

26 April 07	W. Jones	26 April 07	SWD	PCLP0711650820
DATE IN	ENGINEER	LOGGED IN	TYPE	APP NO

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:

[NSL-Non-Standard Location] [NSP-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 _____

2007 APR 26 PM 1 45

[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 is 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.

Carolyn Larson
 Print or Type Name

Carolyn Larson
 Signature

Regulatory Analyst
 Title

4-19-07
 Date

clarson@energen.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance XX Disposal Storage
Application qualifies for administrative approval? Yes No
- II. OPERATOR: Energen Resources Corporation
ADDRESS: 3300 North A Street, Bldg. 4, Ste. 100, Midland, TX 79705
CONTACT PARTY: Carolyn Larson PHONE: 432/684-3693
- 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 XX 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: Carolyn Larson TITLE: Regulatory Analyst

SIGNATURE: Carolyn Larson DATE: 4-19-07

E-MAIL ADDRESS: clarson@energen.com

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

Logs submitted with original completion by Charles Gillespie in 1985.

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

INJECTION WELL DATA SHEET

OPERATOR: ENERGEN RESOURCES CORPORATIONWELL NAME & NUMBER: State "F" #6WELL LOCATION: 2120' FNL and 400' FWL

FOOTAGE LOCATION

E

UNIT LETTER

2

SECTION

15S

TOWNSHIP

33E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17-1/2"Casing Size: 13-3/8"Cemented with: 452 sx. or ft³Top of Cement: SurfaceMethod Determined: cmt. circulatedIntermediate CasingHole Size: 11"Casing Size: 8-5/8"Cemented with: 1400 sx. or ft³Top of Cement: SurfaceMethod Determined: cmt. circulatedProduction CasingHole Size: 7-7/8"Casing Size: 5-1/2"Cemented with: 1025 sx. or ft³Top of Cement: 8352'Method Determined: CBLTotal Depth: 10,135'Injection Interval9750 feet to 10,100' perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2-7/8" Lining Material: IPCType of Packer: Baker Lok-setPacker Setting Depth: 9700'

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

Additional Data

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

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

2. Name of the Injection Formation: Permo; Upper Penn Formation

3. Name of Field or Pool (if applicable): Saunders; Permo Upper Penn

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. No

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

ENERGEN RESOURCES

State "F" Well #6
Saunders Permo Upper Penn
Lea County, New Mexico
2120' FNL & 400' FWL
UL "E", Section 2, Township 15 South, Range 33 East

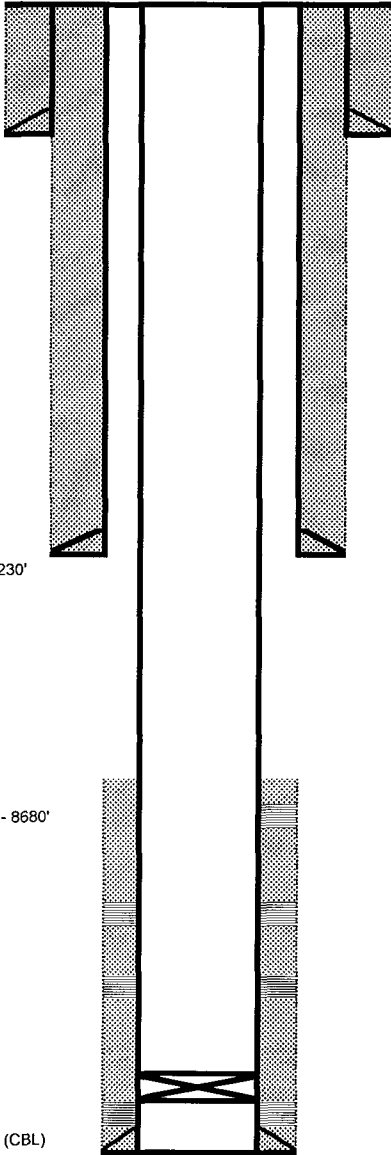
API: 3002529307
Active Producer

Current Status: Active Producer
4/1/2007

TD: 10,122'

Surface Casing:

13-3/8" 61# @ 365'
Cmt w/450 Sx, Circulated



Intermediate Casing:

8-5/8" 24# & 32#, J-55 ST&C set @ 4230'
Cmt w/ 1600 sx, circulated

Orig. TOC - 8680'

Production Casing:

5-1/2", 17#, N-80 & K-55 LT&C set
@ 10122', Cmt w/1025 Sx, TOC 8680' (CBL)

TD: 10,122'

TUBING DETAIL

Type Of Item	Description	Footage	Set Depth	Condition	Size	Weight	Grade	Jts Run
Elevation		14.5	14.5			0	0	1
Tubing		856.96	871.46	B - Rerun	2.38	4.7	L/N-80	27
Tubing		8055.28	8926.74	C - Rerun	2.38	4.7	J-55	248
Tubing		924.42	9851.16	B - Rerun	2.38	4.7	L/N-80	29
Blast joint	2-3/8 slick S.S.	7.07	9858.23	C - Rerun	2.38	0		1
Tubing Sub		28.8	9887.03	B - Rerun	2.38	4.7	L/N-80	3
2 3/8" seat nipple	API	1.1	9888.13	B - Rerun	2.38	0		1
Slotted SN		1.09	9889.22	B - Rerun	2.38	0		1
Tubing Anchor	5-1/2" 40K# shear	2.74	9891.96	B - Rerun	2.38	0		1
Perf Sub		4.07	9896.03	C - Rerun	2.38	4.7	J-55	1
Mud Joint	with 2-3/8" BP	32.87	9928.9	C - Rerun	2.38	4.7	J-55	1

Squeeze hole: 8510'

Squeeze with 25 sx cement. TOC at 8352'

Permo-Penn:

9780-96 32 Holes at 2 SPF
9820-32 24 Holes at 2 SPF
9837-48 22 Holes at 2 SPF

Permo-Penn:

9878-98 40 Holes at 2 SPF
9915-24 18 Holes at 2 SPF
9933-45 24 Holes at 2 SPF

CIPB at 9980'

Permo-Penn:

9984-96 24 Holes at 2 SPF
10006-18 24 Holes at 2 SPF

Cement

ENERGEN RESOURCES

State "F" Well #6
Saunders Permo Upper Penn
Lea County, New Mexico

2120' FNL & 400' FWL
UL "E", Section 2, Township 15 South, Range 33 East

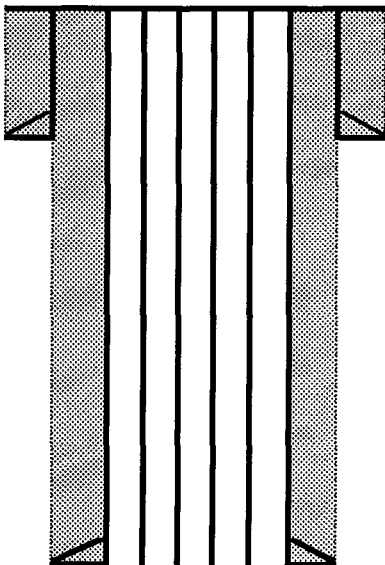
API: 3002529307

Proposed

TD: 10,122'

Surface Casing:

13-3/8" 61# @ 365'
Cmt w/450 Sx, Circulated



Intermediate Casing:

8-5/8" 24# & 32#, J-55 ST&C set @ 4230'
Cmt w/ 1600 sx, circulated

Orig. TOC - 8680'

Production Casing:

5-1/2", 17#, N-80 & K-55 LT&C set
@ 10122', Cmt w/1025 Sx, TOC 8680' (CBL)

TD: 10,122'

Squeeze hole: 8510'

Squeeze with 25 sx cement. TOC at 8352'

Packer @ 9700'

Permo-Penn:

9780-96 32 Holes at 2 SPF
9820-32 24 Holes at 2 SPF
9837-48 22 Holes at 2 SPF

Permo-Penn:

9878-98 40 Holes at 2 SPF
9915-24 18 Holes at 2 SPF
9933-45 24 Holes at 2 SPF

CIPB at 9980'

Permo-Penn:

9984-96 24 Holes at 2 SPF
10006-18 24 Holes at 2 SPF

Proposed

ENERGEN RESOURCES CORPORATION

State F #6`
2120' FNL and 400' FWL
Sec 2, T-15-S, R-33-E
Lea, Co. NM
Saunders Permo Upper Penn Field
SWD Conversion Procedure

RECEIVED

MAY 14 2007

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Date: March 29, 2007

AFE No:

Cost:

WI: %

NRI: %

TD: 10135'

PBTD: 9980' (CIPB)

KB: 4199'

GL: 4185'

Surface Casing: 13-3/8" 61#/ft, J-55 at 365'.
Cemented w/452 sx.
Cement circulated.

Intermediate Casing: 8-5/8" 24-32#/ft, J-55 Set at 4230'
Cemented w/1400 sx Howco Lite and 200 sx class C
Cement circulated

Production Casing: 5-1/2" 17#/ft, N-80 Surf to 1378'
K-55 1378 to 8208'
N-80 8208 to 10122'
Cemented w/1025 50/50 Poz H.
TOC at 8680'

Tubing: 2-3/8" 6.5#/ft, L/N-80 surf to 871'
J-55 871' to 8927'
L/N-80 8927' to EOT at 9928'
SN at 9887'
TAC at 9889'

Rods: 38-1425' 1" Fiberglass, 140-3500' 7/8" D, 35-875' 3/4" D, 10-250' 7/8" D, 6-150' 1-5/8" flexbar C

Pump: 20-125-RHBC-30-6-2

Permo-Penn:	9984-96	24 Holes at 2 SPF
CIBP at 9980'	10006-18	24 Holes at 2 SPF

Permo-Penn:	9878-98	40 Holes at 2 SPF
	9915-24	18 Holes at 2 SPF
	9933-45	24 Holes at 2 SPF

Permo Penn:	9780-96	32 Holes at 2 SPF
	9820-32	24 Holes at 2 SPF
	9837-48	22 Holes at 2 SPF

Squeeze hole: 8510'. Squeeze with 25 sx cement
TOC at 8352'

ENERGEN RESOURCES CORPORATION

State F #6

2120' FNL and 400' FWL

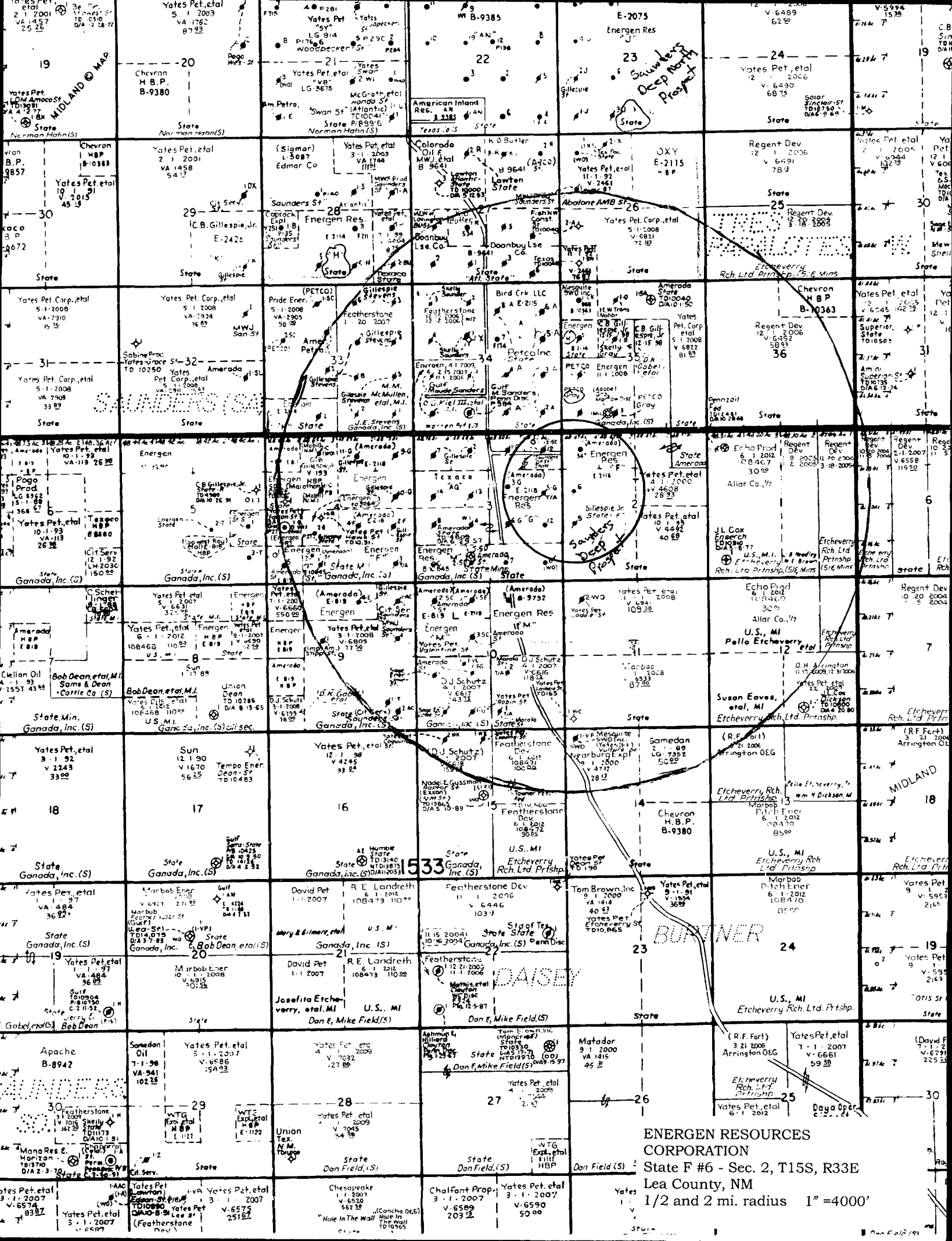
Sec 2, T-15-S, R-33-E

Lea, Co. NM

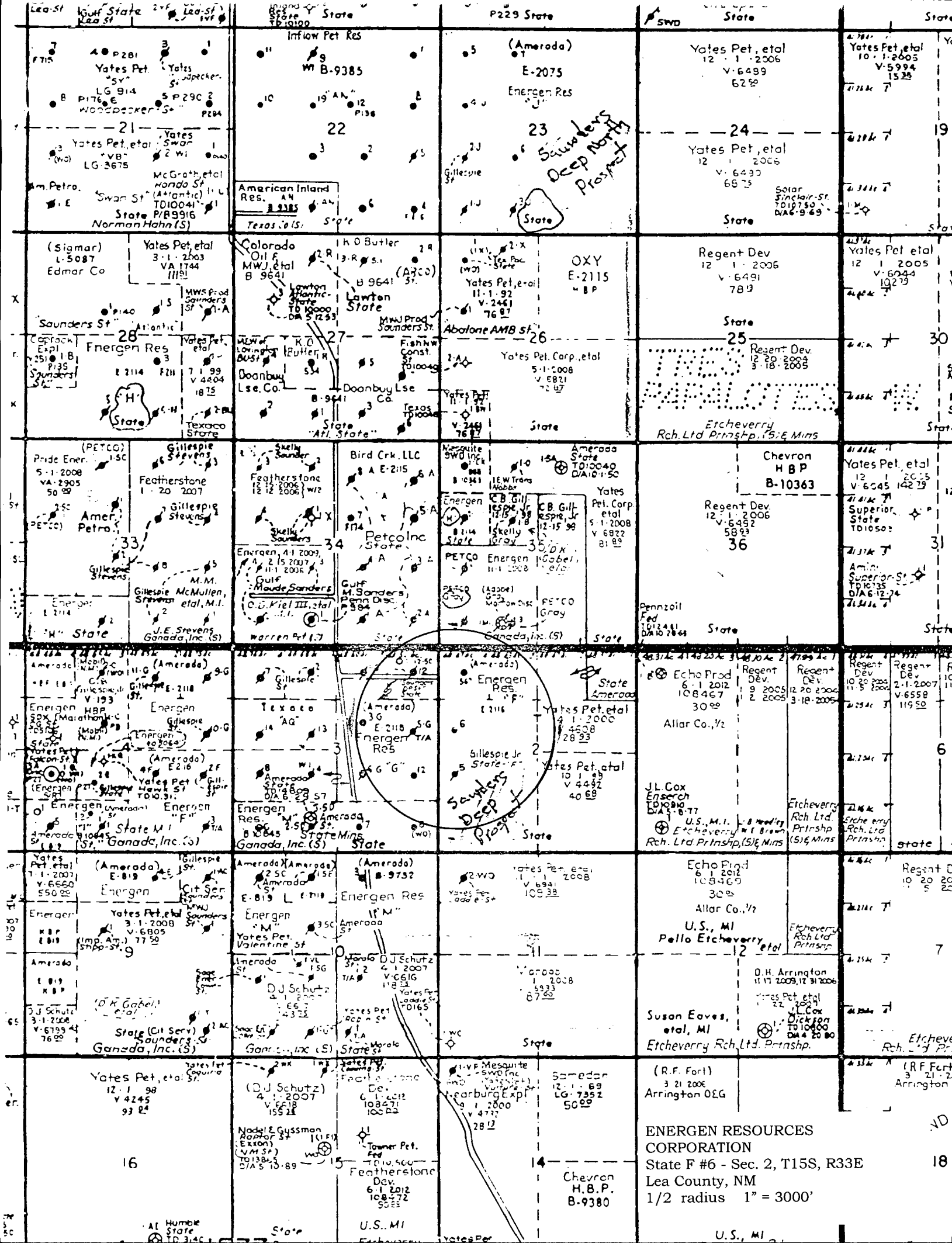
Saunders Permo Upper Penn Field

SWD Conversion Procedure

1. MIRU Pulling Unit
2. Install BOPE. POOH & LD rods, pump, and tubing. Send for inspection.
3. RIH w/ Packer and tbg. Set @ 9700' and test casing. If bad Call office for instruction.
4. PU Bit and collars and RIH w/tbg.
5. RU Reverse Unit. Drill CIBP @ 9980'
6. RIH w/ packer, SN and 2-3/8" tubing. Set packer at 9700'.
7. Acidize perms per service company recommendation.
8. RIH with injection equipment.
9. Circulated packer fluid per chemical company recommendation.
10. Set packer and allow for air to work out of annulus, then pressure test.
11. Notify OCD personnel for final mechanical integrity testing.
12. Test well
13. RD pulling unit
14. RU SWD facility.
15. Begin injection.



ENERGEN RESOURCES CORPORATION
State F #6 - Sec. 2, T15S, R33E
Lea County, NM
1/2 and 2 mi. radius 1" = 4000'



AREA OF REVIEW
WELL DATA

Operator	Well Name	API	Type	Status	Location	Distance	Spud Date	Total Depth	Bttm Int.	TOC	Construction
Energen Resources	State F #6	30-025-29307	O&G	Active	2E 15S 33E 2120' FNL & 400' FWL	0.0	8/6/1985				13-3/8" @365' w/450sx - Circulated 8-5/8" @4230' w/1400sx - Circulated 5-1/2" @10,122' w/1025sx - TOC 8680' CBL
								10,135	4230	8680	
Energen Resources	State E #1	30-025-01216	O&G	TA	3A 15S 33E 660' FNL & 660' FEL	1804.2	1/4/1951				13-3/8" @296' w/225sx - TOC surface 8-5/8" @3090' w/1000sx - TOC 1745' 5-1/2" @9933' w/600sx - TOC 6181' (7.25" hole)
								9933	3090	3926	
Energen Resources	State F #1	30-025-08331	O&G	Active	2D 15S 33E 660' FNL & 660' FWL	1483.0	5/12/1951				13-3/8" @298' w/250sx - TOC surface 8-5/8" @4240' w/1500sx - TOC 2056' 5-1/2" @9915' w/600sx - TOC 7138'
								9915	4240	7138	
** Chas. Gillespie Jr.	State F #5	30-025-29306	O&G	P&A	2L 15S 33E 1980' FSL & 400' FWL	1180.0	7/8/1985				13-3/8" @ 352' w/450sx - TOC surface 8-5/8" @ 4273' w/1340sx - TOC surface 5-1/2" @10,126' w/1100sx - TOC 6550'
								10,126	4273	6550	
Energen Resources	State G #3	30-025-01210	O&G	Active	3G 15S 33E 1320' FNL & 1980' FEL	2510.9	4/13/1951				13-3/8" @297' w/225sx - TOC surface 8-5/8" @4225' w/1500sx - TOC 2033' 5-1/2" @9905' w/600sx - TOC 7070'
								9905	4225	7070	
** Chas. Gillespie, Jr.	State G #5	30-025-01212	O&G	P&A	3H 15S 33E 2120' FNL & 660' FEL	1060.0	6/12/1951				13-3/8" @295' w/250sx - TOC Surface 7-5/8" @4295' w/1500 sx - TOC 1045' 5-1/2" @9908' w/600 sx - TOC 7336'
								9908	4295	7336	
Energen Resources	State G #12	30-025-28756	O&G	Active	3I 15S 33E 1980' FSL & 660' FEL	1586.2	6/9/1984				13-3/8" @352' w/400sx - TOC Surface 8-5/8" @4225' w/1700 sx - TOC Surface 5-1/2" @10,128' w/780 sx - TOC 7150'
								10,130	4225	7150	
* Energen Resources	Saunders Deep State #1	30-025-36859	O&G	Active	3A 15S R33E 420' FNL & 940' FEL	1785.5	2/27/2005				13-3/8" @ 413' w/800 sx - TOC surface 9-5/8" @ 5870' w/3800 sx - TOC surface 5-1/2" @ 13,542' w/2200 - TOC 5460' CBL
								13,931	5870	5460	
** Petroleum Corp. of TX	Gray Shell #1	30-025-01205	O&G	P&A	35M 14S 33E 660' FSL & 660' FWL	2792.1	9/16/1951				13-3/8" @332' w/325sx - TIC surface 8-5/8" @4209' w/3300sx - TOC surface 5-1/2" Lnr @4004 -9903' w/1050sx - TOC 4004'
								9903	4209	4404	
* New wells, not on "Ownership" map.											
** Operator when well was plugged. Not currently operating in this area.											

Prof 9862
ASCO
No Prod
New

ENERGEN RESOURCES CORPORATION

State "E" #1

Current Condition: TA
12-Apr-2007

Spud Date:

GL Elevation: 4194'

KB Elevation: 4201'

Location: 660' FNL & 660' FEL,

Sec 3, T-15-S, R-33-E

Lea County, NM

Surface Casing:

13-3/8" 36#, J-55
@ 296' in 17-1/2" hole
W/225 sx Class C cmt

Intermediate Casing:

8-5/8" 32 & 36#, J-55 & N-80
@ 3090' in 11" hole
Cmt w/1000 Sx cmt
TOC @ 1745'

TOC after Sqz @ 3926'

CICR @ 4750'
CICR @ 4878'
CICR @ 5242'
CICR @ 5432'
CICR @ 5583'

CIBP: Set @ 5675'

TOC @ 6181'

Production Casing:

5-1/2" 17# N-80 & J-55
@ 9933', Cmt w/ 600 sx Cmt
TOC @ 6181
Cmt Sqz Hole @ 5965'
TOC @ 3926' by CBL

San Andres Perfs:

4780'-4794', 4808-4824',
4836'-4846', 120 Holes, 4 spf
CICR @ 4750'
4900'-4916', 48 Holes, 4 spf
CICR @ 4878'
5288'-5309', 5318'-5338', 123
Holes, 4 spf, CICR @ 5242'
5490'-5518', 84 Holes, 4 spf
CICR @ 5432'
5550'-5558', 5572'-5580',
5592'-5598', 5604'-5618',
5628'-5644' 156 Holes, 4 spf
CICR @ 5583'

Pennsylvanian Perfs:

9535'-9550', 31 Holes, 2 spf
9562'-9612', 41 Holes, 2 spf
Permo Penn Perfs: 9728'-9744', 64 Holes, 4 spf
9750'-9776', 104 Holes, 4 spf
9808'-9828', 80 Holes, 4 spf
9833'-9855', 44 Holes, 2 spf
9858'-9890', 128 Holes, 4 spf
9905'-9915', 20 Holes, 2 spf
9923'-9927', 8 Holes, 2 spf

Permo Penn Perfs:

San Andres Perfs

Penn Perfs

CIBP: Set @ 9700' w/20' cmt

Permo Penn Perfs

PBD: 5675'
TD: 9933'

CHARLES B. GILLESPIE, JR.

State "F" Well #5
Saunders Permo Upper Penn
Lea County, New Mexico

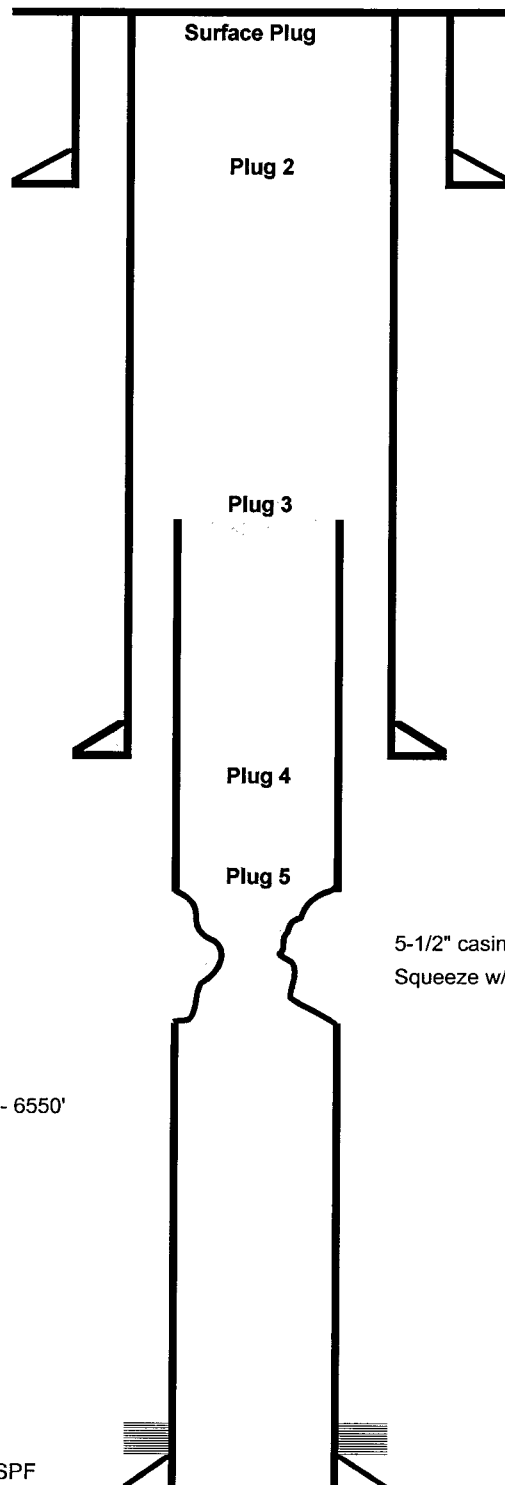
1980' FSL & 400' FWL
UL "L", Section 2, Township 15 South, Range 33 East

API: 3002529306
Date Plugged: 9/26/1996

TD: 10,126'

Perfs: 9976' - 9982' &
9993' - 10,014', 2 SPF

TOC - 6550'



Surface Casing:

13-3/8" 61# @ 352'

Cmt w/450 Sx, Circulated

Surface Plug: 15 Sx

Plug 2: 335' w/25 sx

Plug 3: 3107' - 3220' w/35 sx

Plug 4: 4300' w/25 sx

Plug 5: 4658' - 700 sx Sqz'd into
collapsed csg @ 5086'

5-1/2" Csg cut @ 3167'

Intermediate Casing:

8-5/8" 24# & 32# @ 4273'

Cmt w/ 1340 sx, circulated

5-1/2" casing collapsed @ 5086'

Squeeze w/700 sx, top @ 4658'

Production Casing:

5-1/2", 17# @ 10,126'

Cmt w/1100 Sx, TOC 6550'

TD: 10,126'

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

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

WELL API NO.
30-025-29306

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
E-2116-2

7. Lease Name or Unit Agreement Name
State "F"

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

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

2. Name of Operator
Charles B. Gillespie, Jr.

8. Well No.
5

3. Address of Operator
P. O. Box 8, Midland, TX 79702

9. Pool name or Wildcat
Saunders Fermo Upper Penn

4. Well Location
Unit Letter L : 1980 Feet From The South Line and 400 Feet From The West Line

Section 2 Township 15-S Range 33-E NMPM Lea County

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

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

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

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

- 1) 7-19-96 Cement top tagged inside 5½ casing @ 4658'
- 2) Load hole with mud
- 3) Cut 5½ casing @ 3167' Pulled out of hole
- 4) Spot 25 sx cmt Plug across 8-5/8 shoe @ 4300'
- 5) Spot 35 sx cement Plug across 5½ stub @ 3220' W.O.C. Tag cement top @ 3107'
- 6) Spot 25 sx cement plug @ 335'
- 7) Spot 15 15 sx cement plug @ surface Set PA marker
- 8) Job completed 9-26-96

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

SIGNATURE Raymond M. Deland TITLE Supervisor DATE 9/26/96

TYPE OR PRINT NAME TELEPHONE NO.

(This space for State Use)

APPROVED BY Raymond M. Deland TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

IC

CD

CHARLES B. GILLESPIE, JR.

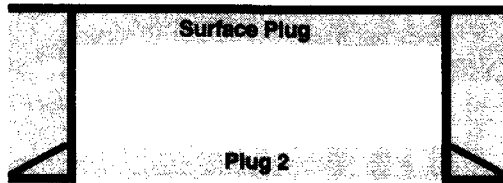
State "G" Well #5
Saunders Permo Upper Penn
Lea County, New Mexico

2120' FNL & 660' FEL
UL "H", Section 3, Township 15 South, Range 33 East

API: 3002501212

TD: 9908'

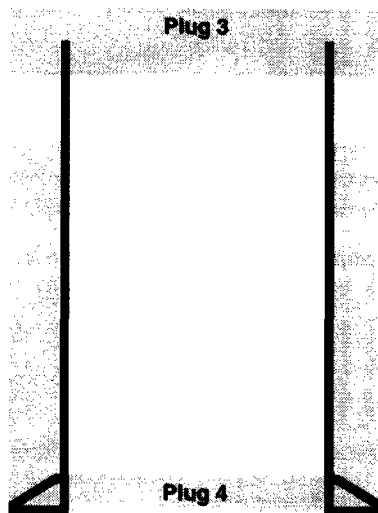
Date Plugged: 5/5/1993



Surface Casing:

13-3/8" 36# @ 295'

Cmt w/250 Sx, TOC Surface



TOC - 1045'

Surface Plug: 15 Sx @ Surface

Plug 2: 80 sx @ 345', TOC tagged @ 246'

Plug 3: 8-5/8" Csg cut @ 700' & POOH

Spot 55 sx @ 700', TOC tagged @ 639'

Plug 4: 4285' w/30 sx, TOC tagged @ 4173'

Plug 5: 5-1/2" Csg cut @ 4716' & POOH

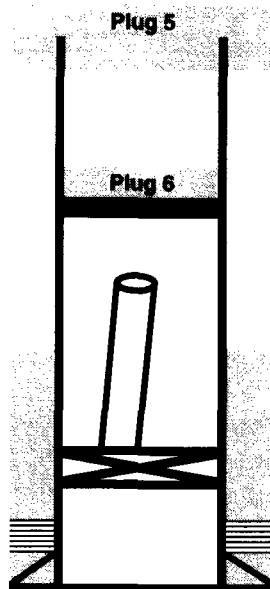
Spot 30 sx @ 4776', TOC tagged 4672'

Plug 6: 5684' CIGR w/400 sx C+ 100' on top

Intermediate Casing:

8-5/8" 32# @ 4235'

Cmt w/ 1500 sx, TOC 1045'



TOC - 7336'

CIBP @ 9590'

Perfs: 9870' - 9902'

TD: 9908'

Top of Fish @ 6022'

Fish is 2-3/8" tubing, Drill Collar and Bit

Production Casing:

5-1/2", 17# & 15.5# @ 9908'

Cmt w/600 Sx, TOC 7336'

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

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

WELL API NO.	30-025-01212 ✓
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	E-2118
7. Lease Name or Unit Agreement Name	STATE G
8. Well No.	5
9. Pool name or Wildcat	offici Saunders Permian Penn

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER	
2. Name of Operator CHARLES B. GILLESPIE JR.	
3. Address of Operator P.O. BOX 8 Midland, Tx. 79702	
4. Well Location Unit Letter H : 2120 Feet From The North Line and 660 Feet From The East Line Section 3 Township 15-S Range 33-E NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4186' GR 4199 DF	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

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

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

- (1) Lead hole w/mud
- (2) Cut 5½ casing POOH @ 4716
- (3) Spot 30 sacks cement @ 5½ stub 4776' W.O.C. tag plug @ 4672'
- (4) Spot 30 sacks cement @ 8 5/8 shoe 4285' W.O.C. Tag plug @ 4173'
- (5) Cut 8 5/8 casing POOH w/700'
- (6) Spot 55 sacks cement @ 8 5/8 stub 700' W.O.C. Tag plug @ 639'
- (7) Spot 80 sacks cement @ 13 3/8 shoe 345' W.O.C. Tag plug @ 246'
- (8) spot 15 sacks cement @ surf. Set P&A marker

work began 4-20-93 completed 5-5-93

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

SIGNATURE Raymond M. Alderado TITLE Supervisor DATE 5-21-93
TYPE OR PRINT NAME TELEPHONE NO.

(This space for State Use)

APPROVED BY Jack Griffin TITLE OIL & GAS INSPECTOR DATE 5-21-93
CONDITIONS OF APPROVAL, IF ANY:

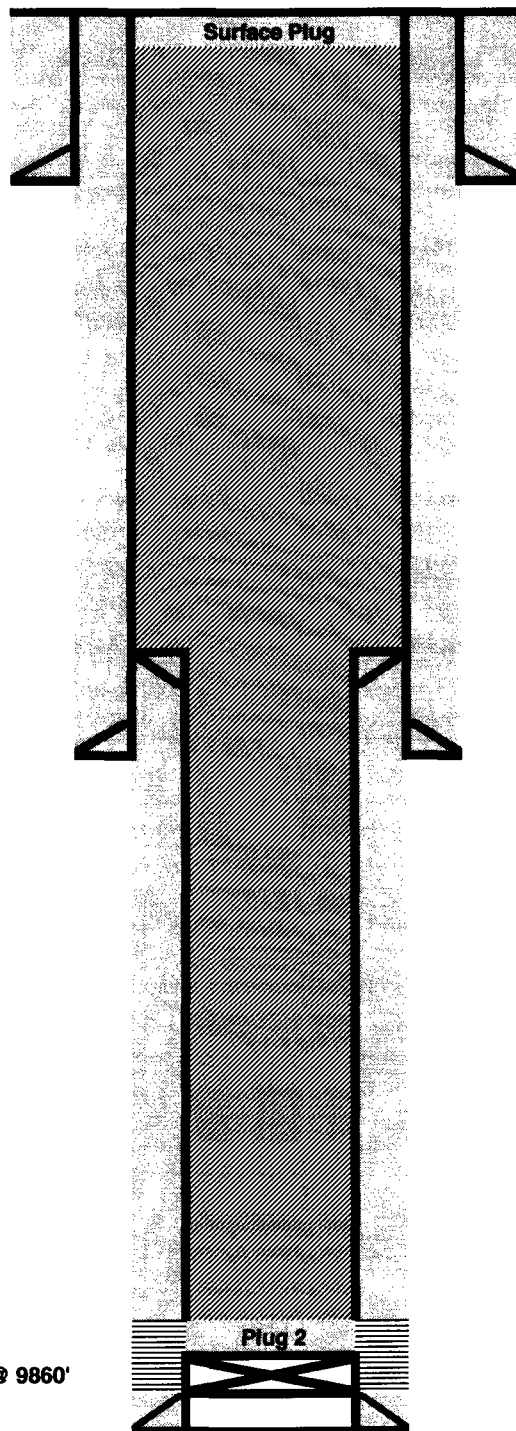
PETROLEUM CORPORATION OF TEXAS

Gray Shell #1
Saunders Permo Upper Penn
Lea County, New Mexico

660' FSL & 660' FWL
UL "M", Section 35, Township 14 South, Range 33 East

API: 3002501205
Date Plugged: 4/13/1970

TD: 9905'



Surface Casing:
13-3/8" 48# @ 317'
Cmt w/325 sx to Surface

Surface Plug: 10 sx @ Surface
Plug 2: 25 sx 9711'-9831' across perfs
Hole filled w/mud laden fluids between plugs

TOL @ 4001'

Intermediate Casing:
8-5/8" 32# @ 4209'
Cmt w/3300 sx to Surface

Perfs: 9786' - 9831
9882' - 9888'
CIBP @ 9860'

Liner:
5-1/2" 15.5# & 17# @ 4001' - 9903'
Cmt w/1050 sx, TOC Approx. 4000'

TD: 9905'

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
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 <input type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. Patented
7. Unit Agreement Name
8. Farm or Lease Name Gray Shell
9. Well No. 1
10. Field and Pool, or Wildcat Saunders (Permo-Pen)
12. County Lea

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"/>
2. Name of Operator Petroleum Corporation of Texas
3. Address of Operator c/o Hobbs Pipe & Supply Co. P.O. Box 2010 Hobbs, N M
4. Location of Well UNIT LETTER <u>M</u> <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>660</u> FEET FROM THE <u>West</u> LINE, SECTION <u>35</u> TOWNSHIP <u>14S</u> RANGE <u>33S</u> NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 4198 DF

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 JOBS <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.

1. Spotted a 25 sx. cement plug across perforations at 9831'-9711'.
2. Hole was loaded with mud laden fluids.
3. Spotted a 10 sx. cement plug at surface with marker.
4. No casing was recovered.

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

SIGNED <u>Harold Schuler</u>	TITLE <u>Agent</u>	DATE <u>4-13-70</u>
APPROVED BY <u>John W. Runyan</u>	TITLE <u>Geologist</u>	DATE <u>MAY 5 1971</u>
CONDITION OF APPROVAL, IF ANY:		

AM

ENERGEN RESOURCES CORPORATION
State "F" #6
2120' FNL & 440' FWL
Section 2, 15S, 33E
Lea County, NM

VII. Data on the proposed operation:

1. Proposed average daily injection volume: 4000 BWPD
Proposed maximum daily injection volume: 5000 BWPD
2. This will be a closed system.
3. Proposed average daily injection pressure: 850 psi
Proposed maximum daily injection pressure: 1950 psi

4. Sources of injection water will be produced water from area Devonian, Atoka and San Andres wells that have been drilled and that are scheduled to be drilled. Water analysis from these 3 zones has been taken from Brazos Deep State #1, Saunders Deep State #2 and State "G" #3 and the resulting report is attached.

List of produced Water Source Wells:

Texas Deep State #1
Saunders Deep State Nos. 1, 2, 3 and 4
Brazos Deep State #1
State F, G, H, I, J, M. Q. S. and T

5. Chlorides in all the source wells is expected to be similar to the water analysis in the same Attachment from Martin Water Labs.

IX. Describe the proposed stimulation program, if any.

Well will be acidized with 15,000 gallons of 15% HCL acid if required.

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

TO: Mr. Mark Solari
3300 N. "A" Bldg 3, Suite 100, Midland, TX 79705

LABORATORY NO. 107-274
SAMPLE RECEIVED 1-18-07
RESULTS REPORTED 1-25-07

COMPANY Energen Resources LEASE State "F" #6

FIELD OR POOL _____
SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Atoka. 1-17-07 - Brazos Deep State #1
NO. 2 Devonian. 1-17-07 - Saunders Deep State #2
NO. 3 San Andres. 1-17-07 - State "G" #3
NO. 4 _____

REMARKS: _____

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0390	1.0210	1.1130	
pH When Sampled				
pH When Received	6.69	6.73	6.69	
Bicarbonate as HCO ₃	525	476	634	
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	6,900	3,800	8,400	
Calcium as Ca	2,320	1,320	2,400	
Magnesium as Mg	267	122	583	
Sodium and/or Potassium	19,353	9,698	61,652	
Sulfate as SO ₄	457	923	3,575	
Chloride as Cl	34,089	16,689	98,006	
Iron as Fe	660	17.3	2.0	
Barium as Ba	0	0	0	
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	57,011	29,228	166,851	
Temperature °F.				
Carbon Dioxide, Calculated	215	157	260	
Dissolved Oxygen,				
Hydrogen Sulfide	0.0	5.3	127.2	
Resistivity, ohms/m at 77° F.	0.145	0.262	0.065	
Suspended Oil				
Fixed Solids as mg/l Corrosiveness	Moderate	Mod-Severe	Mod-Severe	
Volume Barium Sulfate Scaling Tendency	None	None	None	
CaCO ₃ S.I. @ 77° F. (Stiff-Davis)	-0.05	-0.06	0.40	
CaCO ₃ S.I. @ 122° F. (Stiff-Davis)	0.55	0.54	1.00	
Calcium Sulfate Scaling Tendency	None	None	None	
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks				
CaCO ₃ S.I. - A positive fig. signifies a scaling potential proportionate to the magnitude of the number, and a negative fig. signifies no scaling potential.				
Based on these results and a hypothetical combination of all three, we would not expect a significant scaling potential from either calcium sulfate nor barium sulfate. A slight calcium carbonate scaling tendency exists in each water, but combining them should not increase this potential significantly.				

Form No. 3

By 

Greg Ogden, B.S.

ERC #6 State "F"
Lea Co., N.M.

Permo-Penn Injection Zone

- VIII Injection zone: The Permo-Penn perforated interval between 9780'-10,018' will be used for salt water disposal. The Permo-Penn lithology is limestone that has developed intercrystalline porosity, as well as secondary vuggy porosity. The depositional environment is a shallow, normal marine shelf that dipped east into the Tatum Basin. There has been minimal tectonic activity since the early Paleozoic; hence, only minor depositional and compacting fracturing has occurred since Permo-Penn time.

The Ogallala formation is a fresh water aquifer that occurs from 60-250' beneath the surface. It is protected by strings of casing: 13 3/8" at 365' and 8 5/8 at 4230. Both strings of casing circulated cement to surface.

- XII I, David Cromwell, have examined the available geologic data and find no evidence of open active faults, which may connect this proposed disposal zone to any underground sources of fresh, potable water aquifer.

DWC
9-Apr-07

P.O. BOX 98
MIDLAND, TX. 79702
PHONE (432) 683-4521

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
FAX (432) 682-8819

RESULT OF WATER ANALYSES

TO: Mr. Mark Solari
3300 N. A Street, Bldg 4, Suite 100, Midland, TX 79705

LABORATORY NO.	107-275
SAMPLE RECEIVED	1-18-07
RESULTS REPORTED	1-25-07

COMPANY Energen Resources

LEASE _____ State M-8

FIELD OR POOL

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Submitted water sample - taken from fresh water well.

NO. 2.

NO. 3.

NO. 4 .

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0008			
pH When Sampled				
pH When Received	7.46			
Bicarbonate as HCO ₃	171			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	230			
Calcium as Ca	67			
Magnesium as Mg	15			
Sodium and/or Potassium	8			
Sulfate as SO ₄	60			
Chloride as Cl	31			
Iron as Fe	59.3			
Barium as Ba	0			
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	352			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	24.050			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks

The undersigned certifies the above to be true and correct to the best of

By

Greg Ogden, B.S.

ENERGEN RESOURCES CORPORATION
State "F" #6
2120' FNL & 440' FWL
Section 2, 15S, 33E
Lea County, NM

XIII. Item A – Proof of Notice

Surface Owner

New Mexico State Land Office
Oil, Gas and Minerals Division
P. O. Box 1148
Santa Fe, NM 87504-1148

Lease Operators within ½ mile:

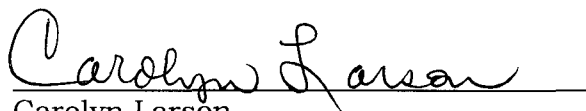
Yates Petroleum Corporation
104 S. 4th Street
Artesia, NM 88210

Chesapeake Operating, Inc.
P. O. Box 11050
Midland, TX 79702

Energen Resources Corporation
3300 N. A St., Bldg. 4, Ste. 100
Midland, TX 79705

A copy of this application was furnished to the New Mexico State Land Office at the above address by certified mail No. 7002 2410 0000 0033 5915 on April 19, 2007.

A copy of this application was furnished to Yates Petroleum and Chesapeake Operating at the above respective addresses on May 10, 2007.


Carolyn Larson
Regulatory Analyst

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

April 12 2007
and ending with the issue dated

April 12 2007

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 12th day of

April 2007
[Signature]

Notary Public.

My Commission expires
February 07, 2009
(Seal)



My Commission Expires: _____

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

April 12, 2007

NOTICE OF APPLICATION FOR
FLUID INJECTION WELL PERMIT

Energen Resources Corporation, 3300 N. A St. Bldg. 4, Ste. 100, Midland, TX 79705 (Contact Person: Carolyn Larson, (432) 684-3693) is applying to the New Mexico Oil Conservation Division seeking administrative approval to inject fluid into a formation productive of oil or gas.

The applicant proposes to inject fluid into the State F #6 for the purpose of disposing of water from area wells producing from the Atoka, Devonian, Permo-Upper Penn, and San Andres formations. The proposed disposal well is located in Section 2, T-15-S, R-33E, Lea County, New Mexico. Fluid will be injected into strata in the subsurface Permo-Upper Penn Formation, at a depth interval from 9750' - 10100'. Expected maximum injection rate is 5000 BWPD. Expected maximum injection pressure is 1800 psig.

LEGAL AUTHORITY: Rule 401.C(1) of the Rules and Regulations of the New Mexico Oil Conservation Commission.

Requests for a public hearing from persons who can show they are adversely affected, or requests for further information concerning any aspect of the application should be submitted in writing, within fifteen days of this publication, to the Oil Conservation Division, 1220 South St. Francis, Santa Fe, NM 87505.
#23178

02107745000 67543597
ENERGEN RESOURCES
3300 NORTH "A" STREET
BUILDING 4, SUITE 100
MIDLAND, TX 79705

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except in state land, where six copies are required. See Rule 1135.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____ 1580'	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____ 1677'	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____ 2550'	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____ 2695'	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____ 3902'	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____ 4130'	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzite _____
T. Glorieta _____ 5769'	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____ 6056'	T. Ellenburger _____	T. Dakota _____	T. _____
T. Elinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____ 7072'	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____ 7800'	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____ 9145'	T. _____	T. Chinle _____	T. _____
T. Penn. _____ 9436'	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	6	6	Cellar				
6	220	214	Sand, caliche				
220	300	80	Redbed, sand, shale				
300	1690	1390	Sand, anhydrite, shale				
1690	2710	1020	Shale, anhydrite, salt				
2710	3230	520	Shale, anhydrite, sand				
3230	3500	270	Shale, anhydrite				
3500	4020	520	Shale, anhydrite, sand, salt				
4020	4200	180	Shale, anhydrite, sand, dolomite				
4200	5590	1390	Dolomite, anhydrite				
5590	5650	60	Limestone, dolomite				
5650	5740	90	Dolomite, anhydrite				
5740	6490	750	Dolomite, sand, anhydrite				
6490	7800	1310	Dolomite, anhydrite				
7800	8480	680	Shale, dolomite, anhydrite				
8480	9100	620	Dolomite, anhydrite				
9100	9220	120	Dolomite, chert				
9220	9410	190	Limestone, chert, shale				
9410	10135	725	Limestone, shale				

RECEIVED
OCT 10 1985
G.C.O.
HOURS OFFICE

COMPLETIONS SEC 2 TWP 15S RGE 33E
PI# 30-T-0007 11/21/85 30-025-29307-0000 PAGE 2

GILLESPIE CHARLES B JR D DO
6 STATE "F"

TYPE	FORMATION	LTH	TOP DEPTH/SUB	BSE DEPTH/SUB
LOG	ABO		7800 -3600	
LOG	WOLFCAMP		9145 -4945	
LOG	PNNSYLVN		9436 -5236	

LOGS AND SURVEYS /INTERVAL, TYPE/

LOGS	CBND	DI	GRNL
LOGS	ML		

DRILLING PROGRESS DETAILS

GILLESPIE CHARLES B JR
BOX 8
MIDLAND, TX 79702
915-683-1765
06/17 LOC/1985/
08/09 DRLG 1510
08/13 DRLG 2810
08/20 DRLG 7396
08/27 DRLG 9860
09/04 10135 TD, RNG CSG
11/14 10135 TD, PB 10065, COMPLETE
11/18 TD REACHED 08/29/85
10135 TD, PB 10065
COMP 10/8/85, IPP 48 BO + 94 BWPD, GTY
42.1, GOR 2167
PROD ZONE - PERMO-PENNSYLVANIAN 9878-
9945
NO CORES OR DSTS

Jones, William V., EMNRD

From: Carolyn Larson [Carolyn.Larson@energen.com]
Sent: Thursday, May 10, 2007 3:37 PM
To: Jones, William V., EMNRD
Subject: RE: SWD Application: State F #6 API No. 30-025-29307
Attachments: State F #6_20070510162351.pdf

Mr. Jones:

Attached are corrected/additional pages that should answer all of your questions. I have placed the original plus one copy in the mail today addressed to your attention. I will also mail a copy to the Hobbs District Office. Please let me know if you require any further information.

CL

*Carolyn Larson
 Regulatory Analyst
 Energen Resources Corp.
 (432) 684-3693
 (432) 688-3140 FAX*

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, May 08, 2007 10:12 AM
To: Carolyn Larson
Cc: Ezeanyim, Richard, EMNRD; Kautz, Paul, EMNRD
Subject: SWD Application: State F #6 API No. 30-025-29307

Hello Ms Larson:

The Division has received your application and after reviewing have the following questions:

- ✓ 1) Is this well 400 FWL or 440 FWL?
- ✓ 2) Our new notice Rule is 701.B(2). This well is Please let us know if Energen has all acreage leased within the 1/2 mile AOR of this well including the portion in the E/2 of Section 2.
- ✓ 3) Since this is a depleted producing well and injection will be in the same interval, please send a production vs time plot showing all production from this interval in this well and also put the final cumulative oil and gas and water on the plot somewhere.
- ✓ 4) Ask your reservoir engineer and/or David Cromwell to send a brief writeup of their expectations of this injection on any productive capability within the PermoPenn within the vicinity of this well or in the 1/2 mile AOR. It seems this well is on the edge of the reservoir - please send more data for our records of what exists on the edge of this reservoir. Was it a water saturation edge or a pinchout or other? If this injection is expected to stimulate other producing wells, why is that? Is there any waterflooding parameters that are favorable and what are they?

Thank You,

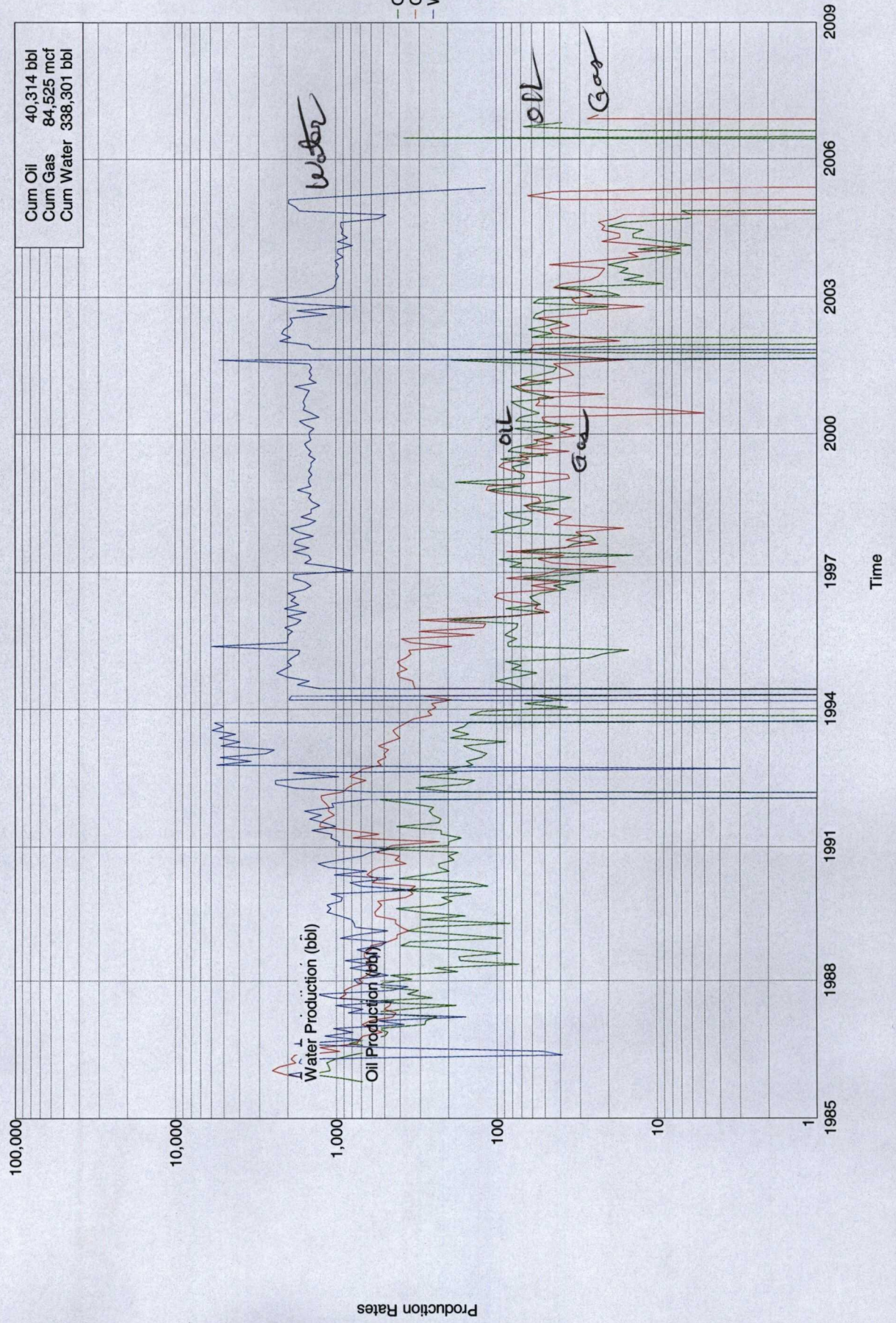
William V. Jones PE
 New Mexico Oil Conservation Division
 1220 South St. Francis
 Santa Fe, NM 87505
 505-476-3448

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient

5/14/2007

Lease Name: STATE F
County, State: LEA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: SAUNDERS
Reservoir: PERMO UPPER PENNSYLV
Location: 2 15S 33E

STATE F # 6 - SAUNDERS



Energen #6 State "F"

Tract E Section 2 T-15-S R-33- E

Lea County, NM

The ERC #6 St. "F" is located on the eastern, downdip boundary of the established Permo-Penn production. There are no productive or dryhole well- bores further east (see structure map). The exact nature of the reservoir is unknown to the east-there is no evidence of an oil-water contact or a diminution of porosity and permeability. When the field was discovered in the early 1950's the reservoir trap was described (Roswell Geological Society, 1960) as a anticlinal structural with a solution gas expansion drive. There are as many as 7 separate porosity zones over a 200' interval in the Permo-Penn. There was a high GOR (1400:1) originally and it increased with pressure depletion. As a result of the high GOR there will be a long response time for the injected water to enhance secondary recovery; therefore, for the time being, this well will be treated as a saltwater disposal. However ERC is willing to view this as a pilot to determine if the Permo-Penn interval can be successfully pressured with water injection to into the multiple pay horizons.

Hence recover additional oil from the offset wells that would otherwise be left in the reservoir.

No mention of mobility Ratios Good or Bad — WVSJ

Injection Permit Checklist 2/8/07

SWD Order Number 1083 **Dates:** Division Approved _____ District Approved _____

Well Name/Num: State F #6 **Date Spudded:** 8/85

API Num: (30-) 025-29307 **County:** Lea

Footages 2120 FNL/400 FWL **Sec** 2 **Tsp** 15S **Rge** 33E

Operator Name: Energy Resource Corporation **Contact** Carolyn Larson

Operator Address: 3300 North A Street, Bldg 4, Suite 100, Midland TX 79705

Current Status of Well: Producer **Planned Work:** Convert **Inj. Tubing Size:** 2 7/8

	Hole/Pipe Sizes		Depths	Cement	Top/Method
Surface	17 1/2	13 3/8	365'	452	CIRC
Intermediate	11	8 5/8	4230'	1400	ICIRC
Production	7 7/8	5 1/2	10122	1025	8 689 8352 CBLT has 02 To 1 8352
Last DV Tool					
Open Hole/Liner					
Plug Back Depth			10135		

Diagrams Included (Y/N): Before Conversion ✓ After Conversion ✓

Checks (Y/N): Well File Reviewed ✓ ELogs in Imaging ✓

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/Potash			
Capitan Reef			
Cliff House, Etc.			
Formation Above			
Top Inj Interval	9750	Upper Permian	1950 PSI Max. WHIP
Bottom Inj Interval	10100	Permian	NO Open Hole (Y/N)
Formation Below			NO Deviated Hole (Y/N)

TOPS? ✓

Fresh Water: Depths: 60'-250' Wells(Y/N) 1/2 Analysis Included (Y/N) ✓ Affirmative Statement ✓

Salt Water Analysis: Injection Zone (Y/N/NA) _____ Disp Waters (Y/N/NA) _____ Types: Dev/ATOKA/SA, Permian

Notice: Newspaper(Y/N) ✓ Surface Owner CLO Mineral Owner(s) _____

Other Affected Parties: none

AOR/Repairs: NumActiveWells 6 Repairs? — Producing in Injection Interval in AOR (it was before!)

AOR Num of P&A Wells 3 Repairs? — Diagrams Included? _____ RBDMS Updated (Y/N) ✓

Well Table Adequate (Y/N) ✓ AOR STRs: Sec _____ Tsp _____ Rge _____ UIC Form Completed (Y/N) Yes

New AOR Table Filename _____ Sec _____ Tsp _____ Rge _____ This Form completed 5/14/07

Conditions of Approval: Sec _____ Tsp _____ Rge _____ Data Request Sent on 1/14/07
✓ Need State Protection effect of other S.P.P. production / EDGE of Pool Talk.
✓ Does Energy control all S.P.P. in 1/2 mile?
✓ Produce Plot w/ Cumuls of Subj well

AOR Required Work: _____

Required Work to this Well: _____