

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 _____

[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.

Preston Stein

Print or Type Name

Signature

Preston Stein

Vice-President

Title

10/10/2016

Date

preston@delawareenergyllc.com
 e-mail Address

Delaware Energy, LLC
Application for Injection/SWD
State RR #1, API: 30-015-20966

UL K, Sec. 17, T-23-S, R-27-E, 1979' FSL & 1980' FWL, Eddy Co., NM

October 10, 2016

Contents:

1. Administrative Application Checklist
2. Form C-108: Application for Authority to Inject
3. Form C-108 Additional Questions Answered
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5. Chemical Analysis of Bone Springs Formation Water Sample from T25S, R28E, Eddy Co., NM
6. Chemical Analysis of Wolfcamp Formation Water Sample from T26S, R29E, Eddy Co., NM
7. Chemical Analysis of Delaware Formation Water Sample from T23S, R28E, Eddy Co., NM
8. Top Gun Fed. SWD #1 (30-015-31075), Sec. 18, T23S, R27E Water Report & Log
9. Wellbore diagram of State RR #1 as Plugged
10. Wellbore diagram as Planned
11. ~~Tabular Data on All Wells of Public Record within the Area of Review which Penetrate the Proposed Injection Zone (No applicable wells)~~
12. Water Well Samples:
 - a. Sec. 19, T23S, R27E
 - b. Sec. 21, T23S, R27E
13. Map Identifying 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
14. Sample of Letter Sent with This Application Packet to Owner of 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
15. Legal Notice that will be run as required in the Carlsbad Current-Argus
16. Formation Tops
17. Regulatory Filings

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance xxx Disposal Storage
Application qualifies for administrative approval? xxx Yes No
- II. OPERATOR: Delaware Energy LLC
ADDRESS: 3001 W Loop 250 N, Suite C-105-318, Midland TX 79705
CONTACT PARTY: Preston Stein PHONE: 214-558-1371
- 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 xxx 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: Preston Stein TITLE: Vice-President
SIGNATURE: Preston Stein DATE: 10/10/2016
E-MAIL ADDRESS: Prestonm@delawareenergyllc.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.

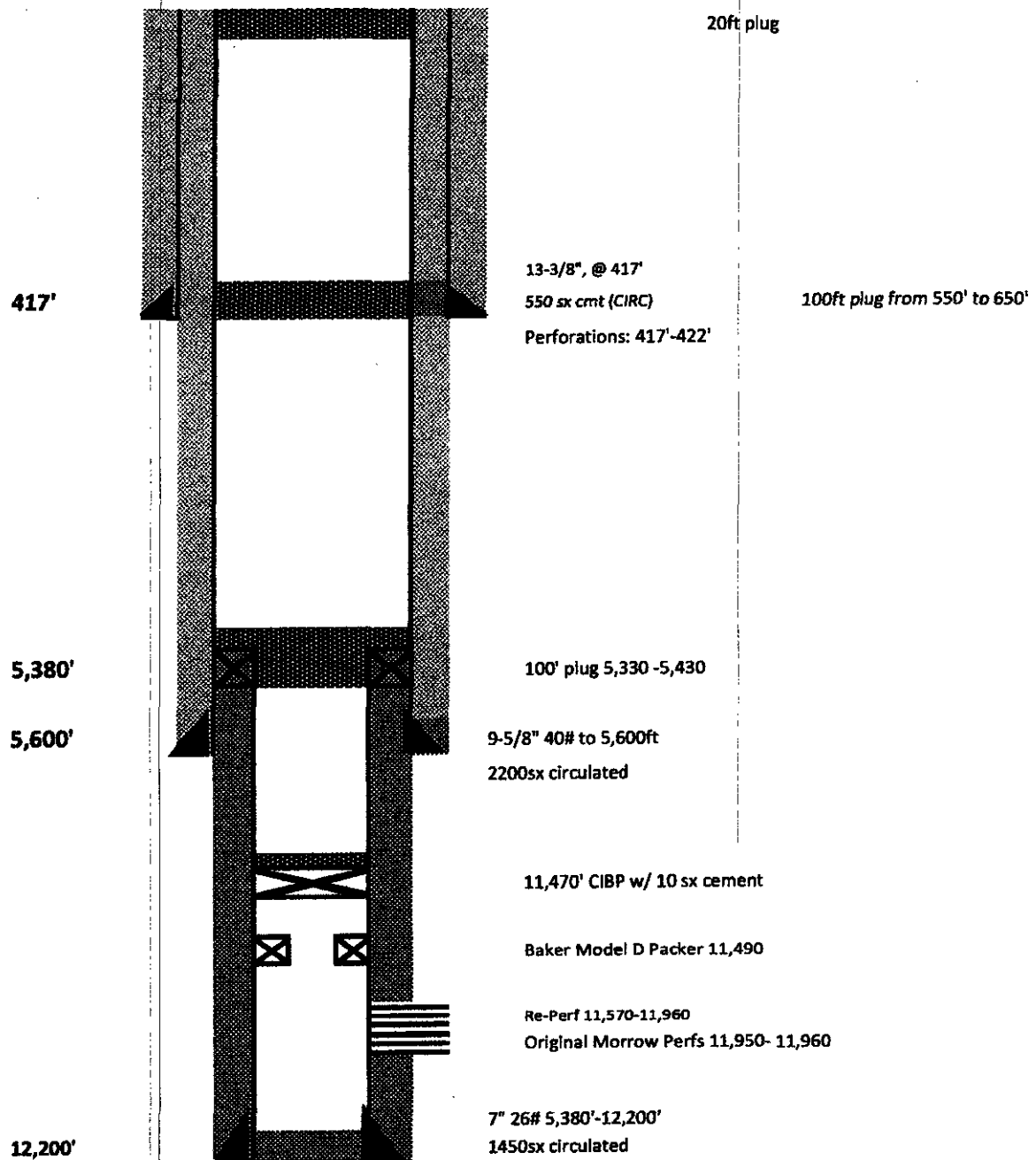
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Delaware Energy
LLC

State RR No 1
1979 'FSL & 1980' FWL, UL K, SEC. 17, T-23S R-27E, Eddy County, NM
API # 30-015-20966



State RR No 1
1979 FSL & 1980' FWL, UL K, SEC. 17, T-23S R-27E, Eddy County, NM
API # 30-015-20966

4.5" & 3.5" IPC tubing
to 12,850' (proposed)

417'

13-3/8", @ 417'
550 sx cmt (CIRC)

5,380'

5,600'

9-5/8" 40# to 5,600ft
2200sx circulated

Baker Liner hanger at 11,370 ft proposed)
Sqz'd perms 11,570- 11,960' (proposed)

7" 26# 5,380'-12,200'
1450sx circulated

12,200'

12,450 Mississippian Lime

12,900'

Proposed packer @ 12,850' Arrow set 1X
5.5" 17# P110 liner to 12,900' (proposed)
plan to circulate with 200 sacks class H

6.125" Hole Open Hole (proposed)

TD: 13,900'

WELL NAME & NUMBER: State RR No

1

WELL LOCATION: 1979' FSL, 1980'

FWL

K

17

23S

27E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2"

Casing Size: 13-3/8"

Cemented with: 435 sx.

or ft³

Top of Cement: SURFACE

Method Determined: Circulated

Total Depth: 407'

Intermediate Casing (N/A)

Hole Size: 12-1/2"

Casing Size: 9-5/8"

Cemented with: 2,200 sx.

or ft³

Top of Cement: Surface

Method Determined: Circulated

Total Depth: 5,600'

Production Casing

Hole Size: 8-3/4"

Casing Size: 7"

Cemented with: 1450 sx.

or ft³

Top of Cement: TOL @ 5380'

Method Determined: Circulated

Total Depth: 12,200'

5" Liner *

Hoe Size: 6-1/8"

Casing Size: 5.5"

Top of Liner: 11,370'

or ft³

Top of Cement: TOL @ 11,370'

Method Determined: Circulated

Total Depth: 12,900'

Injection Interval

12,900'

feet

to

13,900'

Open hole

INJECTION WELL DATA SHEET

Tubing Size: 3.5" & 4.5" Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection

Packer

Packer Setting Depth: 50-100ft above open hole

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

NONE

Additional Data

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

If no, for what purpose was the well originally drilled? The well was originally drilled as a vertical Morrow test. The well was found to be unproductive of hydrocarbons in commercial quantities.

2. Name of the Injection Formation: Devonian

3. Name of Field or Pool (if applicable): SWD: Devonian

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.

Yes.

Perforations from 11,570'-11,960". Interval plugged w/ CIBP set @ ~11,470' and

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

BELOW: None

ABOVE: Morrow 11,336'-12,105', Atoka 10,846'-11,336', Strawn 10,620'-10,846', Wolfcamp 8,844'-10,620', Bone Springs 5,386'-8,844'

10sx cmt

proposed

Additional Questions on C-108

VII.

1. Proposed average and maximum daily rate and volume of fluids to be injected;

Average 5,000-8,000 BHPD, Max 15,000 BHPD

2. Whether the system is open or closed;

Open System, Commercial SWD

3. Proposed average and maximum injection pressure;

Average 400-1,000 PSI, Max 2,580 PSI

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,

Bone Spring, Delaware, and Wolfcamp produced water. No incompatibility exists with Devonian formation fluid. See attached water analysis from Bone Spring, Wolfcamp, and Delaware produced water. The offset Top Gun SWD tested Sulphur water in the Devonian, see attached report.

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.).

See attached report, produced water in offset Top Gun contained no hydrocarbons and Sulphur water.

***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.**

The proposed disposal interval is located in the Devonian 12,900'-13,900'. Top of the Woodford shale is 12,800ft. Woodford is an impervious organic shale (100ft thick). Devonian is carbonate lime and dolomite, with porosity development of 4% -20%. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the top of the Rustler Anhydrite at +/- 300', the water source is older alluvium (Quaternary). All of the fresh water wells in the area have an average depth to water of 100ft - 150ft.

IX. Describe the proposed stimulation program, if any.

20,000 gallons 15% HCL acid job with packer

X. Attach appropriate logging and test data on the well

Logs have been filed. See attached log of the offset Top Gunn SWD. Delaware Energy will file all cased and open hole logs following reentry.

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.

No water wells exist in section 17. Included in the application are locations of water wells nearby in sections 7, 19 and 21 of T23S, R27E, and two water samples.

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.

Delaware Energy, L.L.C. has reviewed and examined available geologic and engineering data in the area of interest for the State RR #1 SWD and have found no evidence of faults or other hydrologic connections between the Devonian disposal zone and the underground sources of drinking water. Furthermore, there exist many impermeable intervals between the injection interval and the fresh ground water.

Preston Stein

Vice-President

10/10/2016

Title _____

Date _____

III. WELL DATA

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

State RR #1, Sec. 17-T23S-R27E, 1979' FSL & 1980' FWL, UL K, Eddy County, New Mexico

(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.

Casing Size	Setting Depth	Sacks of Cement	Hole Size	Top of Cement	Determined
13-3/8"	407'	435	17-1/2"	Surface	CIRC
9-5/8"	5600'	2200	12-1/4"	Surface	CIRC
7" Liner	5,380'-12,200'	1450	8-3/4"	At TOL	CIRC
**5.5" liner	11,370'- 12,900'	200	6.125"	At TOL	Circ

** proposed

(3) A description of the tubing to be used including its size, lining material, and setting depth.

3.5" & 4-1/2" OD, Internally Plastic Coated Tubing set 50 to 100ft above open hole

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Weatherford Arrow set 1X injection packer, nickel plated with on/off tool

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.

Formation: Devonian

Pool Name: SWD (Devonian)

(2) The injection interval and whether it is perforated or open-hole.

12,900' to 13,900' (OH)

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

The well was originally drilled as a vertical Morrow test. The well was found to be unproductive of hydrocarbons in commercial quantities.

(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.

Perforations from 11,570'-11,960". Interval plugged w/ CIBP set @ ~11,470' and 10sx cmt

(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.

Next Higher: Morrow 11,336'-12,105', Atoka 10,846'-11,336', Strawn 10,620'-10,846', Wolfcamp 8,844'-10,620', Bone Springs 5,386'-8,844'.

Next Lower: None

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
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

1 API Number 30-015-	2 Pool Code Undesignated	3 Pool Name SWD; Devonian
4 Property Code	5 Property Name State RR SWD	
6 Well Number 1		
7 OGRID No. 371195	8 Operator Name Delaware Energy, LLC	
9 Elevation		

Surface Location

UI, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	17	23 S	27 E		1979'	South	1980'	West	EDDY

Bottom Hole Location If Different From Surface

UI, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

10 Dedicated Acres	11 Joint or Infill	12 Consolidation Code	13 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.

	<p>17 OPERATOR CERTIFICATION <i>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 undivided 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 the division.</i></p> <p>Signature _____ Date _____</p> <p><u>Preston Stein</u> Printed Name</p> <p><u>Preston@delawareenergyllc.com</u> E-mail Address</p> <p>18 SURVEYOR CERTIFICATION <i>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.</i></p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>WAITING ON SIGNED PLAT</p> <p>Certificate Number _____</p>
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**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

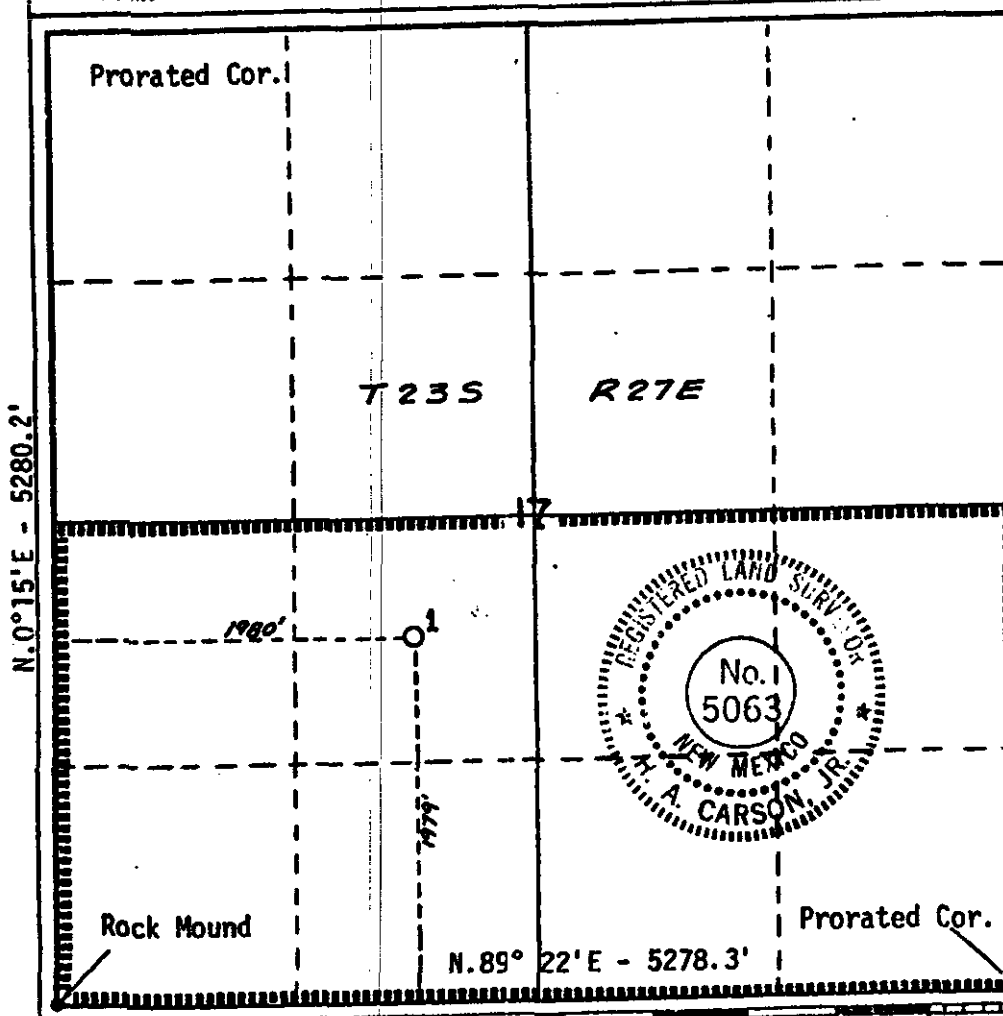
Operator Mobil Oil Corporation			Lease State RR		Well No. 1
Unit Letter K	Section 17	Township 23-S	Range 27-E	County Eddy	
Actual Footage Location of Well: 1979 feet from the South line and 1980' feet from the West line					
Ground Level Elev. 3176'	Producing Formation Morrow	Pool Undesignated		Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

A. D. Bond

Name

A. D. Bond

Position

Proration Staff Assistant

Company

Mobil Oil Corporation

Date

September 20, 1973

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 knowledge and belief.

H. A. Carson, Jr.

Date Surveyed

September 19, 1973

Registered Professional Engineer and/or Land Surveyor

Harvey A. Carson, Jr.

Certificate No.

Sec 22, T25S, R28E

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 228-8121
Lab Team Leader - Sheila Hernandez
(432) 495-7240

Bone Spring

Water Analysis Report by Baker Petrolite

Company:		Sales RDT:	33514.1
Region:	PERMIAN BASIN	Account Manager:	TONY HERNANDEZ (575) 910-7135
Area:	ARTESIA, NM	Sample #:	534665
Lease/Platform:	PINOCHLE 'BPN' STATE COM	Analysis ID #:	106795
Entity (or well #):	2 H	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 534665 @ 75 F					
Sampling Date:	03/10/11	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	03/18/11	Chloride:	109618.0	3091.92	Sodium:	70275.7	3058.82
Analyst:	SANDRA GOMEZ	Bicarbonate:	2135.0	34.99	Magnesium:	195.0	18.04
TDS (mg/l or g/m3):	184911.1	Carbonate:	0.0	0.	Calcium:	844.0	42.12
Density (g/cm3, tonne/m3):	1.113	Sulfate:	747.0	15.55	Strontium:	220.0	5.02
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.8	0.01
		Borate:			Iron:	6.5	0.23
		Silicate:			Potassium:	869.0	22.22
Carbon Dioxide:	0.50 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7	Lead:		
					Manganese:	0.100	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.08	188.52	-1.20	0.00	-1.18	0.00	-0.11	0.00	0.56	0.29	1.72
100	0	1.10	208.05	-1.29	0.00	-1.20	0.00	-0.15	0.00	0.35	0.29	2.35
120	0	1.12	224.17	-1.36	0.00	-1.19	0.00	-0.17	0.00	0.16	0.00	3.17
140	0	1.13	243.17	-1.42	0.00	-1.18	0.00	-0.18	0.00	0.00	0.00	4.21

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.

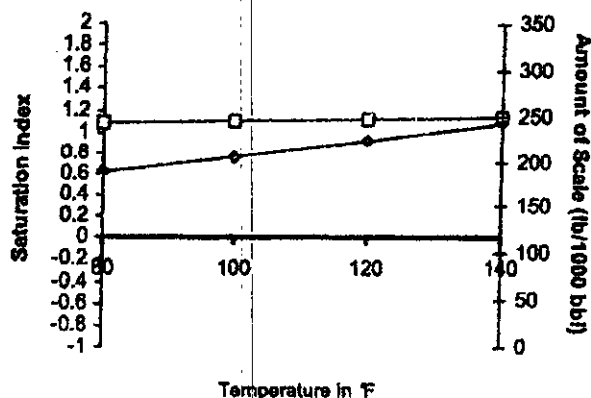
Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

Scale Predictions from Baker Petrolite

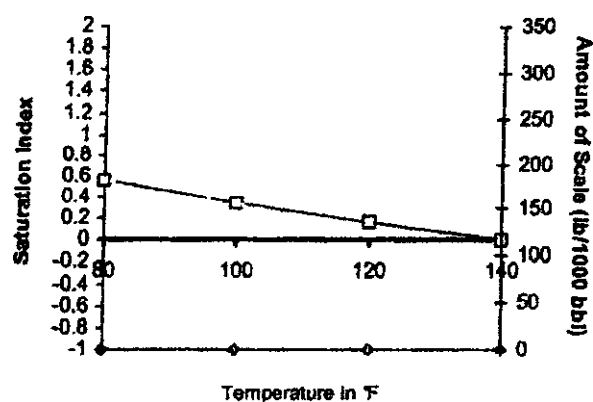
Analysis of Sample 534665 @ 75 °F for

03/18/11

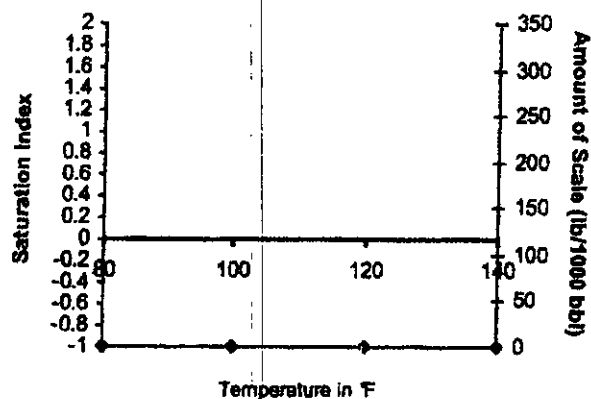
Calcite - CaCO_3



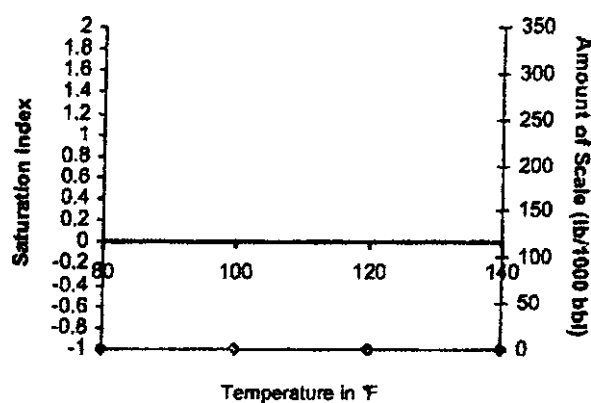
Barite - BaSO_4



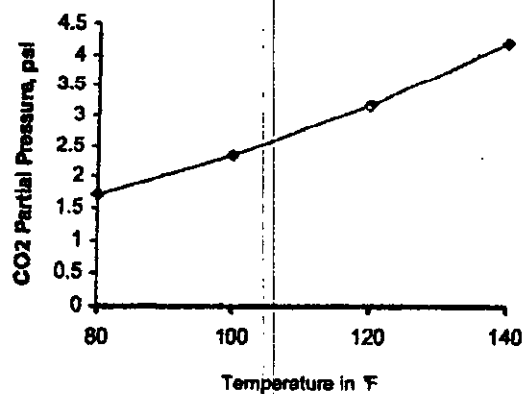
Gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$



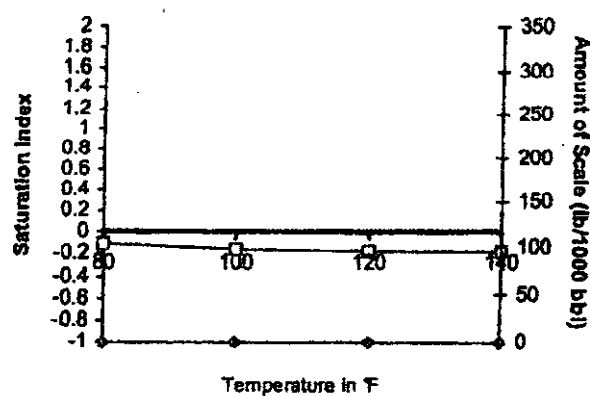
Anhydrite - CaSO_4



Carbon Dioxide Partial Pressure



Celestite - SrSO_4



Wolfcamp



Water Analysis

Date: 23-Aug-11

2708 West County Road, Hobbs NM 88240

Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Brushy Draw 1#1

Company	Well Name	County	State
	BD	Lea	New Mexico

Sample Source

Swab Sample

Sample #

1

Formation

Depth

Specific Gravity	1.170	SG @ 60 °F	1.172
pH	6.30	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	77,982	in PPM	66,520
Calcium	in Mg/L	4,000	in PPM	3,413
Magnesium	in Mg/L	1,200	in PPM	1,024
Soluble Iron (FE2)	in Mg/L	10.0	in PPM	9

Anions

Chlorides	in Mg/L	130,000	in PPM	110,922
Sulfates	in Mg/L	250	in PPM	213
Bicarbonates	in Mg/L	127	in PPM	108

Total Hardness (as CaCO3)	in Mg/L	15,000	in PPM	12,799
Total Dissolved Solids (Calc)	in Mg/L	213,549	in PPM	182,209
Equivalent NaCl Concentration	in Mg/L	182,868	in PPM	158,031

Scaling Tendencies

*Calcium Carbonate Index 507,520

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index 1,000,000

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks RW=.048@70F

Report # 3188



PRODUCTION DEPARTMENT

MILLER CHEMICALS, INC.

Post Office Box 298
Artesia, N.M. 88211-0298
(505) 746-1919 Artesia Office
(505) 392-2893 Hobbs Office
(505) 746-1918 Fax
mci@plateautel.net

Delaware Brushy Canyon
WATER ANALYSIS REPORT

Company :
Address :
Lease : LOVING "AIB"
Well : #15
Sample Pt. : WELLHEAD

Date : MARCH 17, 2008
Date Sampled : MARCH 17, 2008
Analysis No. :

ANALYSIS		mg/L	* meq/L
1. pH	6.0		
2. H2S	0		
3. Specific Gravity	1.070		
4. Total Dissolved Solids		304684.9	
5. Suspended Solids		NR	
6. Dissolved Oxygen		NR	
7. Dissolved CO2		NR	
8. Oil In Water		NR	
9. Phenolphthalein Alkalinity (CaCO3)			
10. Methyl Orange Alkalinity (CaCO3)			
11. Bicarbonate	HCO3	927.0	HCO3 15.2
12. Chloride	Cl	187440.0	Cl 5287.4
13. Sulfate	SO4	500.0	SO4 10.4
14. Calcium	Ca	37200.0	Ca 1856.3
15. Magnesium	Mg	996.3	Mg 82.0
16. Sodium (calculated)	Na	77586.6	Na 3374.8
17. Iron	Fe	35.0	
18. Barium	Ba	NR	
19. Strontium	Sr	NR	
20. Total Hardness (CaCO3)		97000.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt X meq/L	= mg/L
1856 *Ca <----- *HCO3 15	Ca(HCO3)2	81.0	15.2 1231
----- /-----> -----	CaSO4	68.1	10.4 709
82 *Mg <-----> *SO4 10	CaCl2	55.5	1830.7 101584
----- <-----/ -----	Mg(HCO3)2	73.2	
3375 *Na <-----> *Cl 5287	MgSO4	60.2	
+-----+	MgCl2	47.6	82.0 3902
Saturation Values Dist. Water 20 C	NaHCO3	84.0	
CaCO3 13 mg/L	Na2SO4	71.0	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	3374.8 197223
BaSO4 2.4 mg/L			

REMARKS:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

UCD-HOBBS Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**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.5. Lease Serial No.
NMNM0540701A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side.

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other: INJECTION8. Well Name and No.
TOP GUN FEDERAL SWD 12. Name of Operator
MEWBOURNE OIL COMPANYContact: JACKIE LATHAN
E-Mail: jlathan@mewbourne.com9. API Well No.
30-015-90475 310753a. Address
PO BOX 5270
HOBBS, NM 882413b. Phone No. (include area code)
Ph: 575-393-590510. Field and Pool, or Exploratory
SALT WATER DISPOSAL
SWD, Duonlan

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 18 T23S R27E Mer NMP NENE 660FNL 660FEL

11. County or Parish, and State

EDDY COUNTY, NM

SWD-1561

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

TYPE OF SUBMISSION

TYPE OF ACTION

☐ Notice of Intent☒ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations 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 recompleat 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 requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

SICP 200#. MIRU acid pump. Opened csg & well began flowing @ 2 BPM. POOH to 12914'. Flowed well back & recovered 500 BW. Samples show no presence of hydrocarbons (approved by Paul Swartz w/BLM, no swab test needed). Pumped 17500 gals 15% HCl acid down csg, AIR 10 BPM @ 500#. Flushed w/340 BPW.

See attached Geological summary & Mud log.

NM OIL CONSERVATION
ARTESIA DISTRICT

Accepted for record - NMOC

Bond on file: NM1693 nationwide & NMB000919

JUN 10 2016

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RECEIVED

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

Electronic Submission #341116 verified by the BLM Well Information System
For MEWBOURNE OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by PAUL SWARTZ on 06/07/2016 ()

Name (Printed/Typed) ERIN MCMATH

Title ENGINEER

Signature (Electronic Submission)

Date 06/06/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Paul R Swartz

Title

Eng Tech

Date 06/07/16

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 operations thereon.

Office

Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

B
6/13/16

6/3/2016

Geological Summary: Top Gun SWD #1

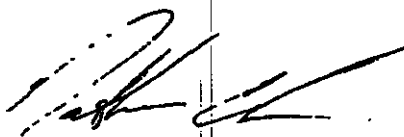
The Devonian formation in the Top Gun Federal SWD #1 consists of mainly limestone, dolomite, and a trace of shale. While drilling the Top Gun SWD #1, we encountered no hydrocarbon shows of any kind throughout the entire Devonian formation.

The Devonian formation does not produce from any well in a fifteen mile radius around the Top Gun SWD #1. There are approximately sixteen wells that have penetrated the Devonian formation in this area, and fifteen of those wells ran a drill stem test in the Devonian. All of these DSTs recovered significant amounts of water with no shows of oil or gas. The Mobil-Fed 12 #1 (API 3001520151), which is located 1.6 miles to the northwest of the Top Gun SWD #1, recovered 3250' of Sulphur water from its Devonian DST. This well is structurally 270' updip from the Top Gun SWD #1. With the Top Gun SWD #1 being downdip from the Mobil-Fed 12 #1, we would expect any type of a test to be non-productive.

When the Devonian formation does produce, it tends to be productive because of a closed deep structural feature. By looking at a structure map on the top of the Devonian, you can see there is no such structural feature present around the Top Gun that would trap hydrocarbons in the Devonian.

In conclusion, the Devonian formation around the Top Gun SWD #1 is not productive. There have been numerous DSTs in this area that have all recovered significant Sulphur water and no hydrocarbons. These wet DSTs are due to the fact that there is no structural feature in the Devonian formation that would create a hydrocarbon trap.

Sincerely,



Nathan Cless

Geologist

Mewbourne Oil Company

Top Gun Federal SWD #1

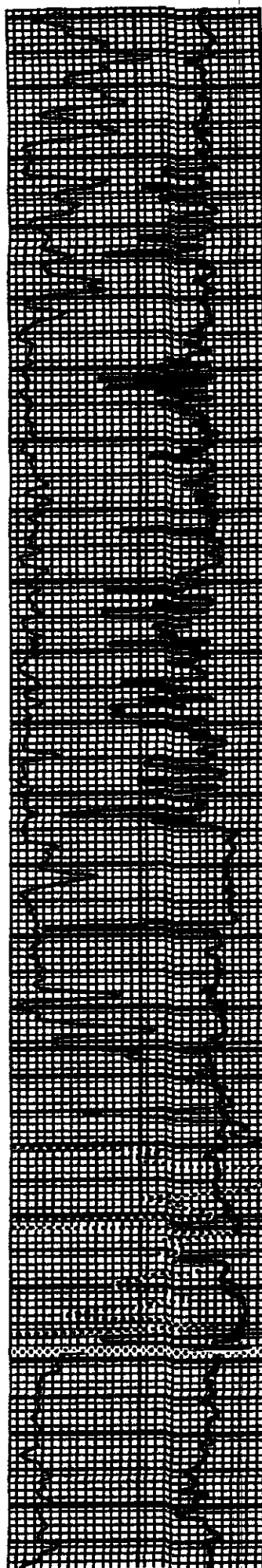
300153107500

MEWBOURNE OIL CO
TOP GUN FEDERAL SWD 1
680 FNL 660 FEL
TWP: 23 S - Range: 27 E - Sec. 18
Ground=3230.00
Reference=KB
Datum=3257.00

Correlation		Depth	Porosity		Lithology
ROP		MD	TNPH		0.000 100
100-	ft/hr	0	30	% -10	
GR			>10%		Dolomite
0	GAPI	150			Limestone
GR					Sandstone
150	GAPI	300			Shale
					Carbon Shale
					Chert
					Siltstone
		12420			
		12440			
MSSPL		12452			
		-9195			
		12480			
		12500			

Limestone - Off white, white, light gray, light brown, pinkish-white to cream, very fine to micro-crystallinity, some waxy to moderate chalky, some dark chert.

Shale - Medium gray, dark gray, black, slightly calcareous to non-calcareous, moderately silty, traces of carbonaceous shale.



12520

12540

12560

12580

12600

12620

12640

12660

12680

12700

12720

12740

12760

12780

12800

WDFO
12812
-9555

12840

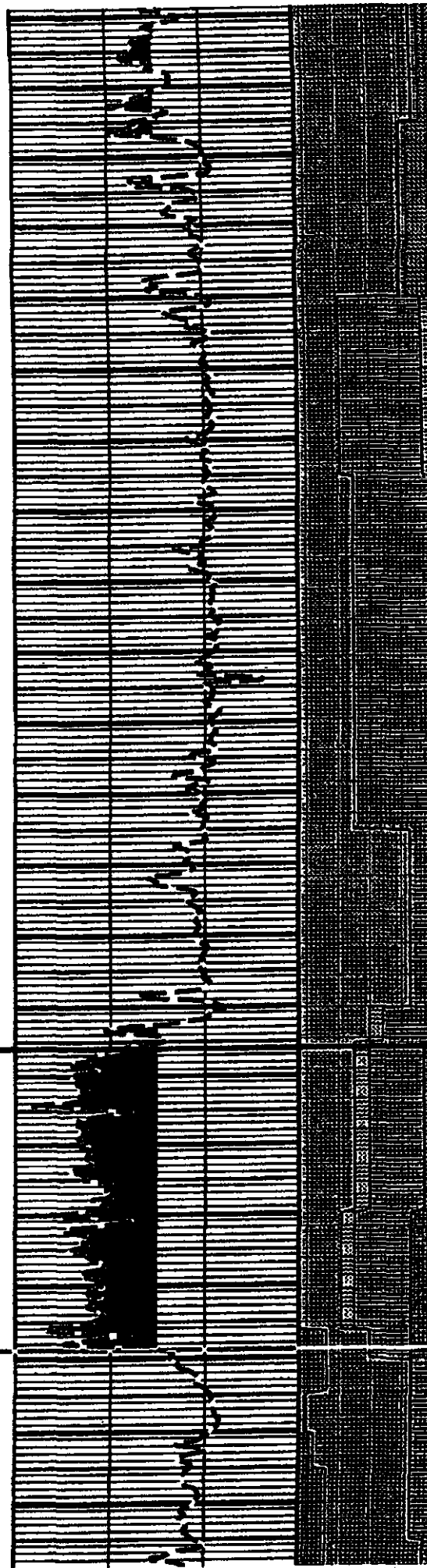
12860

12880

DVNN
12898
-9641

12920

12940



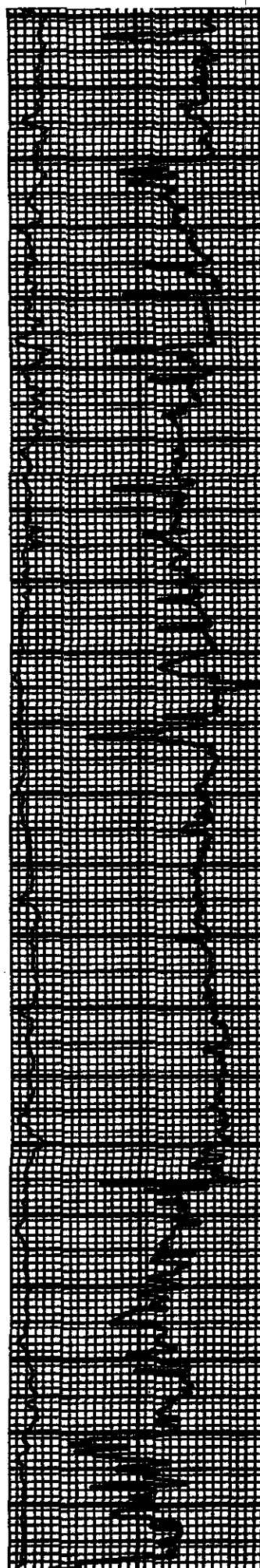
shale with few scattered traces of sandstone/limey-sand.

Shale - Dark brown to dark gray, medium gray, black, firm to moderately hard, some very hard, earthy to waxy, moderately to very carbonaceous, non-calcareous

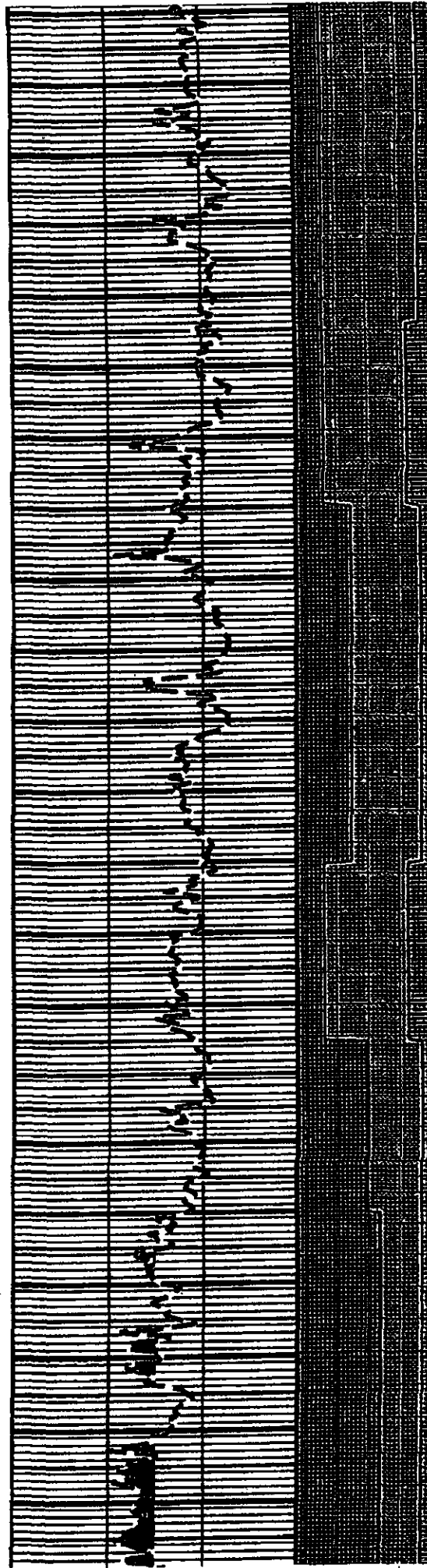
Limestone, slight sandy, moderately silty

Sandstone/limey-sand with some scattered traces of silty-shale

Dolomite - Clear, off white to milky white, opaque to translucent, light gray to very soft browns, micro to very fine crystallinity, sucrosic.



12980
12980
13000
13020
13040
13060
13080
13100
13120
13140
13160
13180
13200
13220
13240
13260
13280
13300
13320
13340
13360
13380



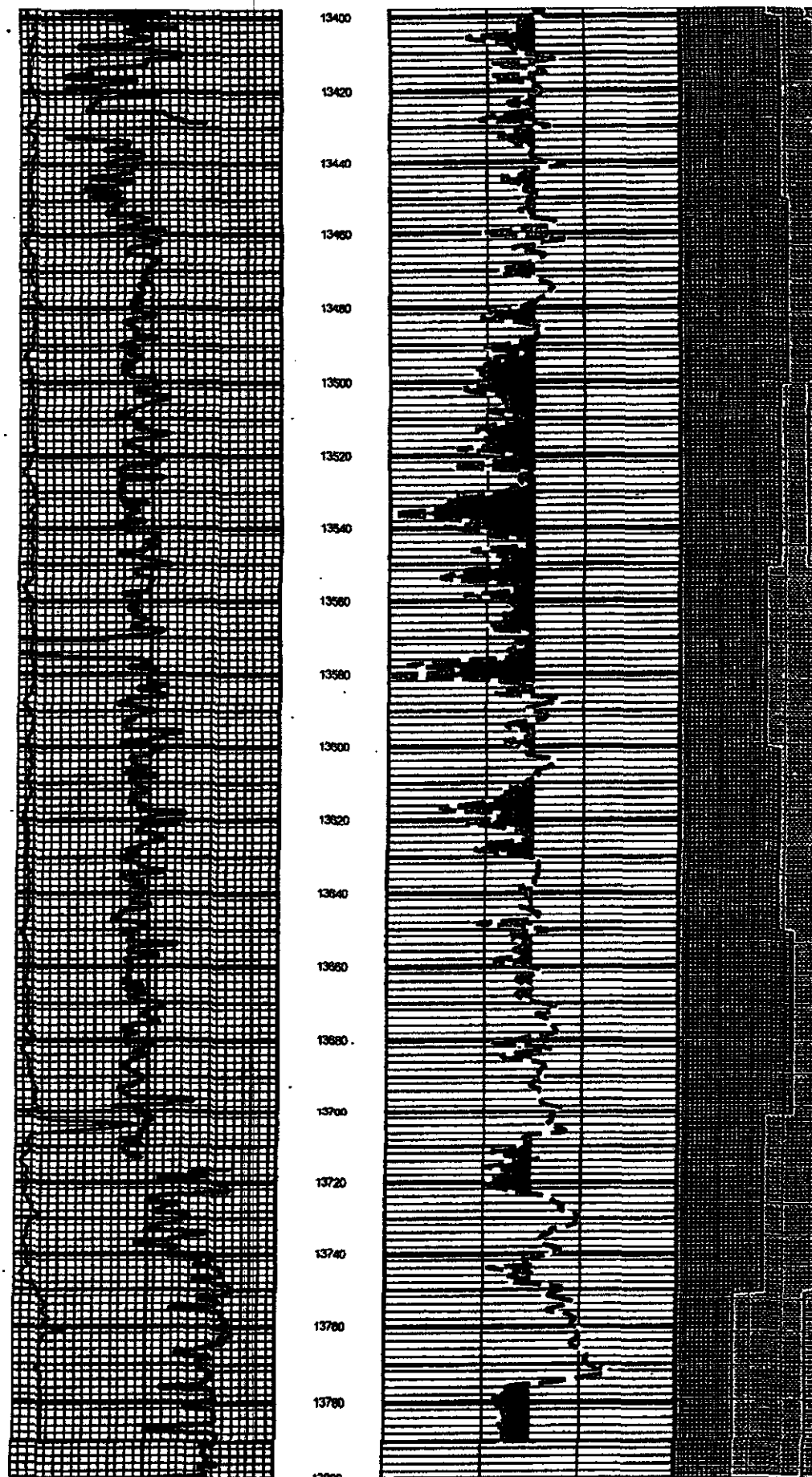
Limestone - White, off white, light gray to medium gray, cream to slightly brown-white, very fine to micro-crystallinity, moderately waxy to chalky, moderate to very dolomitic.

trace-10% shale/carbonaceous shale.

Limestone - Very light to light brown, tan, light to medium grey, very fine to fine crystalline, some argillaceous, with some shales, slight waxy to moderately chalky, very dolomitic

Dolomite - Off white, white, light/soft brown, moderately opaque, micro-fine crystallinity, sucrosic.

Dolomite - Off white, white, light/soft brown, moderately opaque, micro-fine crystallinity, sucrosic



Limestone – Very light to light brown, tan, light to medium grey, very fine to fine crystalline, some argillaceous, with some shales, slight waxy to moderately chalky, very dolomitic

Dolomite – Off white, white, light/soft brown, moderately opaque, micro-fine crystallinity, sucrosic.

TD=13800.00

Order of Authorized Officer

**Top Gun - 01, API 3001531075
T23S-R27E, Sec 18, 660FNL & 660FEL
June 07, 2016**

1. Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 12800 to top of cement taken with Opsig casing pressure. The CBL may be attached to a pswartz@blm.gov email.
2. Approval is granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. Disposal fluid from another operator, lease, communitization, or unit agreement require BLM surface right-of-way agreement approvals and if applicable, authorization from the surface owner.
3. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement approvals.
4. If the well is to receive off-lease water or commercial disposal, the operator shall provide proof of surface right-of-way approval prior to injection.

Well with a Packer - Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). Verify all annular casing vents are plumbed to surface and those valves open to the surface during this pressure test. An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) Make arrangements 24 hours before the test for BLM to witness. In Eddy County 575-361-2822. In Lea County phone 575-393-3612. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number
- 5) The setting depths and descriptions of tubing internal protection, tubing on/off equipment just above the packer, and profile nipple are to be included in the subsequent sundry.
- 6) Compliance with a NMOCD Administrative Order is required.
 - a) Approved injection pressure compliance is required.

- b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
- c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 7) A request for increased wellhead pressures is to be accompanied by a step rate test. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
- 8) Stimulation injection pressures are not to exceed BLM's permitted wellhead pressure or the well's frac pressure established by a BLM approved step rate test for Class II water injection wells.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 11) Maintain the annulus full of packer fluid at atmospheric pressure. Installation of equipment that will display continuous open to the air packer fluid level above the casing vent is required for this disposal well.
- 12) Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902) to arrange for approval of the annular monitoring system.
- 13) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 14) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 15) Gain of annular fluid pressure requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 16) Class II (production water disposal) wells will not be permitted Stimulation Pressures or "Injectivity Tests" that exceed the NMOCD/BLM generic frac pressure which is: .2 x ft depth to the topmost injection or 50psig below the frac point as clearly indicated by a BLM accepted "Step Rate Test".
- 17) A request for increased wellhead pressures is to be accompanied by a "Step Rate Test:" that is to clearly indicate any requested wellhead pressure is +50psig below frac pressure for the wellbore's disposal formation. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
- 18) The subsequent report is to include all stimulation injection pressures. Report maximum/minimum injection rate (BPM) and max/min stimulation injection pressures (psig).

19) Submit a (BLM Form 3160-5 subsequent report (daily reports) via BLM's Well Information System; <https://www.blm.gov/wispermits/wis/SP> describing (dated daily) all wellbore maintenance and workover activity including the Mechanical Integrity Test chart document.



- Home
- Production
- Software
- Projects
- Software
- Other Links

North American

Hunt Oil
Company and
TSSP
announce
agreement to
jointly
develop
Midland Basin
acreage.

Penn West
Petroleum
announces
sale of
Saskatchewan
assets for
\$975 million

Natural gas
flaring in
North Dakota
has declined
sharply since
2014

The End of
the Long Cold
Winter

Source: Oil
Voice

NYMEX LS Crude

0

Navajo WTXI

0

Henry Hub

0

Updated : 6/10/2016

State Land Office Data Access

PRRC NM-TECH NM-BGMR

[-] NM WAIDS

[-] Data

- Produced Water
- Ground Water
- Conversion Tools

[-] Scale

- Scale details
- Stiff
- Oddo
- Probable Mineral Composition
- mix

[-] Corrosion

[-] Theory

- Uniform
- Galvanic
- Crevice
- Hydrogen Damage
- EIC
- Erosion

[-] Equipment

- Artificial
- Casing and Tubing
- Surface
- Enhanced

[-] Gases

General Information About: Sample 8691

Section/ Township/Range	19 / 23S / 27E	Lat/Long	32.29/-104.2291
Elevation	3192	Depth	180
Date Collected	3/26/1992 12:00:00 AM	Chlorides	73
Collector / Point of Collection	SEO/DP	Use	Domestic
Formation	OAL	TDS	0



- ~ Home
- ~ Production Data ▶
- ~ Well Data ▶
- ~ NM Pricsheet
- ~ Water Data ▶
- ~ Projects ▶
- ~ Software ▶
- ~ Archive ▶
- ~ Other Links ▶
- ~ Help ▶

North American Oil and Gas News

Oceaneering announces second quarter 2016 results

Torchlight Energy reaches total depth at Flying B Ranch Well #1

Contango Oil and Gas to purchase Southern Delaware Basin acreage for up to \$25 million

Husky Energy announces second quarter 2016 results

Source: Oil Voice

NYMEX LS Crude	44.94
Navajo WTXI	0
Henry Hub	2.836
Updated	7/21/2016

State Land Office Data Access

OCD well/log image files

PRRC NM-TECH NM-BGMR

[-] NM WAIDS

[-] Data

- Produced Water
- Ground Water
- Conversion Tools

[-] Scale

- Scale details
- Stiff
- Odds
- Probable Mineral Composition mix

[-] Corrosion

[-] Theory

- Uniform
- Galvanic
- Crevice
- Hydrogen Damage
- EIC
- Erosion

[-] Equipment

- Artificial
- Casing and Tubing
- Surface

General Information About: Sample 10461			
Section/ Township/Range	21 / 23S / 27E	Lat/Long	32.29/-104.1948
Elevation	3170	Depth	190
Date Collected	5/14/1981 12:00:00 AM	Chlorides	48
Collector / Point of Collection	SEO/DP	Use	
Formation	OAL	TDS	0



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Range	X	Y	Depth Well	Depth Water	Water Column
C 01618	C	ED		4	4	4	07	23S	27E	573252	3575384*	250		
C 01632	C	ED		3	2	4	07	23S	27E	573050	3575789*	162	100	62
C 01632 CLW197648	O	ED		3	2	4	07	23S	27E	573050	3575789*	162	100	62
C 01632 POD2	C	ED		3	2	4	07	23S	27E	573050	3575789*	173	100	73
C 01847	C	ED		1	3	07	23S	27E		571956	3575878*	300		
C 01847 POD2	C	ED		1	3	07	23S	27E		571956	3575878*	243		
C 02300		ED			3	07	23S	27E		572160	3575676*	402		
C 02326	C	ED			2	07	23S	27E		572948	3576491*	140	99	41
C 03005	C	ED		3	4	4	07	23S	27E	573052	3575384*	140	100	40
C 03301	C	ED		3	3	4	07	23S	27E	572597	3575268	375		

Average Depth to Water: 99 feet

Minimum Depth: 99 feet

Maximum Depth: 100 feet

Record Count: 10

Basin/County Search:

Basin: Carlsbad

PLSS Search:

Section(s): 7

Township: 23S

Range: 27E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW#### in the
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& no longer serves a
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(R=POD has
been replaced,
O=orphaned,
C=the file is

closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Twp	Range	X	Y	Depth Well	Depth Water	Water Column
C 01195	C	ED		2	19	23S	27E			572958	3573260*	180	100	80
C 01781	C	ED		2	4	19	23S	27E		573161	3572659*			
C 01781 POD2	C	ED		2	4	19	23S	27E		573161	3572659*	210		
C 01781 POD3	C	ED		2	4	19	23S	27E		573161	3572659*	210		

Average Depth to Water: 100 feet

Minimum Depth: 100 feet

Maximum Depth: 100 feet

Record Count: 4

Basin/County Search:

Basin: Carlsbad

PLSS Search:

Section(s): 19

Township: 23S

Range: 27E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

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closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Sub-Code	basin	County	Q Q Q	Sec	Tws	Ring	X	Y	Depth Well	Depth Water	Water Column
C 01261			ED		21	23S	27E	575780	3572889*	250		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

Basin/County Search:

Basin: Carlsbad

PLSS Search:

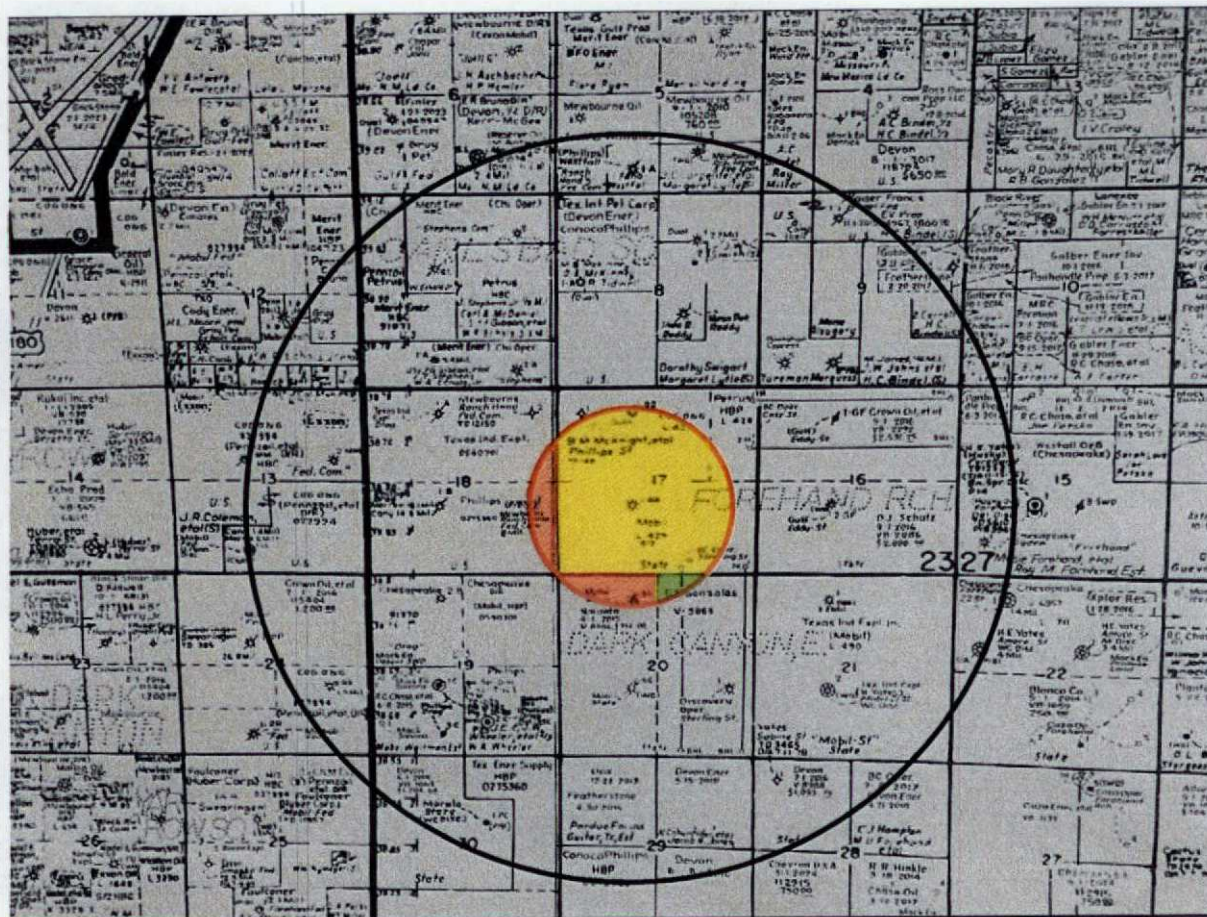
Section(s): 21

Township: 23S

Range: 27E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



Mobil Producing Texas & NM, Inc.



Mewbourne Oil Co.



BC Operating, Inc.

Delaware Energy, L.L.C.
3001 W. Loop 250 N., Suite C-105-318
Midland, TX 79705
Office: (214) 558-1371

October 10, 2016:

Surface Owner / Offset Operators

Re: Notification of Application for Authorization to Inject
State RR #1 SWD Well

Ladies and Gentlemen:

Delaware Energy, LLC is seeking administrative approval to utilize the State RR #1 (API - 30-015-20966) as a Salt Water Disposal well. As required by the New Mexico Oil Conservation Division Rules, we are notifying you of the following proposed salt water disposal well. This letter is a notice only. No action is required unless you have questions or objections.

<u>Well:</u>	State RR #1 SWD
<u>Proposed Disposal Zone:</u>	Devonian Formation (from 12,900' - 13,900')
<u>Location:</u>	1979' FSL & 1980' FWL, Sec. 17, UL K, T23S, R27E, Eddy Co., NM
<u>Applicants Name:</u>	Delaware Energy, L.L.C.
<u>Applicants Address:</u>	3001 W. Loop 250 N., Suite C-105-318, Midland, TX 79705

This application for water disposal well will be filed with the New Mexico Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Conservation Division address is 1220 South St. Francis Dr., Santa Fe, NM 87505. And their phone number is 505-476-3460.

Please call Preston Stein with Delaware Energy, LLC if you have any questions at 214-558-1371.

Sincerely,

Preston Stein

LEGAL NOTICE

Delaware Energy, L.L.C., 3001 W. Loop 250N, Suite C-105-318, Midland, TX 79705, has filed a form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to utilize the State RR #1 (API - 30-015-20966) as a Salt Water Disposal well.

The State RR #1 is located at 1979' FSL and 1980' FWL, Unit Letter K, Section 17, Township 23 South, Range 27 East, Eddy County, New Mexico. The well will dispose of water produced from oil and gas wells into the Devonian Formation from 12,900' to 13,900' at a maximum rate of 15,000 barrels of water per day at a maximum pressure of 2,580 psi.

Interested parties must file objections or requests for hearing with the Oil Conservations Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

Additional information can be obtained by contacting Delaware Energy, L.L.C., at (214) 558-1371.

State RR No 1

API#: 30-015-20966

Location: Sec. 17, T-23S, R-27E, UL K

Formation Tops

Top Salt	837'
Base Salt	1,123'
Lamar	2,100
Delaware Sand	2,200'
Bone Springs	5,386'
Wolfcamp	8,844'
Strawn	10,620'
Atoka	10,846'
Morrow	11,336'
Barnett	12,000'
Mississippian	12,450'
Woodford Shale	12,800'
Devonian	12,900'

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FILE	
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LAND OFFICE	
OPERATOR	

NEW MEXICO CONSERVATION COMMISSION

NOV 14 1973

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

SUNDY NOTICES AND REPORTS ON WELLS <small>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL, OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT..." (FORM C-101) FOR SUCH PROPOSALS.)</small>		5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER-		5. State Oil & Gas Lease No.
2. Name of Operator Mobil Oil Corporation		7. Unit Agreement Name
3. Address of Operator Box 633, Midland, Texas 79701		8. Farm or Lease Name State RR
4. Location of Well UNIT LETTER K 1979 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE, SECTION 17 TOWNSHIP 23-S RANGE 27-E NMPM.		9. Well No. 1
15. Elevation (Show whether DF, RT, GR, etc.) 3176 GR		10. Field and Pool, or Wildcat Undesignated
12. County Eddy		

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> OTHER <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> COMMENCE DRILLING OPNS. <input checked="" type="checkbox"/> CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1503.

STATE "RR" #1

11-8 (1) 40 drlg sd & gravel, 17½" hole, ND, Spud Mud.
Marcum Drlg. Co spudded 17½ hole @ 5:30 a.m. 11-8-73

11-9 (2) 407 WOC, 13-3/8 csg, sd, 17½ hole, 3/4 @ 405, Spud Mud.
ran 10 jts 13-3/8 48# H-40 ST&C csg. Howco cmtd @ 407 w/435x
Class C cmt 2% CaCl2, PD 8:30 p.m. 11-8-73, cmt circ, WOC 18 hrs.
Test 13-3/8 csg @ 1000# for 15 mins. Tested OK

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

SIGNED *[Signature]* TITLE Authorized Agent DATE 11-13-73

APPROVED BY *[Signature]* TITLE OIL AND GAS INSPECTOR DATE NOV 15 1973

CONDITIONS OF APPROVAL, IF ANY:

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SANTA FE	1
FILE	1 ✓
U.S.G.S.	
LAND OFFICE	
OPERATOR	1

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED

NOV 29 1973

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-85

5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. L-429
7. Unit Agreement Name
8. Farm or Lease Name State "RR"
9. Well No. 1
10. Field and Pool, or Wildcat So. Carlsbad Morrow
12. County Eddy

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

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER-
2. Name of Operator Mobil Oil Corporation
3. Address of Operator Box 633, Midland, Texas 79701
4. Location of Well UNIT LETTER K 1979 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE, SECTION 17 TOWNSHIP 23-8 RANGE 27-E NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 3176 GR

18. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

STATE "RR" #1
11-21 (14) 5600 MD, WOC 9-5/8 csg, Howco cmtd 9-5/8 csg on bottom
@ 5600 w/ 700x TILW w/ 1/4# Flocele + 7 1/2# salt/x + 2000x TILW
w/ 7 1/2# salt/x + 200x Class C Heat cmt, PD @ 9:00 am 11-20-73
cmt did not circ, lost 100% circ on last 90 bbls of displ,
Worth Well ran Temp Survey, T/cmt @ 1150, ran 1" pipe on
outside of 9-5/8 csg, Howco cmtd thru 1" pipe w/ 200x Class C
cmt w/ 2% CaCl cmt, circ to surf
11-23 Finish nipping up csg & BOP's, test csg 2500#, test BOP's 5000# OK

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

SIGNED <i>[Signature]</i>	TITLE Authorized Agent	DATE 11-28-73
APPROVED BY <i>[Signature]</i>	TITLE OIL AND GAS INSPECTOR	DATE NOV 29 1973
CONDITIONS OF APPROVAL, IF ANY:		

STATE "RR" #1

12/12 (35) 10,750 drlg lm & sh, 8-3/4" hole, 1-3/4" 9.8# Br. Wtr.
10,750, down 3 hrs repairing FRL logging tool.

STATE "RR" #1

12/13 (36) 10,759 drlg lm & sh, 8-3/4" hole, NND. 9.8# Br. Wtr.
Down 11 hrs repairing FRL logging tool, ran bit to bottom, drilled
9' logging tool, not working, POH, prep to LD logging tool.

STATE "RR" #1

12/14 (37) 11,050 drlg lm & sh, 8-3/4" hole, NND. 9.8# Br. Wtr.

STATE "RR" #1

12/15 (38) 11,307 drlg lm & sh, 8-3/4 hole, 3/4 @ 11,240. 9.8# Br Wtr.

12/16 (39) 11,611 drlg lm & sh, 8-3/4 hole, NND. 9.8-35-9.8.

12/17 (40) 11,738 drlg lm & sh, 8-3/4 hole, 3/4 @ 11,665. 9.8-34-11.2.

STATE "RR" #1

12/18 (41) 11,911 drlg sd & sh, 8-3/4 hole, NND. 10.0-36-7.0.

STATE "RR" #1

12/19 (42) 12,003 drlg lm & sh, 8-3/4 hole, NND. 10.0-35-7.0.

STATE "RR" #1

12/20 (43) 12,116 drlg sh & sd 8-3/4 hole 3/4 @ 12,110 10.0-36-8.0

STATE "RR" #1

12/21 (44) 12,200 TD sh & sd, 8-3/4 hole, 1" @ 12,195, 10.0-36-7.0.
finish hole @ 2:30 pm 12/20/73, circ 3 hrs, POH, Schl
running OH logs.

STATE "RR" #1

12/22 (45) 12,200' T.D. WOC 7" liner, Sch. ran comp Newton & caliper logs
12195, back to surface, Dual lat. logs 12195, Back to 5600',
ran 160 jts 7"-26# S-95 lt&c csg with bot type C hanger, Howco
cemented liner on bottom with top of liner @ 5380 with 1200
sxs trinty lite wate with .05% Halad g, followed with 250
sxs Class C cement, plug down @ 3:30 a. m. 12/22/73, pull
& laid drill pipe down

12/23 12,200' TD. WOC on 7" liner ran 8-3/4" Bit, drill cement
4300 to top of liner 5380, test liner top to 2,000# 30 min.,
ok, pull Bit & finish laying drill pipe down. release drlg
rig 12 midnite 12/22/73

12/26 12,200' WOC on 7" liner

STATE "RR" #1, 12,200 TD.

12/27 Moving out rotary tools

STATE "RR" #1, 12,200 TD.

12/28 Tearing down & moving out tools

STATE "RR" #1, 12,200 TD.

12/29/73 Hold for Completion

12/31/73 Hold for Completion

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Danny Fletcher, being first duly
sworn, on oath says:

That he is the Publisher 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:

September 9 2016

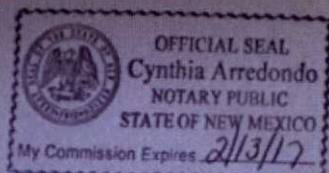
That the cost of publication is **\$66.15**
and that payment thereof has been
made and will be assessed as court
costs.

Subscribed and sworn to before me
this 13 day of September
2016

Cynthia Arredondo

My commission Expires
2/13/17

Notary Public



September 9, 2016

Delaware Energy, L.L.C., 3001 W. Loop 250N, Suite C-105-318, Midland, TX 79705, has filed a form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to utilize the State RR #1 (API - 30-015-20966) as a Salt Water Disposal well.

The State RR #1 is located at 1979' FSL and 1980' FWL, Unit Letter K, Section 17, Township 23 South, Range 27 East, Eddy County, New Mexico. The well will dispose of water produced from oil and gas wells into the Mississippian Formation from 12,200' to 12,800' at a maximum rate of 15,000 barrels of water per day at a maximum pressure of 2,440 psi.

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.

Additional information can be obtained by contacting Delaware Energy, L.L.C., at (214) 558-1371.

789.5 3070 0000 3274 .2933

צוֹרֵם מִן הַיָּם

0000 3308 0810

Table 1

0870 3306

Table 1

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U.S. Postal Service™
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OFFICIAL USE

Domestic Mail Form 3825, 2016

Basic Rate and First-class mail, including First-class Mail®	12.70
Priority Mail®	40.00
Registered Mail®	3.00
Certified Mail Restricted Delivery®	10.00
Adult Signature Required®	3.00
Adult Signature Restricted Delivery®	30.00

Postage **92.41**

Total Postage and Fees **92.41**

10/28/2016

12-0 South St Francis Miss
 82-02 NM 87505

English

Customer Service

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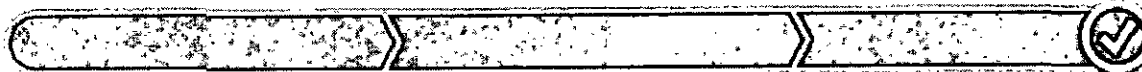
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Available Actions

Text Updates

Email Updates

DATE & TIME	STATUS OF ITEM	LOCATION
November 9, 2016 , 6:15 am	Delivered, PO Box	HOUSTON, TX 77201
Your item has been delivered and is available at a PO Box at 6:15 am on November 9, 2016 in HOUSTON, TX 77201.		

November 8, 2016 , 1:54 am

In Transit to Destination

DATE & TIME	STATUS OF ITEM	LOCATION
November 7, 2016 , 1:54 am	Departed USPS Destination Facility	NORTH HOUSTON, TX 77315
November 6, 2016 , 12:57 am	Arrived at USPS Destination Facility	NORTH HOUSTON, TX 77315
November 5, 2016 , 9:39 pm	In Transit to Destination	
November 5, 2016 , 12:12 am	Departed USPS Facility	MIDLAND, TX 79711
November 4, 2016 , 9:39 pm	Arrived at USPS Origin Facility	MIDLAND, TX 79711
November 4, 2016 , 1:28 pm	Acceptance	MIDLAND, TX 79707

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New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	basin	County	Q 64	Q 16	Q 4	Sec	Twa	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00195		CUB	ED	4	1	4	09	23S	27E	576069	3575827*	128	83	45
C 00420	C	C	ED	4	2	09	23S	27E	576370	3576337*	2151			
C 01071		C	ED		1	08	23S	27E	573751	3576499*	279	95	184	
C 01195		C	ED		2	19	23S	27E	572958	3573260*	180	100	80	
C 01261			ED			21	23S	27E	575780	3572889*	250			
C 01618		C	ED	4	4	4	07	23S	27E	573252	3575384*	250		
C 01632		C	ED	3	2	4	07	23S	27E	573050	3575789*	162	100	62
C 01632 CLW197648	O		ED	3	2	4	07	23S	27E	573050	3575789*	162	100	62
C 01632 POD2		C	ED	3	2	4	07	23S	27E	573050	3575789*	173	100	73
C 01781		C	ED	2	4	19	23S	27E	573161	3572659*				
C 01781 POD2		C	ED	2	4	19	23S	27E	573161	3572659*	210			
C 01781 POD3		C	ED	2	4	19	23S	27E	573161	3572659*	210			
C 01847		C	ED	1	3	07	23S	27E	571956	3575878*	300			
C 01847 POD2		C	ED	1	3	07	23S	27E	571956	3575878*	243			
C 02191		C	ED		1	08	23S	27E	573751	3576499*	252	75	177	
C 02300			ED		3	07	23S	27E	572160	3575676*	402			
C 02326		C	ED		2	07	23S	27E	572948	3576491*	140	99	41	
C 02510		C	ED	1	2	1	08	23S	27E	573848	3576806*	350	350	0
C 03005		C	ED	3	4	4	07	23S	27E	573052	3575384*	140	100	40
C 03301		C	ED	3	3	4	07	23S	27E	572597	3575268	375		
C 03892 POD1		C	ED	1	2	1	08	23S	27E	573846	3576764	148	54	94

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Average Depth to Water: 114 feet

Minimum Depth: 54 feet

Maximum Depth: 350 feet

Record Count: 21

PLSS Search:

Section(s): 7-9, 16-18, 19-
21 Township: 23S Range: 27E



C-108 Review Checklist: Received: 10/31/2014 Add. Request: 10/31/2014 Reply Date: 11/4/2016 Suspended: _____ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No. 1 Well Name(s): State PR SWD

API: 30-0 15-20966 Spud Date: 01-18-1973 New or Old: 2 (UIC Class II Primacy 03/07/1982)

Footages 2.6 miles NW/NE 1/4 Lot _____ or Unit _____ Sec 17 Tsp 23S Rge 27E County Eddy

General Location: 1975 KSL Pool: _____ Pool No.: _____

BLM 100K Map: CANL SHA 1 Operator: Delaware Energy, LLC OGRID: 371195 Contact: Preston Stein, Vice President

COMPLIANCE RULE 5.9: Total Wells: 0 Inactive: 0 Fincl Assur: OK Compl. Order? MAIS 5.9 OK? Y Date: 11-22-2016

WELL FILE REVIEWED ☐ Current Status: PFA

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: N/A

Planned Rehab Work to Well: run in hole from 12400-12000

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		<u>17 1/2 / 13 7/8</u>	<u>407</u>	<u>435</u>	<u>Surface / Visual</u>
Planned ___ or Existing ___ Interm/Prod		<u>12 1/4 / 9 5/8</u>	<u>5600</u>	<u>220</u>	<u>Surface / Visual</u>
Planned ___ or Existing ___ Interm/Prod		<u>8 3/4 / 7</u>	<u>12200</u>	<u>1450</u>	<u>400 / CALL</u>
Planned ___ or Existing ___ Prod/Liner		<u>6 7/8 / 5</u>	<u>12900</u>		<u>10415 / CALL</u>
Planned ___ or Existing ___ Liner					
Planned ___ or Existing ___ OH / PERF		<u>12400-13900</u>			

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		<u>W2</u>	<u>12900</u>
Confining Unit: Litho. Struc. Por.		<u>DV</u>	<u>12500</u>
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD <u>12200</u>	PBTD _____
NEW TD <u>13900</u>	NEW PBTD _____
NEW Open Hole <input checked="" type="radio"/> or NEW Perfs <input type="radio"/>	
Tubing Size <u>3 1/2</u> in. Inter Coated? <u>Y</u>	
Proposed Packer Depth <u>12500</u> ft	
Min. Packer Depth _____ (100-ft limit)	<u>25 ft</u>
Proposed Max. Surface Press. <u>2500</u> psi	
Admin. Inj. Press. <u>250</u> (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information

POTASH: R-111-P _____ Noticed? _____ BLM Sec Ord ☐ WIPP ☐ Noticed? _____ Salt/Salado T: 10W B: 104W NW: Cliff House fm

FRESH WATER: Aquifer Quaternary Max Depth 165 HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: CANL SHA 1 CAPITAN REEF: thru adj NA No. Wells within 1-Mile Radius? _____ FW Analysis offset

Disposal Fluid: Formation Source(s) Delaware, W2 Analysis? Y On Lease ☐ Operator Only ☐ or Commercial ☒

Disposal Int: Inject Rate (Avg/Max BWPD): 84/1512 Protectable Waters? Y Source: _____ System: Closed ☒ or Open ☐

HC Potential: Producing Interval? MA Formerly Producing? _____ Method: Logs/DST/P&A/Other region 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? Y Well List? _____ Total No. Wells Penetrating Interval: 0 Horizontals? _____

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

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

NOTICE: Newspaper Date 6-4-2016 Mineral Owner NMSLW Surface Owner NMSLW N. Date 10-28-2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: BL operating mobil, member of N. Date 10-28-2016

Order Conditions: Issues: _____

Add Order Cond: See existing permits 11570-11560
release existing logs to District II prior to injection.