

DATE IN 11-15-04	SUSPENSE 11/30/04	ENGINEER Jones	LOGGED IN 11-16-04	TYPE SUD 960	APP NO. PSEM0432147888
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSP-Non-Standard Location] [NSL-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS-Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application if One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Bill Baswell

Print or Type Name

Bill Baswell

Signature

Production Engineering Manager

Title

11/8/04

Date

bill.baswell@apachecorp.com

e-mail Address

30-025-37042
Folio B#9
AOR 5 ACTIVE (1 saved)
0 PPA
5 TOTAL
OK 11/30/04



November 8, 2004

State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: **Proposed – Elliott B #~~8~~ WD**
Unit P, Sec. 6-T22S-R37E
Eunice, San Andres, Southwest
Lea County, New Mexico

Apache Corporation is proposing to drill a saltwater disposal well.

To support this request we have attached the following:

- 1) OCD Form C-108 with attachments
- 2) Maps which include all wells within one-half mile and two mile radius of the proposed disposal well.
- 3) Injection Well Data Sheet for the proposed disposal well
- 4) A Publishing Affidavit and copy of legal notice
- 5) List of Surface Owners and Offset Operators with Certified Mail Receipt numbers indicated and copy of letter sent
- 6) Tabulation of Data on wells located within the Area of Review
- 7) Wellbore Diagrams for all wells P&A'd in the Area of Review

Please contact me at 918-491-4957 if you need additional information or have any questions regarding this application. Thank you.

Sincerely,

APACHE CORPORATION

A handwritten signature in cursive script that reads "Kara Coday".

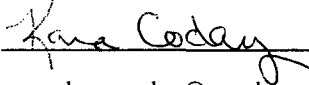
Kara Coday
Sr. Engineering Technician

Attachments

cc: Mr. Chris Williams
Oil Conservation Division
District I
P O Box 1980
Hobbs, New Mexico 88241

Bureau of Land Management
2909 West 2nd Street
Roswell, New Mexico 88201

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE : _____ Secondary Recovery _____ Pressure Maintenance X Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No
- II. OPERATOR: Apache Corporation
ADDRESS : 6120 South Yale, Suite 1500 Tulsa, Oklahoma 74136-4224
CONTACT PARTY : Kara Coday PHONE : (918)491-4957
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes X No
If yes, give the Division order number authorizing the project _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such 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 source of drinking water.
- XIII. Applicants must complete the 'Proof of Notice' section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Kara Coday TITLE: Sr. Engineering Technician
SIGNATURE:  DATE: 11/08/2004
E-MAIL ADDRESS: kara.coday@apachecorp.com
- * If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal: _____

9
ATTACHMENT FOR FORM C-108
ELLIOTT B #8-WD
MISCELLANEOUS DATA

III. WELL DATA

B. (5)	Next higher oil zone	Grayburg @ +/- 3796'
	Next lower oil zone	Blinberry @ +/- 5524'

VII. PROPOSED OPERATION

1.	Average Injection Rate	8,000 BWPD
	Maximum Injection Rate	12,000 BWPD
2.	Closed Injection System	
3.	Average Injection Pressure	700 psi
	Maximum Injection Pressure	1200 psi (approximate) (will not exceed 0.2 psi/ft to top perforation)
4.	Source Water	Grayburg Analysis Attached San Andres Analysis Attached

VIII. Please see attached.

IX. STIMULATION PROGRAM

Acidize injection interval with +/- 12,000 gals 15% HCL

X. Logs will be submitted upon completion of the well.

XI. There are no Fresh Water Wells

OPERATOR Apache Corporation LEASE Elliott B
WELL NO. 8-WD 330' FSL & 330' FEL P 6 22S 37E
FOOTAGE LOCATION UNIT SECTION TOWNSHIP RANGE

Well Construction Data

Surface Casing

Size 9-5/8 Cemented with 250 sx
TOC Surface feet determined by Circulation
Hole Size 12-1/4

Intermediate Casing

Size _____ Cemented with _____
TOC _____ feet determined by _____
Hole Size _____

Long String

Size 7 Cemented with 800 sx
TOC Surface feet determined by Circulation
Hole Size 8-3/4
Total Depth 5050

Injection Interval

4400 (est.) feet to 5050 (est.) feet Open-hole
(perforated or open-hole; indicate which)

Tubing Size 4-1/2" lined with Fiberliner set in a
(type of internal coating)
7" Baker Lok-Set packer at 4375' feet

Other type of tubing / casing seal if applicable N/A

Other 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 San Andres
3. Name of Field or Pool (if applicable) Eunice, San Andres, Southwest
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 names and depths of any over or underlying oil or gas zones (pools) in this area.
See C-108 Attachment

The San Andres formation has been chosen for water disposal.
The intervals chosen within the San Andres are as follows:

Proposed Injection Formation: San Andres, Top - 3960' Base - 5120'
Proposed Injection Intervals: 4400 - 5050'

The San Andres formation is overall a thick, porous dolomite exhibiting excellent porosity. In offset logs, porosities are typically in the 15 - 20 % range. These porosity zones are more than adequate to allow for the disposal of produced water. Sufficient barriers exist in the upper and lower portions of the San Andres formations to prevent vertical migration either upwards or downwards into over/underlying productive formations.

Nearest overlying productive formation: Grayburg, Top - 3672 Base - 3796'
Distance to uppermost San Andres perforation: 604'

Next lowest productive zone: Blinberry, Top - 5524' Base - 6028'
Distance from lowest San Andres perforation to top of Blinberry: 474'

The deepest known fresh water in this immediate area is the Ogallala formation at a depth of 100' - 300', ~4000' above the proposed disposal zone. This should present no hazard to the fresh water aquifers in the area.

The above information is accurate to the best of my knowledge. I have worked in the Permian Basin for the last 25 years. My credentials have been accepted by the NMOCD as an expert witness in this area.

Robert E. Curtis
Sr. Staff Geologist
Apache Corporation
(918) 491-4924
bob.curtis@apachecorp.com

CP Falby "A" Federal #2

API - 30-025-10104 Penrose Skelly Grayburg

660' FNL & 660' FWL

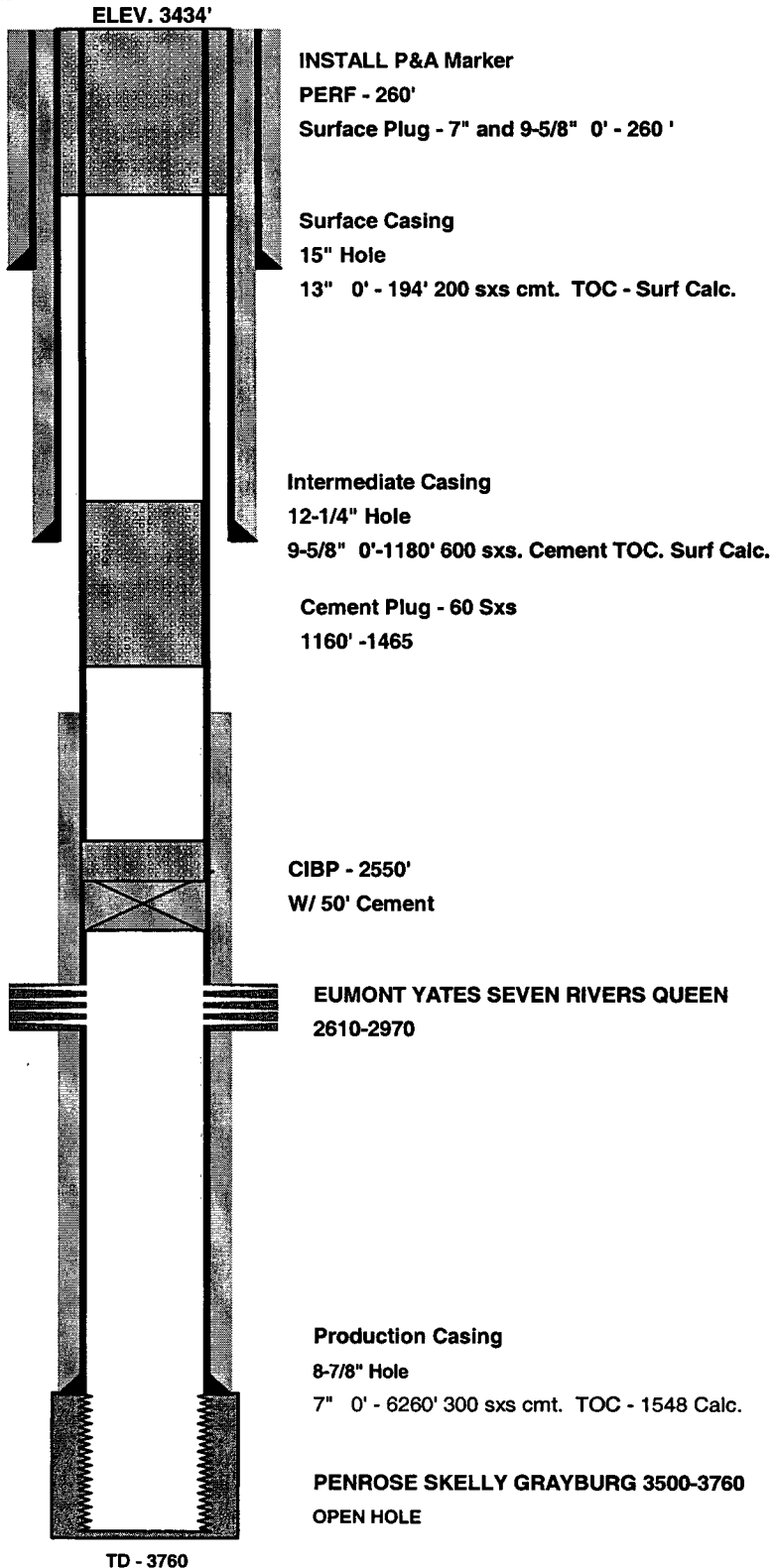
Sec. 8 T-22S R-37E

Lea County, New Mexico

Spud Date - 10/18/1937

Last Updated - 10/12/2004 BY RAC

CURRENT STATUS - P&A (2/96)



South Permian Basin Region
 10520 West I-20 East
 Odessa, TX 79765
 (915) 498-9191
 Lab Team Leader - Shaila Hernandez
 (915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 910-9517
Area:	EUNICE, NM	ID #:	22639
Lease/Platform:	GRIZZELL UNIT	Analysis Cost:	\$40.00
Entity (or well #):	12		
Formation:	Grayburg		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 209886 @ 75 °F					
Sampling Date:	11/15/01	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	11/20/01	Chloride:	4050.0	114.24	Sodium:	2894.3	125.9
Analyst:	JAMES AHRLETT	Bicarbonate:	2405.0	39.42	Magnesium:	112.0	9.21
TDS (mg/l or g/m3):	9975.3	Carbonate:	0.0	0.	Calcium:	262.0	13.07
Density (g/cm3, tonne/m3):	1.008	Sulfate:	20.0	0.42	Strontium:	9.0	0.21
Anion/Cation Ratio:	1.0000001	Phosphate:			Barium:	6.0	0.09
Carbon Dioxide:		Borate:			Iron:	4.0	0.14
Oxygen:		Silicate:			Potassium:	213.0	5.45
Comments:		Hydrogen Sulfide:			Aluminum:		
		pH at time of sampling:			Chromium:		
		pH at time of analysis:		7.47	Copper:		
		pH used in Calculation:		7.47	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO3		Gypsum CaSO4*2H2O		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4		CO2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.32	171.78	-2.42	0.00	-2.49	0.00	-2.11	0.00	0.82	2.78	0.94
100	0	1.41	181.85	-2.44	0.00	-2.44	0.00	-2.09	0.00	0.67	2.78	1.28
120	0	1.51	191.57	-2.45	0.00	-2.37	0.00	-2.07	0.00	0.55	2.43	1.7
140	0	1.60	199.89	-2.46	0.00	-2.29	0.00	-2.04	0.00	0.45	2.08	2.2

- Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.
- Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.
- Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

South Permian Basin Region
 10520 West I-20 East
 Odessa, TX 79765
 (915) 498-9191
 Lab Team Leader: Sheila Hernandez
 (915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 910-9517
Area:	EUNICE, NM	ID #:	22638
Lease/Platform:	GRIZZELL UNIT	Analysis Cost:	\$40.00
Entity (or well #):	10		
Formation:	San Andres		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 209885 @ 75 °F					
Sampling Date:	11/15/01	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	11/20/01	Chloride:	4111.0	115.96	Sodium:	2877.7	125.17
Analyst:	JAMES AHRLETT	Bicarbonate:	2282.0	37.4	Magnesium:	114.0	9.38
TDS (mg/l or g/m3):	9891.7	Carbonate:	0.0	0	Calcium:	281.0	14.02
Density (g/cm3, tonne/m3):	1.007	Sulfate:	20.0	0.42	Strontium:	9.0	0.21
Anion/Cation Ratio:	1.0000000	Phosphate:			Barium:	8.0	0.12
		Borate:			Iron:	4.0	0.14
		Silicate:			Potassium:	185.0	4.73
Carbon Dioxide:		Hydrogen Sulfide:			Aluminum:		
Oxygen:		pH at time of sampling:			Chromium:		
Comments:		pH at time of analysis:		7.44	Copper:		
		pH used in Calculation:		7.44	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO3		Gypsum CaSO4*2H2O		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4		CO2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.30	177.00	-2.39	0.00	-2.46	0.00	-2.11	0.00	0.94	4.16	0.95
100	0	1.39	188.80	-2.41	0.00	-2.41	0.00	-2.10	0.00	0.79	3.82	1.3
120	0	1.49	199.91	-2.42	0.00	-2.34	0.00	-2.07	0.00	0.67	3.47	1.71
140	0	1.59	209.97	-2.43	0.00	-2.26	0.00	-2.04	0.00	0.57	3.12	2.2

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224



WWW.APACHECORP.COM

(918) 491-4900

(918) 491-4853 (FAX)

(918) 491-4854 (FAX)

November 8, 2004

Surface Owner

**Plantation Petroleum
2203 Timberloch Place, Suite 229
The Woodlands, Texas 77380**

**Re: Proposed – Elliott B #⁹~~8~~-WD
 Unit P, Sec. 6-T22S-R37E
 Eunice, San Andres, Southwest
 Lea County, New Mexico**

Attached please find a copy of completed form C-108 with attachments, which Apache has filed with the New Mexico Oil Conservation Division.

Sincerely,

APACHE CORPORATION

Kara Coday
Sr. Engineering Technician

cc: State of New Mexico
 Energy, Minerals & Natural Resources Dept.
 Oil Conservation Division
 1220 South St. Francis Drive
 Santa Fe, New Mexico 87505

**APPLICATION TO EXPAND WATERFLOOD
ELLIOTT B LEASE
OFFSET OPERATORS**

Arch Petroleum Inc.
PO Box 10340
Midland, TX 79702-7340
Certified Rcpt. # 7002 2410 0004 2683 4481

BEC Corporation
110 N Marienfeld, Suite 370
Midland, Texas 79702
Certified Rcpt. # 7002 2410 0004 2683 4498

Chevron Texaco
P.O. Box 36366
Houston, Texas 77236-6366
Certified Rcpt. # 7002 2410 0004 2683 4504

McCasland Farm & Ranch
P.O. Box 206
Eunice, New Mexico 88231
Certified Rcpt. # 7002 2410 0004 2683 4511

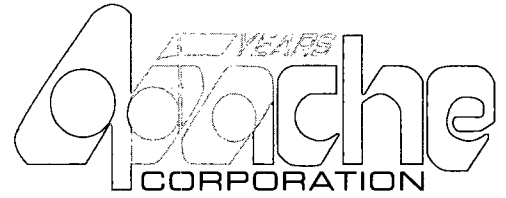
Zia Energy Inc.
2203 Timberloch Place, Suite 229
The Woodlands, TX 77380
Certified Rcpt. # 7002 2410 0004 2683 4528

XTO Energy, Inc.
3000 North Garfield Suite 175
Midland, TX 79705
Certified Rcpt. # 7002 2410 0004 2683 4535

A copy of the application was mailed to the Offset Operators listed above on November 9, 2004.

Kara Coday
Kara Coday, Sr. Engineering Technician

11/9/2004
Date



WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

November 8, 2004

Offset Operator

Re: **Proposed – Elliott B #⁹8-WD
Unit P, Sec. 6-T22S-R37E
Eunice, San Andres, Southwest
Lea County, New Mexico**

Attached please find a copy of completed form C-108 with attachments, which Apache has filed with the New Mexico Oil Conservation Division. The map shows the referenced well in relation to your offset operations.

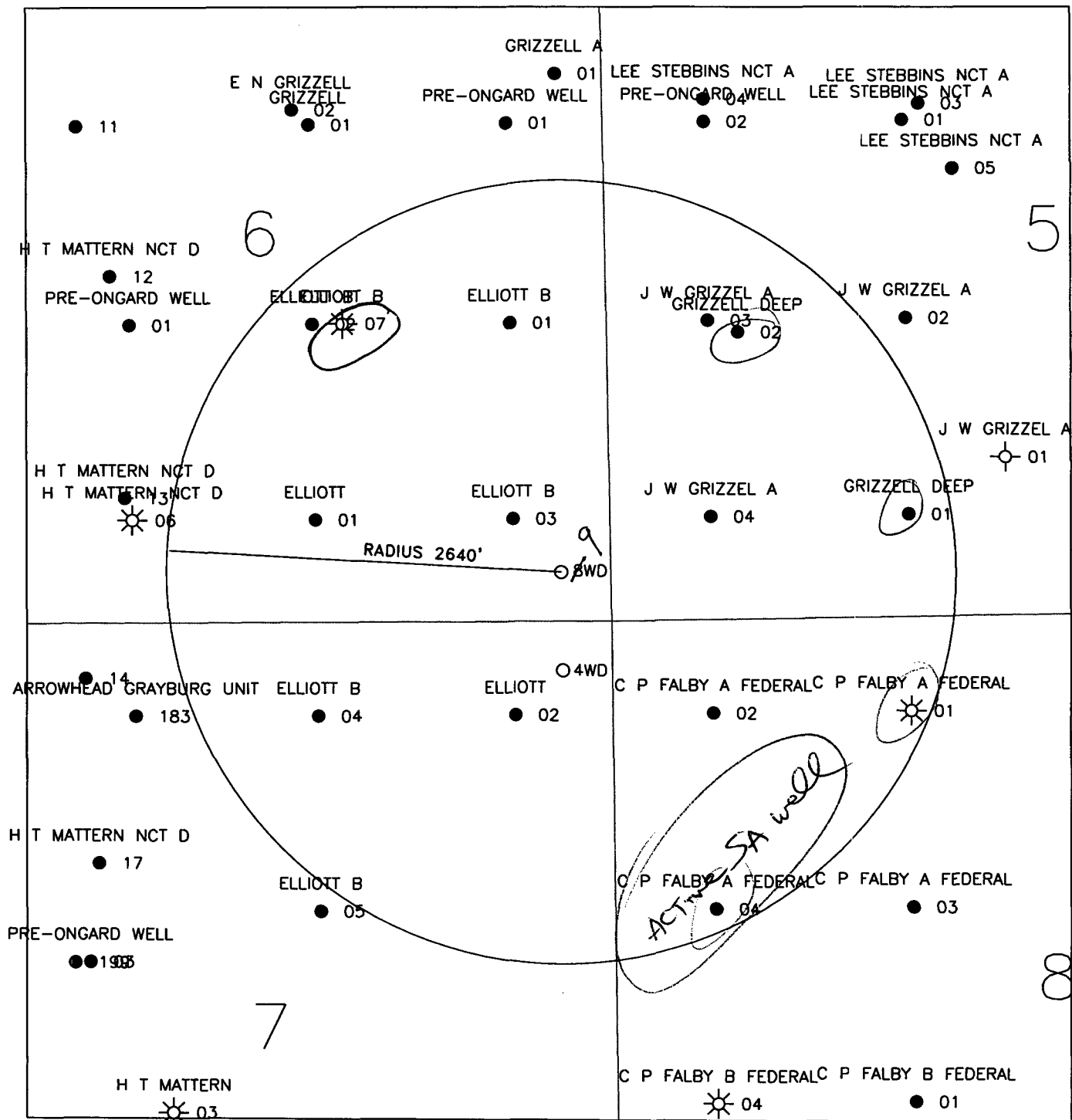
Sincerely,

APACHE CORPORATION

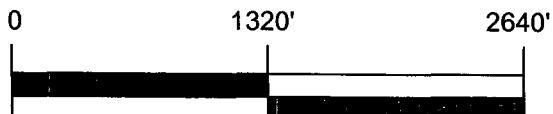
Kara Coday
Sr. Engineering Technician

Attachments

cc: State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505



- O LOCATION
- Ø INJ WELL
- OIL WELL
- P&A-OIL
- ☀ GAS WELL
- DRY HOLE



TWO WARREN PLACE, SUITE 1500
6120 SOUTH YALE
TULSA, OKLAHOMA 74136-4224

ELLIOTT 8WD

Sec. 6-22S 37E
Lea County, New Mexico

Date: 11/2/04

Dwg: ELLIOTT 8WD SMALL (KARA)

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
newspaper published at
Hobbs, New Mexico, do solemnly
swear that the clipping attached
hereto was published once a
week in the regular and entire
issue of said paper, and not a
supplement thereof for a period.

of 1
_____ weeks.

Beginning with the issue dated

November 2 2004
and ending with the issue dated

November 2 2004

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 2nd day of

November 2004

Joseph J. Gowers
Notary Public.

My Commission expires
November 27, 2004
(Seal)

This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

LEGAL NOTICE

November 2, 2004

Notice is hereby given of the application of Apache Corpo-
ration, 6120 South Yale, Suite 1500, Tulsa, Oklahoma
74136-4224 (918)491-4957, to the Oil Conservation Divi-
sion, New Mexico Energy, Minerals and Natural Resources
Department, for approval of the following injection well to be
drilled for the purpose of waste disposal.

Pool Name: Eunice; San Andres, Southwest
this well is located in Lea County, New Mexico

Lease/Unit Name: Elliott B

Well No. 8-WD (API - not yet assigned)

Location: 330' FSL & 330' FEL, Section 6, T22S, R37E,
Unit P.

The injection formation is the San Andres located between
the interval of 4400' MD to 5050' MD below the surface of
the ground. Expected maximum injection rate is 12,000
barrels per day and the expected maximum injection pres-
sure is 1200 psi. Interested parties must file objections or
requests for hearing with the Oil Conservation Division,
1220 South St. Francis Drive, Santa Fe, NM 87505 within
fifteen days.
#21067

02102716000

02573185

Apache Corporation
6120 South Yale, Suite 1500
TULSA, OK 74136-4224

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

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

2. Name of Operator
TEXACO EXPLORATION & PRODUCTION INC.

3. Address and Telephone No. 205 E. Bender, HOBBS, NM 88240 397-0405

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Unit Letter E : 1980 Feet From The NORTH Line and 660 Feet From The
WEST Line Section 8 Township 22S Range 37E

5. Lease Designation and Serial No.

LC - 033706 A

6. If Indian, Alottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and Number
FALBY, C. P. -A- FEDERAL

4

9. API Well No.
30 025 10120

10. Field and Pool, Exploratory Area
EUNICE SAN ANDRES SOUTHWEST

11. County or Parish, State
LEA, NEW MEXICO

12. Check Appropriate Box(s) To Indicate Nature of Notice, Report, or Other Data

TYPE OF SUBMISSION

TYPE OF ACTION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

- ☐ Abandonment
☒ Recompletion
☒ Plugging Back
☒ Casing Repair
☐ Altering Casing
☒ OTHER: RC TO EUN S/A SW

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

OIL well 2660' AWAY in HIGHER SAN ANDRES

3-10-99: MIRU. WELL HAD 60# ON CSG & FLOWING OIL. PUMP 15 BBLS 2% KCL DN CSG. PRESS UP TO 500#. SPOOL LEAKING ON WH. CRACKED. PUMP 15 BBLS 2% DN CSG-VAC. NDWH. NUBOP. TIH W/PKR ON 2 3/8" TBG. PSA 120'. INSTL TIW VALVE.
3-12-99: ATTEMPT TO LOAD CSG-LEAKED. PUMP 20 BBLS DN TBG. TEST WH & BOP TO 1000#-OK. PUMP 50 BBLS BRINE DN TBG. WELL ON VAC. REL PKR. TIH W/BIT, & CSG SCRAPER. PU 206 JTS 2 3/8" TBG TO 6414'. PULL BIT TO 6200'.
3-15-99: MIRU SCH/LOG. TIH W/CIBP & SET @ 6300'. TIH W/SN, & TBG TO 6285'. CIRC W/240 BBLS 2% KCL.
3-16-99: CIRC HLE W/50 BBLS 2% -CSG STAYING FULL. RAN ULTRA SONIC IMAGER LOG FR 5800-3880'. GOOD CMT FR 4250-3880'. POSSIBLE HLES FR 4550-4600'. POOR CMT FR 4250-5800'. TIH W/BAILER & DMP 35' CMT ON TOP OF PLUG @ 6300'. TIH W/2 3/8" OPEN ENDED TO 1200'.
3-17-99: CIRC HLE W/60 BBLS 2% KCL. TIH W/CIBP & SET @ 4500'. PRESS CSG TO 500#. TIH W/PKR ON TBG TO 4495'. TEST PLUG TO 6520#-OK. REL PKR & PULL UP TO 3935'. TEST DN TBG. TEST DN BACKSIDE 350# LEAK OFF IN 1 MIN. RESET PKR @ 4246'. LOWER PKR TO 4433' & RESET. TEST TO 500#-OK.
3-18-99: REL PKR. TIH W/RBP W/4 1/2" PKR ON 2 3/8" TBG. SET RBP @ 4100'. SET PKR @ 4094'. TEST PLUG TO 500#-OK. PULL UP & SET PKR 3904'. TEST TO 500#-OK. LOAD & TEST BACKSIDE TO 500#. REL PKR -LOWER & REL RBP. TIH W/USED BIT & CSG SCRAPER ON TBG TO LINER TOP @ 3883'. TIH W/TBG TO 1000'.
3-19-99: TIH W/CIBP & SET @ 4100'. TIH W/PKR ON TBG & SET @ 3863'. TEST TO 500#-CHART. TEST CSG TO 500#. SURF PIPE SET @ 339'.
3-20-99: TIH W/TBG OPEN ENDED TO 815'. SPOT 193 SX CL C CMT TO SURF. NDBOP. NUWH. PMP 200 SX CL C DN 7 5/8". CSG PRESS TI 559#.
3-22-99: NDWH. NUBOP. TIH W/BIT, DC'S ON TBG. TAG CMT @ 95'.
3-23-99: LOWER TOOLS TO 346'. DRILL HARD CMT TO 724'.
3-24-99: DRILL CMT TO 840'. CHART & TEST TO 500# FOR 30 MINS. TIH W/BIT & TAG @ 4100'-CIBP.
3-25-99: TIH W/CSG GUN. PERF FR 3962-4045'. TIH W/PKR @ 3906'. NUWH.
3-26-99: ACIDIZE 3962-4045' W/6300' GALS 15% HCL NEFE ACID. RIG DOWN. RU & SWAB. FL @ 1000'. STARTED FLOWING.
3-30-99: ON 24 HR OPT. FLOWING 2 BO, 125 BW, & 90 MCF. FINAL REPORT

14. I hereby certify that the foregoing is true and correct

SIGNATURE _____ TITLE Engineering Assistant DATE 05/13/1999

TYPE OR PRINT NAME J. Denise Leake

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.