

2-25-95

DEVON  
ENERGY  
OPERATING  
CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102

405/235-3611  
Fax 405/552-4550  
Fax 405/552-4552

February 7, 1995

Ben Stone  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87504

Ben:

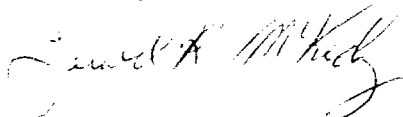
Attached is an application (form 108) to convert to water injection the J. B. Keel wells ~~A-9, A-11, A-12, A-23, B-6, B-7, B-11, B-17, B-18, B-20, B-21, B-25, B-30, B-38, B-39, and B-47~~. In conjunction, wells A-11, B-7, B-11, B-18, and B-30 will also be deepened prior to conversion in order to inject into the Jackson zone.

The BLM is the surface owner and has been notified by Sundry and application on both the conversions and deepenings. No outside operators are within the area of review.

Casing will be tested on all wells before work is started toward conversion. All wells will use new nickel-coated, double grip tension packers in conjunction with new 2 3/8", 4.7 ppf, J-55 tubing internally coated with Tuboscope TK-99. The annulus will be filled with packer fluid and checked for integrity as per state requirements.

Conversions will begin upon receipt of approval from the OCD & BLM. If I may be of assistance, please call (405) 552-4520.

Sincerely,



Gerald R. McKedy

# CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: DEVON ENERGY CORP. Well: KEEL WEST WFX (6 wells)  
 Contact: TERRELL MCKEY Title: PE Phone: 405.552.4520  
 DATE IN 2-10-95 RELEASE DATE 2-25-95 DATE OUT 3-16-95 \*

Proposed Injection Application is for: ☒ WATERFLOOD ☐ Expansion ☐ Initial

Original Order: R- 2268 + AMD ☐ Secondary Recovery ☐ Pressure Maintenance

☒ SENSITIVE AREAS ☐ SALT WATER DISPOSAL

☐ WIPP ☒ Capitan Reef ☐ Commercial Operation

Data is complete for proposed well(s)? YES Additional Data S&L NOTES

## AREA of REVIEW WELLS

32 Total # of AOR 3 # of Plugged Wells  
☒ YES Tabulation Complete YES Schematics of P & A's  
YES Cement Tops Adequate NO ACR Repair Required

## INJECTION INFORMATION

Injection Formation(s) GRAYBURG / SAN ANDRES  
 Source of Water AREA PRODUCERS 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: RECEIVED ADDITIONAL INFO 3-16-95

## APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL YES

### COMMUNICATION WITH CONTACT PERSON:

1st Contact: ☐ Telephoned ☒ Letter 3-9-95 Date 3-9-95 Nature of Discussion NEED ADDITIONAL FOR INFO  
 2nd Contact: ☐ Telephoned ☐ Letter \_\_\_\_\_ Date \_\_\_\_\_ Nature of Discussion \_\_\_\_\_  
 3rd Contact: ☐ Telephoned ☐ Letter \_\_\_\_\_ Date \_\_\_\_\_ Nature of Discussion \_\_\_\_\_

## J. L. KEEL "A" & "B" WATERFLOOD EXPANSION

### Deepening Wells Prior to Conversion.

Devon Energy Operating Corporations plans to deepen the subject wells either with conventional rotary tools and/or a completion unit in conjunction with a reverse circulating unit. In both cases a standard 3000 psi w.p. double ram BOP will be used. The rotary tools will use a rotating head on top of the BOP and the completion unit will utilize a stripping head. Since all wells proposed for deepening have casing set and are cemented below 2500', a conventional drilling choke manifold is not needed. Both heads have the capability of controlling flow while drilling and/or shutting a well in.

Both rigs will use a 2 steel pit system to contain all drilling fluids. No reserve pit will be needed. All proposed work will be contained on the original pad with no disturbance to the surrounding area.

# MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

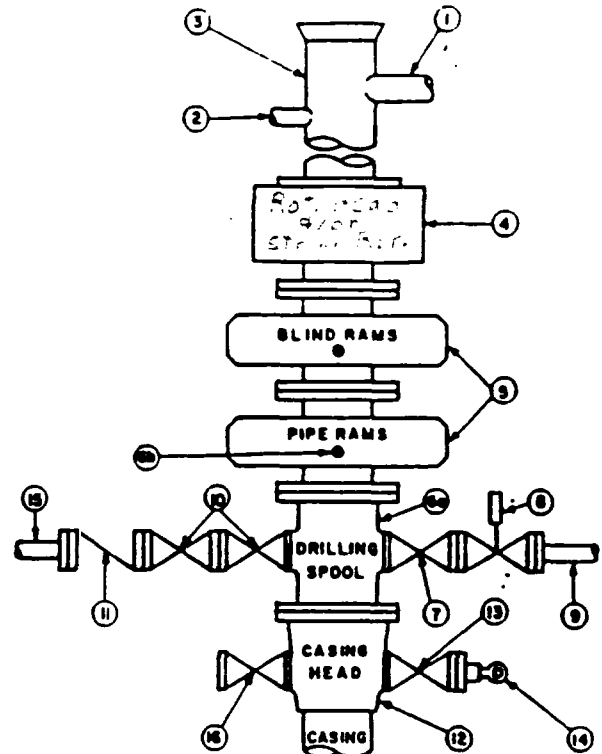
## STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Rotating Head-Stripper Bar		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

## OPTIONAL

16	Flanged valve	1-13/16"	
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CONFIGURATION A



## CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

## MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

## GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chokes. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

**DEVON ENERGY OPERATING CORPORATION**

**HYDROGEN SULFIDE DRILLING  
OPERATIONS PLAN**

**A. Hydrogen Sulfide Training**

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of the H<sub>2</sub>S safety equipment and of personal protective equipment to be utilized at the location such as H<sub>2</sub>S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H<sub>2</sub>S bearing formation, H<sub>2</sub>S training will be provided at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provide by a qualified instructor with each individual being required to pass a 20 question test regarding H<sub>2</sub>S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H<sub>2</sub>S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

**B. H<sub>2</sub>S Safety Equipment And Systems**

All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling operations reaches a depth approximately 500' above any known or probable H<sub>2</sub>S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

2

(a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.

(b) A choke manifold with a minimum of one remote choke.

Note: BOP's will be in place prior to drilling out surface casing.

## **2. H2S Detection And Monitoring Equipment**

(a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 20 ppm.

(b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

## **3. Protective Equipment For Essential Personnel**

Protective equipment will consist of the following:

(a) Four (4) - five minute escape packs located at strategic points around the rig.

(b) Four (4) - thirty minute rescue packs to be located at the designated briefing areas.

(c) Breathing air cascade manifold system complete with 10 - 300 cubic feet air cylinders with four hose line work units.

## **4. Visual Warning System**

Visual warning system will consist of the following:

(a) Two wind direction indicators.

(b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

## **5. Mud Program**

- (a) The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight and safe drilling practices ( for example, keeping the hole filled during trips) will minimize hazards when drilling in H<sub>2</sub>S bearing formations.**

## **6. Metallurgy**

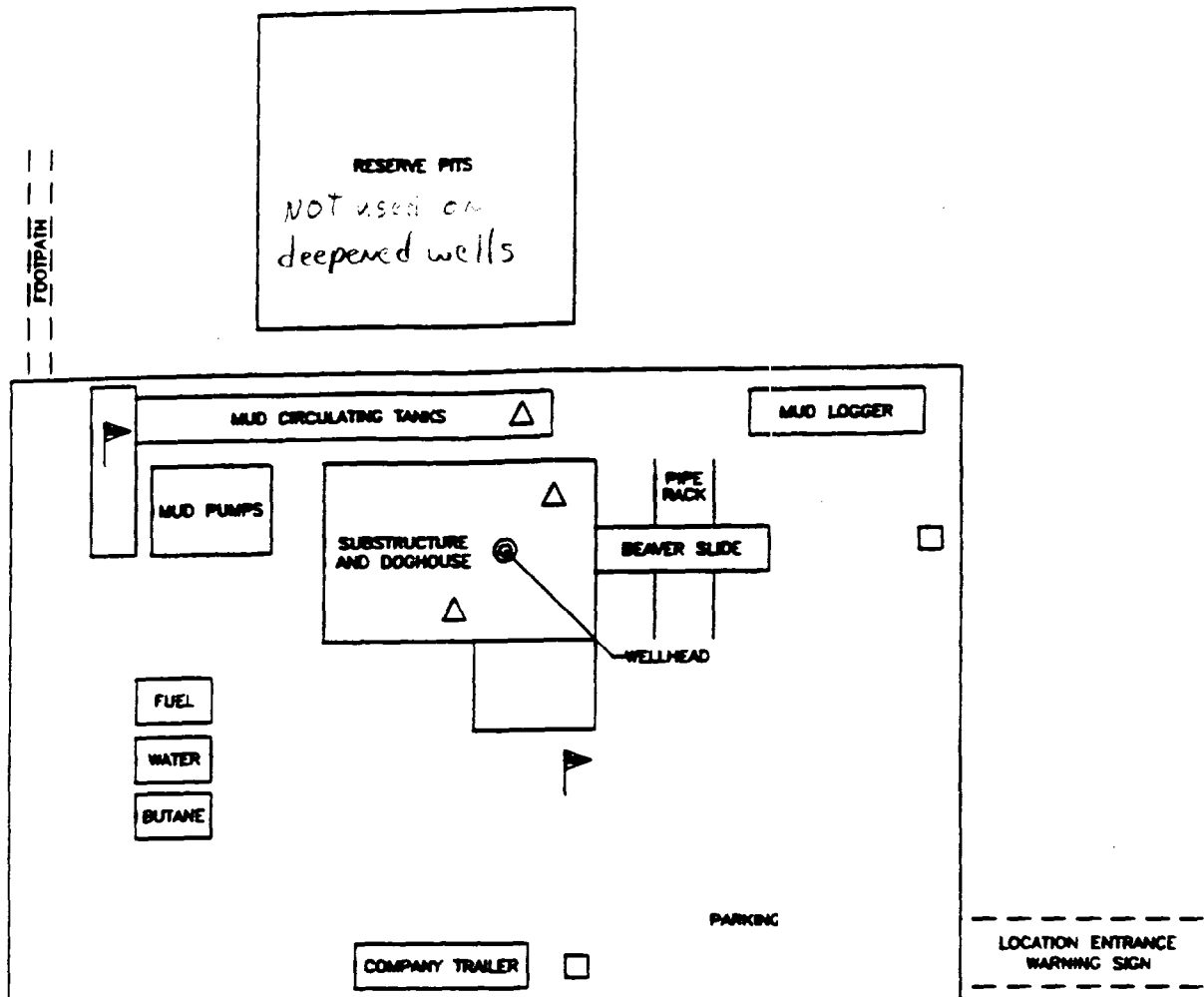
- (a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.**

## **7. Communication**

- (a) Two way radio and cellular telephone communication will be available in company vehicles.**

## **C. Diagram Of Drilling Location**

- 1. Attached is a diagram representing a typical location layout as well as the location of H<sub>2</sub>S monitors, briefing areas, and wind direction indicators.**



- △ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ▲ WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



FILE: H230-J

**Devon Energy Operating Corp**

**GRAYBURG-JACKSON AREA**

ESBAY COUNTY, NEW MEXICO

Scale in Feet  
25 0 25 50 75 100

RJ

10/94



APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage  
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: DEVON ENERGY OPERATING CORPORATION  
Address: 20 N. BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102-8260  
Contact party: JERALD MCKEDY Phone: (405) 552-4520
- 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 R-2268.
- 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: JERALD MCKEDY

Title: PETROLEUM ENGINEER

Signature: Jerald McKedy

Date: 1-19-95

- \* 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.

**devon**

OPERATING CORPORATION  
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260  
Telephone 405/235-3611  
Fax 405/552-4550

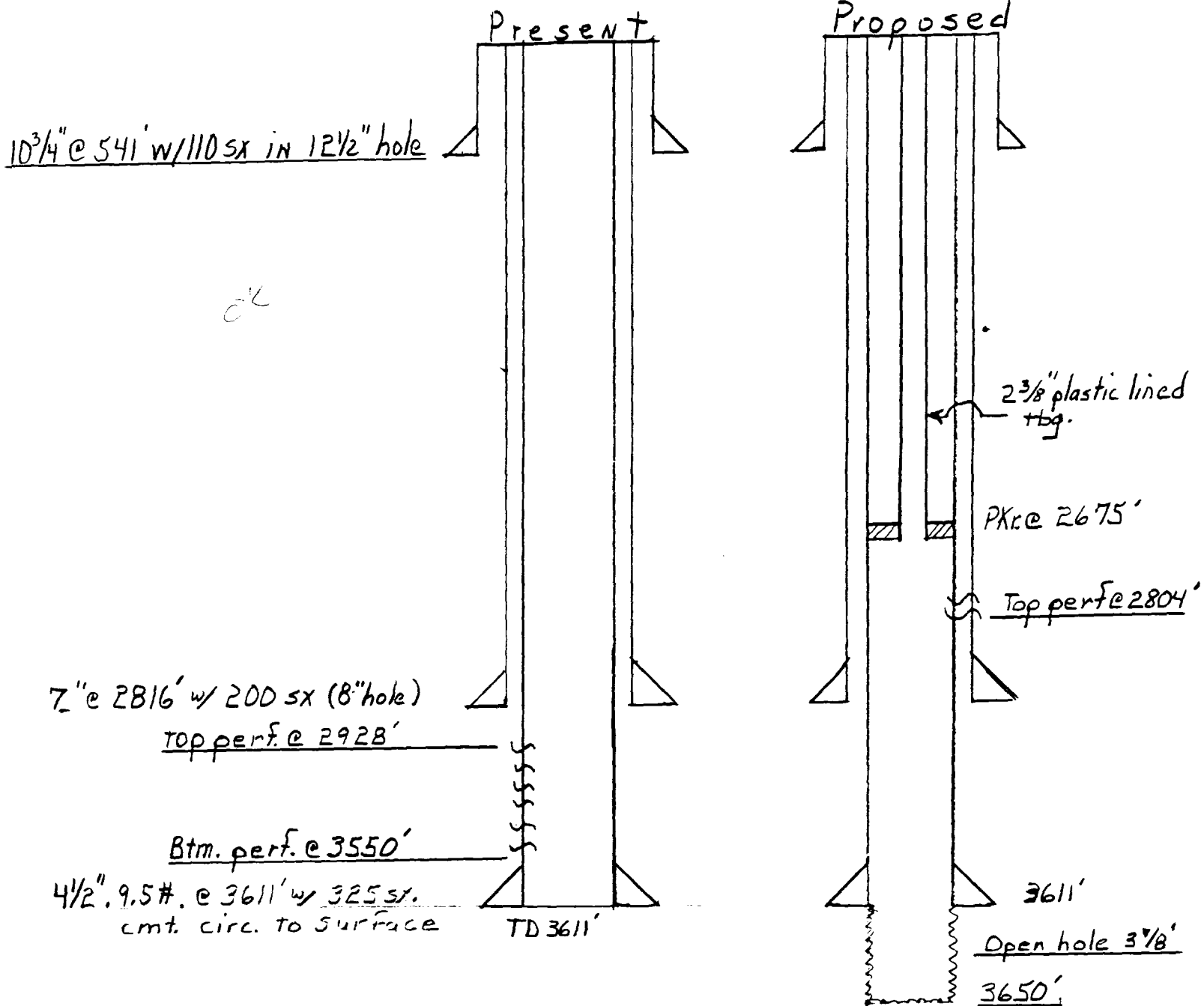
# WELLBORE SCHEMATIC

WELL: J.L. Keel "A" No. 9

LOCATION: 1980' FNL & 1980' FEL

7-17S-31E

Eddy Co., N.M.



Drill out shoe jt. & 39' of 3 7/8" open hole.

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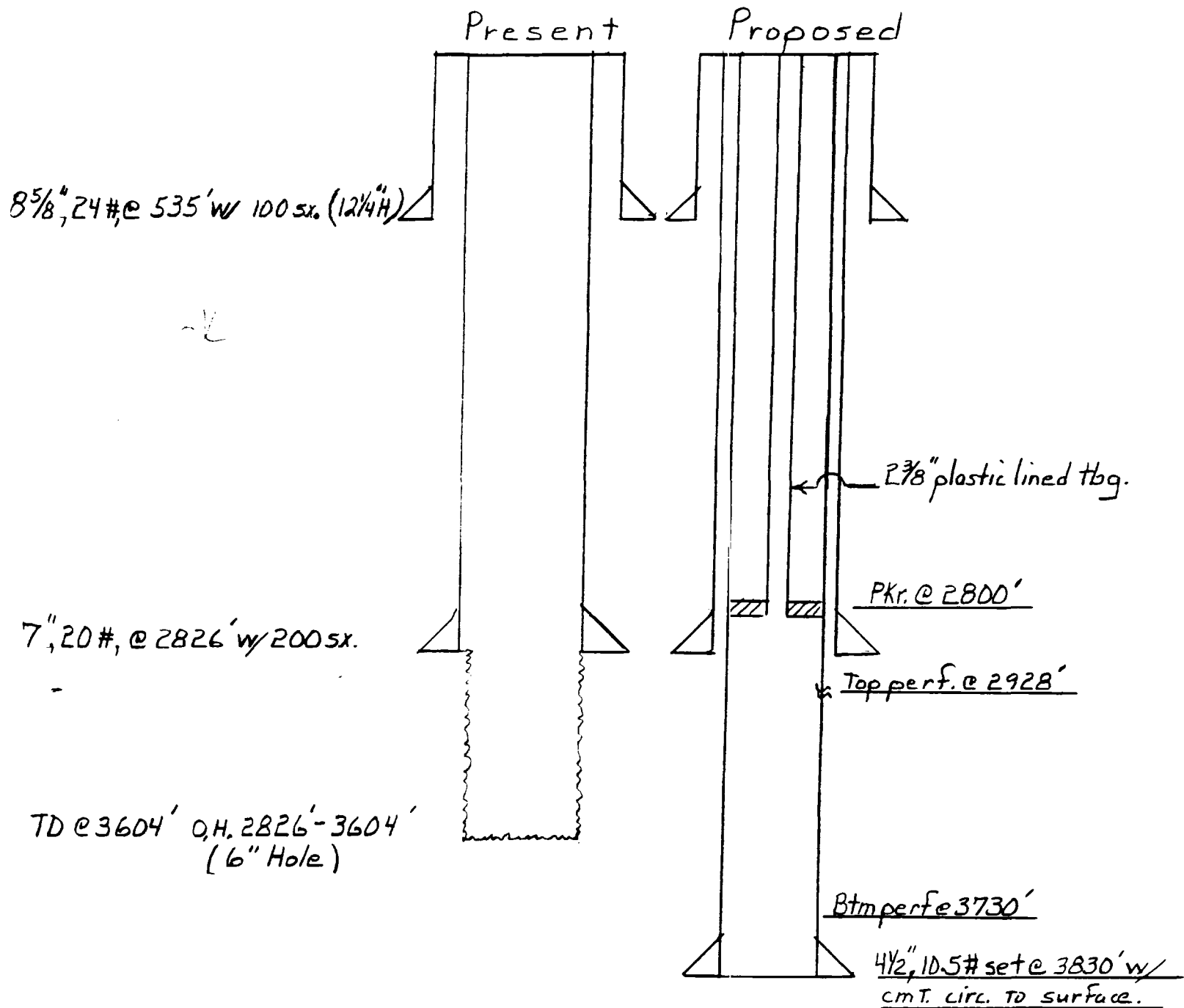
## WELLBORE SCHEMATIC

WELL: J.L. Keel "A" No. 11

LOCATION: 1980' FN 6 & 660' FEL

7-17S-31E

Eddy Co., N.M.



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FAX: 405.652-4550

## WELLBORE SCHEMATIC

WELL: J.L. Keel "A" No. 12

LOCATION: 660 FNL & 660 FFL

7-175-31E

Eddy Co., N.M.

Present

8<sup>5</sup>/<sub>8</sub>" @ 568' w/100 sx. (12<sup>1</sup>/<sub>2</sub>" H.)

OK

7" @ 2853' w 200 sx. Est. TOC 1080'

Top perf. @ 2954'

Btm. perf. @ 3588

4<sup>1</sup>/<sub>2</sub>" 9.5#, K-55 @ 3610' w/325 sx.  
TOC @ 1960' by CBL.

Proposed

2<sup>3</sup>/<sub>8</sub>" plastic lined tbg

PKr. @ 2675'

top perf 2812'

Btm perf 3600'

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FAX 405/652-4550

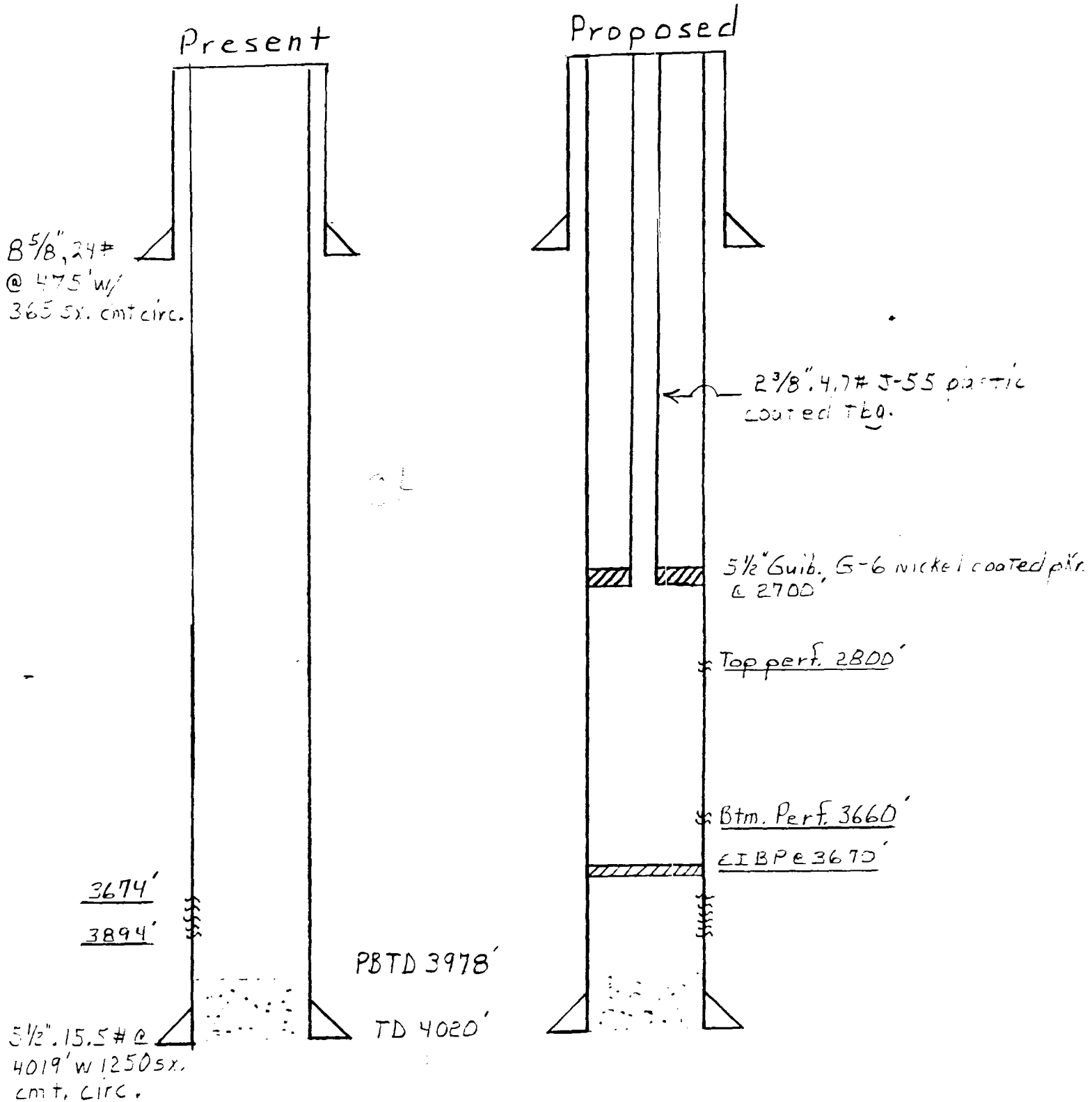
## WELLBORE SCHEMATIC

WELL: J. L. Kee/ "A" No. 23

LOCATION: 660' FNL - 2880 FEL

7-17S-31E

Eddy Co., New Mexico



devon

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FAX: 405/552-4560

## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 6

LOCATION: 1980' FNL & 1980' FWL

8-175-31E

Eddy Co., N.M.

Present

Proposed

10 $\frac{3}{4}$ " @ 556' w/ 200 sx.

7" @ 2856' w/ 200 sx.

6 $\frac{1}{4}$ " open hole to 3680'

2 $\frac{3}{8}$ " plastic lined tbq.

4 $\frac{1}{2}$ " pkr. @ 2750'

\* top perf. 2876'

\* Btm perf @ 3720'

4 $\frac{1}{2}$ " 10.5 # @ 3820'

cmr. circ. to surface

Deepen to 3820' & run 4 $\frac{1}{2}$ " csg.  
cmr. circ. to surface

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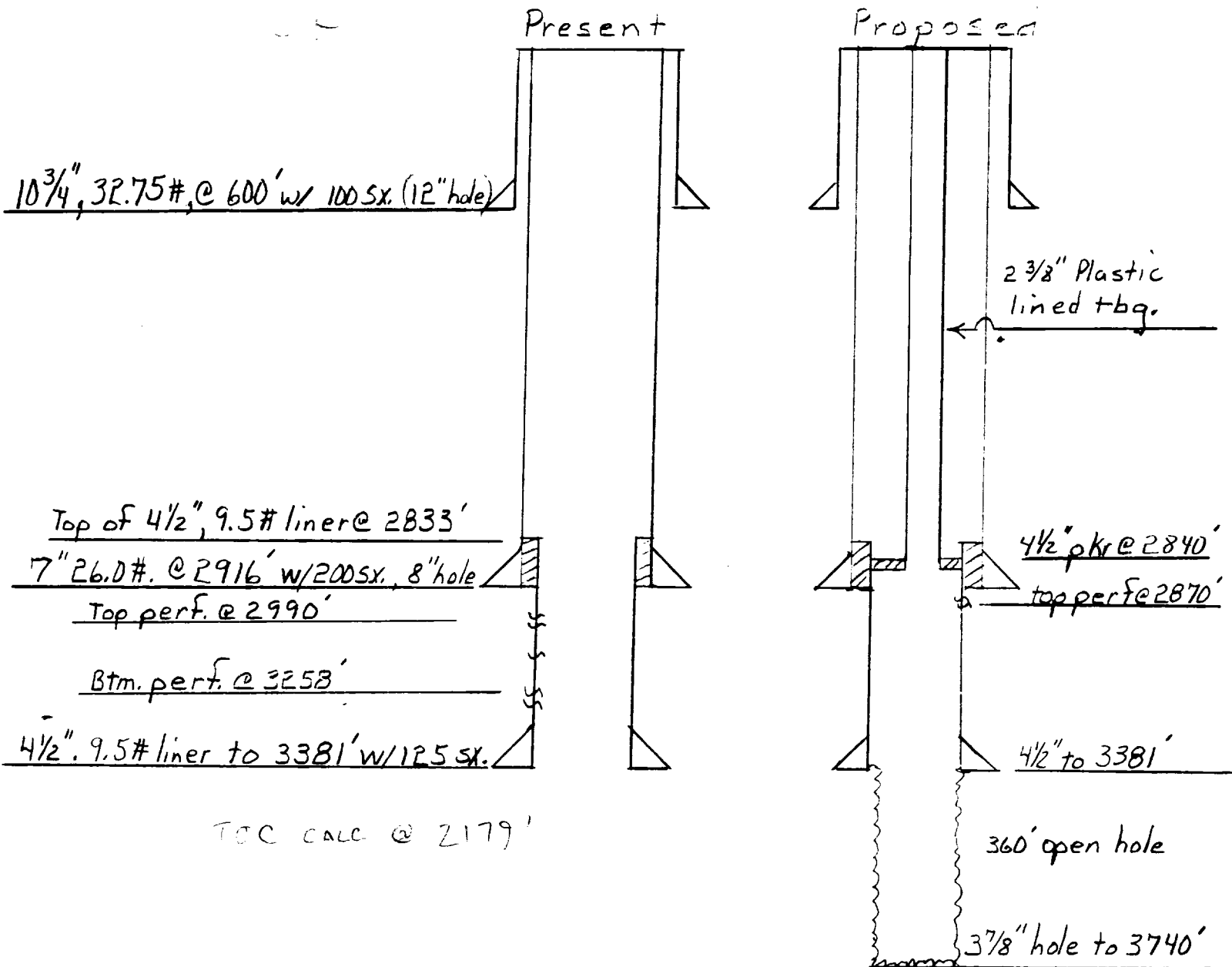
## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 7

LOCATION: 660'FWL & 1980'FWL

8-175-31E

Eddy Co., N.M.



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20 North Broadway, Suite 1800  
Oklahoma City, Oklahoma 73102-8260  
Telephone: 405.235-3611  
Fax: 405.652-4550

## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 11

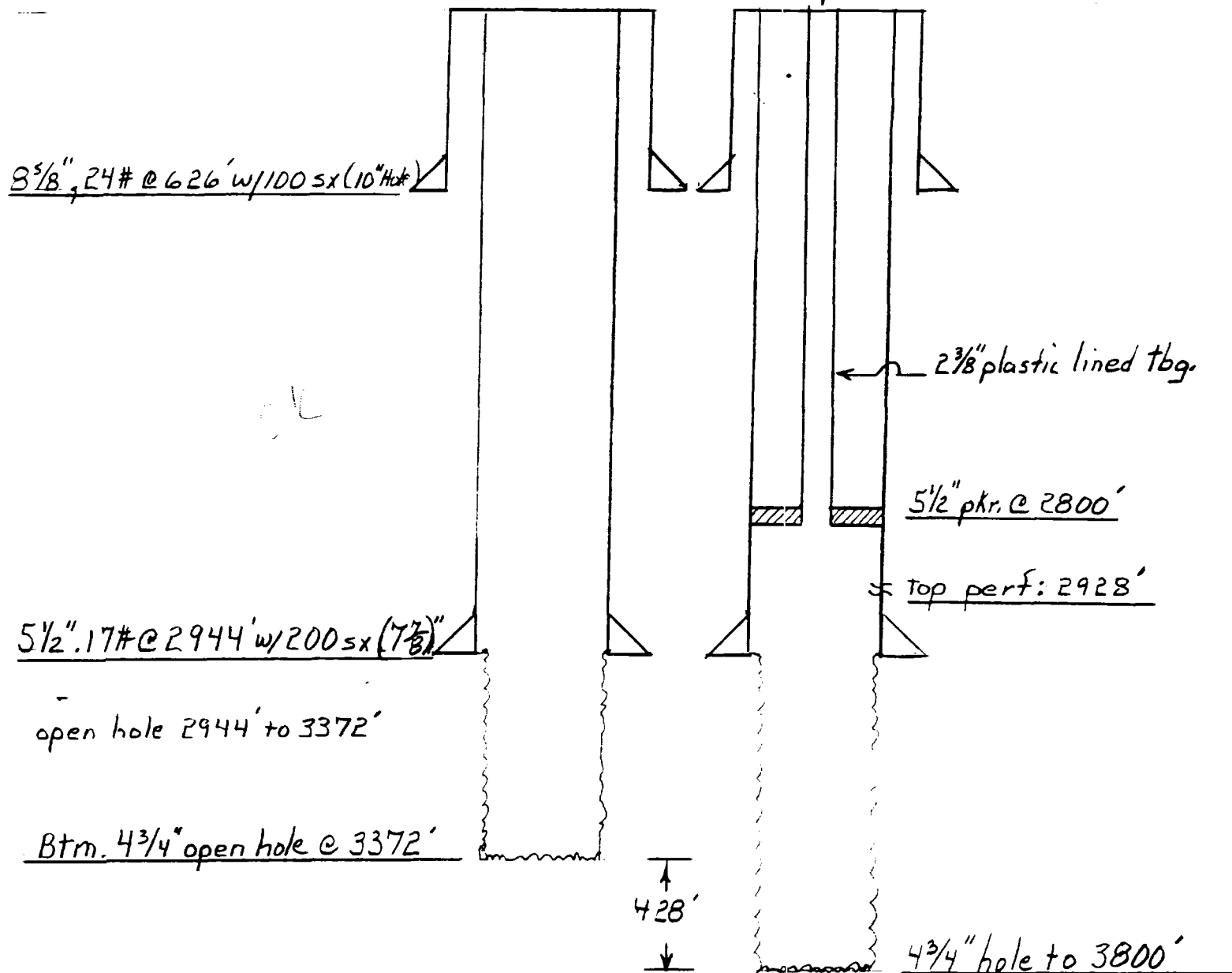
LOCATION: 660' FSL & 1980 FWH

5-17S-31E

Eddy Co., N.M.

Present

Proposed



Deepen existing 4 3/4" OH  
from 3372' to 3800' (428')



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## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 17

LOCATION: 1980' ENL 9 660 FWL

8-17S-31E

Eddy Co., NM.

Present

Proposed

5/8" 24# @ 568' w/ 100 sx. in 10" hole

OK

20# @ 2839' w/ 200 sx in 8" hole

Top perf. @ 2965'

Btm. perf. @ 3601'

1 1/2" 9.5# @ 3615' w/ 325 sx in 6" hole

TOC @ 560' by Terra svy.

2 3/8" plastic lined tbg

pkr. @ 2700'

top perf. @ 2827'

Btm. perf. @ 3615'

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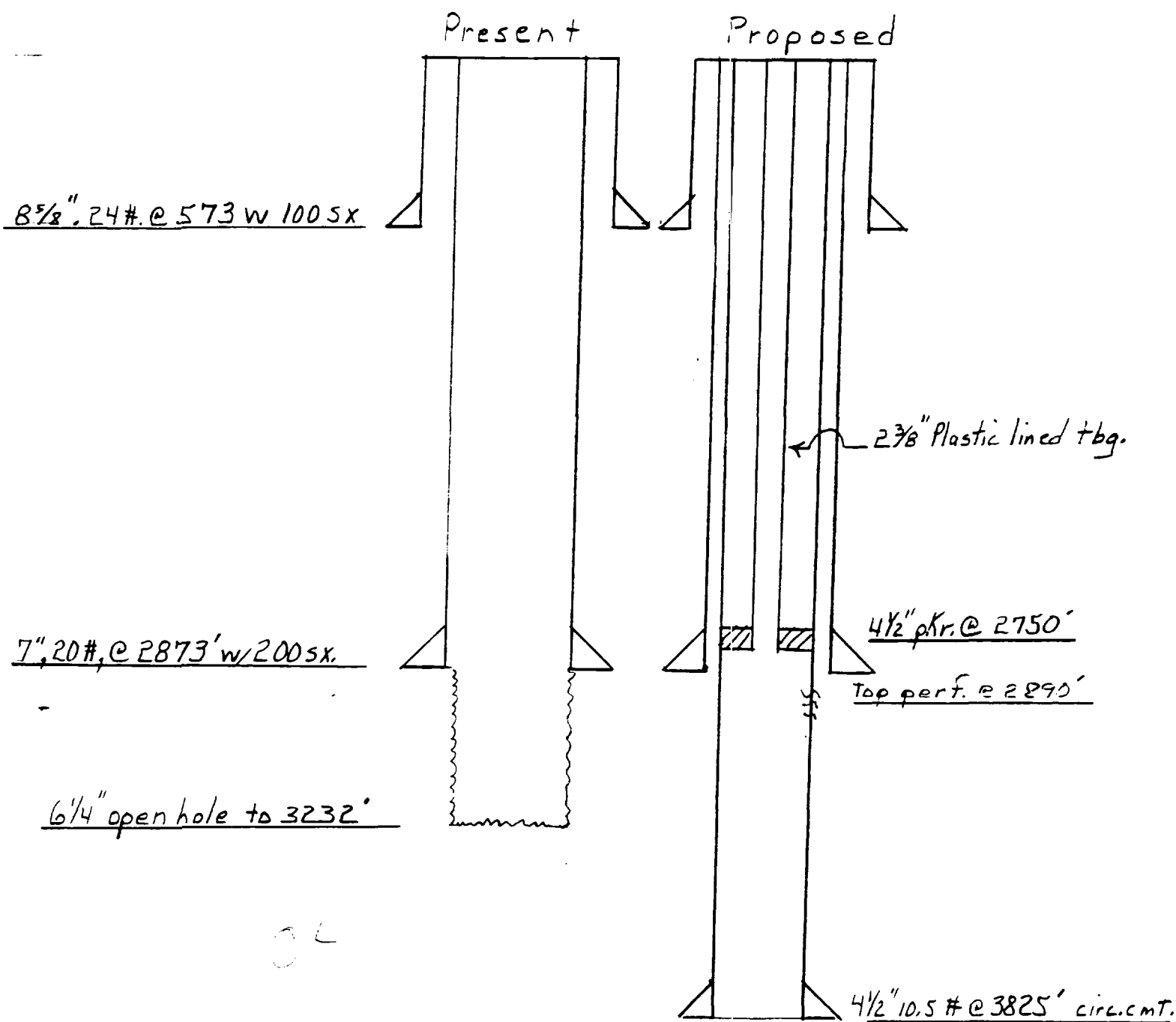
## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 18

LOCATION: 660 FNL & 660 FWL

8-17S-31E

Eddy Co., NM.



Drill 6 1/4" hole to 3825'; run 4 1/2" csg. & cement to the surface  
Perf. selectively based on new log data

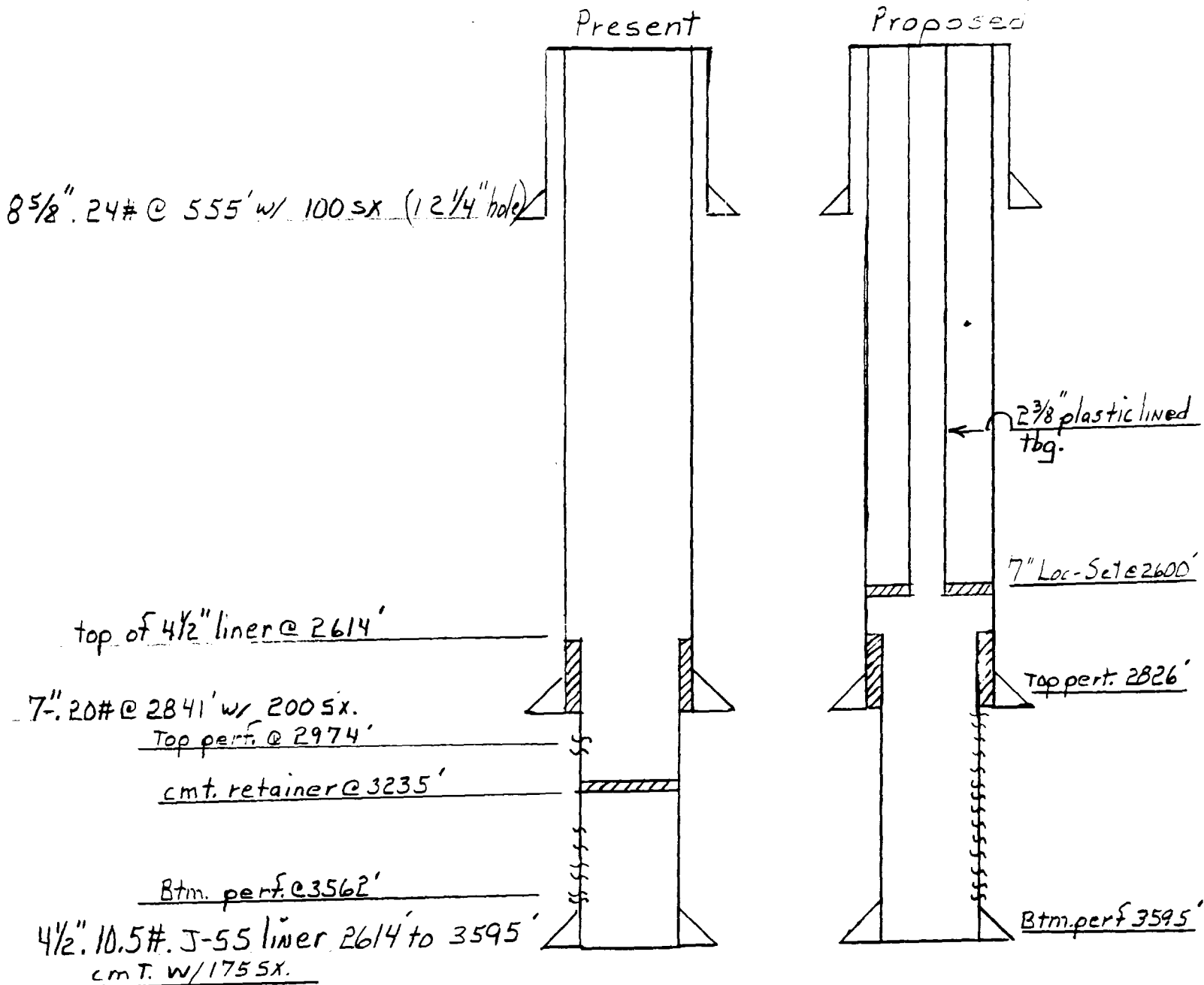
# WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 20

LOCATION: 660' FSL & 660' FEL

6-175-31E

Eddy Co. N.M.



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Telephone: 405.635-3611  
FAX: 405.652-4520

# WELLBORE SCHEMATIC

WELL: J.L. Kee 1" B" No. 21

LOCATION: 1980' FSL & 1980' FEL

6-17S-31E

Eddy Co., N.M.

C.L.

Present

Proposed

10<sup>3</sup>/<sub>4</sub>" @ 734' w 100 SX in 12<sup>1</sup>/<sub>2</sub>" hole

Top of 3<sup>1</sup>/<sub>2</sub>" liner @ 2737'

5<sup>1</sup>/<sub>2</sub>" @ 2811' w 125 SX in 8" hole

Est. TOC @ 1983' (calculated)

top perf. 2938'

Btm perf. 3454'

Btm. of 3<sup>1</sup>/<sub>2</sub>" liner @ 3471'

cmt. w 125 SX.

2<sup>3</sup>/<sub>8</sub>" plastic lined  
+bg.

PKr. @ 2675'

Top perf 2798'

Btm perf. 3470'

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FAX: 405/652-4550

# WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No 22

LOCATION: 1980' FSL & 660 FWL

5-17S-31E

Eddy Co. N.M.

Present

Proposed

9 5/8" @ 610' w/ 100 SX in 11" hole

Top 3 1/2" liner @ 2841'

5 1/2" @ 2907' w/ 200 SX in 8" hole

(TOL @ 1582' cal.)

top perf. 2983'

Btm perf. 3031'

1/2" 7.7# liner to 3609' w/ 100 SX.

2 3/8" plastic lined  
+ bgs.

PKr. @ 2750'

Top perf @ 2880'

Btm perf @ 3600'

Selectively perforate interval  
2880' to 3600', treat &  
convert to water injection

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Telephone: 405.235-3611  
FAC: 405.862-4880

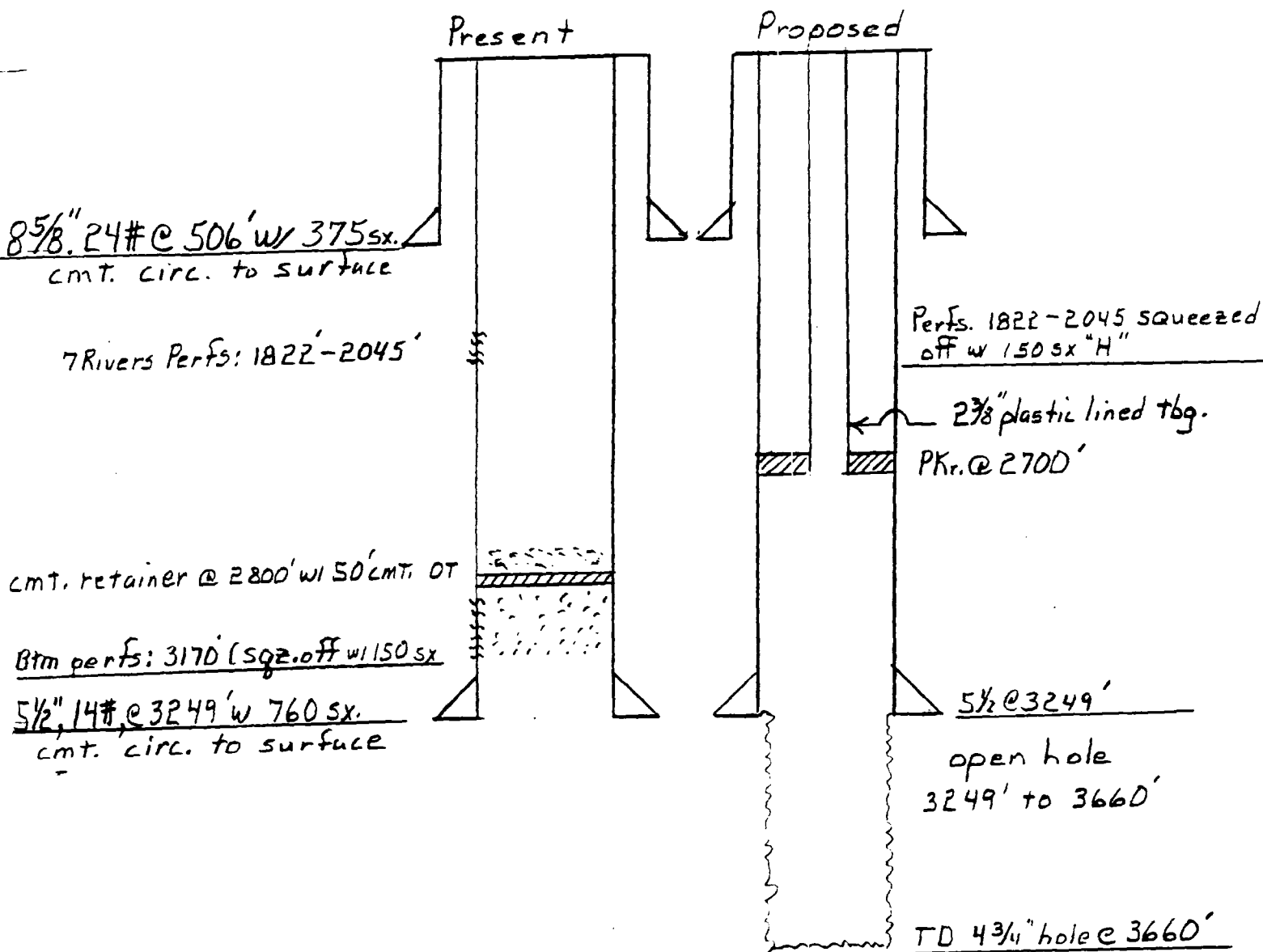
## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 30

LOCATION: 430' FSL & 2250' FEL

6-175-31E

Eddy Co., N.M.



Squeeze perfs @ 1822-2045 w/ 150 sx.  
Drill out sqz., retainer & shoe ST.  
Drill 4 3/4" O.H. 3249'-3660'  
Log & perf selectively 2812'-3660'

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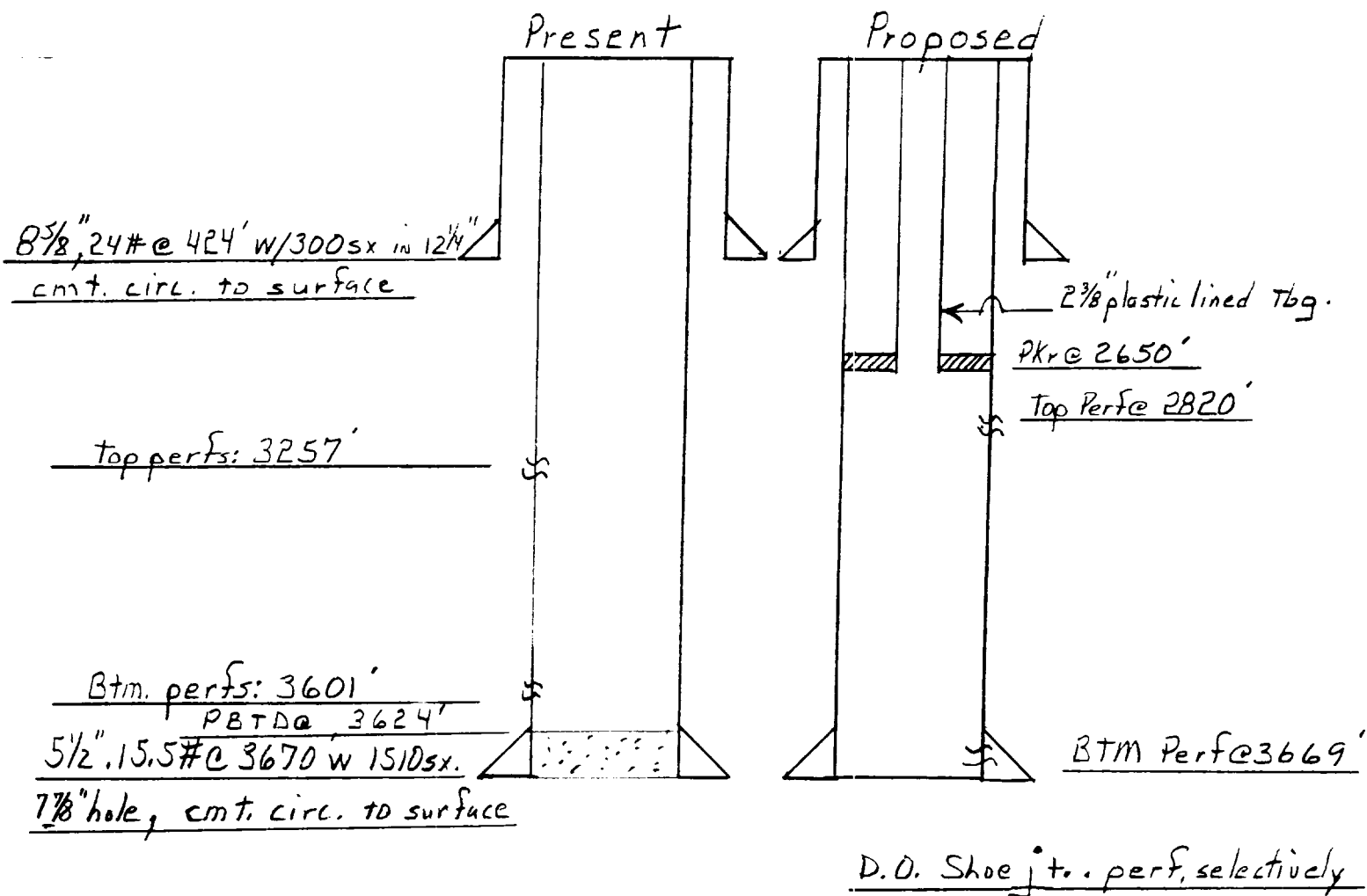
# WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 38

LOCATION: 2080 FSL & 660 FEL

6-175-31E

Eddy Co., N.M.



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Oklahoma City, Oklahoma 73102-8260  
Telephone: 405.235-3411  
FAC: 405.852-4550

## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 39

LOCATION: 510' FSL & 660' FWL

5-175-31E

Eddy Co., N.M.

Present

Proposed

8 $\frac{5}{8}$ " 24# @ 379' w/ 300sr in 12 $\frac{1}{4}$ "  
CMT. LIRC TO SURFACE

Top perf. @ 3011'

Btm. perf. @ 3702'

PBTD @ 3711'

5 $\frac{1}{2}$ " 15.5# @ 3757' w/ 1150sr in 7 $\frac{7}{8}$ "  
CMT. LIRC. to surface

2 $\frac{3}{8}$ " plastic lined tbg.

Pkr. @ 2700'

Top perf. @ 2872'

Btm. Perf. @ 3706'



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OPERATING CORPORATION  
20 North Broadway, Suite 1800  
Oklahoma City, Oklahoma 73102-8260  
Telephone: 405.226-3611  
FAX: 405.652-4550

## WELLBORE SCHEMATIC

WELL: J. L. Keel "B" No. 47

LOCATION: 1980' FSL & 1880' FWL

5-17S-31E

Eddy Co., N.M.

Present

Proposed

8 5/8" @ 503' w/ 305 SX in 12 1/4"  
cm t. circ. to surface

Top perf. @ 3807'

BTm perf. @ 3922'

PBTD: 3995

5 1/2" @ 4039' w/ 1010 SX in 7 7/8"  
cm t. circ. to surface

TD: 4040'

2 3/8" plastic lined tbq.

PKr. @ 2800'

Top perfs 2938'

BTm perfs @ 3784'

CI BP @ 3800'

OK

# Affidavit of Publication

Nº 17015

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "A" #9  
1980/FNL & 1980/FEL  
Sec. 7-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

Nº 17024

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "A" #11  
1980'FNL & 660'FEL  
Sec. 7-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4580

# Affidavit of Publication

Nº 17012

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this  
14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "A" #12  
660'FNL & 660'FEL  
Sec. 7-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

Nº 16906

January 27, 1995

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

January 27, 1995  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

30<sup>th</sup> day of January, 1995  
Donna Crump

My commission expires 8/01/98  
Notary Public

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well to an injection well for secondary recovery purposes:

J.L. Keel "A" #23  
660' FNL & 2080' FEL  
Section 7-T17S-R31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy  
Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

No 17014

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #6  
1980'FNL & 1980'FWL  
Sec. 8-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating  
Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

No 17017

State of New Mexico,  
County of Eddy, ss.

Amy McKay

being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14th day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #7  
660'FNL & 1980'FWL  
Sec. 8-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4564

# Affidavit of Publication

Nº 17027

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #11  
660FSL & 1980FWL  
Sec. 5-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560



# Affidavit of Publication

No 17019

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 19 94  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14th day of December, 19 94

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #17  
1980'FNL & 680'FWL  
Sec. 8-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

No 17016

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #18  
660'FNL & 660'FWL  
Sec. 8-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

No 17026

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #20  
660FSL & 660FEL  
Sec. 6-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

Nº 17023

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14th day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #21  
1980FSL & 1980FEL  
Sec. 6-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

Nº 17020

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #22  
1980'FSL & 660'FWL  
Sec. 5-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 500 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

No 17025

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$24.53,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #30  
430FSL & 2250FEL  
Sec. 6-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4560

# Affidavit of Publication

Nº 17021

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98

Notary Public

*December 13, 1994*

Notice is hereby given that  
Devon Energy Operating Corporation is applying to the  
New Mexico Oil Conservation  
Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #38  
2080'FSL & 660'FEL  
Sec. 6-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4580

# Affidavit of Publication

Nº 17018

State of New Mexico,  
County of Eddy, ss.

Amy McKay,  
being first duly sworn, on oath says:

That she is Business Manager  
of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 19 94  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 19 94

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #39  
510'FSL & 660'FWL  
Sec. 5-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating Corporation  
20 North Broadway,  
Suite 1500  
Oklahoma City, OK  
(405) 552-4500



# Affidavit of Publication

Nº 17022

State of New Mexico,  
County of Eddy, ss.

Amy McKay

being first duly sworn, on oath says:

That she is Business Manager of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 13, 1994  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_

That the cost of publication is \$ 24.53,  
and that payment thereof has been made and will  
be assessed as court costs.

Amy McKay

Subscribed and sworn to before me this

14<sup>th</sup> day of December, 1994

Donna Crump

My commission expires 8/01/98  
Notary Public

December 13, 1994

Notice is hereby given that Devon Energy Operating Corporation is applying to the New Mexico Oil Conservation Division to convert the following well for secondary recovery purposes:

J.L. Keel "B" #47  
1980FSL & 1880FWL  
Sec. 5-17S-31E  
Eddy County, NM

The intended purpose of this well is to inject produced waters into the Grayburg-San Andres formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Randy Jackson  
District Engineer  
Devon Energy Operating  
Corporation  
20 North Broadway,  
Suite 1500,  
Oklahoma City, OK  
(405) 552-4560

# WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 8

LOCATION: 1980' FNL & 1980' FEL

8-17S-31E

Eddy Co., N.M.

OK

P & A  
 6-9-B3

10<sup>3</sup>/<sub>4</sub>" @ 60' w/ 100 sx.

Perf. 7" @ 580' circ cmt to surf.  
left cmt inside 7"

35 sx plug 1280' - 1486'

1475'

top of 4 1/2" liner @ 2750'

7" @ 2946' w/ 200 sx.

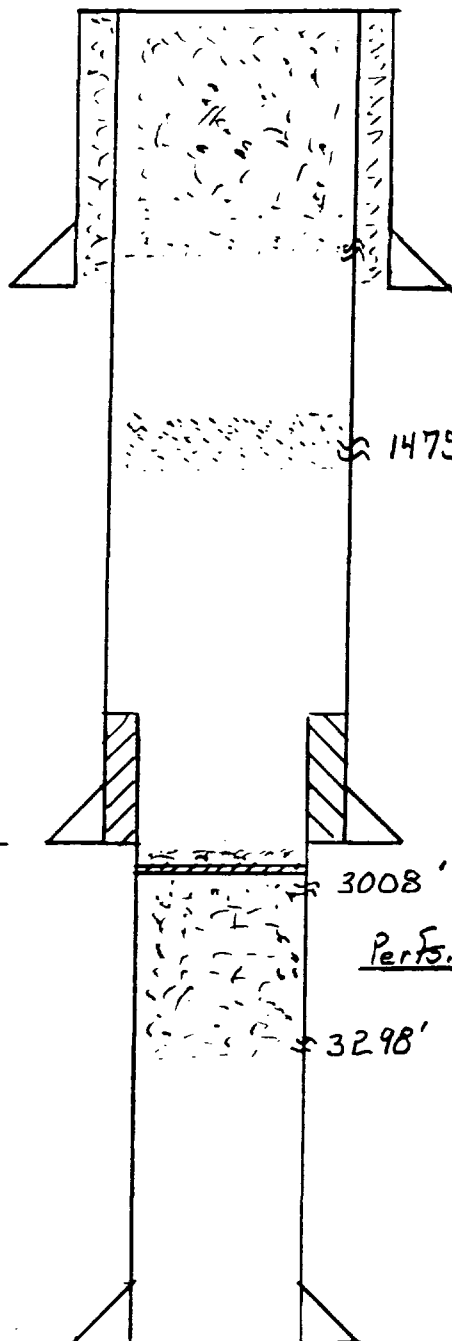
cmt. retainer @ 2985' w 35 sx OT.

3008'

Perfs. 3008-3298 sqz. off w/ 100 sx "H"

3298'

4 1/2" liner 2750' to 3400'



District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2038

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies



AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-05097
<sup>4</sup> Property Code LC-029435-A	<sup>5</sup> Property Name J.L. Keel "A"	<sup>6</sup> Well No. 9

**<sup>7</sup> Surface Location**

UL or lot no. "G"	Section 7	Township 17S	Range 31E	Lot Ids	Feet from the 1980	North/South line North	Feet from the 1980	East/West line East	County Eddy
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**<sup>8</sup> Proposed Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code  	<sup>12</sup> Work Type Code  	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code  	<sup>15</sup> Ground Level Elevation 3747'
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth 3650	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor Not Known	<sup>20</sup> Spud Date 3-1-95

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
12 1/2"	10 3/4"	40.5	541	110	140'
8 1/4"	7"	26.0	2816	200	820'
6"	4 1/2"	9.5	3611	325	circ. to surface

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

This WIW is currently shut in. It has 4 1/2" casing to 3611' & is cemented to the surface. It is perforated 2928'-3550' in the Grayburg-San Andres. Devon proposes to deepen the well 39' to 3650' (3 7/8" hole), run logs, selectively perforate 2804' to 3611' & acidize the interval 2804'-3650' w/15% NEFE acid. The well will be returned to water injection. This should provide a more effective & efficient flood pattern for the Grayburg-San Andres. It is anticipated the proposed work will start 3-1-95.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		<b>OIL CONSERVATION DIVISION</b>	
Signature: <i>Gerald McKedy</i>		Approved by:	
Printed name: Gerald McKedy		Title:	
Title: Petroleum Engineer		Approval Date:	
Date: January 24, 1995		Expiration Date:	
Phone: 405-552-4580		Conditions of Approval:	
Attached <input type="checkbox"/>			

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

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

WELL API NO.

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.  
LC-029435-A

7. Lease Name or Unit Agreement Name  
J.L. KEEL "A"

8. Well No.

23

9. Pool name or Wildcat  
GRAYBURG JACKSON

**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.)

1. Type of Well:

OIL  
WELL ☐

GAS  
WELL ☐

OTHER

W.I.W.

2. Name of Operator

DEVON ENERGY OPERATING CORPORATION

3. Address of Operator

20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260

4. Well Location

Unit Letter \_\_\_\_\_ : 660 Feet From The NORTH Line and 2080 Feet From The EAST Line

Section 7

Township 17S

Range 31E

NMPM

EDDY

County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

GR: 3768'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: CONVERT TO WATER INJECTION ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

THE SUBJECT WELL WAS DRILLED AS A REPLACEMENT WELL SOLELY FOR THE PURPOSE OF WATER INJECTION INTO THE GRAYBURG-SAN ANDRES. DEVON PROPOSES TO SELECTIVELY PERFORATE THE INTERVAL 2800'-3660', ACIDIZE W/15% NEFE AND CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Jerald M. Kedy*

TITLE

PETROLEUM ENGINEER

DATE

1/25/95

TYPE OR PRINT NAME

JERALD MCKEDY

TELEPHONE NO.

405-552-4520

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

District I  
PO Box 1980, Hobbs, NM 88241-1980  
  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-05107
<sup>4</sup> Property Code LC-029435-B	<sup>5</sup> Property Name J.L. Keel "B"	<sup>6</sup> Well No. 6

**<sup>7</sup> Surface Location**

UL or lot no. "F"	Section 8	Township 17S	Range 31E	Lot Ids	Feet from the 1980	North/South line North	Feet from the 1980	East/West line West	County Eddy
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**<sup>8</sup> Proposed Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1					<sup>10</sup> Proposed Pool 2				

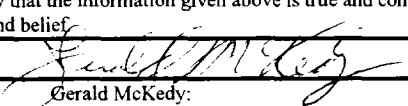
<sup>11</sup> Work Type Code	<sup>12</sup> Work Type Code	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code	<sup>15</sup> Ground Level Elevation 3753'
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth 3820	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor Not Known	<sup>20</sup> Spud Date 3-1-95

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
12 1/2"	10 3/4"	32.7	556	200	50'
8"	7"	20.0	2856	200	462'
6 1/4"	4 1/2"	10.5	3820	circ. cmt. to surface	

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

This well is a producer in the Grayburg-San Andres through an open hole section 2856'-3680'. Devon proposes to deepen the well to 3820', run OH & cased hole logs, run & cement 4 1/2" casing to the surface. Based on new log data, the interval 2876'-3720' will be selectively perforated, acidized w/15% NEFE & converted to water injection. It is anticipated the proposed work will start 3-1-95.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: 		Approved by:	
Printed name: Gerald McKedy		Title:	
Title: Petroleum Engineer		Approval Date:	Expiration Date:
Date: January 24, 1995	Phone: 405-552-4520	Conditions of Approval:	
		Attached <input type="checkbox"/>	

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-01508
<sup>4</sup> Property Code LC-029435-B	<sup>5</sup> Property Name J.L. Keel "B"	<sup>6</sup> Well No. 7

<sup>7</sup> Surface Location

UL or lot no. C	Section 8	Township 17S	Range 31E	Lot Ids	Feet from the 660	North/South line North	Feet from the 1980	East/West line West	County Eddy
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<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1						<sup>10</sup> Proposed Pool 2			

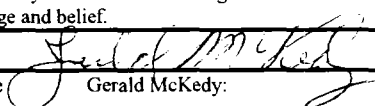
<sup>11</sup> Work Type Code	<sup>12</sup> Work Type Code	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code	<sup>15</sup> Ground Level Elevation
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth 3740	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor Not Known	<sup>20</sup> Spud Date 3-1-95

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
12"	10 3/4"	32.75	600	100	320'
8"	7"	26.0	2916	200	620'
6 1/4"	4 1/2"	9.5	2883-3381	125	TOL @ 2883'
3 3/4"	None O.H.				(circ.)

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

This WIW is currently shut in. It has a 4 1/2" liner from 2883' to 3381' & is perforated 2990' to 3258' **OR**. Devon proposes to deepen the well to 3740', run OH & cased hole logs, selectively perforate the interval 2870' to 3381' & open hole the section 3381' to 3740'. It is anticipated the interval will be acidized w/15% NEFE prior to first injection. After pressure testing the well will be returned to injection in the Grayburg-San Andres.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: 		Approved by:	
Printed name: Gerald McKedy		Title:	
Title: Petroleum Engineer		Approval Date:	Expiration Date:
Date: January 24, 1995	Phone: 405-552-4520	Conditions of Approval:	
		Attached <input type="checkbox"/>	

District I  
PO Box 1980, Hobbs, NM 88241-1980  
  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-05077
<sup>4</sup> Property Code LC-029435-B	<sup>5</sup> Property Name J.L. Keel "B"	<sup>6</sup> Well No. 11

<sup>7</sup> Surface Location

UL or lot no. "N"	Section 5	Township 17S	Range 31E	Lot Ids	Feet from the 660	North/South line South	Feet from the 1980	East/West line FWL	County Eddy
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<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code	<sup>12</sup> Work Type Code	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code	<sup>15</sup> Ground Level Elevation 3809
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth 3800	<sup>18</sup> Formations Grayburg-San Andres	<sup>19</sup> Contractor not known	<sup>20</sup> Spud Date 3-1-95

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
10"	8 5/8"	24	626	100	429 calc.
7 7/8"	5 1/2"	17	2944	200	1559 calc.

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.  
The subject well is a marginal producer from an open hole section 2944'-3372' in the Grayburg-San Andres. Devon proposes to deepen the existing OH section to 3800', run OH & cased hole logs, selectively perforate the interval 2928'-3800' w/15% NEFE acid as needed & convert the well to water injection. This will allow a more effective & efficient flood pattern in the Grayburg-San Andres. It is anticipated the proposed work will start 3-1-95.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: <i>Jerald M. McKedy</i>		Approved by:	
Printed name: <i>Jerald McKedy</i>		Title:	
Title: <i>Petroleum Engineer</i>		Approval Date:	Expiration Date:
Date: <i>1-25-95</i>	Phone: <i>405-552-4520</i>	Conditions of Approval:	
		Attached <input type="checkbox"/>	

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

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

WELL API NO.

30-015-05100

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

LC-029435

7. Lease Name or Unit Agreement Name

J.L. KEEL "A"

8. Well No.

12

9. Pool name or Wildcat

GRAYBURG JACKSON

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.)

1. Type of Well:

OIL  
WELL ☐

GAS  
WELL ☐

OTHER W.I.W.

2. Name of Operator

DEVON ENERGY OPERATING CORP.

3. Address of Operator

20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260

Well Location

Unit Letter A : 660 Feet From The NORTH Line and 660 Feet From The EAST Line

Section 7 Township 17S Range 31E NMPM EDDY County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

GR: 3745'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: ADD ADDITIONAL PERFS AND ACIDIZE ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

THIS WIW IS CURRENTLY SHUT IN. IT IS PERFORATED 2954' TO 3588' OA IN THE GRAYBURG-SAN ANDRES. DEVON PROPOSES TO RUN Cased Hole Logs, SELECTIVELY PERFORATE 2812'-3600', TREAT W/15% NEFE ACID AS NEEDED AND RETURN THE WELL TO WATER INJECTION. THE PROPOSED WORK SHOULD RESULT IN A MORE EFFICIENT & EFFECTIVE FLOOD PATTERN. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3-1-95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald Mckedy TITLE PETROLEUM ENGINEER DATE 1/25/95

TYPE OR PRINT NAME JERALD MCKEDY 405-552-4520 TELEPHONE NO.

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



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

WELL API NO. 30-015-05113
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. LC-029435-B
7. Lease Name or Unit Agreement Name  J.L. KEEL "B"
8. Well No. 17
9. Pool name or Wildcat GRAYBURG JACKSON

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)	
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER W.I.W. <input type="checkbox"/>	
2. Name of Operator DEVON ENERGY OPERATING CORP.	
3. Address of Operator 20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260	
4. Well Location Unit Letter <u>E</u> : <u>1980</u> Feet From The <u>NORTH</u> Line and <u>660</u> Feet From The <u>WEST</u> Line Section <u>8</u> Township <u>17S</u> Range <u>31E</u> NMPM <u>EDDY</u> County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
<b>NOTICE OF INTENTION TO:</b>	<b>SUBSEQUENT REPORT OF:</b>
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>REACTIVATE AS WIW</u> <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>

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.

THE WELL IS A TEMPORARILY SHUT IN WATER INJECTION WELL. IT IS CURRENTLY PERFORATED 2965'-3601' O.A. DEVON PLANS TO TEST CASING, SELECTIVELY PERFORATE THE INTERVAL 2827'-3615' TREAT W/15% NEFE ACID AS NEEDED & RETURN TO WATER INJECTION. IT IS ANTICIPATED THE PROSOSED WORK WILL START 3/1/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald M. Kedy TITLE PETROLEUM ENGINEER DATE 1/25/95  
TYPE OR PRINT NAME JERALD MCKEDY TELEPHONE NO. 405-552-4520

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

Submit 3 Copies  
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State of New Mexico  
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Form C-103  
Revised 1-1-89

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

WELL API NO.  
30-015-05114

5. Indicate Type of Lease  
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.  
LC-029435-B

7. Lease Name or Unit Agreement Name

J.L. KEEL "B"

8. Well No.  
18

9. Pool name or Wildcat  
GRAYBURG-JACKSON

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.)

1. Type of Well:  
OIL WELL ☐ GAS WELL ☐ OTHER WATER INJECTION

2. Name of Operator  
DEVON ENERGY OPERATING CORPORATION

3. Address of Operator  
20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260

4. Well Location  
Unit Letter : 660 Feet From The NORTH Line and 660 Feet From The WEST Line

Section 8 Township 17S Range 31E NMPM EDDY County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
GR: 3761'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐  
OTHER: DEEPEN & CONVERT TO INJECTION ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
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.

THE WELL CURRENTLY PRODUCES FROM AN OPEN HOLE SECTION 2873'-3232' IN THE GRAYBURG SAN ANDRES INTERVAL. SEVEN INCH CASING IS SET @ 2873'. DEVON ENERGY PLANS TO DEEPEN THE WELL TO 3825', RUN OPEN HOLE LOGS, RUN & CEMENT 4 1/2" CASING TO THE SURFACE. THE INTERVAL 2890' TO 3725' WILL BE SELECTIVELY PERFORATED, TREATED & CONVERTED TO WATER INJECTION.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald Mckedy TITLE PETROLEUM ENGINEER DATE 1/25/95

TYPE OR PRINT NAME JERALD MCKEDY

TELEPHONE NO. 405-552-4580

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

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PO Drawer DD, Artesia, NM 88211-0719  
  
District III  
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District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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Revised February 10, 1994  
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Fee Lease - 5 Copies



AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-05114
<sup>4</sup> Property Code LC-029435-B	<sup>5</sup> Property Name J.L. Keel "B"	<sup>6</sup> Well No. 18

<sup>7</sup> Surface Location

UL or lot no. D	Section 8	Township 17S	Range 31E	Lot Ids	Feet from the 660'	North/South line <u>North</u>	Feet from the <u>660</u>	East/West line <u>West</u>	County <u>Eddy</u>
--------------------	--------------	-----------------	--------------	---------	-----------------------	----------------------------------	-----------------------------	-------------------------------	-----------------------

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code	<sup>12</sup> Work Type Code	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code	<sup>15</sup> Ground Level Elevation
<sup>16</sup> Multiple <u>Yes</u>	<sup>17</sup> Proposed Depth 3825'	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor Not Known	<sup>20</sup> Spud Date <u>3-1-95</u>

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
12 1/2"	8 5/8"	24.0	573	100	137' calc.
8"	7"	20.0	2873	200	526' calc.
6 1/4"	4 1/2"	10.5	3825	cire to surface	

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

The well is currently producing from the Grayburg-San Andres through an open hole section 2873'-3232'. Devon plans to deepen the well to 3825', run O.H. & cased hole logs, run & cement 4 1/2" casing to the surface. Based on new log data the interval 2890' to 3725' will be selectively perforated, acidized w/15% NEFE as needed and the well converted to water injection. It is anticipated the proposed work will start 3-1-95.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Gerald McKedy  
Printed name: Gerald McKedy

Title: Petroleum Engineer

Date: 1/24/95

Phone: 405-552-4520

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

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Revised 1-1-89

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

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

WELL API NO. 30-015-05085
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. LC-029435-B
7. Lease Name or Unit Agreement Name J.L. KEEL "B"
8. Well No. 20
9. Pool name or Wildcat GRAYBURG JACKSON
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GR: 3769'

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.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. Name of Operator DEVON ENERGY OPERATING CORPORATION
3. Address of Operator 20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260	4. Well Location Unit Letter P : 660 Feet From The SOUTH Line and 660 Feet From The EAST Line Section 6 Township 17S Range 31E NMPM EDDY County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GR: 3769'	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: DRILL OUT TO TD, PERFORATE & ACIDIZE <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

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.

THIS PRODUCING WELL WAS ORIGINALLY COMPLETED IN THE GRAYBURG-SAN ANDRES THROUGH PERFORATIONS 2974'-3562' OA. SINCE INITIAL COMPLETION A CEMENT RETAINER WAS SET @ 3235' & ALL PERFORATIONS BELOW WERE SQUEEZED OFF. THE WELL IS NOW A VERY MARGINAL PRODUCER THROUGH PERFORATIONS 2974'-3194'.

DEVON PROPOSES TO DRILL OUT TO 3595' (BOTTOM OF 4 1/2" LINER), PRESSURE TEST CASING AND LINER, SELECTIVELY PERFORATE THE INTERVAL 2826' TO 3595', TREAT W/15% NEFE ACID AS NEEDED & CONVERT THE WELL TO WATER INJECTION. THIS WILL ALLOW A MORE EFFECTIVE AND EFFICIENT FLOOD PATTERN IN THE GRAYBURG-SAN ANDRES. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald Mckedy TITLE PETROLEUM ENGINEER DATE 1/25/95  
TYPE OR PRINT NAME JERALD MCKEDY TELEPHONE NO. 405 552-4520

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
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Revised 1-1-89

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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

WELL API NO. 30-015-05084
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. LC-029435-B

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)	
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> WIW <input type="checkbox"/>	7. Lease Name or Unit Agreement Name J.L. KEEL "B"
2. Name of Operator DEVON ENERGY OPERATING CORP.	8. Well No. 21
3. Address of Operator 20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260	9. Pool name or Wildcat GRAYBURG JACKSON
4. Well Location Unit Letter <u>J</u> : <u>1980</u> Feet From The <u>SOUTH</u> Line and <u>1980</u> Feet From The <u>EAST</u> Line Section <u>6</u> Township <u>17 SOUTH</u> Range <u>31 EAST</u> NMPM <u>EDDY</u> County <u></u>	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GL: <u>3752</u>	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
<b>NOTICE OF INTENTION TO:</b>	<b>SUBSEQUENT REPORT OF:</b>
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <u>REACTIVATE AS WIW.</u> <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <u></u> <input type="checkbox"/>

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.

THE WELL WAS ORIGINALLY COMPLETED AS A GRAYBURG-SAN ANDRES PRODUCER FROM AN OPEN HOLE SECTION 2811'-3471'. IN 2/66 A 3 1/2" LINER WAS SET FROM 2737'-3471' AND THE INTERVAL 2938'-3454' WAS PERFORATED. AFTER ACIDIZING THE WELL WAS CONVERTED TO WATER INJECTION. THE WELL IS CURRENTLY SHUT IN.

DEVON ENERGY PLANS TO RE-ENTER THE WELL, TEST CASING & LINER, LOG, & PERFORATE SELECTIVELY EXPANDING THE INJECTION INTERVAL WITHIN THE GRAYBURG-SAN ANDRES (2798-3470). A NEW STRING OF PLASTIC COATED 2 3/8" TUBING IN CONJUNCTION W/A NICKEL COATED TENSION PACKER WILL BE USED AS THE INJECTION STRING. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald Mckedy TITLE PETROLEUM ENGINEER DATE 1/25/95  
TYPE OR PRINT NAME JERALD MCKEDY TELEPHONE NO. 405-552-4520

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

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

WELL API NO.	30-015-05082
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.	LC-029435-B

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 J.L. KEEL "B"
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER WATER INJECTION WELL	8. Well No. 22	9. Pool name or Wildcat GRAYBURG-JACKSON
2. Name of Operator DEVON ENERGY OPERATING CORP.		
3. Address of Operator 20 N. BROADWAY, SUITE 1500, OKC, OK 73102-8260		
4. Well Location Unit Letter L : 1980 Feet From The SOUTH Line and 660 Feet From The WEST Line Section 5 Township 17S Range 31E NMPM EDDY County		
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GR: 3791'		

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: REACTIVATE AS WATER INJECTION WELL <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

THE WELL IS A WATER INJECTION WELL WHICH IS CURRENTLY SHUT IN. THE WELL IS CURRENTLY PERFORATED 2983'-3031'. DEVON ENERGY PLANS TO PRESSURE TEST CASING & LINER, EXTEND THE PERFORATED INTERVAL TO 2880'-3600' WITHIN THE GRAYBURG-SAN ANDRES, TREAT W/15% NEFE ACID AS NEEDED & RETURN THE WELL TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3-1-95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald McKedy TITLE PETROLEUM ENGINEER DATE 1/24/95  
TYPE OR PRINT NAME Jerald McKedy TELEPHONE NO. 405-552-4580

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

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PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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Revised February 10, 1994  
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AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>2</sup> Operator Name and Address. Devon Energy Corporation 1500 Mid America Tower 20 N. Broadway Oklahoma City, OK 73102-8260		<sup>1</sup> OGRID Number 136025
		<sup>3</sup> API Number 30-015-21460
<sup>4</sup> Property Code LC-029435-B	<sup>5</sup> Property Name J.L. Keel "B"	<sup>6</sup> Well No. 30

<sup>7</sup> Surface Location

UL or lot no. "O"	Section 6	Township 17S	Range 31E	Lot Ids	Feet from the 430	North/South line South	Feet from the 2250	East/West line East	County Eddy
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<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
<sup>9</sup> Proposed Pool 1						<sup>10</sup> Proposed Pool 2			

<sup>11</sup> Work Type Code	<sup>12</sup> Work Type Code	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code	<sup>15</sup> Ground Level Elevation 3760'
<sup>16</sup> Multiple Yes	<sup>17</sup> Proposed Depth 3660	<sup>18</sup> Formation Grayburg-San Andres	<sup>19</sup> Contractor Not Known	<sup>20</sup> Spud Date 3-1-95

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/feet	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	506	375	circ. to surface
7 7/8"	5 1/2"	14#	3249	760	circ. to surface

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

The well was originally completed as a producer from the Grayburg-San Andres through perforations 2889-3170. A cmt. retainer was set @ 2800' & the perms below were squeezed off. The well was recompleted in the Seven Rivers 1822'-2045'. Devon proposes to squeeze off the Seven Rivers, drill out casing to 3249' & drill 4 3/4" open hole from 3249' to 3660'. After logging, the interval 2812'-3249' will be selectively perforated, the interval 2812-3660 acidized w/15% NEFE acid & the well converted to water injection. Estimated start date 3-1-95.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Gerald McKedy*  
Printed name: Gerald McKedy

Title: Petroleum Engineer

Date: January 24, 1995

Phone: 405-552-4520

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

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

OIL CONSERVATION DIVISION

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

WELL API NO.

30-015-25919

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

LC-029435-B

7. Lease Name or Unit Agreement Name

J.L. KEEL "B"

8. Well No.

38

9. Pool name or Wildcat

GRAYBURG-JACKSON

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.)

1. Type of Well:

OIL  
WELL ☐

GAS  
WELL ☐

OTHER WATER INJECTION

2. Name of Operator

DEVON ENERGY OPERATING CORPORATION

3. Address of Operator

20 N. BROADWAY, SUITE 1500, OKC, OK 73102-8260

4. Well Location

Unit Letter I : 2080 Feet From The SOUTH Line and 660 Feet From The EAST Line

Section 6

Township 17S

Range 31E

NMPM

EDDY

County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

GR: 3748'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: CONVERT TO WATER INJECTION ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

THE WELL IS CURRENTLY PRODUCING FROM PERFORATIONS 3257'-3601' OA IN THE GRAYBURG-SAN ANDRES. DEVON ENERGY PLANS TO SELECTIVELY PERFORATE THE INTERVAL 2820'-3669' OA, ACIDIZE AS REQUIRED W/15% NEFE ACID & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3-1-95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

*Jerald M. Kedy* Jerald M. Kedy

TITLE

PETROLEUM ENGINEER

DATE

1/24/95

TYPE OR PRINT NAME

Petroleum Engineer

405-352-4520

TELEPHONE NO.

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



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

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

WELL API NO.  
30-015-25920

5. Indicate Type of Lease  
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.  
LC-029435

7. Lease Name or Unit Agreement Name  
J.L. KEEL "B"

8. Well No. 39

9. Pool name or Wildcat  
GRAYBURG JACKSON

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.)

1. Type of Well:  
OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. Name of Operator  
DEVON ENERGY OPERATING CORP.

3. Address of Operator  
20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260

4. Well Location  
Unit Letter M : 510 Feet From The SOUTH Line and 660 Feet From The WEST Line  
Section 5 Township 17S Range 31E NMPM EDDY County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
GR: 3780'

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐  
OTHER: CONVERT TO WATER INJECTION ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
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.

THE WELL IS CURRENTLY PRODUCING FROM PERFORATIONS 3011'-3702' OA IN THE GRAYBURG-SAN ANDRES. DEVON PLANS TO SELECTIVELY PERFORATE THE INTERVAL 2872'-3702', TREAT W/15% NEFE ACID & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald Mckedy TITLE PETROLEUM ENGINEER DATE 1/25/95

TYPE OR PRINT NAME JERALD MCKEDY 405-552-4520 TELEPHONE NO.

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

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

WELL API NO. 30-015-26789
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. LC-029435-B
7. Lease Name or Unit Agreement Name J.L. KEEL "B"
8. Well No. 47
9. Pool name or Wildcat GRAYBURG-JACKSON
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GR: 3823

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.)

1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. Name of Operator DEVON ENERGY OPERATING CORPORATION
3. Address of Operator 20 N. BROADWAY SUITE 1500, OKLAHOMA CITY, OK. 73102-8260	4. Well Location Unit Letter "K" : 1980 Feet From The SOUTH Line and 1880 Feet From The WEST Line Section 5 Township 17S Range 31E NMPM EDDY County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: CONVERT TO WIW <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

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.

THE WELL WAS COMPLETED IN THE SAN ANDRES THROUGH PERFORATIONS 3807' TO 3922' OA.  
DEVON PROPOSES TO SET A CIBP @ 3800', SELECTIVELY PERFORATE THE INTERVAL 2938'-3784',  
ACIDIZE W/15% NEFE AS NEEDED AND CONVERT THE WELL TO WATER INJECTION. IT IS ANTI-  
CIPATED THE WORK WILL START 3-1-95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerald M. Keedy TITLE PETROLEUM ENGINEER DATE 1/24/95  
TYPE OR PRINT NAME Jerald M. Keedy TELEPHONE NO. 405 552-4520

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

III. WELL DATA									
B.									
A.	1 Well Name & Legal	2 Csg.-cmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones
	J.L. Keel "A" #12 660'FNL-660'FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 568' w/100 sx in 12 1/2" hole TOC @ 295' calc. 7", 20# @ 2853' w/ 200 sx in 8" hole. TOC 408' calc. 4 1/2", 9.5#, K-55 @ 3610' w/325 sx in 6 1/4" hole. TOC @ 1960' by temp. survey.	All tubing will be new 2 3/8", 4.7#, J-55 plastic lined w/tuboscope TK-99 lining.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2675'-3600' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "B" #20 660' FSL-660' FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 555' w/100 sx in 12 1/4" hole. TOC @ 282' calc. 7", 20# @ 2841' w/200 sx in 8" hole. TOC @ 366' calc. 4 1/2", 10.5#, J-55 liner from 2614'- 3595' w/175 sx in 6 1/4" hole.	All tubing will be new 2 3/8", 4.7#, J-55 plastic lined w/tuboscope TK-99 lining.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2826'-3595' Perforated	Completed as prod- ucer from Grayburg- San Andres.	Perfs. 3265'-3562' Sqz. w/75 sx Perfs. 3080'-3110' Sqz. w/275 sx Cmt. retainer @ 3235'.	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "B" #30 430' FSL-2250' FEL 6-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 506' w/375 sx in 12 1/4" hole cmt. circ. 5 1/2", 14# @ 3249' w/760 sx in 7 7/8" hole cmt. circ.	All tubing will be new 2 3/8", 4.7#, J-55 plastic lined w/tuboscope TK-99 lining.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2812'-3249' Perforated 3249'-3660' Open Hole	Completed as prod- ucer from Grayburg- San Andres.	Cmt. retainer @ 2800' Perfs. 2889'-3137' Sqz. w/150 sx.	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.

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DO NOT SIGNATURES

NEED

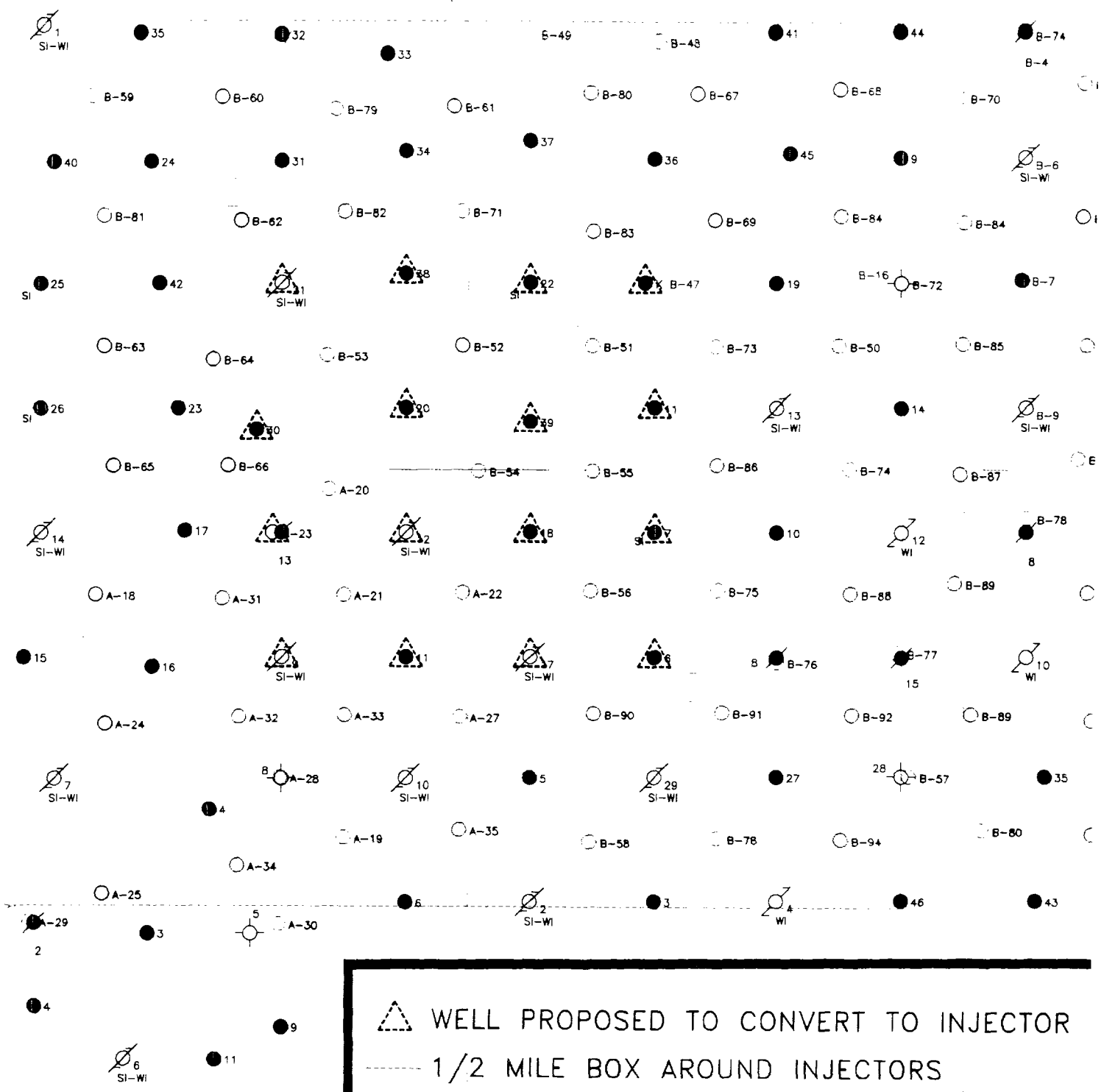
B-18 GOT SCHEDULES

E-22

III. WELL DATA									
B.									
A.	1 Well Name & Legal	2 Csg.-cmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones
	J.L. Keel "B" #23 660'FNL-2080'FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 475' w/365 sx cmt. circ. 5 1/2", 15.5 # @ 4019' w/1250 sx cmt. circ.	All tubing will be new 2 3/8", 4.7#, J-55 plastic lined w/tuboscope TK-99 lining.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2800'-3720' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "B" #11 660' FSL-1980' FWL 5-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 626' w/100 sx in 10" hole. Est. TOC @ 207'. 5 1/2", 17# @ 2944' w/200 sx in 7 7/8" hole. Est TOC @ 1536'.	All tubing will be new 2 3/8", 4.7#, J-55 plastic lined w/tuboscope TK-99 lining.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2928'-2944' Perforated 2944'-3800' Open Hole	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "B" #39 510' FSL-660' FWL 5-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 379' w/300 sx in 12 1/4" hole cmt. circ. 5 1/2", 15.5# @ 3757' w/1150 sx in 7 7/8" hole cmt. circ.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	All packers will be Guiberson G-6 Nickel coated tension packers (new)	Formation Grayburg- San Andres Pool Grayburg Jackson	2872'-3706' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "A" #11 1980' FNL-660' FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 535' w/100 sx in 12 1/2" hole. Est. TOC @ 260'. 7", 20# @ 2826' w/200 sx in 8" hole. Est. TOC @ 1100'.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2928'-3730' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
	J.L. Keel "B" #17 1980' FNL & 660' FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 568' w/100 sx in 10" hole. Est. TOC @ 130' 7", 20# @ 2839' w/200 sx in 8" hole. Est. TOC @ 452'. 4 1/2", 9.5# @ 3615' w/325 sx in 6" hole. TOC @ 560' by Temp. survey.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2827'-3615' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.

III. WELL DATA								
B.								
1 Well Name & Legal	2 Csg.-cmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones
J.L. Keel "B" #21 1980' FSL-1980' FEL 6-17S-31E Eddy Co., New Mexico	10 3/4" 32 3/4# @ 734' w/100 sx in 12 1/2" hole. Est. TOC @ 184'. 5 1/2", 15.5# @ 2811' w/12 Tuboscope TK-99. sx in 8" hole. Est. TOC @ 1950'. 3 1/2", 8.4#, N-80 liner from 2737'-3471' w/125 sx in 4 3/4" hole.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2798'-3470' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
J.L. Keel "B" # 47 1980' FSL-1880' FWL 5-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 503' w/305 sx in 12 1/4" hole. cmt. circ. 5 1/2", 15.5# @ 4029' w/1010 sx in 7 7/8" hole. cmt. circ.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2938'-3784' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
J.L. Keel "B" #38 2080' FSL-660' FEL 5-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 424' w/300 sx in 12 1/4" hole cmt. circ. 5 1/2", 15.5# @ 3670' w/1510 sx in 7 7/8" hole cmt. circ.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2820'-3670' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.
J.L. Keel "A" #22 1980' FNL-660' FEL 7-17S-31E Eddy Co., New Mexico	9 5/8", 32.3# @ 610' w/100sx in 12 1/2" hole. Est. TOC @ 260'. 5 1/2", 15.5# @ 2907' w/20 sx in 8" hole. Est. TOC @ 1600'.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2880'-3600' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.

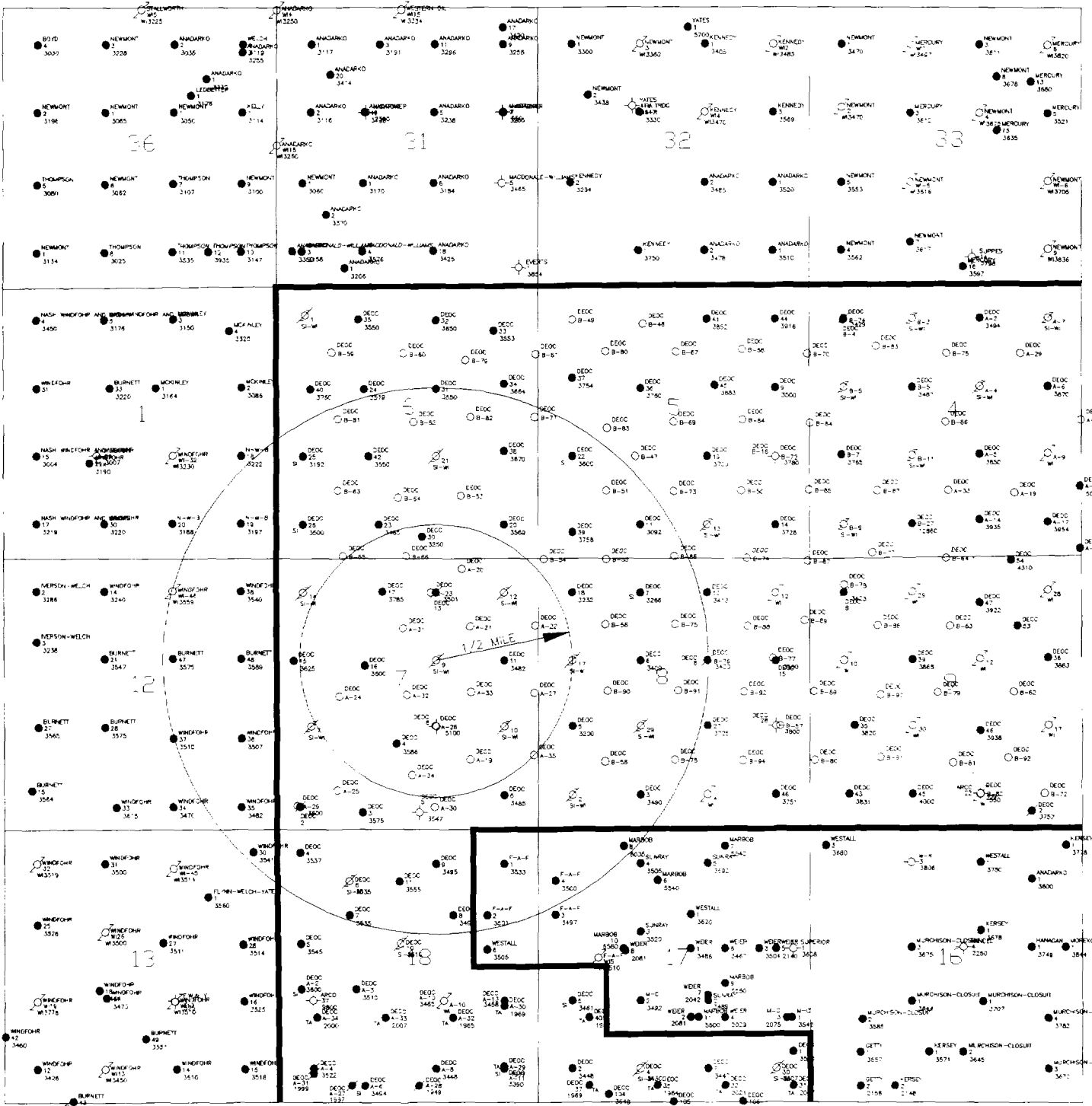
III. WELL DATA									
B.									
1 Well Name & Legal	2 Csg.-cmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones	
J.L. Keel "B" # 7 660' FNL-1980' FWL 8-17S-31E Eddy Co., New Mexico	10 3/4", 32.75# @ 600' w/100 sx in 12" hole. Est. TOC @ 400' 7", 26# @ 2916' w/200 sx in 8" hole. Est. TOC @ 530'. 4 1/2", 9.5# liner from 2833'-3381' w/125 sx in 6" hole.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2870'-3381' Perforated 3381'-3740' Open Hole	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.	
J.L. Keel "A" # 9 1980' FNL-1980' FEL 7-17S-31E Eddy Co., New Mexico	10 3/4", 40.5# @ 541' w/110 sx in 12 1/2" hole. Est. TOC @ 238'. 7", 26# @ 2816' w/200 sx in 8 1/4" hole. Est. TOC @ 712'. 4 1/2", 9.5# @ 3611' w/3235 sx in 6" hole. cmt. circ.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2804'-3611' Perforated 3611'-3642' Open Hole	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.	
J.L. Keel "B" # 6 1980' FNL-1980' FWL 8-17S-31E Eddy Co., New Mexico	10 3/4" @ 556' w/200 sx in 12" hole. Est. TOC @ 100'. 7", 20# @ 2856' w/200 sx in 8" hole. Est. TOC @ 450'.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New Guiberson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2876'-3720' Perforated	Completed as prod- ucer from Grayburg- San Andres.	None	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.	



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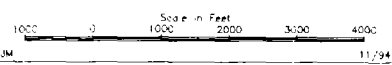
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**devon**  
ENERGY CORPORATION  
**GRAYBURG-JACKSON AREA**  
EDDY COUNTY, NEW MEXICO

KEEL A-9

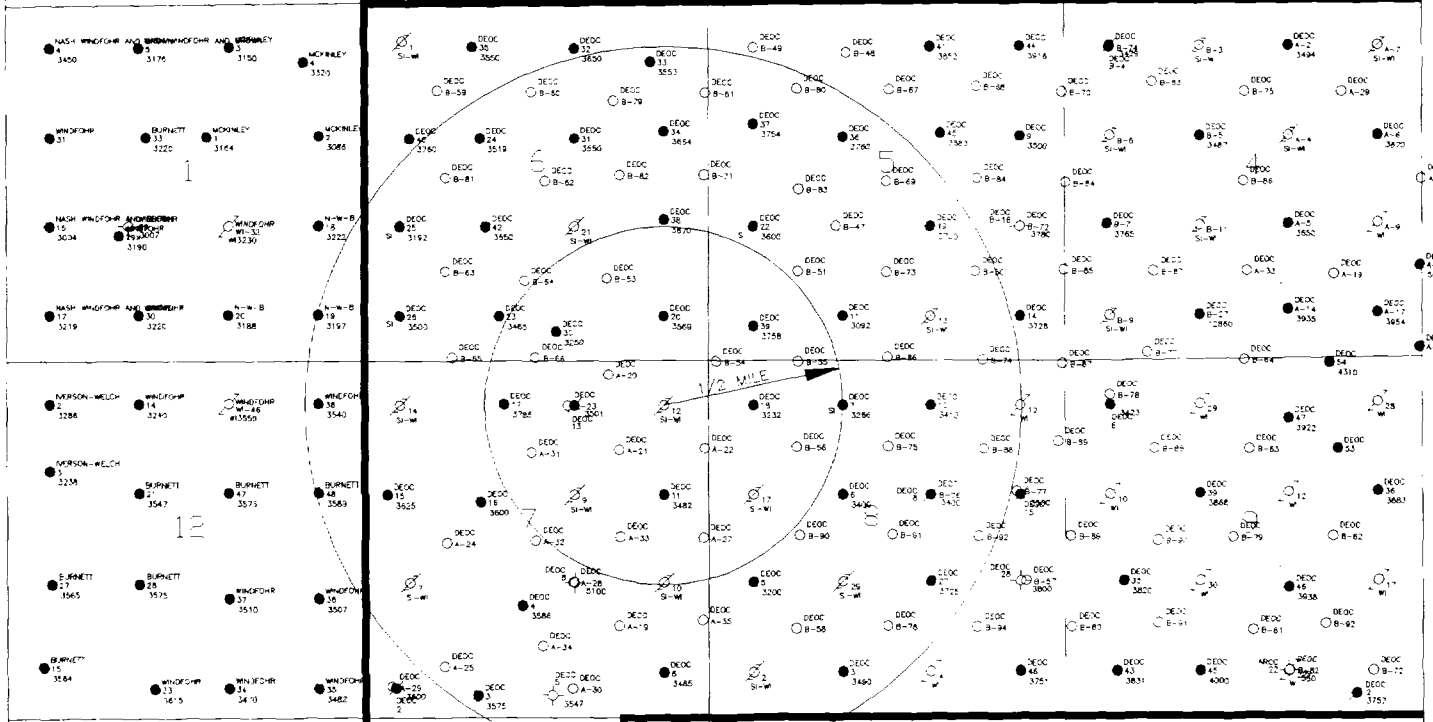
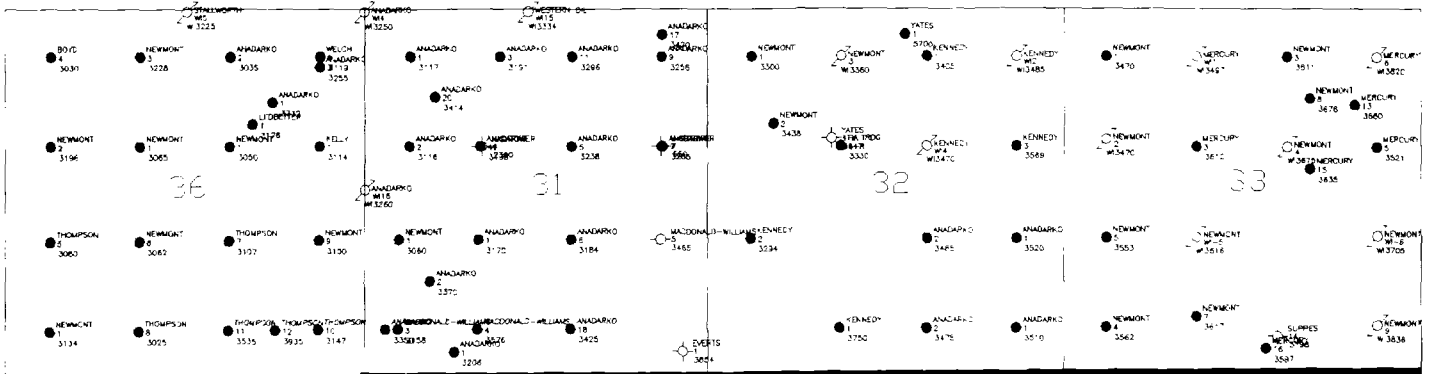
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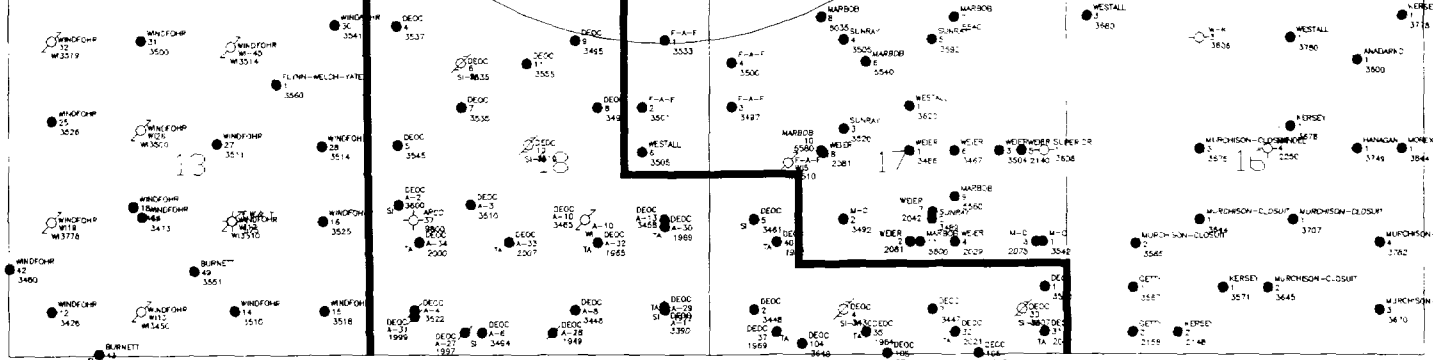


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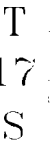
**devon**  
ENERGY CORPORATION

**GRAYBURG-JACKSON AREA**  
EDDY COUNTY, NEW MEXICO

**KEEL A-12**

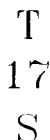
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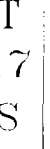
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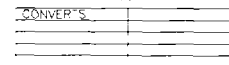


A horizontal graphic scale bar with tick marks at 1000, 0, 1000, 2000, 3000, and 4000 feet. The text "Scale in Feet" is centered above the bar.

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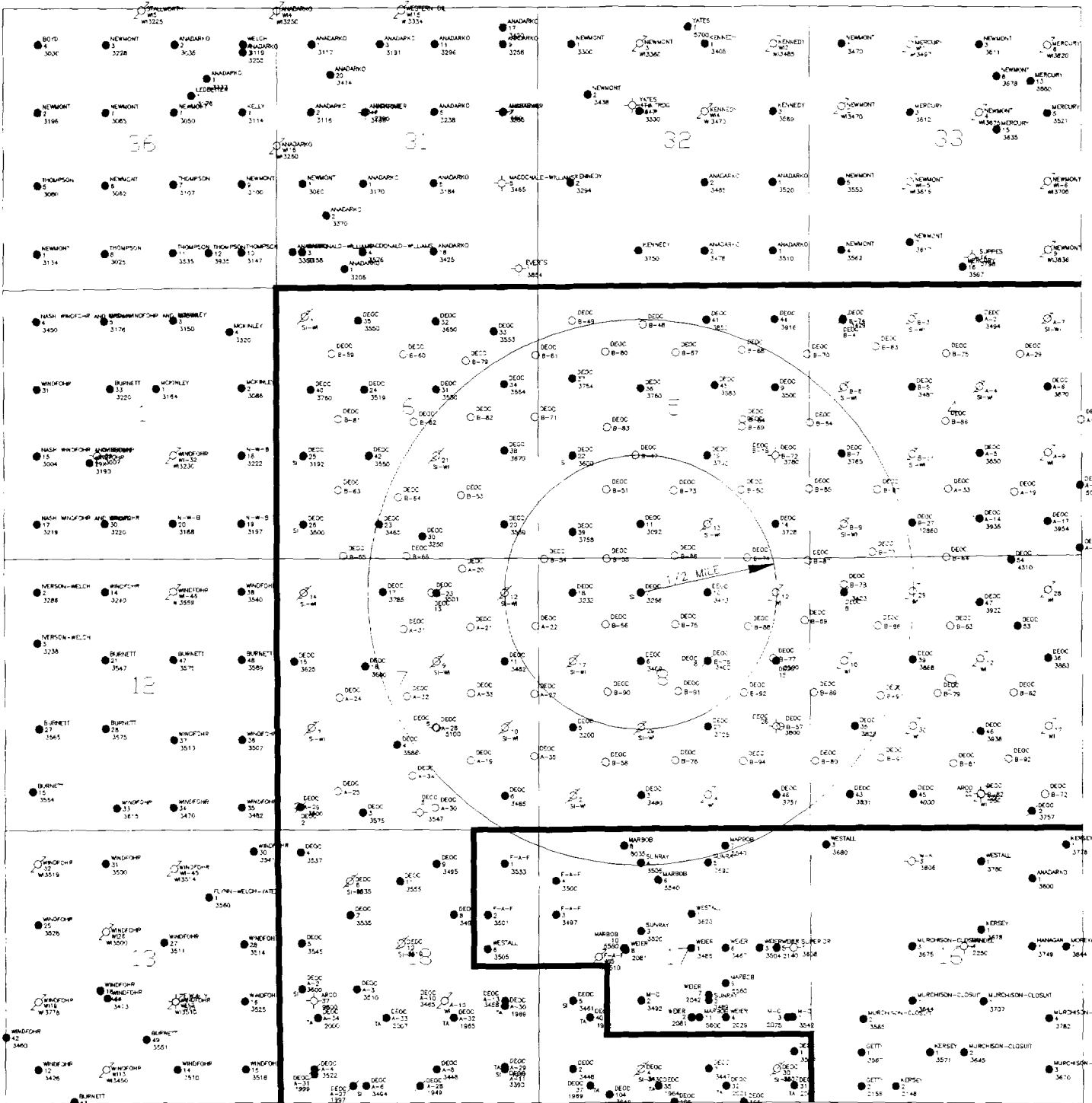
GRAYBURG-JACKSON AREA  
EDDY COUNTY, NEW MEXICO

KEEL B-6



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**devon**  
Energy Corporation

**GRAYBURG-JACKSON AREA**  
EDDY COUNTY, NEW MEXICO

**KEEL B-7**

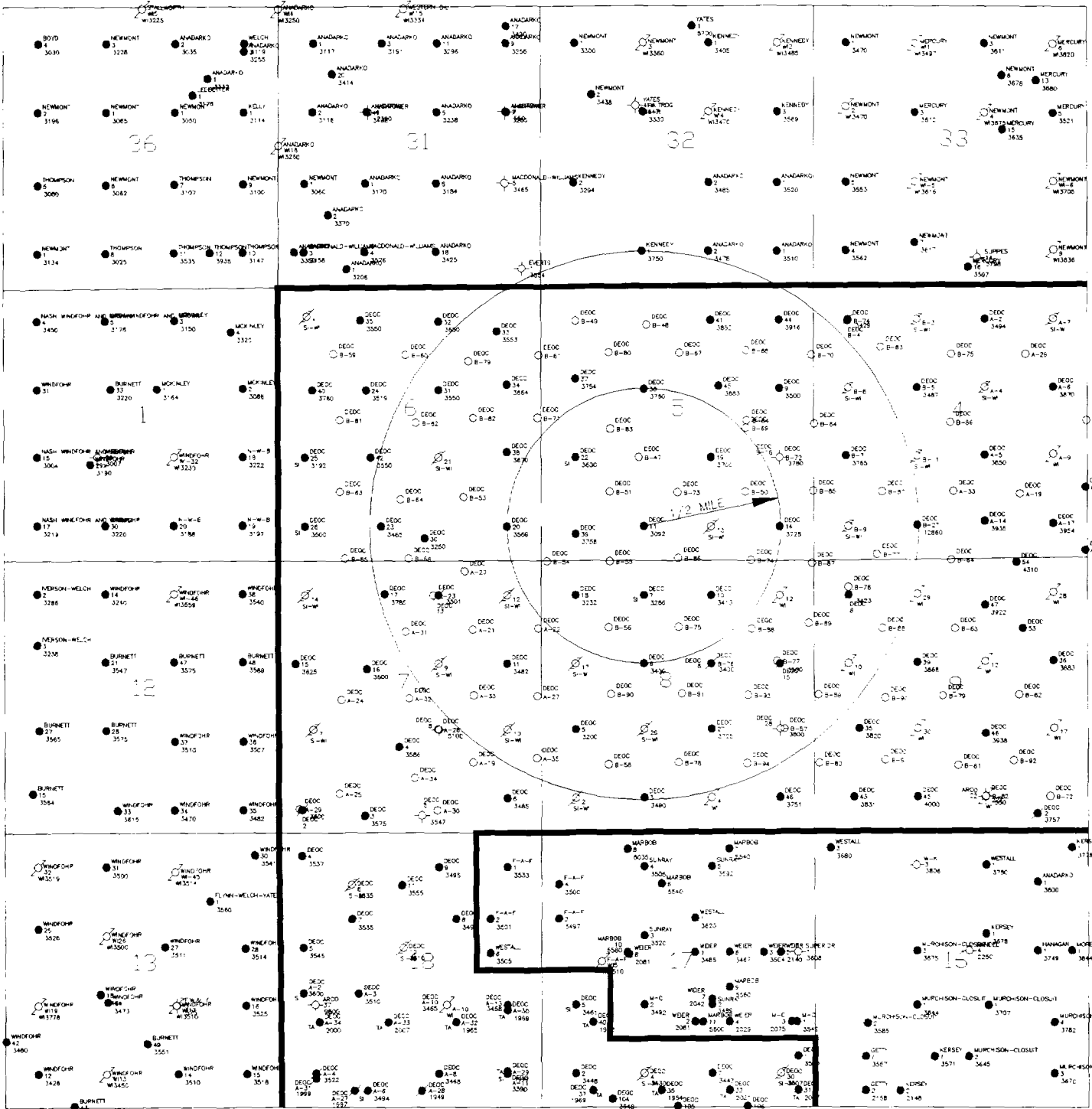
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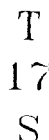
GRAYBURG-JACKSON AREA  
EDDY COUNTY, NEW MEXICO

KEEL B-11

CONVERT

Scale in Feet  
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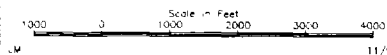
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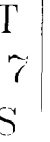


GRAYBURG-JACKSON AREA  
EDDY COUNTY, NEW MEXICO

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CONVER'S



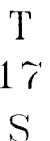
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KEEL B-18

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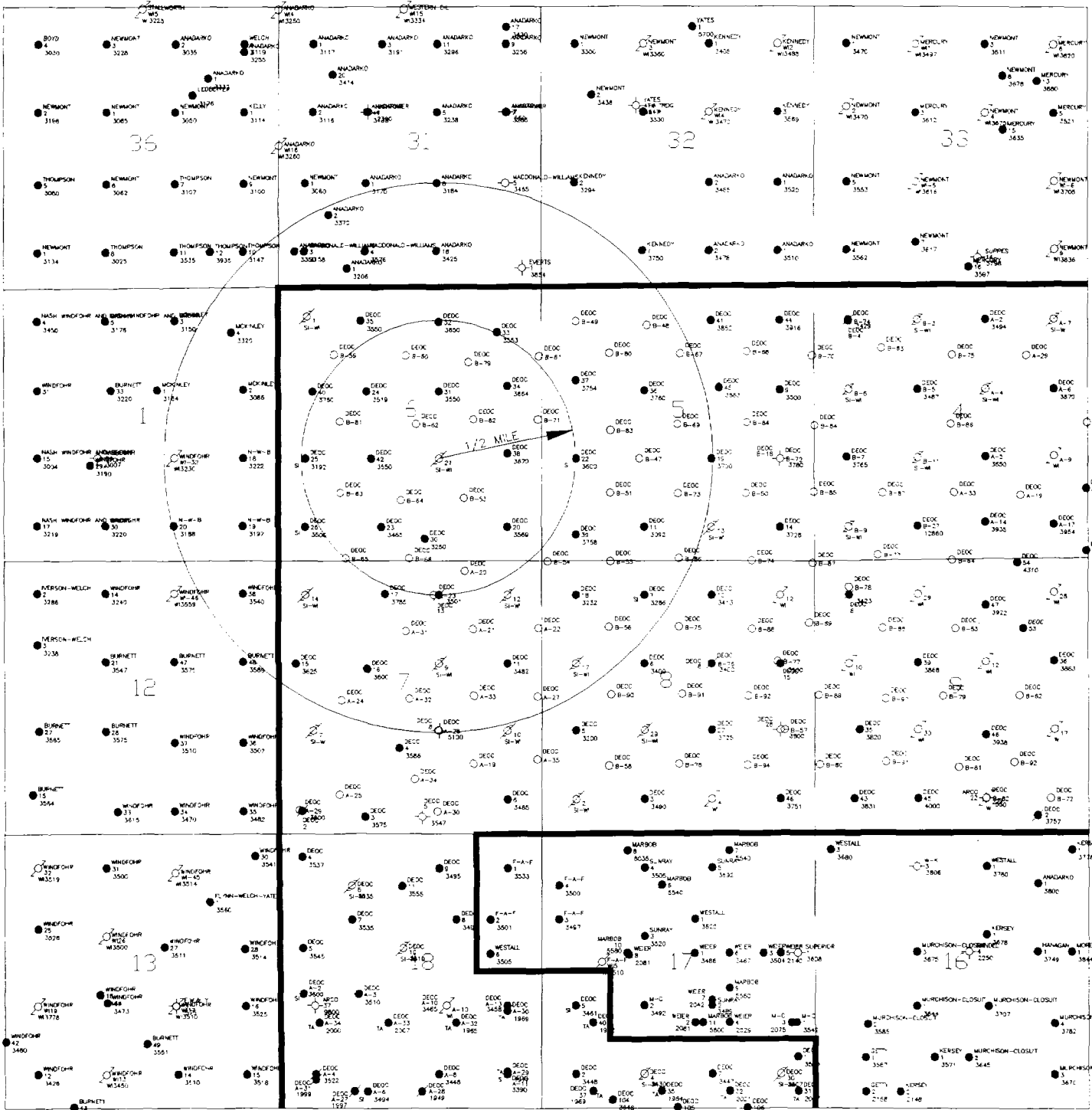


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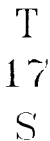


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GRAYBURG-JACKSON AREA  
EDDY COUNTY, NEW MEXICO

KEEL B-21

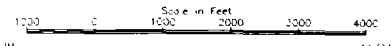
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GRAYBURG-JACKSON AREA  
EDDY COUNTY, NEW MEXICO

KEEL B-22

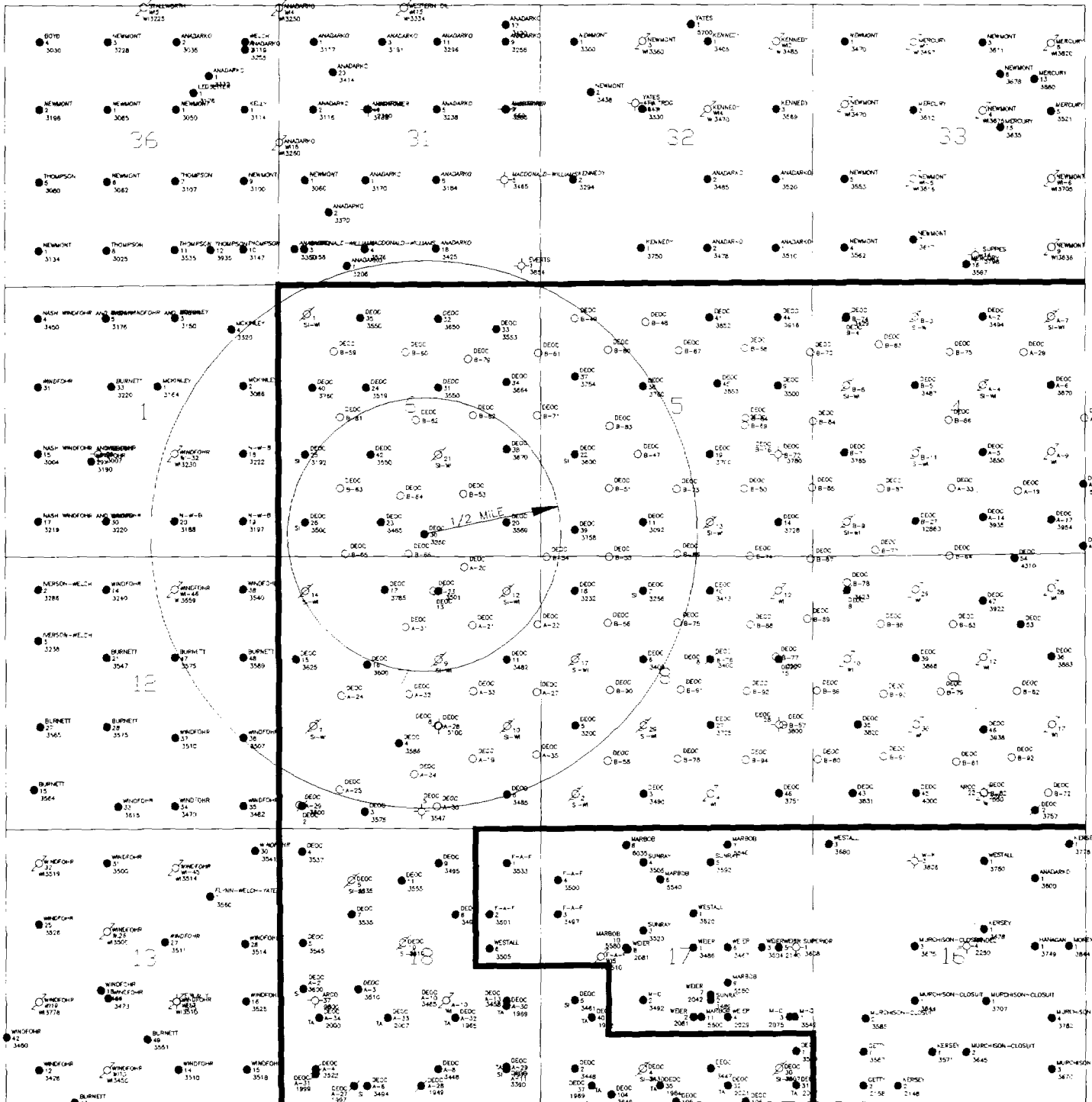


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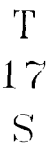
**devon**  
ENERGY CORPORATION

**GRAYBURG-JACKSON AREA**  
EDDY COUNTY, NEW MEXICO

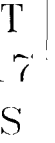
**KEEL B-30**

Scale in Feet  
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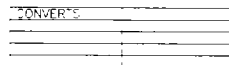
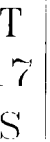
1" = 794'

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A graphic scale bar is provided for reference. The top scale is in feet, ranging from 0 to 4000 with major markings every 1000 feet. The bottom scale is in miles, ranging from 0 to 1 1/4 with major markings at 0, 1/2, and 3/4.

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**DEVON ENERGY OPERATING CORPORATION  
APPLICATION FOR AUTHORITY TO INJECT  
J.L. KEEL WATER FLOOD**

**VII Proposed Operations Data:**

- (1) Average daily injection rate-500 BWPD  
Maximum daily injection rate-600 BWPD
- (2) Type of system-closed
- (3) Average injection pressure-1900 psi  
Maximum injection pressure-2500 psi
- (4) Source of injection water-water produced from the Keel West plus make-up water from the Keel West fresh water system.

**VIII Geological Data:**

The proposed injection zone is in the Grayburg San Andres from 2675'-3800'. The Grayburg formation consists primarily of quartz sand with cementation. The San Andres formation consists primarily of dolomite with intermingled stringers of quartz sand with dolomite cementation.

Surface formation is cretaceous and has no known source of drinking water. Also, there are no known underground sources of drinking water overlying or underlying the proposed injection zone.

**IX Stimulation Program:**

It is anticipated the proposed injection interval will be acidized w/15% NEFE acid prior to initial injection.

**X Well Logs:**

Copies of the current well logs are on file.

**XI Chemical Analysis of Fresh Water:**

There are no known producing fresh water wells within one mile of the proposed injection wells.



**DEVON ENERGY OPERATING CORPORATION  
APPLICATION FOR AUTHORITY TO INJECT  
J.L. KEEL WATER FLOOD**

**XII**

Upon examination of the available geologic and engineering data, no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water was found.

**SURFACE OWNER:**

Federal land

**OFFSET OPERATOR:**

Devon Energy Operating Corporation (applicant) is the offset operator of all wells within the area of review.

**ATTACHMENT VI**

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "A" #4</u>	<u>1650 FSL &amp; 2310 FWL</u> <u>7-17S-31E</u>	<u>3-4-39</u>	<u>5-11-39</u>	<u>Producer</u>	<u>3638'/3586'</u>	<u>8 5/8" @ 556' w/75sx in 10" hole.</u> <u>7" @ 3141' w/1100 sx in 8" hole</u> <u>Open hole (6 1/4") from 3141' to 3586'</u> <u>Completed in Grayburg-San Andres from perforations 2891'-</u> <u>3122' &amp; open hole 3341'-3586' as a producer.</u>
<u>J.L. Keel "A" #6</u>	<u>660' FSL &amp; 660' FEL</u> <u>7-17S-31E</u>	<u>3-21-44</u>	<u>6-15-44</u>	<u>Producer</u>	<u>TD 3485'</u>	<u>8 5/8" @ 510' w/75 sx in 11" hole.</u> <u>7" @ 3141' w/100 sx in 8" hole.</u> <u>Completed as a producer from an open hole section in the</u> <u>Grayburg-San Anddres 3141'-3485'.</u>
<u>J.L. Keel "A" #9</u>	<u>1980' FNL &amp; 1980' FEL</u> <u>7-17S-31E</u>	<u>6-17-50</u>	<u>12-19-64</u>	<u>Producer</u>	<u>3611'/3590'</u>	<u>10 3/4" @ 541' w/110 sx in 12 1/2" hole.</u> <u>7"@ 2816' w/200 sx in 8 1/4" hole.</u> <u>4 1/2" @ 3611' w/325sx in 6" hole. Cement circ.</u>
<u>J.L. Keel "A" #10</u>	<u>1980' FSL &amp; 660' FEL</u> <u>7-17S-31E</u>	<u>8-3-1950</u>	<u>11-11-64</u>	<u>Injection</u>	<u>3580'/</u> <u>3580'</u>	<u>10 3/4" @ 537' w/100 sx</u> <u>7" @ 2809' w/200 sx</u> <u>4 1/2' @ 3580' w/325 sx in 6 1/4" hole; did not circ.</u> <u>Perf. 2980-3571 &amp; completed as Water Injection well in the</u> <u>Grayburg-San Andres.</u>
<u>J.L. Keel "A" #11</u>	<u>1980' FNL &amp; 660' FEL</u> <u>7-17S-31E</u>	<u>5-19-53</u>	<u>7-22-53</u>	<u>Producer</u>	<u>3604'/3604'</u>	<u>8 5/8" @ 535' w/100 sx in 12 1/2" hole</u> <u>Est. TOC @ 260'.</u> <u>7" @ 2826' w/200 sx in 8" hole.</u> <u>Est. TOC 1100'.</u> <u>Completed as a producer from an OH section 2826'-3604' in</u> <u>the Grayburg-San Andres.</u>

# ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "A" #12</u>	660' FNL & 660' FEL	<u>7-1-54</u>	8-11-54	Producing	3610'/3590'	8 5/8" @ 568' w/100sx in 12 1/4" hole. 7" @ 2853' w/200 sx in 8" hole. 4 1/2" @ 3610' w/325 sx in 6 1/4" hole. TOC @ 1960' by Temp. Survey Completed as a producer from the Grayburg-San Andres through perforations 2954' -3588' OA.
<u>J.L. Keel "A" #14</u>	660' FNL & 519' FWL 7-17S-31E	<u>8-28-57</u>	11-5-57	Producing converted to WTW	3502'/3502' OH	10 3/4" @ 587' w/100 sx in 12 1/2" hole. 5 1/2" @ 3435' w/125 sx in 8" hole. J-55 -14# TOC @ 2775' by Temp. Survey. Completed as a producer I the Grayburg-San Andres from the perforations 2888'-3200' & OH 3502'-3435'. Perf: 2930'-45', 3060'-65', 3030'-45', 3104'-08', & 3112'-18'. Converted to water injection 3-8-66.
<u>J.L. Keel "A" #16</u>	2080 FNL & 1700 FWL 7-17S-31E	<u>11-12-85</u>	12-19-85	Producer	3600'/3580'	17 1/2" hole to 503'. Run 503', 54.5# 13 3.8 cmt w/800 sx. Did not circ. top out w/300 sx using 1" circ. 11" hole 8 5/8" @ 1557' w/800 sx circ. cmt. to surf. 5 1/2", 15.5#, K-55 @ 3592 s/7 7/8 800 sx Cmt. circ to surf. Completed as producer from Grayburg-San Andres 2931' -3513'. (50 holes)

## ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "A" #17</u>	640' FNL & 2050' FSL 7-17S-31E	<u>7-10-88</u>	7-27-88	Producing	3785'/3527'	8 5/8" 24# @ 400' w/ 300sx. Circ cmt. 12 1/4" 5 1/2", 15.5# @ 3785' w/1500 cmt circ to surf. Completed as a producer from the Grayburg-San Andres through perforations 3136'-3747' OH.
<u>J.L. Keel "B" #5</u>	1980' FSL & 660' FWL 8-17S-31E	<u>12-28-50</u>	2-28-51	Producing	3650'/3504'	8 5/8" @ 557' w/100 sx in 12 1/2" hole. 7" @ 2802' w/200 sx in 8" hole. 6" open hole from 2802'-3650'. Completed as a producer from the Grayburg-San Andres through OH section 2802'-3650'.
<u>J.L. Keel "B" #6</u>	1980 FNL & 1980 FWL 8-17S-31E	<u>3-19-51</u>	5-7-51	Producing	3680'/3680'	10 3/4" @ 556' w/200 sx in 12 1/2" hole. 7" @ 2856' w/200 sx in 8 3/4" hole. Deepened t 3680' 6" OH. Completed as producer from Grayburg-San Andres through OH section 2856'-3680'.
<u>J.L. Keel "B" #7</u>	660' FNL & 1980' FWL 8-17S-31E	<u>6-1-64</u>	6-26-64	Producing	3381'/3360'	10 3/4" @ 600' w/100 sx in 12" hole. 7" @ 2916' w/200 sx in 8" hole. 4 1/2" liner from 2833'-3381' w/125 sx in 6" hole. Completed as a producer from perforations 2990'-3258' in the Grayburg-San Andres.

# ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #8</u>	1980' FNL & 1980' FEL 8-17S-31E	<u>5-25-51</u>	7-7-51	P & A	3400'/3375'	10 3/4" @ 601' w/ 100sx Circ cmt. 12 1/2" hole. 7", @ 2946' w/200 in 8" hole. 4 1/2" liner from 2750'-3400'. Completed as a producer from the Grayburg-San Andres later converted to water injection before being P&A 6-9-83 see attached schematic for P & A details.
<u>J.L. Keel "B" #10</u>	660' FNL & 1980' FEL 8-17S-31E	<u>8-15-51</u>	9-20-51	Producing	Deepened 3413'/3346'	10 3/4" @ 594' w/100 sx in 12 1/2" hole. 7" @ 3019' w/200 sx in 8" hole. Completed as a producer from the Grayburg-San Andres OH. Section 3019'-3413'.
<u>J.L. Keel "B" #11</u>	660 FSL & 1980 FWL 5-17S-31E	<u>3-21-65</u>	4-16-65	Producing	3372'/3372'	8 5/8" @ 656' w/100 sx in 10" hole. 5 1/2" @ 2944' w/200 sx in 6 1/4" hole. 4 3/4" open hole from 2944'-3372'. Completed as a producer from an open hole section 2944'-3372' in the Grayburg-San Andres.
<u>J.L. Keel "B" #13</u>	660' FS: & 1980' FEL 5-17S-31E	<u>11-10-51</u>	1-25-52	Injection	3737'/3715'	8 5/8" @ 609' w/100 sx in 12 1/2" hole. 7" @ 2992' w/200 sx in 8" hole. 5" liner from 2942'-3735' w/200 sx Completed as a producer from Grayburg-San Andres through perforations 3045'-3714'. Converted to WIW 1-22-64.
<u>J.L. Keel "B" #17</u>	1980' FNL & 660' FWL	<u>10-8-52</u>	10-29-52	Producing	3615'/3585'	8 5/8" @ 568' w/100 sx in 10" hole. 7" @ 2839' w/200 sx in 8" hole. 4 1/2" @ 3615' w/325 sx in 6" hole. TOC @ 56' by temp. suv. Completed as a producer from the Grayburg-San Andres through perforations 2965'-3601'.

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #18</u>	660' FNL & 660' FWL 8-17S-31E	<u>12-19-53</u>	2-24-54	Producer (Proposed injector)	3232'/3232'	8 5/8" @ 573' w/100sx. in 12 1/2" hole. 7" @ 2873' w/200 sx in 8" hole. Est. TOC @ 1088' cal. Completed as a producer from an OH section 2873'-3232' in the Grayburg-San Andres.
<u>J.L. Keel "B" #19</u>	1980' FSL & 1980' FEL 8-17S-31E 15	<u>3-13-54</u>	6-22-54	Producing	3700'/3316'	8 5/8" @ 624' w/100 sx in 10" hole. cmt circ to surface 7" @ 3006' w/200 sx in 8" hole. Open hole from 3006'-3700'. Completed as a producer from the Grayburg-San Andres through OH section 3006'-3700'.
<u>J.L. Keel "B" #20</u>	660' FSL & 660' FWL 6-17S-31E E	<u>2-24-55</u>	4-7-55	Producing	3596'/3235'	8 5/8" @ 555' w/100 sx in 12 1/4" hole. 7" @ 2841' w/100 sx in 8" hole. Liner 4 1/2" from 2614'-3595' w/175 sx. Completed as producer from Grayburg-San Andres through perforations 2974'-3194'.
<u>J.L. Keel "B" #21</u>	1980' FSL & 1980' FEL 6-17S-31E	<u>5-24-56</u>	7-26-56	Water Injection	3471'/3468'	10 3/4" @ 734' w/100 sx in 12 1/4" hole. 5 1/2" @ 2811' w/100 sx in 8" hole. 3 1/2" liner from 2737'-3471' w/125 sx in 4 3/4" hole. Completed as a producer from perforations 2938'-3479' in the Grayburg-San Andres.
<u>J.L. Keel "B" #22</u>	1980' FSL & 660' FWL 5-17S-31E	<u>8-12-56</u>	11-19-56	Producing	3611'/3560'	9 5/8" @ 610' w/100 sx in 11" hole. 5 1/2" @ 299907' w/200 sx in 8" hole. 3 1/2" liner from 2841' to 3609' w/100 sx in 4 3/4" hole. Completed as a producer from perforations 2983'-3031" OH in the Grayburg-San Andres.

ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #23</u>	660' FSL & 1980' FWL 6-17S-31E	<u>9-21-56</u>	11-17-56	Producing	3465'/3465'	10 3/4" @ 590' w/100sx. in 12 1/2" hole. 7", @ 2805' w/200 sx in 8" hole. 6 1/4" OH 2805'-3465'. Completed as a producer from Grayburg-San Andres 6 1/4" OH 2805'-3465'.
<u>J.L. Keel "B" #24</u>	1980' FNL & 1694 FWL 6-17S-31E	<u>12-21-56</u>	3-16-57	Producing	3519'/3175'	10 3/4" @ 509' w/500 sx in 12 1/2" hole. cmt circ. 7" @ 3180' w/100 sx in 8" hole. TOC @ 2685' by Temp. suv. Completed as a producer from the Grayburg-San Andres interval 2996'-3519'.
<u>J.L. Keel "B" #26</u>	660' FSL & 516.8' FWL 6-17S-31E	<u>6-15-57</u>	8-22-57	Producing	3500'/3415'	10 3/4" @ 566' w/100 sx in 12 1/2" hole. 7" @ 3420' w/100 sx in 9 1/2" hole. TOC @ 2100' by Temp. suv. Completed as producer from Grayburg-San Andres 2888'-3226'. Presently cmt. retainer set @ 2784' w/200 sx cmt ssqueezed below retainer. Well TA.
<u>J.L. Keel "B" #27</u>	1980' FSL & 1980' FEL 8-17S-31E	<u>10-3-64</u>	11-9-64	Producing	3725'/3725'	8 5/8" @ 560' w/370 sx cmt. cmt circ 11" hole 5 1/2" 17# @ 3725' w/325 sx in 7 7/8" hole. Completed as a producer from Grayburg-San Andres interval through perforations 3064'-3724'.

# ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #29</u>	1980' FSL & 1980' FWL 8-17S-31E	<u>10-28-64</u>	11-19-64	Injection	3700'/3697'	8 5/8" @ 555' w/220sx. in 11" hole.cmt. circ. 4 1/2" , 9.5# @ 3700' w/360 sx in 7 7/8" hole. Completed as WIW in the Grayburg-San Andres interval through perforations 2996'-3660' (236 holes)
<u>J.L. Keel "B" #30</u>	430' FSL & 2250' FEL	<u>2-4-75</u>	2-28-75	Producing	3250'/3202'	8 5/8" @ 506' w/375 sx in 12 1/4" hole. cmt circ. 5 1/2" @ 3249' w/760 sx. cmt. circ. to surface. Completed as a producer from Grayburg-San Andres through perforations 2889'-3170'. Retainer set @ 2800' and sqz. perfs 2889'-3170' w/150 sx. Spot 50' plug OT of retainer. Perf 7 Rivers 1959'-2013' & recomplete.
<u>J.L. Keel "B" #31</u>	1980' FNL & 1980' FEL 6-17S-31E	<u>4-24-85</u>	5-17-85	Producing	3550'/3482'	13 3/8" ,54.5# @ 450' w/500 sx in 17 1/2" hole. cmt. circ to surface. 8 5/8" @ 1515' w/1000 sx in 11" hole. cmt. circ to surface. Completed as a producer from the Grayburg-San Andres through perforations 2977'-3260'.
<u>J.L. Keel "B" #33</u>	860' FNL & 860' FEL 6-17S-31E	<u>12-27-85</u>	1-28-86	Producing	3553'/3465'	13 3/8" @ 415' w/900 sx in 17 1/2" hole. cmt. circ. 9 5/8" @ 2704' w/1375 sx in 12 1/2" hole. cmt. circ. 7" @ 3553' w/550 sx in 8 3/4" hole. cmt. circ. Completed as a producer from Grayburg-San Andres through perforations 3193'-3208'.



# ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #34</u>	1880' FNL & 660' FWL 6-17S-31E	<u>8-23-88</u>	9-8-88	Producing	3664'/3621'	8 5/8" @ 458' w/700sx. in 121/4" hole.cmt. circ. 5 1/2" @ 3664' w/1400 sx in 7 7/8" hole. cmt. circ. Completed as producer from the Grayburg-San Andres through perforations 2997'-3615' OH.
<u>J.L. Keel "B" #36</u>	1980' FSL & 1980' FEL 5-17S-31E	<u>6-12-87</u>	6-29-87	Producing	3760'/3718'	8 5/8" @ 420' w/400 sx in 12 1/4" hole. cmt. circ. 5 1/2" @ 3760' w/550 sx in 7 7/8" hole. cmt. did not circ. TOC @ 1200' by CBL. Completed as a producer from Grayburg-San Andres through perforations 3275'-3315'. Additional perfs: 3363'-3619'.
<u>J.L. Keel "B" #37</u>	<del>1780' FNL &amp; 660' FWL</del> 5-17S-31E <b>WR924</b>	<u>6-30-88</u>	7-16-88	Producing	3754'/3714'	8 5/8" @ 380' w/500 sx in 12 1/2" hole. cmt. circ. 5 1/2" @ 3754' w/1300 sx in 7 7/8" hole. cmt. circ. Completed as a producer from the Grayburg-San Andres through perforations 2999'-3697' OH.
<u>J.L. Keel "B" #38</u>	510' FSL & 660' FWL 6-17S-31E	<u>5-25-88</u>	6-12-88	Producing	3670'/3624'	8 5/8" @ 424' w/300 sx in 12 1/4" hole. cmt. circ. 5 1/2" @ 3670' w/1510 sx in 7 7/8" hole. cmt. circ. Completed as a producer from the Grayburg-San Andres through perforations 3257'-3601'.

ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #39</u>	510' FSL & 660' FWL 5-17S-31E	<u>6-6-88</u>	6-24-88	Producing	3758'/3711'	8 5/8" @ 379' w/300sx. in 12 1/4" hole.cmt. circ. 5 1/2" @ 3757' w/1150 sx in 7 7/8" hole. cmt. circ. Completed as producer from the Grayburg-San Andres through perforations 3011'-3702'.
<u>J.L. Keel "B" #42</u>	<sup>w</sup> 1980' FSL & 1780' FEL 6-17S-31E	<u>9-7-88</u>	9-29-88	Producing	3550'/3481'	8 5/8" @ 463' w/400 sx in 12 1/4" hole. cmt circ. 5 1/2" @ 3550' w/1200 sx in 7 7/8" hole. cmt. circ. Completed as a producer from Grayburg-San Andres through perforations 2965'-3509' (153 holes)
<u>J.L. Keel "B" #45</u>	1930' FNL & 1830' FEL 5-17S-31E <b>not in AOR</b>	<u>2-13-89</u>	3-30-89	Producing	3754'/3714'	8 5/8" @ 464' w/300 sx in 12 1/4" hole. cmt. circ. 5 1/2" @ 3883' w/1500 sx in 7 7/8" hole. cmt. circ. Completed as a producer from the Grayburg-San Andres through perforations 3136'-3730' (149 holes)
<u>J.L. Keel "B" #47</u>	1980' FSL & 1880' FWL 5-17S-31E	<u>6-26-94</u>	7-20-94	Producing	4040'/3995'	8 5/8" @ 503' w/305 sx in 12 1/4" hole. cmt. circ. 5 1/2" @ 4039' w/1010 sx in 7 7/8" hole. cmt. circ. Completed as a producer from the Grayburg-San Andres through perforations 3807'-3922'.

# ATTACHMENT VI

<u>WELL NAME</u>	<u>LOCATION</u>	<u>SPUD DATE</u>	<u>COMPLETION DATE</u>	<u>TYPE OF WELL</u>	<u>DEPTH/PBTD</u>	<u>COMPLETION RECORD</u>
<u>J.L. Keel "B" #51</u>	1320' FSL & 1320' FWL 5-17S-31E	<u>10-9-94</u>	new well		4073'/4026'	8 5/8" @ 399' w/305 sx. in 12 1/4" hole. cmt. circ. 5 1/2" @ 4073' w/1300 sx in 7 7/8" hole. cmt. circ. New well awaiting completion as an oil producer.
<u>J.L. Keel "B" #52</u>	1320' FSL & 60' FEL 6-17S-31E	<u>10-17-94</u>	new well		3715'/3672'	8 5/8" @ 361' w/325 sx in 12 1/4" hole. cmt circ. 5 1/2" @ 3715' w/1150 sx in 7 7/8" hole. cmt. circ. New well awaiting completion as an oil producer.
<u>J.L. Keel "B" #53</u>	1220' FSL & 1500' FEL	<u>10-24-94</u>	11-24-94	Producing	3950'/3902'	8 5/8" @ 401' w/325 sx in 12 1/4" hole. cmt. circ. 5 1/2" @ 3949' w/1375 sx in 7 7/8" hole. cmt. circ. Completed as a producer through perforations 3693' -3857'. New well.

**devon**  
**ENERGY CORPORATION**

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611  
FAX 405/552-4550

DEVON-OK  
1352

March 9, 1995

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Certified Mail No. Z 781 292 846

Attention: Ben Stone

RE: Additional information J.L. Keel waterflood expansion

Dear Mr. Stone:

Enclosed is the construction data requested on J.L. Keel wells:

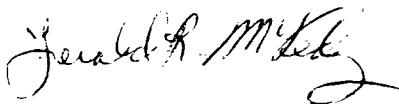
"B" Nos. 3, 14, 15, 25 and 32

Also enclosed are the last reported injection pressures on wells Keel "B" No. 13 and Keel "A" No. 14. The last field report shows pressures ranging from 1890 psi to 2150 psi. In the well records, I found old copies of NMOCD casing tests when the wells were operated by ARCO. Although "casing tests" the tubing pressures were recorded and are consistent with field reports.

If you have questions, or if I may assist by providing additional information, please call (405) 552-4520.

Sincerely,

DEVON ENERGY OPERATING CORPORATION



Jerald R. McKedy  
Engineer

JRM/cg

Enclosures

**devon**

OPERATING CORPORATION

20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260  
Telephone: 405/235-3611  
FAX: 405/552-4550

## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" 1b, 3

LOCATION: 660' FSL & 1980' FWL

Sec 8-T17S-R31E

Eddy Co., New Mexico

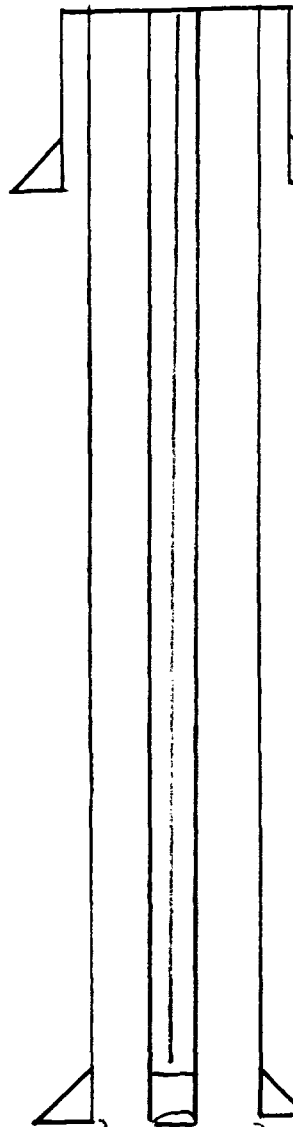
LC-029435-B

30-015-05104

Unit # "N"

Use Code "F"

GL: 3713'



B 5/8". 32# @ 517' w 50 sk in 10" hole

113- 3/4" rods, 2" x 1 1/2" x 16' pump  
92 ITS. 2 3/8", 4.7#, J-55 tbg  
511 @ 2849'

7", 24# @ 2930' w/ 100 sk. in 8" hole

OH 2930'-3489' acidized w/ 2000 gals  
Frac'd w/ 30,000 gals. gelled water &  
30,000 # sand.

3489' Plug back w/ 50 sk cm T.

TD: 3630'

Open hole 2930'-3630'

# WELLBORE SCHEMATIC

WELL: J. L. Keel "B" No. 14

LOCATION: 660' FSL & 660' FFL

Sec. 5-T17S-R31E

Eddy Co., New Mexico

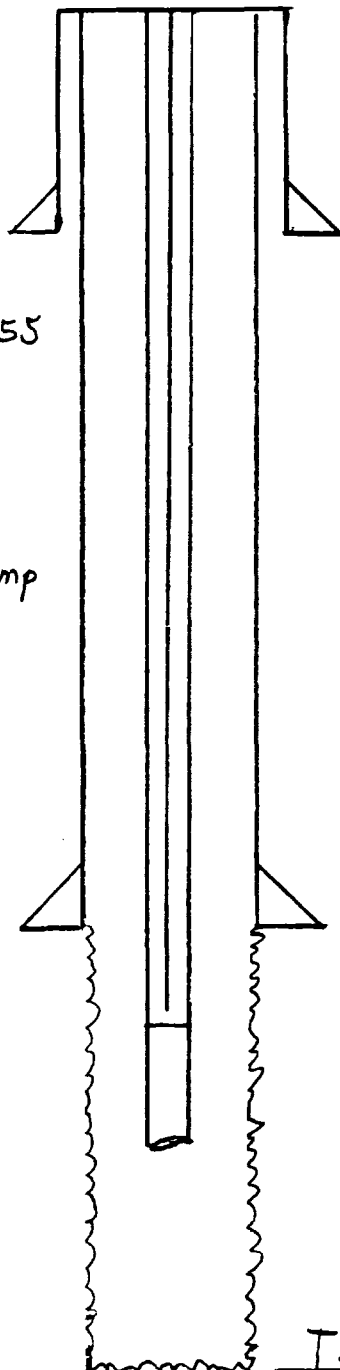
LC-029435-B  
 API 30-015-05079  
 Unit Letter "P"

GL: 3868'

108 Jts. 2 7/8" 6.5# J-55  
 to 3373'

134- 3/4" rods w/  
 2 1/2" x 1 1/4" x 12' Pump

SN @ 3374'  
 Open Hole  
 3054'-3728'



8 5/8", 24# @ 650' w/ 100 sx. in 10" hole

7", 20# @ 3054' w/ 200 sx. in 8" hole

3140'-3190' 100 qts. Nitro

3320'-3390' 140 qts. Nitro

3590'-3728' acidized w 2000 gals. 15% HCl.

3059'-3728' Frac'd w/ 25,000 gals slick  
 water & 25,000 # 20/40 sand.

TD: 3728'

# devon

OPERATING CORPORATION  
20 North Broadway, Suite 1800  
Oklahoma City, Oklahoma 73102-8260  
Telephone: 405/235-3611  
FAX: 405/652-4550

## WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 15

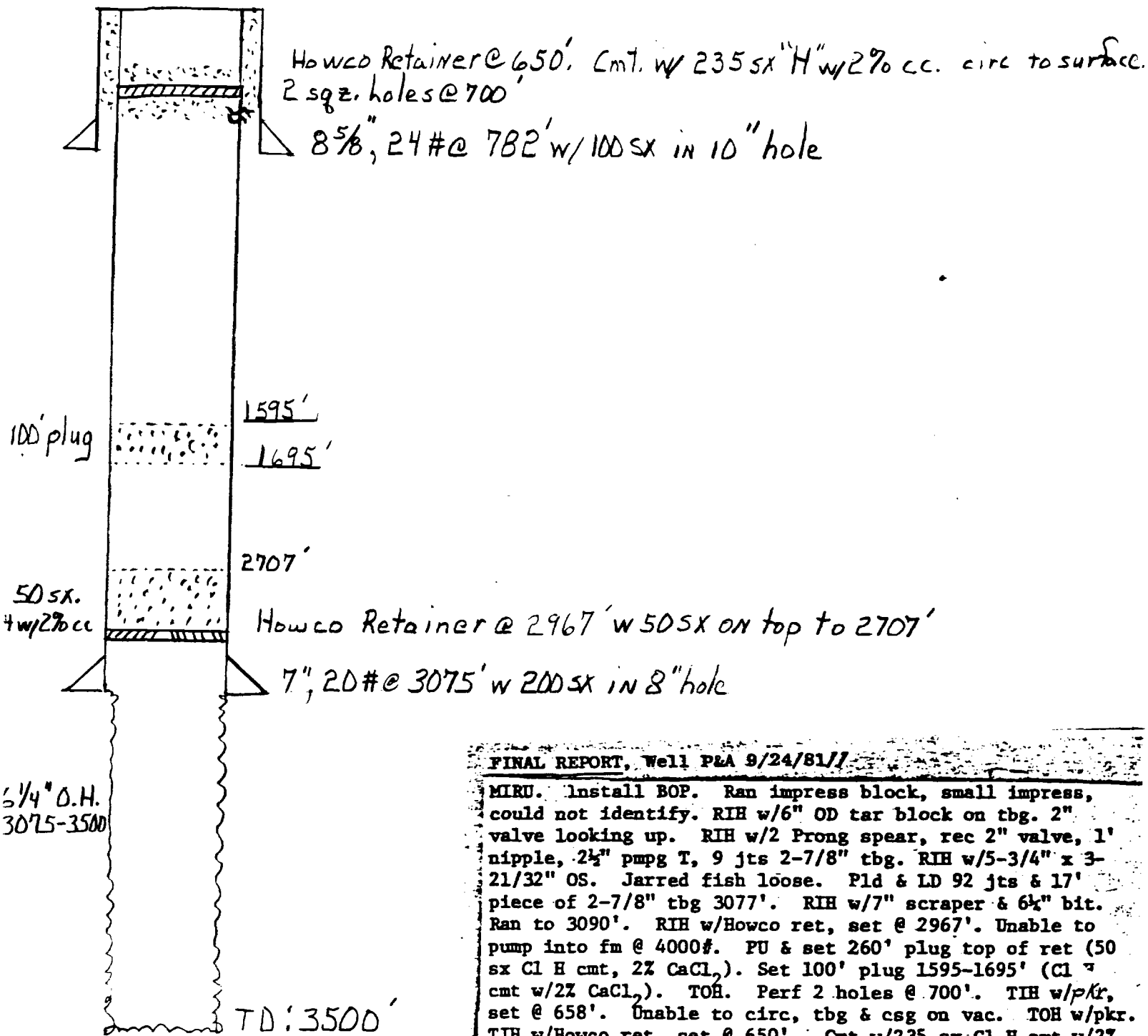
LOCATION: 1980' FNL & 660' FEL

Sec 8-T17S-R31E

Eddy Co., New Mexico

LC-029435-B

GL: 3848



### FINAL REPORT, Well P&A 9/24/81/1

MIRU. Install BOP. Ran impress block, small impress, could not identify. RIH w/6" OD tar block on tbg. 2" valve looking up. RIH w/2 Prong spear, rec 2" valve, 1" nipple, 2 1/2" pmpg T, 9 jts 2-7/8" tbg. RIH w/5-3/4" x 3-21/32" OS. Jarred fish loose. Pld & LD 92 jts & 17' piece of 2-7/8" tbg 3077'. RIH w/7" scraper & 6 1/2" bit. Ran to 3090'. RIH w/Howco ret, set @ 2967'. Unable to pump into fm @ 4000#. PU & set 260' plug top of ret (50 sx Cl H cmt, 2% CaCl<sub>2</sub>). Set 100' plug 1595-1695' (Cl cmt w/2% CaCl<sub>2</sub>). TOH. Perf 2 holes @ 700'. TIH w/pkr, set @ 658'. Unable to circ, tbg & csg on vac. TOH w/pkr. TIH w/Howco ret, set @ 650'. Cmt w/235 sx Cl H cmt w/2% CaCl<sub>2</sub>. Pump 175 sx cmt. Good returns to surf. Left 100' plug tog of ret. TOH w/stinger. Put 10' cmt plug top of 7". Cut off WH, install P&A worker.

(AFE \$ 61,800; \$21,866)

# WELLBORE SCHEMATIC

WELL: J.L. Kee / "B" No. 25

LOCATION: 1980' FSL & 517' FWL

Sec 6-T17S-R31E

Eddy Co., New Mexico

LC-029435-B

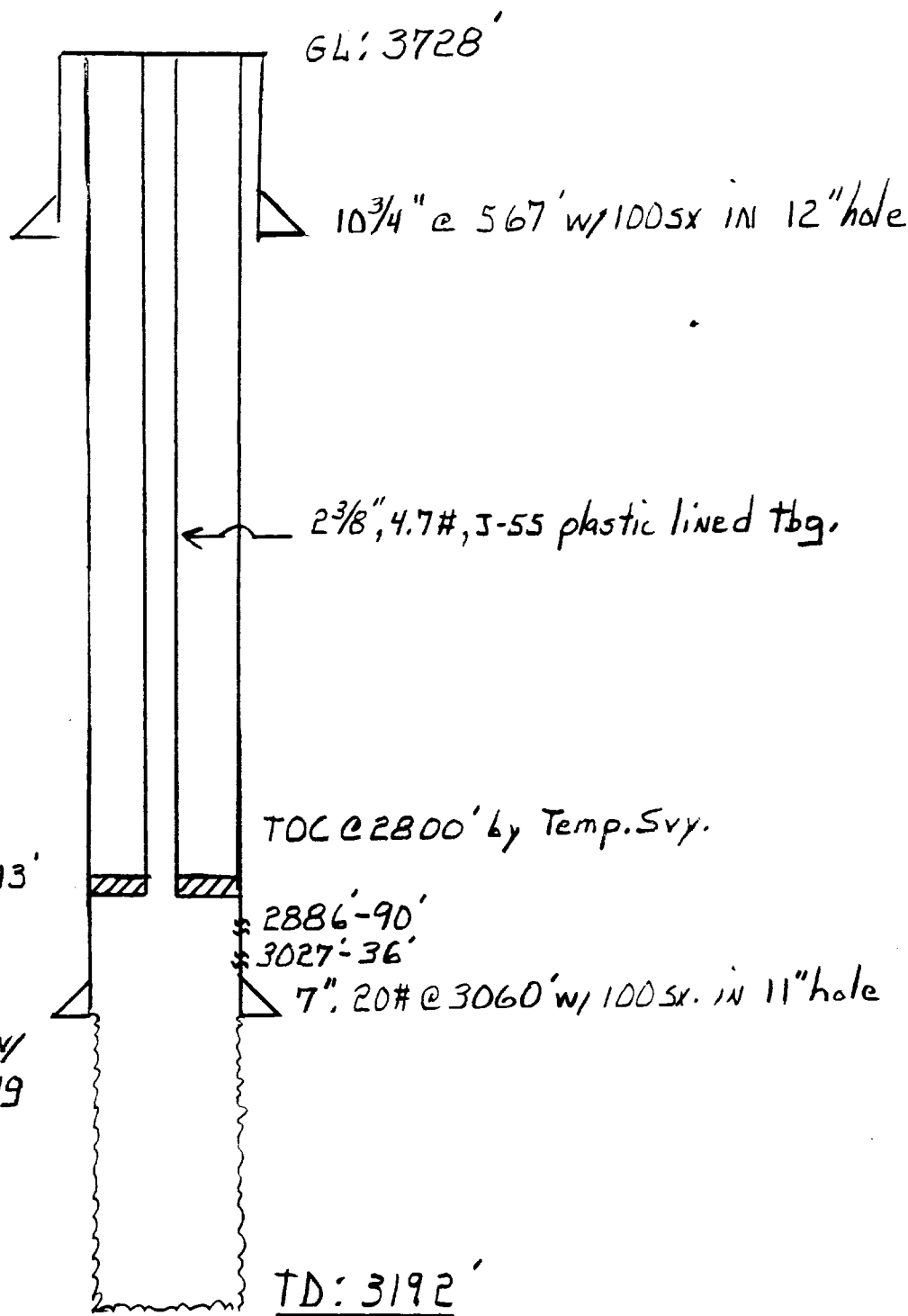
API 30-015-05088

UI "L"

Lse Code "F"

OGRID # 136025

Status: TSI, WIW



Baker "R" dbl. grip pkr. @ 2813'

Treated O.H. 3060'-3192' w/  
 15,000 gal. petrofrac carrying  
 15,000 # sand



# WELLBORE SCHEMATIC

WELL: J.L. Keel "B" No. 32

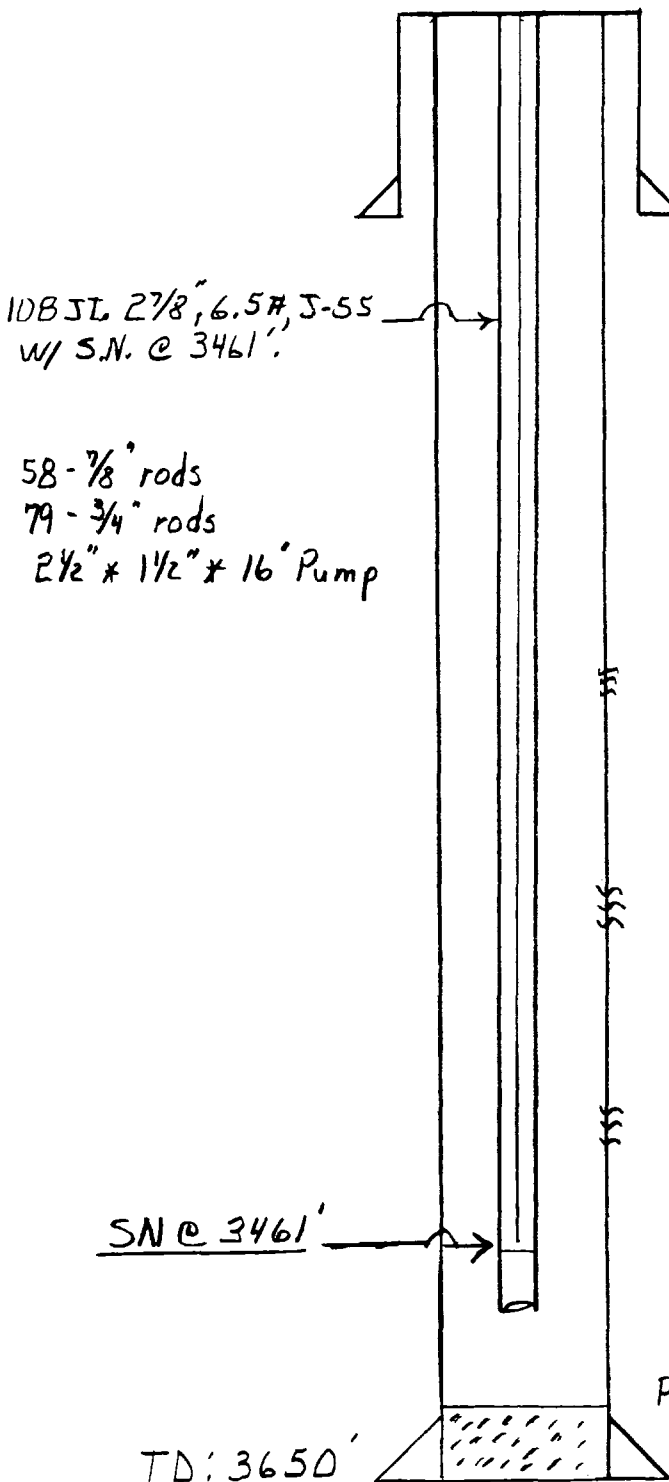
LOCATION: 660' FNL & 1980' FEL

Sec 6-T17S-R 31E

Eddy Co., New Mexico

LC-029435-B  
 API 30-015-24694  
 GL: 3767'

Before Rotary Tools  
 set 30' 14" conductor w/ 2 yds. Redi Mix



8 5/8", 24#, K-55 c 550' w/ 350 sx. cmt. circ.

## Perforations

3003, 07, 14, 17, 67, 69, 71, 76, 78, 80, 95, 97

3171, 73, 78, 82

3256, 62, 64, 66

3390, 96, 98

3413, 16, 18

Total 26 - 0.50' dia. holes

3003'-3097' Acidized w/ 3600 gals. 15% NEFE.

3171'-3266' Acidized w/ 3000 gals. 15% NEFE

3256'-3418' acidized w/ 2400 gals. 15% NEFE  
 Frac'd w/ 20,500 gals x-linked gel w/  
 66,000 # sd.

PBTD: 3562'

TD: 3650'

5 1/2", 17#, K-55 @ 3650' w/ 2300 sx. cmt to surf.

NEW MEXICO OIL CONSERVATION DIVISION  
CASING -- BRADENHEAD TEST

Operator Arco oil & Gas Co  
Lease Name Keel A Pool GR-T  
Well Number 14 Unit Letter D Section 7 Township 17 Range 31

Test Date: 6-11-80 Time & Place 1044 Bu u

CASING STRING	Size	Set At	Cemented	Pressure	Remarks	19
SURFACE	10 3/4	587	100	5	Gas	
INTERMEDIATE						
PRODUCTION	5 1/2	3425	125	0		
TUBING	2 3/8			1825		
TD3502 Per F 2842-2904 2930-3108						

Test Date: 6-9-8 Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks	19
SURFACE	10 3/4			5	Gas OK	
INTERMEDIATE						
PRODUCTION	5 1/2			0		
TUBING	2 3/8			2150		

Test Date: 4-6-82 Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks	19
SURFACE	10 3/4			20	Gas	
INTERMEDIATE						
PRODUCTION	5 1/2			0		
TUBING	2 3/8			2150		

Test Date: 4/5/83 M.S. Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks	19
<u>Active</u> SURFACE	10 3/4"			20 #	Shutdown Gas	
INTERMEDIATE						
PRODUCTION	5 1/2"			0 #		
TUBING	2 3/8"			1950 #		

Test Date: Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks	19
SURFACE						
INTERMEDIATE						
PRODUCTION						
TUBING						

6-60 1501 980.FCL  
MEXICO OIL CONSERVATION DIVISION  
CASING -- BRADENHEAD TEST

Operator Arco Oil & Gas  
Lease Name Keel B Pool G-J  
Well Number 13 Unit Letter 0 Section 5 Township 17 Range 31

Test Date: 6-11-80 Time & Place 11:20 AM BWW

CASING STRING	Size	Set At	Cemented	Pressure	Remarks
SURFACE	8 5/8	609	100	0	
INTERMEDIATE				0	
PRODUCTION	7	2992	200	0	
TUBING	2 3/8			2100	
TD 3715 P.C. 3054-3714					

Test Date: 6-9-81 Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks
SURFACE	8 5/8			0	Puff Gas
INTERMEDIATE				0	
PRODUCTION	7			0	
TUBING	2 3/8			2100	

Test Date: 4-6-82 Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks
SURFACE	8 5/8		100	0	
INTERMEDIATE				0	
PRODUCTION	7		200	0	
TUBING	2 3/8			20.5 A	

Test Date: Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks
SURFACE					
INTERMEDIATE					
PRODUCTION					
TUBING					

Test Date: Time & Place

CASING STRING	Size	Set At	Cemented	Pressure	Remarks
SURFACE					
INTERMEDIATE					
PRODUCTION					
TUBING					