

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

AUG 28 '89

WELL API NO. 5. Indicate Type of Lease STATE [X] and FED [ ] FEE [ ] 6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE 'APPLICATION FOR PERMIT' (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name South Lucky Lake Queen Unit 8. Well No. 204, 301 & 701 9. Pool name or Wildcat Lucky Lake Queen South

1. Type of Well: OIL WELL [ ] GAS WELL [ ] OTHER Injection wells

2. Name of Operator Burk Royalty Co.

3. Address of Operator P. O. Box BRC, Wichita Falls, Texas 76307

4. Well Location Unit Letter SEE BELOW Feet From The Line and Feet From The Line

Section Township Range NMPM County 10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3800 + (GR)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK [ ] PLUG AND ABANDON [ ] REMEDIAL WORK [ ] ALTERING CASING [ ] TEMPORARILY ABANDON [ ] CHANGE PLANS [ ] COMMENCE DRILLING OPNS. [ ] PLUG AND ABANDONMENT [ ] PULL OR ALTER CASING [ ] CASING TEST AND CEMENT JOB [ ] OTHER: Increase injection pressure [X] OTHER: [ ]

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103. Well Location: Tract 2 No. 4 N 990' FSL & 1477' FWL Sec. 22 15S 29E Tract 3 No. 1 F 2310' FNL & 1650' FWL Sec. 22 15S 29E Tract 7 No. 1 O 660' FSL & 1980' FEL Sec. 16 15S 29E

These step rate tests were run on 3 injection wells that had dropped below 100 BWPD injection rate of 350 psig. The rates indicate a need for increased pressure and we request an increase to 1000 psig for all wells in the unit. The Sulimar Flood of Jack McClellans' offsets this Flood and was flooded at 1000 psig with no channeling. We need increase as soon as possible to properly flood this Unit.

RECEIVED

AUG 29 1989

I hereby certify that the information above is true and complete to the best of my knowledge and belief. SIGNATURE Fred M. Lynch TITLE Petroleum Engineer DATE 8-24-89 OIL CONSERVATION DIV. SANTA FE 817/322-5421 TELEPHONE NO.

(This space for State Use) APPROVED BY TITLE DATE CONDITIONS OF APPROVAL, IF ANY:

BURK ROYALTY COMPANY  
 South Lucky Lake Unit Tract 2 Well No. 4  
 Step-rate Injection Test

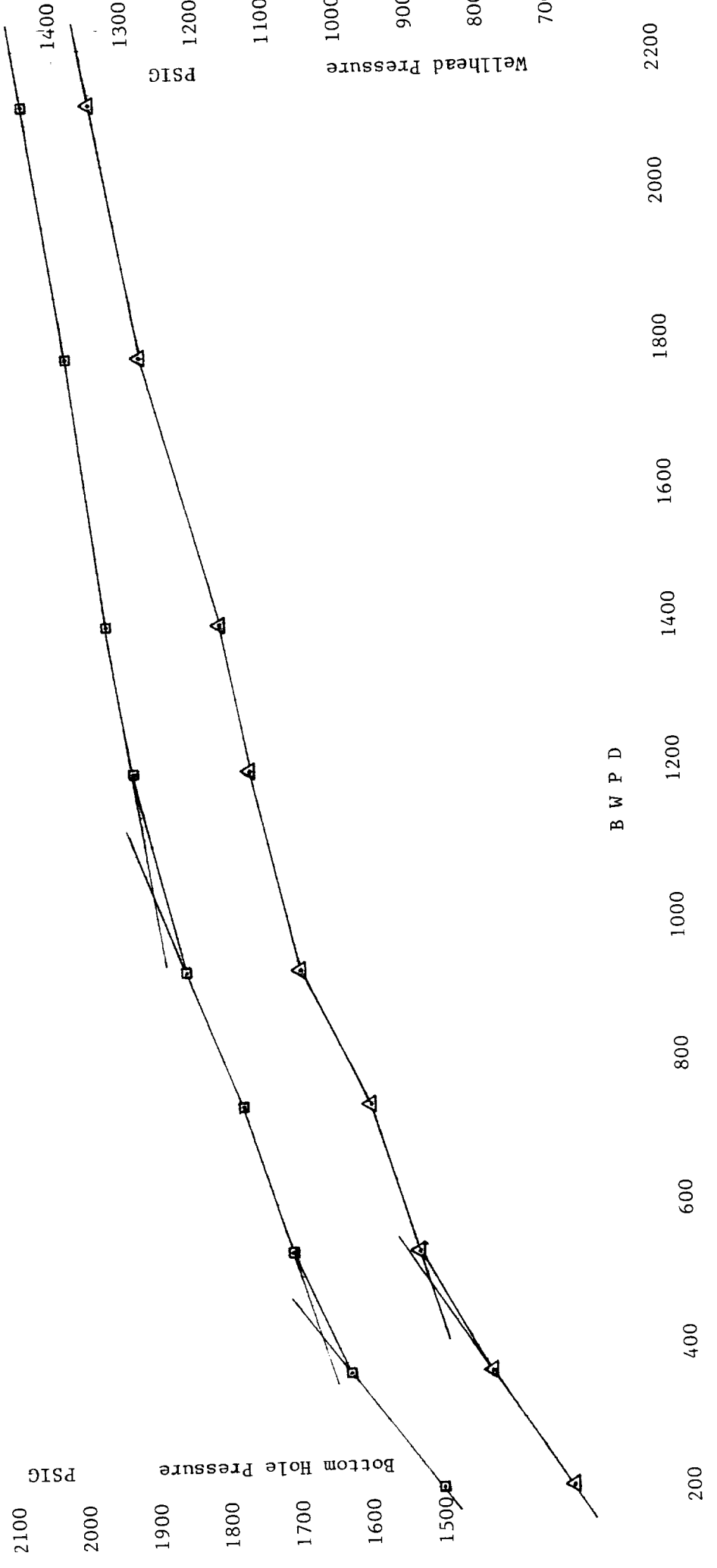
Bottom Hole Pressure @ 1,805 Feet  
 Recorder Wellhead Pressure

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AUG 28 '89

C. C. D.  
 ANTESA, OFFICE

*359 psi  
 Original*





**JOHN WEST ENGINEERING CO.**  
**Step Rate Injection Test**

Well Name South Lucky Lake Unit  
Tract 2 Well No. 4  
CO. Name Burk Royalty Company

Date 8-15-89

Remarks	Time	Tbg. Press.	Rate BPD	Total	B H P	Tbg. Press.	Rate GPM	HEAD LOSS
			BOMB SET	@ 1805'				
	1:40	648.60		0	1466.70			
	1:45	711.10	230.40	.8	1483.0			
	1:50	676.80	201.60	1.5	1487.60			
Rate 1	1:55	721.4	172.80	2.1	1505.60			
	2:00	821.20	374.00	3.4	1622.90			
	2:05	853.20	374.40	4.7	1635.90			
Rate 2	2:10	832.60	345.60	5.9	1633.90			
	2:15	896.30	547.20	7.8	1692.60			
	2:20	937.30	547.20	9.7	1694.80			
Rate 3	2:25	928.50	518.40	11.5	1704.30			
	2:30	966.8	748.80	14.1	1760.3			
	2:35	1011.30	748.80	16.7	1771.80			
Rate 4	2:40	997.0	720.00	19.2	1775.70			
	2:45	1063.20	921.60	22.4	1830.10			
	2:50	1072.50	921.60	25.6	1840.0			
Rate 5	2:55	1083.70	921.60	28.8	1847.0			
	3:00	1146.40	1209.60	33.0	1894.70			
	3:05	1143.60	1209.60	37.2	1904.60			
Rate 6	3:10	1152.50	1180.80	41.3	1914.50			
	3:15	1193.30	1497.60	46.5	1937.10			
	3:20	1208.40	1324.80	51.1	1937.50			
Rate 7	3:25	1190.10	1382.40	55.9	1943.80			
	3:30	1273.50	1814.40	62.2	1981.20			
	3:35	1265.0	1785.60	68.4	1990.50			
Rate 8	3:40	1292.60	1728.00	74.4	1998.40			
	3:45	1340.0	2188.80	82.0	2030.6			
	3:50	1349.20	2102.40	89.3	2039.80			
Rate 9	3:55	1354.8	2073.60	96.5	2047.60			

- Bottom Hole Pressure @ 1,770 Feet
- △ Recorded Wellhead Pressure
- Corrected Wellhead Pressure Based on 2 3/8" Tubing

RECEIVED

AUG 28 '89

OFFICE

PSIG

Bottom Hole Pressure

1900  
1800  
1700  
1600  
1500  
400  
300  
200  
100  
000  
900  
300

1300  
1200  
1100  
1000  
900  
800  
700  
600  
500  
400  
300  
200  
100  
000

Wellhead Pressure

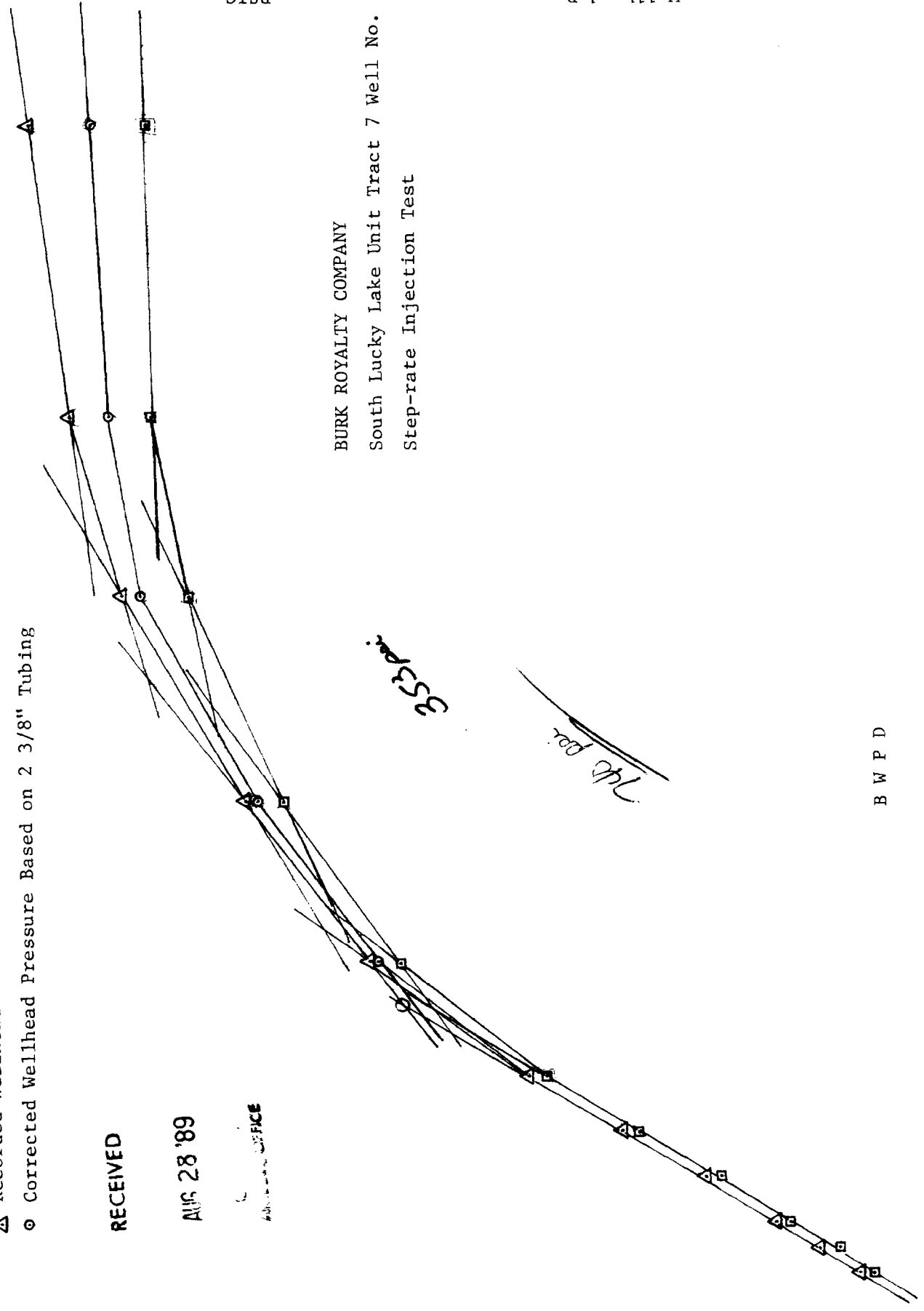
2700  
2400  
2100  
1800  
1500  
1200  
900  
600  
300  
0

B W P D

BURK ROYALTY COMPANY  
South Lucky Lake Unit Tract 7 Well No. 1  
Step-rate Injection Test

*ESS*

*740 per*





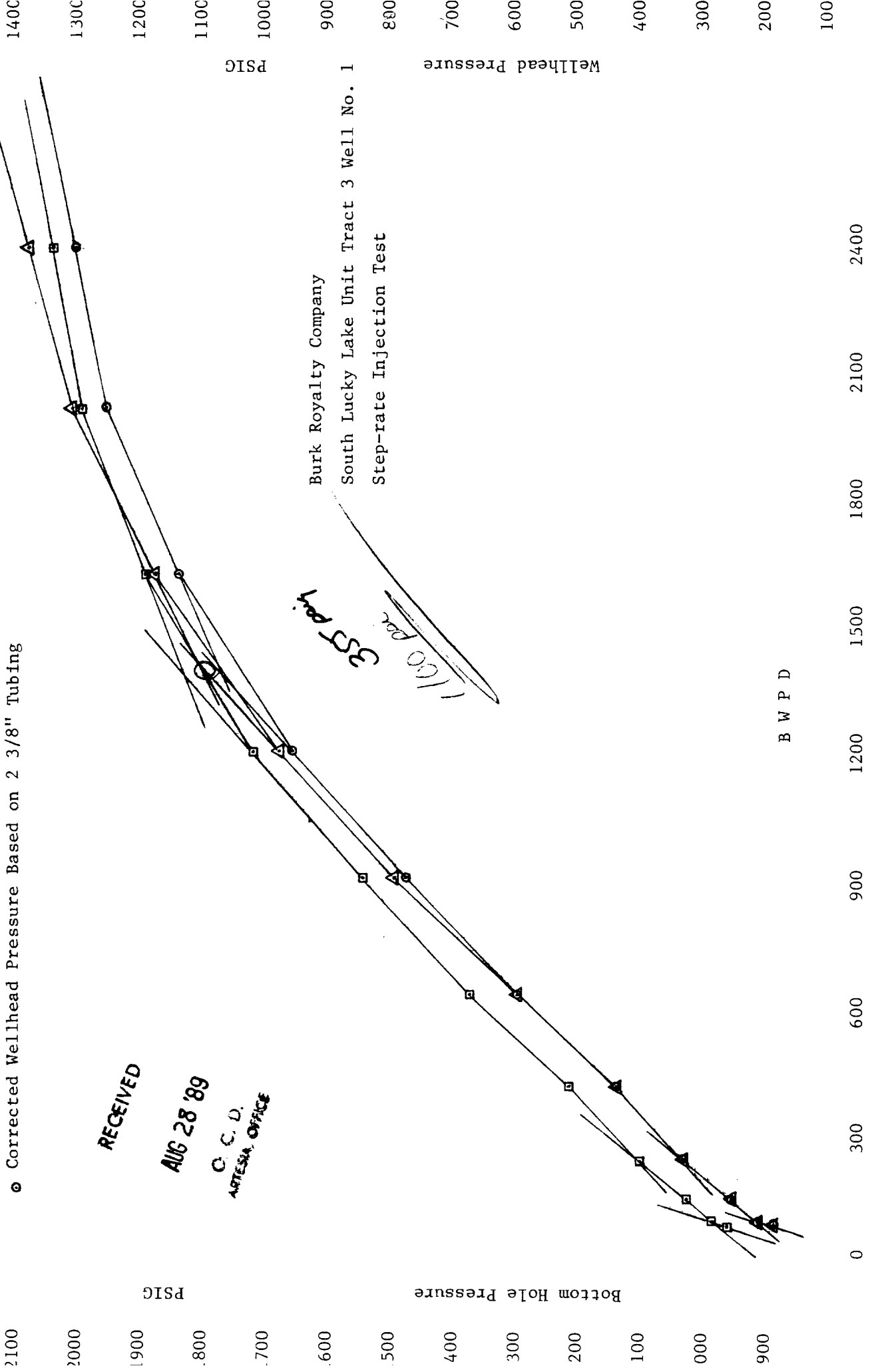


- Bottom Hole Pressure @ 1,780 Feet
- △ Recorded Wellhead Pressure
- ⊙ Corrected Wellhead Pressure Based on 2 3/8" Tubing

RECEIVED

AUG 28 '89

C. C. D.  
ARTESIA OFFICE



1100 psi  
350 psi

Burk Royalty Company  
South Lucky Lake Unit Tract 3 Well No. 1  
Step-rate Injection Test

B W P D







OF COUNSEL  
DON L. DICKASON  
WILLIAM A. SLOAN  
RAY H. RODEY

RODEY, DICKASON, SLOAN, AKIN & ROBB, P. A.

COUNSELLORS AND ATTORNEYS AT LAW

MARCY PLAZA, SUITE 101

123 EAST MARCY STREET

P. O. BOX 1357

SANTA FE, NEW MEXICO 87504-1357

TELEPHONE 984-0100

AREA CODE 505

ALBUQUERQUE OFFICE:  
20 FIRST PLAZA, SUITE 700  
P. O. BOX 1888  
ALBUQUERQUE, NM 87103  
TELEPHONE 765-5900  
AREA CODE 505

RIO RANCHO OFFICE:  
JEMEZ PROFESSIONAL BLDG.  
3615 RIO RANCHO BLVD.  
SUITE 203 A  
P. O. BOX 15423  
RIO RANCHO, NM 87174-0423  
TELEPHONE 765-5900  
AREA CODE 505

February 11, 1986

JACKSON G. AKIN  
JOHN D. ROBB  
CHARLES B. LARRABEE  
JAMES C. RITCHIE  
WILLIAM C. SCHAAB  
ROBERT M. ST. JOHN  
JOSEPH J. MULLINS  
DUANE C. GILKEY  
MARK K. ADAMS  
ROBERT G. MCCORKLE  
PETER G. PRINA  
BRUCE HALL  
JOHN P. SALAZAR  
WILLIAM S. DIXON  
JOHN P. BURTON  
REX D. THROCKMORTON  
JONATHAN W. HEWES  
GENE C. WALTON  
RICHARD C. MINZNER  
W. ROBERT LASATER, JR.  
RICHARD K. BARLOW  
MARK C. MEIERING  
VICTOR R. MARSHALL  
PAUL D. BARBER  
JOE L. McCLAUGHERTY  
JAMES S. STARZYNSKI  
CATHERINE T. GOLDBERG  
PAUL A. COOTER  
DIANE FISHER  
TRAVIS R. COLLIER  
JO SAXTON BRAYER  
EDWARD RICCO  
W. MARK MOWERY  
PATRICK M. SHAY  
NANCY J. APPLEBY  
JAY R. HONE  
DEBRA ROMERO THAL  
ELLEN G. THORNE  
WAYNE G. CHEW  
HENRY M. BOHNHOFF  
SHANNON L. DONAHUE  
WILLIAM B. KIRLEY  
TRACY E. MCGEE  
MATTHEW H. SPANGLER  
JAMES O. BROWNING  
DAVID C. DAVENPORT, JR.  
JOHN A. SWAIN  
CAMERON PETERS  
CHARLES E. STUCKEY  
NEAL W. HARDIN  
DEBORAH A. PEACOCK  
CHARLES R. PEIFER  
JOSEPH B. ROCHELLE  
SCOTT D. GORDON  
MICHAEL J. CONDON  
STEPHEN K. BOWMAN

Ms. Florine Davidson  
Oil Conservation Division  
Energy & Mineral Department  
State Land Office Building  
Santa Fe, New Mexico 87503

Re: Supplemental Application of Burk Royalty Co. for  
Approval of the South Lucky Lake Queen Unit  
Docket No. 8808

Dear Florine:

Enclosed herewith is the Supplemental Application of  
Burk Royalty Co. for approval of its proposed waterflood  
project in the South Lucky Lake Queen Unit, Chaves County,  
New Mexico.

Appreciating your courtesy, I am

Very truly yours,

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

Paul A. Cooter

PAC:pg  
05003-80426

cc: Mr. Al Norris (w/encl)

STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY & MINERALS  
OIL CONSERVATION DIVISION

Case No. <sup>8540</sup>~~8808~~

IN THE MATTER OF THE  
Application of Burk Royalty Co.  
for Approval of the South Lucky Lake  
Queen Unit, Chaves County, New Mexico,  
and its Waterflood Project therefore.

SUPPLEMENTAL APPLICATION

COMES NOW Burk Royalty Co., by and through its attorneys,  
Rodey, Dickason, Sloan, Akin & Robb, P.A., and supplementing its  
application heretofore filed herein, states:

1. Applicant has formed the South Lucky Lake Queen Unit  
comprising the following described lands situate in Chaves County,  
New Mexico, to wit:

Township 15 South, Range 29 East, N.M.P.M.

Section 15: SW $\frac{1}{4}$ SW $\frac{1}{4}$

Section 16: SE $\frac{1}{4}$ SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , and SE $\frac{1}{4}$ SE $\frac{1}{4}$

Section 21: NW $\frac{1}{4}$ NE $\frac{1}{4}$  and E $\frac{1}{2}$ E $\frac{1}{2}$

Section 22: W $\frac{1}{2}$

Section 27: W $\frac{1}{2}$ NW $\frac{1}{4}$

Section 28: E $\frac{1}{2}$ NE $\frac{1}{4}$

containing 880.00 acres, more or less. By Order Number R-8140, dated January 30, 1986, the Division approved that Unit.

2. Applicant proposes to put into effect a waterflood project in order to effect additional recovery of Unitized Substances from the Unitized Formation, being defined as that subsurface portion of the Unit Area commonly known as the Queen Formation, and which is the same formation that was encountered between the logged depths of 1,750 feet (subsea elevation of +2,105 feet) and 1,800 feet (subsea elevation of 2,055 feet) in Dalport Oil Corporation's Jones Federal No. 2 Well located 990 feet from the south line and 330 feet from the west line of Section 22, Township 15 South, Range 29 East, N.M.P.M., Chaves County, New Mexico.

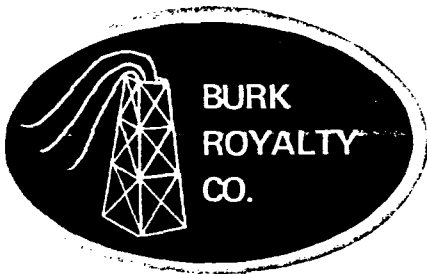
WHEREFORE, Applicant requests that after notice and hearing, this Supplemental Application be granted and the Applicant be granted the proper authority to institute the proposed waterflood project within the South Lucky Lake Queen unit.

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.



By \_\_\_\_\_

Paul A. Cooter  
Post Office Box 1357  
Santa Fe, New Mexico 87504-1357  
Telephone: (505) 984-0100



February 4, 1986

Working Interest Owners  
Leasehold Operators  
Surface Owners  
South Lucky Lake Queen Unit  
Chaves County, New Mexico

Gentlemen:

Enclosed please find an application by Burk Royalty Co. to inject water into 7 wells in the South Lucky Lake Field, Chaves County, New Mexico. Burk Royalty Co. is the operator of a Unit which was formed to waterflood these properties. The Oil Conservation Division of the State of New Mexico requires that these applications be sent to each of you prior to the hearing for these injection wells.

The hearing will be held in the State Land Office Building in Santa Fe, New Mexico on March 5, 1986 at 8:15 a.m. A map is also included with these applications.

Sincerely yours,

BURK ROYALTY CO.

A handwritten signature in cursive script that reads "Fred M. Lynch".

Fred M. Lynch

FML/ks  
Enc.

SOUTH LUCKY LAKE QUEEN UNIT

Chaves County, New Mexico

Working Interest Owners:

Yates Petroleum Corp.  
207 S. 4th St.  
Artesia, New Mexico 88210

Read & Stevens, Inc.  
P. O. Box 1518  
Roswell, New Mexico 88201

Bison Petroleum  
5809 Southwestern #200  
Amarillo, TX 79110-3607

Leasehold Operators:

McClellan Oil Corp.  
P. O. Drawer 730  
Roswell, New Mexico 88202

Cities Service Oil Co.  
500 W. Texas #700  
Midland, TX 79702

New Mexico Oil & Gas Co.  
Attn: L. C. Harris  
P. O. Box 1714  
Roswell, New Mexico 88201

BLM  
P. O. Box 1379  
Roswell, New Mexico 88201

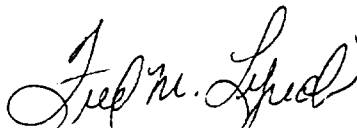
Armstrong Energy Corp.  
P. O. Box 1973  
Roswell, New Mexico 88201

Texas American Oil Corp.  
300 W. Wall #400  
Midland, TX 79701

Surface Owner:

Bogle Farms  
Dexter, New Mexico 88230

Application to inject water into 7 wells in the South Lucky Lake Queen Unit were mailed to the above February 4, 1986.



FRED M. LYNCH

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: Burk Royalty Co.  
Address: P. O. Box BRC, Wichita Falls, TX 76307  
Contact party: Fred M. Lynch Phone: 817/322-5421
- 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: Fred M. Lynch Title Petroleum Engineer  
Signature: *Fred M. Lynch* Date: 2-4-86
- \* 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.

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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.

INJECTION WELL DATA SHEET

SIDE 1

Dalport Oil Corp.

Jones-Federal

OPERATION

LEASE

2310' FSL & 330' FWL

22

15S

29E

WELL NO. 1

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

Schematic

Tabular Data

Surface Casing to 270'

Size 8 5/8" - 20# " Cemented with 150 sx "C" sx.

TOC Surface feet determined by circulated

Hole size 11"

Intermediate Casing

Size " Cemented with " sx.

TOC feet determined by

Hole size

Long stringing to 1,794'

Size 5 1/2" - 15.5# " Cemented with 275 sx.

TOC 600 feet determined by volume

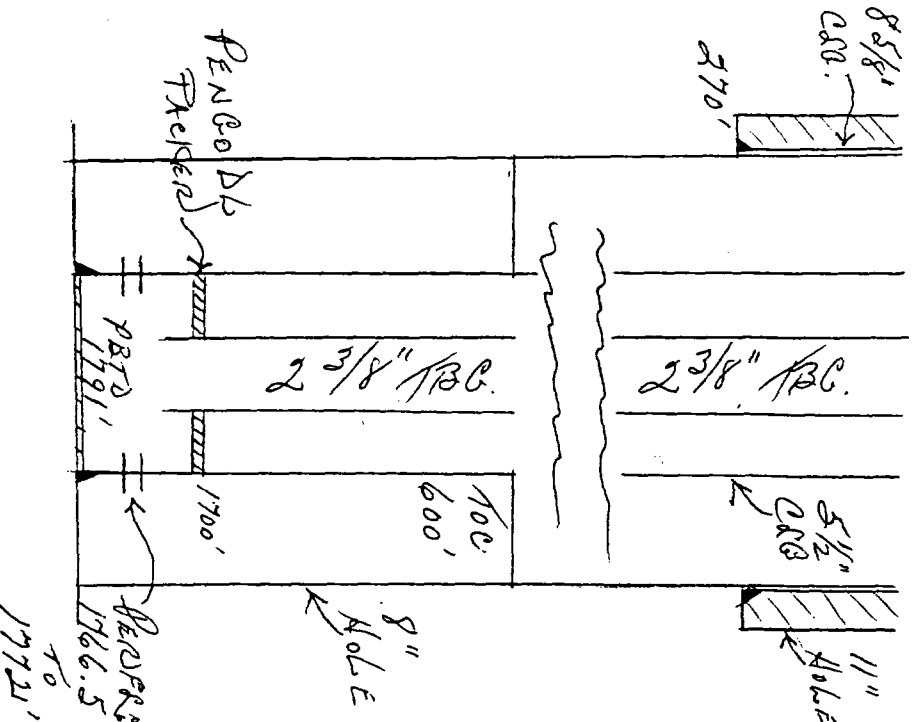
Hole size 8"

Total depth 1,796' BPTD 1,791'

Injection interval Queen

1,766 1/2 feet to 1,772 feet

(perforated xxxxxxxxxx, indicate which)



INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with fiberglass tubing set in a  
(brand and model) Pengo DL packer at 1,700'± feet  
(or describe any other casing-tubing seal).  
Other Data

1. Name of the Injection formation Queen

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

3. Is this a new well drilled for injection?  Yes  No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production

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) in this area. \_\_\_\_\_  
None

INJECTION WELL DATA SHEET

SIDE 1

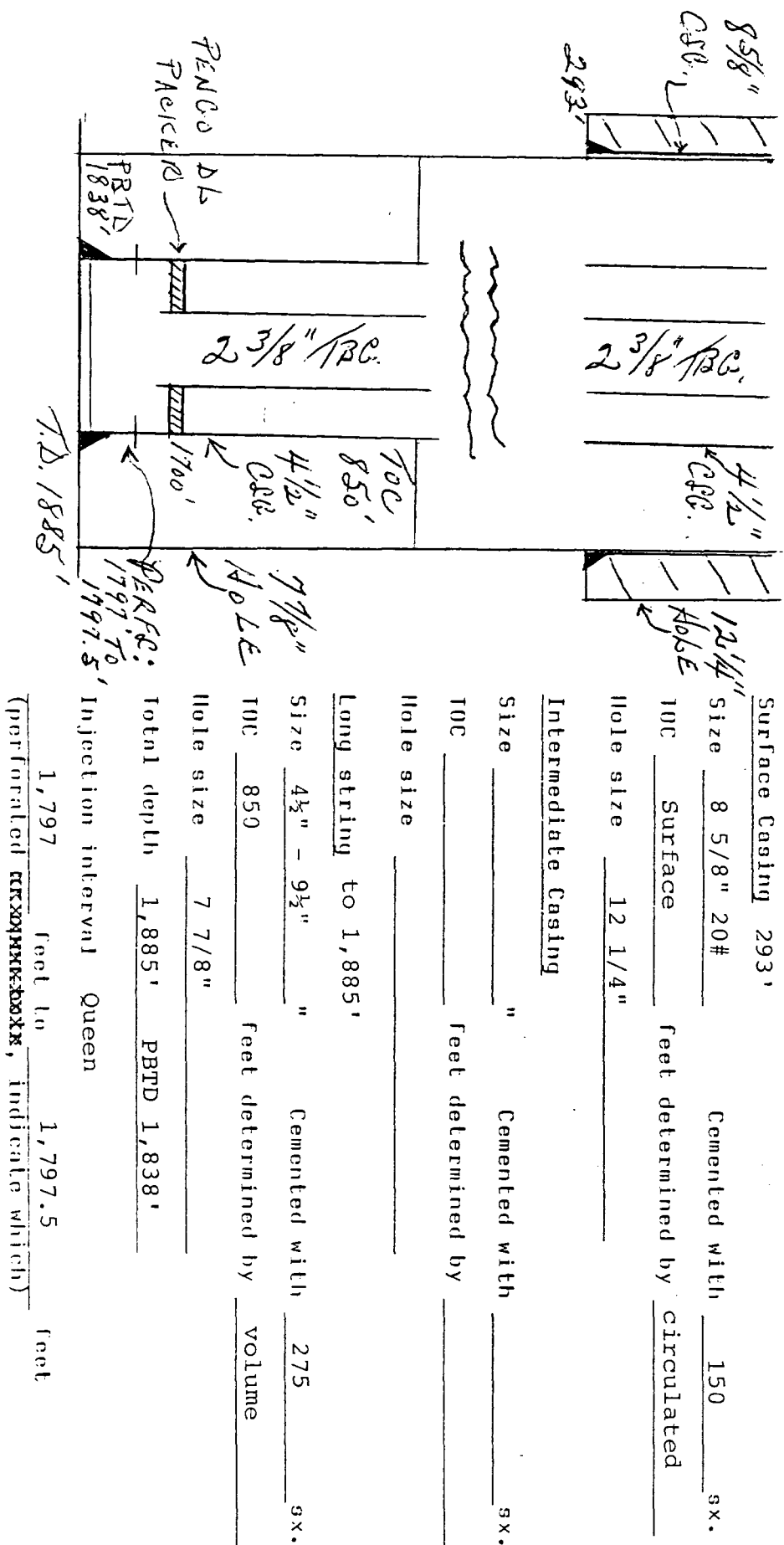
Operator Dalport Oil Corp.

Lease Jones-Federal

Well No. 4 FSL & 1477' FWL SECTION 22 TOWNSHIP 15S RANGE 29E  
 FOOTAGE LOCATION

Schematic

Tabular Data



Surface Casing 293'  
 Size 8 5/8" 20# Cemented with 150 sx.  
 TOC Surface feet determined by circulated  
 Hole size 12 1/4"

Intermediate Casing  
 Size " Cemented with " sx.  
 TOC " feet determined by "

Hole size "  
 Long string to 1,885'  
 Size 4 1/2" - 9 1/2" Cemented with 275 sx.  
 TOC 850 feet determined by " volume "

Hole size 7 7/8"  
 Total depth 1,885' PRTD 1,838'  
 Injection interval Queen  
1,797 feet to 1,797.5 feet  
 (perforated ~~xxxxxxx~~, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with Fiberglass tubing set in a  
Pengo DL packer at 1,700± feet  
(brand and model) (material)  
(or describe any other casing-tubing seal).  
Other Data

1. Name of the injection formation Queen  
2. Name of Field or Pool (if applicable) South Lucky Lake

3. Is this a new well drilled for injection?  Yes  No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production

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) in this area. \_\_\_\_\_  
None

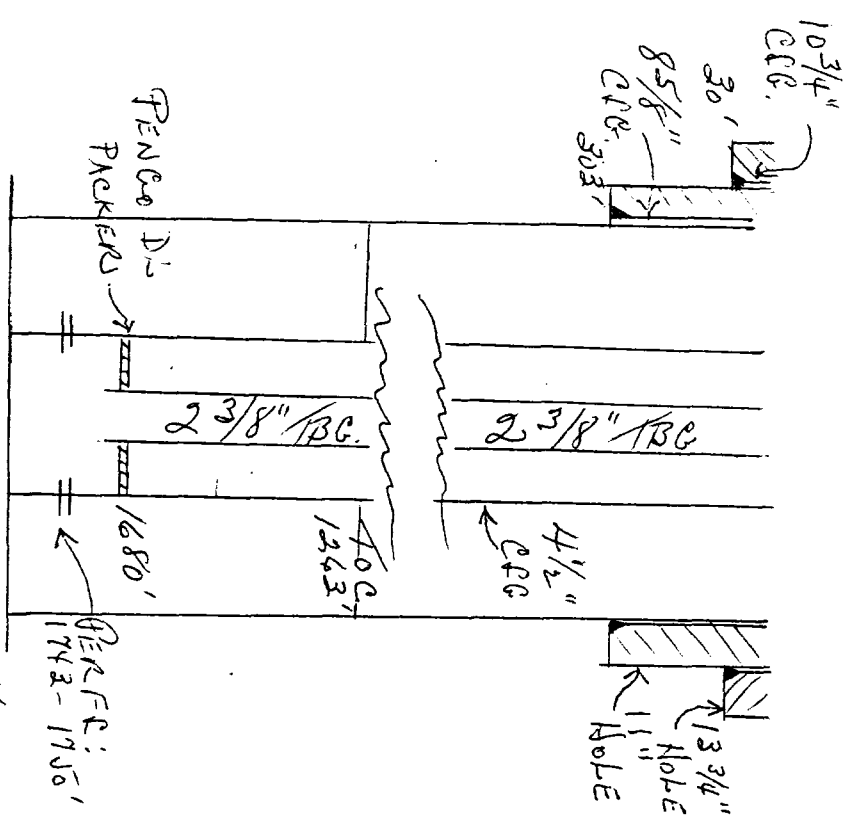
INJECTION WELL DATA SHEET

SIDE 1

Yates Petroleum Corp. Federal "DH" LEAST OPERATOR

1 1980' FNL & 330' FWL 27 15S 29E  
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Schematic



Tabular Data

Surface Casing	30'	Size 10 3/4" 30#	"	Cemented with	25	sx.
		TOC surface		feet determined by		circulated
Hole size	13 3/4"					
Intermediate Casing	303'	Size 8 5/8" - 24#	"	Cemented with	50	sx.
		TOC Surface		feet determined by		circulated
Hole size	11"					
Long string	1,788'	Size 4 1/2" - 10.5#	"	Cemented with	125	gx.
		TOC		feet determined by		volume
Hole size	8"					
Total depth	1,788'					
Injection interval	Queen					
	1,743	feet to	1,750			feet

(perforated ~~XXXXXXXXXX~~, indicate which) feet

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with Fiberglass tubing set in a

Baker Model D packer at 1,680' feet

(brand and model) \_\_\_\_\_  
(material)

(or describe any other casing-tubing seal).  
Other Data

1. Name of the injection formation Queen

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

3. Is this a new well drilled for injection?  Yes  No

If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production \_\_\_\_\_

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) in this area. \_\_\_\_\_  
None

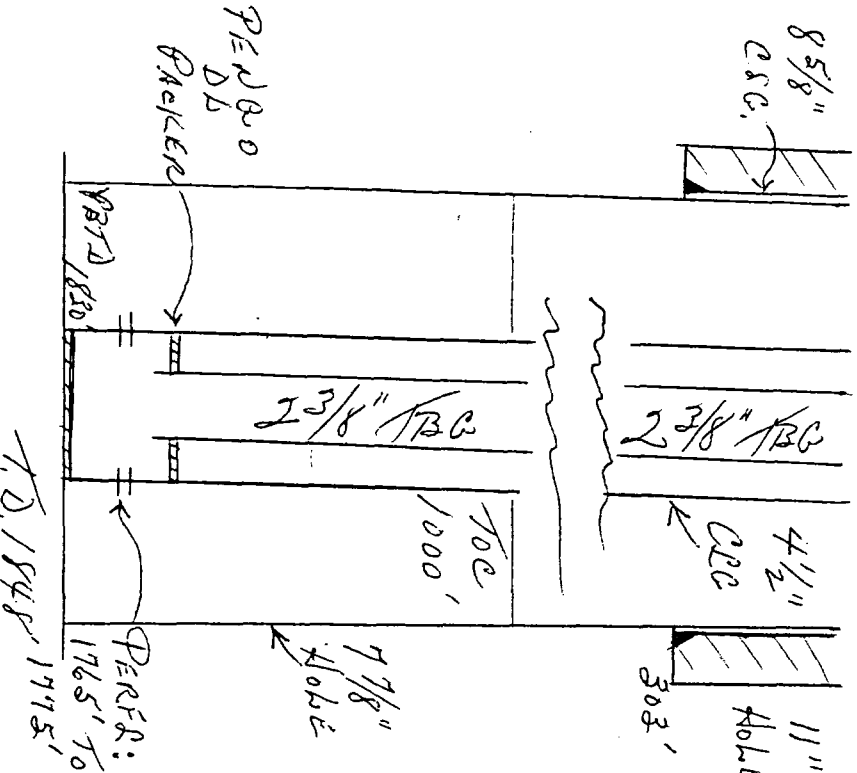
INJECTION WELL DATA SHEET

SIDE 1

Read & Stevens  
 OPERATOR  
 Harris State 16  
 LEASE

1 660' FSL & 1980' FEL 16 15S 29E  
 WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Schematic



Tabular Data

Surface Casing 303' Cemented with 100 sx.  
 Size 8 5/8" - 24# " feet determined by circulated  
 TOC Surface " feet determined by  
 Hole size 11" Hole  
Intermediate Casing  
 Size " Cemented with sx.  
 TOC " feet determined by  
 Hole size " Hole  
Long string 1,848' Cemented with 100 sx.  
 Size 4 1/2" - 9.5# " feet determined by  
 TOC 1,000 feet determined by volume  
 Hole size 7 7/8"  
 Total depth 1,848' PBTPD 1,830'  
 Injection interval Queen  
 Perf. 1,765 feet to 1,775 feet  
 (perforated xxxxxx, indicate which)



INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with Fiberglass tubing set in a  
Pengo DL packer at 1,680'± feet  
(brand and model) (material)  
(or describe any other casing-tubing seal).  
Other Data

1. Name of the injection formation Queen  
2. Name of Field or Pool (if applicable) South Lucky Lake

3. Is this a new well drilled for injection?  Yes  No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production

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) in this area. \_\_\_\_\_  
None

INJECTION WELL DATA SHEET

SIDE 1

Dalport Oil Corp.  
OPERATOR

Podhunter-Federal  
LEASE

1 2,310' FNL & 330' FWL  
WELL NO. FOOTAGE LOCATION

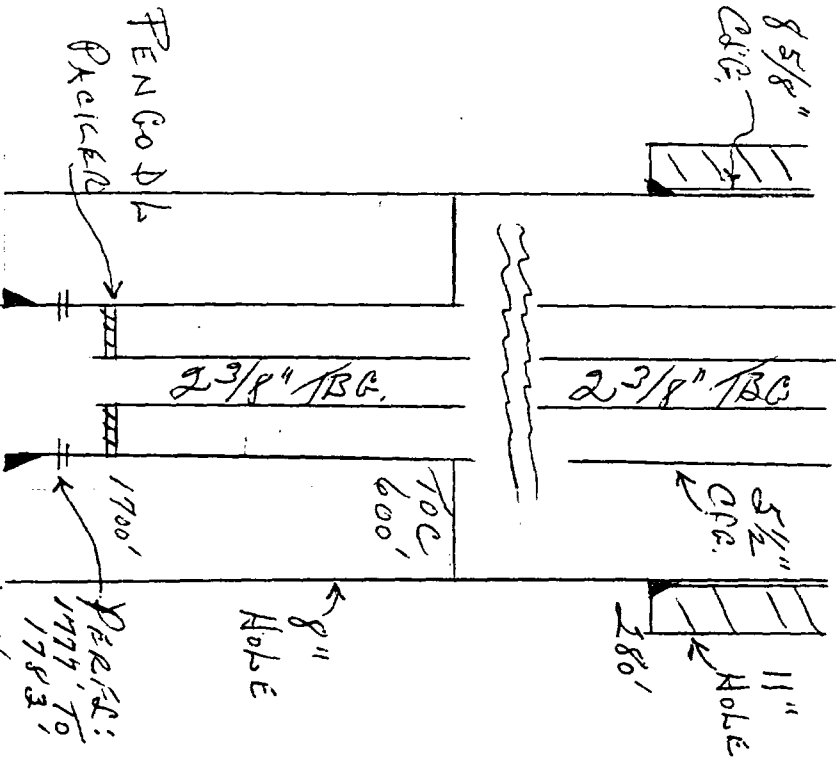
22  
SECTION

15S  
TOWNSHIP

29E  
RANGE

Schematic

Tabular Data



Surface Casing 280'  
Size 8 5/8" - 20# " Cemented with 150 gx.  
Hole size 11" feet determined by circulated

Intermediate Casing  
Size " Cemented with " gx.  
Hole size " feet determined by "

Long string 1,826'  
Size 5 1/2" - 14# " Cemented with 275 sx.  
Hole size 8" feet determined by volume

Total depth 1,827'  
Injection interval Queen  
1,777 feet to 1,783 feet

(perforated xxxxxxxxxx indicate which) feet

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with fiberglass tubing set in a  
Pengo DL (material) \_\_\_\_\_  
(brand and model) packer at 1,700' ± \_\_\_\_\_ feet  
(or describe any other casing-tubing seal).  
Other Data

1. Name of the injection formation Queen  
2. Name of Field or Pool (if applicable) South Lucky Lake

3. Is this a new well drilled for injection?  Yes  No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production

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) in this area. \_\_\_\_\_  
None

INJECTION WELL DATA SHEET

SIDE 1

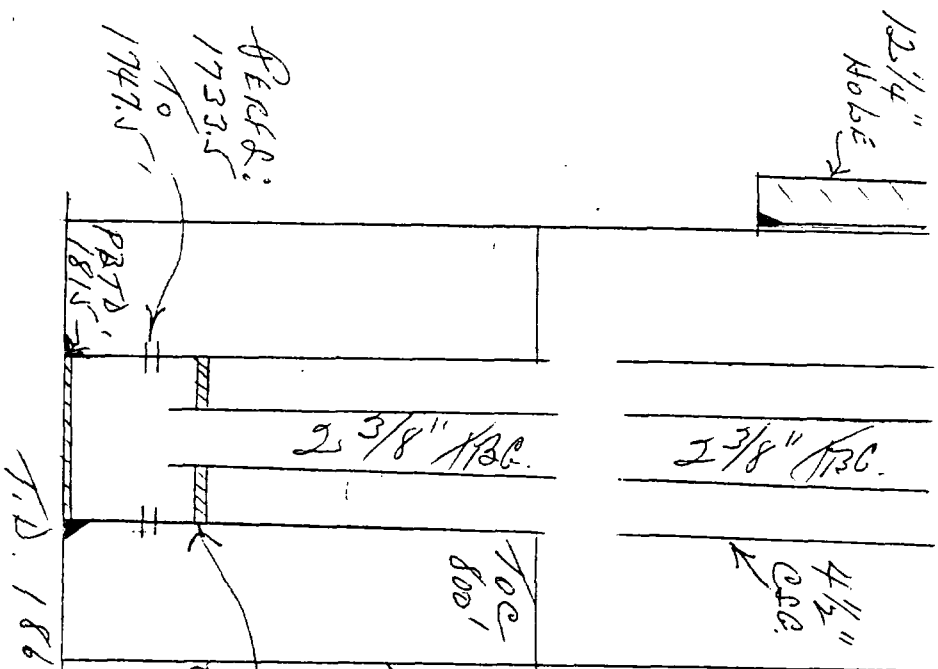
Bison Petroleum Corp. LEASE Owen-Federal

OPERATOR 1 660' FEL & 1980' FNL SECTION 21 TOWNSHIP 15S RANGE 29E

WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE

Schematic

Tabular Data



Surface Casing 261' Cemented with 300 sx.

Size 8 5/8" - 20# " Cemented with 300 sx.

TOC Surface feet determined by circulated

Hole size 12 1/4" feet determined by \_\_\_\_\_

Intermediate Casing

Size \_\_\_\_\_ " Cemented with \_\_\_\_\_ sx.

TOC \_\_\_\_\_ feet determined by \_\_\_\_\_

Hole size \_\_\_\_\_

Long string 1,853' Cemented with 300 sx.

Size 4 1/2" - 9.5# " feet determined by \_\_\_\_\_

TOC 800 feet determined by \_\_\_\_\_

Hole size 7 7/8" volume \_\_\_\_\_

PERF. 1733.5

1747.5

P.B.T.D. 1,815'

T.D. 1,863'

PERF. 1733.5

1747.5

P.B.T.D. 1,815'

T.D. 1,863'

Injection interval Queen

1,733 1/2 feet to 1,747 1/2 feet

(perforated ~~xxxxxxx~~, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with fiberglass tubing set in a  
Pengo DL packer at 1,650'± feet  
(brand and model) (material)  
(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Queen

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

3. Is this a new well drilled for injection?  Yes  No

If no, for what purpose was the well originally drilled? \_\_\_\_\_  
Oil production \_\_\_\_\_

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) in this area. \_\_\_\_\_  
None \_\_\_\_\_

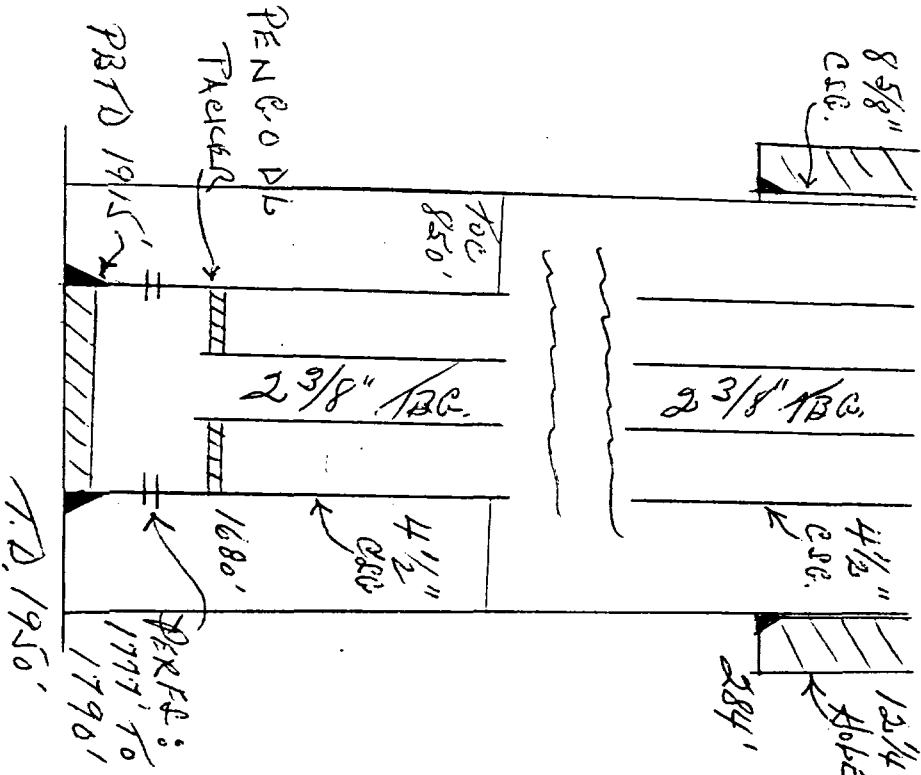
INJECTION WELL DATA SHEET

SIDE 1

Read & Stevens  
 OPERATOR  
 South Lucky Lake Federal  
 LEASE

1 330' ESL & 330' FWL SECTION 15 TOWNSHIP 155 RANGE 29E  
 WELL NO. FOOTAGE LOCATION

Schematic



Tabular Data

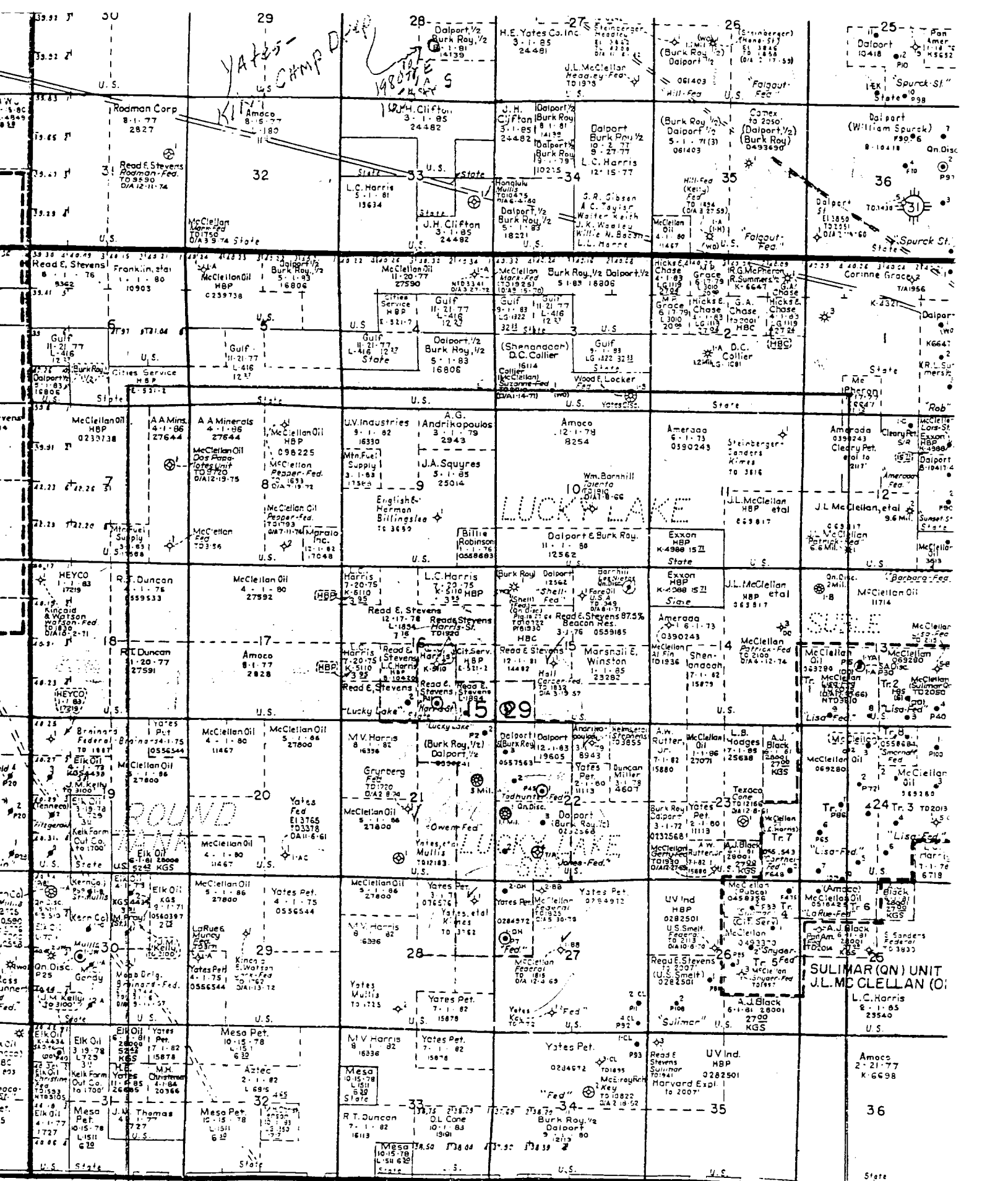
Surface Casing 284'  
 Size 8 5/8" - 24# " Cemented with 150 sx.  
 TOC Surface feet determined by circulated  
 Hole size 12 1/4" 284'

Intermediate Casing  
 Size " Cemented with sx.  
 TOC feet determined by

Hole size  
 Long string 1,950'  
 Size 4 1/2" - 9.5# " Cemented with 400 sx.  
 TOC 850 feet determined by volume

Hole size 7 7/8"  
 Total depth 1,950' P.B.T.D. 1,915'

Injection interval Queen  
 1,777 feet to 1,790 feet  
 (perforated xxxxxxxxxxxx indicate which)



Yates - CAMP D...  
1980...  
KIM

LUCKY LAKE

ROUND

SULIMAR (QN) UNIT  
J.L. McClellan (O)

R29E

N

OF COUNSEL  
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RAY H. ROBB

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AREA CODE 505

PEARCE C. POOLY (1880-1958)  
WILLIAM A. SLOAN  
JACKSON D. AKIN  
JOHN C. ROBB  
CHARLES B. LARRABEE  
JAMES P. RITCHIE  
JOHN P. EASTHAM  
WILLIAM C. SCHAAF  
ROBERT M. ST. JOHN  
JOSEPH J. MULLINS  
DUANE G. CULLEY  
MARK W. ADAMS  
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NATHAN W. DENES  
GENE C. WALKER  
RICHARD G. WENZNER  
W. ROBERT WALTER, JR.  
RICHARD W. BARLOW  
CHARLES J. SANDERS  
MARA J. MILLERING  
VICTOR B. MARSHALL  
ROBERT A. JOHNSON  
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PAUL A. COOPER  
DIANE FISHER  
TRAVIS R. COLLIER  
BEN M. ALLEN  
JO SEXTON BRAYER  
EDWARD RIGGS  
W. MARK MOWERY  
PATRICK M. SHAY  
NANCY J. APPLEBY  
JAY R. HONE  
DEBRA ROMERO THAL  
JAMES I. RASMUSSEN  
ELLEN G. THORNE  
WAYNE G. CHEW  
HENRY M. BOHMOFF  
SHANNON L. DONAHUE  
WILLIAM B. KIRLEY  
TRACY E. MCGEE  
MATTHEW M. SPANGLER  
JAMES O. BROWNING  
DAVID C. DAVENPORT, JR.  
JILL E. ADAMS  
JOHN A. SWAIN  
CAMERON PETERS

December 17, 1985

*COLE 8808  
8840*

Ms. Florine Davidson  
Oil Conservation Division  
Energy and Minerals Department  
State Land Office Building  
Santa Fe, New Mexico 87503

Re: Application of Burk Royalty Co. for approval of  
the South Lucky Lake Queen Unit, Chaves County,  
New Mexico

Dear Florine:

Enclosed herewith is the application of Burk Royalty Co.  
for approval of its proposed South Lucky Lake Queen Unit,  
Chaves County, New Mexico. It is my understanding that the  
same will be set for hearing on the January 22, 1986 docket.

If something else be required to complete the filing of this  
case, would you please let me know.

Appreciating your courtesy, I am

Very truly yours,

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

By: Paul A. Cooter

PAC/bwh  
Enclosure

cc: Mr. Ray Graham  
Mr. Al Norris

RECEIVED

DEC 18 1985

OIL CONSERVATION DIVISION



STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY & MINERALS  
OIL CONSERVATION DIVISION

IN THE MATTER OF

Case No. 8809

The Application of Burk Royalty Co.  
for Approval of the South Lucky Lake  
Queen Unit, Chaves County, New Mexico

APPLICATION

COMES NOW Burk Royalty Co., by and through its attorneys,  
Rodey, Dickason, Sloan, Akin & Robb, P.A., and seeks approval for  
its proposed South Lucky Lake Queen Unit, Chaves County, New  
Mexico, and states:

1. Applicant proposes to form the South Lucky Lake Queen  
Unit comprising the following described lands situate in Chaves  
County, New Mexico, to wit:

Township 15 South, Range 29 East, N.M.P.M.

Section 15: SW $\frac{1}{4}$ SW $\frac{1}{4}$

Section 16: SE $\frac{1}{4}$ SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , and SE $\frac{1}{4}$ SE $\frac{1}{4}$

Section 21: NW $\frac{1}{4}$ NE $\frac{1}{4}$  and E $\frac{1}{2}$ E $\frac{1}{2}$

Section 22: W $\frac{1}{2}$

Section 27: W $\frac{1}{2}$ NW $\frac{1}{4}$

Section 28: E $\frac{1}{2}$ NE $\frac{1}{4}$

containing 880.00 acres, more or less.

2. Applicant proposes to put into effect an improved recovery project in order to effect additional recovery of Unitized Substances from the Unitized Formation, being defined as that subsurface portion of the Unit Area commonly known as the Queen Formation, and which is the same formation that was encountered between the logged depths of 1,750 feet (subsea elevation of +2,105 feet) and 1,800 feet (subsea elevation of 2,055 feet) in Dalport Oil Corporation's Jones Federal No. 2 Well located 990 feet from the south line and 330 feet from the west line of Section 22, Township 15 South, Range 29 East, N.M.P.M., Chaves County, New Mexico.

3. The proposed unit area is composed of approximately 760 acres of Federal lands and 120 acres of State lands. Applicant has received preliminary indications of approval from the Bureau of Land Management, and a fully executed copy of the Unit Agreement, together with a copy of this Application, has been submitted to the Commissioner of Public Lands of the State of New Mexico.

WHEREFORE, Applicant requests that after notice and hearing, this Application be granted and the South Lucky Lake Queen Unit be approved.

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

By \_\_\_\_\_  
Paul A. Cooter  
Post Office Box 1357  
Santa Fe, New Mexico 87504-1357  
Telephone: (505) 984-0100