

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 \_\_\_\_\_

*Devon*  
*API-pending*  
*K/16/24S/27E*  
*Black River 16 SWD\**  
 RECEIVED OGD  
 2013 SEP 13 P 1:12  
*Devonian*  
*Ordovician*

- [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.**

Stephanie A. Porter  
 Print or Type Name

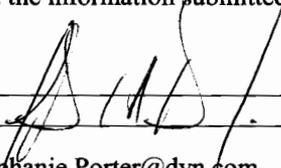
*[Signature]*  
 Signature

Operations Technician  
 Title

9/12/2013  
 Date

Stephanie.Porter@dmn.com  
 e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_  Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  Yes \_\_\_\_\_ No
- II. OPERATOR: \_\_\_\_\_ Devon Energy Production Company, LP \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ 333 West Sheridan Avenue, Oklahoma City, Oklahoma 73102-5010 \_\_\_\_\_  
CONTACT PARTY: \_\_\_\_\_ Stephanie A. Porter \_\_\_\_\_ PHONE: \_\_\_\_\_ 405-552-7802
- 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: \_\_\_\_\_ Stephanie A. Porter \_\_\_\_\_ TITLE: \_\_\_\_\_ Operations Technician \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_  \_\_\_\_\_ DATE: \_\_\_\_\_ 07/12/03 \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_ Stephanie.Porter@dvn.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: \_\_\_\_\_

### 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.**

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**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.

# INJECTION WELL DATA SHEET

OPERATOR: Devon Energy Production Company, LP

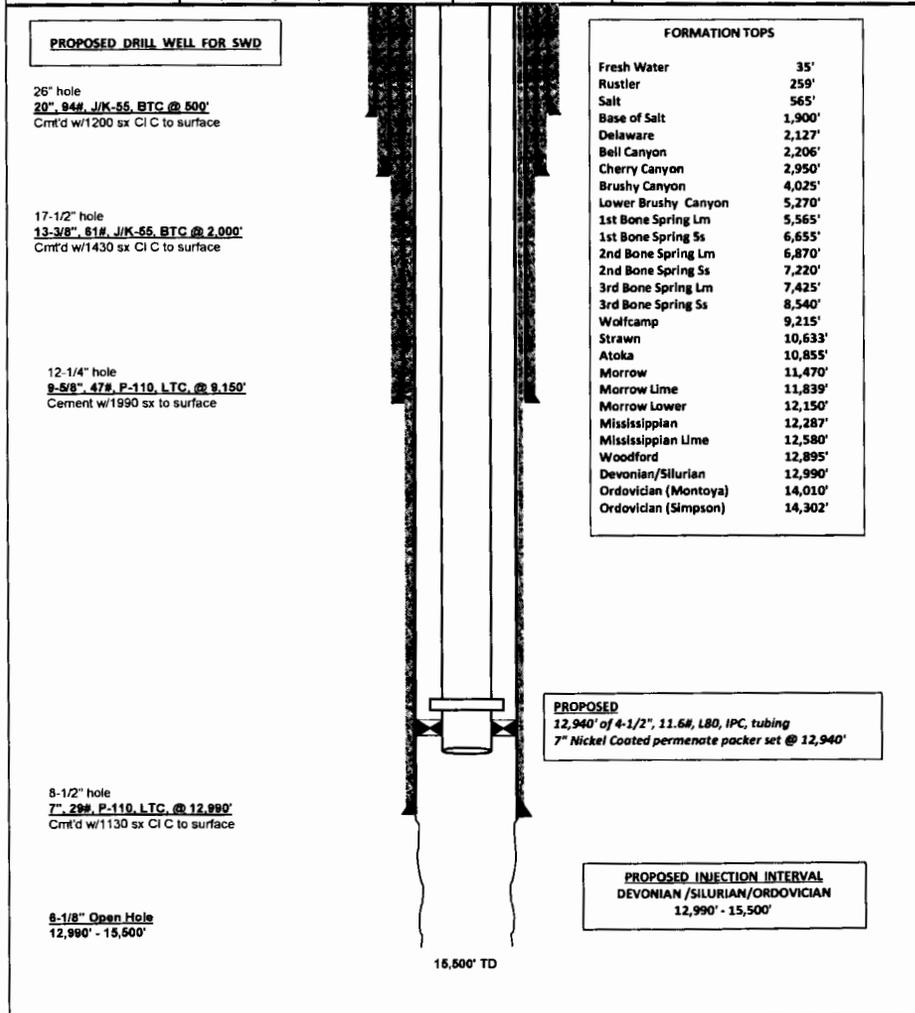
WELL NAME & NUMBER: BLACK RIVER 16 SWD #1

WELL LOCATION: 2631' FSL & 2613' FWL K Sec 16 T24S R27E  
 FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

### WELLBORE SCHEMATIC

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: <b>BLACK RIVER 16 SWD 1</b>		Field: <b>BLACK RIVER NORTH</b>	
Location: <b>Sec 16 - 24S-27E; 2631' FSL &amp; 2613' FWL</b>		County: <b>EDDY</b>	State: <b>NM</b>
Elevation: <b>3190.3</b>		Spud Date: <b>N/A</b>	Compl Date: <b>N/A</b>
API#: <b>30-015-</b>	Prepared by: <b>Stephanie Porter</b>	Date: <b>9/10/13</b>	Rev:



FORMATION TOPS	
Fresh Water	35'
Rustler	259'
Salt	565'
Base of Salt	1,900'
Delaware	2,127'
Bell Canyon	2,206'
Cherry Canyon	2,950'
Brushy Canyon	4,025'
Lower Brushy Canyon	5,270'
1st Bone Spring Lm	5,565'
1st Bone Spring Ss	6,655'
2nd Bone Spring Lm	6,870'
2nd Bone Spring Ss	7,220'
3rd Bone Spring Lm	7,425'
3rd Bone Spring Ss	8,540'
Wolfcamp	9,215'
Strawn	10,633'
Atoka	10,855'
Morrow	11,470'
Morrow Lime	11,839'
Morrow Lower	12,150'
Mississippian	12,287'
Mississippian Lime	12,580'
Woodford	12,895'
Devonian/Silurian	12,990'
Ordovician (Montoya)	14,010'
Ordovician (Simpson)	14,302'

### WELL CONSTRUCTION DATA

#### Surface Casing

Hole Size: 26" Casing Size: 20", 94# @ 500'  
 Cemented with: 1200 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface Method Determined: Circ. cement

#### Intermediate Casing

Hole Size: 17-1/2" Casing Size: 13-3/8", 61#, @ 2000'  
 Cemented with: 1430 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface Method Determined: Circ. cement

#### Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8", 47#, @ 9150'  
 Cemented with: 1990 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface Method Determined: Circ. cement

#### Production Casing

Hole Size: 8-1/2" Casing Size: 7", 29#, @ 12990'  
 Cemented with: 1130 sx. or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: Surface Method Determined: Circ. cement

Total Depth: 15500 *[Signature]*  
14622 Injection Interval (Open Hole) *[Signature]*  
+100  
14722 (Perforated or Open Hole; indicate which) 14722  
 12990' to 15500 +100

**INJECTION WELL DATA SHEET**

Tubing Size: 4-1/2" Lining Material: IPC

Type of Packer: 7" Nickel Coated Arrowset Packer

Packer Setting Depth: +/- 12940'

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

Additional Data

1. Is this a new well drilled for injection? Yes

If no, for what purpose was the well originally drilled? \_\_\_\_\_

2. Name of the Injection Formation: Devonian/Silurian/Ordovician

3. Name of Field or Pool (if applicable): (to be assigned)

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. N/A

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

Fresh Water 35; Rustler 259; Salt 565 (Barren); Base of Salt (chg to anhy) 1900 (Barren); Delaware 2127 (Barren); Bell Canyon 2206 (Oil); Cherry Canyon 2950 (Oil); Brushy Canyon 4025 (Oil); Lower Brushy Canyon 5270 (Oil); 1st Bone Spring Lm 5565 (Oil); 1st Bone Spring Ss 6655 (Oil); 2nd Bone Spring Lm 6870 (Oil); 2nd Bone Spring Ss 7220 (Oil); 3rd Bone Spring Lm 7425 (Oil); 3rd Bone Spring Ss 8540 (Oil); Wolfcamp 9215 (Gas); Strawn 10633 (Gas); Atoka 10855 (Gas); Morrow 11470 (Gas); Morrow Lime 11839 (Gas); Morrow Lower 12150 (Gas); Mississippian 12287 (Gas); Mississippian Lime 12580 (Gas); Woodford 12895 (Barren); Devonian/Silurian 12990 (Barren); Ordovician (Montoya) 14010 (Barren); Ordovician (Simpson) 14302 (Barren); Ordovician (Ellenburger) 14622 (Barren)

Remove Lower Ellenburger - Top 100'

**Proposed Injection Well: Black River 16 SWD #1**

API: 30-015-

APPLICATION FOR INJECTION

Form C-108 Section III

**III. Well Data--On Injection Well**

**A. Injection Well Information**

- (1) **Lease** Black River 16 SWD  
**Well No** #1  
**Location** 2631' FSL & 2613' FWL  
**Sec.Twn,Rnge** Sec 16-T24S-R27E  
**Cnty, State** Eddy County, NM
- (2) **Casing** 20", 94#, J/K-55,BTC, @ 500'  
Cmt'd w/1200 sx, circ cmt to surf  
  
13-3/8", 61#, J/K, BTC, @ 2000'  
Cmt'd w/1430 sx, circ cmt to surf  
  
9-5/8", 47#, P-110, LTC, @ 9150'  
Cmt'd w/1990, circ cmt to surf  
  
7", 29#, P110, LTC @ 12990'  
Cmt w/1130 sx, circ cmt to surf
- (3) **Injection Tubing** 4 -1/2" IPC injection tubing
- (4) **Packer** 7" Nickel Coated Arrowset Packer @ +/- 12940'

**B. Other Well Information**

- (1) **Injection Formation:** Devonian/Silurian/Ordovician  
**Field Name:** (to be assigned)
- (2) **Injection Interval:** 12990 - 15500'

(3) **Original Purpose of Wellbore:**

Drill and convert to SWD

(4) **Other perforated intervals:**

n/a

(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.**

Fresh Water 35; Rustler 259; Salt 565 (Barren); Base of Salt (chg to anhy) 1900 (Barren); Delaware 2127 (Barren); Bell Canyon 2206 (Oil); Cherry Canyon 2950 (Oil); Brushy Canyon 4025 (Oil); Lower Brushy Canyon 5270 (Oil); 1st Bone Spring Lm 5565 (Oil); 1st Bone Spring Ss 6655 (Oil); 2nd Bone Spring Lm 6870 (Oil); 2nd Bone Spring Ss 7220 (Oil); 3rd Bone Spring Lm 7425 (Oil); 3rd Bone Spring Ss 8540 (Oil); Wolfcamp 9215 (Gas); Strawn 10633 (Gas); Atoka 10855 (Gas); Morrow 11470 (Gas); Morrow Lime 11839 (Gas); Morrow Lower 12150 (Gas); Mississippian 12287 (Gas); Mississippian Lime 12580 (Gas); Woodford 12895 (Barren); Devonian/Silurian 12990 (Barren); Ordovician (Montoya) 14010 (Barren); Ordovician (Simpson) 14302 (Barren); Ordovician (Ellenburger) 14622 (Barren)

**Proposed Injection Well: Black River 16 SWD #1**  
**API: 30-015-**  
**APPLICATION FOR INJECTION**  
**Form C-108 Section VII to XIII**

**VII Attach data on the proposed operation, including:**

- (1) Proposed average injection rate: 5000 BWPD  
Proposed maximum injection rate: 10000 BWPD
- (2) The system will be a closed system.
- (3) Proposed average injection pressure: 1299 psi  
Proposed max injection pressure: 2598 psi
- (4) The injection fluid will be produced water from area wells producing from the Bone Springs and/or Delaware formations that will be injected into the Devonian/Silurian/Ordovician formation.
- (5) A representative water analysis cannot be provided for the Delaware & Bone Spring formation(s).

**VIII Geologic Injection Zone Data**

The injection zone is the Devonian/Silurian/Ordovician formation from 12990' to 15500'. The gross injection interval is 2510' thick. The Devonian/Silurian/Ordovician formation is a Permian aged sandstone. The average depth to fresh water is 35' in this area.

**IX Proposed Stimulation**

Based on injectivity results this interval could be acid stimulated.

**X Log Data**

Logs will be submitted to the OCD.

**XI Fresh Water Analysis**

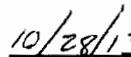
Fresh water wells were identified in the vicinity of the proposed well, representative analysis' have been provided. See documentation.

**XII Geologic / Engineering Statement**

An examination of this area has determined there are no open faults or other hydrologic connection between the disposal zone and any underground drinking water.

See geologic write up and support for Devonian/Silurian/Ordovician

  
\_\_\_\_\_  
Raleigh Blumstein, Geologist  
Direct #: (405)-552-3359  
Cell #: (405)-635-7903

  
\_\_\_\_\_  
Date:

**XIII Proof of Notice**

Proof of notice to surface owner, and public legal notification are attached.

Name of the Injection Formation: **Devonian/Silurian/Ordovician**

Field or Pool Name (if known):

Injection Interval: **12,990'-15,500' open hole**

Depth to Fresh Water's Stratigraphic Unit Name: **Rustler**

Depth to Ground Water: **35' (C 00850; NESW 09-24S-27E)**

Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well: Next Higher - **Mississippian (12,323')**; Next Lower - **N/A**

Potential Productivity of the target disposal interval: **See Comments Below**

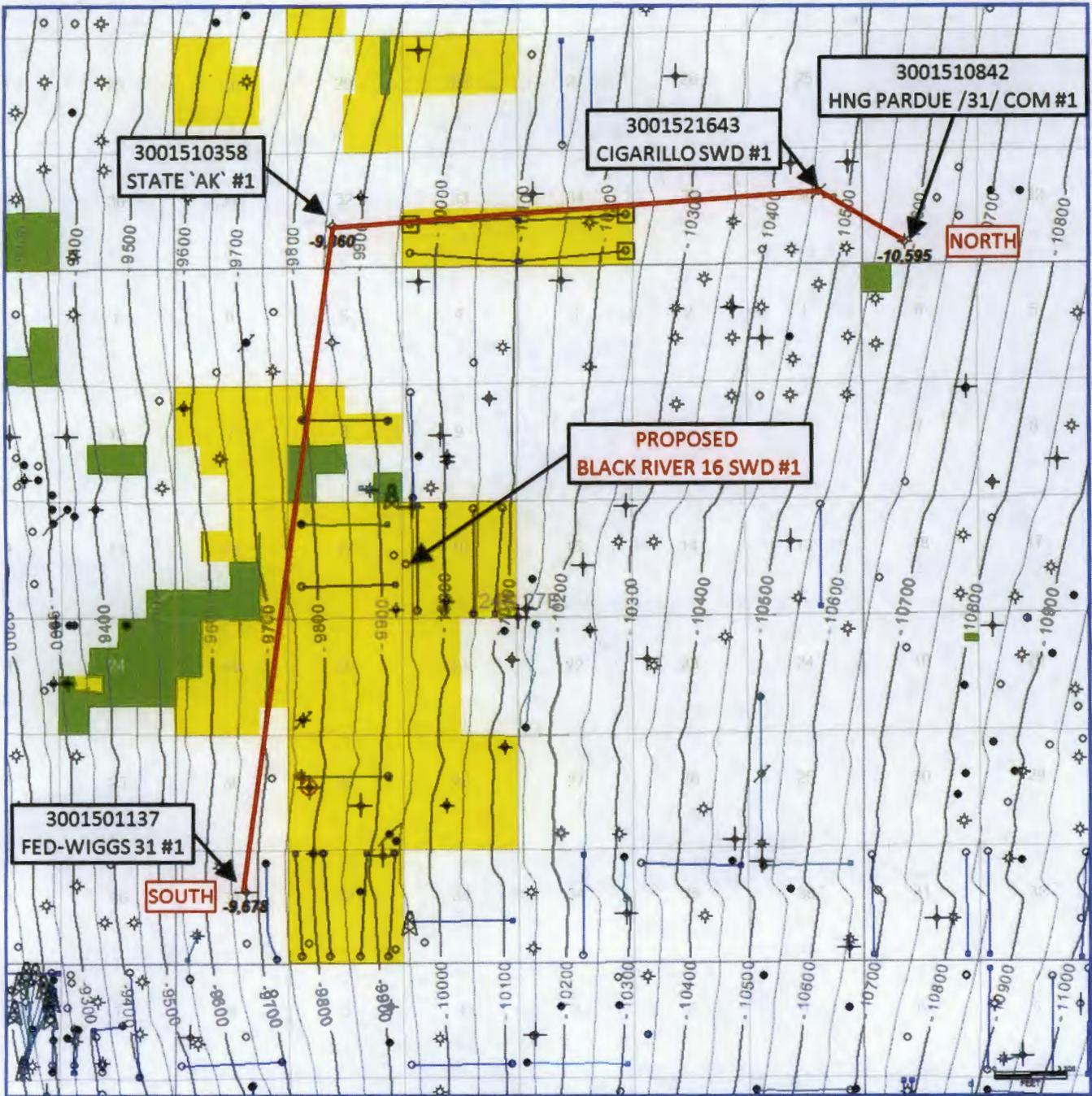
Disposal water will be sourced from area wells from the **Bone Spring and/or Delaware** formation(s).

**Black River 16 SWD #1 (2427' FNL & 904' FWL 29-24S-27E; PTD 15500')**

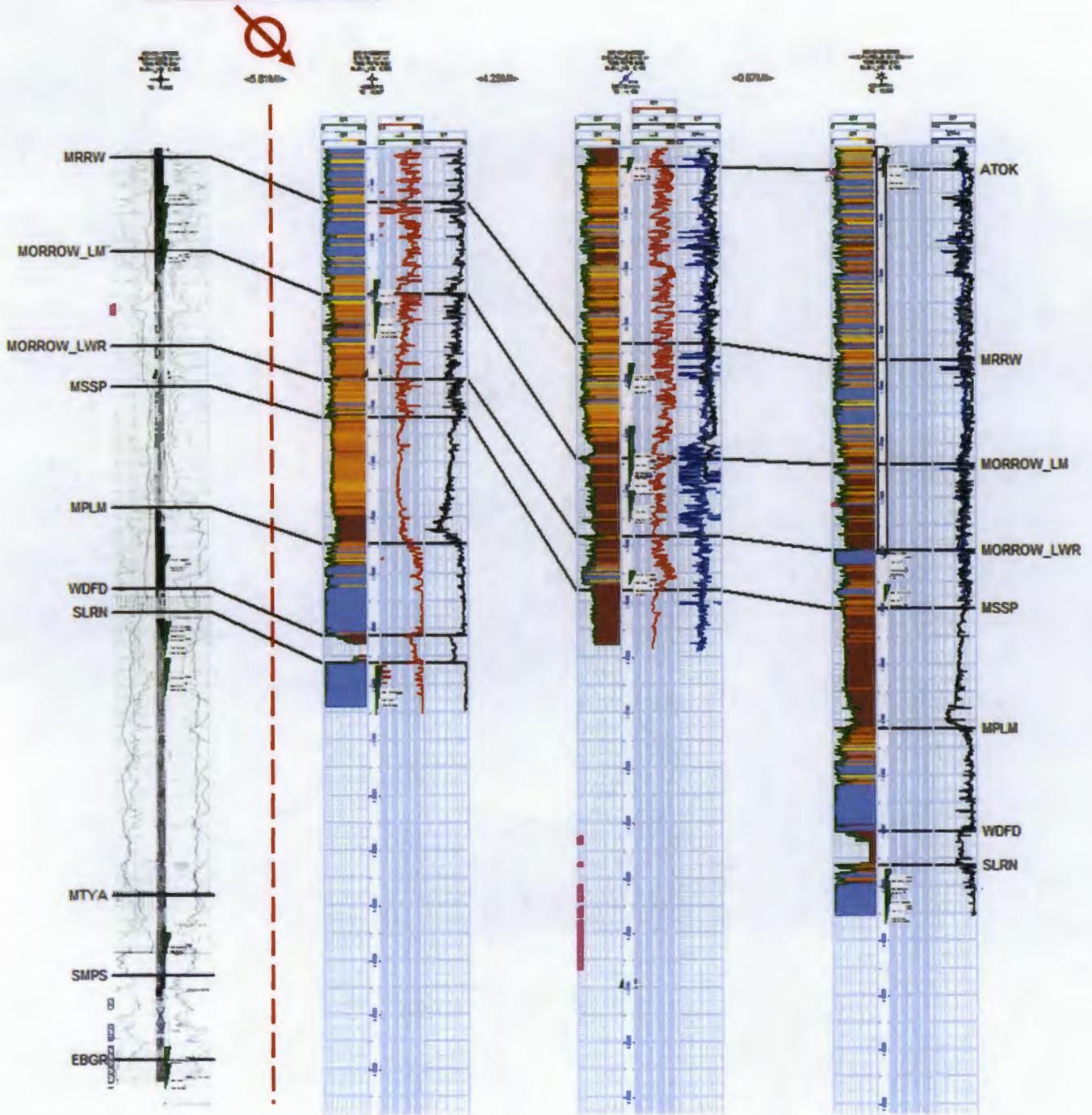
The proposed interval for disposal per the Black River 16 SWD #1 APD is the Devonian/Silurian/Ordovician from 12,990' to 15,500'. A review of the wells surrounding the drill site shows that the closest Devonian/Silurian/Ordovician penetrations are the Fed-Wiggs 31 #1 in 31-T24S-27E (3.15 miles SSW), State 'AK' #1 in 32-T23S-R27E (2.97 miles NNW), Cigarillo SWD #1 in 36-T23S-R27E (4.85 miles NE), and HNG Pardue /31/ Com #1 in 31-T23S-R28E (5.20 miles NE). These wells are shown on the subsequent map and cross-section along with the proposed re-entry of the Black River 16 SWD #1. These wells tested the Devonian/Silurian/Ordovician in some capacity or are actively disposing in subject interval. None of the DST tests produced hydrocarbons in quantities that warranted further testing and/or completion. Below are the test results for the four (4) offset wells in the cross-section.

1. Fed-Wiggs 31 #1 (API# 3001501137)
  - a. Well is 3.15 miles from proposed Black River 16 SWD #1 and -350 FT updip
  - b. Five (5) DSTs were performed in the Devonian/Silurian/Ordovician
    - i. DST #1 from 13,174-13,286 FT Recovered 1147 FT (WB), 650 FT (M), 2080 FT (MCXW), 3500 FT (SXW)
    - ii. DST #2 from 13,302-13,432 FT Recovered 1360 FT (W), 4370 FT (M), 837 FT (MCW), 5450 FT (SXW)
    - iii. DST #3 from 14,294-14,380 FT Recovered 3000 FT (WB), 550 FT (M)
    - iv. DST #4 from 14,714-14,790 FT Recovered 30 FT (M)
    - v. DST #5 from 14,777-14,865 FT Recovered 3000 FT (WB), 837 FT (M), 2325 FT (XW)
2. State 'AK' #1 (API# 3001510358)
  - a. Well is 4.82 miles from proposed Black River 16 SWD #1 and -80 FT updip
  - b. One (1) DST was performed in the Devonian/Silurian
    - i. DST #1 from 13,145-13,307 FT Recovered 3300 FT (WB), 1200 FT (XZW)
3. Cigarillo SWD #1 (API# 3001521643)
  - a. Well is 6.78 miles from proposed Black River 16 SWD #1 and -500 FT downdip
  - b. No DSTs were performed in the Devonian/Silurian, however the well is currently disposing in the Devonian/Silurian/Ordovician from 13,650-14,130 FT
4. HNG Pardue /31/ Com #1 (API# 3001510842)
  - a. Well is 7.0 miles from proposed Black River 16 SWD #1 and -640 FT downdip
  - b. Two (2) DSTs were performed in Devonian/Silurian
    - i. DST #1 from 13,741-13,790 FT Recovered 2000 FT (WB), 95 FT (M)
    - ii. DST #2 from 13,824-13,935 FT Recovered 2000 FT (WB), 1000 FT (MCZW)

**REGIONAL TOP DEVO/SILURIAN STRUCTURE MAP**  
(C.I. = 50 ft)



**PROPOSED  
BLACK RIVER 16 SWD #1**



**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: <b>BLACK RIVER 16 SWD 1</b>		Field: <b>BLACK RIVER NORTH</b>	
Location: <b>Sec 16 - 24S-27E; 2631' FSL &amp; 2613' FWL</b>		County: <b>EDDY</b>	State: <b>NM</b>
Elevation: <b>3190.3</b>		Spud Date: <b>N/A</b>	Compl Date: <b>N/A</b>
API#: <b>30-015-</b>	Prepared by: <b>Stephanie Porter</b>	Date: <b>9/10/13</b>	Rev:

**PROPOSED DRILL WELL FOR SWD**

26" hole  
20", 94#, J/K-55, BTC @ 500'  
 Cmt'd w/1200 sx CI C to surface

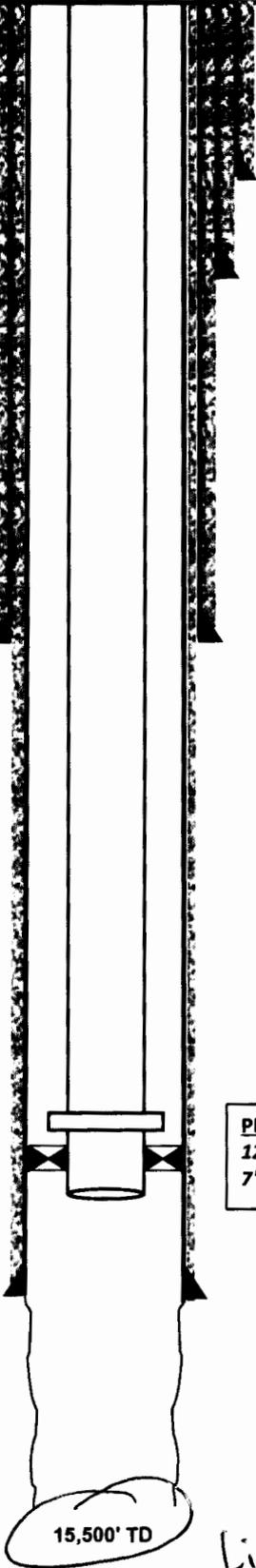
17-1/2" hole  
13-3/8", 61#, J/K-55, BTC @ 2,000'  
 Cmt'd w/1430 sx CI C to surface

12-1/4" hole  
9-5/8", 47#, P-110, LTC, @ 9,150'  
 Cement w/1990 sx to surface

8-1/2" hole  
7", 29#, P-110, LTC, @ 12,990'  
 Cmt'd w/1130 sx CI C to surface

6-1/8" Open Hole  
 12,990' - 15,500'

*modified TD*



**FORMATION TOPS**

Fresh Water	35'
Rustler	259'
Salt	565'
Base of Salt	1,900'
Delaware	2,127'
Bell Canyon	2,206'
Cherry Canyon	2,950'
Brushy Canyon	4,025'
Lower Brushy Canyon	5,270'
1st Bone Spring Lm	5,565'
1st Bone Spring Ss	6,655'
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Morrow	11,470'
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Morrow Lower	12,150'
Mississippian	12,287'
Mississippian Lime	12,580'
Woodford	12,895'
Devonian/Silurian	12,990'
Ordovician (Montoya)	14,010'
Ordovician (Simpson)	14,302'

**PROPOSED**  
 12,940' of 4-1/2", 11.6#, L80, IPC, tubing  
 7" Nickel Coated permeate packer set @ 12,940'

**PROPOSED INJECTION INTERVAL**  
 DEVONIAN /SILURIAN/ORDOVICIAN  
 12,990' - 15,500'

*Limit to top 100' of Ellenberger*

C108 ITEM VI--Well Tabulation in 1/2 Mile Review Area

Devon Energy Production Company, LP

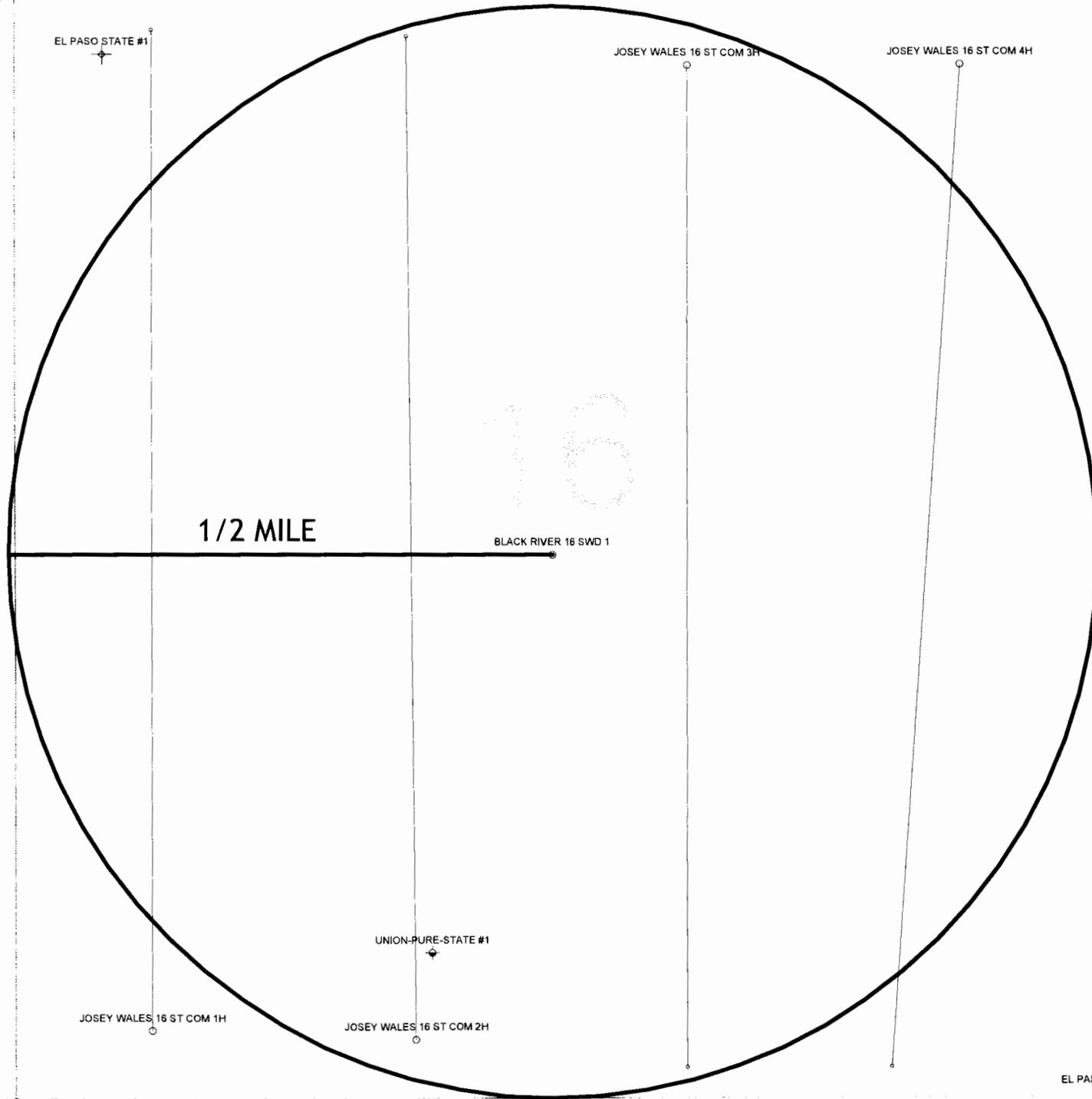
Proposed Inj Well: **BLACK RIVER 16 SWD 1**

Proposed Formation: Devonian/Silurian/Ordovician

Proposed Interval: 12990' - 15500'

Operator	Well Name	API NO	County	Surf Location	Sec	Twn	Rnge	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval-Ft	Casing Program	Cement / TOC
Devon Energy Prod Co LP	Black River 16 SWD 1	30-015-	Eddy	2631' FSL 2613' FWL	16	24S	27E	Inj	To Be Drilled	To Be Drilled	To Be Drilled	15500'	15500'	Devonian/ Silurian/ Ordovician	12990-15500'	20", 94# @ 500' 13-3/8", 61# @ 2000' 9-5/8", 40# @ 9150' 7", 29# @ 12990'	1200 sx / surface 1430 sx / surface 1900 sx / surface 1130 sx / surface 400 sx / surface
Devon Energy Prod Co LP	El Paso 29 Fed 1	30-015-22084	Eddy	2427' FNL 904' FWL	29	24S	27E	Gas	P&A	7/24/1977	3/2/1978	12400'	Surf	Morrow	2316-2354' & 2722-2756'	9-5/8", 36# @ 1990' 7", 23# @ 9466'	1250 sx / surface (see schematic)
Lubbock Machine & Supply Co.	Matlock 1	30-015-01136	Eddy	330' FSL 330' FEL	17	24S	27E	Dry Hole	P&A	10/3/1952	12/20/1952	2305'	Surf	Delaware	n/a	7", 22# @ 346' (7" cut & pulled from 251')	5 sx / surf plug (see schematic)
R.S. Gleason & W.R. Donnell	Union-Pure State 1	30-015-01127	Eddy	860' FSL 1980' FWL	16	24S	27E	Dry Hole	P&A	6/8/1962	7/6/1962	2328'	Surf	Delaware	n/a	No casing set per NMOCD Well Record	5 sx / surf plug (see schematic)

# 24S 27E



BR '15' STATE #1



Black River 16 SWD 1

1/2 Mile Radius Map

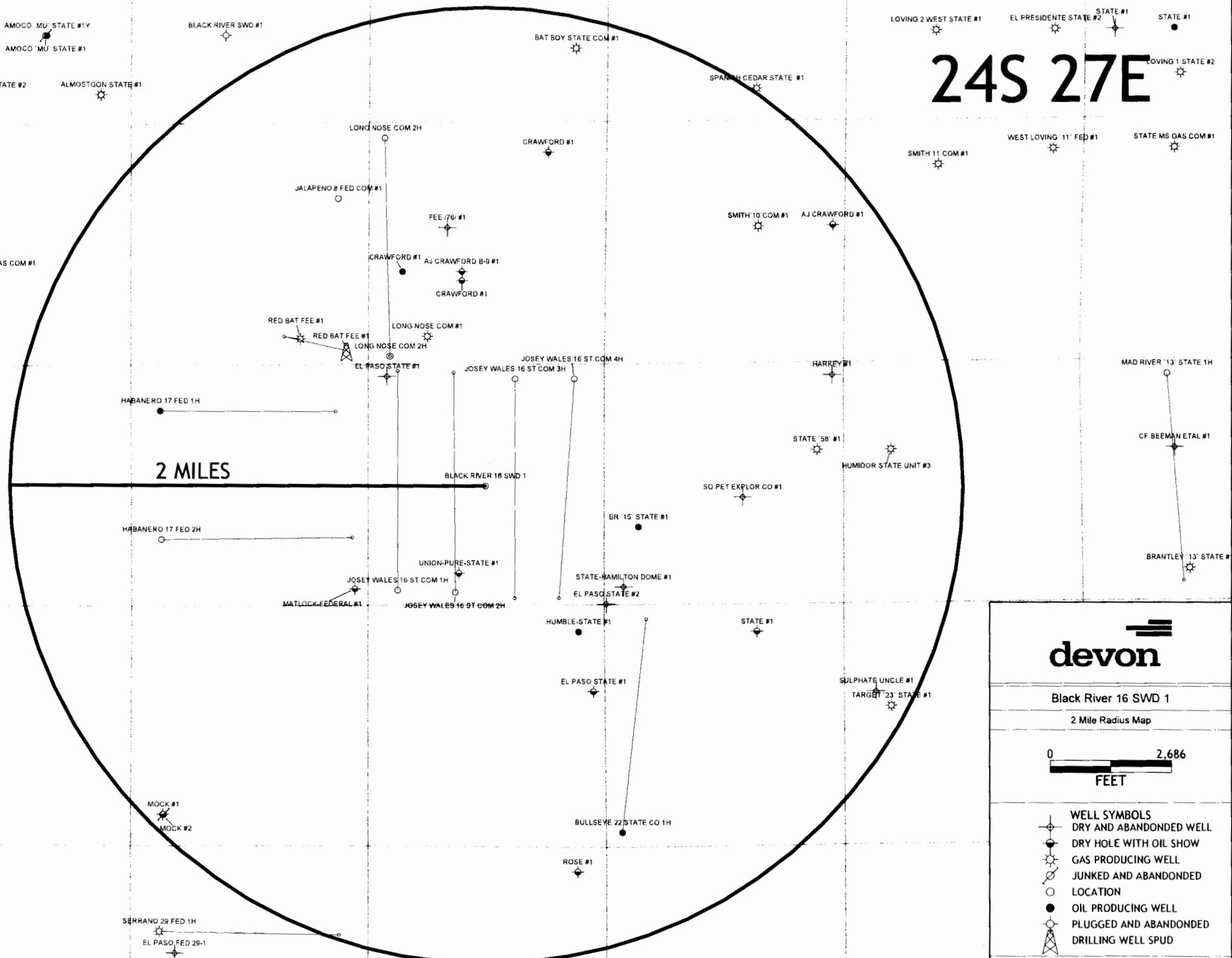


- WELL SYMBOLS
- DRY AND ABANDONED WELL
  - DRY HOLE WITH OIL SHOW
  - LOCATION
  - OIL PRODUCING WELL

EL PASO STATE #2

June 18, 2013

# 24S 27E



2 MILES



Black River 16 SWD 1

2 Mile Radius Map



- WELL SYMBOLS**
- DRY AND ABANDONED WELL
  - DRY HOLE WITH OIL SHOW
  - GAS PRODUCING WELL
  - JUNKED AND ABANDONED LOCATION
  - OIL PRODUCING WELL
  - PLUGGED AND ABANDONED
  - DRILLING WELL SPUD

June 18, 2013

**DEVON ENERGY PRODUCTION COMPANY LP**

Well Name: EI PASO 29 FED 1		Field: WILDCAT; MORROW	
Location: 2427' FNL & 904' FWL, SEC 29-T24S-R27E		County: EDDY	State: NM
Elevation: 3359' GL		Spud Date: 7/24/77	Compl Date: P&A 4/29/11
API#: 30-015-22084	Prepared by: Ronnie Slack	Date: 05/06/11	Rev:

**WELLBORE PLUGGED & ABANDONED  
4/29/11**

12-1/4" hole  
9 5/8" 36#, K-55, @ 1990'  
Cmt'd w/400 sx cmt to surface

Spot 100 sx cmt @ 2200' (4/28/11)

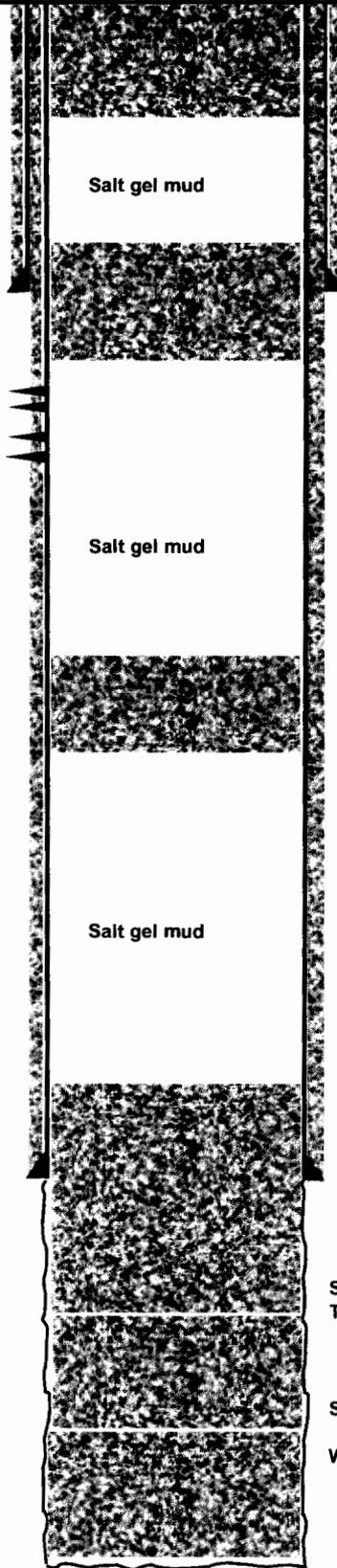
Perfs: 2316'-20', 2332'-36', 2350'-54'  
2722'-27', 2742'-46', 2752'-56'

Est TOC @ 5700' (not required to tag)

Spot 100 sx cmt @ 6300' (4/27/11)

8-1/2" hole  
7" 23#, N-80/S-95, @ 9466'  
Cmt w/1250 sx cmt to surface

6 1/4" hole



Cut wellhead off & set dry hole marker. (4/29/11)  
Top out csg w/5 sx surf. (4/29/11)

Circ 195 sx cmt from 540' to surf. (4/28/11)

Tagged TOC @ 1900' (4/28/11)

TOC re-tagged @ 9204' (4/26/11)  
Tagged TOC @ 9196' (12/9/10)

Spot 400 sx cmt @ 10701' (12/8/10)  
Tagged TOC @ 10704' (8/5/10)

Spot 80 sx cmt @ 11140' (8/4/10)

Well re-entered & plugs drilled out to 11163' (7/31/10)

TD @ 12,400'

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals**

*SUBMIT IN TRIPLICATE - Other instructions on page 2*

5. Lease Serial No. <b>NM 112269</b>
6. If Indian, Allottee or Tribe Name
7. Unit or CA Agreement Name and No.
8. Well Name and No. <b>EL PASO 29 FED 1</b>
9. API Well No. <b>30-015-22084</b>
10. Field and Pool, or Exploratory Area <b>WILDCAT; MORROW</b>
11. County or Parish, State <b>Eddy NM</b>

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator <b>DEVON ENERGY PRODUCTION COMPANY, LP</b>	
3a. Address <b>20 North Broadway, Ste 1500, Oklahoma City, OK 73102</b>	3b. Phone No. (include area code) <b>405-552-4615</b>
4. Location of Well ( Footage, Sec., T., R., M., or Survey Description) <b>2427 FNL 904 FWL 29 T24S R27E</b>	

**12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

**WELLBORE PLUGGED & ABANDONED - 4/29/11**

- 4/21/11--MIRU plugging rig. TIH & tag TOC @ 9204'. (Previously tagged @ 9196 on 12/9/10).
- Displace hole w/salt gel mud.
- Spot 100 sx cmt @ 6300'. Est TOC @ 5700'. (Not required to tag TOC)
- Spot 100 sx cmt @ 2200'. Tagged TOC @ 1900'.
- Circulate 195 sx cmt from 540' to surface.
- Top out casing w/5 sx cmt.
- 4/29/11--Cut wellhead off and set dry hole marker. Wellbore plugged & abandoned.

**RECLAMATION  
DUE 10-26-11**

**Accepted as to plugging of the well bore.  
Liability under bond is retained until  
Surface restoration is completed.**

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

Name: **Ronnie Slack**

Title **Operations Technician**

Signature

*Ronnie Slack*

Date

**5-6-11**

ACCEPTED FOR RECORD

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

**AUG 3 2011**

Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct or operations thereon.

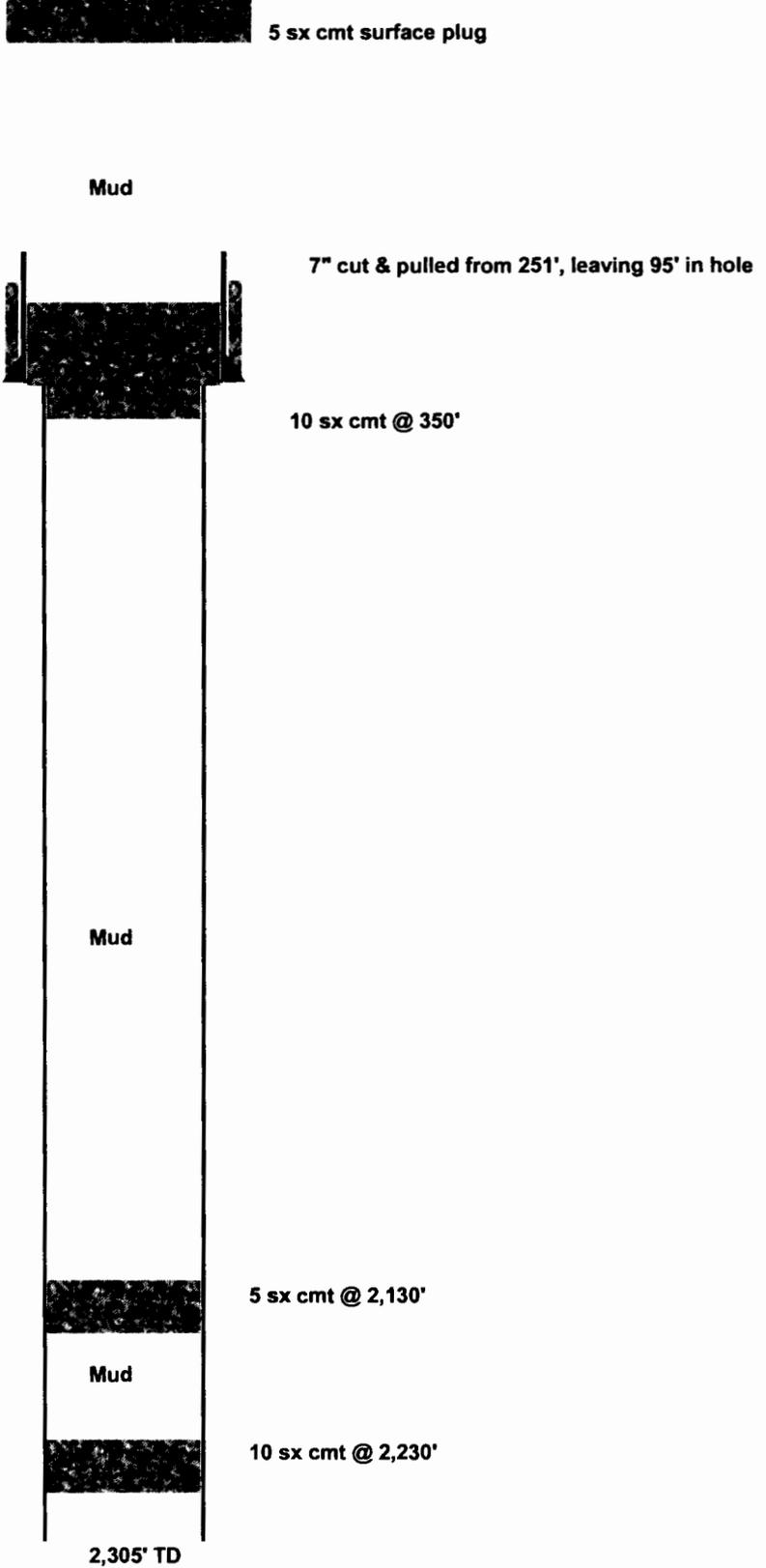
Office

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

LUBBOCK MACH & SUPPLY CO. INC.

Well Name: MATLOCK #1		Field: W. MALAGA	
Location: 330' FSL & 330' FEL; SEC 17-T24S-R27E		County: EDDY	State: NM
Elevation: NA		Spud Date: 10/3/52	Compl Date: P&A-1/17/53
API#: 30-015-01136	Prepared by: Ronnie Slack	Date: 8/14/13	Rev:

Plugging Schemat based on NMOCD records dated 1/17/53.



7", 22#, @ 346'  
Cmt'd w/25 sx, 10 sx mud

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces

Lease No. 009016

Unit \_\_\_\_\_



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	<input type="checkbox"/>	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	<input type="checkbox"/>	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	<input type="checkbox"/>	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	<input type="checkbox"/>	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	<input type="checkbox"/>	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	<input type="checkbox"/>	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 1, 1952

Well No. matlook 1 is located 330 ft. from S line and 330 ft. from E line of sec. 17.

SE 1/4 Sec 17 (1/4 Sec. and Sec. No.)      24 (Twp.)      7 (Range)      N.M. P.M. (Meridian)  
\_\_\_\_\_  
(Field)      Edgar (County or Subdivision)      N. M. (State or Territory)

The elevation of the derrick floor above sea level is \_\_\_\_\_ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We plan to drill a Delaware sand well to the approx. depth of 240 ft. We will set a couple of hundred ft. of surface casing of 5/8" and will then cement our oil string 5 1/2" casing, just in the sand with 75 lbs. of cement.

U.S. GEOLOGICAL SURVEY  
R  
OCT 1 1952  
ARTESIA, N.M.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

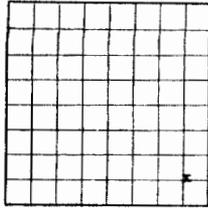
Company Lubbock Machine and Supply Co. Inc.

Address P.O. Box 281

Artesia, N.M.

By Wm. H. Foster

Title Agent



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**LOG OF OIL OR GAS WELL**

LOCATE WELL CORRECTLY

Company **Lubbock Mach. & Supply Co. Inc.** Address **Box 261, Artesia, N. M.**  
Lessor or Tract **Bonnie E. Matlock** Field **W. Malaga** State **N. M.**  
Well No. **1** Sec. **17 T. 24 S. R. 27** Meridian **N.M.P.M.** County **Eddy**  
Location **330ft. (N.)** of **S** Line and **330ft. (W.)** of **E** Line of **Sec. 17** Elevation \_\_\_\_\_  
The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed **Wm. N. Porter**  
Title **Agent**

Date **December 29, 1952**  
The summary on this page is for the condition of the well at above date.  
Commenced drilling **10-3-52** Finished drilling **12-20-52**

**OIL OR GAS SANDS OR ZONES**  
(Denote gas by G)

No. 1, from **NONE** to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

**IMPORTANT WATER SANDS**

No. 1, from **200'** to **270' (Gravel)** No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

**CASING RECORD**

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From-	To-	
7"	22	8	Spang	340	Baker	251			Shut off water

**MUDDING AND CEMENTING RECORD**

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7"	340	25	rump	--	10 sacks

**PLUGS AND ADAPTERS**

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

**SHOOTING RECORD**

Size	Shoe used	Explosive used	Quantity	Date	Depth shot	Depth cleared out

**TOOLS USED**

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

**DATES**

\_\_\_\_\_ Put to producing \_\_\_\_\_  
The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_ % was oil; \_\_\_\_\_ % emulsion; \_\_\_\_\_ % water; and \_\_\_\_\_ % sediment. Gravity, °Bé. \_\_\_\_\_

If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
Rock pressure, lbs. per sq. in. \_\_\_\_\_

**EMPLOYEES**

**C. E. Hammond** Driller **T. E. Hammond** Driller  
**T. D. Bradshaw** Driller

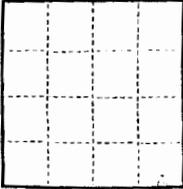
**FORMATION RECORD**

FROM-	TO-	TOTAL FEET	FORMATION
0	50	50	Caliche, Anhy.
50	75	25	Lime, Gravel
75	115	40	Brown sand
115	150	15	Yellow shale.
150	220	90	Anhy, Gravel & shale
220	200	40	Gravel, Red Beds
200	310	50	Gravel, Anhy (water 200' to 270')
310	350	40	Anhy
350	400	70	Anhy, shale stringers.
400	1270	850	Anhy
1270	1340	70	Lime
1340	1425	85	Lime, Anhy
1425	1400	35	Brown Lime
1400	1400	0	Anhy
1400	1650	164	Salt
1650	1785	135	Anhy, Lime
1785	1955	170	Salt
1955	2025	70	Anhy
2025	2045	20	Lime
2045	2172	127	Anhy, Lime
2172	2208	36	Black Lime
2208	2210	8	Grey and Brown Lime
2210	2239	23	Black Lime
2239	2305	66	Dark Grey Sand (D.L. SD.)

FOLD | MARK

RECEIVED  
JAN 17 1953  
Oil Cons. Comm  
Artesia Office





(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office .....  
Lease No. ....  
Unit .....

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT..... <input checked="" type="checkbox"/>
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Well No. 1 <sup>*matlock*</sup> is located 350 ft. from N line and 350 ft. from E line of sec. 17  
17 (Sec. and Sec. No.) 7 (Twp.) 7 (Range) 11 (Meridian)  
Art (Field) Art (County or Subdivision) Art (State or Territory)

The elevation of the derrick floor above sea level is ..... ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; list water-mudding jobs, cementing points, and all other important proposed work)

Total depth 250' incl. 50' (sulphur water)  
 10 sacks cement 150' to 200'  
 heavy mud 200' to 250'  
 5 sacks cement 250' to 300'  
 heavy mud 300' to 350'  
 10 sacks cement 350' to 400'  
 heavy mud 400' to surface  
 5 sacks cement to surface 400' to 450'

moving oil location.

**cut and pulled 7 inch casing from 251' leaving 75' in the hole.**

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company .....

Address Box 221

Artesia, N.M.

By Wm. A. Foster  
 . . . . . SURVEY

Title .....

R. S. GLEASON & W.R. DONNELL

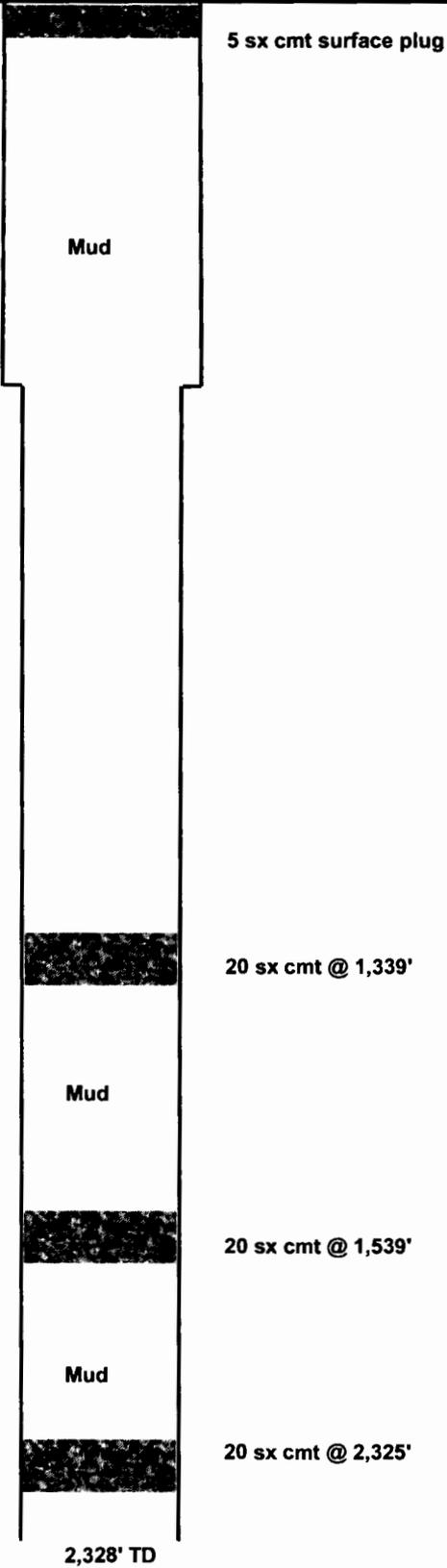
Well Name: UNION PURE STATE 1		Field: WILDCAT	
Location: 660' FSL & 1980' FWL; SEC 16-T24S-R27E		County: EDDY	State: NM
Elevation: 3215 KB		Spud Date: 6/8/62	Compl Date: P&A-7/7/62
API#: 30-015-01127	Prepared by: Ronnie Slack	Date: 8/14/13	Rev:

Plugging Schemat based on NMOCD records dated 7/7/62.

10" Hole - ? →

Open Hole from surface to 2,328'  
No casing strings set in wellbore →

6-3/4" Hole-? →



2,328' TD

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
SALE	FILE
U.S.G.S.	LAND OFFICE
TRANSPORTER	OIL GAS
PRODUCTION OFFICE	OPERATOR

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

Form C-101  
Revised (12/1/55)

NOTICE OF INTENTION TO DRILL

Notice must be given to the District Office of the Oil Conservation Commission and approval obtained before drilling or recompletion begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in QUINTUPLICATE. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission. If State Land submit 6 Copies Attach Form C-128 in triplicate to first 3 copies of form C-101

MIDLAND, TEXAS

5-28-62

(Place)

(Date)

RECEIVED

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Gentlemen:

You are hereby notified that it is our intention to commence the Drilling of a well to be known as **R. S. GLEASON AND W. R. DONNELL**

**UNION-PURE STATE**

(Company or Operator)

ARTESIA, OFFICE

Well No. **1**

in **N**

located **1,980** feet from the **WEST** line and **660** feet from the

**SOUTH**

line of Section **16**, T **24**, R **27**, NMPM.

(GIVE LOCATION FROM SECTION LINE)

**WILDCAT** Pool,

**EDDY** County

If State Land the Oil and Gas Lease is No. **K-441**

If patented land the owner is.....

Address.....

We propose to drill well with drilling equipment as follows: **CABLE TOOLS**

**TO TOTAL DEPTH**

The status of plugging bond is **IN SANTA FE FOR APPROVAL**

Drilling Contractor **BUFFALO DRILLING CO.**

**KERMIT, TEXAS**

We intend to complete this well in the **BELL CANYON**

formation at an approximate depth of **2,400** feet.

CASING PROGRAM

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per Foot	New or Second Hand	Depth	Sacks Cement
10	8-5/8	23#	Second hand	400'	100 Sck
6-3/4	5-1/2	15.5	New	2,400'	100 Sx

If changes in the above plans become advisable we will notify you immediately.

ADDITIONAL INFORMATION (If recompletion give full details of proposed plan of work.)

Approved JUN 5 1962, 19.....  
Except as follows:

Sincerely yours,  
R. S. Gleason & W. R. Donnell  
(Company or Operator)

By W. R. Donnell

Position..... Send Communications regarding well to

Name R. S. Gleason

Address 103 Wilkinson-Foster Building

OIL CONSERVATION COMMISSION

By M. L. Armstrong

NUMBER OF COPIES RECEIVED		2
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.I.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
PROBATION OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

MISCELLANEOUS NOTICES

strict Office, Oil Conservation Commission, before the work specified is to begin. A copy will be furnished to the person 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	<input checked="" type="checkbox"/>	NOTICE OF INTENTION TO TEMPORARILY ABANDON WELL	<input type="checkbox"/>	NOTICE OF INTENTION TO DRILL DEEPER	<input type="checkbox"/>
NOTICE OF INTENTION TO PLUG WELL	<input type="checkbox"/>	NOTICE OF INTENTION TO PLUG BACK	<input type="checkbox"/>	NOTICE OF INTENTION TO SET LINER	<input type="checkbox"/>
NOTICE OF INTENTION TO SQUEEZE	<input type="checkbox"/>	NOTICE OF INTENTION TO ACIDIZE	<input type="checkbox"/>	NOTICE OF INTENTION TO SHOOT (Nitro)	<input type="checkbox"/>
NOTICE OF INTENTION TO GUN PERFORATE	<input type="checkbox"/>	NOTICE OF INTENTION (OTHER)	<input type="checkbox"/>	NOTICE OF INTENTION (OTHER)	<input type="checkbox"/>

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
103 Wilkinson-Foster Bldg.  
Midland, Texas July 2, 1962  
(Place) (Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the R.S. Gleason & W.R. Donnell

(Company or Operator) Union-Pure State Well No. 1 in N (Unit)  
SE 1/4 SW 1/4 of Sec. 16, T. 24, R. 27, NMPM., Wildcat Pool  
Eddy County.

FULL DETAILS OF PROPOSED PLAN OF WORK  
(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

Will not set surface casing. No water was encountered. If well is a producer we will cement production string to the surface.

RECEIVED  
JUL 2 1962  
MIDLAND OFFICE

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

R.S. Gleason & W.R. Donnell  
Company or Operator

By Robert S. Gleason

Approved  
OIL CONSERVATION COMMISSION

Position \_\_\_\_\_  
Send Communications regarding well to:

By M.L. Armstrong  
Title \_\_\_\_\_

Name R.S. GLEASON  
Address 103 WILKINSON-FOSTER BLDG  
MIDLAND, TEXAS

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION OFFICE	
OPERATOR	

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**MISCELLANEOUS REPORTS ON WELLS**

FORM C-103  
(Rev 3-55)

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company <b>R.S. Gleason &amp; W.R. Donnell</b>		Address <b>103 Wilkinson-Foster Bldg. Midland, Texas</b>			
Lease <b>Union-Pure State</b>	Well No. <b>1</b>	Unit Letter <b>N</b>	Section <b>16</b>	Township <b>24 South</b>	Range <b>27 East</b>
Date Work Performed <b>July 7, 1962</b>	Pool <b>Wildcat</b>	County <b>Eddy</b>			

THIS IS A REPORT OF: (Check appropriate block)

- Beginning Drilling Operations     
 Casing Test and Cement Job     
 Other (Explain):  
 Plugging     
 Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Received verbal permission to plug well.  
Loaded hole with mud before plugging, plugs pumped in through tubing.  
Set 20 sack plug at 2325  
Set 20 sack plug at 1539  
Set 20 sack plug at 1339  
Set 5 sack plug at surface  
Set dry hole marker  
Filled in pit and cleaned up location.

**RECEIVED**  
**JUL 23 1962**  
**D. C. C.**  
**ARTESIA, OFFICE**

Witnessed by <b>R.S. Gleason</b>	Position	Company <b>R.S. Gleason &amp; W.R. Donnell</b>
----------------------------------	----------	--

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

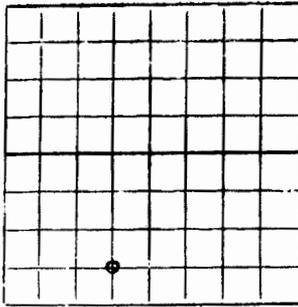
ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval		Producing Formation(s)		

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

<b>OIL CONSERVATION COMMISSION</b>		I hereby certify that the information given above is true and complete to the best of my knowledge.	
Approved by <b>Howard E. Lobbey</b>	Name <b>Robert S. Gleason</b>		
Title <b>WELL AND GAS INSPECTION</b>	Position		
Date <b>JUL 27 1962</b>	Company		



**NEW MEXICO OIL CONSERVATION COMMISSION**  
Santa Fe, New Mexico

**WELL RECORD**

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in **QUINTUPLICATE**. If State Land submit 6 Copies

AREA 640 ACRES  
LOCATE WELL CORRECTLY

R. S. Gleason & V. B. Donnell Union-Pure State  
(Company or Operator) (Land)  
Well No. 1, in SE  $\frac{1}{4}$  of S1  $\frac{1}{4}$ , of Sec. 16, T. 24 South R. 27 East, NMPM.  
Wildcat Pool, Eddy County.  
Well is 660 feet from South line and 1980 feet from West line  
of Section 16. If State Land the Oil and Gas Lease No. is K-111  
Drilling Commenced June 8, 1962 Drilling was Completed July 6, 1962.  
Name of Drilling Contractor Buffalo Drilling Co.  
Address P.O. Box 271, Hermit, Texas  
Elevation above sea level at Top of Tubing Head 3215. The information given is to be kept confidential until  
19        .

**OIL SANDS OR ZONES**

No. 1, from None to          No. 4, from          to           
No. 2, from          to          No. 5, from          to           
No. 3, from          to          No. 6, from          to         

**RECEIVED**

JUL 27 1962

O. C. O.  
ARTESIA, OFFICE

**IMPORTANT WATER SANDS**

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from No water was encountered to          feet.  
No. 2, from          to          feet.  
No. 3, from          to          feet.  
No. 4, from          to          feet.

**CASING RECORD**

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
<u>Did not set any casing.</u>							

**MUDDING AND CEMENTING RECORD**

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED

**RECORD OF PRODUCTION AND STIMULATION**

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

.....  
.....  
.....  
.....

Result of Production Stimulation.....

Depth Cleaned Out.....

**RECORD OF DRILL-STEM AND SPECIAL TESTS**

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

**TOOLS USED**

Rotary tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet.  
 Cable tools were used from surface feet to 2328 TD feet, and from ..... feet to ..... feet.

**PRODUCTION**

Put to Producing....., 19.....

**OIL WELL:** The production during the first 24 hours was ..... barrels of liquid of which ..... % was oil; ..... % was emulsion; ..... % water; and ..... % was sediment. A.P.I. Gravity.....

**GAS WELL:** The production during the first 24 hours was ..... M.C.F. plus ..... barrels of liquid Hydrocarbon. Shut in Pressure..... lbs.

Length of Time Shut in.....

**PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):**

**Southeastern New Mexico**

**Northwestern New Mexico**

T. Anhy.....	T. Devonian.....	T. Ojo Alamo.....
T. Salt.....	T. Silurian.....	T. Kirtland-Fruitland.....
B. Salt.....	T. Montoya.....	T. Farmington.....
T. Yates..... <u>T. Lower 2172</u>	T. Simpson.....	T. Pictured Cliffs.....
T. 7 Rivers..... <u>T. Delaware sand</u>	T. McKee.....	T. Menefee.....
T. Queen..... <u>2245</u>	T. Ellenburger.....	T. Point Lookout.....
T. Grayburg.....	T. Gr. Wash.....	T. Mancos.....
T. San Andres.....	T. Granite.....	T. Dakota.....
T. Glorieta.....	T. ....	T. Morrison.....
T. Drinkard.....	T. ....	T. Penn.....
T. Tubbs.....	T. ....	T. ....
T. Abo.....	T. ....	T. ....
T. Penn.....	T. ....	T. ....
T. Mias.....	T. ....	T. ....

**FORMATION RECORD**

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	315	315	Dolomite & shale				
315	1385	1070	Anhydrite				
1385	1590	205	Salt				
1590	1685	95	Anhydrite				
1685	1900	215	Salt				
1900	2172	272	Line & Anhydrite				
2172	2200	28	"Black line"				
2200	2245	45	Line				
2245	2328	83	Sandstone & shale				

**OIL CONSERVATION COMMISSION**  
**ARTESIA DISTRICT OFFICE**

No. Copies Received \_\_\_\_\_  
 DISTRIBUTION \_\_\_\_\_

OPERATOR \_\_\_\_\_  
 SANTA FE \_\_\_\_\_  
 PRODUCTION OFFICE \_\_\_\_\_  
 STATE LAND OFFICE \_\_\_\_\_  
 U. S. G. S. \_\_\_\_\_  
 TRANSPORTER \_\_\_\_\_  
 FILE \_\_\_\_\_  
 BUREAU OF MINES \_\_\_\_\_

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

*Robert A. Stearn* July 25 1962  
 (Date)

Company or Operator..... Address 103 Wilkinson-Foster Bldg  
MIDLAND, TEXAS

Name.....

Black River 16 SWD #1  
Section 16-T24S-R27E  
Eddy County, NM

8

9

10

Legend 50%  
Marshall & Winston 50%  
IIBP

Legend Nat Gas

VB-1762

**24S 27E**

**16**

Black River 16 SWD 1  
Surface Owner:  
Commissioner of Public Lands

VB-1763

NM-112268  
Devon 100%/87.5%  
7/31/2014  
IIBP

V-3722  
Oxy 50%  
Khody Land Minerals 50%

**15**

NM-112269  
D/C 100%/87.5%  
7/31/2014

NM-112269  
Devon 100%/87.5%  
7/31/2014

Yates

20

21

22

Black River 16 SWD #1  
2631' FSL & 2613' FWL  
Section 16-T24S-R27E  
Eddy County, NM

Surface Owner

Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Leasehold Owners ½ mile radius

Section 17-T24S-R27E: E/2

Devon Energy Production Company, L.P.                      100%  
333 W. Sheridan  
OKC, OK 73102

Section 9-T24S-R27E: SW/4

Legend Natural Gas    50%  
15021 Katy Freeway  
Suite 200  
Katy, TX 77094

Marshall & Winston, Inc.    50%  
P.O. Box 50880  
Midland, TX 79710-0880

Section 9-T24S-R27E: SE/4

Legend Natural Gas    100%  
15021 Katy Freeway  
Suite 200  
Katy, TX 77094

Section 15-T24S-R27E: W/2

OXY USA, Inc.    50%  
P.O. Box 4294  
Houston, TX 77210

Khody Land & Minerals    50%  
210 Park Avenue, Suite 900  
OKC, OK 73102

Section 21-24S-R27E: NE/4  
Yates Petroleum Corporation 100%  
105 S. Fourth Street  
Artesia, NM 88210-8260

Section 21-24S-R27E: NW/4  
Devon Energy Production Company, L.P. 100%  
333 W. Sheridan  
OKC, OK 73102



Section XIV--Proof of Notice to Surface Land Owner  
Devon Energy Prod Co LP  
C108 Application For Injection  
Proposed Well: Black River 16 SWD 1

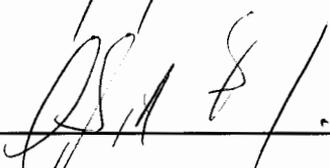
Proof of Notice to Surface Land Owner of well location site.

Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 875045-1148

Certified receipt No.  
7008 1830 0002 7421 6146

A copy of this application has been mailed to the above surface land owner by certified mail, pertaining to Devon Energy's application for salt water disposal in the Black River 16 SWD #1.

Date Mailed: 09/12/2013

Signature: 

Stephanie A. Porter, Operations Technician  
Devon Energy Production Co., L.P.  
333 West Sheridan Avenue  
Oklahoma City, OK 73102

Date: 09/12/2013



Davis well #1	32.227528	-104.212291
Davis well #2	32.227698	-104.212985
Davis well #3&4	32.225503	-104.216621
Ogden well	32.222586	-104.220867

**Black River 16 SWD 1**  
**C108 Application for Injection**  
**Fresh Water Analysis (Water Well Sample)**  
**Davis 516 Unit Well 1**  
**Sec 8-T24S-R27E**  
**Lat 32.227528 Long -104.212291**

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(806) 229-8121  
Lab Team Leader - Sheila Hernandez  
(432) 495-7240

## Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	578341
Lease/Platform:	DAVIS 516 UNIT	Analysis ID #:	133296
Entity (or well #):	1	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	FRESH WATER		

Summary		Analysis of Sample 578341 @ 75 F					
Sampling Date:	5/22/2013	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
Analysis Date:	6/12/2013	Chloride:	69.0	1.95	Sodium:	238.0	10.35
Analyst:	SANDRA GOMEZ	Bicarbonate:	244.0	4.	Magnesium:	89.0	7.32
TDS (mg/l or g/m3):	2334.6	Carbonate:	0.0	0.	Calcium:	439.0	21.91
Density (g/cm3, tonne/m3):	1.002	Sulfate:	1244.0	25.9	Strontium:	8.0	0.18
Anion/Cation Ratio:	1.2516530	Phosphate:			Barium:	0.1	0.
Carbon Dioxide:	0 PPM	Borate:			Iron:	0.5	0.02
Oxygen:		Silicate:			Potassium:	3.0	0.08
Comments:		Hydrogen Sulfide:		0 PPM	Aluminum:		
		pH at time of sampling:		7.6	Chromium:		
		pH at time of analysis:			Copper:		
		pH used in Calculation:		7.6	Lead:		
					Manganese:	0.025	0.
					Nickel:		

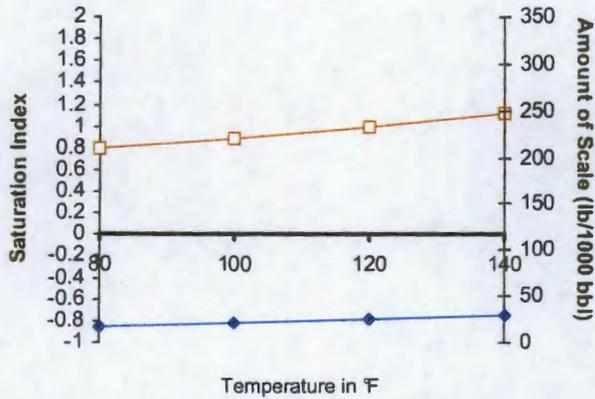
Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0	0.79	17.48	-0.23	0.00	-0.30	0.00	-0.31	0.00	0.94	0.00	0.08
100	0	0.89	20.98	-0.24	0.00	-0.24	0.00	-0.30	0.00	0.79	0.00	0.11
120	0	1.00	25.18	-0.23	0.00	-0.15	0.00	-0.27	0.00	0.67	0.00	0.14
140	0	1.12	29.37	-0.21	0.00	-0.04	0.00	-0.24	0.00	0.57	0.00	0.19

- 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.

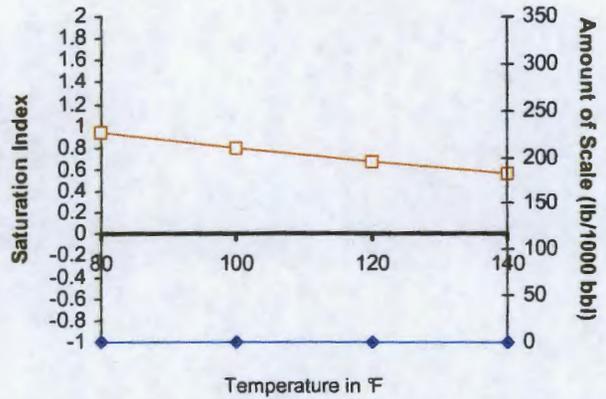
# Scale Predictions from Baker Petrolite

Analysis of Sample 578341 @ 75 °F for DEVON ENERGY CORPORATION, 6/12/2013

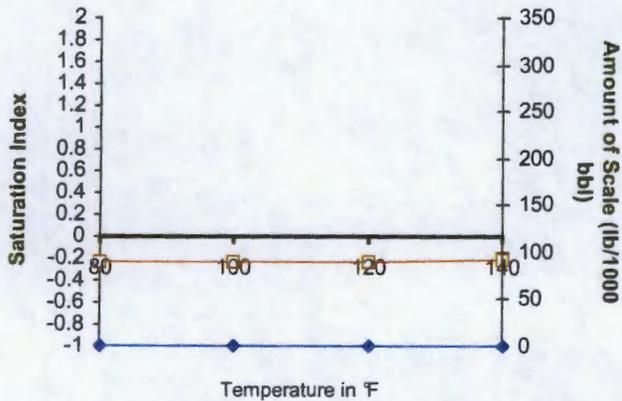
**Calcite - CaCO<sub>3</sub>**



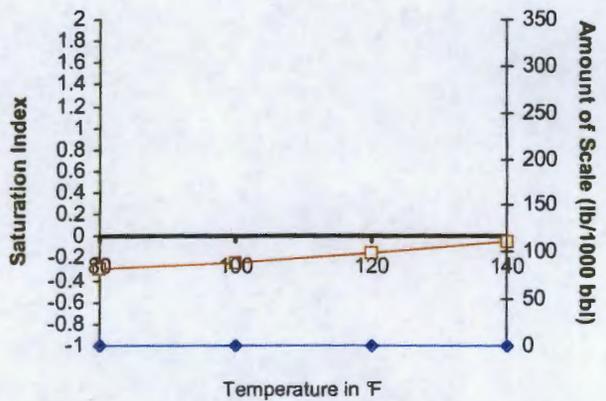
**Barite - BaSO<sub>4</sub>**



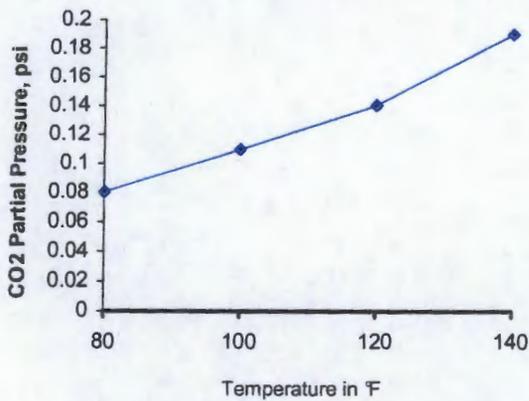
**Gypsum - CaSO<sub>4</sub>\*2H<sub>2</sub>O**



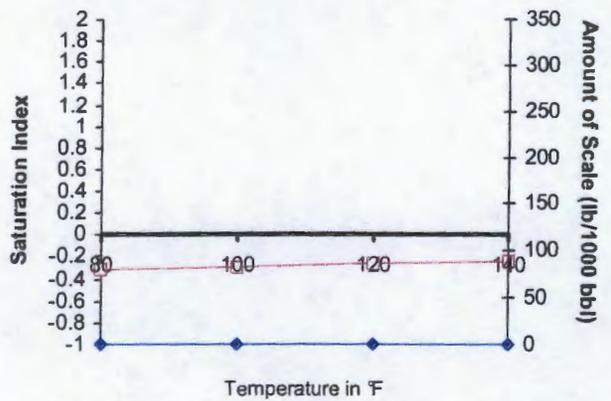
**Anhydrite - CaSO<sub>4</sub>**



**Carbon Dioxide Partial Pressure**



**Celestite - SrSO<sub>4</sub>**



**Black River 16 SWD 1  
C108 Application for Injection  
Fresh Water Analysis (Water Well Sample)  
Davis 516 Unit Well 2  
Sec 8-T24S-R27E  
Lat 32.227698 Long -104.212985**

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(806) 229-8121  
Lab Team Leader - Sheila Hernandez  
(432) 495-7240

## Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	658181
Lease/Platform:	DAVIS 516 UNIT	Analysis ID #:	133297
Entity (or well #):	2	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	FRESH WATER		

Summary		Analysis of Sample 658181 @ 75 F					
Sampling Date:	5/22/2013	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
Analysis Date:	6/12/2013	Chloride:	199.0	5.61	Sodium:	245.0	10.66
Analyst:	SANDRA GOMEZ	Bicarbonate:	219.6	3.6	Magnesium:	120.0	9.87
TDS (mg/l or g/m3):	3142.4	Carbonate:	0.0	0.	Calcium:	731.0	36.48
Density (g/cm3, tonne/m3):	1.003	Sulfate:	1617.0	33.67	Strontium:	7.5	0.17
Anion/Cation Ratio:	1.335596	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	0.7	0.03
Carbon Dioxide:	0 PPM	Silicate:			Potassium:	2.5	0.06
Oxygen:		Hydrogen Sulfide:		0 PPM	Aluminum:		
Comments:		pH at time of sampling:		6.7	Chromium:		
		pH at time of analysis:			Copper:		
		pH used in Calculation:		6.7	Lead:		
					Manganese:	0.025	0.
					Nickel:		

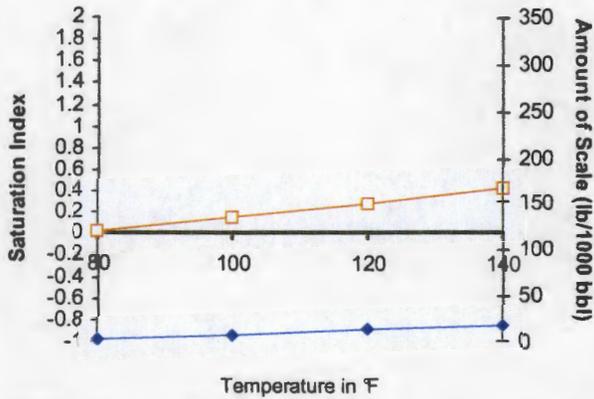
Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0	0.02	1.05	-0.01	0.00	-0.08	0.00	-0.34	0.00	0.94	0.00	0.54
100	0	0.15	5.94	-0.02	0.00	-0.02	0.00	-0.33	0.00	0.78	0.00	0.7
120	0	0.28	11.53	-0.01	0.00	0.06	83.51	-0.31	0.00	0.66	0.00	0.88
140	0	0.42	17.12	0.00	8.04	0.17	207.20	-0.28	0.00	0.56	0.00	1.06

- 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 CO<sub>2</sub> pressure is actually the calculated CO<sub>2</sub> fugacity. It is usually nearly the same as the CO<sub>2</sub> partial pressure.

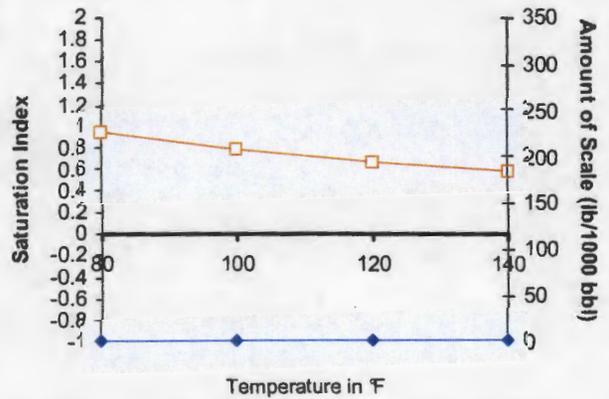
# Scale Predictions from Baker Petrolite

Analysis of Sample 658181 @ 75 °F for DEVON ENERGY CORPORATION, 6/12/2013

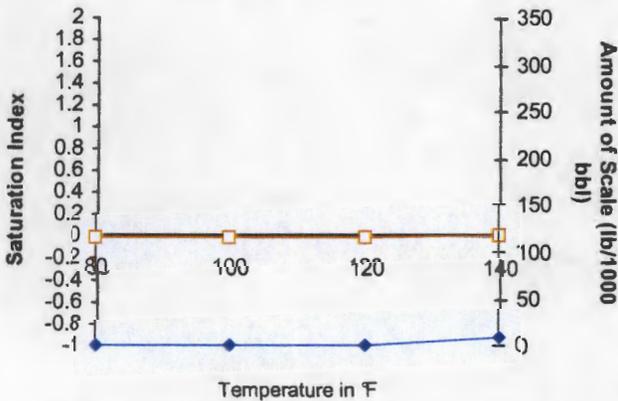
### Calcite - CaCO<sub>3</sub>



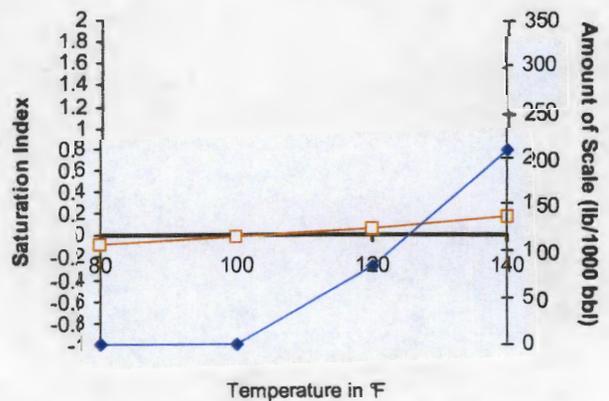
### Barite - BaSO<sub>4</sub>



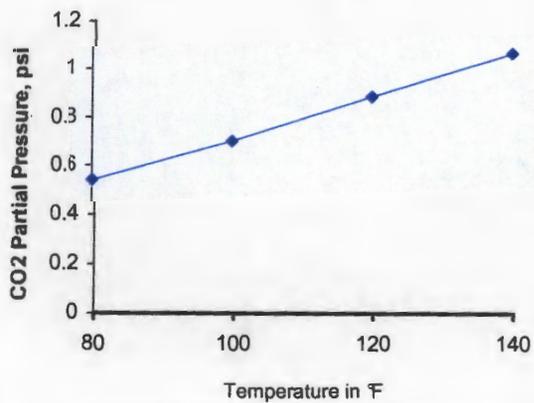
### Gypsum - CaSO<sub>4</sub>·2H<sub>2</sub>O



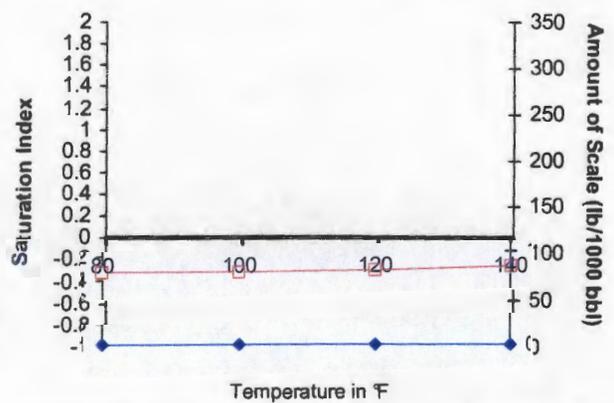
### Anhydrite - CaSO<sub>4</sub>



### Carbon Dioxide Partial Pressure



### Celestite - SrSO<sub>4</sub>



**Black River 16 SWD 1**  
**C108 Application for Injection**  
**Fresh Water Analysis (Water Well Sample)**  
**Davis 516 Unit Well 3 & 4**  
**Sec 8-T24S-R27E**  
**Lat 32.225503 Long -104.216621**

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(806) 229-8121  
Lab Team Leader - Sheila Hernandez  
(432) 495-7240

## Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	652182
Lease/Platform:	DAVIS 516 UNIT	Analysis ID #:	133298
Entity (or well #):	3 & 4	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	FRESH WATER		

Summary		Analysis of Sample 652182 @ 75 F			
Sampling Date:	5/22/2013	Anions	mg/l	meq/l	Cations
Analysis Date:	6/12/2013	Chloride:	113.0	3.19	Sodium:
Analyst:	SANDRA GOMEZ	Bicarbonate:	231.8	3.8	Magnesium:
TDS (mg/l or g/m3):	3027.9	Carbonate:	0.0	0.	Calcium:
Density (g/cm3, tonne/m3):	1.003	Sulfate:	1686.0	35.1	Strontium:
Anion/Cation Ratio:	1.2344527	Phosphate:			Barium:
Carbon Dioxide:	0 PPM	Borate:			Iron:
Oxygen:		Silicate:			Potassium:
Comments:		Hydrogen Sulfide:		0 PPM	Aluminum:
		pH at time of sampling:		6.7	Chromium:
		pH at time of analysis:			Copper:
		pH used in Calculation:		6.7	Lead:
					Manganese:
					Nickel:

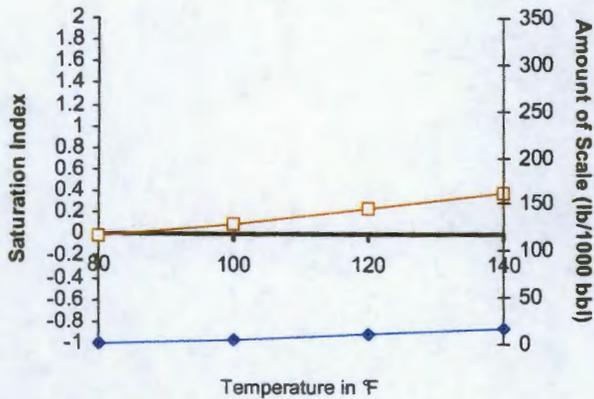
Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.02	0.00	-0.04	0.00	-0.11	0.00	-0.33	0.00	0.97	0.00	0.58
100	0	0.10	4.54	-0.05	0.00	-0.05	0.00	-0.33	0.00	0.82	0.00	0.75
120	0	0.24	10.48	-0.04	0.00	0.04	45.43	-0.31	0.00	0.70	0.00	0.94
140	0	0.38	16.42	-0.02	0.00	0.14	168.78	-0.28	0.00	0.60	0.00	1.14

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.

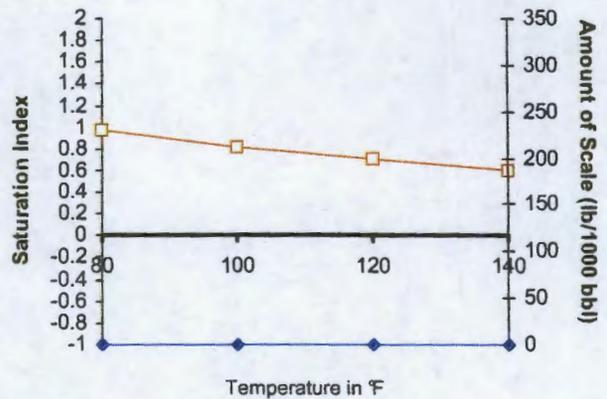
# Scale Predictions from Baker Petrolite

Analysis of Sample 652182 @ 75 °F for DEVON ENERGY CORPORATION, 6/12/2013

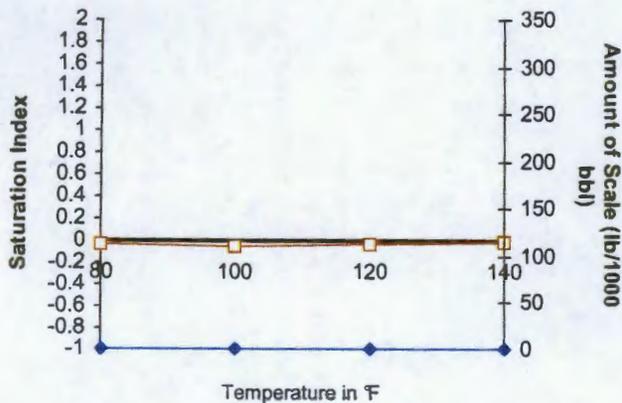
### Calcite - CaCO<sub>3</sub>



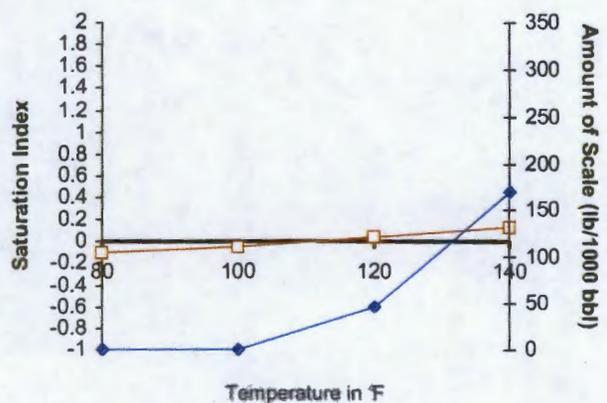
### Barite - BaSO<sub>4</sub>



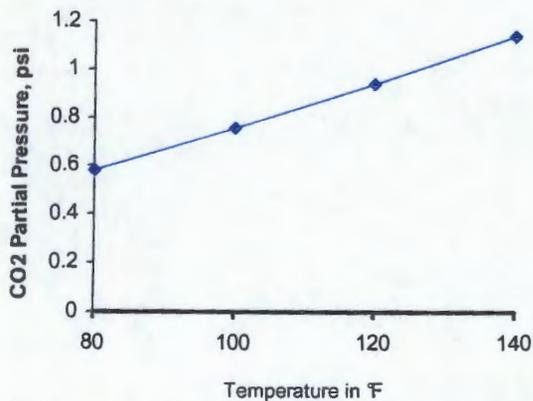
### Gypsum - CaSO<sub>4</sub>\*2H<sub>2</sub>O



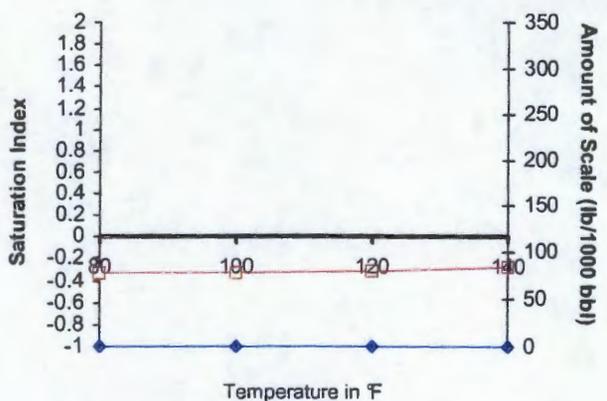
### Anhydrite - CaSO<sub>4</sub>



### Carbon Dioxide Partial Pressure



### Celestite - SrSO<sub>4</sub>



**Black River 16 SWD 1**  
**C108 Application for Injection**  
**Fresh Water Analysis (Water Well Sample)**  
**Ogden Well**  
**Sec 17-T24S-R27E**  
**Lat 32.222586 Long -104.220867**

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(806) 229-8121  
Lab Team Leader - Sheila Hernandez  
(432) 495-7240

## Water Analysis Report by Baker Petrolite

Company:	DEVON ENERGY CORPORATION	Sales RDT:	33521.1
Region:	PERMIAN BASIN	Account Manager:	GENE ROGERS (575) 910-1022
Area:	ARTESIA, NM	Sample #:	578340
Lease/Platform:	OGDÉN UNIT	Analysis ID #:	133300
Entity (or well #):	WATER TANK	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	FRESH WATER		

Summary		Analysis of Sample 578340 @ 75 F			
Sampling Date:	5/22/2013	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>
Analysis Date:	6/12/2013	Chloride:	83.0	2.34	Sodium:
Analyst:	SANDRA GOMEZ	Bicarbonate:	268.4	4.4	Magnesium:
TDS (mg/l or g/m3):	3314.7	Carbonate:	0.0	0.0	Calcium:
Density (g/cm3, tonne/m3):	1.003	Sulfate:	1879.0	39.12	Strontium:
Anion/Cation Ratio:	1.2606503	Phosphate:			Barium:
		Borate:			Iron:
		Silicate:			Potassium:
Carbon Dioxide:	0 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:
Oxygen:		pH at time of sampling:		7.8	Chromium:
Comments:		pH at time of analysis:			Copper:
		pH used in Calculation:		7.8	Lead:
					Manganese:
					Nickel:

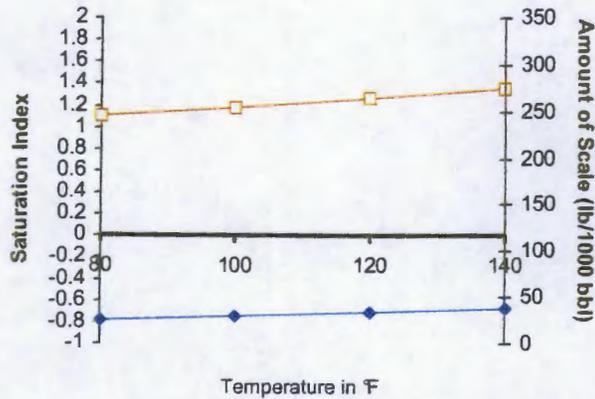
Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
		Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0	1.11	25.15	-0.02	0.00	-0.09	0.00	-0.27	0.00	0.98	0.00	0.05
100	0	1.18	29.00	-0.03	0.00	-0.03	0.00	-0.26	0.00	0.83	0.00	0.08
120	0	1.26	33.19	-0.02	0.00	0.06	73.36	-0.24	0.00	0.71	0.00	0.11
140	0	1.36	37.73	0.00	0.00	0.16	197.03	-0.21	0.00	0.61	0.00	0.14

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.

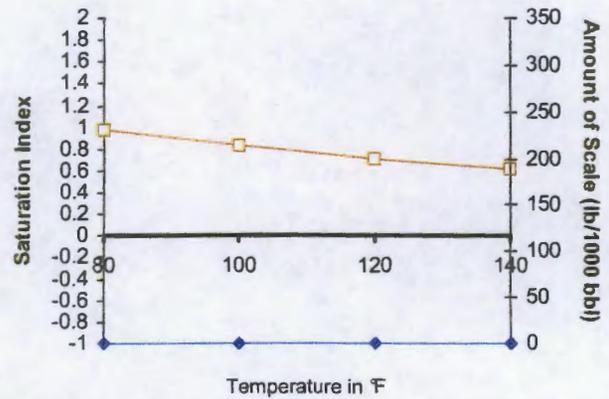
# Scale Predictions from Baker Petrolite

Analysis of Sample 578340 @ 75 °F for DEVON ENERGY CORPORATION, 6/12/2013

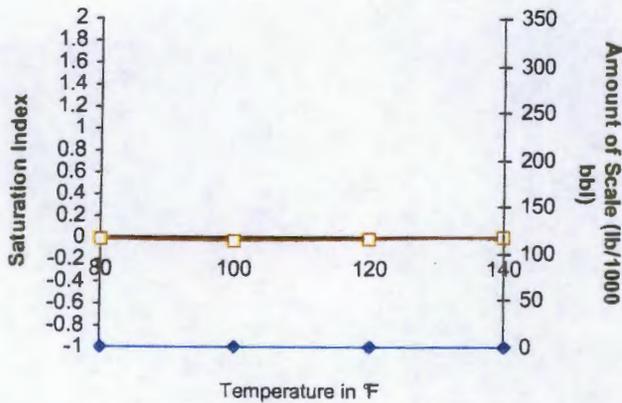
**Calcite - CaCO<sub>3</sub>**



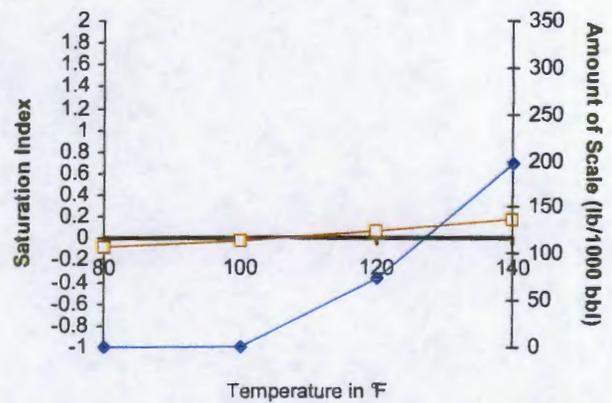
**Barite - BaSO<sub>4</sub>**



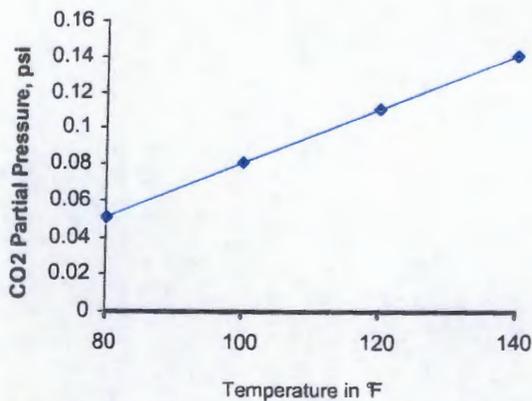
**Gypsum - CaSO<sub>4</sub>·2H<sub>2</sub>O**



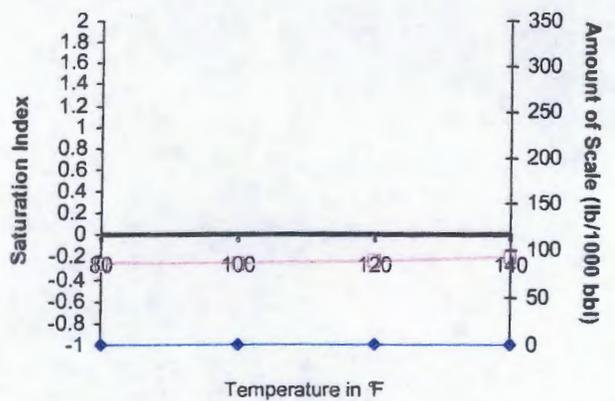
**Anhydrite - CaSO<sub>4</sub>**



**Carbon Dioxide Partial Pressure**



**Celestite - SrSO<sub>4</sub>**



**Affidavit of Publication**

State of New Mexico,  
County of Eddy, ss.

**Kathy McCarroll**, being first duly sworn,  
on oath says:

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

June 19 2013

That the cost of publication is **\$60.07** and that payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

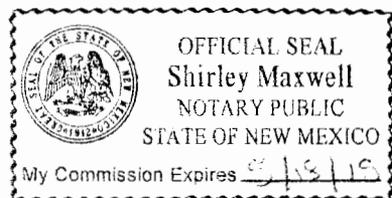
Subscribed and sworn to before me this

29th day of June, 2013

Shirley Maxwell

My commission Expires on May 18, 2015

Notary Public



June 19, 2013

**Legal Notice**

Devon Energy Production Company, LP, 333 West Sheridan Avenue, Oklahoma City, OK 73102-8260 has filed form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for an injection well. The proposed well, the Black Riv-

er 16 SWD 1 will be a new drill; proposed location is 2631' FSL & 2613' FWL, Section 16, Township 24 South, Range 27 East, in Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Bone Spring and/or Delaware formations. The disposal water will be injected into

the Devonian/Sturion/Ordovician formation at a depth of 12,900' to 15,500', open hole, at a maximum surface pressure of 2580 psi and a maximum rate of 10,000 BWPD. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within (15) days of this notice. Any interested party with questions or comments may contact Trevor Klaassen at Devon Energy Corporation, 333 West Sheridan Avenue, Oklahoma City, OK 73102-8260, or call (405) 552-5069.



Devon Energy Corporation  
333 West Sheridan  
Oklahoma City, OK 73102-8260

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, New Mexico 87504-1148

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API# 30-015-  
Eddy County, NM  
Section 16, T24S, R27E; 2631' FSL & 2613' FWL

Dear Commission of Public Lands:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal. Produced waters will be injected into the Devonian/Silurian/Ordovician formation from 12990' to 15500'.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as the well site surface land owner. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Khody Land & Minerals  
210 Park Avenue, Suite 900  
OKC, OK 73102

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Khody Land & Minerals:

Please find attached Devon Energy Production Company, LP's Form C-108; Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Black River 16 SWD #1 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie A. Porter".

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Legend Natural Gas  
15021 Katy Freeway, Suite 200  
Katy, Texas 77094

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Legend Natural Gas:

Please find attached Devon Energy Production Company, LP's Form C-108; Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Black River 16 SWD #1 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Marshall & Winston, Inc.  
P.O. Box 50880  
Midland, Texas 79710-0880

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Marshall & Winston, Inc.:

Please find attached Devon Energy Production Company, LP's Form C-108; Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Black River 16 SWD #1 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

A handwritten signature in black ink, appearing to read "S.A.P.", with a long horizontal stroke extending to the right.

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Oil Conservation Division  
811 S. First Street  
Artesia, New Mexico 88210

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Conservation Division-Artesia District Office:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject. The original application has been filed with the Oil Conservation Division-Santa Fe Office.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

The surface land owner and operators with leasehold ownership have been notified with Devon's application to inject via certified mail.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie A. Porter". The signature is fluid and cursive, with a large initial "S" and "A".

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Oxy USA, Inc.  
P.O. Box 4294  
Houston, Texas 77210

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Oxy USA, Inc.:

Please find attached Devon Energy Production Company, LP's Form C-108; Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Black River 16 SWD #1 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
[www.devonenergy.com](http://www.devonenergy.com)

September 12<sup>th</sup>, 2013

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Santa Fe Oil Conservation Division:

Please find attached Devon Energy Production Company, LP's Form C-108, Application for Authorization to Inject. Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

The surface land owner and operators with leasehold ownership have been notified with Devon's application to inject via certified mail. A copy of this application has been filed with the OCD-Artesia office.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

A handwritten signature in black ink, appearing to read "S.A.P." with a long horizontal stroke extending to the right.

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure



Devon Energy Corporation  
333 West Sheridan Avenue  
Oklahoma City, OK 73102-5010

405 235 3611 Phone  
www.devonenergy.com

September 12th, 2013

Yates Petroleum Corporation  
105 S. Fourth Street  
Artesia, New Mexico 88210-8260

RE: Form C-108, Application for Authorization to Inject  
Black River 16 SWD #1; API 30-015-  
Eddy County, NM  
Section 16, T24S, R27E

Dear Yates Petroleum Corporation:

Please find attached Devon Energy Production Company, LP's Form C-108; Application for Authorization to Inject.

Devon's application proposes to drill and convert the Black River 16 SWD #1 to salt water disposal in the Devonian/Silurian/Ordovician formation.

As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as having leasehold ownership within the ½ mile review area around the Black River 16 SWD #1 well. Any objections must be submitted in writing to NMOCD, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within (15) days of receipt of this letter.

If you have any questions, please contact Trevor Klaassen (405)-552-5069 or myself at (405)-552-7802.

Sincerely,

A handwritten signature in black ink, appearing to read "S.A. Porter". The signature is fluid and cursive, with a large initial "S" and "A" followed by "Porter".

Stephanie A. Porter  
Operations Technician

SP/sp  
Enclosure

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
 1009 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico  
 Energy, Minerals and Natural  
 Resources  
 Oil Conservation Division  
 1220 S. St Francis Dr.  
 Santa Fe, NM 87505**

Form C-101  
 August 1, 2011  
 Permit 173252



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

1. Operator Name and Address DEVON ENERGY PRODUCTION COMPANY, LP 333 W. Sheridan Avenue Oklahoma City, OK 73102		2. OGRID Number 6137
		3. API Number
4. Property Code	5. Property Name Black River 16 SWD	6. Well No. 001

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	16	24S	27E	K	2631	S	2613	W	Eddy

**8. Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	16	24S	27E	K	2631	S	2613	W	Eddy

**9. Pool Information**

SWD;DEVONIAN-SILURIAN	97869
-----------------------	-------

**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3190
16. Multiple N	17. Proposed Depth 15500	18. Formation Devonian	19. Contractor	20. Spud Date 10/12/2013
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	26	20	94	500	1200	0
Int1	17.5	13.375	61	2000	1430	0
Int2	12.25	9.625	47	9150	1990	0
Int3	8.5	7	29	12990	1130	0
Prod	6.125	0	0	15500	0	0

**Casing/Cement Program: Additional Comments**

\*\*This will be an open hole completion, thus the hole interval is deeper than the 7" production casing depth.\*\*

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Annular	2000	5000	
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> if applicable.	<b>OIL CONSERVATION DIVISION</b>	
Signature:	Approved By:	
Printed Name: Ryan DeLong	Title:	
Title: Regulatory Compliance Coordinator	Approved Date:	Expiration Date:
Email Address: ryan.delong@dvn.com	Conditions of Approval Attached	
Date: 9/12/2013	Phone:	

**2014 Land Renewal Cost Options**

Devon Net Description	First Expiration	Acres (1000s)			Renewal Cost,			Partnership Acres (1000s)			Partnership Renewal Cost,		
		2014	2015	Total	2014	2015	Total	2014	2015	Total	2014	2015	Total
High Case		79			24			102			35		
Mid Case		46			21			66			30		
Low Case		37			16			55			23		
<b>Total</b>	<b>2014/15</b>	<b>162</b>	<b>232</b>	<b>394</b>	<b>61</b>	<b>118</b>	<b>147</b>	<b>123</b>	<b>221</b>	<b>471</b>	<b>88</b>	<b>168</b>	<b>210</b>

Prepared August 23, 2013

Sumitomo Net Description	First Expiration	Acres (1000s)			Renewal Cost,			Partnership Acres (1000s)			Partnership Renewal Cost,		
		2014	2015	Total	2014	2015	Total	2014	2015	Total	2014	2015	Total
High Case		34			10			112	0	0	35	0	0
Mid Case		20			9			66	0	0	30	0	0
Low Case		17			7			56	0	0	23	0	0
<b>Total</b>	<b>2014/15</b>	<b>71</b>	<b>99</b>	<b>170</b>	<b>26</b>	<b>38</b>	<b>63</b>	<b>134</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>0</b>	<b>0</b>

Prepared August 23, 2013

County	Acres	\$ to Extend
Sterling	3,256	2,116,322.00
Mitchell	10,536	3,324,714.00
Nolan	960	240,000.00
Fisher	2,142	406,980.00

\*Additional Fisher County Acres outside High Case Outline (Davenport & McCall Davenport) 6400 acres - \$2,560,000.00.

**2014 Land Renewal Cost Options**

District I  
1625 N. French Dr., Hobbs, NM 89340  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code 97869	<sup>3</sup> Pool Name SWD; Devonian-Silurian
<sup>4</sup> Property Code	<sup>5</sup> Property Name BLACK RIVER 16 SWD		<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.		<sup>9</sup> Elevation 3190.3

<sup>10</sup> Surface Location

U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	16	24 S	27 E		2631	SOUTH	2613	WEST	EDDY

<sup>11</sup> Bottom Hole Location If Different From Surface

U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 40.00	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

**<sup>17</sup> OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by this division.

Signature: *[Signature]* Date: 9/12/2013

Printed Name: Ryan DeLong

Lease Line: ryan.delong@dmv.com

E-mail Address:

**<sup>18</sup> SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: JUNE 13, 2011

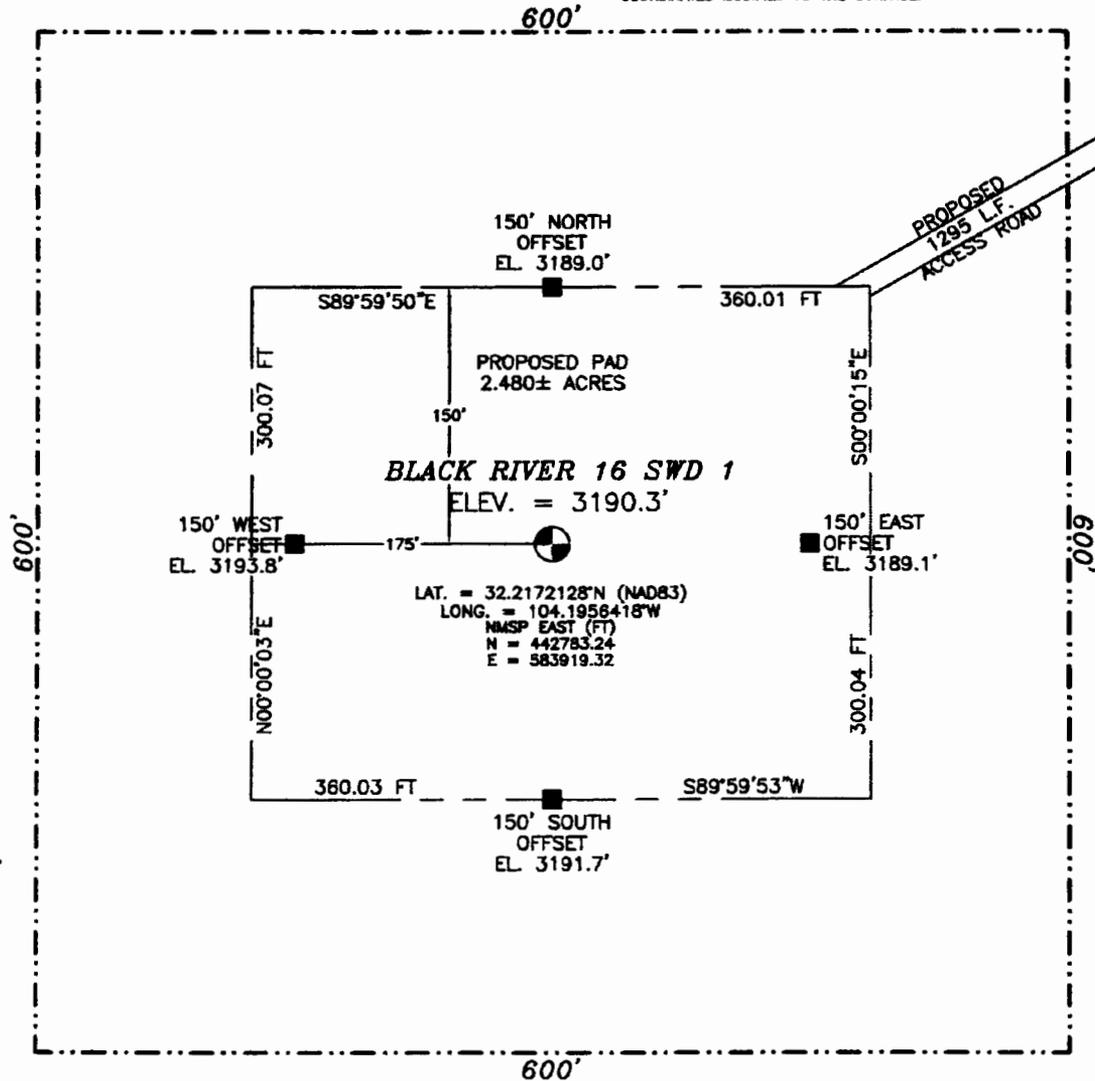
Signature and Seal of Professional Surveyor: *[Signature]*

Certificate Number: 12797

SURVEY NO. 1844

**SECTION 16, TOWNSHIP 24 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
SITE MAP**

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83), BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.



**SCALE 1" = 100'**  
**DIRECTIONS TO LOCATION**  
FROM THE INTERSECTION OF CR 742 (JOHN D. FOREHAND) & CR 720 (BLACK RIVER VILLAGE) GO EAST ON CR. 720 APPROX. 4 MILES GO SOUTH-SOUTHWEST ON MAIN CALICHE LEASE RD. FOR APPROX. 2.2 MILES TO RD. INTERSECTION CONTINUE SW ON CALICHE RD. 0.27 MILES TO 2-TRACK ROAD X-ING RUNNING N-S, TURN RIGHT ON 2-TRACK RD. 0.48 MILES TO PROPOSED ROAD ON LEFT FOLLOW STAKED RD. 1295 FT TO SITE

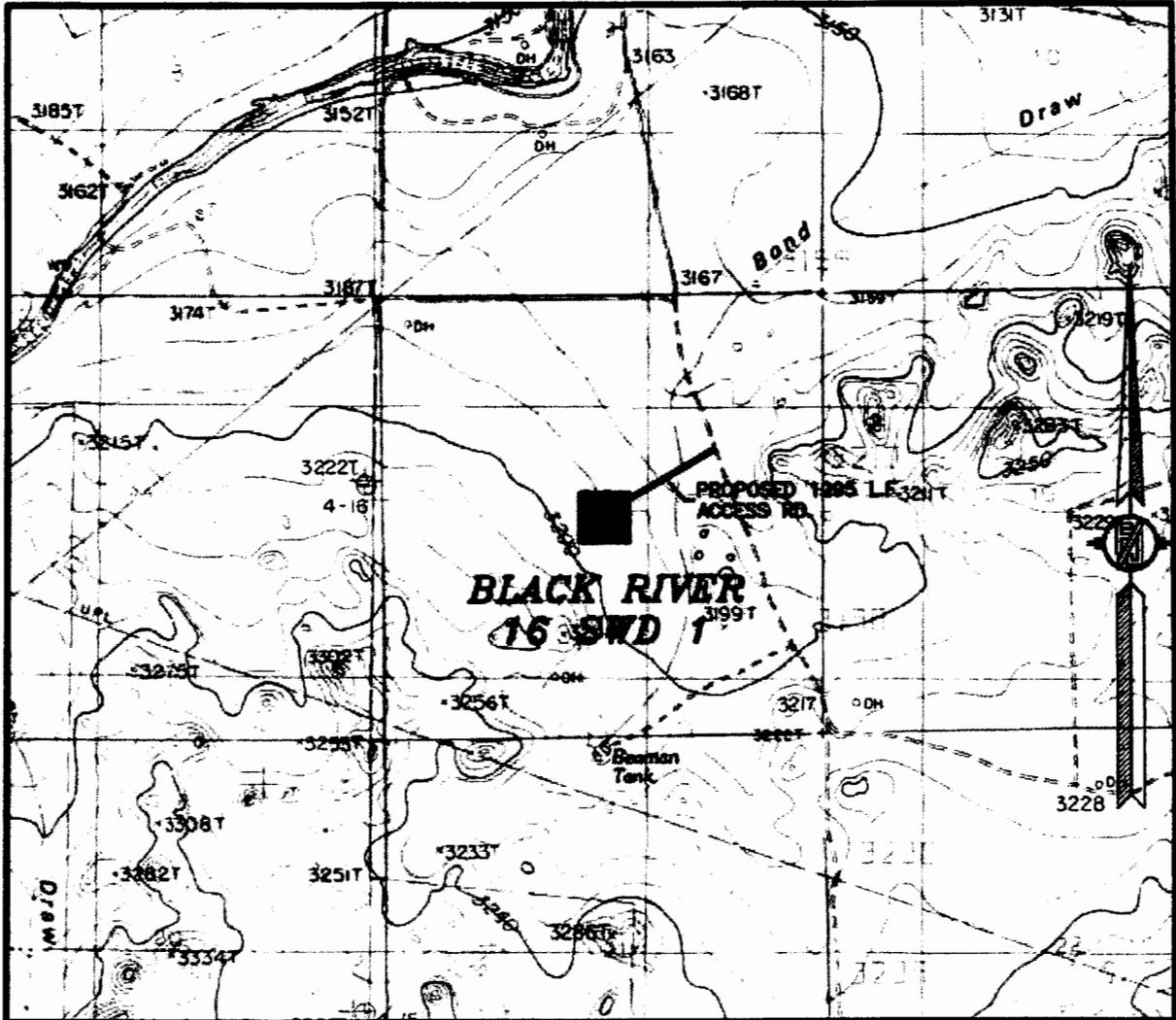
**DEVON ENERGY PRODUCTION COMPANY, L.P.  
BLACK RIVER 16 SWD 1  
LOCATED 2631 FT. FROM THE SOUTH LINE  
AND 2613 FT. FROM THE WEST LINE OF  
SECTION 16, TOWNSHIP 24 SOUTH,  
RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO**

JUNE 13, 2013

SURVEY NO. 1844

**MADRON SURVEYING, INC.** 301 SOUTH CANAL (575) 234-3341 **CARLSBAD, NEW MEXICO**

SECTION 16, TOWNSHIP 24 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
**LOCATION VERIFICATION MAP**



USGS QUAD MAP:  
 BOND DRAW

NOT TO SCALE

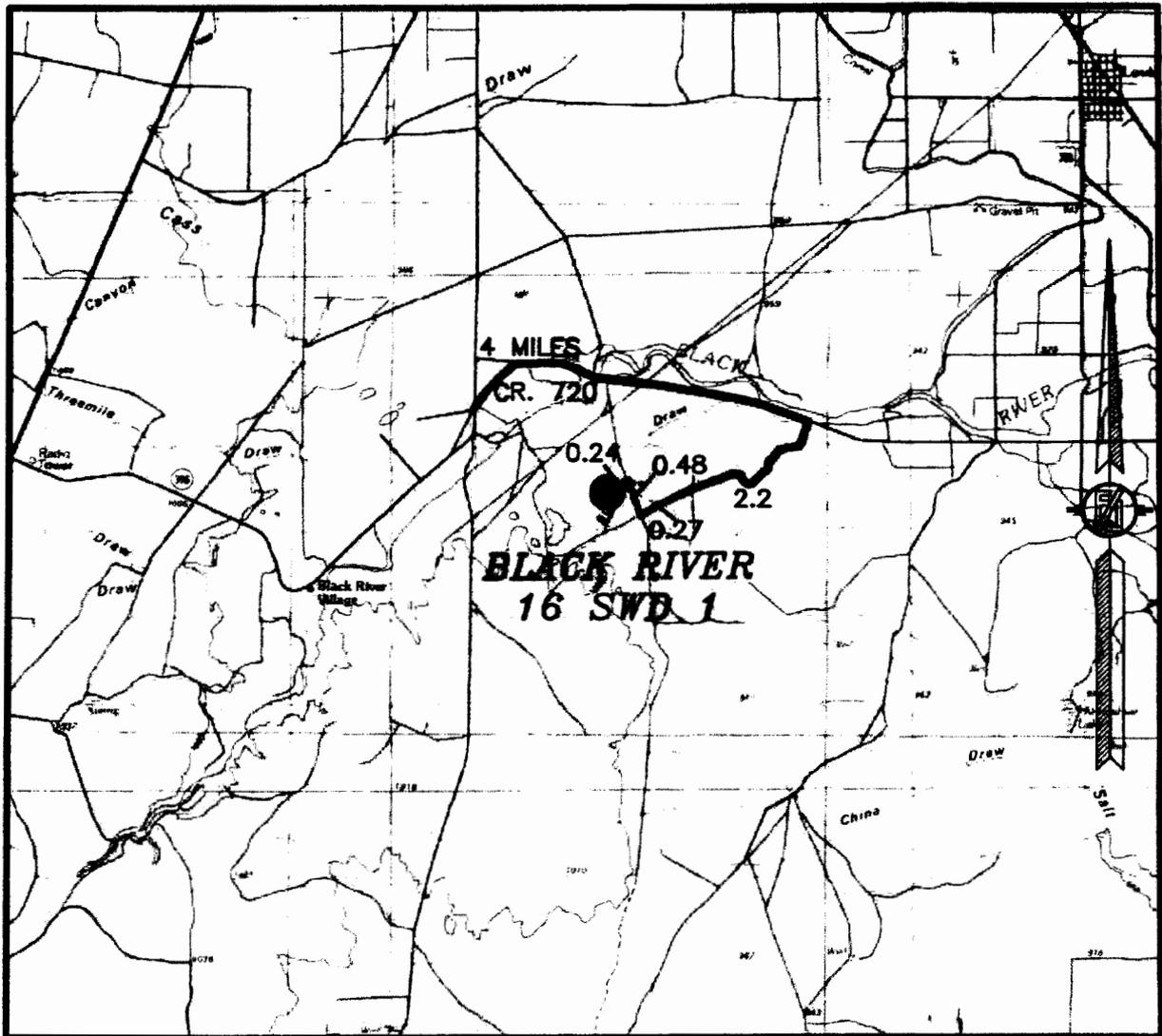
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 RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

JUNE 13, 2013

SURVEY NO. 1844

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

**SECTION 16, TOWNSHIP 24 SOUTH, RANGE 27 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 VICINITY MAP**



DISTANCES IN MILES

NOT TO SCALE

**DIRECTIONS TO LOCATION**  
 FROM THE INTERSECTION OF CR 742 (JOHN D. FOREHAND) & CR 720 (BLACK RIVER VILLAGE) GO EAST ON CR. 720 APPROX. 4 MILES GO SOUTH-SOUTHWEST ON MAIN CALICHE LEASE RD. FOR APPROX. 2.2 MILES TO RD. INTERSECTION CONTINUE SW ON CALICHE RD. 0.27 MILES TO 2-TRACK ROAD X-BMG RUNNING N-S. TURN RIGHT ON 2-TRACK RD. 0.48 MILES TO PROPOSED ROAD ON LEFT FOLLOW STAKED RD. 1285 FT TO SITE

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 EDDY COUNTY, STATE OF NEW MEXICO**

JUNE 13, 2013

SURVEY NO. 1844

**MADRON SURVEYING, INC.** 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
 (575) 234-3341

**SECTION 16, TOWNSHIP 24 SOUTH, RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
AERIAL PHOTO**



**NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
APRIL 2013**

**DEVON ENERGY PRODUCTION COMPANY, L.P.  
BLACK RIVER 16 SWD 1  
LOCATED 2631 FT. FROM THE SOUTH LINE  
AND 2613 FT. FROM THE WEST LINE OF  
SECTION 16, TOWNSHIP 24 SOUTH,  
RANGE 27 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO**

**JUNE 13, 2013**

**SURVEY NO. 1844**

**MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO**  
(575) 234-3341

## Goetze, Phillip, EMNRD

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**From:** Porter, Stephanie <Stephanie.Porter@dvn.com>  
**Sent:** Wednesday, November 06, 2013 6:19 AM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** Black River 16 SWD 1 (API #: 30-015-41651): Mr. Davis Status

Phillip,

Just wanted to touch base and let you know that our Landman and Operations Engineer were able to meet with Mr. Davis last week. Devon was able to satisfy Mr. Davis that we were aware of his concerns and already addressing some of feedback that he provided. Devon always wants to be a good neighbor. ☺ If you need anything additional on the Black River 16 SWD 1, please let me know. I'm sure this is in your queue to do.

On another note, on the Todd 27P Federal 16, our landman was able to talk with Oxy and it was collectively agreed to shorten the interval. We are waiting to hear back from them formally in writing. Once everything has been summarized, I can send you a copy. Oxy is aware they need to withdraw their objection, if they hadn't done it already. I'll keep you updated on that. ☺

*Stephanie A. Porter*

Permian New Mexico Technician

Phone: (405)-552-7802

Cell: (405)-721-7689

Fax: (405)-552-8113

DEC 31.326

[Stephanie.Porter@dvn.com](mailto:Stephanie.Porter@dvn.com)

*Courage is being scared to death but saddling up anyway ~ John Wayne*

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**Confidentiality Warning:** This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

RECEIVED OGD

2013 JUL -3 P 3: 00

Jim Davis

P.O. Box 1841

889 Black River Village Rd.

Carlsbad, NM 88221

Phone 575-785-2319 or 575-706-5324

e-mail [bjdavis@pvtnetworks.net](mailto:bjdavis@pvtnetworks.net)

Fax 575-785-1013

(-Additional surface issues)

Called 09/16/13

- notify Devon of situation  
o contacted Devon and requested discussion - met twice with Mr. Davis

- Called 12/31/13; confirmed satisfied with Devon proposed surface operation and shallow casing design.  
BWS

June 30, 2013

New Mexico Oil Conservation Division

Subject: Disposal Well Black River 16 SWD 1 Devon Energy.

I have concerns for this projected injection well.

There is ground water in section 16 at 70 ft. range. This water runs to the Black River in section 8 and 9. Close to Black River the table is at 25 to 30 ft. In section 8 I have 4 wells that use this water domestic and commercial.

South of Black River there is a lot of run off that hits the river. For an injection well to be trouble free it must meet the requirement of no run off and no chance of penetration to the ground water.

The fence that runs south, starting at NW corner of section 16, to halfway into section 21 is off. Any access through existing fence will need to be addressed to prevent double work.

The missing part of this application is how the disposal product will get to the location? Will it be pipelines above ground, buried or trucks?

Where is the power coming from to run the disposal?

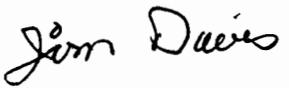
We need to use existing right of ways to prevent loss of pasture.

The other problem we are having is that we find stakes for drill sites, pipelines and no one from Devon the State or BLM talks to me about their proposed drill sites and pipelines. We need more open

communication from all parties before work is done. The State should have a sign off sheet from owners and lessee of proposed drill sites and pipelines with application.

I am for production of oil and gas on private State and BLM leases. I want the smallest footprint on the environment and the safest way of conducting business.

Thanks,

Jim Davis 



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion

(with Ownership Information)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	(R=POD has been replaced and no longer serves this file, C=the file is closed)				(quarters are 1=NW 2=NE 3=SW 4=SE)		(quarters are smallest to largest) (NAD83 UTM in meters)			
									Source	6416	4	Sec	Tws	Rng	X	Y		
<u>C 00364</u>	C	CLS	0	A.J. CRAWFORD	ED	<u>C 00364</u>	C		Shallow	1	2	09	24S	27E	575997	3567043*		
<u>C 00516</u>	C	IRR	72.4	BARBARA DAVIS	ED	<u>C 00516</u>			Shallow	1	3	4	08	24S	27E	574288	3565901*	
					ED	<u>C 00516 POD3</u>				1	3	4	08	24S	27E	574288	3565901*	
					ED	<u>C 00516 POD5</u>				1	3	4	08	24S	27E	574286	3565921	
					ED	<u>C 00516 POD6</u>			Shallow	1	4	3	08	24S	27E	573885	3565895*	
					ED	<u>C 00516 S</u>			Shallow	1	3	4	08	24S	27E	574288	3565901	
<u>C 00631</u>	C	SAN	3	GIRL SCOUTS OF AMERICA	ED	<u>C 00631</u>			Shallow	3	3	4	08	24S	27E	574288	3565701*	
<u>C 00683</u>	C	DOM	3	HARLEY DAVIS	ED	<u>C 00683</u>			Shallow	4	3	08	24S	27E	573986	3565796*		
<u>C 00821</u>	C	PRO	0	UNION OIL CO. OF CALIFORNIA	ED	<u>C 00821</u>			Shallow	3	2	09	24S	27E	575996	3566635*		
<u>C 00850</u>	C	PRO	0	UNION OIL CO. OF CALIFORNIA	ED	<u>C 00850</u>			Shallow	2	3	09	24S	27E	575595	3566223*		
<u>C 01187</u>	C	DOM	3	CAMP LAVELLE ZIA GIRL SCOUT C.	ED	<u>C 01187</u>			Shallow	4	3	08	24S	27E	573986	3565796*		
<u>C 01366</u>		EXP	0	HARLEY DAVIS	ED	<u>C 01366</u>			Shallow	4	08	24S	27E	574590	3566003*			
<u>C 01452</u>	C	STK	3	WILLIAM DIESCHER	ED	<u>C 01452</u>			Shallow		22	24S	27E	577435	3563175*			
<u>C 03416</u>		EXP	0	JAMES S DAVIS	ED	<u>C 03416 POD1</u>				3	1	4	08	24S	27E	574271	3566180	
<u>C 03489</u>	C	EXP	0	JAMES S. DAVIS	ED	<u>C 03489 POD1</u>			Shallow	2	4	3	08	24S	27E	574153	3565939	
<u>C 03490</u>	C	EXP	0	JAMES DAVIS	ED	<u>C 03490 POD1</u>			Shallow	3	4	3	08	24S	27E	573811	3565709	
<u>C 03707</u>		PRO	0	JIM DAVIS	ED	<u>C 00516 POD9</u>				3	4	3	08	24S	27E	573809	3565705	
<u>C 03708</u>		PRO	0	JIM DAVIS	ED	<u>C 00516 S</u>			Shallow	1	3	4	08	24S	27E	574288	3565901	

\*UTM location was derived from PLSS - see Help

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	6416	4	Sec	Tws	Rng	X	Y
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(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
 C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

Record Count: 18

**POD Search:**

POD Basin: Carlsbad

**PLSS Search:**

Section(s): 8, 9, 10, 15, 16, Township: 24S Range: 27E  
 17, 20, 21, 22

Sorted by: File Number



July 3<sup>rd</sup> / Letter from Land/Surface Owner 5/13/13

C-108 Review Checklist: Received 09/16/13 Add. Request: — Reply Date: — Suspended: 1/30/13 [Ver 11]

PERMIT TYPE: WFX / PMX / SWD Number: 1454 Permit Date: 12/30/13 Legacy Permits/Orders: NA

Well No. 1 Well Name(s): Black River 16SWD

API: 30-0 15-41651 Spud Date: TBD New or Old: New (UIC Class II Primacy 03/07/1982)

Footages 2631 FSL / 2613 FWL Lot - Unit K Sec 16 Tsp 24S Rge 27E County Eddy

General Location: Along Black River/SE of White City Pool: SWD: Devon - Ellenburger No.:

Operator: Devon Energy Prod. Co. LP OGRID: 6137 Contact: Stephanie Porter

COMPLIANCE RULE 5.9: Inactive Wells: 3 Total Wells: 1829 Fincl Assur: Yes Compl. Order? No IS 5.9 OK? Yes

Well File Reviewed  Current Status: APD for current C-108 design

Well Diagrams: NEW: Proposed  RE-ENTER: Before Conv.  After Conv.  Are Elogs in Imaging?: No - suite in proposal

Planned Rehab Work to Well: New Well

Well Construction Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Conductor	—	—	—	—	—
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface	26/20	0 to 500	—	1200	Cir. to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod	17 1/2 / 13 3/8	0 to 2000	None	1430	Cir to Surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Prod/Interm	12 1/4 / 9 5/8	0 to 9150	None	1990	Cir to Surface
Planned <input type="checkbox"/> or Existing <input checked="" type="checkbox"/> Liner/Prod	8 1/2 / 7	0 to 12990	None	1130	Cir to Surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> OH/PERF	6 1/8	12990 - 15500	1732	—	—

Injection Stratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops?	Completion/Operation Details:
Adjacent Unit: Litho. <input checked="" type="checkbox"/> Struc. <input type="checkbox"/> Por. <input type="checkbox"/>		Miss Line	12500	Drilled TD 14722 PBSD 14722
Confining Unit: Litho. <input checked="" type="checkbox"/> Struc. <input type="checkbox"/> Por. <input type="checkbox"/>	F 3	Woodford	12895	NEW TD — NEW PBSD —
Proposed Inj Interval TOP:	12990	Devonian/S.1/Ord	12990	NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>
Proposed Inj Interval BOTTOM:	14722	Ellenburger top 100'	14722	Tubing Size 4 1/2 in. Inter Coated? Yes
Confining Unit: Litho. <input checked="" type="checkbox"/> Struc. <input type="checkbox"/> Por. <input type="checkbox"/>	14722	Ellenburger	14722	Proposed Packer Depth 12940 ft
Adjacent Unit: Litho. <input type="checkbox"/> Struc. <input type="checkbox"/> Por. <input type="checkbox"/>	?	DE	?	Proposed Packer Depth 12890 (100-ft limit)
				Proposed Max. Surface Press. 2598 psi
				Admin. Inj. Press. 2598 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-NA Noticed? NA BLM Sec Ord NA WIPP NA Noticed? NA SALADO: T: 566 B: 1900 CLIFF HOUSE NA

FRESH WATER: Formation Alluvial Max Depth = 100 Wells? 1 FW Analysis  HYDROLOGIC AFFIRM By Qualified Person

Disposal Fluid: Formation Source(s) Shallow to Black River Bone Spring/Delaware Analysis? Yes On Lease  Operator Only  or Commercial

Disposal Interval: Injection Rate (Avg/Max BWPD): 500/10000 Protectable Waters: UNKNOWN CAPITAN REEF: thru  adj  NA

HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A/Other Unknown 2-Mile Radius Pool Map

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 0 Horizontals? None

Penetrating Wells: No. Active Wells 0 Num Repairs? 0 on which well(s)? — Diagrams: Yes

Penetrating Wells: No. P&A Wells 0 Num Repairs? 0 on which well(s)? — Diagrams: Yes

NOTICE: Newspaper Date 06/29/13 Mineral Owner SLO Surface Owner SLO - leased N. Date 9/12/13

RULE 26.7(A): Identified Tracts? Yes Affected Persons: Legend Nat. / Marshall & Winter / Oxy / Reddy Date 9/12/13

Permit Conditions: Issues: Ellenburger included; no water-H/C potential for interval

Add Permit Cond: Limit TD to top 100' of Ellenburger; mud log and salinity