# 2.25.95

DEVON ENERGY **OPERATING CORPORATION** 

20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102 65 FE 1 1 6 52

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, 7012, A-23, D-6, B-7, B-7, B-17, B-18, B-20, D-21, D-20, D-50, D-58, -B-99, and 5-47. 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,

Jerald R. McKedy

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: DEVON EVERGY CORP. Well: KEEL WEST WAY (6 WILLS)
Contact: TERALD MCKEDY Title: PE Phone: 45.552.4520
DATE IN 210-95 RELEASE DATE 2-25-95 DATE OUT 3-16-95
Proposed Injection Application is for: <u> </u>
Original Order: R- 2268 + AMD Secondary Recovery Pressure Maintenance
SENSITIVE AREAS SALT WATER DISPOSAL
WIPPCapitan ReefCommercial Operation
Data is complete for proposed well(s)? <u>UFS</u> Additional Data <u>StA</u> NOTES
AREA of REVIEW WELLS
$\frac{32}{2}$ Total # of AOR $\frac{3}{2}$ # of Plugged Wells
义 <u>纠纷</u> Tabulation Complete <u>纠纷</u> Schematics of P & A's
$\eta_{LC}$ Cement Tops Adequate $\lambda O$ ACR Repair Required
INJECTION INFORMATION
Injection Formation(s) (GRAYBURG SAN ANDRES
Source of Water <u>ARIA PROPUCERS</u> Compatible <u>41</u> 5
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
1st Contact:Telephoned XLetter 3-9-95 Date Nature of Discussion 140 AUDITIONAL 30R INFO
2nd Contact:TelephonedLetter Date Nature of Discussion
3rd Contect:TelephonedLetter Date Nature of Discussion

X

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### 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.

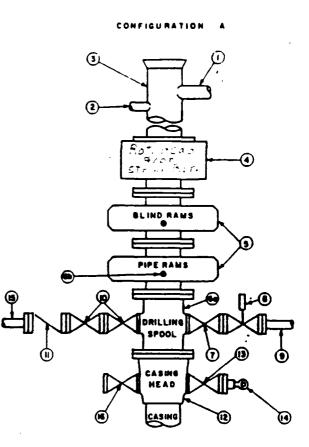
Both rigs will use a 2 steel pit system to contain all drilling fluids. <u>No reserve pit</u> will be needed. All proposed work will be contained on the original pad with no disturbance to the surrounding area.

#### 3.000 psi Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Item		Мил. 1.D.	Min. Nominal
1	Flowline			
2	Fill up line	_		2*
3	Drilling nipple			
4	Potative Hend-Str	ipper Por		
5	Two single or one dual hy operated rams			
64	Drilling spool with 2" min 3" min choke line outlets			
<b>6</b> b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)			
7	Valve	Gale 🗆 Piug 🗆	3-1/8"	
8	Gate valve-power operated		3-1/8"	
9	Line to choke manifold			3"
10	Valves	Gate C Piug C	2-1/16*	
11	Check valve		2-1/16*	
12	Casing head			
13	Valve	Gate D Piug D	1-13/16*	
14	Pressure gauge with nee	die valve		
15	Kill line to rig mud pump i			2"



OPTIONAL				
16	Flanged valve	1-13/16*		

#### 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 prevventer 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 vaives 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 chore. 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 USO.
- 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 (H2S).
- 2. The proper use and maintenance of the H2S safety equipment and of personal protective equipment to be utilized at the location such as H2S 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 H2S bearing formation, H2S 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 H2S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H2S training.

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

### **B. H2S Safety Equipment And Systems**

All H2S safety equipment and systems will be installed, tested, and operational when drilling operations reaches a depth approximately 500' above any known or probable H2S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

- (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 sudible 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:

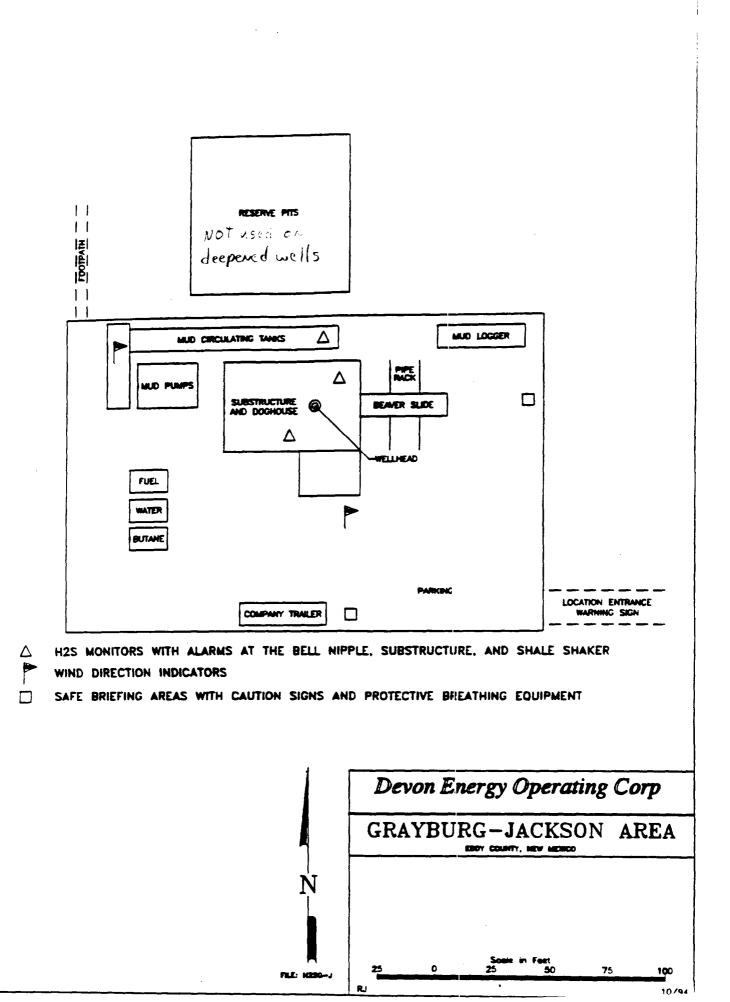
- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that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

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- 5. Mud Program
  - (a) The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight and safe drilling practices ( for example, keeping the hole filled during trips) will minimize hazards when drilling in H2S 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 H2S 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 H2S monitors, briefing areas, and wind direction indicators.



	STATE	OF NEW	MEXICO
ENERGY	AND HI	NERALS	DEPARTHENT

### APPLICATION FOR AUTHORIZATION TO INJECT

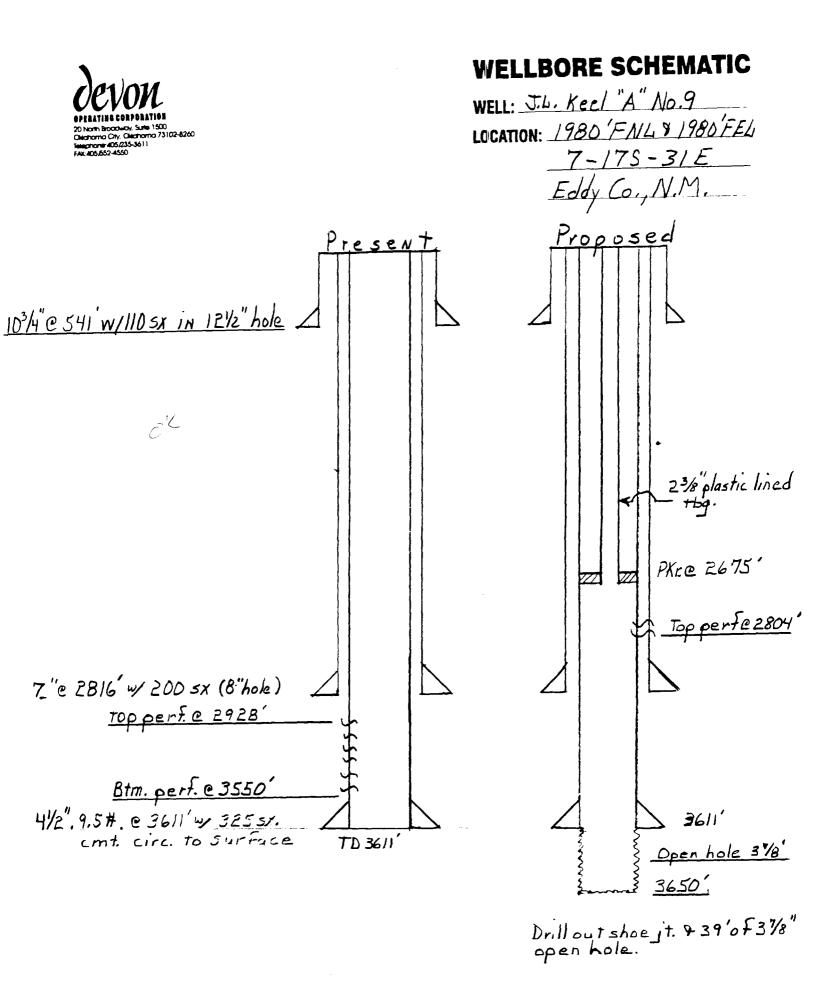
1.	Purpose: Applicat	Secondary Recovery Pressure Maintenance Dicposal Storage
II.	Operator:	DEVON ENERGY OPERATING CORPORATION
	Aodress:	20 N. BROADWAY, SUITE 1500, OKLAHMA CITY, OKLAHOMA 73102-8260
	Contact par	ty: JERALD MCKEDY Phone: (405) 552-4520
III.	Well data:	Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an If yes, giv	expansion of an existing project? X yes no e the Division order number authorizing the project <u>R-2268</u> .

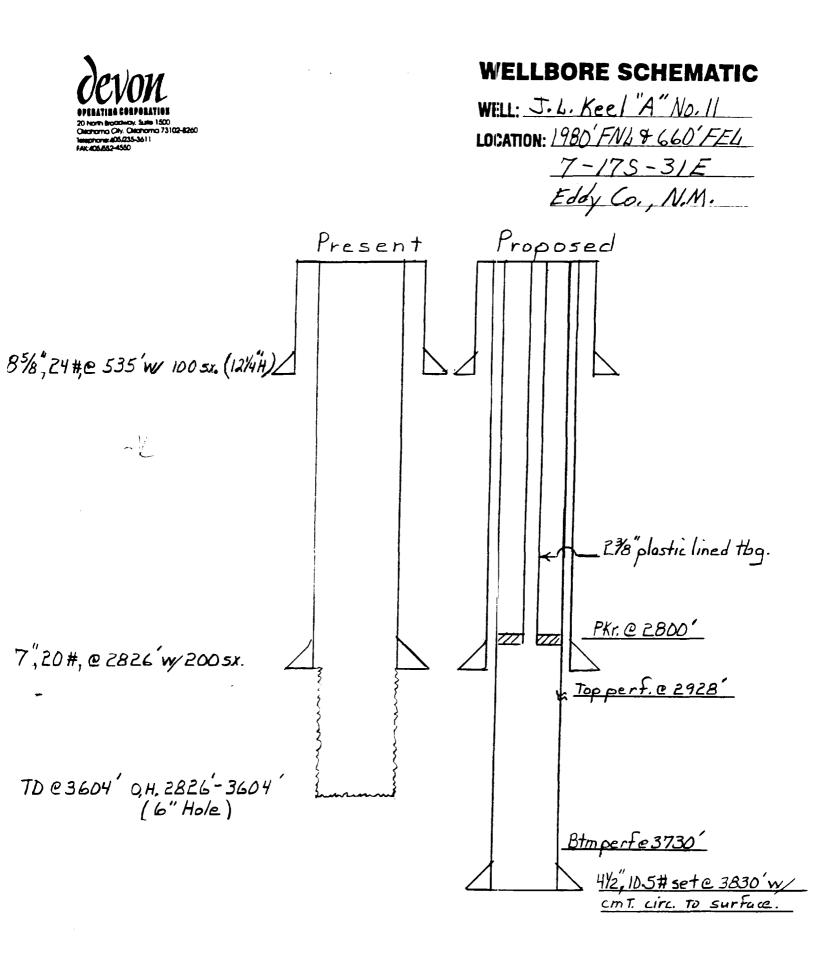
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within 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.

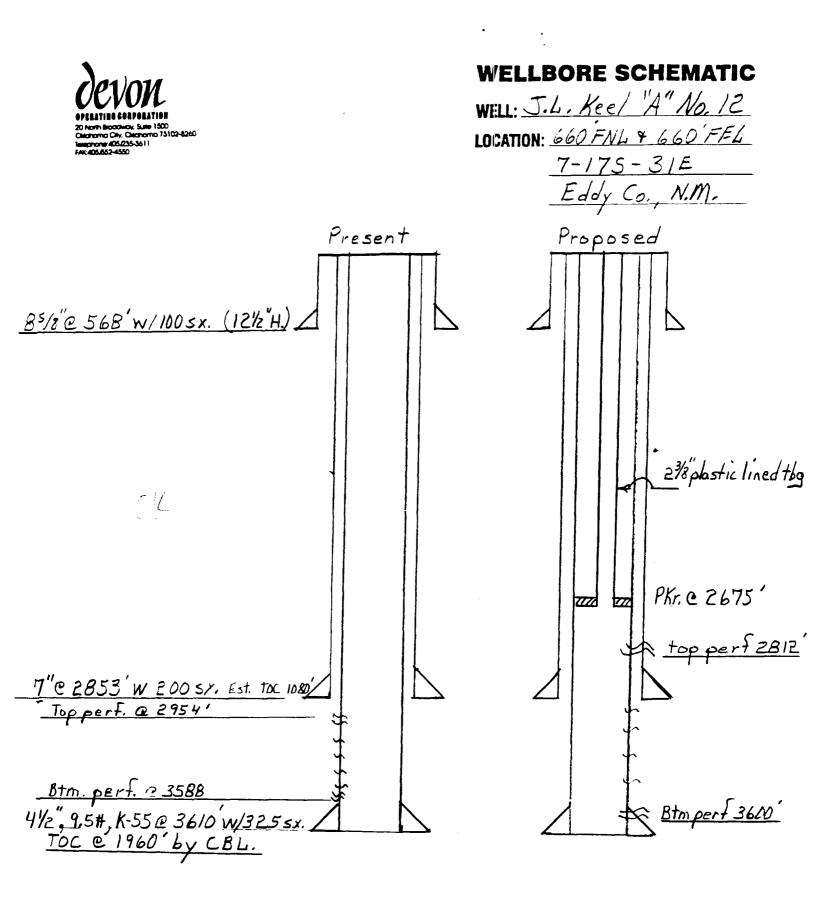
Name: _	JERALD MCKEDY	Title PETROLEUM ENGINEER	
Signatu	re: Jened Miled	Datc: 1-19-95	
If the inform	ation required under Sections VI, need not be duplicated and resul	, VIII, X, and XI above has been previously bmitted. Please show the date and circumstance	e

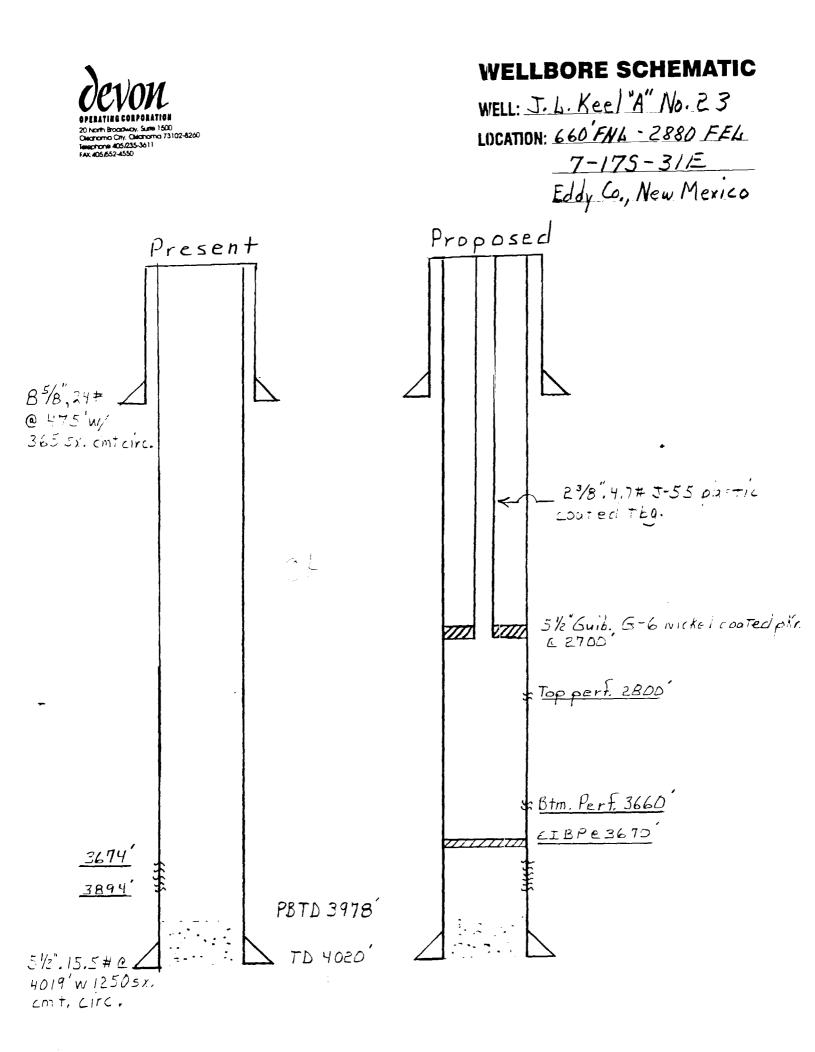
DISTRIBUTION: Original and one copy to Santa Le with one copy to the appropriate Division

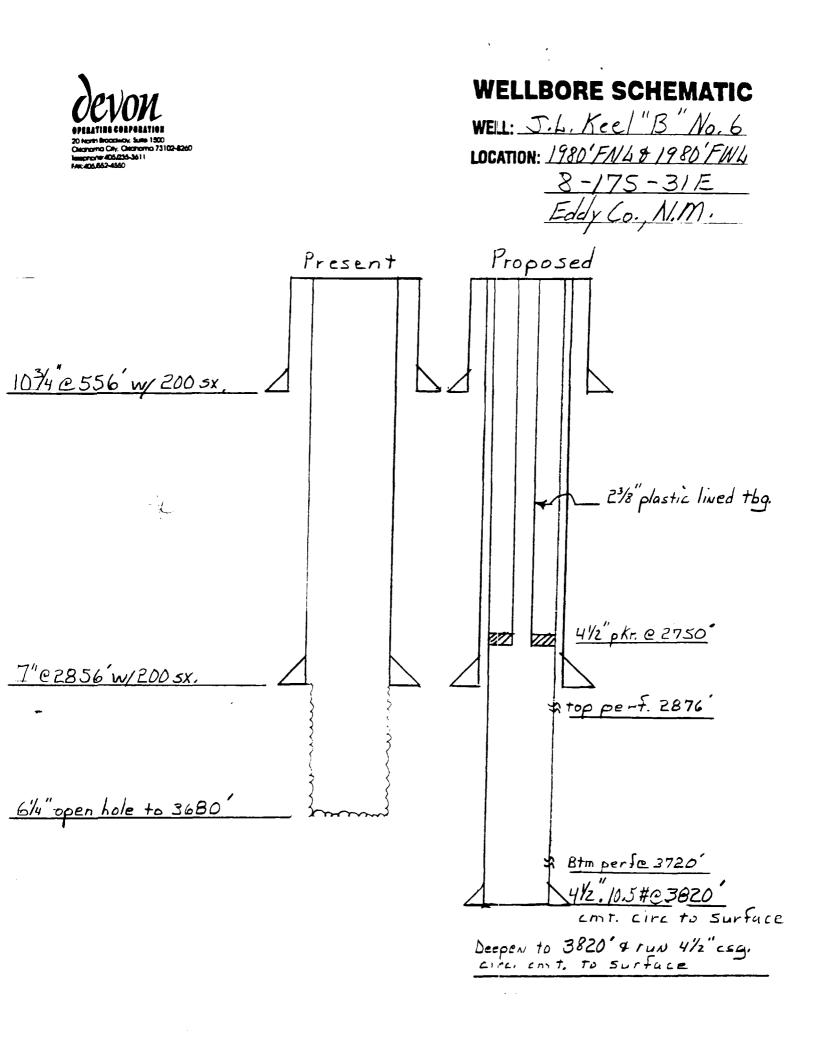


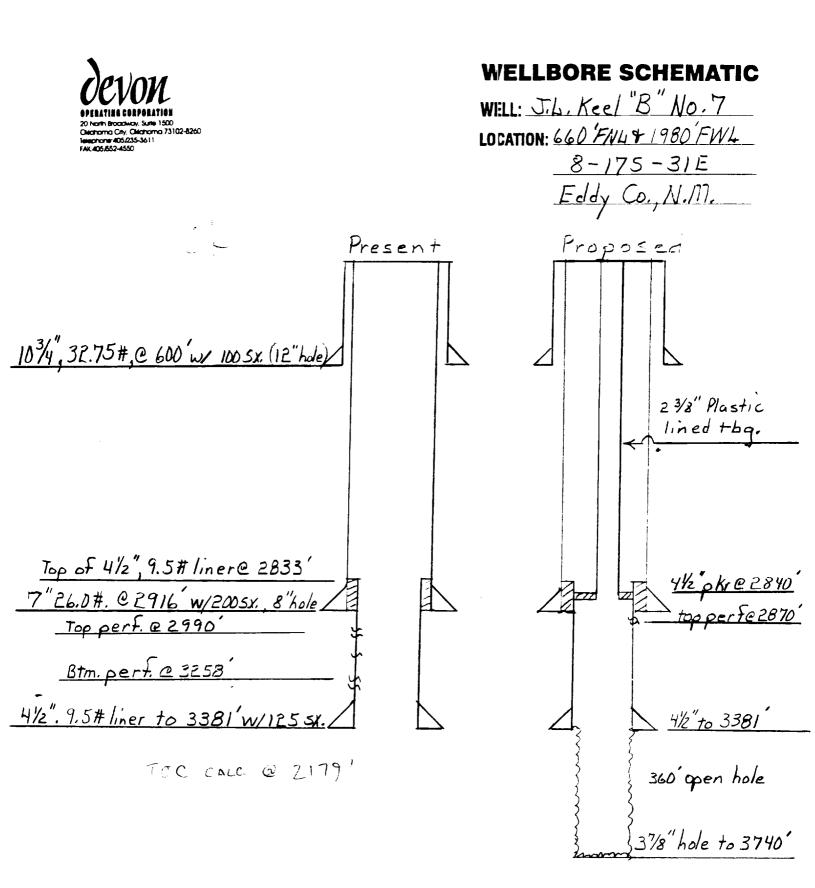


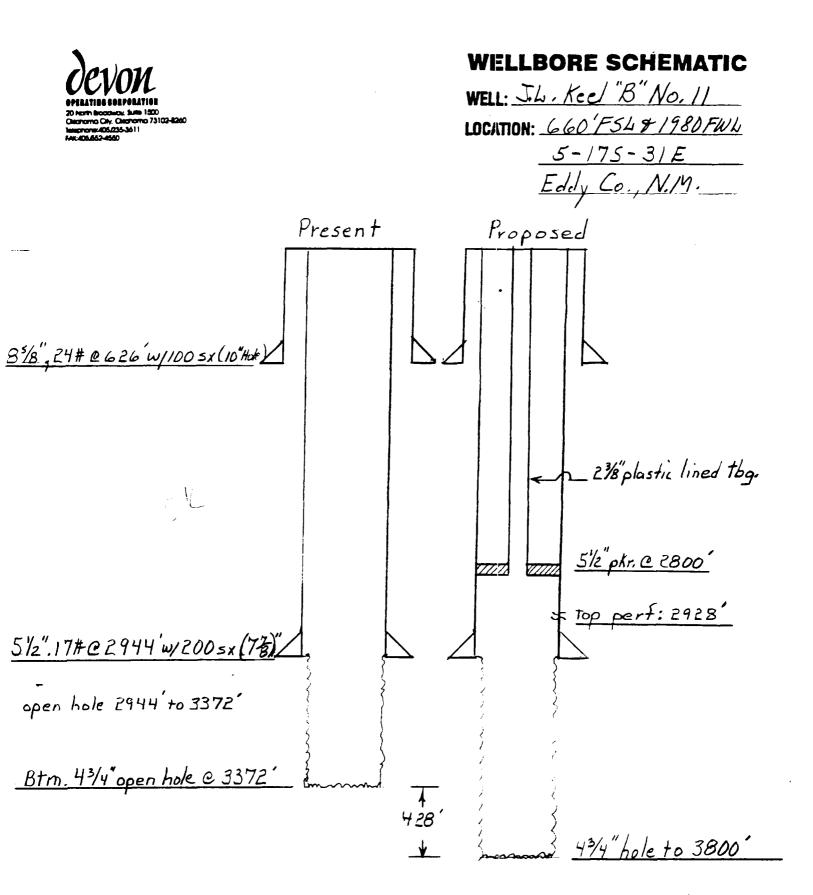
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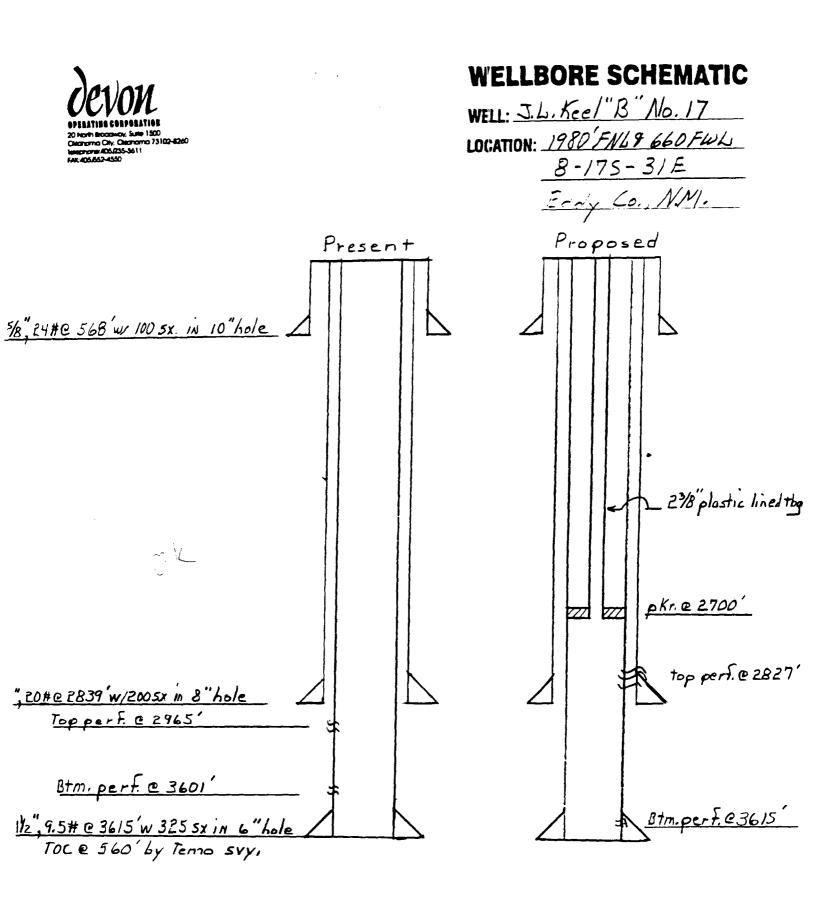


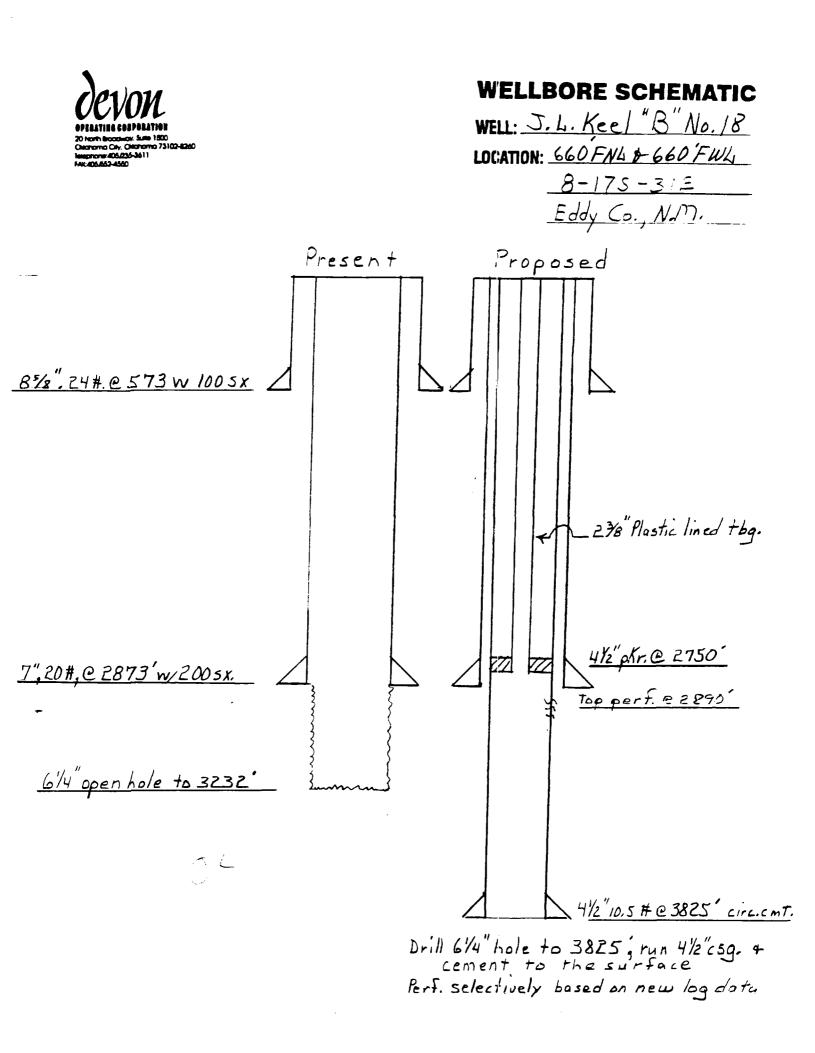


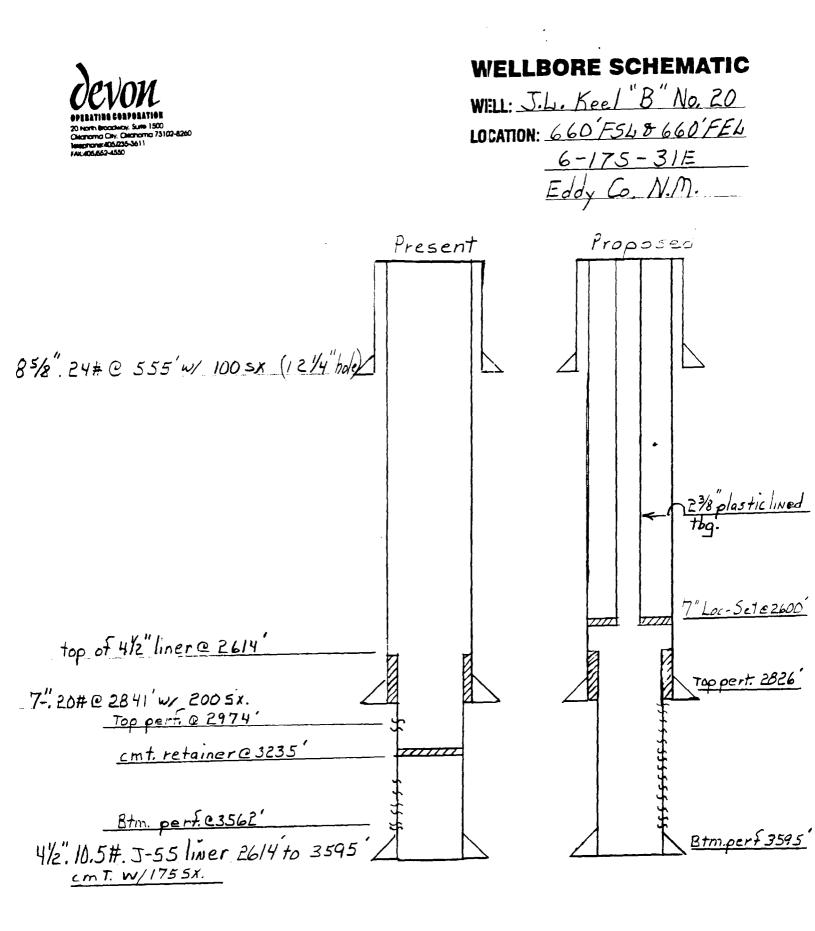


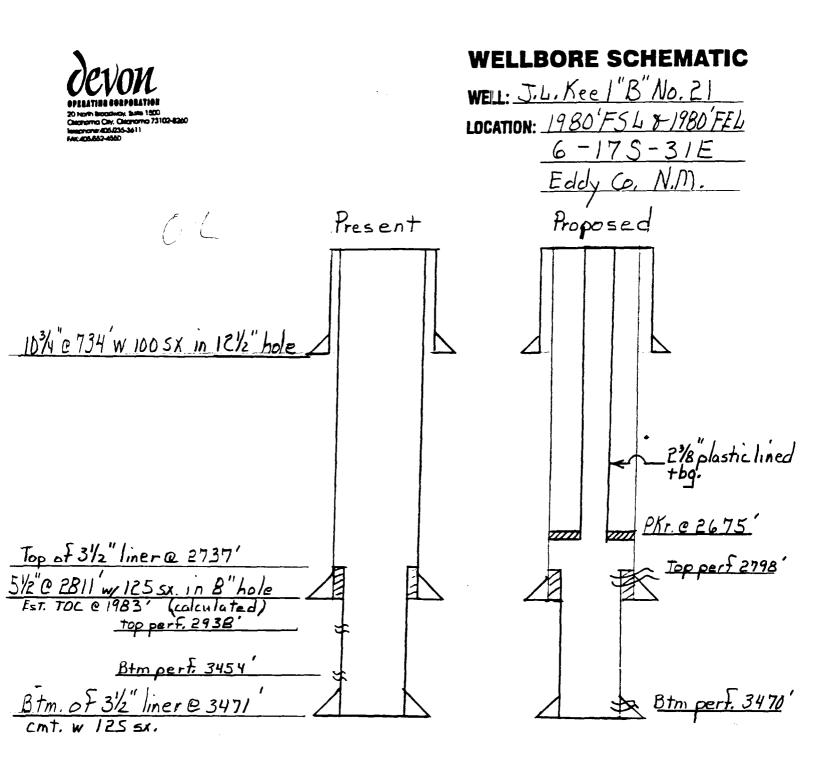


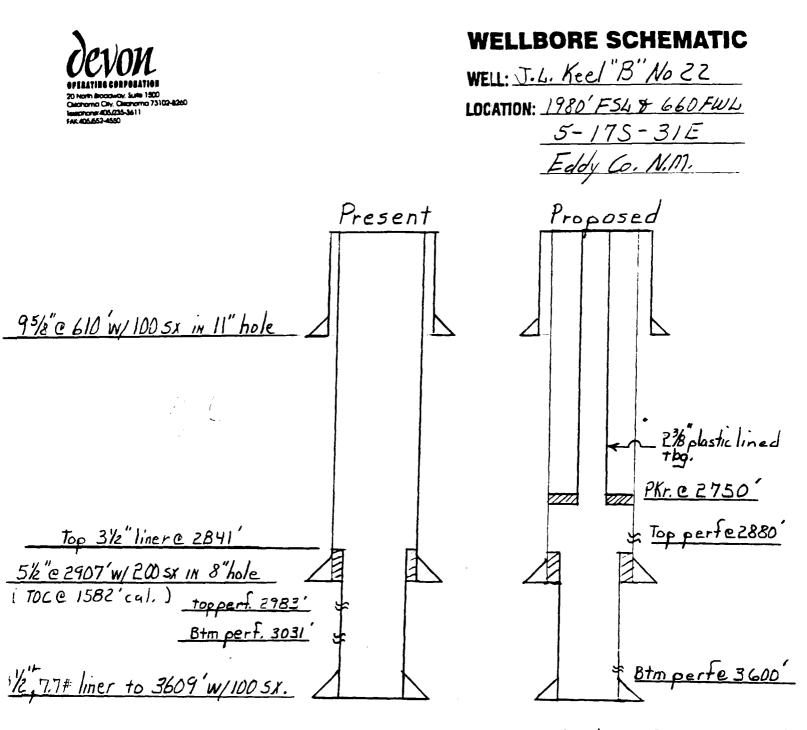
Deepen existing 43/4'0H from 3372' to 3800' (428')



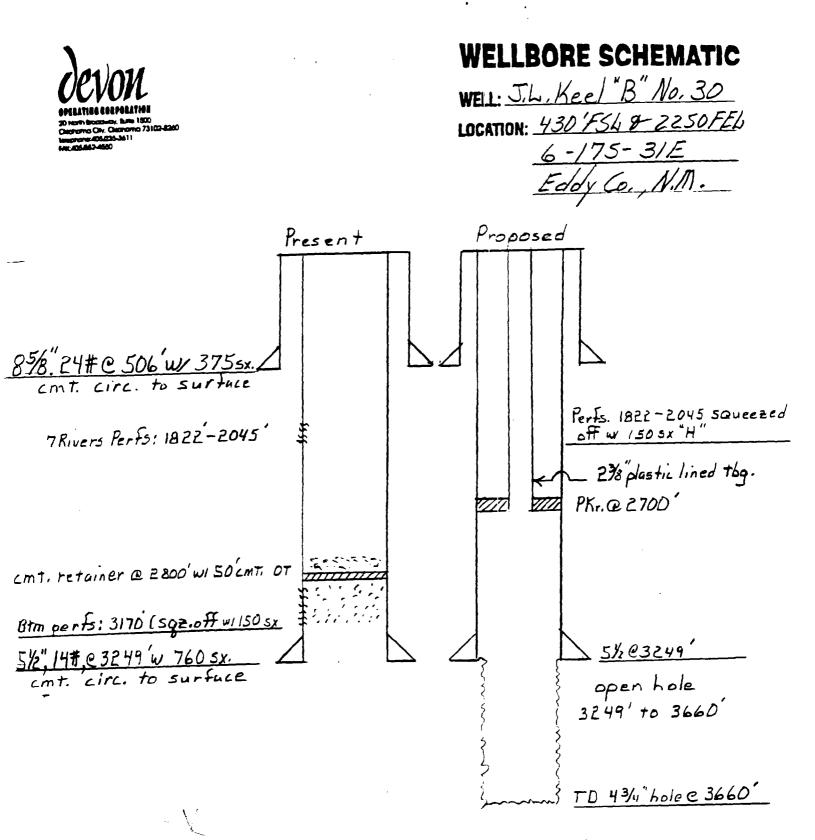




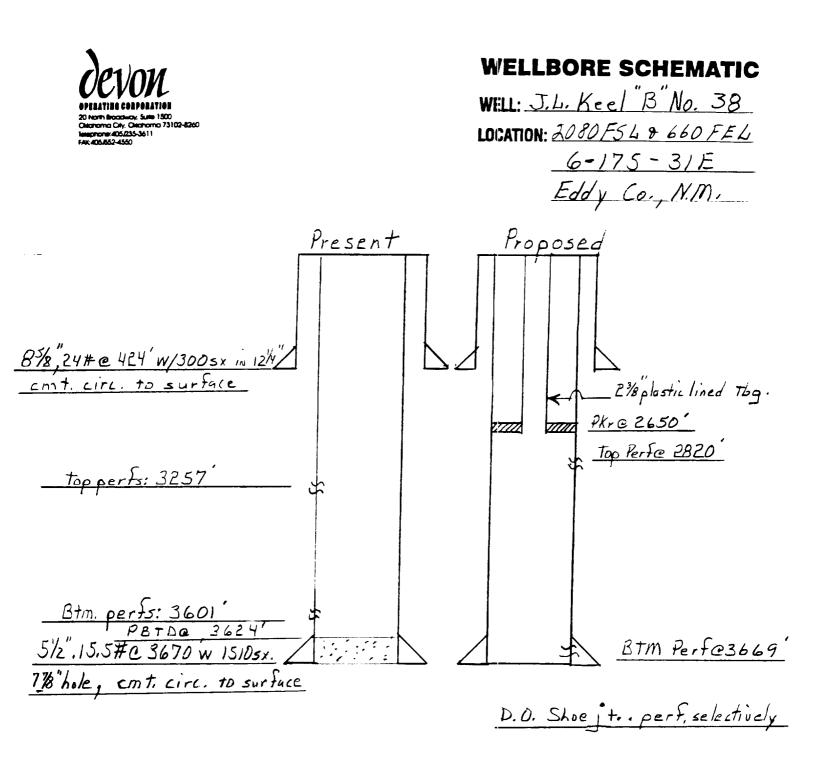




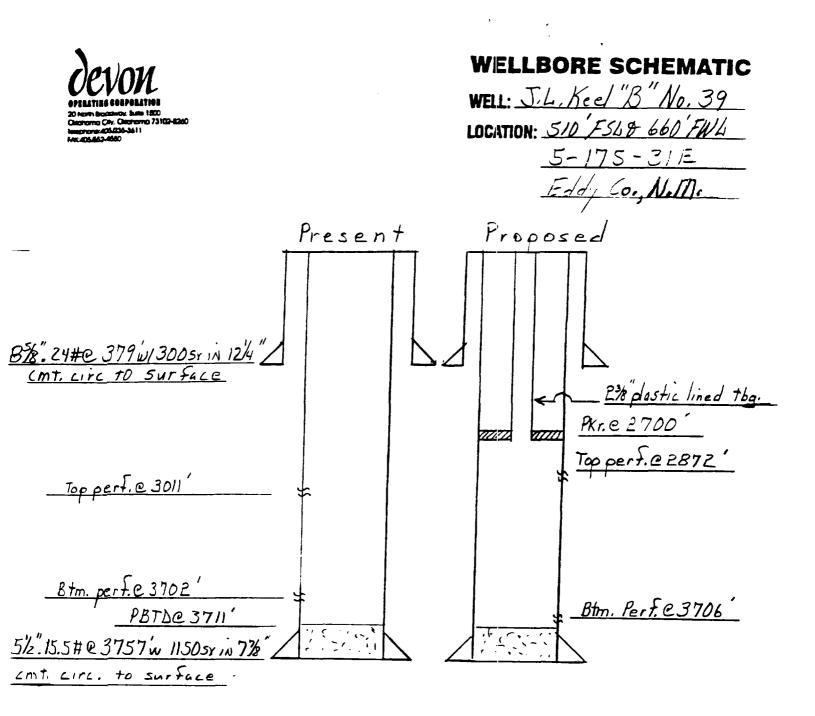
Selectively perforate interval 2880' to 3600, treat & convert to water injection

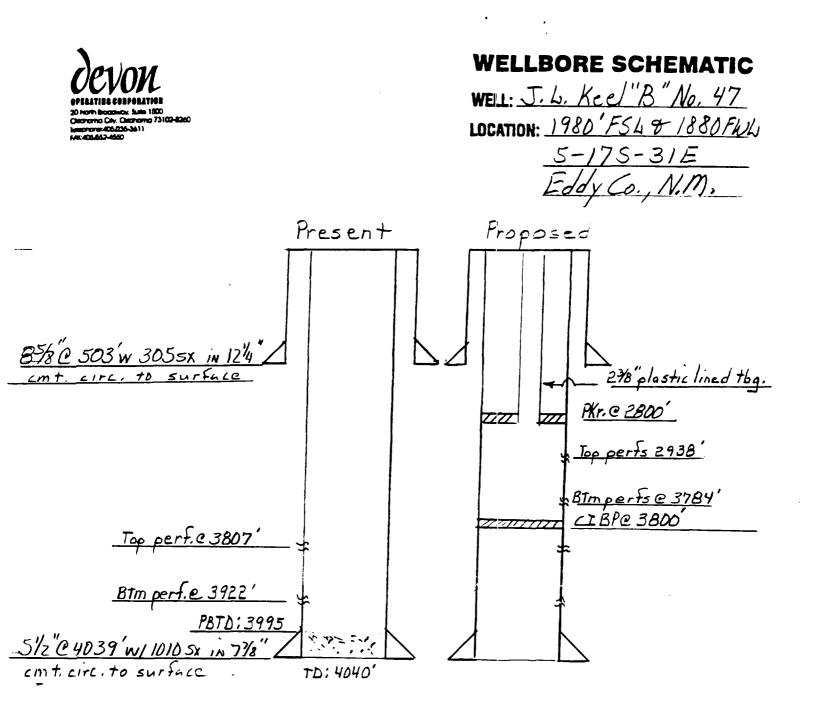


Squeeze perfs @ 1822-2045 w/ 1509x. Drill out sqz., returner + shoe ST. Drill 43/4" O.H. 3249-3660 Log + perf selectively 2812-3660



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r.C

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 <u>94</u> _
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

0

Subscribed and sworn to before me this

davof cember

My commission expires 8/01/98

Notary Public

# Nº 17015

#### 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

State of New Mexico, County of Eddy, ss.

Amy McKav

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:

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Subscribed and sworn to before me this

davof

My commission expires 8/01/98

Notary Public

### Nº 17024

#### 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.

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Subscribed and sworn to before me this

dayof

My commission expires 8/01/98 Notary Public

### Nº 17012

#### 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:

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January 27	, 19 <u>95_</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

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Subscribed and sworn to before me this

30 M day of\_ nuary

My commission expires 8/01/98 Notary Public

### Nº 16906

#### January 27, 1995

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

State of New Mexico, County of Eddy, ss.

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Subscribed and sworn to before me this

144 1944 day of\_

My commission expires <u>8/01/98</u> Notary Public

# Nº 17014

#### December 13, 1994

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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

State of New Mexico, County of Eddy, ss.

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

Subscribed and swom to before me this

14th\_day of\_ cember

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

State of New Mexico, County of Eddy, ss.

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Subscribed and sworn to before me this

14th day of De ember

My commission expires 8/01/98 Notary Public

# Nº 17027

### 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" #11 660 FSL & 1980 FWL Sec. 5-17S-31 E 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

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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

14th\_day of\_

My commission expires 8/01/98 Notary Public

### Nº 17019

#### 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 1960'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

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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Jul,

Subscribed and sworn to before me this

\_,19<u>4</u>4 ecember day of

My commission expires 8/01/98

Notary Public

# Nº 17016

#### 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 tor 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 Andree 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

3

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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and swom to before me this

rember day of

My commission expires <u>8/01/98</u> Notary Public

# Nº 17026

#### 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

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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

mber .199 day of\_

My commission expires 8/01/98 Notary Public

# Nº 17023

#### December 13, 1994

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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 1980 FSL & 1980 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

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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court casts.

N

Subscribed and sworn to before me this

1449\_day of\_

My commission expires <u>8/01/98</u> Notary Public

## Nº 17020

#### 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 secondany recovery. Maximum injec-

tion rates of 500 bund 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

State of New Mexico, County of Eddy, ss.

<u>Amy McKay</u> 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 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

,1994 dayof ember

My commission expires 8/01/98 Notary Public

### Nº 17025

#### 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) 552-4580

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 <u>94_</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

nyt,

Subscribed and sworn to before me this

\_,19<u>94</u> NIMP rember dayof

My commission expires 8/01/98 Notary Public

## Nº 17021

#### 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 tor 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 burgd 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

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 <u>_94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

dayof

My commission expires 8/01/98 Notary Public

### Nº 17018

#### 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 burgd 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 Operation Corporation 20 North Broadway, Suite 1500 Oklahoma City, OK (405) 552-4580

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:

Dece	ember 13	, 19 <u>94</u>
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That the cost of publication is 24.53, and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this

day of\_

My commission expires <u>8/01/98</u> Notary Public

### Nº 17022

#### 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:

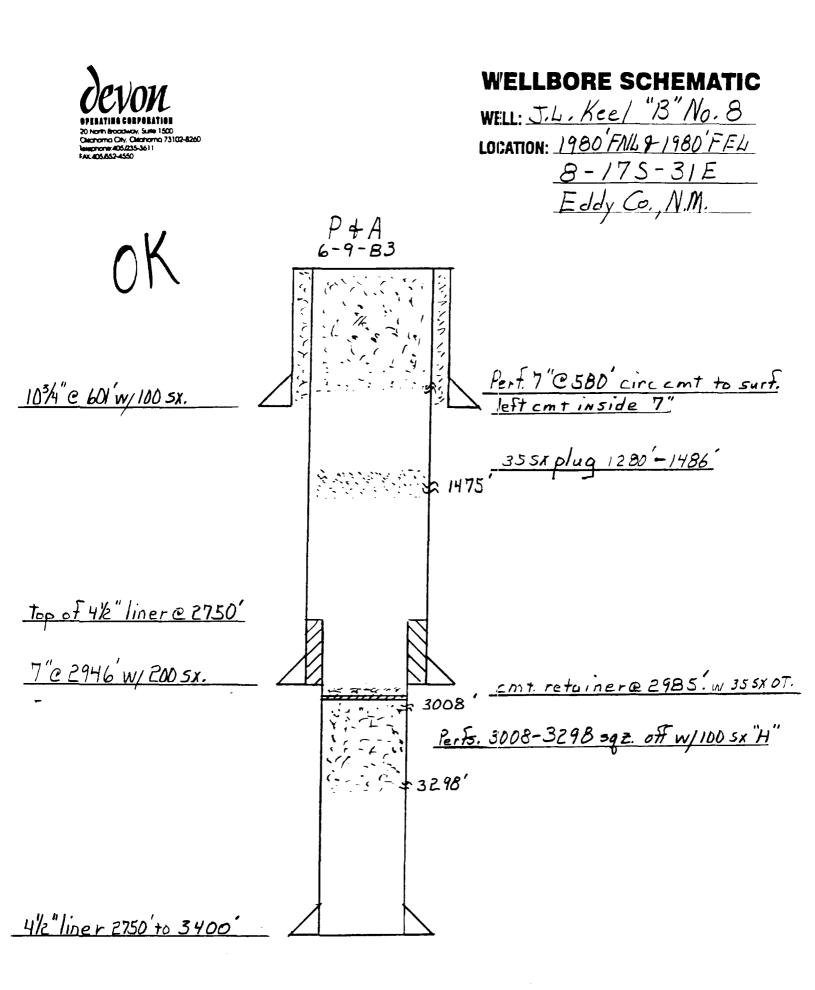
> J.L. Keel "B" #47 1980FSL & 1880FWL Sec. 5-17S-31E Eddy County, NM

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



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. <sup>1</sup> OGRID Number **Devon Energy Corporation** 136025 1500 Mid America Tower 20 N. Broadway <sup>3</sup> API Number Oklahoma City, OK 73102-8260 30-015-05097 <sup>4</sup> Property Code <sup>5</sup> Property Name <sup>6</sup> Well No. J.L. Keel "A" LC-029435-A Q <sup>7</sup>Surface Location UL or lot no. Section Township Range Lot Ids/ Feet from the North/South line Feet from the East/West line County 1980 "G" 7 175 31E North 1980 Fast Eddv <sup>8</sup> Proposed Bottom Hole Location If Different From Surface UL or lot no. Township Range Lot Ids Feet from the North/South line Feet from the Section East/West line County 9 Proposed Pool 1 <sup>10</sup> Proposed Pool 2 <sup>12</sup>Work Type Code 13 Cable/Rotary <sup>11</sup>Work Type Code <sup>14</sup>Lease Type Code <sup>15</sup>Ground Level Elevation 3747' Rotary <sup>20</sup> Spud Date <sup>16</sup> Multiple <sup>17</sup> Proposed Depth 18 Formation <sup>19</sup>Contractor 3650 3-1-95 Yes Grayburg-San Andres Not Known <sup>21</sup> Proposed Casing and Cement Program Casing Size Casing weight/feet Setting Depth Sacks of Cement Estimated TOC Hole Size 10 3/4" 12 1/2" 40.5 110 140' 541 2816 820 8 1/4" 200 7 26.0 4 1/2' 3611 325 6" 9.5 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 **OIL CONSERVATION DIVISION** my knowledge and belief. Signature: Approved by: Title: Printed name Gerald McKedy: Approval Date: Expiration Date: Title Petroleum Engineer Conditions of Approval: Date: January 24, 1995 Phone

Г

Attached

405-552-4**52D** 

Submit 3 Copies to Appropriate District Office	State of New Energy, Minerals and Natura	Form C-103 Revised 1-1-89					
DISTRICT I P.O. Box 1980, Hobbs, NM 88240	Box 1980, Hotbs, NM 88240 P.O. Box 2088						
DISTRICT II P.O. Drawer DD, Artesia, NM 38210	Santa Fe, New Mexi	co 87504-2088	5. Indicate Type of Lease				
DISTRICT III 1000 Rio Brazos Rd., Aziec, NM 87410		· · ·	6. State Oil & Gas Lease No. LC-029435-A				
SUNDRY NOT	ICES AND REPORTS ON V	VELLS					
(FORM C	AVOIR. USE "APPLICATION FOR -101) FOR SUCH PROPOSALS.)	PERMIT'	7. Lease Name or Usit Agreement Name J.L. KEEL "A"				
I. Type of Well: OL GAS WELL WELL	OTHER	W.I.W.					
Name of Operator DEVON ENERGY OPERATI	NG CORPORATION		L. Well No. 23				
Address of Operator 20 N. BROADWAY SUITE	: 1500, OKC, OK 73102	-8260	9. Pool same or Wildon GRAYBURG JACKSON				
Well Location Unit Letter:66	Feet From The		0 Feet From The <u>EAST</u> 1				
··· 66	Towaship 17S		0 Feet From The <u>EAST</u>				
Unit Letter:66	Township 17S	Range         31E         1           her DF, RKB, RT, GR, etc.)         3R:         3768	NMPM EDDY Count				
Unit Letter:66	Towaship 17S 10. Elevation (Show when Appropriate Box to Indicat	Range 31E 1 her DF, RKB, RT, GR, etc.) GR: 3768' The Nature of Notice, Re	NMPM EDDY Count				
Unit Letter:66	Towaship 17S 10. Elevation (Show when Appropriate Box to Indicat	Range 31E 1 her DF, RKB, RT, GR, etc.) GR: 3768' The Nature of Notice, Re	NMPM EDDY Count				
Unit Letter:66	Towaship 17S 10. Elevation (Show when Appropriate Box to Indicat	Range 31E 1 her DF, RKB, RT, GR, etc.) GR: 3768' The Nature of Notice, Re	NMPM EDDY Count				
Unit Letter:66	Towaship 17S 10. Elevation (Show when Appropriate Box to Indica ENTION TO:	kange 31E   her DF, RKB, RT, GR, etc.) GR: 3768' te Nature of Notice, Re SUB	NMPM EDDY Count port, or Other Data SEQUENT REPORT OF:				
Unit Letter:66	Towaship 17S 10. Elevation (Show when Appropriate Box to Indicat ENTION TO: PLUG AND ABANDON	Range     31E       her DF, RKB, RT, GR, etc.)       GR:     3768'       te Nature of Notice, Re       SUB:       REMEDIAL WORK	NMPM EDDY Count port, or Other Data SEQUENT REPORT OF: ALTERING CASING OPNS. PLUG AND ABANDONMENT				

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.

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405-552-4520	TELEPHONE NO.
	<u>405-552-4520</u>

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

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

1500 Mid America Tower										<sup>1</sup> OGRID Number 136025			
20 N. Broad Oklahoma C		102-8260								30-015	<sup>3</sup> API Num 5-05107	ber	
<sup>4</sup> Property Code LC-029435-B				J.L. Keel	"B"	<sup>5</sup> Proper	ty Nam	e		6	<sup>6</sup> Well No. 6		
					<sup>7</sup> Surface	Locatio	on						
UL or lot no. "F"	Section 8	Township 17S	Range 31E	Lot Ids	Lot IdsFeet from the 1980North/South line NorthFeet from the 1980					ast/West line Vest	County Eddy		
	<u> </u>	8 P	roposed	Botton	1 Hole Loca	tion If	Diffe	erent Fro	m Surfac	e T		L <u></u>	
UL or lot no.	Section	Township	Range	Lot Ids	Lot Ids Feet from the North/South line Feet from the				the E	ast/West line	County		
	J	<sup>9</sup> Propos	sed Pool 1	<b>L</b>					<sup>10</sup> Proj	oosed Poo	ol 2	L	
<sup>11</sup> Work Type	Code	<sup>12</sup> Work	Type Code		<sup>13</sup> Cable	e/Rotary		14 Lea	ise Type Co	de	<sup>15</sup> Ground Lev	vel Elevation	
non iyp			Type cou	~	Rotary			3753'					
<sup>16</sup> M Yes	<sup>16</sup> Multiple <sup>17</sup> Proposed Depth <sup>18</sup> Formation 3820 Grayburg-San Andres						Spud Date						
			2	Propos	ed Casing a	ind Cen	nent	Progran	1				
Hole S		Casing		Casing	weight/feet	Set	ting D	epth	Sacks of		t Estin	nated TOC	
12 1/2	1/2" <u>10 3/4</u> " <u>32.7</u> <u>556</u> <u>200</u>					50'							

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: Function (20)	Approved by:						
Printed name Gerald McKedy:	Title:						
Title: Petroleum Engineer	Approval Date: Expiration Date:						
Date:         January 24, 1995         Phone:           405-552-4580         4580	Conditions of Approval:						

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

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

Devon Energ 1500 Mid An	1 Address.					1360						
20 N. Broady Oklahoma Ci		102-8260						30-01	<sup>3</sup> API Nun   5-01508	ıber		
<sup>4</sup> Property Code LC-029435-B J.L. Keel "B"						<sup>5</sup> Property Name <sup>6</sup> Well No. 7				ll No.		
<sup>7</sup> Surface Location											······································	— <u> </u>
UL or lot no. C	Section 8	Township 17 <b>S</b>	Range 31E	Lot Ids				Feet from 1980		East/West line West	County Eddy	
	L	8	Proposed	Bottom	Hole Loca	tion If I	Diffe	erent Fro	m Surfac			<b></b>
UL or lot no.	Section	Township	Range	Lot Ids				outh line	Feet from	_	East/West line	County
	I	<sup>9</sup> Prop	osed Pool 1	_ <b>I</b>	_1				<sup>10</sup> Pro	posed P	ool 2	4
					_							
<sup>11</sup> Work Type Code <sup>12</sup> Work Type Code <sup>13</sup> Cab Rotary						e/Rotary <sup>14</sup> Lease Type Code <sup>15</sup>			<sup>15</sup> Ground Le	<sup>5</sup> Ground Level Elevation		
<sup>16</sup> Mu Yes					<sup>18</sup> For Grayburg-San	mation Andres					<sup>20</sup> Spud Date 3-1-95	
			21	Propos	ed Casing a	and Cem	ent	Program	1			
Hole S	ize	Casing			weight/feet					mated TOC		
<u>12"</u> 8"		<u>10 3</u> 7			<u>32.75</u> 26.0	{	600 2916			100320' 200620'		<u>320'</u> 620'
6 1/4	,	4 1			9.5		83-33			25	TOL @ 2883'	
3 3/4'	'	None	O.H.									(circ.)
<ul> <li><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.</li> <li>This WIW is currently shut in. It has a 4 1/2" liner from 2883' to 3381' &amp; is perforated 2990' to 3258' OR. Devon proposes to deepen the well to 3740', run OH &amp; cased hole logs, selectively perforate the interval 2870' to 3381' &amp; 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.</li> </ul>												
<sup>23</sup> I hereby certi my knowledge :		formation give	n above is true	and comple	te to the best of	f OIL CONSERVATION DIVISION					N	
Signature:	Ful.	e(1)	KK			Approved	by:					
Printed name	Geral	d McKedy:	ð	-		Title:						
Title:	Petro	leum Engineer				Approval	Date:				Expiration	on Date:
Date: Januar	y 24, 1995	1	hone:			Conditions	s of A <sub>l</sub>	pproval:				
405-552-4520					Attached	<u> </u>						

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

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				1 Address.	<sup>1</sup> OGRID Number 136025						
20 N. Broady Oklahoma C	way								<b>3</b> 0-01:	<sup>3</sup> API Numb 5-05077	Jer
LC-029435-B	<sup>4</sup> Propert	y Code		J.L. Keel "B"		<sup>5</sup> Property Nan	ne		$\neg$	<sup>6</sup> Well	No.
				<b></b>	<sup>7</sup> Surface L	ocation			•		
UL or lot no. "N"	Section 5	Township 175	Range 31E	Lot Ids	Feet from the 660	e North/S South	South line	Feet from 1980		East/West line FWL	County Eddy
		<u>8 P</u>	roposed	Bottom	Hole Locati	on If Diff	erent Fro	om Surfa	ce _		
UL or lot no.	UL or lot no. Section Township Range		Range	Lot Ids	Lot Ids Feet from the North/South line Feet fro		Feet from	the E	East/West line	County	
<sup>9</sup> Proposed Pool 1					1		10 Pro	oposed Po	iol 2		
								······			
<sup>11</sup> Work Type Code <sup>12</sup> Work Type Cod		Type Code	e <sup>13</sup> Cable/Rotary <sup>14</sup> Lease Type C Rotary		ase Type Co	ode <sup>15</sup> Ground Level Elevati 3809		el Elevation			
<sup>16</sup> Mu Yes	<sup>16</sup> Multiple <sup>17</sup> Proposed Depth <sup>18</sup> Formaties 3800 Grayburg-San Andres					1 Date					
			21	<sup>1</sup> Propos	ed Casing an	d Cement	Program	n		L	
	Hole Size Casing Size		Size		Casing weight/feet		Depth	Sacks of	of Cemen		nated TOC
10" 77/8	10"         8 5/8"           7 7/8"         5 1/2"			24		626 2944		÷	200		29 calc. 559 calc.
	ł			<b></b>	<del>_</del>			┣───		<u> </u>	
Describe the block The subject we run OH & case	lowout prevent ell is a margina ed hole logs, se	ntion program, if al producer from electively perfora	f any. Use ad n an open hole rate the interv	dditional sheet le section 294 val 2928'-380	or PLUG BACK giv ets if necessary. 44'-3372' in the Gra 00' w/15% NEFE a d the proposed work	ayburg-San An cid as needed &	ndres. Devon & convert the	n proposes to de	leepen the	e existing OH section	ion to 3800',
<sup>23</sup> I hereby certi my knowledge		formation given	above is true	e and comple			OIL CO	NSERVA	TION	N DIVISION	1
Signature:	unit!	1. #8.111	Ke	<u> </u>		Approved by:					
Printed name	Jerula	1 McKe	<u> </u>			Title:					
	roleur					Approval Date:				Expiration	i Date:
Date: 1-25-	00		hone	2-450		Conditions of Approval: Attached					

Submit 3 Copies to Appropriate District Office	State of New M Energy, Minerals and Natural R		Form C-103 Revised 1-1-89
DISTRICT I P.O. BOX 1980, Hobbs, NM 88240 DISTRICT II P.O. Drawer DD, Arlesia, NM 88210 DISTRICT III 1000 Rio Brazos Rd., Azlec, NM 87410	OIL CONSERVATIO P.O. Box 20 Santa Fe, New Mexico	88	WELL API NO. 30-015-05100 5. Indicate Type of Lease STATE FEE X 6. State Oil & Gas Lease No. LC-029435
( DO NOT USE THIS FORM FOR PRO DIFFERENT RESER	CES AND REPORTS ON WE POSALS TO DRILL OR TO DEEPEN WOR. USE "APPLICATION FOR PE 101) FOR SUCH PROPOSALS.)	NOR PLUG BACK TO A	7. Lease Name or Unit Agreement Name J.L. KEEL "A"
2. Name of Operator DEVON ENERGY OPERATING 3. Address of Operator 20 N. BRAODWAY SUITE 15	CORP.		Well No.     12     Or Wildcat     GRAYBURG JACKSON
Well Location Unit LetterA :660 Section 7	Feet From The <u>NORTH</u> Township <u>17S</u> Na	Line and660	Feet From The Line
n. Check A NOTICE OF INT	GR: 3745' Appropriate Box to Indicate I ENTION TO:	•	eport, or Other Data SEQUENT REPORT OF:
	PLUG AND ABANDON	REMEDIAL WORK COMMENCE DIRILLING CASING TEST (AND CE	
	PERFS AND ACIDIZE X	OTHER:	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

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/15Z NEFE ACID AS NEEDED AND RETURN THE WELL TO WATER INJECTION. THE PROPOSED WORK SHOULD RESURLT IN A MORE EFFICIENT & EFFECTIVE FLOOD PATTERN. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3-1-95.

YPE OR PRINT HAME JERALD MCKEDY 405 556-4520 TELEPHONE HO.

ubmit 3 Copies o Appropriate District Office	State of New Mi Energy, Minerals and Natural R		Form C-103 Revised 1-1-89
DISTRICT I P.O. Box 1980, Horbs, NM 88240 DISTRICT II	OIL CONSERVATIO P.O. Box 202 Santa Fe, New Mexico	B8	Well API NO. 30-015-05113
P.O. Drawer DD, Arlesia, NM \$8210 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM \$7410	· · · · · · · · · · · · · · · · · · ·		5. Indicate Type of Lease STATE FEE X 6. State Oil & Gas Lease No.
( DO NOT USE THIS FORM FOR PR	ICES AND REPORTS ON WEI	OR PLUG BACK TO A	LC-029435-B 7. Lease Name or Uait Agreement Name
	RVOIR. USE "APPLICATION FOR PE -101) FOR SUCH PROPOSALS.)		J.L. KEEL "B"
2. Name of Operator DEVON ENERGY OPERAT			Well No.     17 9. Pool same or Wildcat
20 N. BROADWAY SUIT	E 1500, OKC, OK 73102-4		GRAYBURG JACKSON
Unit Letter : : Section 8	170		Feet From The <u>WEST</u> Line NMPM EDDY County
II. Check NOTICE OF IN	Appropriate Box to Indicate I FENTION TO:		eport, or Other Data SEQUENT REPORT OF:
	PLUG AND ABANDON	REMEDIAL WORK	OPNS. DPLUG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND CE	
12. Describe Proposed or Completed Open work) SEE RULE 1103. THE WELL IS A TEMPO 2965'-3601' OA. DE	Licos (Clearly state all pertinent details, an RARILY SHUT IN WATER IN. VON PLANS TO TEST CASING ID AS NEEDED & RETURN TO	d give pertinent dates, includ JECTION WELL. I G, SELECTIVELY F	T IS CURRENTLY PERFORATED PERFORATE THE INTERVAL 2827'-3615' N. IT IS ANTICIPATED

THE PROSOSED WOL	KK WILL	START	3/1/	90
------------------	---------	-------	------	----

——— TTL2 —	PETROLEUM_ENGINEER	DATE	1/25/95
<u> </u>	405-552-452		NE NO.
		· · · · ·	
	III <u>2</u>		THE

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Submit 3 Copies		ARIAA	
to Appropriate District Office	State of New Mo Energy, Minerals and Natural R		Form C-103 Revised 1-1-89
DISTRICT I	OIL CONSERVATIO	N DIVISION	
P.O. Box 1980, Horbs, NM 88240	P.O. Box 20		WELL API NO.
DISTRICT II	Santa Fe, New Mexico	-	30-015-05114
P.O. Drawer DD, Artesia, NM \$8210			5. Indicate Type of Lease STATE FEE X
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	,		6. State Oil & Gas Lease No. LC-029435-B
	ICES AND REPORTS ON WEL	15	
( DO NOT USE THIS FORM FOR PR DIFFERENT RESE	OPOSALS TO DRILL OR TO DEEPEN RVOIR. USE "APPLICATION FOR PEI >101) FOR SUCH PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
1. Type of Well: OIL OAS WELL	OTHER WATE	R INJECTION	J.L. KEEL "B"
2 Name of Operator			& Well No.
DEVON ENERGY OPERATI	NG CORPORATION		18 WELLING
3. Address of Operator		<u></u>	9. Pool same or Wildcat
•	1500, OKC, OK 73102	2-8260	GRAYBURG-JACKSON
<u>20 N. BROADWAY SUITE</u> 4. Well Location	1300; 010; 01 , 3102	· ·	
Unit Letter:66	0 Feet From The NORTH	Line and 66	0 Feet From The WEST Line
Section 8	Township 17S Ka		NMPM EDDY County
		6761	<i>\////////////////////////////////////</i>
11. Check	Appropriate Box to Indicate I	Nature of Notice, R	eport, or Other Data
NOTICE OF INT	FENTION TO:	SUB	SEQUENT REPORT OF:
		REMEDIAL WORK	
	CHANGE PLANS		
_			
ULL OR ALTER CASING		COMMENCE DIRILLING	
PULL OR ALTER CASING		CASING TEST AND CE	
THER: DEEPEN & CONVERT 12. Describe Proposed or Completed Opera work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3	RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL	CASING TEST AND CE OTHER: of give pertiment dates, inclusive SET & 2873'. D S, RUN & CEMENT	EMENT JOB
THER: DEEPEN & CONVERT 12 Describe Proposed or Completed Opera- work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3 SURFACE. THE INTERV	RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL	CASING TEST AND CE OTHER: of give pertiment dates, inclusive SET & 2873'. D S, RUN & CEMENT	EMENT JOB
DEEPEN & CONVERT 12 Describe Proposed or Completed Opera- work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3 SURFACE. THE INTERV CONVERTED TO WATER I	Alons (Clearly state all persinent details, an RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL NJECTION.	CASING TEST AND CE OTHER: DE SECTION 2873 SET @ 2873'. D S, RUN & CEMENT BE SELECTIVELY	EMENT JOB
DEEPEN & CONVERT 12 Describe Proposed or Completed Opera- work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3 SURFACE. THE INTERV CONVERTED TO WATER I 1 bereby certify that the information shows is true SIONATURE	Alons (Clearly state all persinent details, an RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL NJECTION.	CASING TEST AND CE OTHER: DE SECTION 2873 SET @ 2873'. D S, RUN & CEMENT BE SELECTIVELY	EMENT JOB
DEEPEN & CONVERT 12 Describe Proposed or Completed Opera- work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3 SURFACE. THE INTERV CONVERTED TO WATER I 1 bereby cartify that the information shows is the SIONATURE	Alons (Clearly state all persinent details, an RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL NJECTION.	CASING TEST AND CE OTHER: DE SECTION 2873 SET @ 2873'. D S, RUN & CEMENT BE SELECTIVELY	EMENT JOB
DEEPEN & CONVERT 12 Describe Proposed or Completed Opera- work) SEE RULE 1103. THE WELL CURRENTLY P SAN ANDRES INTERVAL. DEEPEN THE WELL TO 3 SURFACE. THE INTERV CONVERTED TO WATER I 1 bereby cartify that the information shows in the SIONATURE	Alons (Clearly state all persinent details, an RODUCES FROM AN OPEN HO SEVEN INCH CASING IS 825', RUN OPEN HOLE LOG AL 2890' TO 3725' WILL NJECTION.	CASING TEST AND CE OTHER: DE SECTION 2873 SET @ 2873'. D S, RUN & CEMENT BE SELECTIVELY	EMENT JOB

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

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					d Address.				13602		RID Nun	nber
20 N. Broady Oklahoma C	vay								30-01	<sup>3</sup> AJ 15-05114	PI Numb	er
<sup>4</sup> Property Code LC-029435-B			J.L. Keel '	"B"	<sup>5</sup> Property Nan	ne			18	<sup>6</sup> Well	No.	
L					<sup>7</sup> Surface L	Location						
UL or lot no. D	Section 8	Township 17S	Range 31E	Lot Ids			South line	Feet from <u>660</u>		East/Wes West	st line	County Eddy
L	A	8 P	roposed	Bottom	n Hole Locati	ion If Diff	erent Fro	om Surfa	ce	<del></del>	I	· · ·
UL or lot no.	Section	Township	Range	Lot Ids			North/South line Feet from the			East/Wes	st line	County
<sup>9</sup> Proposed Pool 1				10 Pro	posed P	'ool 2						
L												
<sup>11</sup> Work Type Code <sup>12</sup> Work Type Code			<sup>13</sup> Cable/I	e/Rotary <sup>14</sup> Lease Type Coc		de	<sup>15</sup> Ground Level Elevation		el Elevation			
<sup>16</sup> Mu Yes	ıltiple	<sup>17</sup> P 3825'	Proposed De	pth	<sup>18</sup> Forma Grayburg-San An					<sup>20</sup> Spud Date <u>3-1-95</u>		l Date
			21	Propos	ed Casing an	d Cement	Program	n		_ <b>-</b>		
Hole S	ize	Casing		Casing	weight/feet			f Ceme	ent		nated TOC	
<u>12 1/2"</u> 8"		<u>8 5/8"</u> 7"		24		<u>573</u>					137	
<u> </u>		4 1/2"			). <u>0</u> ).5	<u>2873</u> 3825	2873         200           3825         circ to su				526'	calc.
					<u> </u>							
					i							
		gram. If this app tion program, if			or PLUG BACK gives if necessary.	ve the data on th	ie present pro	ductive zone	and prop	posed new j	productiv	/e zone.
logs, run & cen	nent 4 1/2" ca	sing to the surfa	ice. Based on	new log da	igh an open hole sec ita the interval 2890 will start 3-1-95.							
<sup>23</sup> I hereby certi my knowledge		formation given	above is true	and comple	te to the best of	(	OIL COI	NSERVA	TIO	N DIVI	ISION	1
Signature:	Fended	my	laki_			Approved by:						
Printed name	<u> </u>	d McKedy	-: 7			Title:						
Title:	Petro	eum Engineer				Approval Date:	:			E	xpiration	Date:
Date: <u>1/24/9</u>	5		ione:	- <u>-</u>		Conditions of A	pproval:					
		4	05-55	2-452	20	Attached 🗌						

•				Revised 1-1-89	
DISTRICT I P.O. Box 1980, Horbs, NM 88240 DISTRICT II	OIL CONSERVA' P.O. Box Santa Fe, New Mex	x 2088	WELL API NO. 30-015-05085 5. Indicate Type of Lease STATE FEE X		
P.O. Drawer DD, Artesia, NM \$8210	Jania I C, New Mich				
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410			6. State Oil & Gas L	esse No.	
SUNDRY NOT ( DO NOT USE THIS FORM FOR PR DIFFERENT RESE (FORM C	LC-029435-B 7. Lease Name or Unit Agreement Name J.L. KEEL "B"				
1. Type of Well: OB. WELL AND WELL	OTHER		J.H. KILL	2	
2. Name of Operator DEVON ENERGY OPERAT	ING CORPORATION	<u>, , , , , , , , , , , , , , , , , , , </u>	8. Well No. 20		
3. Address of Operator 20 N. BROADWAY SUIT	9. Pool same or Wildcat GRAYBURG JACKSON				
4. Well Location Unit Letter P : 660	0 Feet From The SOUTH	Line and660	Feet From Ti	e_EAST Line	
	Township 17S	31 F			
Section 6	TOwnerbh	ther DF, RKB, RT, GR, uc.)	<u>NMPM EDDY</u>	County	
		769'			
11. Check NOTICE OF IN	Appropriate Box to Indic		eport, or Other D		
	CHANGE PLANS				
PULL OR ALTER CASING		CASING TEST AND CI			
THER: DRILL OUT TO TD, PE	RFORATE & ACIDIZE			C	
PERFORATIONS 2974' 3235' & ALL PERFORA PRODUCER THROUGH PE DEVON PROPOSES TO D AND LINER, SELECTIV AS NEEDED & CONVERT	WAS ORIGINALLY COMP 3562' O.A. SINCE INI TIONS BELOW WERE SQU RFORATIONS 2974'-319 RILL OUT TO 3595' (B ELY PERFORATE THE IN THE WELL TO WATER IN PATTERN IN THE GRAY	LETED IN THE GRAYB TIAL COMPLETION A EEZED OFF. THE W 4'. OTTOM OF 4 1/2" LI TERVAL 2826' TO 35 NJECTION. THIS WI	URG-SAN ANDRES CEMENT RETAINE ELL IS NOW A V NER), PRESSURE 95', TREAT W/1 LL ALLOW A MOR	5 THROUGH ER WAS SET @ YERY MARGINAL E TEST CASING 5% NEFE ACID RE EFFECTIVE	
I hereby cartify that the information spore is the SIONATURE LEVILLE TYPE OR PROTENAME JERALD MCI	Lid	PETROLEUM EN	GINEER 2-4520	рате <u>1/25/95</u> тедечноме но.	
(This space for State Use)					

Submit 3 Copies to Appropriate Distinct Office	State of New M Energy, Minerals and Natural R		Form C-103 Revised 1-1-89
DISTRICT I P.O. Box 1980, Hobbs, NM 88240 DISTRICT II P.O. Drawer DD, Ariesia, NM 88210	OIL CONSERVATIO P.O. Box 201 Santa Fe, New Mexico	38	WELL API NO. <u>30-015-05084</u> 5. Indicate Type of Lease
DISTRICT III 1000 Rio Brazos Rd., Aziec, NM \$7410			6. State Oil & Gas Lease No. LC-029435-B
( DO NOT USE THIS FORM FOR PRO DIFFERENT RESEF (FORM C	CES AND REPORTS ON WEI POSALS TO DRILL OR TO DEEPEN IVOIR. USE "APPLICATION FOR PE 101) FOR SUCH PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name J.L. KEEL "B"
1. Type of Well: OL OL WELL OAS WELL WELL	OTHER WIW		
2. Name of Operator DEVON ENERGY OPERATIN	IG CORP.		8. Well No. 21
3. Address of Operator 20 N. BROADWAY SUITE	1500, OKC, OK 73102	-8260	9. Pool same or Wildcat GRAYBURG JACKSON
4. Weii Location Unit Letter <u>J</u> : <u>198(</u>	SOUTH	1080	Feet From The EAST Line
NOTICE OF INT PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING OTHER: REACTIVATE AS W 12 Describe Proposed or Completed Operations work) SEE RULE 1103. THE WELL WAS ORIGINALLY SECTION 2811'-3471'. VAL 2938'-3454' WAS PEN INJECTION. THE WELL IS DEVON ENERGY PLANS TO D SELECTIVELY EXPANDING TA A NEW STRING OF PLASTIC	Appropriate Box to Indicate I ENTION TO: PLUG AND ABANDON CHANGE PLANS W. W. CHANGE PLANS W. CHANGE PLANS W. X COMPLETED AS A GRAYBU IN 2/66 A 3 1/2" LINER RFORATED. AFTER ACIDIZ S CURRENTLY SHUT IN. RE-ENTER THE WELL, TEST THE INJECTION INTERVAL C COATED 2 3/8" TUBING	SUB REMEDIAL WORK COMMENCE DIRILLING CASING TEST AND CE OTHER: d give periment datas, includ RG-SAN ANDRES PI WAS SET FROM 27 ING THE WELL WAT CASING & LINER WITHIN THE GRAY IN CONJUNCTION	SEQUENT REPORT OF:
I bereby certify that the information above in true SHONATURE Actual INC TYPE OR PROFT NAME JERALD MC (This space for State Use)	KEDY	PETROLEUM ENG	INEER DATE1/25/95 5 2 - 4 5 2 С тецерноме но.
APTROVED BY	m		DATE

Submit 3 Copies to Appropriate District Office	State of New Me Energy, Minerals and Natural R			Form C-103 Revised 1-1-89
DISTRICT 1 P.O. Box 1980, Hotbs, NM 88240 DISTRICT II P.O. Drawer DD, Artesia, NM 88210	OIL CONSERVATIO P.O. Box 208 Santa Fe, New Mexico	38	WELL API NO. 30-015-05082 5. Indicate Type of Lease	TE FEE X
DISTRICT III 1000 Rao Brazos Rd., Aziec, NM 87410			5TA 6. State Oil & Gas Lease No. LC-029435-B	
( DO NOT USE THIS FORM FOR PRO DIFFERENT RESER (FORM C-	CES AND REPORTS ON WEL POSALS TO DRILL OR TO DEEPEN VOR. USE "APPLICATION FOR PEI 101) FOR SUCH PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or Unit Agree J.L. KEEL "B"	meal Name
OL WELL         OL WELL           2. Name of Operator           DEVON ENERGY OPERATIN		INJECTION WELL	8. Well No. 22	
3. Address of Operator 20 N. BROADWAY, SUITE		02-8260	9. Pool same or Wildcat GRAYBURG-JACKSON	
4. Well Location Unit Letter:198	0_ Feet From The	Line and	Feet From TheW	EST Line
Section 5	Township 17S Na 10. Elevation (Show whether GR: 3791'		IMPM EDDY	County
11. Check A NOTICE OF INT	Appropriate Box to Indicate I ENTION TO:		port, or Other Data SEQUENT REPOR	
	PLUG AND ABANDON	REMEDIAL WORK		
PULL OR ALTER CASING		CASING TEST AND CE		
OTHER: REACTIVATE AS WATE	R INJECTION WELL X	OTHER:		[
	COSS (Clearly state all persinent details, an NJECTION WELL WHICH IS '. DEVON ENERGY PLANS	CURRENTLY SHUT	IN. THE WELL IS	CURRENTLY

bereby certify that the information above is the and completion to the base of any skonature	PETROLEUM ENGINEER	DATE 1/24/95
TTEOR PROTINAME Jerald MCKEdy	405-552-45	20 TELETHONE NO.
This space for State Use)		····· ··· ··· ··· ··· ··· ··· ··· ···
ATROVED BY	TITL8	DATE

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.

District I	State of New Mexico		Form C-101
PO Box 1980, Hobbs, NM 88241-1980	Energy, Minerals & Natural Resources Department		Revised February 10, 1994
District II			Instructions on back
PO Drawer DD, Artesia, NM 88211-0719	OIL CONSERVATION DIVISION	Submit	to Appropriate District Office
District III	PO Box 2088		State Lease - 6 Copies
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87504-2088		Fee Lease - 5 Copies
District IV			I
PO Box 2088, Santa Fe, NM 87504-2088			AMENDED REPORT
APPLICATION FOR PERMIT	「 TO DRILL, RE-ENTER, DEEPEN, PLU(	GBACK, (	OR ADD A ZONE

<sup>2</sup> Operator Name and Address. <sup>1</sup>OGRID Number Devon Energy Corporation 136025 1500 Mid America Tower <sup>3</sup> API Number 20 N. Broadway Oklahoma City, OK 73102-8260 30-015-21460 <sup>4</sup> Property Code <sup>5</sup> Property Name <sup>6</sup> Well No. LC-029435-B J.L. Keel "B" 30 <sup>7</sup>Surface Location UL or lot no. Feet from the Section Township Range Lot Ids North/South line Feet from the East/West line County "O" 31E South 178 430 2250 East 6 Eddy <sup>8</sup> Proposed Bottom Hole Location If Different From Surface North/South line UL or lot no. Section Township Range Lot Ids Feet from the Feet from the East/West line County <sup>9</sup> Proposed Pool 1 <sup>10</sup> Proposed Pool 2

"Work Type Code	"Work Type Code	Rotary	<sup>1</sup> Lease Type Code	3760'
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth	<sup>18</sup> Formation	<sup>19</sup> Contractor	<sup>20</sup> Spud Date
Yes	3660	Grayburg-San Andres	Not Known	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
7 7/8" 5 1/2" 14# 3249 760 circ. t	14#         3249         760         circ. to surface	12 1/4"	8 5/8"	24#	506	375	circ. to surface
		7 7/8"	5 1/2"	14#	3249	760	circ. to surface
						1	

<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 perfs below were squeezed off. The well was recompleted in the Seven Rivers 1822'-2045'. Devon porposes 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 g my knowledge and belief.	iven above is true and complete to the best of	OIL CONSERV	ATION DIVISION
Signature:	Thed	Approved by:	
Printed name Gerald McKedy:		Title:	
Title: Petroleum Engin	eer	Approval Date:	Expiration Date:
Date: January 24, 1995	Phone:	Conditions of Approval:	
	405-552-4520	Attached	

Submit 3 Copies to Appropriate Distinct Office	State of New M Energy, Minerals and Natural R		Form C-103 Revised 1-1-59
DISTRICT I P.O. Box 1980, Hobbs, NM 88240 DISTRICT II P.O. Drawer DD, Anesia, NM 88210 DISTRICT III 1000 Rio Brazos Rd., Aziec, NM 87410	OIL CONSERVATIO P.O. Box 20 Santa Fe, New Mexico	88	WELL API NO. 30-015-25919 5. Indicate Type of Lease STATE FEE X 6. State Oil & Gas Lease No.
( DO NOT USE THIS FORM FOR PRO DIFFERENT RESER (FORM C-	CES AND REPORTS ON WE POSALS TO DRILL OR TO DEEPEN VOIR. USE "APPLICATION FOR PE 101) FOR SUCH PROPOSALS.)	N OR PLUG BACK TO A	LC-029435-B 7. Lease Name or Unit Agreement Name J.L. KEEL "B"
1. Type of Well: OL WZLL OAS WZLL      2. Name of Operator DEVON ENERGY OPERATIN      3. Address of Operator		R INJECTION	8. Well No. 38 9. Pool same or Wildcat
20 N. BROADWAY, SUITE 4. Well Location	0 Feet From The SOUTH		GRAYBURG-JACKSON
Section 6	10. Elevation (Show whether GR: 3748'	DF, RKB, RT, GR, 41c.)	NMPM EDDY County
n. Check A NOTICE OF INT	Appropriate Box to Indicate E ENTION TO:		port, or Other Data SEQUENT REPORT OF:
	PLUG AND ABANDON	REMEDIAL WORK	OPNS. DE PLUG AND ABANDONMENT
PULL OR ALTER CASING	INJECTION X	CASING TEST AND CE	MENT JOB

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.

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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.

The second secon	Jerald McKedyme	PETROLEUM ENGINEER	_ DATE1/24/95
TTE OR FRONT NAME PETrileum	ENgineer	405-552-4520	TELEPHONE NO.
his space (or State Use)			

DITLCTI DOLLANNELLANNE BEAD       OIL CONSERVATION DIVISION F.O. Box 2088       WELLATING 30-015-25320         DITLCTIT DOLLANNE DD. Austik, NM BEID       Santa Fe, New Mexico 87504-2088       30-015-25320         DITLCTIT DOLLANNE DD. Austik, NM BEID       Santa Fe, New Mexico 87504-2088       31-015-25320         DITLCTIT DOLLANNE DD. Austik, NM BEID       Santa Fe, New Mexico 87504-2088       31-015-25320         DITLCTIT DOLLAN FILL AND ALLAND ALLANDD ALLAND	Submit 3 Copies to Appropriate Distinct Office	State of New Mo Energy, Minerals and Natural R			Form C-103 Revised 1-1-89
P.D. Dever ED, Anexi, MM 1810       S. Badeal Type of Latt Type Datt Type of Latt Type of Latt Type of Latt	DISTRICT	P.O. Box 20	88		20
IDD Bo Brand RL, ALE, NM 1740       I. SUNDRY NOTICES AND REPORTS ON WELLS         SUNDRY NOTICES AND REPORTS ON WELLS       I. C. C29433         (DO NOT USE THIS FORM FOR PROPORATION TO PERMATTING TO PERMATTING TO BEEPEN OR PLUG AND DEFERENT RESERVOIR USE "APPLICATION FOR PERMATTING. I. I. KEEL "B"       I. L. KEEL "B"         1. Type of Well       The PROPORATION FOR PERMATTING TO PERMATTING. TO PERMATTING. CORP.       I. L. KEEL "B"         2. Numa of Opensor       E. Well No. 39.       S. Address of Opensor       I. Well No. 39.         2. Numa of Opensor       E. Well No. 39.       S. Address of Opensor       I. Type of Well.         4. Well Licest       M.: 510       Fee From The SOUTH       Licest M. T. C. KCKSON       GR 3780'         4. Well Licest       M.: 510       Fee From The SOUTH       Licest M. T. C. KCKSON       GR: 3780'         11.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PEFORM REMEDIAL WORK       PLUG AND ABANDON       CMMERCE JAUNG OPNS.       PLUG AND ABANDONMENT         11.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PEFORM REMEDIAL WORK       PLUG AND ABANDON       CMMERCE JAUNG OPNS.       PLUG AND ABANDONMENT         OTHER:       CONFERER CONVERT TO WATER INJECTION       COMMERCE JA	DISTRICT II P.O. Drawer DD, Artesia, NM 88210	Santa Fe, New Mexico	87504-2088	5. Indicate Type of	
(CO NOT USE THIS FORM FOR PROCEALS TO DAILLOR TO APPLICATION OF PERMIT		,			Lease No.
Visit [X]       VEL       OTHER       It Well No. 39         2 Name of Openion       S. Pool sense of Wildesi       S. Pool sense of Wildesi         20 N. BOADWAY SUITE 1500, OKC, OK 73102-8260       CRAYBURG JACKSON       CRAYBURG JACKSON         4 Well Lossues       Status       Status       Status       Status         4 Well Lossues       Its Evaluation (See whether DF, EKE) KT, GR, ec.)       Cranty       Control         Sector       5       Tevenship       17.5       Marge 31.8       MMTM       EDDY       Control         Sector       5       Tevenship       17.5       Marge 31.8       MMTM       EDDY       Control         Sector       5       Tevenship       17.5       Marge 31.8       MMTM       EDDY       Control         10.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data       NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PEFORM REMEDIAL WORK       PLUG AND ABANDON       CHANGE PLANS       Commerce DataLing Opns.       PLUG AND ABANDONMENT         Other       Converts       Fuel Marge       Converts       Casing Test And Cement Job       Casing Test And Cement Job         PULL OR ALTER CASING       Converts       Converts       Converts       Casing Test And Cement Job       Casing Test A	( DO NOT USE THIS FORM FOR PR DIFFERENT RESE (FORM C	OPOSALS TO DRILL OR TO DEEPEN RVOIR. USE "APPLICATION FOR PE	OR PLUG BACK TO A		-
Divine       Divine       Prodimense       Prodimense         20 N. BROADMAX SUITE 1500, OKC, OK 73102-8260       \$P. Podimense       CRAYBURG JACKSON         4 Well Lease       Maine of Wildow       CRAYBURG JACKSON       Image Jackson         4 Well Lease       Site of Complete Jackson       South       F. Podimense       WEST       Line and _660         9 Unit Lease       Main       South       F. Podimense       South       F. Podimense         9 Unit Lease       Main       South       Podimense       South       F. Podimense         9 Unit Lease       Main       South       Podimense       South       F. Podimense         9 Unit Lease       Main       South       Podimense       Podimense       South       Podimense         9 Unit Lease       Maine       South       Podimense       South       Podimense       Podimense       Podimense         10       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data       NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         Perform Remedial work       Plug and Abandoon       Remedial work       Alterning Casing       Plug and Abandonment         9 UL OR ALTER CASING       Convert To Matter Injection       IX       Orther:       South Abandonment       Plug and Ab	WELL X WELL	071H23.			
20 N. BROADWAY SUITE 1500, OKC, OK 73102-8260       GRAYBURG JACKSON         4. Wail Loasion       M:: 510_Fee From The SOUTH       Lise and 660       Feet From The WEST       Lise         Sector       5       Township       17S       Mange       31E       NMM       EDDY       County         10. Extrational (Show whither DF, RKB, RT, GR, std)       GR: 3780'       County       County       County         11.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data       NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PERFORM REMEDIAL WORK       PLUG AND ABANDON       REMEDIAL WORK       Altering casing       Interving casing         PULL OR ALTER CASING       COMMENCE DRULING OPNS.       PLUG AND ABANDONMENT       COMMENCE DRULING OPNS.       PLUG AND ABANDONMENT         PULL OR ALTER CASING       COMVERT TO WATER INJECTION       X       OTHER:       OTHER:       Interving casing any proposed         12 Dearbis Proposed or Completed Operations (Clearly state all periment diable), and give previous data, including assimilat data of staring any proposed       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         V/15Z NEFE ACTD & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK       WILL START 3/1/95.         Iberely fortly that the information down is th	DEVON ENERGY OPERATI	NG CORP.		I	
4. Well Lease       Mission       510       Feet From The       SOUTH       Lise and       660       Feet From The       WEST       Lise         Sector       5       Township       17.5       Marge       31E       NMPM       EDDY       County         10.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data       NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PERFORM REMEDIAL WORK       PLUG AND ABANDON       CR:       37.80'       Altering casing       Image: Subsequence Data         TEMPORARILY ABANDON       CHANGE PLANS       Commerce Drilling orns.       PLUG AND ABANDON       PLUG AND ABANDON       REMEDIAL WORK       Altering casing         0THER:       CONVERT TO WATER INJECTION       X       OTHER:       Incidence data, and give protocol active and protocol data of altering any proposed and Complexed Operations (Clearly state all protocol data, and give protocol data, give protocol data, and give protocol data, and give protocol data	1	1500, OKC, OK 73102-8	260	1	
Usit Letter	4. Well Location				
10. Elevation (Show whether DF, REB, REG, stc.)         CR: 3780'         11.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data         NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PERFORM REMEDIAL WORK       PLUG AND ABANDON       REMEDIAL WORK       ALTERUNG CASING         TEMPORARILY ABANDON       CHANGE PLANS       COMMENCE D FILLING OPNS.       PLUG AND ABANDONMENT         PULL OR ALTER CASING       COMMENCE D RILLING OPNS.       PLUG AND ABANDONMENT       CASING TEST AND CEMENT JOB         OTHER:       CONVERT TO WATER INJECTION       X       OTHER:       COMMENCE D RILLING OPNS.       PLUG AND ABANDONMENT         12. Describe Proposed or Completed Operations (Clearly state all periment detail, and give periment deta:, including estimated date of staning any proposed work SEE RULE 1103.       THE REVUE 1103.       THE CONVERT TO WATER INJECTION S 3011'-3702' OA IN THE CRAFBURG-SAN ANDRES. D EVON PLANS TO SELECTIVELY PERFORATIONS 3011'-3702' OA IN THE CRAFBURG-SAN ANDRES TO SELECTIVELY PERFORATIONS. 311'-3702' OA IN THE CRAFBURG-SAN ANDRES TO SELECTIVELY PERFORATION. IT IS ANTICIPATED THE PROPOSED WORK         W/152. NEFF ACID & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK       WILL START 3/1/95.         Three mean material data of any taxonings and baild.       SKOWATURE       Material data of any taxonings and baild.         SKOWATURE       JERALD MCKEDY       TTHE PETROLEUM ENGINEER       DATE 1/25/95	Unit Letter :1	U Fest From The	Line and	Feet From 7	The Line
GR: 3780'         II.       Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data         NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PERFORM REMEDIAL WORK       PLUG AND ABANDON       REMEDIAL WORK       ALTERING CASING         TEMPORARILY ABANDON       CHANGE PLANS       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT         PULL OR ALTER CASING       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT       CASING TEST, AND CEMENT JOB         OTHER:       CONVERT TO WATER INJECTION       X       OTHER:       OTHER:         12. Describe Proposed Operations (Clearly state all perivised datal, and give perivised data: data of staring any proposed work SEE KULE 1105.       CURRENTLY PRODUCING FROM PERFORATIONS 3011'-3702' OA IN THE CRAYBURG-SAN ANDRES. DEVON PLANS TO SELECTIVELY PERFORATE THE INTERVAL 2872'-3702', TREAT         W/152 NEFE ACID & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK         WILL START 3/1/95.         Ibertry certify that the information devote is the of any taxonings and basid.         SKONATURE       JERALD MCKEDY         TITLE       PETROLEUM ENGINEER DATE DATE 1/25/95         TITLE OFTROTHAGE       JERALD MCKEDY	Section 5	Township 17S Ka	DF. RKB. RT. GR. utc.)	NMPM EDDY	County
NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         PERFORM REMEDIAL WORK       PLUG AND ABANDON       REMEDIAL WORK       ALTERING CASING         TEMPORARILY ABANDON       CHANGE PLANS       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT         PULL OR ALTER CASING       CASING TEST AND CEMENT JOB       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT         OTHER:       CONVERT TO WATER INJECTION       X       OTHER:       CONVERT TO WATER INJECTION         12. Describe Proposed or Completed Operations (Clearly state all periment data), and give periment datas, including estimated data of starting any proposed work). SEE RULE 103.         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/152.         NULL START 3/1/95.         Iberetry cently that the information does a tran and permiserie for the test of any tabovidge and baid.         source from the information does a tran and permiserie for the test of any tabovidge and baid.         source from the information does a tran and permiserie for the test of any tabovidge and baid.         source from the information does a transmitter of any tabovidge and baid.         source from the information does a transmitter of any tabovidge and baid.         source from the information does a transmitter of any tabovidge and baid.         source from the information does a tran and permiseries of any tabovidge and baid.		GR: 3	780'		
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TEMPORARILY ABANDON       CHANGE PLANS       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT         PULL OR ALTER CASING       CASING TEST AND CEMENT JOB       CASING TEST AND CEMENT JOB         OTHER:       CONVERT TO WATER INJECTION       X       OTHER:       COMMENCE DRILLING OPNS.       PLUG AND ABANDONMENT         12 Describe Proposed or Completed Operations (Clearly state all periment details, and give periment data; including assimated data of starting any proposed work) SEE RULE 1105.       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/152 NEFE ACID & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.         Iberdy certly that the information above is true and complete to the base of my traveloge and basid.       Signature         SIGNATURE       JERALD MCKEDY       THE PETROLEUM ENGINEER DATE 1/25/95         TTRE OR FRONT HADE       JERALD MCKEDY       HCS: SS2: 452.C       TELEPHONE NO.			SUB	SEQUENT HE	
PULL OR ALTER CASING       CASING TEST AND CEMENT JOB         OTHER:       CONVERT TO WATER INJECTION       Image: Convert to the state of the			REMEDIAL WORK		
OTHER:       CONVERT TO WATER INJECTION       Image: Convert to water injection         12. Describe Proposed or Completed Openations (Clearly state all periment details, and give periment details, 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 ACLD & CONVERT TO WATER INJECTION. IT IS ANTICIPATED THE PROPOSED WORK WILL START 3/1/95.         Ibereby certify that the Information shores is the and complete to be of any tecowindge and basic.         SIGNATURE         Jereby certify that the Information shores is the and complete to be of any tecowindge and basic.         SIGNATURE         JERALD MCKEDY         THE PETROLEUM ENGINEER         JERALD MCKEDY				iopns. 🛄 p	
12. Describe Proposed or Completed Operations (Clearly state all periment data)!, and give pertiment data; 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.         Ibereby carely that the information above is true and complete to the base of any tanowindge and basid.         SIDNATURE         JERALD MCKEDY       405 552 4520         THEOR FRONT MAKE		_	CASING TEST AND CE		—
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 berdy certly that the information shows is true and complete to the best of my incovindge and besid.         SIGNATURE         JERALD MCKEDY         405       552         475         475	OTHER: CONVERT TO WATER	INJECTION X	OTHER:		L
SIONATURE JUNCKEDY TITLE PETROLEUM ENGINEER DATE 1/25/95 TYPE OR FRINT NAME JERALD MCKEDY 405 552 4520 TELEPHONE NO.	work) SEE RULE 1103. THE WELL IS CURRENTL' SAN ANDRES. DEVON PI W/15% NEFE ACID & COI	Y PRODUCING FROM PERFOR LANS TO SELECTIVELY PER	ATIONS 3011'-37 FORATE THE INTE	D2' OA IN THE RVAL 2872'-37	GRAYBURG- 02', TREAT
	SKONATURE Junit	This m	PETROLEUM EI		

CONDITIONS OF	APPROVAL. P	ANT:

APPROVED BY -----

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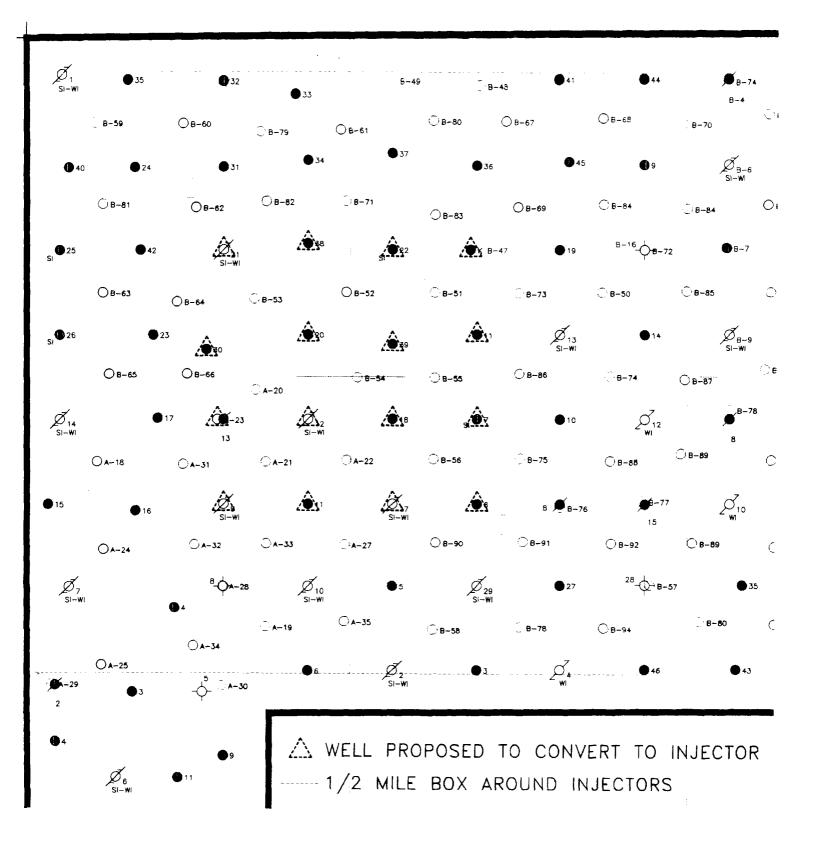
Submit 3 Copies	State of New M Energy, Minerals and Natural R			Form C-103 Revined 1-1-89
Distinct Office DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVATIO		WELL API NO.	
DISTRICT II	P.O. Box 20 Santa Fe, New Mexico		30-015-2678	······
P.O. Drawer DD, Ariesia, NM \$8210 DISTRICT III			5. Indicate Type of Lea	STATE FEE X
1000 Rao Brazos Rd., Aztec, NM 87410	·		6. State Oil & Gas Leas LC-029435-B	se No.
( DO NOT USE THIS FORM FOR PRO DIFFERENT RESER	CES AND REPORTS ON WE POSALS TO DRILL OR TO DEEPEN VOR. USE "APPLICATION FOR PE 101) FOR SUCH PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or Unit. J.L. KEEL	
OE CAS WELL	OTHER			
2. Name of Operator DEVON ENERGY OPERATIN	G CORPORATION		8. Well No. 47	
3. Address of Operator	1500, OKLAHOMA CITY, O	<b>0K.</b> 73102-8260	9. Pool same or Wildow GRAYBURG-JAC	
4. Well Location Unit Letter 198		Line and _ 1880		WEST Line
-	- 170	21.0	EDDY	
Section 5	10. Elevation (Show whether		NMPM EDDI	County
n. Check A NOTICE OF INT	GR: 3823 Appropriate Box to Indicate I			
	PLUG AND ABANDON	REMEDIAL WORK		
PULL OR ALTER CASING		COMMENCE DRILLING		
OTHER: CONVERT TO WIW	X	OTHER:		🛛
DEVON PROPOSES TO SET	D IN THE SAN ANDRES TH A CIBP @ 3800', SELEC NEEDED AND CONVERT TH	IROUGH PERFORATION TIVELY PERFORATION	DNS 3807' TO 39 E THE INTERVAL	22' OA. 2938'-3784',
I hereby carely that the information above is true (	and complete to the best of my knowledge and	balief.		
SKONATURE Derection	Ked m	PETROLEUM EN	GINEER P	ATE 1/24/95
TTPEOR PRONTNAME Jerald 1	nckedy	405	552-45 <b>20</b> 1	ELEPHONE NO.
(This space for State Use)				
ATTROVED BY	m	L	D	ATE
CONDITIONS OF APPROVAL, IF ANY:				

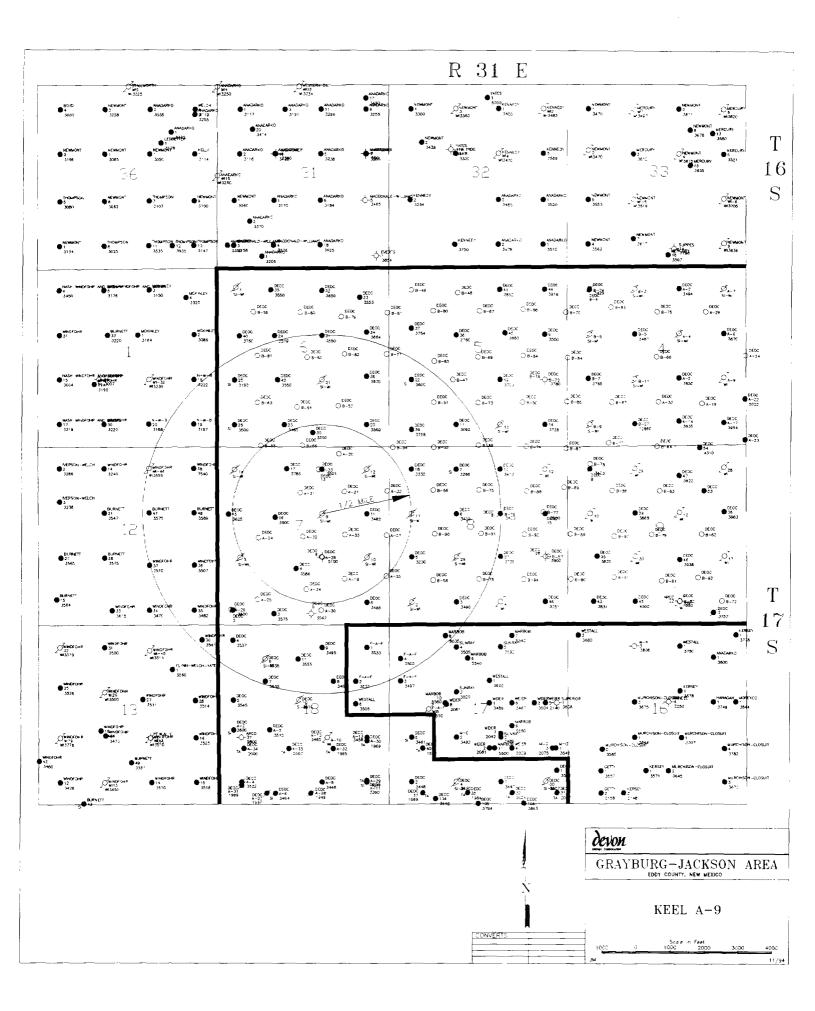
A.				III. WELL DATA B.				
1 Well Name & Legal	2 Csgcmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones
J.L. Keel "A" #12 660'FNL-660'FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 568' w/100 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 packcrs 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 $(a + 1780^{\circ})$ & there are no known lower zones.
J.L. Kcel "B" #30 430' FSL-2250' FEL 6-17S-31E Eddy Co., New Mexico VEE ( B - 1 & B - 1 & C - 2 Z	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. $(5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7 + 1) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) (1 - 7) < (5 \odot T - S(2^{-1} + 2)^{-1}) < (5 \odot T - S(2^{-1} + $	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.

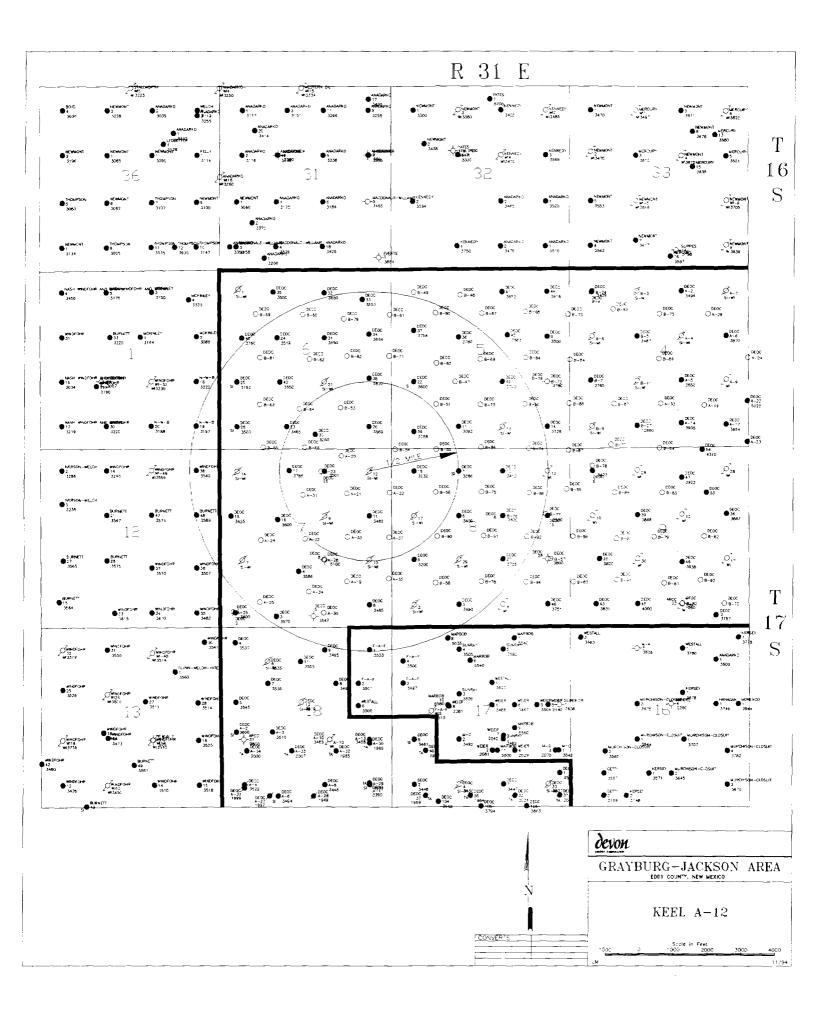
Ň				III. WELL DATA B.				
1 Well Name & Legal	2 Csgcmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/O.H.	3 Original Purpose Of Well	4 Other Perfs. Sqz. Off	5 Name-depth of Higher/Lower Zones
A J.L. Keel "₿" #23 660'FNL-2080'FEL 7-17S-31E Eddy Co., New Mexico	8 5/8", 24# @ 475' w/365 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 Mcxico	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 Guibcrson G-6 Nickel coated tension packer.	Formation Grayburg- San Andres Pool Grayburg Jackson	2928'-3730' Perforated	Completed as prod- ucer from Grayburg- San Andres.	Nonc	Top of the Seven Rivers is $(a) + 1780$ ' & 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.	Nonc	Top of the Seven Rivers is $@ + 1780'$ & there are no known lower zones.

				III. WELL DATA B.				
1 Well Name & Legal	2 Csgcmt. 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 5 6-17S-31E Eddy Co., New Mexico 5	<ul> <li>10 3/4" 32 3/4# @ 734' w/100 New 2 3/8", 4.7#, sx in 12 1/2" hole. Est. TOC @ J-55 Plastic lined v 184'. 5 1/2", 15.5# @ 2811' w/12 Tuboscope TK-99. sx in 8" hole. Est. TOC @ 1950'.</li> <li>3 1/2", 8.4#, N-80 liner from 2737'-3471' w/125 sx in 4 3/4" hole.</li> </ul>	>	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 $(a) + 1780^{\circ}$ & 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 78" hole. cmt. circ.	New 2 3/8", 4.7#, J-55 Plastic lined w/ Tuboscope TK-99.	New 2 3/8", 4.7#, New Guiberson G-6 J-55 Plastic lined w/ Nickel coated tension Tuboscope TK-99. 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 2 3/8", 4.7#, New Guiberson G-6 J-55 Plastic lined w/ Nickel coated tension Tuboscope TK-99. 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 $(a) + 1780$ ' & there are no known lower zones.
J.L. Kccl "A" #22 1980' FNL-660' FEL 7-17S-31E Eddy Co., New Mcxico	9 5/8", 32.3# @ 610' w/100sx Ncw 2 3/8", 4.7#, in 12 1/2" hole. Est. TOC @ J-55 Plastic lined v 260': 5 1/2", 15.5# @ 2907' w/20 Tuboscope TK-99. sx in 8" hole. Est. TOC @ 1600'.	Ncw 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.	Nonc	Top of the Seven Rivers is @ + 1780' & there are no known lower zones.

				III. WELL DATA B.				
1 Well Name & Legal	2 Csgcmt. Data	3 Inj. Tbg.	4 Inj. Pkr.	1 Inj. Formation	2 Inj. Interv Perf/0.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 s 8-17S-31E Eddy Co., New Mexico P	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 2 3/8", 4.7#, New Guiberson G-6 J-55 Plastic lined w/ Nickel coated tension Tuboscope TK-99. 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	<ul> <li>J.L. Keel "A" # 9 10 3/4", 40.5# @ 541' w/110</li> <li>1980' FNL-1980'FEL sx in 12 1/2" hole. Est. TOC @</li> <li>7-17S-31E 238'. 7", 26# @ 2816' w/200 sx</li> <li>Eddy Co., New Mexico in 8 1/4" hole. Est. TOC @ 712'.</li> <li>4 1/2", 9.5# @ 3611' w/3235 sx</li> <li>in 6" hole. cmt. circ.</li> </ul>	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 $(a) + 1780$ ' & there are no known lower zoncs.
J.L. Keel "B" # 6 1 1980' FNL-1980' FWL 1 8-17S-31E 7 Eddy Co., Ncw Mexico ii	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.

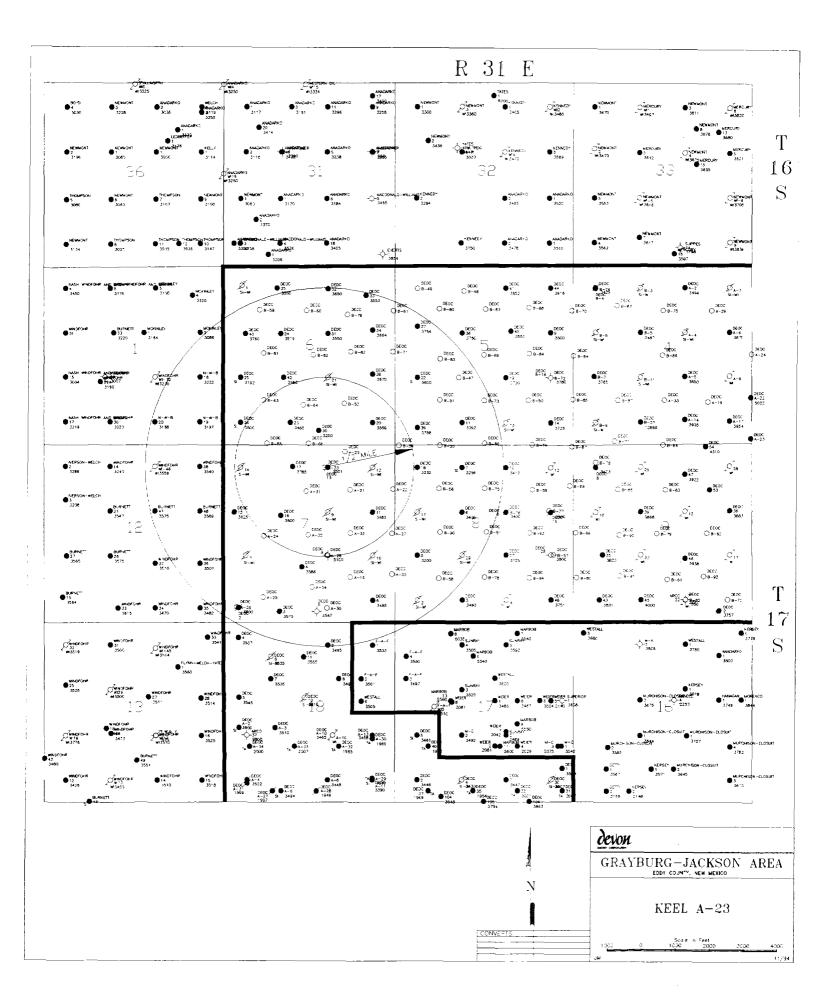


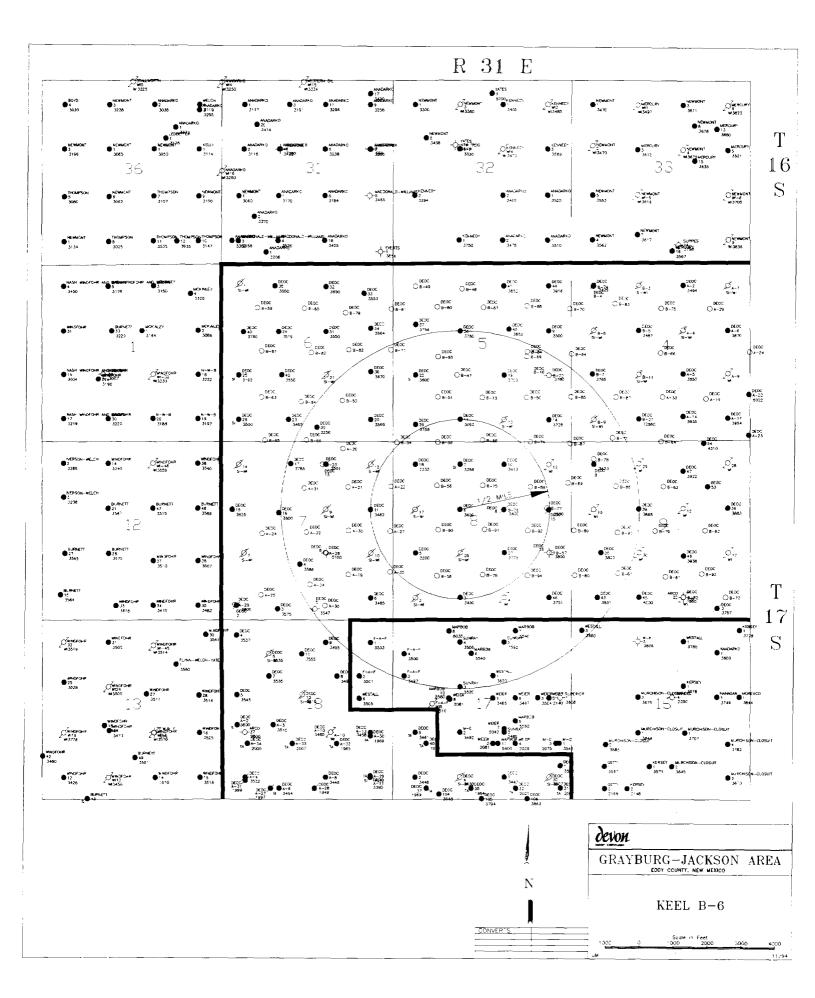


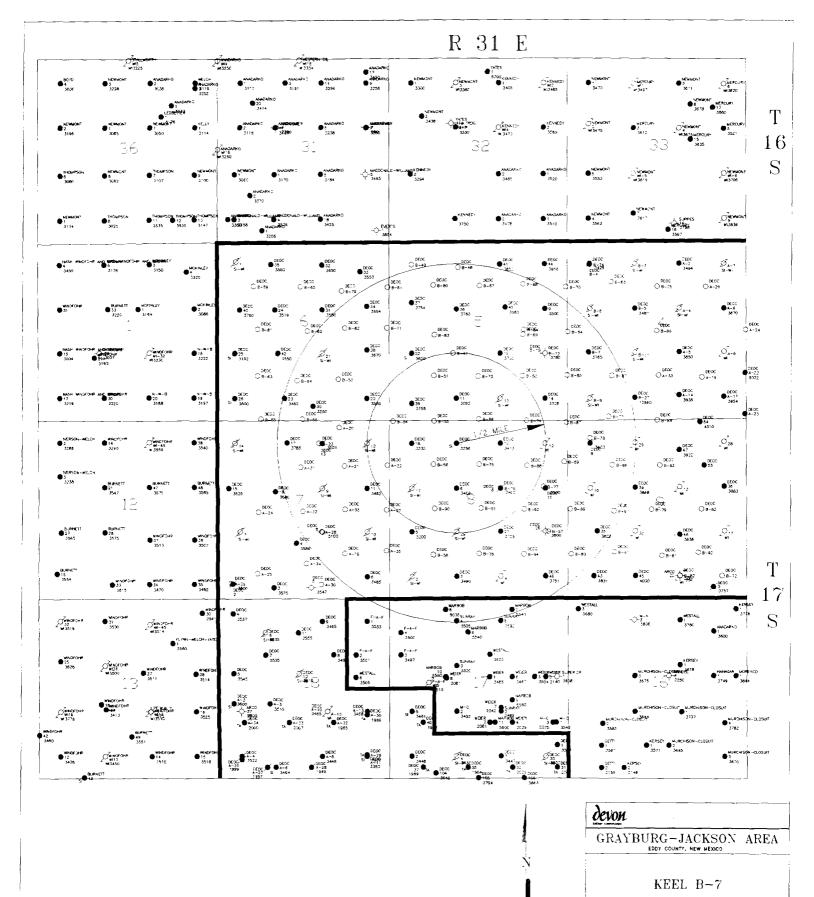


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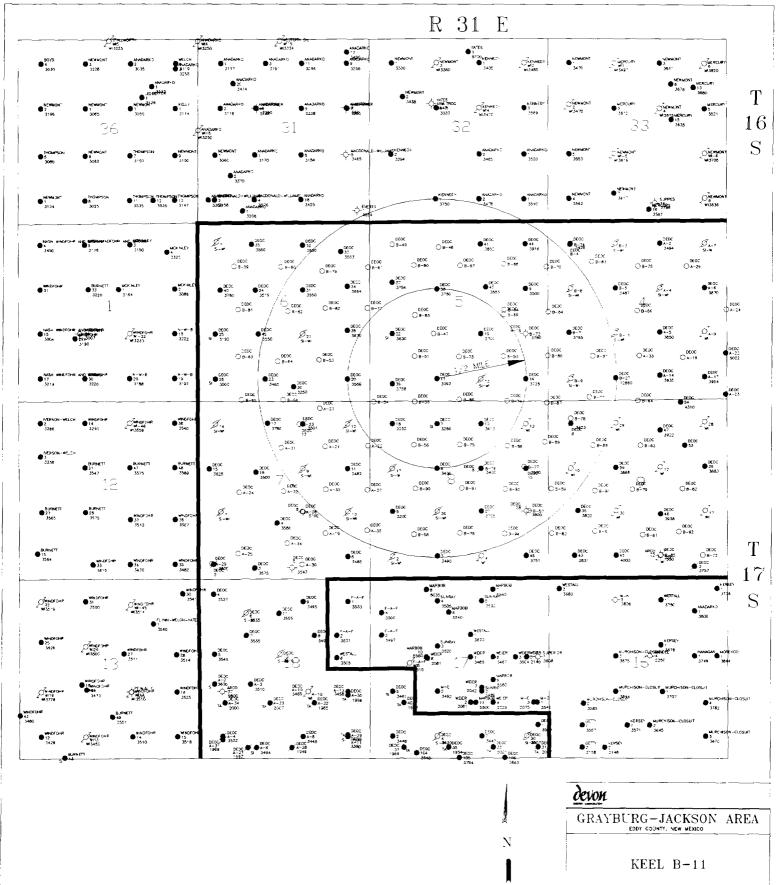




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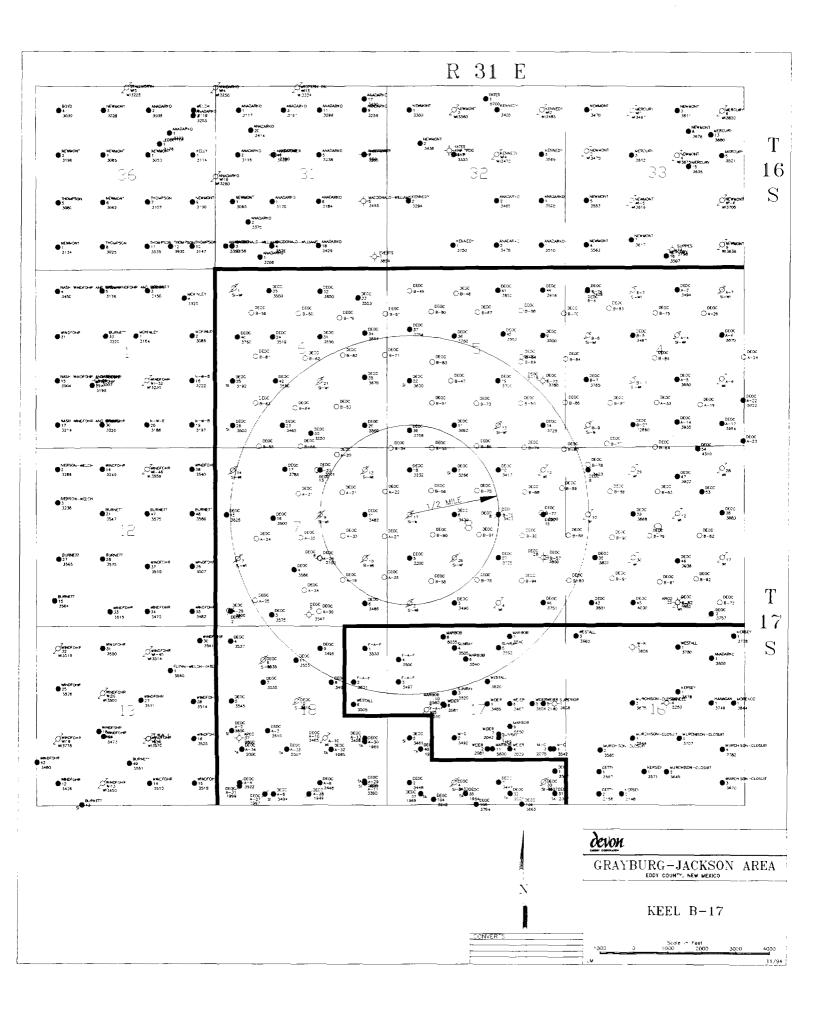
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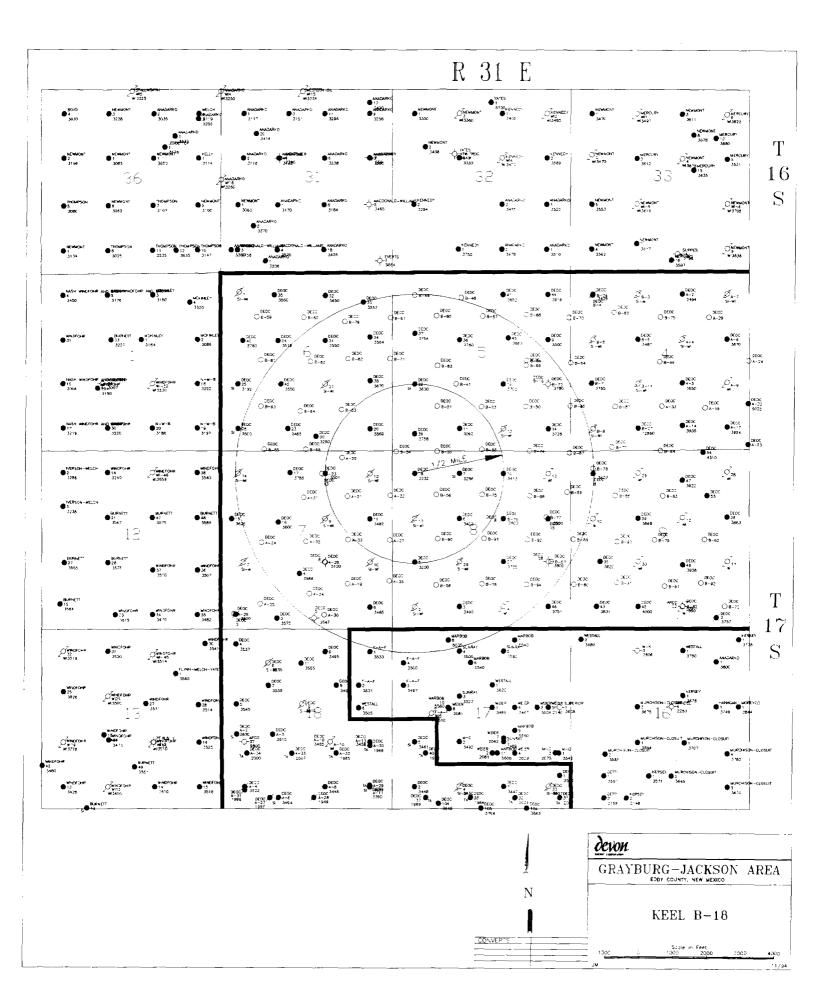


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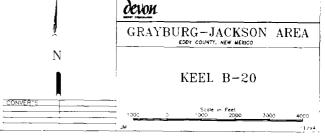
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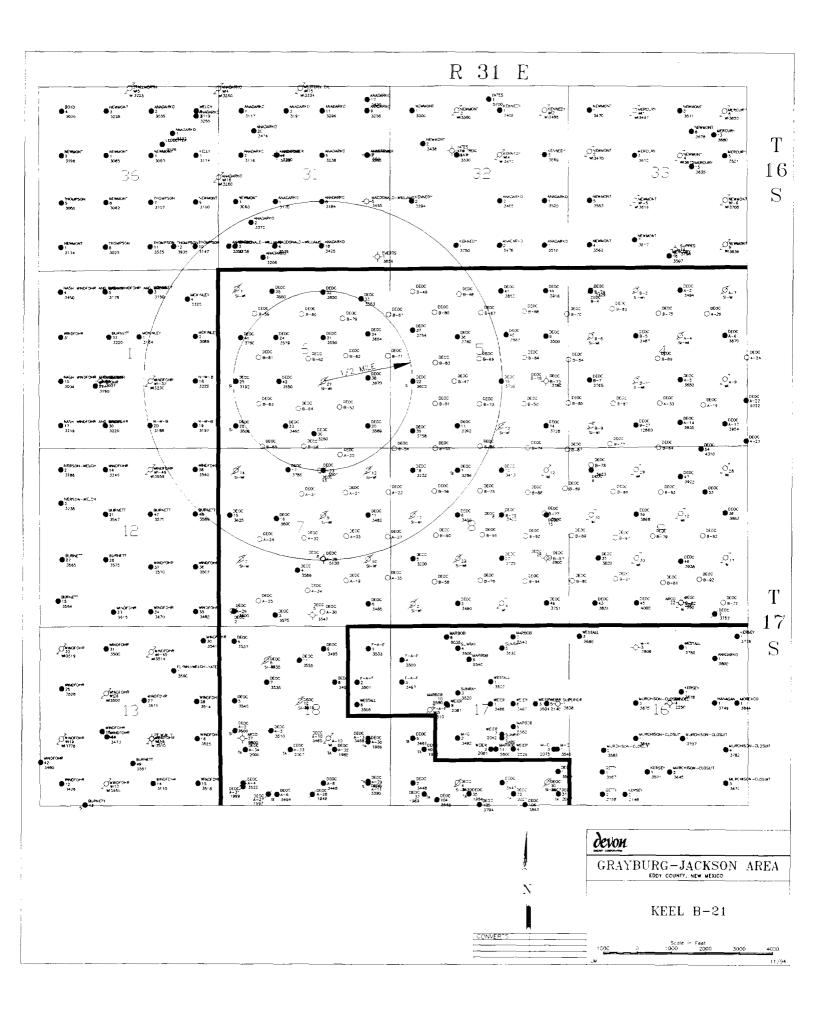
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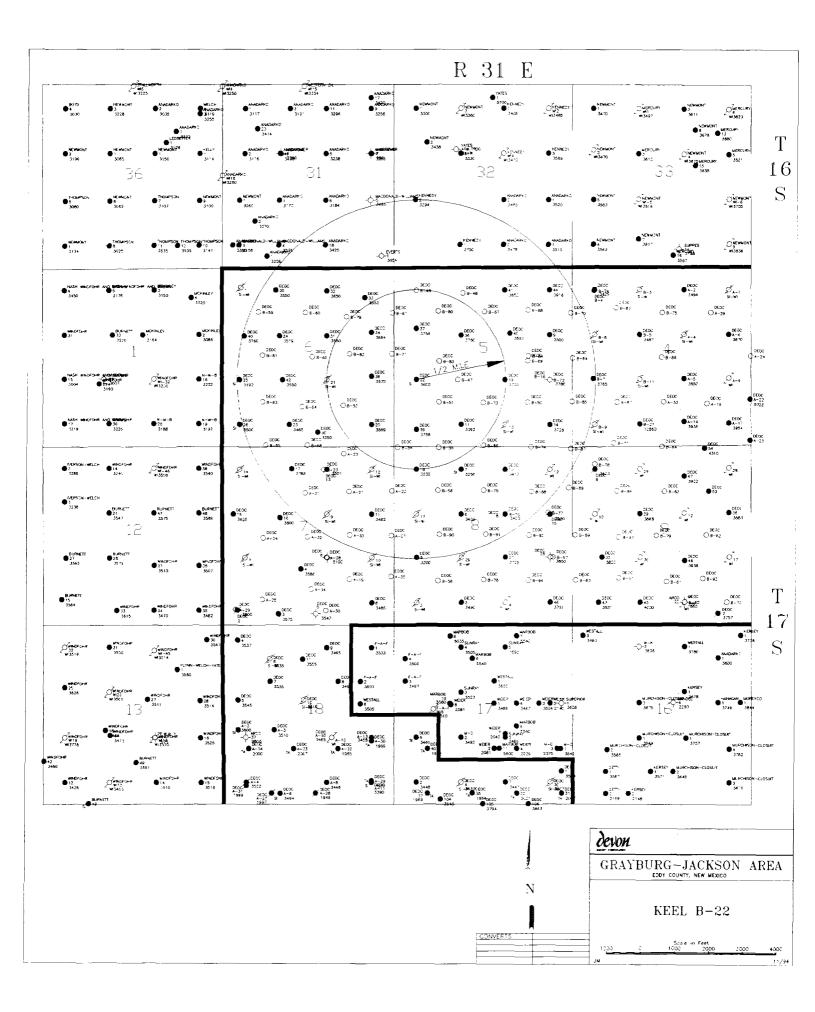


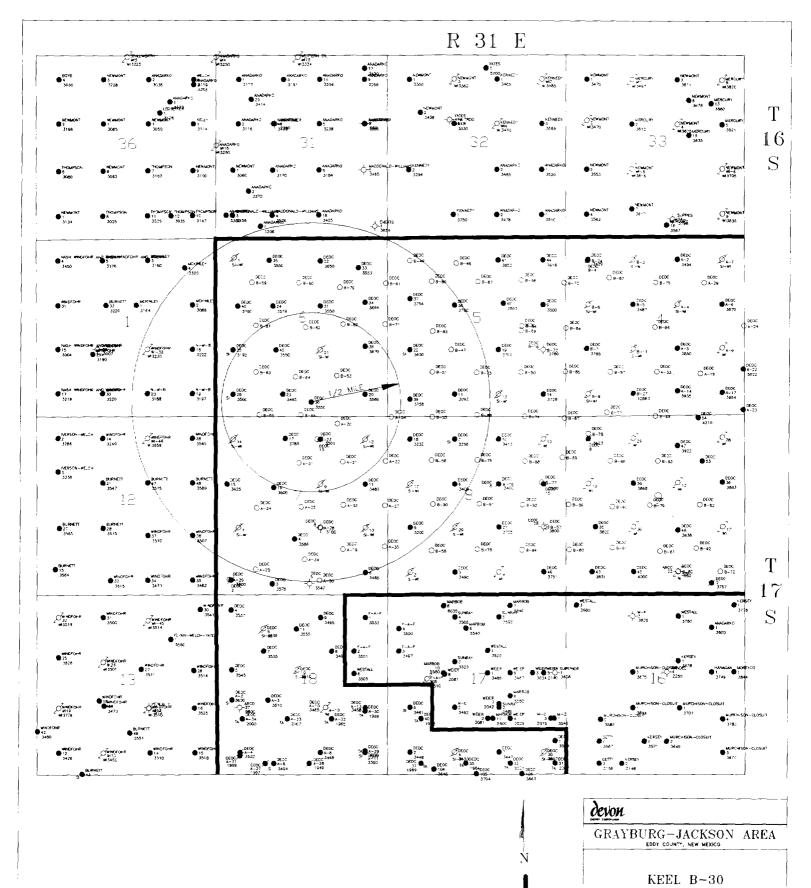


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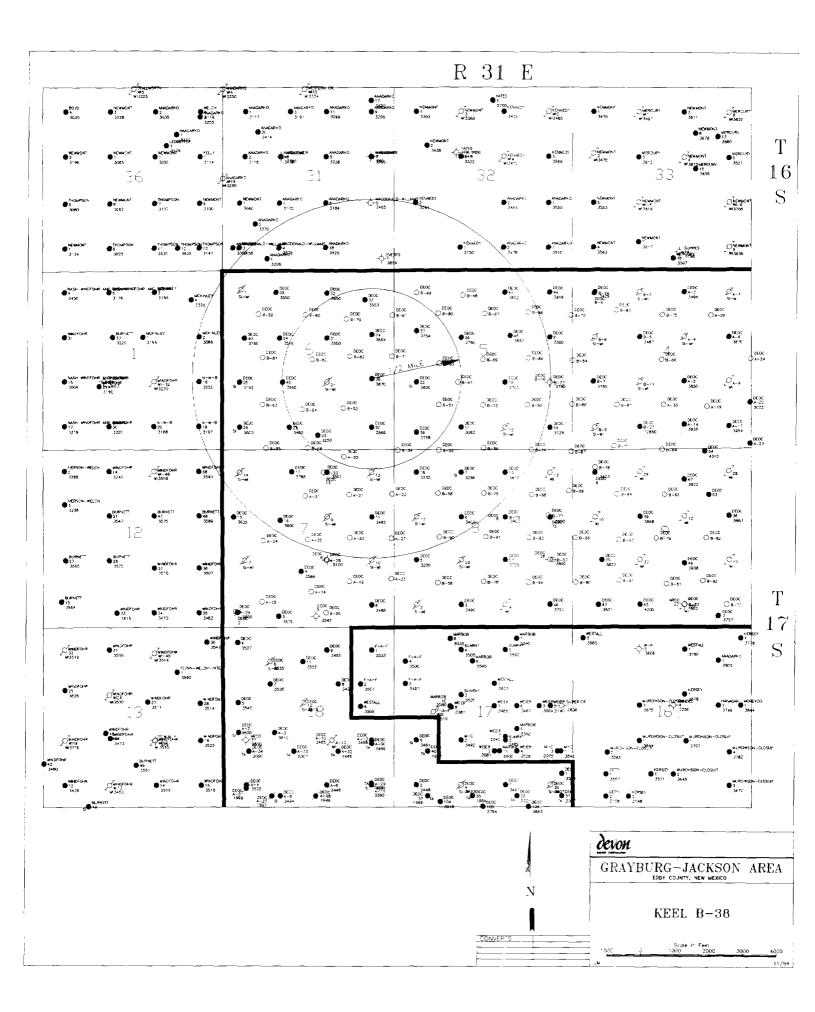


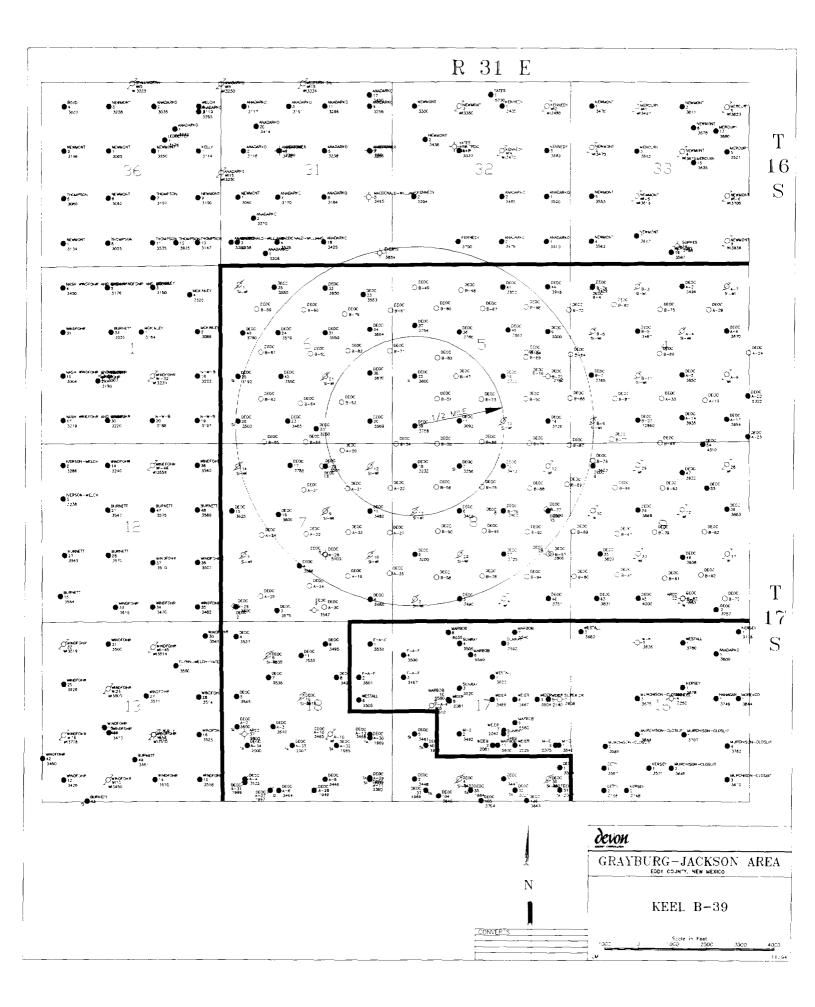


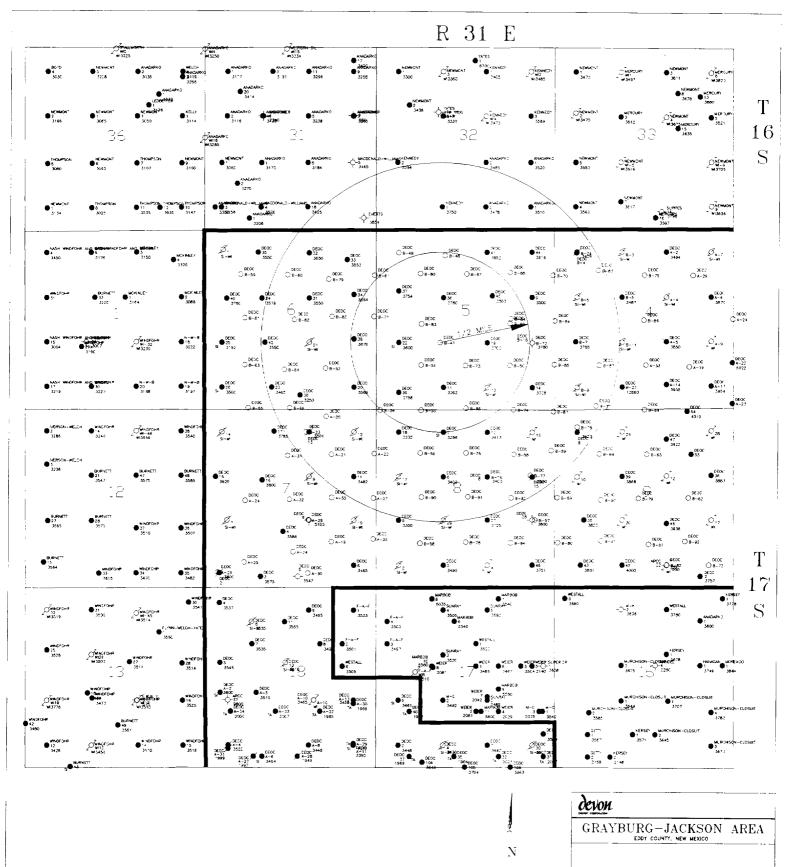
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#### DEVON ENERGY OPERATING CORPORATION APPLICATION FOR AUTHORITY TO INJECT J.L. KEEL WATER FLOOD

#### 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 know 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 date, 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.

	COMPLETION RECORD	8 5/8" @ 556' w/75sx in 10" hole. 7" @ 3141' w/1100 sx in 8" hole Open hole (6 1/4") from 3141' to 3586' Completed in Grayburg-San Andres from perforations 2891'- 3122' & open hole 3341'-3586' as a prodecer.	8 5/8" @ 510' w/75 sx in 11" hole. 7" @ 3141' w/100 sx in 8" hole. Completed as a producer from an open hole section in the Grayburg-San Anddres 3141'-3485'.	<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>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> Grayburg-San Andres.	8 5/8" @ 535' w/100 sx in 12 1/2" hole Est. TOC @ 260'. 7" @ 2826' w/200 sx in 8" hole. Est. TOC 1100'. Completed as a producer from an OH section 2826'-3604' in the Grayburg-San Andres.
	DEPTH/PBTD	3638'/3586'	TD 3485'/	36117/3590	<u>3580'/</u>	3604'/3604'
<b>ATTACHMENT VI</b>	TYPE OF WELL	Producer	Producer	Producer	Injection	Producer
Α	COMPLETION DATE	<u>5-11-39</u>	6-15-44	12-19-64	11-11-64	7-22-53
	SPUD DATE	3-4-39	3-21-44	<u>6-17-50</u>	8-3-1950	<u>5-19-53</u>
	LOCATION	<u>1650 FSL &amp; 2310 FWL</u> 7-17S-31 <u>E</u>	7-17S-31 E	<u>1980' FNL &amp; 1980' FEL</u> 7-17S-31E	<u>1980' FSL &amp; 660' FEL</u> <u>7-17S-31E</u>	1980' FNL & 660' FEL 7-17S-31E
	WELL NAME	J.L. Keel "A" #4	J.L. Keel "A" #6	J.L. Keel "A" #9	J.L. Keel "A" #10	<u>J.L. Keel "A: #11</u>

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

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

COMPLETION RECORD	<ul> <li>10 3/4" @ 601' w/ 100sx. Circ cmt. 12 1/2" hole.</li> <li>7", @ 2946' w/200 in 8" hole.</li> <li>4 1/2" liner from 2750'-3400'.</li> <li>Completed as a producer from the Grayburg-San Andres later converted to water injection before being P&amp;A 6-9-83 see attached schematic for P &amp; A details.</li> </ul>	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'.	<ul> <li>8 5/8" @ 656' w/100 sx in 10" hole.</li> <li>5 1/2" @ 2944' w/200 sx in 6 1/4" hole.</li> <li>4 3/4" open hole from 2944'-3372'.</li> <li>Completed as a producer from an open hole section 2944'-3372' in the Grayburg-San Andres.</li> </ul>	8 5/8" @ 609' w/100 sx in 121/2" 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.	<ul> <li>8 5/8" @ 568' w/100 sx in 10" hole.</li> <li>7" @ 2839' w/200 sx in 8" hole.</li> <li>4 1/2" @ 3615' w/325 sx in 6" hole.</li> <li>TOC @ 56' by temp. suv.</li> <li>Completed as a producer from the Grayburg-San Andres through perforations 2965'-3601'.</li> </ul>
DEPTH/PBTD	3400'/3375'	Deepened 3413'/3346'	3372'/3372'	3737'/3715'	3615'/3585'
TYPE OF WELL	P & A	Producing	Producing	Injection	Producing
COMPLETION DATE	1-7-51	9-20-51	4-16-65	1-25-52	10-29-52
SPUD DATE	<u>5-25-51</u>	8-15-51	3-21-65	<u>11-10-51</u>	<u>10-8-52</u>
LOCATION	1980' FNL & 1980' FEL 8-17S-31E	660' FNL & 1980' FEL 8-17S-31E	660 FSL & 1980 FWL 5-17S-31E	660' FS: & 1980' FEL 5-17S-31E	1980' FNL & 660' FWL
WELL NAME	J.L. Keel "B" #8	J.L. Keel "B" #10	J.L. Keel "B" #11	J.L. Kcel "B" #13	J.L. Keel "B" #17

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

COMPLETION RECORD	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'	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'.	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.	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'.
DEPTH/PBTD	3465'/3465'	3519'/3175'	3500'/3415'	3725'/3725'
TYPE OF WELL	Producing	Producing	Producing	Producing
COMPLETION DATE	11-17-56	3-16-57	8-22-57	11-9-64
SPUD DATE	<u>9-21-56</u>	<u>12-21-56</u>	<u>6-15-57</u>	10-3-64
LOCATION	660' FSL & 1980' FWL 6-17S-31E	1980' FNL & 1694 FWL 6-17S-31E	660° FSL & 516.8° FWL 6-17S-31E	1980' FSL & 1980' FEL 8-17S-31E
WELL NAME	J.L. Keel "B" #23	J.L. Kccl "B" #24	J.L. Keel "B" #26	J.L. Keel "B" #27

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

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<b>ITACHMENT</b>	

COMPLETION RECORD	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.	<ul> <li>8 5/8" @ 420' w/400 sx in 12 1/4" hole. cmt circ.</li> <li>5 1/2" @ 3760' w/550 sx in 7 7/8" hole. cmt. did not circ. TOC @ 1200' by CBL.</li> <li>Completed as a producer from Grayburg-San Andres through perforations 3275'-3315'.</li> <li>Additional perfs: 3363'-3619'.</li> </ul>	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 throug <b>h</b> perforations 2999'-3697' OH.	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 throug <b>In</b> perforations 3257'-3601'
DEPTH/PBTD	3664'/3621'	3760°/3718°	3754°/3714°	3670'/3624'
TYPE OF WELL	Producing	Producing	Producing	Producing
COMPLETION DATE	9-8-88	6-29-87	7-16-88	6-12-88
SPUD DATE	8-23-88	6-12-87	<u>6-30-88</u>	<u>5-25-88</u>
LOCATION	1880' FNL & 660' FWL 6-17S-31E	1980' FSL & 1980' FEL 5-17S-31E	1780 FM & 6602 FEL 5-178-31E VEQJG	510' FSL & 660' FWL 6-17S-31E
WELL NAME	J.L. Keel "B" #34	J.L. Keel "B" #36	J.L. Keel "B" #37	J.L. Keel "B" #38

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COMPLETION RECORD	8 5/8" ( $\textcircled{m}$ 379' w/300sx. in 12 1/4" hole.cmt. circ. 5 1/2" ( $\textcircled{m}$ 3757' w/1150 sx in 7 7/8" hole. cmt. circ. Completed as producer from the Grayburg-San Andres through perforations 3011'-3702'.	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)	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)	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'
DEPTH/PBTD	3758'/3711'	3550'/3481'	3754'/3714'	4040'/3995'
TYPE OF WELL	Producing	Producing	Producing	Producing
COMPLETION DATE	6-24-88	9-29-88	3-30-89	7-20-94
SPUD DATE	<u>6-6-88</u>	9-7-88	2-13-89	6-26-94
LOCATION	510' FSL & 660' FWL 5-17S-31E	1980' FSL & 1780' FL	1930' FNL & 1830' FEL 5-17S-31E WOT IN AOR	1980' FSL & 1880' FWL 5-17S-31E
WELL NAME	J.L. Keel "B" #39	J.L. Keel "B" #42	J.L. Keel "B" #45	J.L. Kccl "B" #47

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COMPLETION RECORD	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.	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.	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.
DEPTH/PBTD	4073`/4026`	3715°/3672°	3950°/3902°
TYPE OF WELL			Producing
COMPLETION DATE	new well	new well	11-24-94
SPUD DATE	10-9-94	10-17-94	10-24-94
LOCATION	1320' FSL & 1320' FWL 5-17S-31E	1320' FSL & 60' FEL 6-17S-31E	1220' FSL & 1500' FEL
WELL NAME	J.L. Keel "B" #51	J.L. Keel "B" #52	J.L. Keel "B" #53

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# **Devon** ENERGY CORPORATION

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

1 3 52

March 9, 1995

Certified Mail No. Z 781 292 846

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

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 consistant with field reports.

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

Sincerely,

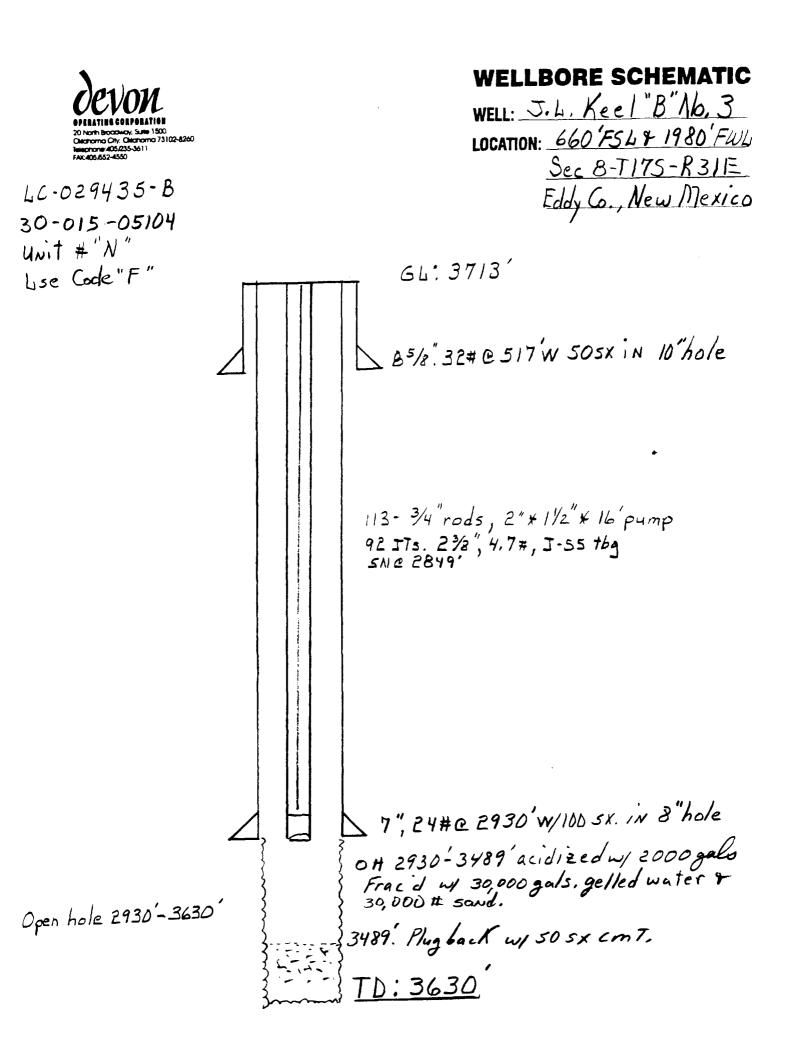
DEVON ENERGY OPERATING CORPORATION

Jerald & Milet

Jerald R. McKedy Engineer

JRM/cg

Enclosures

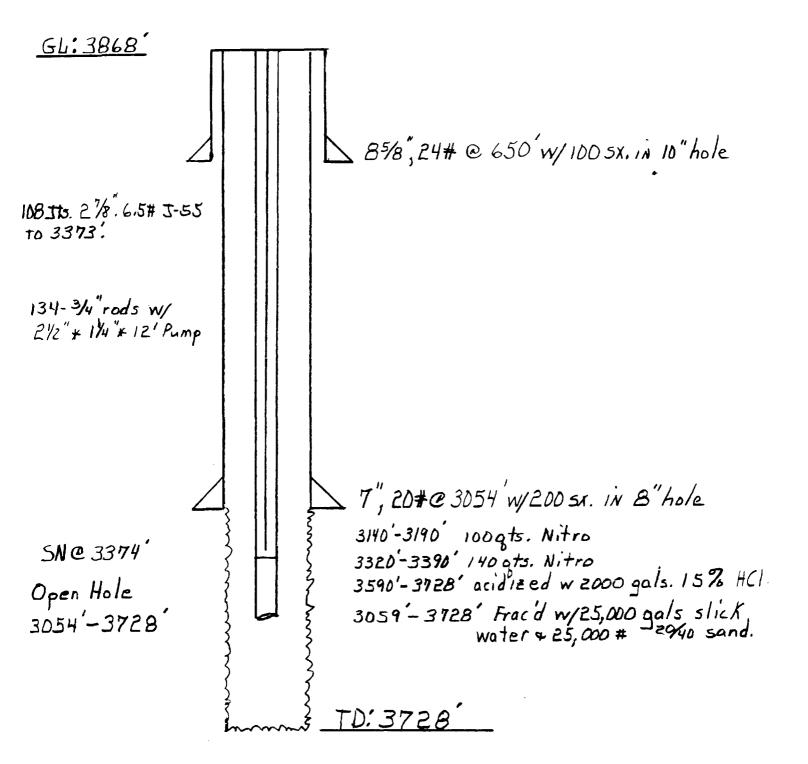




## LC-029435-B 4PI 30-015-05079 Unit Letter "P"

# WELLBORE SCHEMATIC

WELL: J. L. Keel "B" No.14 LOCATION: 660'F54 + 660'FFL Sec. 5-T17S-R31E Eddy Co., New Mexico

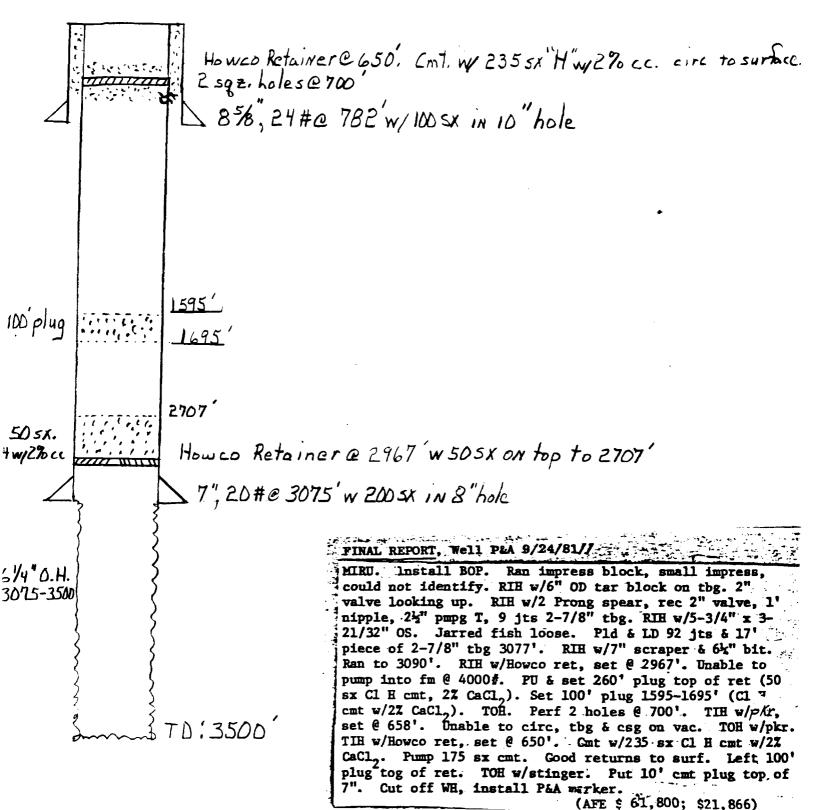


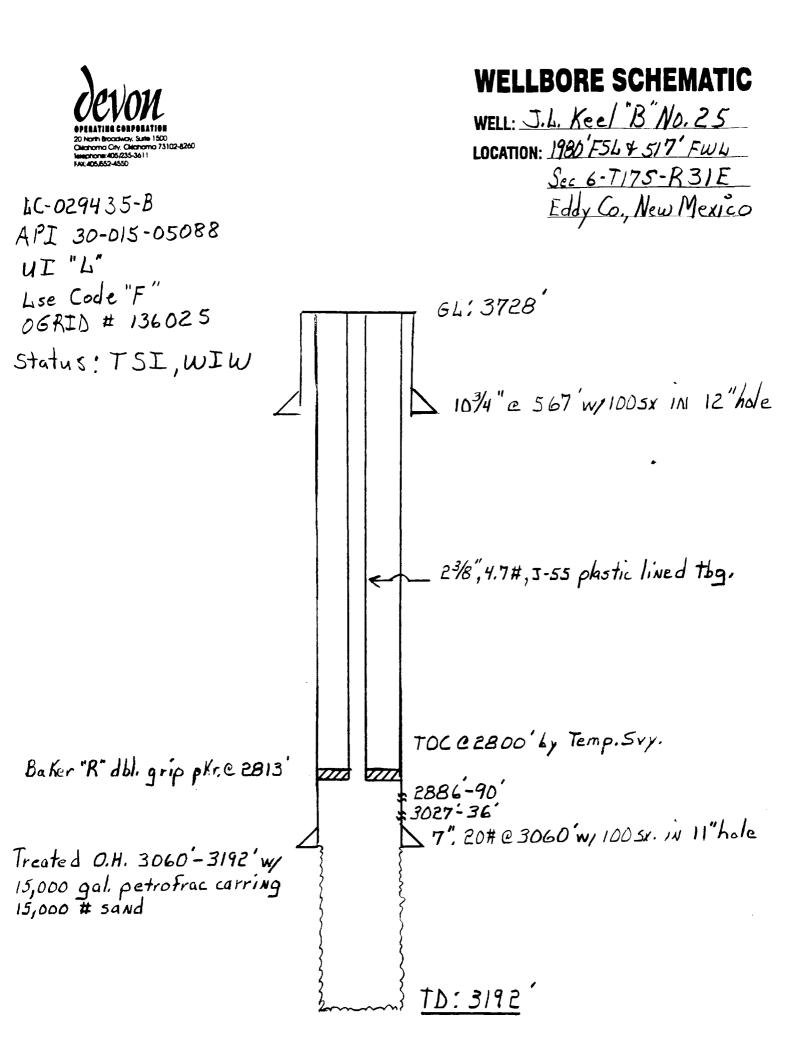


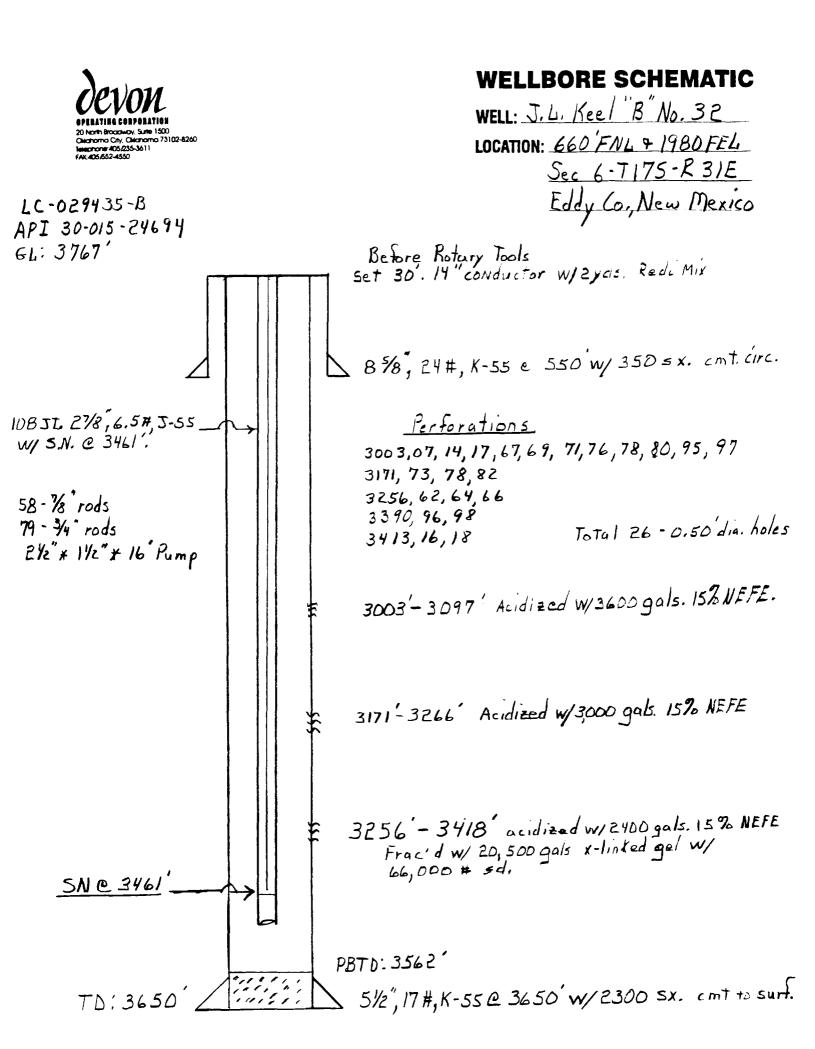
## WELLBORE SCHEMATIC WELL: J.L. Keel "B'ND. 15 LOCATION: 1980'FNL& 660FEL Sec 8-T175-R31E

Eddy Co., New Mexico

LC-029435-B GL:3848







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# 660 . MEXICO OLL CONSERVATION DIV

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