

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  Yes  No

II. OPERATOR: APACHE CORPORATION

ADDRESS: 6120 S. Yale Ave., Suite 1500, Tulsa, OK 74136

CONTACT PARTY: KEVIN MAYES

PHONE: 918-491-4972

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project?  Yes  No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_

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

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic 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 sources 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.

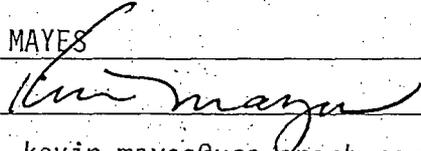
XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

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: KEVIN MAYES

TITLE: SR. STAFF RESERVOIR ENGINEER

SIGNATURE: 

DATE: 2/26/08

E-MAIL ADDRESS: kevin.mayes@usa.apachecorp.com

\* If the information required under Sections VI, VIII, X, and XI above has been pr  
Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

Oil Conservation Division

Case No. 32

Exhibit No. \_\_\_\_\_

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate I

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

**NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.**

**NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.**

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HARRY LEONARD NCT E 4

WELL LOCATION: 660 FNL 660 FEL 16 21S 37E

FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2      Casing Size: 13 3/8

Cemented with: 300 sx. or \_\_\_\_\_ ft'

Top of Cement: Surf      Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4      Casing Size: 9 5/8

Cemented with: 1300 sx. or \_\_\_\_\_ ft'

Top of Cement: Surf      Method Determined: Calc

Production Casing

Hole Size: 8 3/4      Casing Size: 7

Cemented with: 700 sx. or \_\_\_\_\_ ft'

Top of Cement: 79'      Method Determined: Calc.

Total Depth: 6699

Injection Interval

5793 feet to 6690'

(Perforated or Open Hole) indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8      Lining Material: Plastic

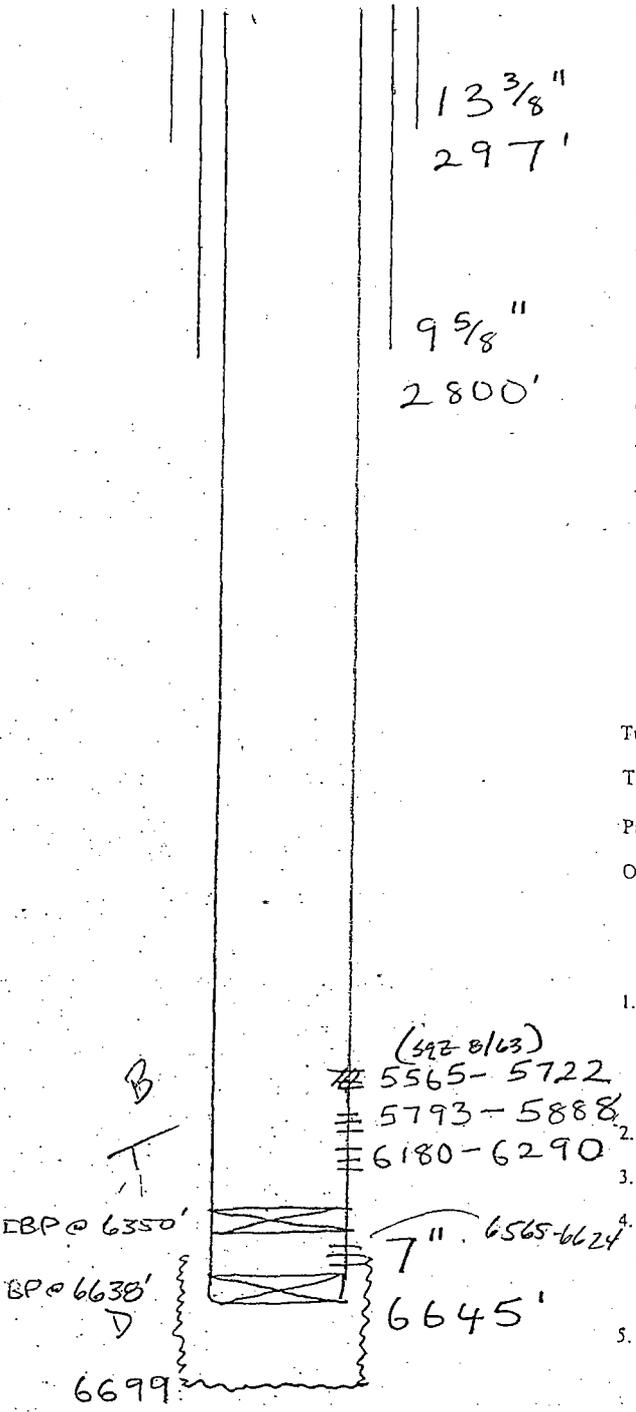
Type of Packer: Baker Lokset

Packer Setting Depth: 5500'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection?      Yes  No  X  
If no, for what purpose was the well originally drilled? Oil Production
2. Name of the Injection Formation: Blinbry and Drinkard
3. Name of Field or Pool (if applicable): Blinbry and Drinkard
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK A 02

WELL LOCATION: 1980 FNL 660 FEL 8 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 15 Casing Size: 13 3/8

Cemented with: 250 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8

Cemented with: 1000 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1190 Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7

Cemented with: 800 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 2950 Method Determined: Calc

Total Depth: 6730

Injection Interval

5785 feet to 6643

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

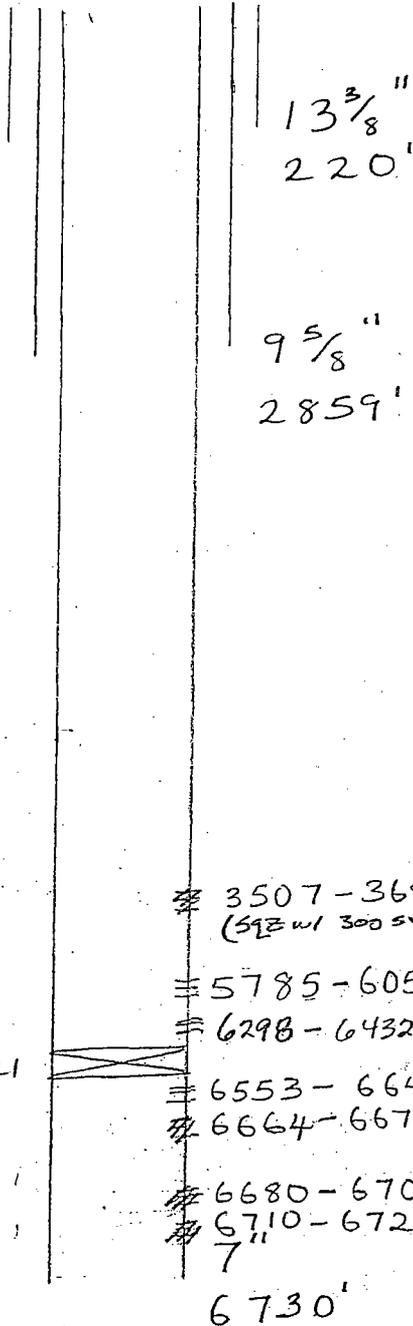
1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



# 3507-3685  
(592 w/ 300 sx)

# 5785-6050

# 6298-6432

# 6553-6643

# 6664-6675

# 6680-6704

# 6710-6720

7"

6730'

6521

(670)

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK A 03

WELL LOCATION: 1980 FNL 660 FWL      9      21S      37E  
FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

✓  
12m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2      Casing Size: 13 3/8

Cemented with: 200 sx. or \_\_\_\_\_ ft'

Top of Cement: Surf      Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4      Casing Size: 9 5/8

Cemented with: 550 sx. or \_\_\_\_\_ ft'

Top of Cement: 350'      Method Determined: Calc

Production Casing

Hole Size: 8 3/4      Casing Size: 7

Cemented with: 500 sx. or \_\_\_\_\_ ft'

Top of Cement: 3800      Method Determined: TS

Total Depth: 6710

Injection Interval

5787 feet to 6710

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8      Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5750'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection?      Yes       No  
If no, for what purpose was the well originally drilled? Oil Production

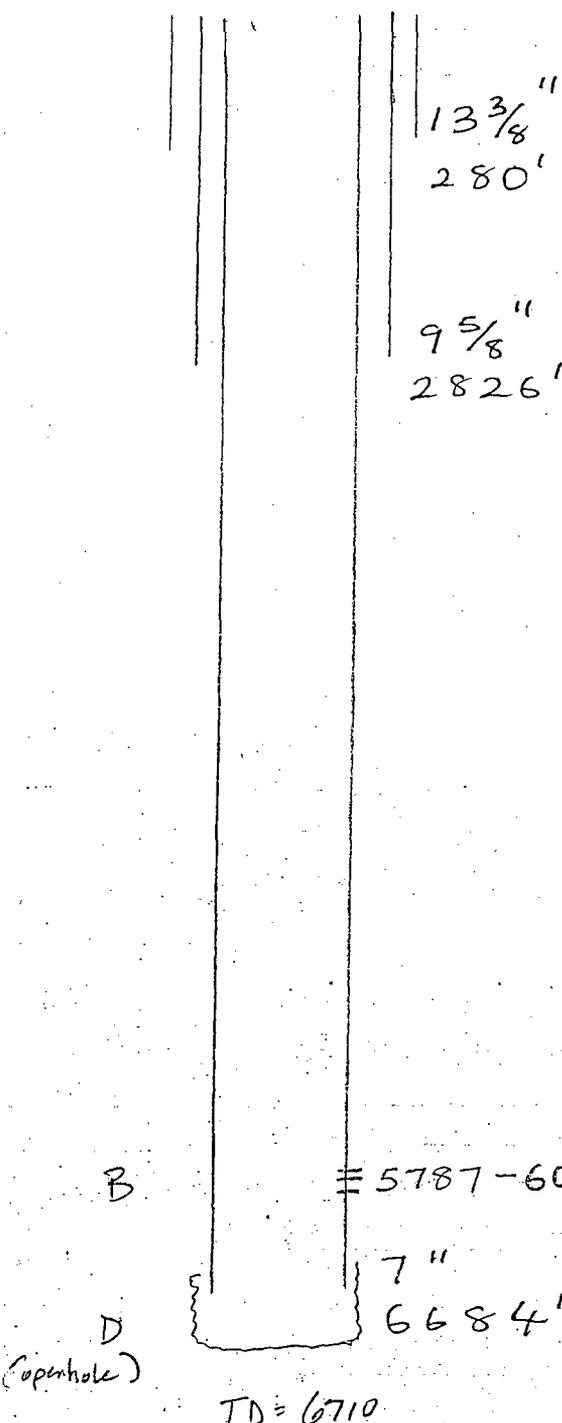
2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')

Below - Abo (7200')



B  
D  
(openhole)

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK A 05

WELL LOCATION: 660 FNL 660 FWL 9 215 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_

Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Intermediate Casing

Hole Size: 11 Casing Size: 8 5/8

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1300 Method Determined: TS

Total Depth: 6800

Injection Interval

5760 feet to 6781'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes  No   
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blainebray and Drinkard

3. Name of Field or Pool (if applicable): Blainebray and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

8 5/8"  
1325'

10/07 5qz 3000-3770  
w/ 305 SX

# 3000 - 3333  
# 3394 - 3770

= 5760 - 6019

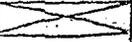
= 6198 - 6400 (10/07)

= 6586 - 6781

5 1/2"

6800'

6509



OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK A 08

WELL LOCATION: 990 FNL 660 FEL 8 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
KIM  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_

Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft'

Top of Cement: \_\_\_\_\_ Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 8 5/8

Cemented with: 475 sx. or \_\_\_\_\_ ft'

Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2

Cemented with: 705 sx. or \_\_\_\_\_ ft'

Top of Cement: Surf Method Determined: Calc

Total Depth: 6980

8 5/8"  
1294'

Injection Interval

5673' feet to 6775'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

≡ 5673 - 5913

Additional Data

1. Is this a new well drilled for injection? Yes  No   
If no, for what purpose was the well originally drilled? Oil Production

≡ 6573 - 6775

2. Name of the Injection Formation: Blinberry and Drinkard

3. Name of Field or Pool (if applicable): Blinberry and Drinkard

6661

≡ 6777 - 6860  
5 1/2" (SQZ)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

6980'

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: APACHE CORPORATION

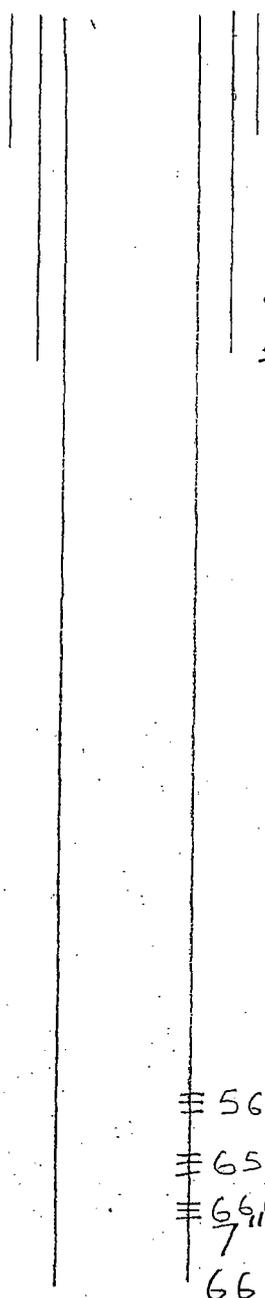
WELL NAME & NUMBER: HAWK B-1 A/C 1 #01

WELL LOCATION: 1980 FNL 1980 FWL 9 21S 37E

FOOTAGE LOCATION                      UNIT LETTER                      SECTION                      TOWNSHIP                      RANGE

✓  
1 1/4"  
9/25/07

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2                      Casing Size: 13 3/8

Cemented with: 260 sx.                      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf                      Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4                      Casing Size: 9 5/8

Cemented with: 500 sx.                      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1628                      Method Determined: Calc

Production Casing

Hole Size: 8 3/4                      Casing Size: 7

Cemented with: 500 sx.                      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 3550                      Method Determined: Calc

Total Depth: 6675

Injection Interval

5645 feet to 6674

(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8                      Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection?                      Yes X No
- If no, for what purpose was the well originally drilled? Oil Production

≡ 5645 - 5837  
≡ 6588 - 6650  
≡ 6666 - 6674  
7  
6674'

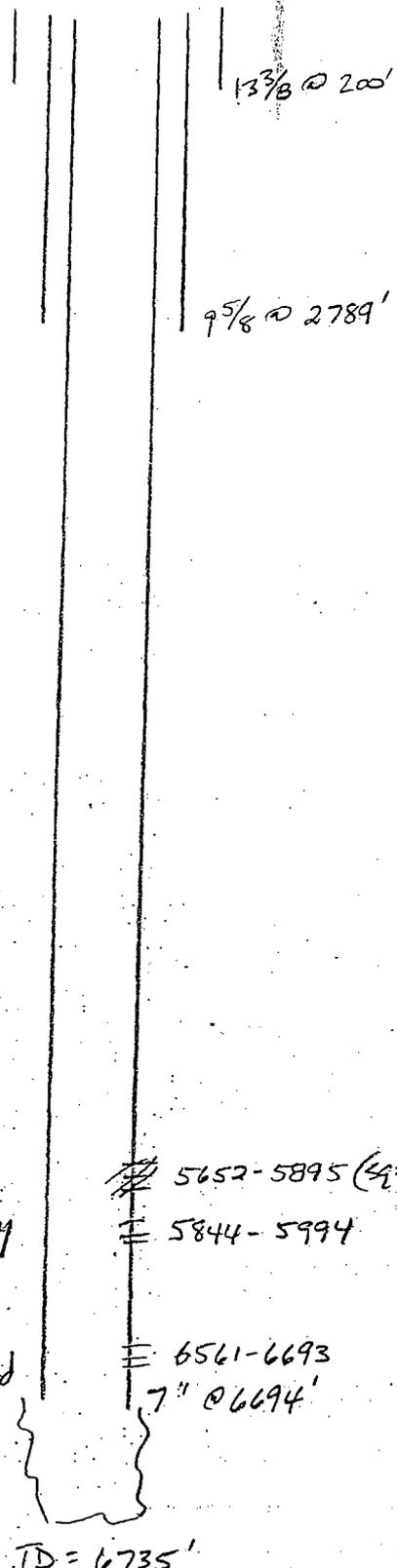
2. Name of the Injection Formation: Blinbery and Drinkard
3. Name of Field or Pool (if applicable): Blinbery and Drinkard
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: Apache Corporation  
 WELL NAME & NUMBER: Hawk B-1 #2  
 WELL LOCATION: 1980 FS 1980 FE J 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

*Km*  
 3/12/08

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
 Cemented with: 200 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surf Method Determined: Circ

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
 Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: 1410' Method Determined: Calc.

Production Casing

Hole Size: 8 3/4 Casing Size: 7"  
 Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: 2942' Method Determined: Calc.  
 Total Depth: 6735'

Injection Interval

5844' feet to 6735'

(Perforated  Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic  
 Type of Packer: Baker Locket  
 Packer Setting Depth: 5750'  
 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production
- Name of the Injection Formation: Blinobry and Drinkard
- Name of Field or Pool (if applicable): \_\_\_\_\_
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  
Above - San Andres (4800')  
Below - Abo (7200')

*Blinobry*  
 5652-5895 (42)  
 5844-5994  
*Drinkard*  
 6561-6693  
 7" @ 6694'  
 TD = 6735'

OPERATOR: APACHE CORPORATION  
 WELL NAME & NUMBER: HAWK B-1#3  
 WELL LOCATION: 660 FNL 1980 FWL      9      215      37E  
FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

✓  
10m  
1/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 15 1/2      Casing Size: 13

Cemented with: 200 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf      Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4      Casing Size: 9 5/8

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1625      Method Determined: TS

Production Casing

Hole Size: 8 3/4      Casing Size: 7

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 3550      Method Determined: TS

Total Depth: 6782

Injection Interval

5776 feet to 6676

(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8      Lining Material: PLastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

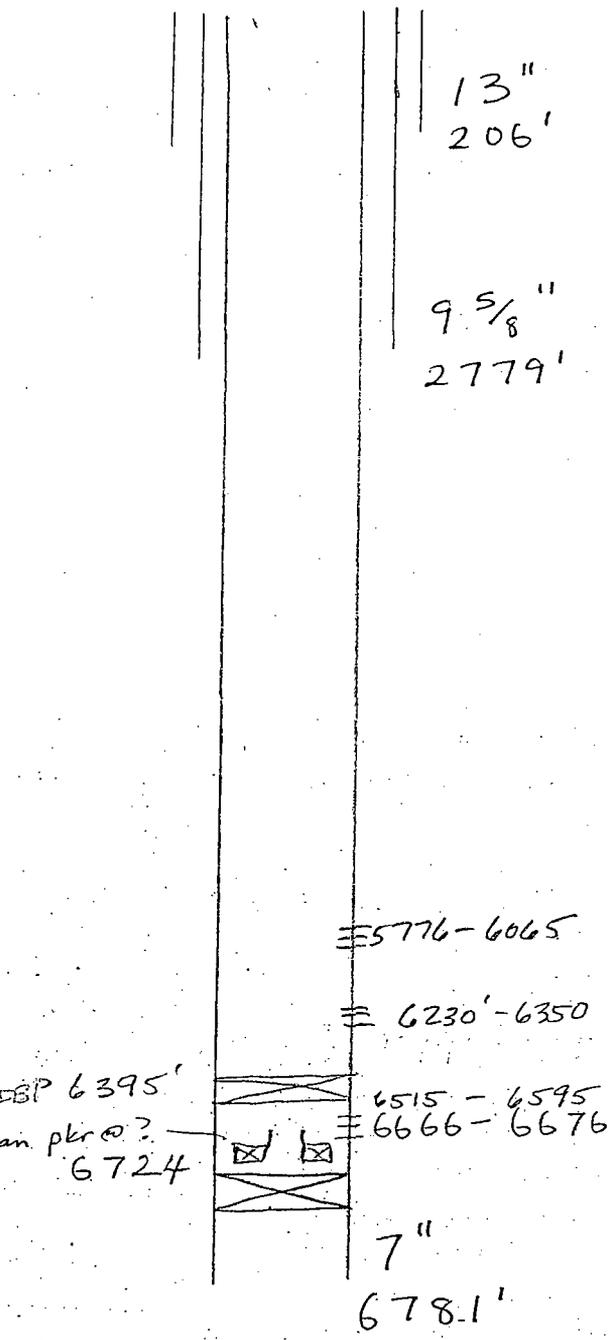
1. Is this a new well drilled for injection?      Yes       No  
 If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



DBP 6395'  
 an pk. @? -  
 6724

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK B-1 04

WELL LOCATION: 1980 FSL 660 FWL 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
KLM  
9/25/67

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented with: 200 sx. or \_\_\_\_\_ ft'

Top of Cement: surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8

Cemented with: 500 sx. or \_\_\_\_\_ ft'

Top of Cement: 1806 Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7

Cemented with: 750 sx. or \_\_\_\_\_ ft'

Top of Cement: 2679 Method Determined: Calc

Total Depth: 6690

Injection Interval

5799 feet to 6577

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

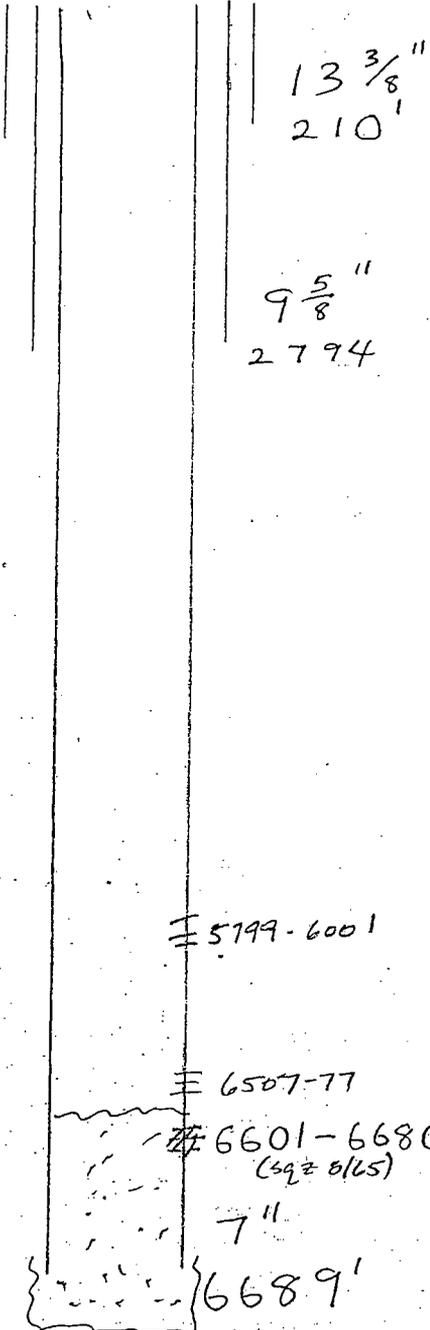
Additional Data

1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinberry and Drinkard  
3. Name of Field or Pool (if applicable): Blinberry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



TOC Plus  
6590

Depend in 8/65 to 6740  
Tested in sqz'd

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK B-1 05

WELL LOCATION: 1980 FSL 1980 FWL 9 215 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
1 km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented with: 200 sx. or \_\_\_\_\_ ft'

Top of Cement: surf Method Determined: Calc.

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8

Cemented with: 500 sx. or \_\_\_\_\_ ft'

Top of Cement: 1650 Method Determined: TS

Production Casing

Hole Size: 8 3/4 Casing Size: 7

Cemented with: 940 sx. or \_\_\_\_\_ ft'

Top of Cement: 2675 Method Determined: F.S.

Total Depth: 6707

Injection Interval

5674 feet to 6706

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

B  
T  
D

≡ 5674-5985

≡ 6190-6258

≡ 6586-6706

≡ 6696-6706

7"

6706'

1. Is this a new well drilled for injection? Yes  No   
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinberry and Drinkard

3. Name of Field or Pool (if applicable): Blinberry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK B-1 # 8

WELL LOCATION: 660 FSL 1980 FEL 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
6m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
Cemented with: 220 sx. or \_\_\_\_\_ ft'  
Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
Cemented with: 500 sx. or \_\_\_\_\_ ft'  
Top of Cement: 1950 Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7  
Cemented with: 900 sx. or \_\_\_\_\_ ft'  
Top of Cement: 2700 Method Determined: Calc  
Total Depth: 6770

Injection Interval

5620 feet to 6736

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic  
Type of Packer: Baker Lokset  
Packer Setting Depth: 5550  
Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

≡ 5620 - 5806

≡ 5806 - 6042

≡ 6523 - 6736

7"

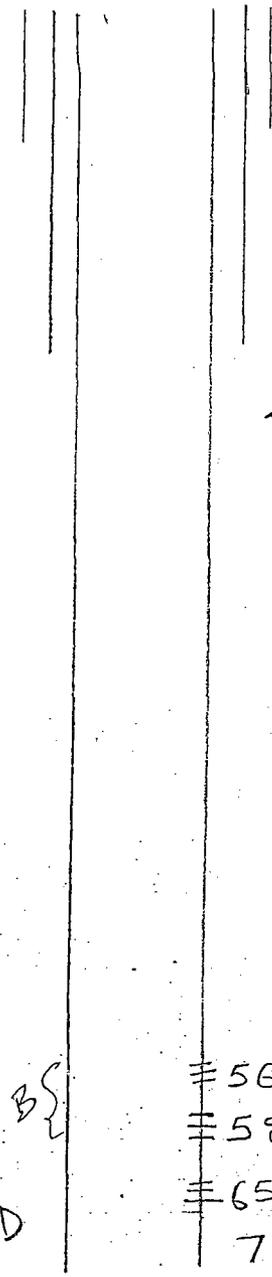
6767'

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



B  
L  
D

CTION WELL DATA SHEET

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAKIK B-1 # 9

WELL LOCATION: 660 FSL 660 FWL 9 215 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 15" Casing Size: 13 3/8"

Cemented with: 250 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 9 5/8"

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1210 Method Determined: TS

Production Casing

Hole Size: 8 3/4" Casing Size: 7"

Cemented with: 750 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 3011 Method Determined: TS

Total Depth: 6770

Injection Interval

5636 feet to 6756

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

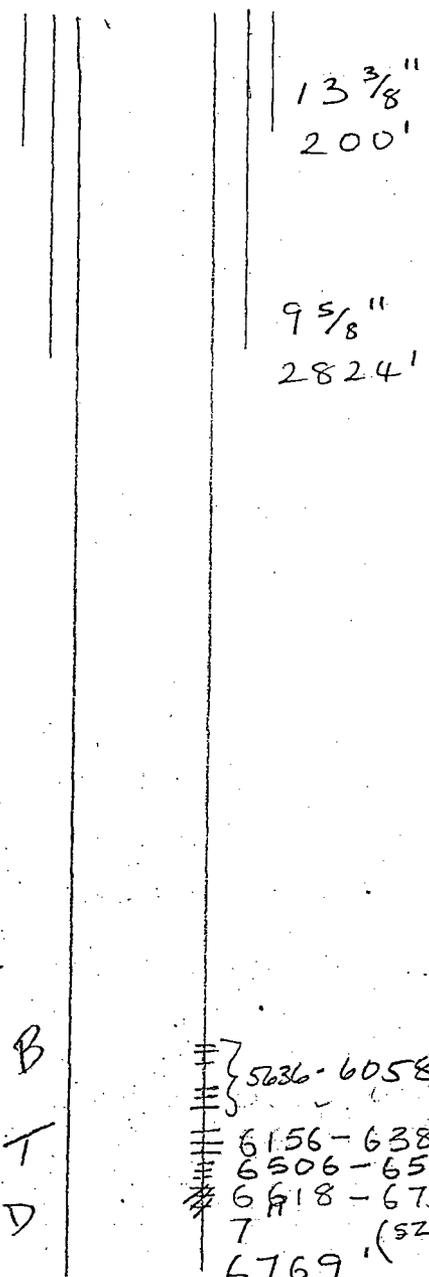
1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



B  
T  
D

5636-6058  
6156-6386  
6506-6583  
6618-6756  
7  
6769 (SZ 150 SX)

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK B-1 11

WELL LOCATION: 1980 FSL 660 FEL      8      21S      37E

FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

✓  
K/m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2      Casing Size: 13 3/8

Cemented with: 250 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf      Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4      Casing Size: 9 5/8

Cemented with: 1750 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1300      Method Determined: Calc

Production Casing

Hole Size: 8 3/4      Casing Size: 7

Cemented with: 822 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 2804      Method Determined: Calc

Total Depth: 6775

Injection Interval

5667 feet to 6629

(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8      Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- Is this a new well drilled for injection?      Yes  No   
If no, for what purpose was the well originally drilled? Oil Production
- Name of the Injection Formation: Blinebry and Drinkard
- Name of Field or Pool (if applicable): Blinebry and Drinkard
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - A60 (7200')

13 3/8"  
213'

9 5/8"  
2684'

B  
T  
D

≡ 5667-5882

# 6260-6390 (522)

≡ 6539-6629

# 6638-6736  
7" (522)

6774'

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: HAWK B-1 13

WELL LOCATION: 1980 FSL 660 FEL      9      215      37E  
FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

✓  
16m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft'  
Top of Cement: \_\_\_\_\_ Method Determined \_\_\_\_\_

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
Cemented with: 400 sx. or \_\_\_\_\_ ft'  
Top of Cement: Surf Method Determined: Calc.

Production Casing

Hole Size: 6 3/4 Casing Size: 5 1/2  
Cemented with: 700 sx. or \_\_\_\_\_ ft'  
Top of Cement: 2400 Method Determined: T/S  
Total Depth: 6780

9 5/8"  
1294'

Injection Interval

5781 feet to 6710

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

B  
D

≡ 5781 - 6043

≡ 6582 - 6710

5 1/2"

6780

- 2. Name of the Injection Formation: Blinbry and Drinkard
- 3. Name of Field or Pool (if applicable): Blinbry and Drinkard
- 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: Apache Corporation

WELL NAME & NUMBER: Hawk B-1 #14

WELL LOCATION: 1980 FS 1980 FE J B 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

*Km*  
*3/12/08*

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 12 1/4 Casing Size: 8 5/8  
Cemented with: 650 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: surf Method Determined: CIRC.

Intermediate Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2  
Cemented with: 625 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: 2767 Method Determined: calc.  
Total Depth: 6836

Injection Interval

5666 feet to 6700

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Locset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes  No   
If no, for what purpose was the well originally drilled? Oil Production

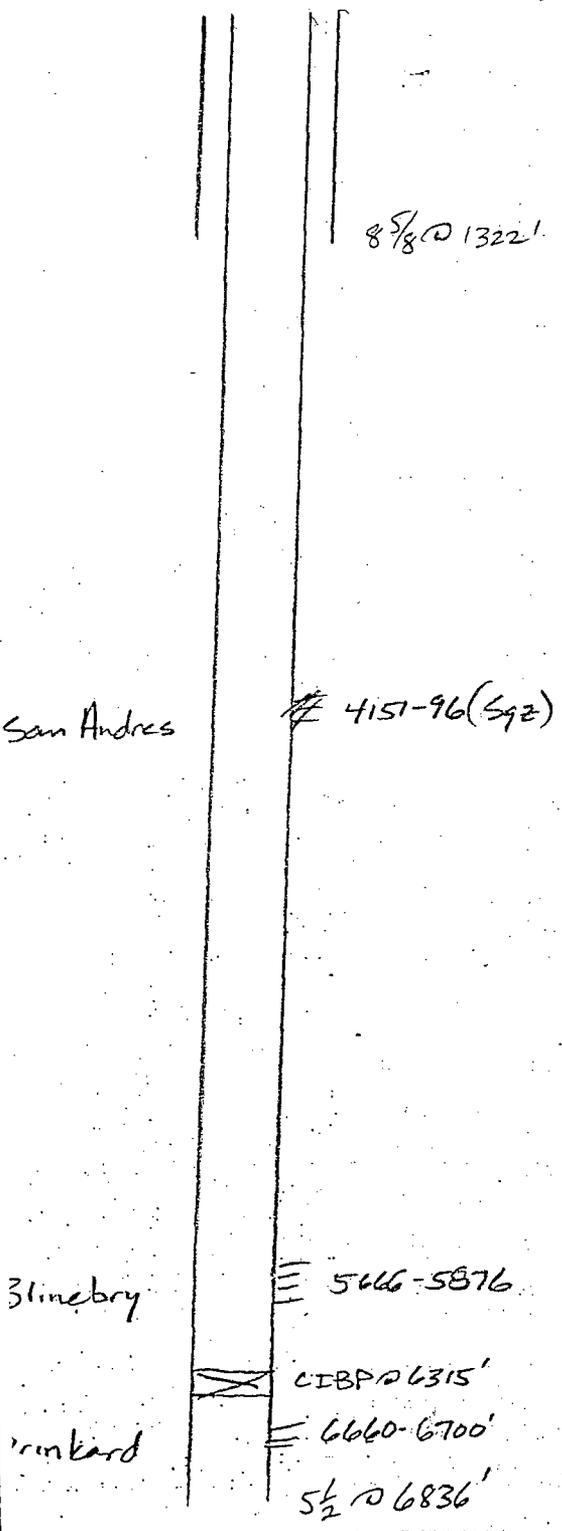
2. Name of the Injection Formation: Blinberry & Drinkard

3. Name of Field or Pool (if applicable): \_\_\_\_\_

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

Above - San Andres (4800')  
Below - Aba (7200')



OPERATOR: APACHE CORPORATION  
 WELL NAME & NUMBER: LOCKHART A-17 #04  
 WELL LOCATION: 660 FNL 660 FEL 17 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
 Km  
 9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
 Cemented with: 250 sx. or \_\_\_\_\_ ft  
 Top of Cement: surf Method Determined: calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
 Cemented with: 900 sx. or \_\_\_\_\_ ft  
 Top of Cement: 675 Method Determined: TS

Production Casing

Hole Size: 8 3/4 Casing Size: 7  
 Cemented with: 650 sx. or \_\_\_\_\_ ft  
 Top of Cement: 3325 Method Determined: TS  
 Total Depth: 6770

Injection Interval

5700 feet to 6697

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic  
 Type of Packer: Baker Lokset  
 Packer Setting Depth: 5600  
 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

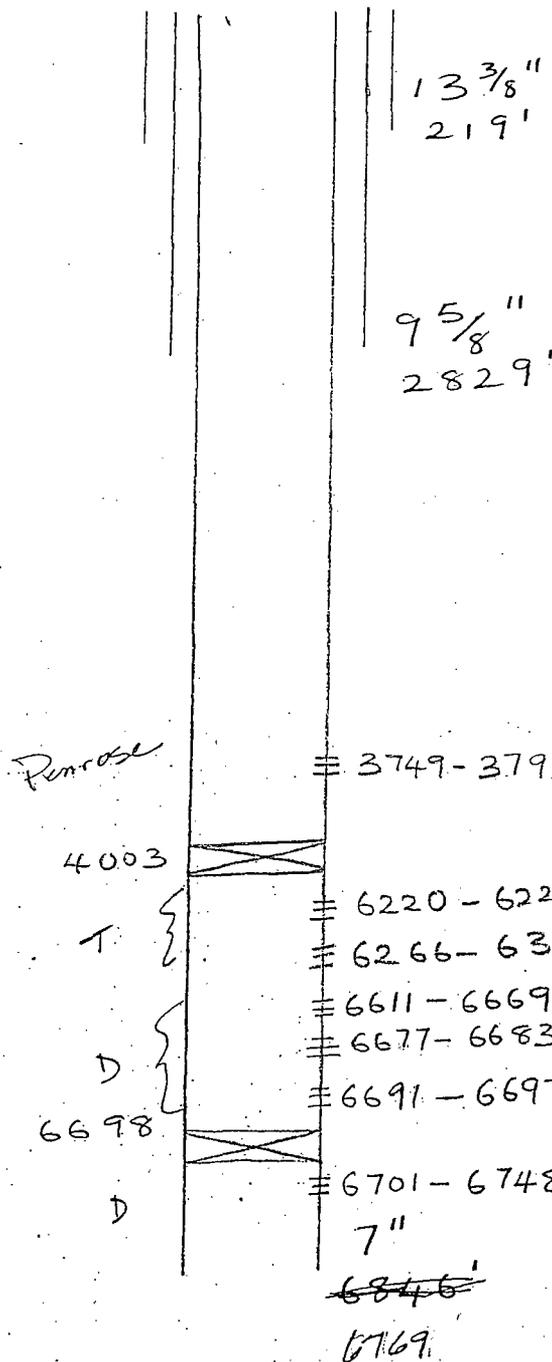
1. Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



*Perforase*

≡ 3749-3793

4003

≡ 6220-6225

T

≡ 6266-6314

D

≡ 6611-6669

≡ 6677-6683

6698

≡ 6691-6697

D

≡ 6701-6748

7"

~~6846'~~

6769'

OPERATOR: APACHE CORPORATION  
 WELL NAME & NUMBER: SOUTHLAND ROYALTY 'A' 01  
 WELL LOCATION: 1980 FNL 1980 FEL 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
 km  
 9/25/67

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
 Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
 Cemented with: 300 sx. or \_\_\_\_\_ ft'  
 Top of Cement: surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
 Cemented with: 1500 sx. or \_\_\_\_\_ ft'  
 Top of Cement: 2050 Method Determined: TS

Production Casing

Hole Size: 8 3/4 Casing Size: 7  
 Cemented with: 600 sx. or \_\_\_\_\_ ft'  
 Top of Cement: 5175 Method Determined: TS  
 Total Depth: 7565

Injection Interval

5664 feet to 6675

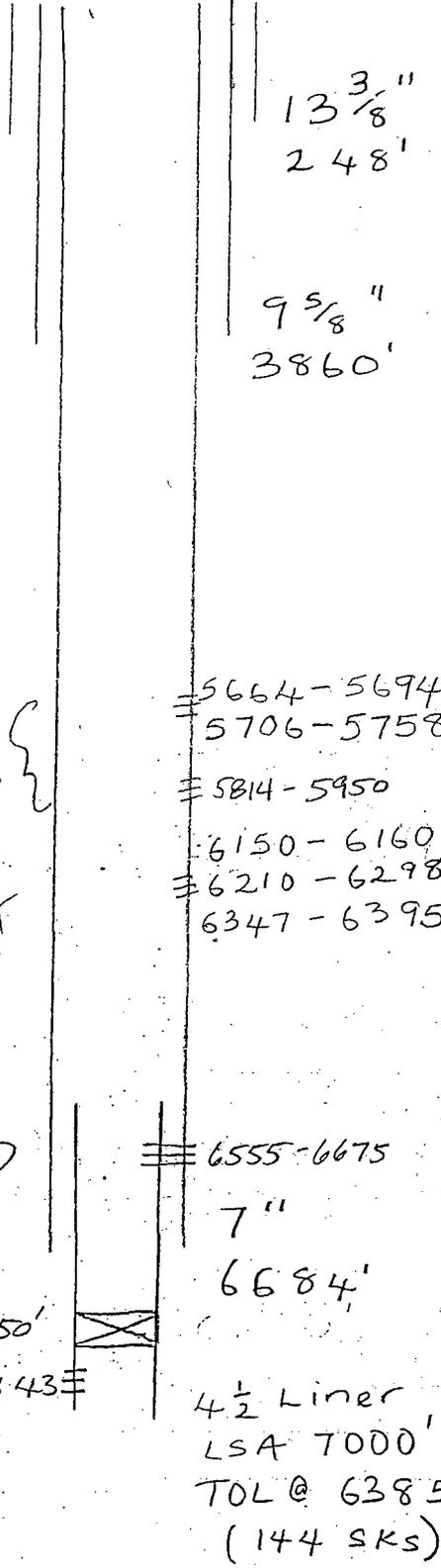
(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic  
 Type of Packer: Baker LOKset  
 Packer Setting Depth: 5600  
 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production
- Name of the Injection Formation: Blinbry and Drinkard
- Name of Field or Pool (if applicable): Blinbry and Drinkard
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



822-6843#  
 (Abo)

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: SOUTHLAND ROYALTY A 02

WELL LOCATION: 660 FNL 1980 FEL 9 215 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
1.6m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8

Cemented with: 700 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7

Cemented with: 3000 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Total Depth: 6750

Injection Interval

5750 feet to 6685

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: PLastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5700

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinberry and Drinkard

3. Name of Field or Pool (if applicable): Blinberry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')

Below - Abo (7200')

11  
13 3/8"  
225'

9 5/8"  
1409'

5750-5936  
6200-6300  
6330-6340  
6488-6495  
6575-6685  
7  
6740'

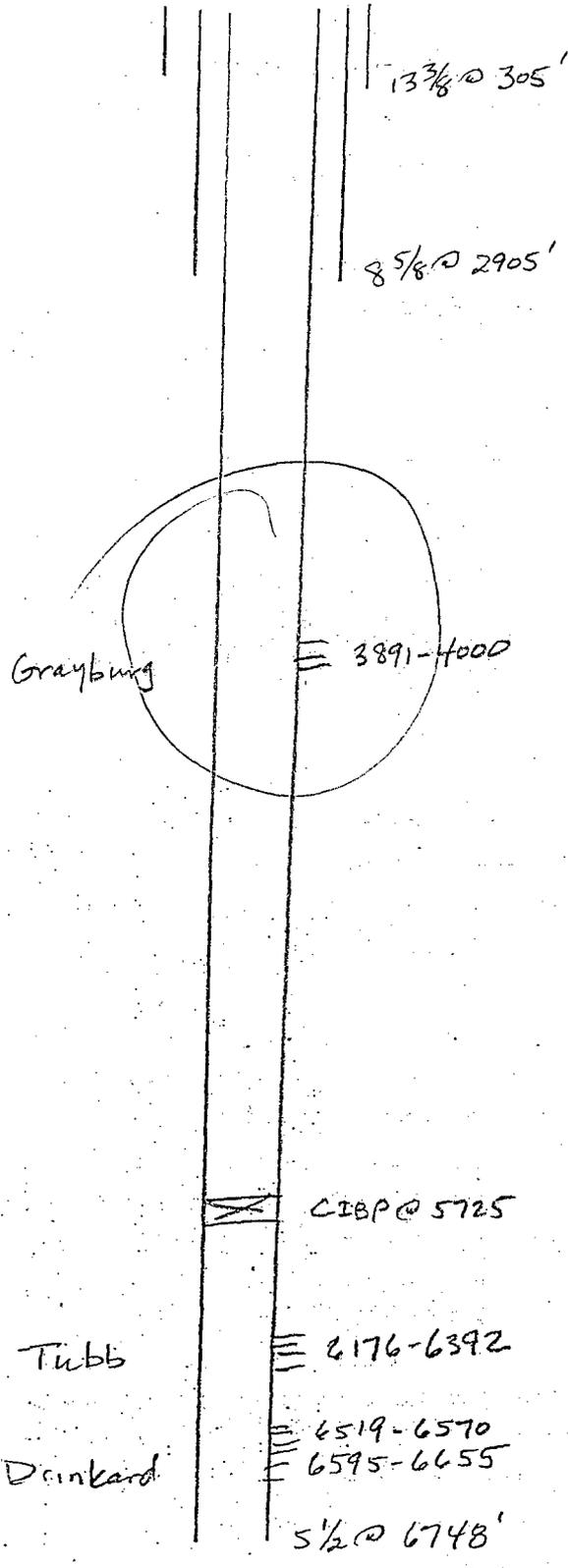
B  
A  
D

OPERATOR: Apache Corporation  
 WELL NAME & NUMBER: Southland Royalty A #4  
 WELL LOCATION: 660 FS 660 FE X 4 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

1 km  
3/12/08

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing



Hole Size: 17 1/2 Casing Size: 13 3/8  
 Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surf Method Determined: Circ

Intermediate Casing

Hole Size: 11" Casing Size: 8 5/8  
 Cemented with: 475 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: 1750 Method Determined: Temp

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2  
 Cemented with: 400 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: 4570' Method Determined: Temp  
 Total Depth: 6750'

Injection Interval

5777 feet to 6655

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic  
 Type of Packer: Baker Locset  
 Packer Setting Depth: 5700'  
 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production
- Name of the Injection Formation: Blinby & Drinkard
- Name of Field or Pool (if applicable): \_\_\_\_\_
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.  
Grayburg will be sized during recom to B&D.
- Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  
Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: SOUTHLAND ROYALTY A 05

WELL LOCATION: 1980 FSL 660 FEL 4 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 11 Casing Size: 8 5/8  
Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: 1365 Method Determined: TS

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2  
Cemented with: 180 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: 5425 Method Determined: TS  
Total Depth: 6756

Injection Interval

5702 feet to 6652

(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: \_\_\_\_\_

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- 1. Is this a new well drilled for injection? Yes  No    
If no, for what purpose was the well originally drilled? Oil Production
- 2. Name of the Injection Formation: Blinebry and Drinkard
- 3. Name of Field or Pool (if applicable): Blinebry and Drinkard
- 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

13 3/8"  
312'

8 5/8"  
2895'

≡ 5702 - 5970

≡ 6646 - 6652

5 1/2"  
6755

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: SOUTHLAND ROYALTY A 6

WELL LOCATION: 1980 FNL 660 FEL 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/67

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented with: 275 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9

Cemented with: 1380 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 7 7/8 Casing Size: 5 1/2

Cemented with: 280 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 5325 Method Determined: TS

Total Depth: 7200

Injection Interval

\* 5642 feet to 6635

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: PLastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

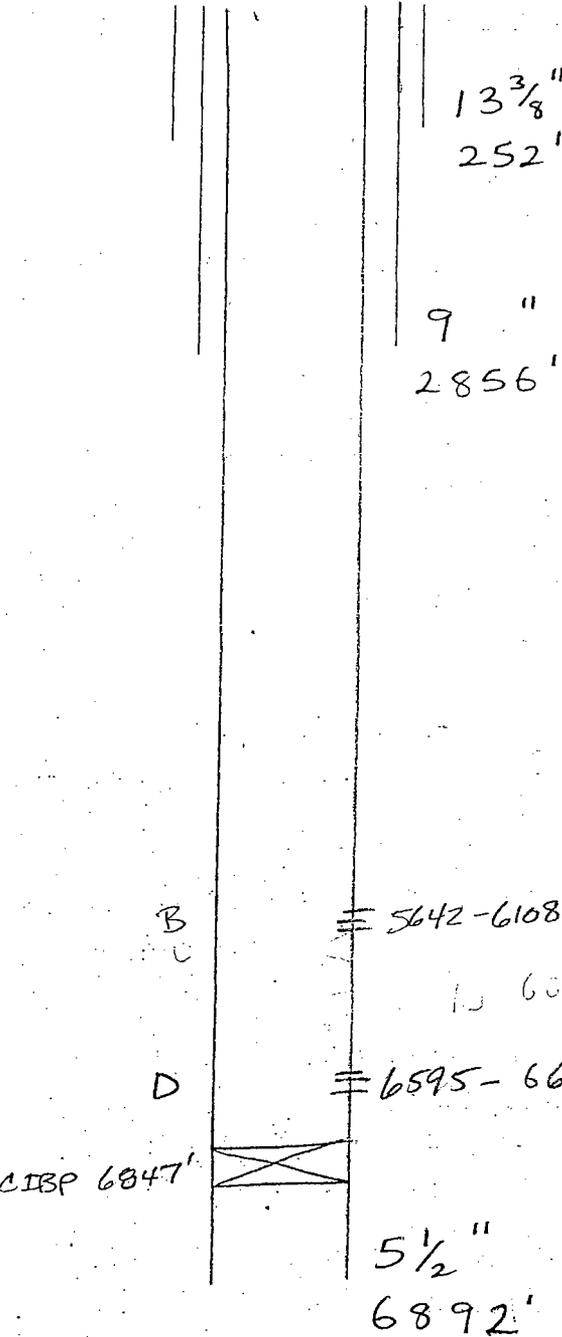
1. Is this a new well drilled for injection? Yes  No   
If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



≡ 5642-6108

≡ 6595-6635

5 1/2"  
6892'

CIBP 6847'

OPERATOR: APACHE CORPORATION  
 WELL NAME & NUMBER: SOUTHLAND ROYALTY A 07  
 WELL LOCATION: 660 FNL 585 FEL 9 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
 km  
 9/25/07  
 will abandon  
 Gray due to  
 low prod  
 rates.

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
 Cemented with: 580 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 8 3/4 Casing Size: 7  
 Cemented with: 1040 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 6 1/4 Casing Size: 5 1/2  
 Cemented with: 730 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surf Method Determined: Calc  
 Total Depth: 8482

Injection Interval

5660 feet to 6616

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

# 5660 - 5760 Tubing Size: 2 3/8 Lining Material: Plastic  
(SQZ)  
 # 5819 - 5950 Type of Packer: Baker Lokset  
(SQZ)  
 # 6118 - 6300 Packer Setting Depth: 5600  
(SQZ)  
 # 6596 - 6616 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_  
(SQZ)

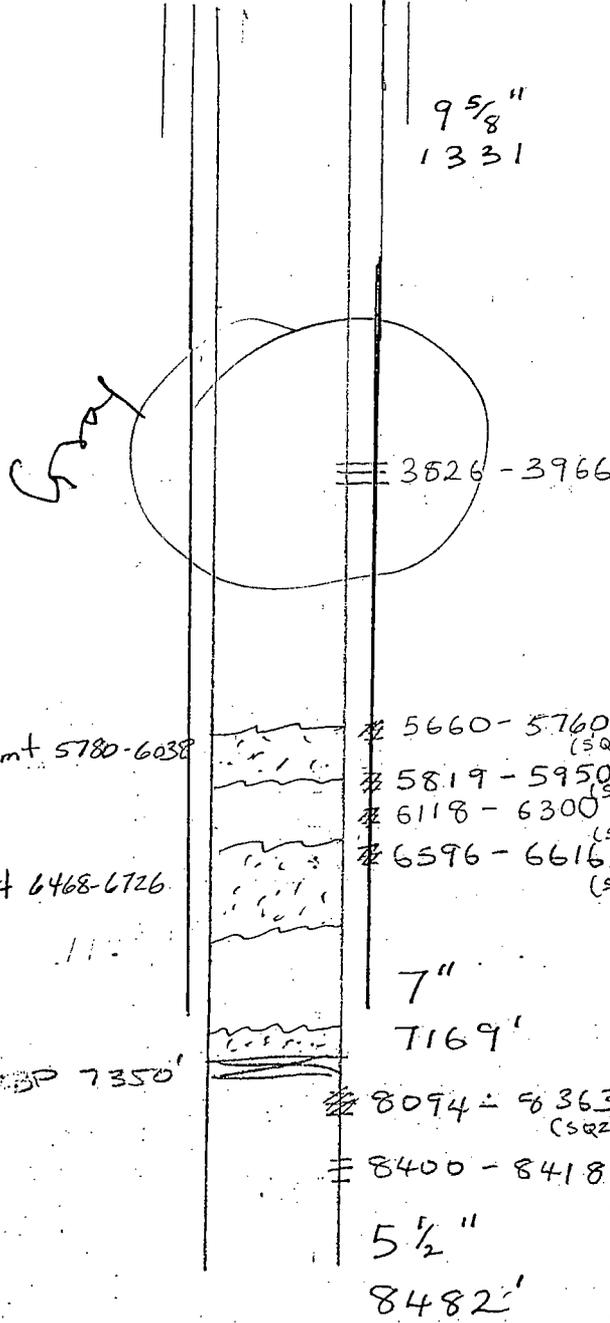
Additional Data

1. Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production

Name of the Injection Formation: Blinbery and Drinkard  
 Name of Field or Pool (if applicable): Blinbery and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')



OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: SOUTHLAND ROYALTY A 08

WELL LOCATION: 660 FSL 1980 FEL 4 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: N/A Casing Size: \_\_\_\_\_

Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Intermediate Casing

Hole Size: 1 2 1/4 Casing Size: 9 5/8

Cemented with: 580 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 2450 Method Determined: Calc

Total Depth: 6703

Injection Interval

5686 feet to 6649

(Perforated) or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

≡ 5686 - 5783

≡ 5837 - 5984

≡ 6229 - 6327

≡ 6617 - 6649

7"  
6703'

B }  
T  
D

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

If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinebry and Drinkard

3. Name of Field or Pool (if applicable): Blinebry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: STATE CTR 12 3

WELL LOCATION: 1980 FNL 660 FNL 16 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
Km  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
Cemented with: 300 sx. or \_\_\_\_\_ ft'  
Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 9 5/8  
Cemented with: 1500 sx. or \_\_\_\_\_ ft'  
Top of Cement: 1560' Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7  
Cemented with: 775 sx. or \_\_\_\_\_ ft'  
Top of Cement: 1900 Method Determined: Calc  
Total Depth: 6660

Injection Interval

5700 feet to 6658'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

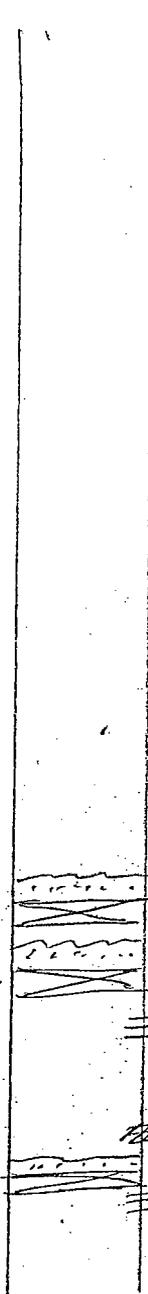
Type of Packer: Baker Lokset

Packer Setting Depth: 5600

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

A. CIBP 3500'  
A. CIBP 3649'  
Remot.  
B  
P 6425'  
D



3721-3774  
5835-5975  
(593 w/ 150 sx)  
6615-6658  
7"  
6660'

1. Is this a new well drilled for injection? Yes  No
- If no, for what purpose was the well originally drilled? Oil Production
2. Name of the Injection Formation: Blinbry and Drinkard
3. Name of Field or Pool (if applicable): Blinbry and Drinkard
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: STATE C TR 12 06 Y

WELL LOCATION: 720 FNL 1986 FWL 16 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

✓  
1/2 m  
9/25/07

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8  
Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Calc

Intermediate Casing

Hole Size: 12 Casing Size: 9 5/8  
Cemented with: 1500 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Calc

Production Casing

Hole Size: 8 3/4 Casing Size: 7  
Cemented with: 1000 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Calc  
Total Depth: 6699

Injection Interval

5602 feet to 6670

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: PLastic

Type of Packer: Baker Lokset

Packer Setting Depth: 5550

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes X No  
If no, for what purpose was the well originally drilled? Oil Production

≡ 5602 - 5862

Name of the Injection Formation: Blinbery and Drinkard

≡ 6185 - 6285<sup>2</sup>

Name of Field or Pool (if applicable): Blinbery and Drinkard

≡ 6578 - 6670

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

7"  
6694'

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

B  
A  
D

OPERATOR: APACHE CORPORATION

WELL NAME & NUMBER: STATE DA Ø2

WELL LOCATION: 1980 FSL 1980 FWL 16 215 37E  
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8

Cemented with: 200 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: Surf Method Determined: Calc.

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 8 5/8

Cemented with: 1860 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 1325 Method Determined: Calc.

Production Casing

Hole Size: 6 3/4 Casing Size: 5 1/2

Cemented with: 500 sx. or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 2850' Method Determined: Calc.

Total Depth: 6654

Injection Interval

5617 feet to 6501

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8 Lining Material: Plastic

Type of Packer: Baker Lakset

Packer Setting Depth: 5550

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

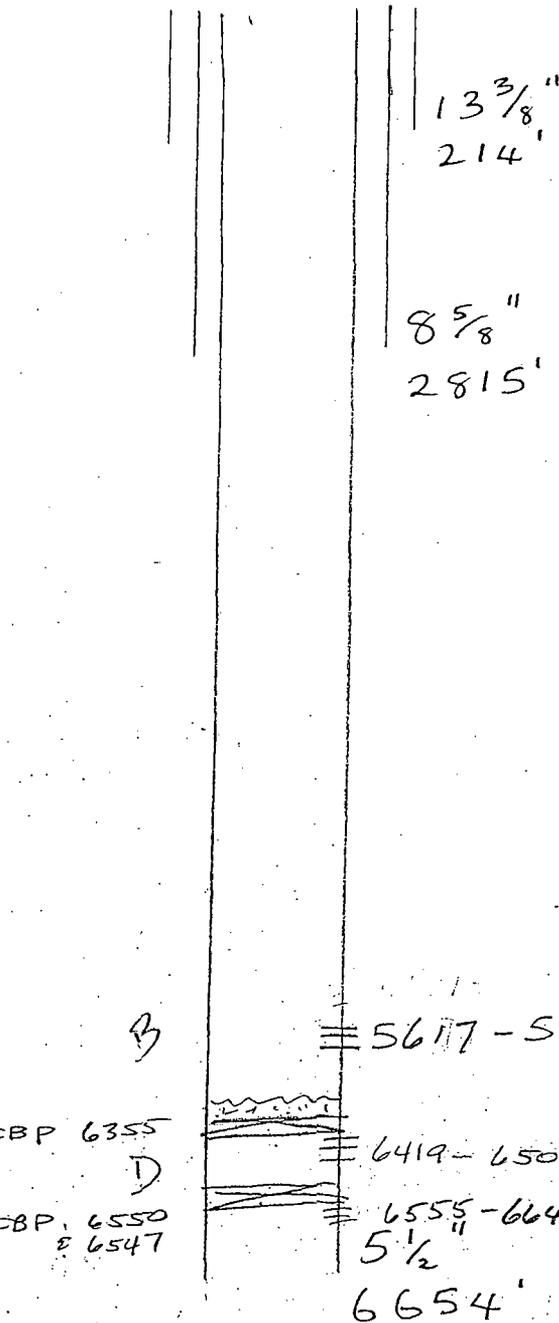
1. Is this a new well drilled for injection? Yes No  
 If no, for what purpose was the well originally drilled? Oil Production

2. Name of the Injection Formation: Blinbry and Drinkard

3. Name of Field or Pool (if applicable): Blinbry and Drinkard

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

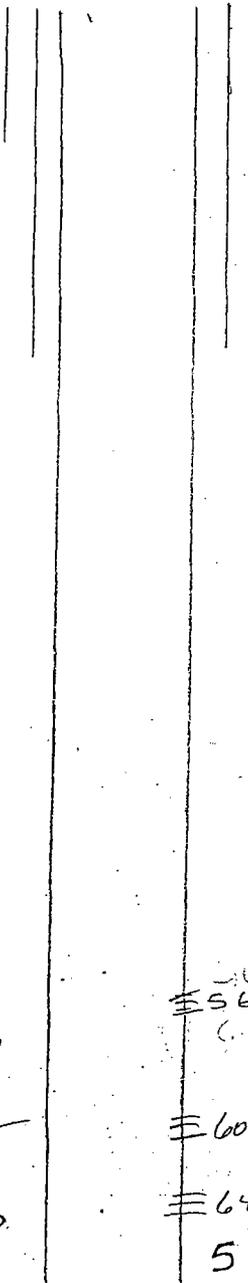


✓  
 Km  
 9/25/07

OPERATOR: APACHE CORPORATION  
 WELL NAME & NUMBER: STATE DA 04  
 WELL LOCATION: 1980 FSL 660 FEL 16 21S 37E  
FOOTAGE LOCATION                      UNIT LETTER                      SECTION                      TOWNSHIP                      RANGE

✓  
 Km  
 9/22/07

WELLBORE SCHEMATIC



13 3/8"  
 213'

8 5/8"  
 2807'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/4                      Casing Size: 13 3/8  
 Cemented with: 200 sx. or \_\_\_\_\_ ft'  
 Top of Cement: Surf                      Method Determined: Calc

Intermediate Casing

Hole Size: 11                      Casing Size: 8 5/8  
 Cemented with: 1550 sx. or \_\_\_\_\_ ft'  
 Top of Cement: 1350                      Method Determined: IS

Production Casing

Hole Size: 7 3/8                      Casing Size: 5 1/2  
 Cemented with: 600 sx. or \_\_\_\_\_ ft'  
 Top of Cement: 1366'                      Method Determined: Calc  
 Total Depth: 6644

Injection Interval

5648 feet to 6641

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 3/8                      Lining Material: Plastic  
 Type of Packer: Baker Lokset  
 Packer Setting Depth: 5600  
 Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

5648-5925 Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Oil Production

6096-6266 2. Name of the Injection Formation: Blinberry and Drinkard

6406-6641 3. Name of Field or Pool (if applicable): Blinberry and Drinkard

5 1/2" 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

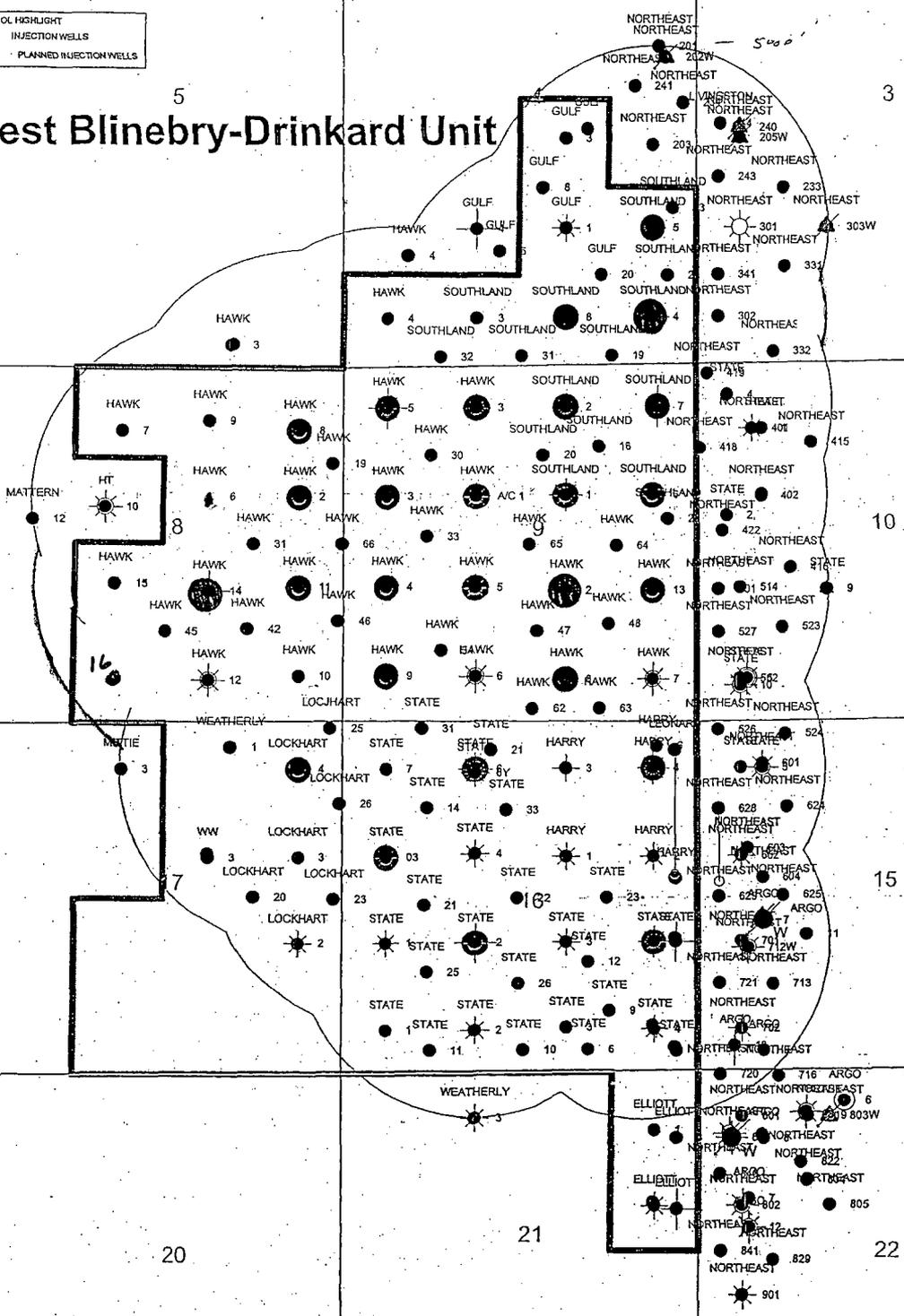
6644' 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above - San Andres (4800')  
Below - Abo (7200')

B  
 T  
 D



SYMBOL HIGHLIGHT  
 ▲ INJECTION WELLS  
 ● PLANNED INJECTION WELLS

# West Blinebry-Drinkard Unit



Inj Wells in Unit

| OPERATOR           | LEASE NAME          | INJ WELL # | LOCATION   | FOOTAGE                    | TYPE | API             | 8 1/2" DYS | TD   | CONSTRUCTION   | TOP OF CEMENT | COMPLETIONS & COMMENTS  |
|--------------------|---------------------|------------|------------|----------------------------|------|-----------------|------------|------|--|---------------|---|
| Apache Corporation | Hewitt Leonard NCTE | 4          | 18 21S 37E | 660 FNL, 660 FEL           | OIL  | 3002508430002   | 07/20/14   | 6899 | 13 3/8 @ 281' CMT WI 300 SX, 9 5/8 @ 280' CMT WI 300 SX, 7 @ 664' CMT WI 700 SX                              | 70            | 12/14/8 6645 - 6981 (Cemented)                                |
| Apache Corporation | Hawk A              | 2          | 8 21S 37E  | 1860 FNL, 660 FEL          | OIL  | 3002508430001   | 03/18/50   | 6720 | 13 3/8 @ 220' CMT WI 200 SX, 9 5/8 @ 285' CMT WI 1000 SX, 7 @ 873' CMT WI 900 SX                             | 2950          | 02/54 add 5553 - 5722 & 6180-8290<br>06/83 5793 - 5888 & frac |
| Apache Corporation | Hawk A              | 3          | 8 21S 37E  | 1860 FNL, 660 FNL          | OIL  | 3002508440001   | 02/11/48   | 6710 | 13 3/8 @ 280' CMT WI 200 SX, 9 5/8 @ 283' CMT WI 550 SX, 7 @ 688' CMT WI 500 SX                              | 1045          | 04/08 chp @ 632' WI 300 sx, add 5785 - 6050 & 6552-6643       |
| Apache Corporation | Hawk A              | 5          | 8 21S 37E  | 660 FNL, 660 FNL           | OIL  | 300250841250001 | 04/7/2/85  | 6600 | 13 3/8 @ 135' CMT WI 500 SX, 5 1/2 @ 680' CMT WI 500 SX  | 1300          | 07/85 5780 - 6010 & 6598-6781                                 |
| Apache Corporation | Hawk A              | 8          | 8 21S 37E  | 660 FNL, 660 FEL           | OIL  | 3002508470000   | 10/02/80   | 6695 | 5 5/8 @ 194' CMT WI 475 SX, 5 1/2 @ 690' CMT WI 795 SX   | Surface       | 01/81 114 & 6302-6722 50.10 6501 5780-6400                    |
| Apache Corporation | Hawk B-1            | 2          | 8 21S 37E  | 1860 FSL, 1860 FEL         | OIL  | 30025084380000  | 12/2/1847  | 6755 | 13 3/8 @ 200' CMT WI 200 SX, 9 5/8 @ 278' CMT WI 500 SX, 7 @ 694' CMT WI 500 SX                              | 2942          | 04/81 chp @ 6003 5673 - 5613 & frac                           |
| Apache Corporation | Hawk B-1            | 3          | 8 21S 37E  | 660 FNL, 1860 FNL          | OIL  | 30025084080001  | 02/19/48   | 6742 | 13 3/8 @ 208' CMT WI 200 SX, 9 5/8 @ 272' CMT WI 500 SX, 7 @ 678' CMT WI 500 SX                              | 3550          | 05/68 5652 - 5693, 6594 - 6670                                |
| Apache Corporation | Hawk B-1            | 4          | 8 21S 37E  | 1860 FSL, 660 FNL          | OIL  | 30025084100000  | 03/28/48   | 6690 | 13 3/8 @ 210' CMT WI 200 SX, 9 5/8 @ 274' CMT WI 500 SX, 7 @ 688' CMT WI 790 SX                              | 2879          | 05/48 6691 - 6693   |
| Apache Corporation | Hawk B-1            | 5          | 8 21S 37E  | 1860 FSL, 1860 FNL         | OIL  | 30025084260003  | 05/7/4/88  | 6707 | 13 3/8 @ 228' CMT WI 200 SX, 9 5/8 @ 276' CMT WI 500 SX, 7 @ 670' CMT WI 840 SX                              | 2875          | 07/85 6698 - 6708   |
| Apache Corporation | Hawk B-1            | 8          | 8 21S 37E  | 660 FSL, 1860 FEL          | OIL  | 30025084080002  | 12/04/48   | 6710 | 13 3/8 @ 212' CMT WI 200 SX, 9 5/8 @ 274' CMT WI 500 SX, 7 @ 678' CMT WI 900 SX                              | 2700          | 01/49 6548 - 6738   |
| Apache Corporation | Hawk B-1            | 9          | 8 21S 37E  | 660 FSL, 660 FNL           | OIL  | 30025084410002  | 09/7/4/49  | 6710 | 13 3/8 @ 200' CMT WI 200 SX, 9 5/8 @ 282' CMT WI 500 SX, 7 @ 678' CMT WI 822 SX                              | 2804          | 04/50 6638 - 6738   |
| Apache Corporation | Hawk B-1            | 11         | 8 21S 37E  | 1860 FSL, 660 FEL          | OIL  | 30025084340001  | 02/08/50   | 6725 | 13 3/8 @ 213' CMT WI 200 SX, 9 5/8 @ 284' CMT WI 750 SX, 7 @ 671' CMT WI 822 SX                              | 3011          | 04/50 6616 - 6756 (502' min 190 SX) & frac                    |
| Apache Corporation | Hawk B-1            | 13         | 8 21S 37E  | 1860 FSL, 660 FEL          | OIL  | 300250170002    | 04/19/63   | 6780 | 9 5/8 @ 1284' CMT WI 400 SX, 5 1/2 @ 670' CMT WI 700 SX  | 3659          | 12/89 6660-6700   |
| Apache Corporation | Hawk B-1            | 14         | 8 21S 37E  | 1860 FSL, 1860 FEL COIL-VI | OIL  | 3002502850001   | 11/25/1988 | 6838 | 8 5/8 @ 1322' cmt wi 650 sx, 5 1/2 @ 6830' cmt wi 655 sx   | Surface       | 12/89 6660-6700   |
| Apache Corporation | Hawk B-1 A/C-1      | 1          | 8 21S 37E  | 1860 FSL, 1860 FNL         | OIL  | 30025084270001  | 10/07/41   | 6675 | 13 3/8 @ 200' CMT WI 200 SX, 9 5/8 @ 276' CMT WI 500 SX, 7 @ 667' CMT WI 500 SX                              | 3550          | 07/85 6691 - 6693   |
| Apache Corporation | Lechtman A-17       | 4          | 17 21S 37E | 660 FNL, 660 FEL           | OIL  | 3002508430002   | 08/28/82   | 6770 | 13 3/8 @ 218' CMT WI 200 SX, 9 5/8 @ 282' CMT WI 600 SX, 7 @ 678' CMT WI 650 SX                              | 3325          | 12/49 chp @ 6688, 6811 - 6897                                 |
| Apache Corporation | Southland Royalty A | 9          | 8 21S 37E  | 1860 FNL, 1860 FEL         | OIL  | 30025084420000  | 07/07/47   | 6668 | 13 3/8 @ 248' CMT WI 200 SX, 9 5/8 @ 280' CMT WI 1500 SX, 7 @ 664' CMT WI 600 SX, 4 1/2 @ 6385' - 7000' WI 7 | 5175          | 09/82 chp @ 4003, 3749 - 3793                                 |
| Apache Corporation | Southland Royalty A | 2          | 8 21S 37E  | 660 FNL, 1860 FEL          | OIL  | 30025084430000  | 01/01/54   | 6750 | 13 3/8 @ 225' CMT WI 300 SX, 9 5/8 @ 140' CMT WI 700 SX, 7 @ 674' CMT WI 3000 SX                             | 2726          | 09/82 chp @ 4003, 3749 - 3793                                 |
| Apache Corp.       | Southland Royalty   | 4          | 8 21S 37E  | 660 FSL, 660 FEL           | OIL  | 3002508390      | 10/12/1951 | 6750 | 13 3/8 @ 305' CMT WI 200 SX, 5 5/8 @ 2305' cmt wi 375 sx, 5 1/2 @ 6748' cmt wi 400 sx                        | 3550          | 07/85 6691 - 6693   |
| Apache Corporation | Southland Royalty A | 5          | 8 21S 37E  | 1860 FSL, 660 FEL          | OIL  | 3002508370000   | 04/07/54   | 6750 | 13 3/8 @ 312' CMT WI 300 SX, 9 5/8 @ 285' CMT WI 300 SX, 5 1/2 @ 6755' CMT WI 180 SX                         | 5475          | 11/82 6540 - 6652   |
| Apache Corporation | Southland Royalty A | 6          | 8 21S 37E  | 1860 FNL, 660 FEL          | OIL  | 3002508440000   | 05/22/53   | 7200 | 13 3/8 @ 257' CMT WI 275 SX, 9 5/8 @ 285' CMT WI 1360 SX, 5 1/2 @ 6662' CMT WI 240 SX                        | 5325          | 08/83 5844 - 6189   |
| Apache Corporation | Southland Royalty A | 7          | 8 21S 37E  | 660 FNL, 665 FEL           | OIL  | 30025084450000  | 05/08/52   | 8485 | 9 5/8 @ 1331' CMT WI 500 SX, 7 @ 716' CMT WI 1040 SX, 5 1/2 @ 4482' CMT WI 730 SX                            | Surface       | 03/62 6318 - 5850 & 6586-6616                                 |
| Apache Corporation | Southland Royalty A | 8          | 8 21S 37E  | 660 FSL, 1860 FEL          | OIL  | 3002508400000   | 12/01/62   | 6709 | 9 5/8 @ 1347' CMT WI 500 SX, 7 @ 6703' CMT WI 500 SX   | 2450          | 05/63 5807-5814 6214-6247, 6117-6248 & frac                   |
| Apache Corporation | State C TR 12       | 3          | 18 21S 37E | 1860 FNL, 660 FNL          | OIL  | 3002508450003   | 07/19/47   | 6660 | 13 3/8 @ 372' CMT WI 300 SX, 9 5/8 @ 280' CMT WI 1500 SX, 7 @ 660' CMT WI 775 SX                             | 1600          | 09/47 6615 - 6639   |
| Apache Corporation | State C TR 12       | 8          | 18 21S 37E | 720 FNL, 1860 FNL          | OIL  | 3002508460002   | 05/09/48   | 6668 | 13 3/8 @ 297' CMT WI 300 SX, 9 5/8 @ 285' CMT WI 1500 SX, 7 @ 668' CMT WI 1000 SX                            | Surface       | 07/85 6698 - 6870   |
| Apache Corporation | State DA            | 2          | 18 21S 37E | 1860 FSL, 1860 FNL         | OIL  | 3002508460001   | 07/01/62   | 6654 | 13 3/8 @ 214' CMT WI 200 SX, 8 5/8 @ 281' CMT WI 1800 SX, 5 1/2 @ 684' CMT WI 500 SX                         | 2850          | 09/57 6600 - 6823   |
| Apache Corporation | State DA            | 4          | 18 21S 37E | 1860 FSL, 660 FEL          | OIL  | 3002508460003   | 10/10/60   | 6644 | 13 3/8 @ 213' CMT WI 200 SX, 9 5/8 @ 280' CMT WI 1550 SX, 5 1/2 @ 664' CMT WI 600 SX                         | 1386          | 09/47 6528 - 6641   |

Prod Wells in Unit

| OPERATOR NAME      | LEA NAME            | WELL RUN      | LOCATION | FOOTAGE            | TYPE | API             | SPUD DATE  | TD   | CONSTRUCTION   | TOP OF CEMENT                                 | COMPLETIONS & COMMENTS |
|--------------------|---------------------|---------------|----------|--------------------|------|-----------------|------------|------|--|---|------------------------|
| Apache Corporation | State Lead 15       | 318 215 37E   |          | 660 FSL, 1880 FEL  | OIL  | 30025069220003  | 01/23/06   | 6660 | @ 215 CMT W/ 350 SX, 8 5/8 @ 2078 CMT W/ 1600 SX, 5 1/2 @ 6557 CMT W/ 500 SX           | 4425 @ 6647 6540 - 6633                       |                        |
| Apache Corporation | Gulf Hill           | 34 215 37E    |          | 3300 FSL, 1880 FEL | OIL  | 30025040430000  | 4/7/08     | 6610 | @ 114 CMT W/ 175 SX, 8 5/8 @ 2954 CMT W/ 1300 SX, 5 1/2 @ 5900 CMT W/ 700 SX           | Surface @ 6659 5740 - 5727 SOZ                |                        |
| Apache Corporation | Gulf Hill           | 14 215 37E    |          | 3480 FSL, 1650 FEL | OIL  | 30025048110000  | 11/02/00   | 6530 | @ 1257 CMT W/ 891 SX, 5 1/2 @ 6907 CMT W/ 1050 SX                                      | 1759 3375 - 5750 & frac                       |                        |
| Apache Corporation | Gulf Hill           | 20 215 37E    |          | 1330 FSL, 1440 FEL | OIL  | 30025033230000  | 11/20/07   | 6620 | @ 1257 CMT W/ 891 SX, 5 1/2 @ 6907 CMT W/ 1050 SX                                      | 1759 3375 - 5750 & frac                       |                        |
| Chengon USA        | Herry Leonard ACT E | 210 215 37E   |          | 1890 FSL, 180 FEL  | OIL  | 30025069230000  | 2/18/04    | 6614 | @ 301 CMT W/ 200 SX, 9 5/8 @ 2932 CMT W/ 1300 SX, 7 @ 6547 CMT W/ 700 SX               | Surface @ 6148 6547 - 6614 (Openhole)         |                        |
| Apache Corporation | Hawk A              | 44 215 37E    |          | 660 FSL, 660 FVL   | OIL  | 30025043300000  | 10/9/02    | 6778 | @ 5/8 @ 1285 CMT W/ 600 SX, 5 1/2 @ 6778 CMT W/ 700 SX                                 | Surface @ 6182 5928 - 6660                    |                        |
| Apache Corporation | Hawk A              | 9 215 37E     |          | 1880 FSL, 1880 FEL | OIL  | 300253218710001 | 02/07/06   | 6618 | @ 5/8 @ 1330 CMT W/ 600 SX, 5 1/2 @ 6819 CMT W/ 640 SX                                 | 3125 @ 6686 6978 - 6724                       |                        |
| Apache Corporation | Hawk A              | 7 215 37E     |          | 660 FSL, 1880 FVL  | OIL  | 30025326250000  | 8/27/07    | 6680 | @ 5/8 @ 1335 CMT W/ 612 SX, 5 1/2 @ 6848 CMT W/ 1700 SX                                | 1266 @ 6636 5078-5974                         |                        |
| Apache Corporation | Hawk A              | 8 215 37E     |          | 840 FSL, 1880 FEL  | OIL  | 30025427580000  | 12/15/08   | 6650 | @ 5/8 @ 1374 CMT W/ 860 SX, 5 1/2 @ 6950 CMT W/ 1575 SX                                | Surface @ 6261 601 @ 6197 5885 - 6038 & frac  |                        |
| Apache Corporation | Hawk A              | 18 215 37E    |          | 1420 FSL, 150 FEL  | OIL  | 30025343300000  | 8/20/03    | 6650 | @ 5/8 @ 1388 CMT W/ 700 SX, 5 1/2 @ 6940 CMT W/ 1380 SX                                | Surface @ 6183 5738 - 5928 & frac             |                        |
| Apache Corporation | Hawk A              | 30 215 37E    |          | 1910 FSL, 1310 FVL | OIL  | 30025319400000  | 11/18/07   | 6658 | @ 5/8 @ 1287 CMT W/ 600 SX, 5 1/2 @ 6945 CMT W/ 1380 SX                                | Surface @ 6103 5975 - 6735 & frac             |                        |
| Apache Corporation | Hawk A              | 16 215 37E    |          | 2630 FSL, 1930 FEL | OIL  | 30025381980000  | 3/17/00    | 6658 | @ 5/8 @ 1307 CMT W/ 575 SX, 5 1/2 @ 7005 CMT W/ 1200 SX                                | 357 @ 6307 5648 - 6714 & frac                 |                        |
| Apache Corporation | Hawk B 1            | 18 215 37E    |          | 660 FSL, 660 FVL   | OIL  | 30025381980000  | 3/17/00    | 6658 | @ 5/8 @ 1315 CMT W/ 575 SX, 5 1/2 @ 6945 CMT W/ 1150 SX                                | 100 @ 6307 5740 - 6714 & frac                 |                        |
| Apache Corporation | Hawk B 1            | 18 215 37E    |          | 660 FSL, 660 FVL   | OIL  | 30025064390003  | 8/31/04    | 6750 | @ 13 3/8 @ 232 CMT W/ 200 SX, 8 5/8 @ 2778 CMT W/ 500 SX, 7 @ 6723 CMT W/ 800 SX       | 230 @ 6307 5740 - 6714 & frac                 |                        |
| Apache Corporation | Hawk B 1            | 10 215 37E    |          | 660 FSL, 660 FVL   | OIL  | 30025064330000  | 11/12/04   | 6758 | @ 13 3/8 @ 229 CMT W/ 250 SX, 9 5/8 @ 2818 CMT W/ 1100 SX, 7 @ 6753 CMT W/ 625 SX      | Surface @ 6160 6200 - 6300                    |                        |
| Apache Corporation | Hawk B 1            | 18 215 37E    |          | 2093 FSL, 1887 FVL | GAS  | 30025064330000  | 5/26/07    | 6600 | @ 5/8 @ 1390 CMT W/ 600 SX, 5 1/2 @ 6880 CMT W/ 1600 SX                                | 1163 6492 - 6718                              |                        |
| Apache Corporation | Hawk B 1            | 31 215 37E    |          | 1040 FSL, 1470 FVL | OIL  | 30025064340000  | 6/20/08    | 6600 | @ 5/8 @ 1390 CMT W/ 600 SX, 5 1/2 @ 6880 CMT W/ 1250 SX                                | 2688 @ 6125 6690 - 6708                       |                        |
| Apache Corporation | Hawk B 1            | 41 215 37E    |          | 1385 FSL, 1420 FEL | OIL  | 30025379200000  | 9/10/03    | 7283 | @ 5/8 @ 1420 CMT W/ 650 SX, 5 1/2 @ 7385 CMT W/ 1300 SX                                | Surface @ 6103 5975 - 6735 & frac             |                        |
| Apache Corporation | Hawk B 1            | 41 215 37E    |          | 1475 FSL, 80 FEL   | OIL  | 30025374100000  | 7/23/00    | 6650 | @ 5/8 @ 1316 CMT W/ 550 SX, 5 1/2 @ 6907 CMT W/ 1150 SX                                | 9005 5870 - 5734 & frac                       |                        |
| Apache Corporation | Hawk B 1            | 41 215 37E    |          | 1430 FSL, 2400 FEL | OIL  | 30025374100000  | 7/23/00    | 6650 | @ 5/8 @ 1316 CMT W/ 550 SX, 5 1/2 @ 6907 CMT W/ 1150 SX                                | Surface @ 6068 5732 - 6628 & frac             |                        |
| Apache Corporation | Hawk B 1            | 49 215 37E    |          | 1440 FSL, 1332 FEL | OIL  | 30025374400000  | 8/23/06    | 6650 | @ 5/8 @ 1288 CMT W/ 600 SX, 5 1/2 @ 6930 CMT W/ 1450 SX                                | Surface @ 6106 5972 - 6114 & frac             |                        |
| Apache Corporation | Hawk B 1            | 8 215 37E     |          | 190 FSL, 1481 FEL  | OIL  | 30025381980000  | 3/27/00    | 6658 | @ 5/8 @ 1307 CMT W/ 575 SX, 5 1/2 @ 6945 CMT W/ 1150 SX                                | 227 @ 6407 5511 - 6696 & frac                 |                        |
| Apache Corporation | Hawk B 1            | 18 215 37E    |          | 2630 FSL, 1930 FEL | OIL  | 30025381980000  | 4/18/00    | 6658 | @ 5/8 @ 1307 CMT W/ 575 SX, 5 1/2 @ 6945 CMT W/ 1150 SX                                | 120 @ 6307 5740 - 6714 & frac                 |                        |
| Apache Corporation | Hawk B 1 (WSV)      | 18 215 37E    |          | 660 FSL, 1880 FVL  | OIL  | 30025068610000  | 5/13/06    | 6625 | @ 5/8 @ 1375 CMT W/ 485 SX, 7 @ 6822 CMT W/ 1750 SX                                    | 200 @ 6307 5740 - 6714 & frac                 |                        |
| Apache Corporation | Lechhart A 7        | 317 215 37E   |          | 1890 FSL, 660 FEL  | OIL  | 30025068760000  | 7/7/04     | 6645 | @ 13 3/8 @ 222 CMT W/ 200SX, 9 5/8 @ 2520 CMT W/ 1900 SX, 7 @ 6687 CMT W/ 500 SX       | Surface @ 6260 5662 - 5877 6533 - 6700 & frac |                        |
| Apache Corporation | Lechhart A 7        | 20 17 215 37E |          | 2630 FSL, 1310 FEL | OIL  | 30025384110000  | 7/14/03    | 6655 | @ 5/8 @ 1295 CMT W/ 650 SX, 5 1/2 @ 6900 CMT W/ 1275 SX                                | 9669 61 @ 4350 3744 - 3782                    |                        |
| Apache Corporation | Lechhart A 7        | 23 17 215 37E |          | 2630 FSL, 130 FEL  | OIL  | 30025384200000  | 2/22/00    | 6625 | @ 5/8 @ 1295 CMT W/ 650 SX, 5 1/2 @ 6900 CMT W/ 1350 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Lechhart A 7        | 25 17 215 37E |          | 110 FSL, 40 FEL    | OIL  | 30025384200000  | 3/8/2007   | 6625 | @ 5/8 @ 1307 CMT W/ 600 SX, 5 1/2 @ 6900 CMT W/ 1100 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Southland Royalty A | 34 215 37E    |          | 660 FSL, 1650 FVL  | OIL  | 30025068360000  | 3/18/04    | 6730 | @ 18 @ 212 CMT W/ 300 SX, 10 3/4 @ 1544 CMT W/ 116 SX, 5 1/2 @ 6775 CMT W/ 800 SX      | 1275 6481 - 6602                              |                        |
| Apache Corporation | Southland Royalty A | 16 215 37E    |          | 1310 FSL, 1470 FEL | OIL  | 30025384300000  | 8/22/00    | 6600 | @ 5/8 @ 1295 CMT W/ 600 SX, 5 1/2 @ 6900 CMT W/ 1275 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Southland Royalty A | 20 215 37E    |          | 130 FSL, 1270 FEL  | OIL  | 30025384300000  | 3/7/2003   | 6600 | @ 5/8 @ 1285 CMT W/ 700 SX, 5 1/2 @ 6900 CMT W/ 1100 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Southland Royalty A | 21 215 37E    |          | 1310 FSL, 430 FEL  | OIL  | 30025384300000  | 3/4/2005   | 6600 | @ 5/8 @ 1295 CMT W/ 600 SX, 5 1/2 @ 6900 CMT W/ 1100 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Southland Royalty A | 23 215 37E    |          | 2310 FSL, 350 FEL  | OIL  | 30025384300000  | 10/17/2005 | 6600 | @ 5/8 @ 1295 CMT W/ 600 SX, 5 1/2 @ 6900 CMT W/ 1100 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | Southland Royalty A | 34 215 37E    |          | 145 FSL, 2630 FEL  | OIL  | 30025384300000  | 2/25/2007  | 6600 | @ 5/8 @ 1295 CMT W/ 600 SX, 5 1/2 @ 6900 CMT W/ 1100 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | State C, TR 12      | 41 215 37E    |          | 1240 FSL, 1270 FVL | OIL  | 30025384300000  | 7/23/2003  | 6650 | @ 5/8 @ 1276 CMT W/ 550 SX, 5 1/2 @ 6950 CMT W/ 1275 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | State C, TR 12      | 41 215 37E    |          | 1960 FSL, 1880 FVL | OIL  | 30025384300000  | 8/17/1941  | 6657 | @ 13 3/8 @ 316 CMT W/ 325 SX, 9 5/8 @ 2800 CMT W/ 1500 SX, 7 @ 6657 CMT W/ 450 SX      | 0454 5650 - 6010                              |                        |
| Apache Corporation | State C, TR 12      | 71 215 37E    |          | 660 FSL, 660 FVL   | OIL  | 30025068230000  | 6/7/1949   | 6680 | @ 13 3/8 @ 325 CMT W/ 300 SX, 9 5/8 @ 2838 CMT W/ 1900 SX, 5 1/2 @ 6622 CMT W/ 1300 SX | 0282 6432 - 6608 5650-6268 (SOZ)              |                        |
| Apache Corporation | State C, TR 12      | 31 215 37E    |          | 119 FSL, 1195 FVL  | OIL  | 30025382970000  | 4/27/2007  | 6645 | @ 5/8 @ 1288 CMT W/ 575 SX, 5 1/2 @ 6845 CMT W/ 1600 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | State DA            | 11 215 37E    |          | 1860 FSL, 600 FVL  | OIL  | 30025382980000  | 5/12/1947  | 6696 | @ 13 3/8 @ 216 CMT W/ 200 SX, 5 1/2 @ 6892 CMT W/ 1300 SX                              | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | State DA            | 31 215 37E    |          | 1690 FSL, 1880 FEL | OIL  | 30025068180000  | 7/4/1947   | 6650 | @ 13 3/8 @ 225 CMT W/ 200 SX, 9 5/8 @ 2807 CMT W/ 1900 SX, 5 1/2 @ 6650 CMT W/ 500 SX  | 0616 5652 - 3594 & frac                       |                        |
| Apache Corporation | State DA            | 12 215 37E    |          | 1650 FSL, 1650 FEL | OIL  | 30025372010000  | 8/12/2005  | 7310 | @ 5/8 @ 1288 CMT W/ 600 SX, 5 1/2 @ 7310 CMT W/ 1600 SX                                | Surface @ 6104 5664 - 6888 & frac             |                        |
| Apache Corporation | State DA            | 21 215 37E    |          | 2530 FSL, 1240 FVL | OIL  | 30025382220000  | 1/19/2007  | 6675 | @ 5/8 @ 1327 CMT W/ 575 SX, 5 1/2 @ 6875 CMT W/ 1425 SX                                | 066 CIEP @ 6368 6160 - 585 - 5875             |                        |

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|                    |                   |                              |                    |        |                |            |  |   |
|--------------------|-------------------|------------------------------|--------------------|--------|----------------|------------|--|---|
| Apache Corporation | State Land 15     | 22 1/8 21S 37E               | 2630 FSL, 2810 FVL | OIL    | 30025582300000 | 2/28/2007  | 070318 5/8 @ 1255' CMT W/ 600 SX, 5 1/2 @ 8703' CMT W/ 1200 SX                               | Surface 02007 5587 - 6648 & frac  |
| Apache Corporation | State DA          | 23 1/8 21S 37E               | 2030 FSL, 1860 FVL | OIL    | 30025582310000 | 4/7/2007   | 6775 8 5/8 @ 1285' CMT W/ 1650 SX, 5 1/2 @ 8875' CMT W/ 1250 SX                              | 320 04007 5521 - 6684 & frac  |
| Apache Corporation | State DA          | 25 1/8 21S 37E               | 1510 FSL, 1280 FVL | OIL    | 30025584100000 | 6/23/2007  | 6850 8 5/8 @ 1273' CMT W/ 1575 SX, 5 1/2 @ 8850' CMT W/ 1300 SX                              | Surface 07007 5910 - 6970 & frac  |
| Apache Corporation | State DA          | 28 1/8 21S 37E               | 1330 FSL, 2850 FVL | OIL    | 30025584150000 | 7/3/2007   | 6835 8 5/8 @ 1285' CMT W/ 1550 SX, 5 1/2 @ 8835' CMT W/ 1400 SX                              | Surface 07007 5715 - 6612 & frac  |
| Apache Corporation | State Land 15     | 4 1/8 21S 37E                | 690 FSL, 690 FVL   | OIL    | 30025086130001 | 6/22/1947  | 6655 13 3/8 @ 219' CMT W/ 250 SX, 8 5/8 @ 2884' CMT W/ 400 SX                                | 1282 07047 6555 - 6640  |
| Apache Corporation | State Land 15     | 5 1/8 21S 37E                | 330 FSL, 330 FVL   | OIL    | 30025086140023 | 4/13/1952  | 625 13 3/8 @ 233' CMT W/ 250 SX, 8 5/8 @ 2881' CMT W/ 1500 SX, 5 1/2 @ 8255' CMT W/ 400 SX   | 0509 5583 - 5789 & frac<br>0702 6100 - 6200<br>0702 6100 - 6200<br>1105 5600 - 6200 |
| Apache Corporation | State Land 15     | 6 1/8 21S 37E                | 330 FSL, 1650 FVL  | OIL    | 30025083110000 | 6/18/1963  | 7300 13 3/8 @ 252' CMT W/ 300 SX, 8 5/8 @ 2890' CMT W/ 1665 SX, 5 1/2 @ 7288' CMT W/ 1005 SX | 1886 10883 6808 - 7052  |
| Apache Corporation | State Land 15     | 6 1/8 21S 37E                | 910 FSL, 1300 FVL  | OIL    | 30025755500000 | 12/1/2005  | 728 18 5/8 @ 1197' CMT W/ 1575 SX, 5 1/2 @ 7284' CMT W/ 1150 SX                              | 04006 6038 - 6275 & frac  |
| Apache Corporation | State Land 15     | 10 1/8 21S 37E               | 330 FSL, 2810 FVL  | OIL    | 30025755900000 | 12/14/2005 | 7102 8 5/8 @ 1255' CMT W/ 1550 SX, 5 1/2 @ 7102' CMT W/ 1250 SX                              | Surface 04008 5586 - 6611 & frac  |
| Apache Corporation | State Land 15     | 11 1/8 21S 37E               | 330 FSL, 1330 FVL  | OIL    | 30025757100000 | 5/25/2006  | 7290 8 5/8 @ 1207' CMT W/ 1500 SX, 5 1/2 @ 7290' CMT W/ 1050 SX                              | Surface 08009 5932 - 6892 & frac  |
| Apache Corporation | WV Weatherly      | 3 17 21S 37E                 | 1890 FVL, 1890 FVL | OIL    | 30025084800003 | 10/14/1947 | 6655 10 3/4 @ 363' CMT W/ 300 SX, 7 5/8 @ 2873' CMT W/ 2900 SX, 5 1/2 @ 6655' CMT W/ 1100 SX | 2820 174 558 650<br>0450 Decem 22 6635 - 6977                                       |
| CAMPBELL & HEDRICK | WEATHERLY         | 1 17 21S 37E NE A330 FNL     | 1650 FEL CONGR     | OIL-WO | 30025084800001 | 11/16/1951 | 6641 13 3/8 @ 232' cmt w/ 250 sx, 8 5/8 @ 2785' cmt w/ 1100 sx, 5 1/2 @ 6513' cmt w/ 200 sx  | 08487 BP @ 8480, 6268 - 6438<br>3725 - 3787 SO2                                     |
| ARACHE CORP        | SOUTHLAND ROYALTY | 2 1/8 21S 37E SE SE 2010 FNL | 490 FEL CONGR      | OIL    | 30025728000000 | 6/7/2005   | 7280 8 5/8 @ 1292' cmt w/ 625 5 1/2 @ 7288' cmt w/ 1450                                      | 03004 5655 - 5604 & frac, 6288 - 6600 SO2   |
| ARACHE CORP        | SOUP HILL         | 8 1/4 21S 37E NW N6397 FBL   | 2310 FEL CONGR     | OIL    | 30025728000000 | 7/12/2005  | 7280 8 5/8 @ 1292' cmt w/ 625 5 1/2 @ 7288' cmt w/ 1450                                      | 03004 5655 - 5604 & frac, 6288 - 6600 SO2   |





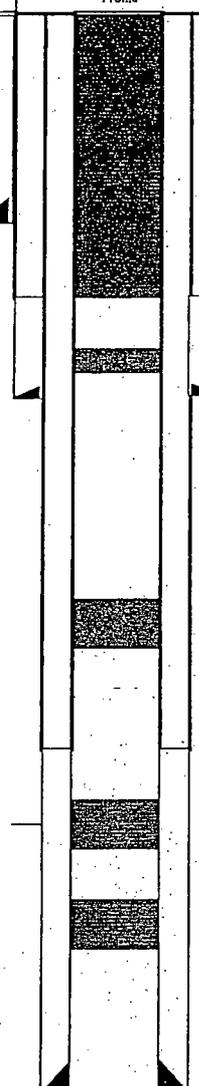
APACHE CORP.

Plug and Abandoned Well Summary

Lease: NE Drinkard Unit  
 Well : 603  
 Area: Lea  
 Res: Blinebry, Abo

Location : 3390' FSL, 4520' FEL, Sec.15 T-21S R-37E  
 BHL: 3390' FSL, 4520' FEL, Sec.15 T-21S R-37E  
 Start Date 11/13/1993  
 End Date 11/22/1993

API 30025099130000  
 TD 8182'  
 Elevation: 3445'  
 RKB:

| Directional | Sands / Markers                  | Depth         |  | Completion Info   | Casing Profile   | Inc deg | Hole Size | Casing Details  | Mud Wt & Type | Max. Dogleg Severity  |  |  |
|-------------|----------------------------------|---------------|--|-------------------|--|---------|-----------|---|---------------|---|--|--|
|             |                                  | TVD           |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 0'            |  | Cement to Surface |  | 0°      | 17 1/4"   | Surface Casing<br>13 3/8"<br>CMT W/ 325 SX<br>Circ to Surface |               |   |  |  |
|             |                                  | 296'          |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 750'          |  | CICR              |  |         |           |   | 11 3/4"       | Intermediate Casing<br>8 5/8"<br>CMT W/ 500 SX<br>TOC = 1193' |  |  |
|             |                                  | 2739'         |  | CICR              |  |         |           |   |               |   |  |  |
|             |                                  | 2802'         |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 2818'         |  |                   |  |         |           |   |               |   |  |  |
|             |                                  |               |  |                   |  |         |           |   |               |   |  |  |
|             | CSG LK BTW<br>4934' - 4965'      | 4715'         |  |                   |  |         |           |   |               |   |  |  |
|             | SQZ w / 200 sx                   | 4841'         |  | CICR              |  |         |           |   |               |   |  |  |
|             |                                  |               |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 5466'         |  |                   |  |         |           |   |               |   |  |  |
|             | Blinebry Perfs<br>SQZ w / 250 sx | 5651'         |  | CICR              |  |         |           |   |               |   |  |  |
|             |                                  |               |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 6696'         |  |                   |  |         |           |   |               |   |  |  |
|             |                                  | 6731'         |  | CIBP              |  |         |           |   |               |   |  |  |
|             |                                  |               |  |                   |  |         |           |   |               |   |  |  |
|             | Abo Perfs                        | 6723' - 7231' |  |                   |  |         | 7 7/8"    | Production Casing<br>5 1/2"<br>CMT W/ 400 SX<br>TOC = 5452'   |               |   |  |  |
|             | Casting Shoe                     | 8030'         |  |                   |  |         |           |   |               |   |  |  |

Note: Not to Scale

APACHE CORP.

Plug and Abandoned Well Summary

Lease: NE Drinkard Unit  
 Well : 205  
 Area: Lea  
 Res: Blinebry, Tubb, Drinkard

Location : 3300' FSL, 660' FSL, Sec. 3 T-21S R-37E  
 BHL: 3300' FSL, 660' FSL, Sec. 3 T-21S R-37E  
 Start Date  
 End Date 2/22/1996

API 30025065210000  
 TD 6730'  
 Elevation:  
 RKB:

| Directional | Sands / Markers | Depth         | Completion                              | Casing Profile | Inc deg | Hole Size | Casing Details  | Mud Wt & Type | Max. Dogleg Severity |  |                                   |
|-------------|-----------------|---------------|---|----------------|---------|-----------|---|---------------|----------------------|--|-----------------------------------|
|             |                 | TVD           | Info                                    |                |         |           |   |               |                      |  |                                   |
|             |                 |               | Fill 2 7/8" CSG With Cement to Surface. |                | 0°      |           | Surface Casing<br>9 5/8"  |               |                      |  |                                   |
|             |                 | 271'          |   |                |         |           |   |               |                      |  | CMT W / 250 SX<br>Circ to Surface |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             | Blinebry Perfs  | 5719' - 5834' | SQZ 04/83                               |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             | Tubb Perfs      | 6133' - 6363' |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             | Drinkard Perfs  | 6519' - 6635' | SQZ 04/83                               |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           |   |               |                      |  |                                   |
|             | Casting Shoe    | 6724'         |   |                |         |           |   |               |                      |  |                                   |
|             |                 |               |   |                |         |           | Production Casing<br>2 7/8"<br>CMT W / 325 SX<br>TOC = 5452' (Calc) |               |                      |  |                                   |

Note: Not to Scale

APACHE CORP.

Plug and Abandoned Well Summary

Lease: H.T. Mattern NCT-C  
 Well: 12  
 Area: Lea  
 Res: Drinkard

Location: 2310' FNL, 660' FWL, Sec. 8 T-21S R-37E  
 BHL: 2310' FNL, 660' FWL, Sec. 8 T-21S R-37E  
 Start Date  
 End Date 11/19/2002

API 30025255470000  
 TD 6800'  
 Elevation: 3,476'  
 RKB:

| Directional | Sands / Markers | Depth         | Completion                | Casing Profile | Inc deg | Hole Size | Casing Details   | Mud Wt. & Type | Max. Dogleg Severity |
|-------------|-----------------|---------------|---------------------------|----------------|---------|-----------|--|----------------|----------------------|
|             |                 | TVD           | Info                      |                |         |           |  |                |                      |
|             |                 | 0'            | 40 sack<br>Cement<br>Plug |                | 0°      |           | Surface Casing<br>8 5/8"<br>CMT W / 550 SX<br>Circ to Surface        |                |                      |
|             |                 | 300'          |                           |                |         |           |  |                |                      |
|             |                 | 354'          |                           |                |         |           |  |                |                      |
|             |                 | 1088'         | Cement<br>Plug, 35 SX     |                |         |           |  |                |                      |
|             |                 | 1400'         |                           |                |         |           |  |                |                      |
|             |                 | 2400'         | Cement<br>Plug, 25 SX     |                |         |           |  |                |                      |
|             |                 | 2600'         |                           |                |         |           |  |                |                      |
|             |                 | 3200'         | Cement<br>Plug, 25 SX     |                |         |           |  |                |                      |
|             |                 | 3400'         |                           |                |         |           |  |                |                      |
|             |                 | 5276'         | CIBP<br>25 SX             |                |         |           |  |                |                      |
|             |                 | 5506'         |                           |                |         |           |  |                |                      |
|             | Drinkard Perfs  | 6567' - 6740' |                           |                |         |           | Production<br>Casing<br>5 1/2"<br>CMT W / 1600 SX<br>CIRC TO SURFACE |                |                      |
|             | Casting Shoe    | 6800'         |                           |                |         |           |  |                |                      |

Note: Not to Scale

APACHE CORP.

Plug and Abandoned Well Summary

Lease: Gulf Hill  
 Well : 4  
 Area: Lea  
 Res: Blinebry, Drinkard, Abo

Location : 1980' FSL, 1980' FWL, Sec. 4 T-21S R-37E  
 BHL: 1980' FSL, 1980' FWL, Sec. 4 T-21S R-37E  
 Start Date  
 End Date 7/19/1974

API 30025127590000  
 TD 7450'  
 Elevation: 3,476'  
 RKB:

| Directional | Sands / Markers | Depth TVD     | Completion Info     | Casing Profile | Inc deg | Hole Size | Casing Details   | Mud WL & Type   | Max. Dogleg Severity |  |
|-------------|-----------------|---------------|---------------------|----------------|---------|-----------|--|---|----------------------|--|
|             |                 | 0'            | 10 sack Cement Plug |                | 0°      |           | Surface Casing<br>16"<br>CMT W / 330 SX<br>Circ to Surface |   |                      |  |
|             |                 | 279'          |                     |                |         |           |  |   |                      |  |
|             |                 | 2840'         | Cement Plug         |                |         |           |  | Intermediate Casing<br>10 3/4"<br>CMT W / 1344 SX<br>TOC = 400' |                      |  |
|             |                 | 2940'         |                     |                |         |           |  |   |                      |  |
|             |                 | 3633'         | Cement Plug         |                |         |           |  |   |                      |  |
|             |                 | 3733'         |                     |                |         |           |  |   |                      |  |
|             |                 | 3751'         | Cement Plug         |                |         |           |  |   |                      |  |
|             |                 | 3951'         |                     |                |         |           |  |   |                      |  |
|             |                 | 5117'         | Cement Plug         |                |         |           |  |   |                      |  |
|             |                 | 5717'         |                     |                |         |           |  |   |                      |  |
|             | Blinebry Perfs  | 5717' - 5841' |                     |                |         |           |  |   |                      |  |
|             |                 | 5996'         | Cement Plug         |                |         |           |  |   |                      |  |
|             |                 | 6596'         |                     |                |         |           |  |   |                      |  |
|             | Drinkard Perfs  | (6596'-6799') |                     |                |         |           |  |   |                      |  |
|             |                 | 6420'         | Cement Plug         |                |         |           |  | Production Casing<br>2 7/8"<br>CMT W / 900 SX<br>TOC = 3744'    |                      |  |
|             |                 | 7020'         |                     |                |         |           |  |   |                      |  |
|             | Abo Perfs       | 7020' - 7096' |                     |                |         |           |  |   |                      |  |
|             | Casting Shoe    | 7215'         |                     |                |         |           |  |   |                      |  |

Note: Not to Scale

40

|                        |  |  |
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| LAND OFFICE            |  |  |
| OPERATOR               |  |  |

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
Supersedes Old  
C-102 and C-103  
Effective 1-1-65

5a. Indicate Type of Lease  
State  Fee

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

|   |  |
|---|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>  | 7. Unit Agreement Name   |
| 2. Name of Operator<br>Summit Energy, Inc.  | 8. Farm or Lease Name<br>Gulf Hill                                 |
| 3. Address of Operator<br>112 North First, Artesia, N.M. 88210  | 9. Well No.<br>4   |
| 4. Location of Well!<br>UNIT LETTER <u>S</u> <u>1980</u> FEET FROM THE <u>West</u> LINE AND <u>1980</u> FEET FROM<br><u>South</u> THE <u>4</u> LINE, SECTION <u>21S</u> TOWNSHIP <u>37E</u> RANGE <u>4</u> T.M.P.M. | 10. Field and Pool, or Wildcat<br>Drinkard - Blinebry<br>Wantz Abo |
| 15. Elevation (Show whether DF, RT, GR, etc.)<br>3476 GR  | 12. County<br>Lea  |

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data  
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

|  |   |   |  |
|--|---|---|--|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/> | REMEDIAL WORK <input type="checkbox"/>              | ALTERING CASING <input type="checkbox"/>                 |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>     | COMMENCE DRILLING OPNS. <input type="checkbox"/>    | PLUG AND ABANDONMENT <input checked="" type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/>  | OTHER <input type="checkbox"/>            | CASING TEST AND CEMENT JOB <input type="checkbox"/> | OTHER <input type="checkbox"/>                           |

17. 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.

A 600' Cement Plug was spotted over Wantz Abo Perfs, from 7020 back to 6420.  
A 600' Cement Plug was spotted over Drinkard Perfs, from 6596 back to 5996.  
A 600' Cement Plug was spotted over Blinebry Perfs, from 5717 back to 5117.  
A 200' Cement Plug was spotted over perfs from 3951 back to 3751.  
A 100' Cement Plug was spotted over 2 7/8" Tubing Stubs from 3733 back to 3633.  
A 100' Cement Plug was spotted in and out of 10 3/4" casing from 2940 back to 2840.  
A 10 sack cement plug was spotted on surface with dry hole marker.  
Location is cleared and ready for inspection.

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

SIGNED Paul White TITLE Division Engineer DATE 7-19-74

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE FEB 12/5

CONDITIONS OF APPROVAL, IF ANY:

41

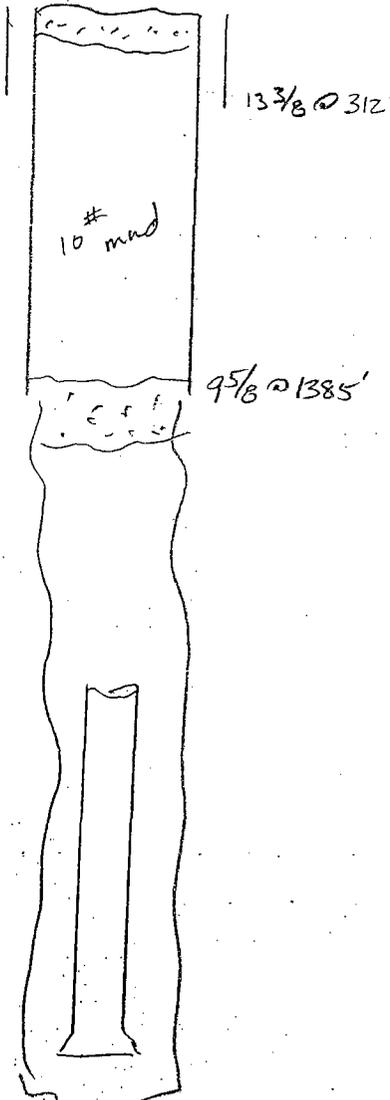
D&A  
INJECTION WELL DATA SHEET

OPERATOR: Stanolind Oil

WELL NAME & NUMBER: State C Tract 12 #6

WELL LOCATION: 660 FNL, 1980 FNL C 16 21S 37E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC



TD = 5762'

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: \_\_\_\_\_ Casing Size: 13 3/8  
Cemented with: 300 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Circ

Intermediate Casing

Hole Size: \_\_\_\_\_ Casing Size: 9 5/8  
Cemented with: 600 sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surf Method Determined: Per plugging Rpt.

Production Casing

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
Cemented with: \_\_\_\_\_ sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_  
Total Depth: \_\_\_\_\_

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: \_\_\_\_\_ Lining Material: \_\_\_\_\_

Type of Packer: \_\_\_\_\_

Packer Setting Depth: \_\_\_\_\_

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

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

2. Name of the Injection Formation: \_\_\_\_\_

3. Name of Field or Pool (if applicable): \_\_\_\_\_

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

# OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

## DUPLICATE MISCELLANEOUS REPORTS ON WELLS

RECEIVED  
MAY 11 1948  
HOBB'S OFFICE

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

|  |          |  |  |
|--|----------|--|--|
| REPORT ON BEGINNING DRILLING OPERATIONS                    |          | REPORT ON REPAIRING WELL                       |  |
| REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL |          | REPORT ON PULLING OR OTHERWISE ALTERING CASING |  |
| REPORT ON RESULT OF TEST OF CASING SHUT-OFF                |          | REPORT ON DEEPENING WELL                       |  |
| REPORT ON RESULT OF PLUGGING OF WELL                       | <b>X</b> |  |  |

May 3, 1948

Hobbs, New Mexico

Date

Place

OIL CONSERVATION COMMISSION,  
SANTA FE, NEW MEXICO.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the \_\_\_\_\_

Stanolind Oil Gas Company State G Tract 12 Well No. 6 in the \_\_\_\_\_

Company or Operator Lease

NW 1/4 of Sec. 16, T. 21-S, R. 37-E, N. M. P. M.,

Drinkard Field, Lea County.

The dates of this work were as follows: May 2 & 3, 1948

Notice of intention to do the work was (was not) submitted on Form C-102 on May 1 1948

and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

### DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Plugged according to approval.

*(see form C-102)*

Witnessed by Thomas S. Holden Stanolind Oil Gas Company Head Roustabout  
Name Company Title

Subscribed and sworn before me this 3<sup>rd</sup>

I hereby swear or affirm that the information given above is true and correct.

day of May, 1948

Name Joseph H. Hemmickson

Position FIELD SUPT.

[Signature]  
Notary Public

Representing STANOLIND OIL & GAS CO.  
Company or Operator

My commission expires 2-23-50

Address BOX F: HOBBS, NEW MEXICO

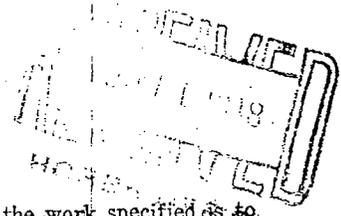
Remarks:

APPROVED

Date MAY 1 1948

[Signature]  
Name  
OIL & GAS INSPECTOR  
Title

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
**MISCELLANEOUS NOTICES**



Submit this notice in triplicate to the Oil Conservation Commission or its proper agent before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

|   |   |
|---|---|
| NOTICE OF INTENTION TO TEST CASING SHUT-OFF | NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL |
| NOTICE OF INTENTION TO CHANGE PLANS         | NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING |
| NOTICE OF INTENTION TO REPAIR WELL          | NOTICE OF INTENTION TO PLUG WELL                      |
| NOTICE OF INTENTION TO DEEPEN WELL          | X   |

Hobbs, New Mexico

Date 5-1-48

OIL CONSERVATION COMMISSION,  
Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the \_\_\_\_\_

Well No. 6 in \_\_\_\_\_

Stanlind Oil & Gas Company State "C" Tract 12 NW 1/4  
of Sec. 16, T. 21-S, R. 37-E, N. M. P. M., Drinkard Field.  
Lea County.

**FULL DETAILS OF PROPOSED PLAN OF WORK**  
FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

This well was spudded 2-10-48 and drilled to total depth of 5762. Drill pipe was stuck and all efforts to recover it failed. We propose to plug by setting a 30-sack cement plug at bottom of 9-5/8" casing set at 1385-cemented to surface, and a 10-sack plug in top of 9-5/8". All pipe will be left in tact--the hole filled between and below plugs with 10# mud. Celler will be filled and ground restored to conform with the natural terrain (Confirming telephone-Hendrickson to Yarbrough-5/1/48).

Approved \_\_\_\_\_ MAY 11 1948 \_\_\_\_\_ 19  
except as follows:

By \_\_\_\_\_ Stanlind Oil & Gas Company  
Position \_\_\_\_\_  
Send copy of this notice regarding well to \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Box F; Hobbs, New Mexico

OIL CONSERVATION COMMISSION,  
By \_\_\_\_\_  
Title \_\_\_\_\_

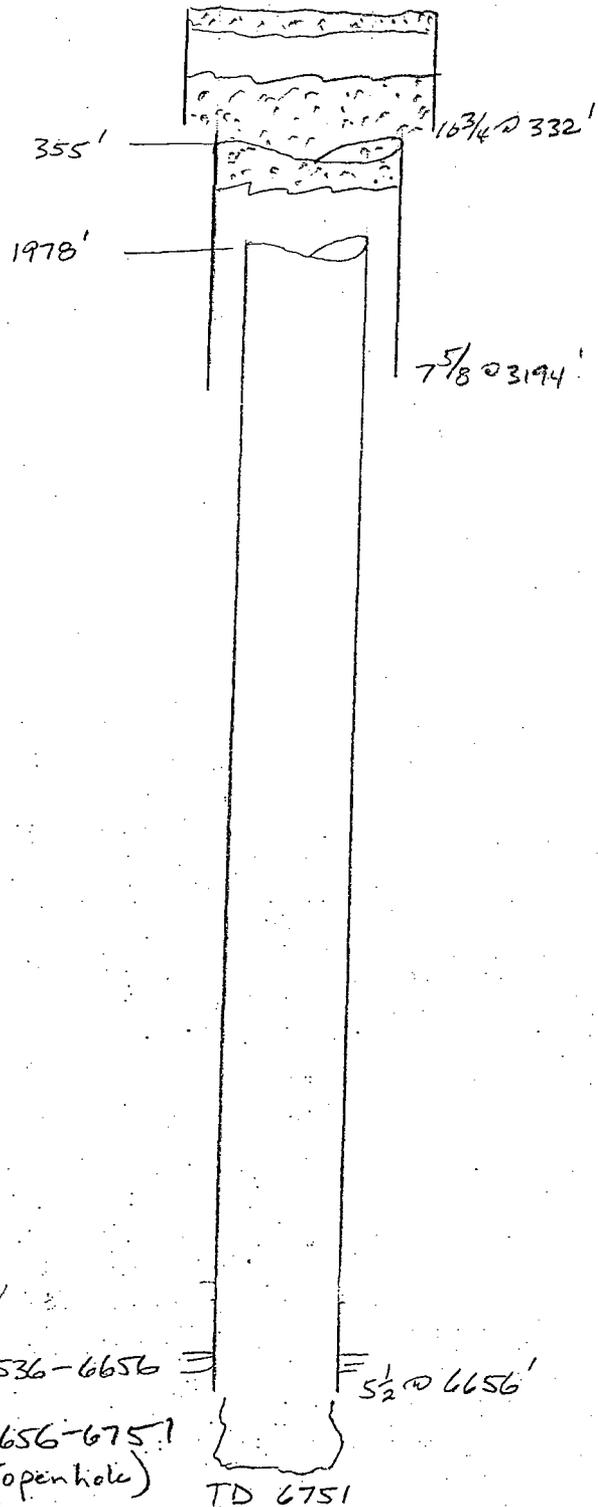
SECTION WELL DATA SHEET

OPERATOR: Humble Oil

WELL NAME & NUMBER: New Mexico State V #2

WELL LOCATION: 660 FSL, 1980 FWL      N      10      21S      37E  
FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: \_\_\_\_\_ Casing Size: 10 3/4  
Cemented with: 275 sx. or \_\_\_\_\_ ft'  
Top of Cement: surf Method Determined: CIRC

Intermediate Casing

Hole Size: \_\_\_\_\_ Casing Size: 7 5/8  
Cemented with: 1250 sx. or \_\_\_\_\_ ft'  
Top of Cement: 360 Method Determined: Plugging Rpt.

Production Casing

Hole Size: \_\_\_\_\_ Casing Size: 5 1/2  
Cemented with: 575 sx. or \_\_\_\_\_ ft'  
Top of Cement: 2000' Method Determined: Plugging Rpt  
Total Depth: \_\_\_\_\_

Injection Interval

\_\_\_\_\_ feet to \_\_\_\_\_

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: \_\_\_\_\_ Lining Material: \_\_\_\_\_

Type of Packer: \_\_\_\_\_

Packer Setting Depth: \_\_\_\_\_

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- Is this a new well drilled for injection? \_\_\_\_\_ Yes \_\_\_\_\_ No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_
- Name of the Injection Formation: \_\_\_\_\_
- Name of Field or Pool (if applicable): \_\_\_\_\_
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_
- Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

**DUPLICATE**

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

**RECEIVED**  
APR 12 1954  
OIL CONSERVATION COMMISSION  
HOBBS OFFICE

MISCELLANEOUS REPORTS ON WELLS

Submit this report in TRIPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work specified is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Report by Checking Below

|   |                                     |   |  |                          |  |
|---|-------------------------------------|---|--|--------------------------|--|
| REPORT ON BEGINNING DRILLING OPERATIONS |                                     | REPORT ON RESULT OF TEST OF CASING SHUT-OFF |  | REPORT ON REPAIRING WELL |  |
| REPORT ON RESULT OF PLUGGING WELL       | <input checked="" type="checkbox"/> | REPORT ON RECOMPLETION OPERATION            |  | REPORT ON (Other)        |  |

April 8, 1954 ✓  
(Date)

Hobbs, New Mexico  
(Place)

Following is a report on the work done and the results obtained under the heading noted above at the

**Humble Oil & Refining Company**  
(Company or Operator)

**New Mexico State V**  
(Lease)

**Gardie Drilling Company** (Contractor), Well No. **2** in the **SE** 1/4 **SW** 1/4 of Sec. **10**

**T 218**, R. **37E**, NPM. **Drinkard** Pool, **Lee** County.

The Dates of this work were as follows: **3-18-54**

Notice of intention to do the work (was) (~~shown~~ submitted on Form C-102 on **3-18-54**, 19.....  
(Cross out incorrect words)

and approval of the proposed plan (was) (~~shown~~ obtained.

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

First Plug from 477' back to 277' with 200 sacks regular cement.  
Job completed 9:00 P. M. 3-18-54.  
Second Plug from 45' to surface with 40 sacks regular cement.  
Job Completed 9:25 P. M. 3-18-54.

Marker placed in accordance with regulations of State of New Mexico.

Witnessed by Russell M. Lilly (Name) **Humble Oil & Refining Company** (Company) **Asst. Dist. Superintendent** (Title)

Approved: S. J. Stanley (Name)  
OIL CONSERVATION COMMISSION

(Title) \_\_\_\_\_ (Date) \_\_\_\_\_

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

Name M. M. Rogers  
Position District Superintendent  
Representing Humble Oil & Refining Co.  
Address Box 2347, Hobbs, N. M.

mob/mob

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Submit this report in TRIPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work specified is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Report by Checking Below

|   |  |   |                                     |                          |  |
|---|--|---|-------------------------------------|--------------------------|--|
| REPORT ON BEGINNING DRILLING OPERATIONS |  | REPORT ON RESULT OF TEST OF CASING SHUT-OFF |                                     | REPORT ON REPAIRING WELL |  |
| REPORT ON RESULT OF PLUGGING WELL       |  | REPORT ON RECOMPLETION OPERATION            | <input checked="" type="checkbox"/> | REPORT ON (Other)        |  |

3-18-54  
(Date)

Hobbs, New Mexico  
(Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Humble Oil & Refining Company  
(Company or Operator)

New Mexico State V  
(Lease)

Gackle Drilling Company  
(Contractor)

Well No. 2 in the SE 1/4 SW 1/4 of Sec. 10

T. 21S, R. 37E, NMPM, Drinkard Pool, Lea County.

The Dates of this work were as follows: Started drilling on cement 3-3-54.

Notice of intention to do the work (was) ~~not~~ submitted on Form C-102 on 2-16-54, 19

and approval of the proposed plan (was) ~~not~~ obtained.

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Drilled junk and cement to 5056' in 10-3/4", 7-5/8" and 5-1/2" casing. Pulled out of hole to change bits, started back in hole and bit stopped at top of 7-5/8" casing at 362'. Ram impression blocks and found 7-5/8" coupling had turned over on pipe and lodged in top of casing. Attempted to mill up coupling but failed to do so; mills sidetracked casing.

Now preparing to plug and abandon.

Witnessed by M. M. Rogers Humble Oil & Refining Company District Superintendent  
(Name) (Company) (Title)

Approved: S. J. Stanley  
OIL CONSERVATION COMMISSION  
(Name)

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

Name M. M. Rogers  
Position District Superintendent  
Representing Humble Oil & Refining Company  
Address Box 2347, Hobbs, N. M.

(Title) (Date)

RMG/mcb

47

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

MISCELLANEOUS NOTICES

Submit this notice in TRIPPLICATE to the District Office, Oil Conservation Commission, before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Notice by Checking Below

|                                      |  |   |  |   |          |
|--------------------------------------|--|---|--|---|----------|
| NOTICE OF INTENTION TO CHANGE PLANS  |  | NOTICE OF INTENTION TO TEMPORARILY ABANDON WELL |  | NOTICE OF INTENTION TO DRILL <del>Down</del> Cement Plugs | <b>x</b> |
| NOTICE OF INTENTION TO PLUG WELL     |  | NOTICE OF INTENTION TO PLUG BACK                |  | NOTICE OF INTENTION TO SET LINER                          | <b>x</b> |
| NOTICE OF INTENTION TO SQUEEZE       |  | NOTICE OF INTENTION TO ACIDIZE                  |  | NOTICE OF INTENTION TO SHOOT (Nitro)                      |          |
| NOTICE OF INTENTION TO GUN PERFORATE |  | NOTICE OF INTENTION (OTHER)                     |  | NOTICE OF INTENTION (OTHER) <b>Recomplete as gas well</b> | <b>x</b> |

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

**Hobbs, New Mexico**

(Place)

**February 16, 1954**

(Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the **New Mexico State V**

**Humble Oil & Refining Company** Well No. **2** in **N**  
(Company or Operator) (Unit)

**SE**  $\frac{1}{4}$  **SW**  $\frac{1}{4}$  of Sec. **10**, T. **21S**, R. **37E**, NMPM, **Drinkard** Pool  
(40-acre Subdivision)

**Lee** County.

FULL DETAILS OF PROPOSED PLAN OF WORK

(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

The well was plugged and abandoned in May 1949.

Objectives: The purpose of this workover is to drill out cement plugs, set a liner, and recomplete as a Tubb gas well.

Intended Procedure: It is intended to recomplete the well according to the following procedure: (1) move in and rig up light power rotary rig, (2) drill out cement to top of 5-1/2-inch casing with a 6-3/4-inch bit, (3) pull bit and run 4-3/4-inch bit with casing scraper and drill out bridging plugs and cement to 6370 feet, (4) set a cast iron bridging plug on bottom at 6370 feet with 10 foot cement on top, (5) run a 4-inch OD T&C liner to 5400' and cement to surface, (6) drill plug and spot oil or fresh water from 5600 feet to bottom and pull out of hole, (7) perforate casing from 6290 to 6360 feet, (8) run tubing and swab and test, (9) treat with 500 gallons of mud acid and 3000 gallons of low tension acid, (10) swab acid load and place on production.

Approved \_\_\_\_\_, 19\_\_\_\_  
Except as follows:

**Humble Oil & Refining Company**

Company or Operator

By *M M Rogan*

Position **District Superintendent**

Send Communications regarding well to:

Approved  
OIL CONSERVATION COMMISSION

By *J. G. Stanley*

Title **ecb/mcb**

Name **Humble Oil & Refining Co.**

Address **Box 2347, Hobbs, N. M.**

48

**OIL CONSERVATION COMMISSION**

Santa Fe, New Mexico

**MISCELLANEOUS REPORTS ON WELLS**

RECEIVED  
MAY 26 1949  
HOBBS OFFICE

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

|  |   |  |  |
|--|---|--|--|
| REPORT ON BEGINNING DRILLING OPERATIONS                    |   | REPORT ON REPAIRING WELL                       |  |
| REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL |   | REPORT ON PULLING OR OTHERWISE ALTERING CASING |  |
| REPORT ON RESULT OF TEST OF CASING SHUT-OFF                |   | REPORT ON DEEPENING WELL                       |  |
| REPORT ON RESULT OF PLUGGING OF WELL                       | X |  |  |

May 23, 1949 ✓

Midland, Texas

Date

Place

OIL CONSERVATION COMMISSION,  
SANTA FE, NEW MEXICO

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the \_\_\_\_\_  
Humble Oil & Refining Co. N. M. State "V" Well No. 2 in the

Company or Operator Lease  
<sup>50</sup>SE/4 of NE/4 of Sec. 10, T. 21-S, R. 37-E, N. M. P. M.,  
Drinkard Field, Lea County.

The dates of this work were as follows: 5-13-49 to 5-16-49

Notice of intention to do the work was (~~approved~~) submitted on Form C-102 on 5-13 19 49  
and approval of the proposed plan was (~~approved~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Original total depth 6751'. Plug back depth 3900'. Spotted cement plug of 50 sacks from 3900' to 3700', 50 sacks from 2000' to 1800' and 400' cement plug to surface. Intervals between plugs filled with mud laden fluid. Recovered 1977.80' of 5-1/2" casing and 354.90' of 7-5/8" casing. Well plugged and abandoned. Regulation marker installed.

Witnessed by \_\_\_\_\_ Name \_\_\_\_\_ Company \_\_\_\_\_ Title \_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_  
24 day of May 19 49

I hereby swear or affirm that the information given above is true and correct.

*Alma D. Morgan*  
ALMA D. MORGAN Notary Public

Name *J. P. Drinkard*  
Position Asst. Div. Superintendent  
Representing Humble Oil & Refining Company

My commission expires 6-1-49

Company or Operator  
Address Box 1600, Midland, Texas

Remarks:

APPROVED

*Notary Public*  
Name \_\_\_\_\_  
Oil & Gas Inspector Title

ITEM VII OF NEW MEXICO OCD FORM C-108  
DATA ON PROPOSED OPERATIONS  
EAST BLINEBRY DRINKARD UNIT

- 1) Proposed average initial injection rate is 12,225 bwpd.  
Maximum injection rate should not exceed 15,000 bwpd.
- 2) The injection system will be operated as a closed system.
- 3) Proposed average initial injection pressure is 1120 psi (0.2 psi/ft).  
Proposed maximum pressure will not exceed the pressure limitations ordered by the Division. Apache Corp will perform step rate tests and anticipates securing a maximum injection pressure of 1375 psi (same as the Northeast Drinkard Unit).
- 4) Source water will come from the San Andres Formation.
- 5) Not Applicable.

ITEM VIII OF NEW MEXICO OCD FORM C-108  
GEOLOGIC DATA ON THE INJECTION ZONE & UNDERGROUND DRINKING  
WATER  
EAST BLINEBRY DRINKARD UNIT

The Formations being targeted for water injection are the Blinebry, Tubb and Drinkard at depths ranging from approximately 5550' to 6800'. These formations are Leonardian in age and are a sequence of shallow marine carbonates, which have for the most part been dolomatized. A five percent porosity cut off is used to determine "pay" as porosity less than this is considered non-productive at the existing and proposed reservoir pressures and reservoir fluid regimes. Net pay isopach maps show the areal extent of the targeted reservoir. The vertical extent of the reservoir is limited top and bottom by impermeable shales and carbonates. All injected fluids should remain in the reservoir with the exception of cycling to the surface through wellbores.

Based on communications with the New Mexico States Engineer's Roswell office and a review of online files there are 7 fresh water wells (see attached) in the area of review. The deepest of these wells is 163'. Which is the assumed base of fresh water. All wellbores involved with the proposed injection program are constructed to not allow injection water into this fresh water source.

ITEMS IX THROUGH XII OF NEW MEXICO OCD FORM C-108  
EAST BLINEBRY DRINKARD UNIT

IX All of the current wellbores proposed for unitization have an existing fracture stimulation. Any new wells drilled subsequent to unitization will also be treated with a fracture stimulation, and it is assumed that all of the wellbores will be treated with acid at least once during the life of the waterflood.

X All logging and test data for the existing wellbores already exists on file with the State of New Mexico Oil Conservation Division and will not be resubmitted with this application.

XI It appears the only strata within one mile of our proposed unit which contains water of possible drinking quality is confined to 163' and shallower. No contamination of this drinking water should occur as all existing wellbores which penetrate the Blinebry, Tubb and Drinkard are constructed as to not allow injection water to escape the system.

XII After reviewing the geology in a one and one-half mile radius around the proposed waterflood area there appears no evidence of fractures or any hydrologic connection between the zone of injection and any overlying or underlying strata.

New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 21S Range: 37E Sections: 3,4,5,8,9,10,15,16,17,20,21,22

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) C Non-Domestic C Domestic  All

POD / Surface Data Report Avg Depth to Water Report Water Column Report

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POD / SURFACE DATA REPORT 08/14/2007

(acre ft per annum)

| DB File Nbr | Use | Diversion | Owner                         | POD Number   | Source | Tws | Rng | Sec | q | q |
|-------------|-----|-----------|-------------------------------|--------------|--------|-----|-----|-----|---|---|
| CP 00063    | DOM | 0         | RIGHT REVEREND SIDNEY MEIZGER | CP 00063 EXP | 21S    | 37E | 17  | 1   | 2 | 2 |
| CP 00251    | IND | 48        | VERSADO GAS PROCESSORS LLC    | CP 00251     | 21S    | 37E | 22  | 4   | 3 | 2 |
| CP 00252    | IND | 40        | VERSADO GAS PROCESSORS, LLC   | CP 00252     | 21S    | 37E | 22  | 4   | 2 | 4 |
| CP 00552    | STK | 3         | MILLARD DECK                  | CP 00552     | 21S    | 37E | 04  | 4   | 2 |   |
| CP 00553    | STK | 3         | MILLARD DECK                  | CP 00553     | 21S    | 37E | 04  | 4   | 2 |   |
| CP 00554    | STK | 3         | MILLARD DECK                  | CP 00554     | 21S    | 37E | 16  | 2   | 2 |   |
| CP 00881    | DOM | 3         | RICHARD DON JONES             | CP 00881     | 21S    | 37E | 22  | 4   | 4 | 3 |
| CP 00895    | DOM | 3         | JOE R. SIMS                   | CP 00895     | 21S    | 37E | 20  | 1   | 1 |   |

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

Record Count: 8

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New Mexico Office of the State Engineer  
POD Reports and Downloads

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)   Non-Domestic  Domestic  All

WATER COLUMN REPORT 08/14/2007

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

| POD Number | Tws | Rng | Sec | q | q | Zone | X | Y | Depth Well | Depth Water | Water Column | Water (in feet) |
|------------|-----|-----|-----|---|---|------|---|---|------------|-------------|--------------|-----------------|
| CP 00552   | 21S | 37E | 04  | 4 | 2 |      |   |   | 90         | 75          | 15           |                 |
| CP 00553   | 21S | 37E | 04  | 4 | 2 |      |   |   | 90         | 75          | 15           |                 |
| CP 00554   | 21S | 37E | 16  | 2 | 2 |      |   |   | 80         | 70          | 10           |                 |
| CP 00895   | 21S | 37E | 20  | 1 | 1 |      |   |   | 163        |             |              |                 |
| CP 00252   | 21S | 37E | 22  | 4 | 2 |      |   |   | 106        |             |              |                 |
| CP 00251   | 21S | 37E | 22  | 4 | 2 |      |   |   | 103        |             |              |                 |
| CP 00881   | 21S | 37E | 22  | 4 | 3 |      |   |   | 95         | 53          | 42           |                 |

Record Count: 7

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