9/13/16 DATE IN	SUSPENSE	MAM ENGINEER	9/15/16 LOGGED IN	SWD TYPE	DMAM1625950582 APP NO

ABOVE THIS LINE FOR DIVISION USE ONLY

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

ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

SWD 1653
-Delaware Energy, LLC
371195

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

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

NEW
Iceman State
SWD #1
30-015-pending
POW

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 _____

SWD; Devonian
96101

[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		**Vice President**	**7/28/2016**
Print or Type Name	Signature	Title	Date

Preston@delawareenergyllc.com
e-mail Address

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

August 29, 2016

Surface Owner / Offset Operators

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

Ladies and Gentlemen:

Delaware Energy, LLC is seeking administrative approval to utilize the proposed Iceman State #1 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. Delaware Energy, LLC on or about July 28, 2016 submitted the same application for utilization of the proposed Iceman State #1 as a Salt Water Disposal, but the enclosed affected party surface map Areas of Review were slightly misaligned. The Areas of Review have been adjusted accordingly, although no new parties are being affected with this application.

Well:	Iceman State #1 SWD
Proposed Disposal Zone:	Devonian Formations (from 12,900'- 13,900')
Location:	660' FSL & 660' FWL, Sec. 17, UL M, T23S, R27E, Eddy Co., NM
Applicants Name:	Delaware Energy, L.L.C.
Applicants Address:	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

Delaware Energy, LLC

Application for Injection/SWD

Iceman State #1

UL M, Sec. 17, T-23-S, R-27-E, 660' FSL & 660' FWL, Eddy Co., NM

July 28, 2016

Contents:

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance __XXX___Disposal _____Storage
Application qualifies for administrative approval? ___XX____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 ___XXXX_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: _____ DATE: __7/28/2016____

E-MAIL ADDRESS: ___preston@delawareenergyll.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: _____

preston@delawareenergyllc.com

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

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

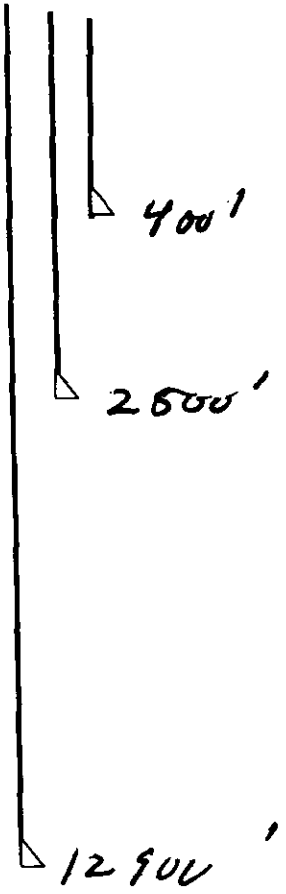
OPERATOR: Delaware Energy, LLC

WELL NAME & NUMBER: Iceman State No 1

WELL LOCATION: 660' FSL, 660' FWL | M | 17 | 23S | 27E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC *see attached wellbore sketch*



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13-3/8"

Cemented with: 550 sx. *or* _____ ft³

Top of Cement: surface Method Determined: Plan to Circulate

Intermediate Casing

Hole Size: 12.25" Casing Size: 9-5/8"

Cemented with: 900 sx. *or* _____ ft³

Top of Cement: surface Method Determined: Plan to Circulate

Production Casing

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

Cemented with: 1600 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Plan to Circulate

Total Depth: 12,900'

Injection Interval

12,900' feet to 13,900'

(OPEN HOLE)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: ___4.5"_____Lining Material: ___Internally Plastic Coated_____

Type of Packer: ___Weatherford Arrow Set 1X_____

Packer Setting Depth: ___12,850'_____

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

Additional Data

1. Is this a new well drilled for injection? ___XXXXX___Yes _____No

   If no, for what purpose was the well originally drilled? ____N/A_____

2. Name of the Injection Formation: ___Devnonian_____

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. _N/A _____

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

   ____Below: none_____

   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', Delaware 5,300' – 3500'

Additional Questions on C-108

VII.

1. **Proposed average and maximum daily rate and volume of fluids to be injected;**
   Average 5,000-10,000 BWPD, Max 15,000 BWPD

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 known incompatibility exists with water these produced water types and the Devonian. Devonian formation and is used as a disposal interval through the Delaware Basin for Wolfcamp, Bone Springs, and Delaware produced water. See attached water analysis from Bone Spring, Wolfcamp, and Delaware produced water.

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.).**
   Disposal interval tested Sulphur water by Mewbourne in offset Top Gunn #1 SWD, see attached report from Top Gunn SWD.

***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 formations 12,900'-13,900'. Devonian is an impermeable organic Shale at the very top (12,800ft, Woodford Shale) 100ft thick followed by permeable lime, dolomite, and small amount of shale 1000ft thick. 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. The Devonian was tested in the offset Top Gunn and produced Sulphur water.

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
   All cased hole and open hole Logs will be filed following drilling operations. See attached log of the Devonian interval from the offset Top Gunn SWD log.

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 Mississippian and 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 between the top of the Devonian Carbonate and the base of the ground water.

Preston Stein **Vice President** **7/27/2016**

_____ Title _____ Date _____

III. WELL DATA

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

Iceman State #1, Sec. 17-T23S-R27E, 660' FSL & 660' FWL, UL M, 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"	400'	550	17-1/2"	Surface	CIRC
9-5/8"	2500'	900	12-1/2"	Surface	CIRC
7"	12,900'	1600	8-3/4""	Surface	CIRC

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

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.

Devonian Formation

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.

Well is a planned new drill for SWD

(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.

None, well is a planned new drill

(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	[2] Pool Code	[3] Pool Name
30-015-	Undesignated	SWD; Devonian

[4] Property Code	[5] Property Name	[6] Well Number
	Iceman State	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
371195	Delaware Energy, LLC	

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	17	23 S	27 E		660'	South	660'	WEST	EDDY

[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] 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.

[16]

660'

660'

[17] 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 the division.

Signature 7/21/16 Date

Preston Stein
Printed Name

preston@delawareenergyllc.com
E-mail Address

[18] 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

Signature and Seal of Professional Surveyor:

WAITING ON SIGNED PLAT

Certificate Number

Sec 22, T25S, R28E

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
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:		Sample #:	534665
Lease/Platform:	PINOCHLE 'BPN' STATE COM	Analysis ID #:	106795
Entity (or well #):	2 H	Analysis Cost:	$90.00
Formation:			
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	03/10/11
Analysis Date:	03/18/11
Analyst:	SANDRA GOMEZ
TDS (mg/l or g/m3):	184911.1
Density (g/cm3, tonne/m3):	1.113
Anion/Cation Ratio:	1
Carbon Dioxide:	0.50 PPM
Oxygen:	
Comments:	

Analysis of Sample 534665 @ 75 °F					
Anions	mg/l	meq/l	Cations	mg/l	meq/l
Chloride:	109616.0	3091.92	Sodium:	70276.7	3056.82
Bicarbonate:	2135.0	34.99	Magnesium:	195.0	16.04
Carbonate:	0.0	0.	Calcium:	844.0	42.12
Sulfate:	747.0	15.55	Strontium:	220.0	5.02
Phosphate:			Barium:	0.8	0.01
Borate:			Iron:	6.5	0.23
Silicate:			Potassium:	869.0	22.22
			Aluminum:		
Hydrogen Sulfide:		0 PPM	Chromium:		
pH at time of sampling:		7	Copper:		
pH at time of analysis:			Lead:		
pH used in Calculation:		7	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 $CaSO_4 \cdot 2H_2O$		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	188.62	-1.20	0.00	-1.18	0.00	-0.11	0.00	0.58	0.29	1.72
100	0	1.10	206.05	-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.

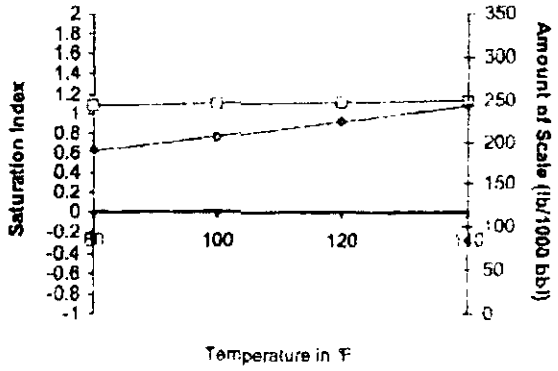
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

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

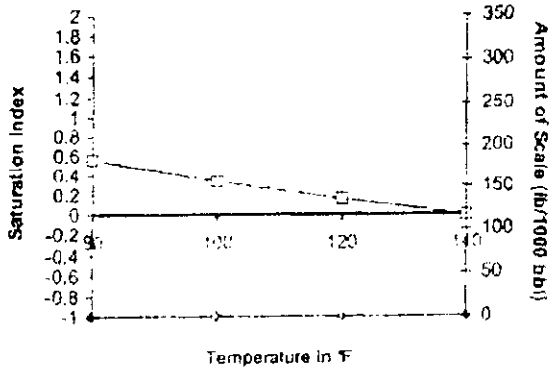
Scale Predictions from Baker Petrolite

Analysis of Sample 534665 @ 75 °F for 03/18/11

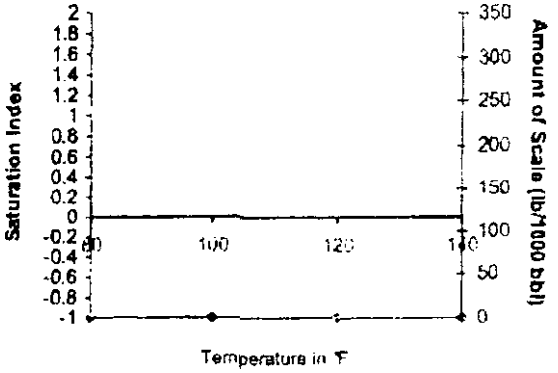
Calcite - CaCO3



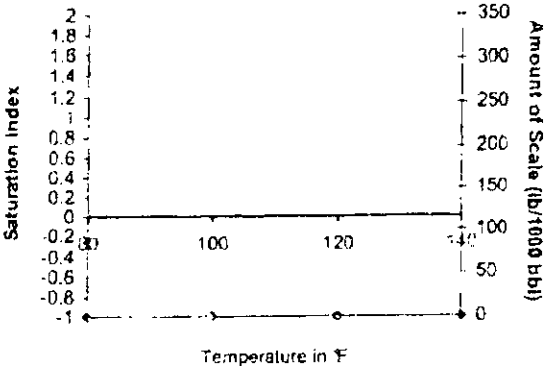
Barite - BaSO4



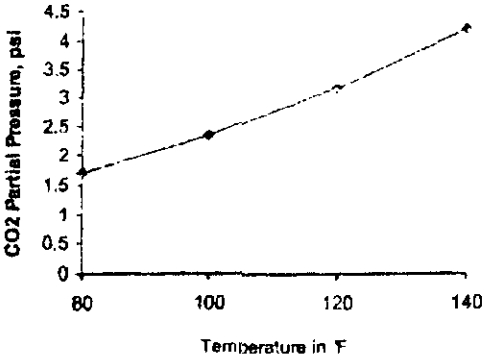
Gypsum - CaSO4*2H20



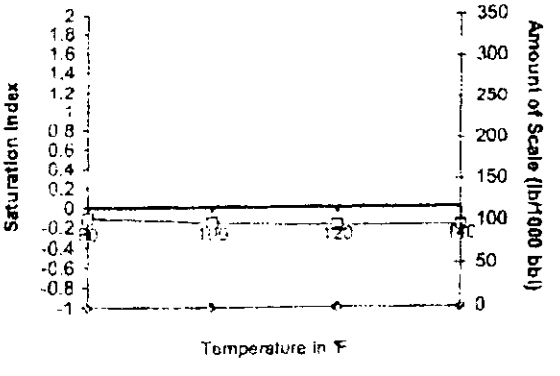
Anhydrite - CaSO4



Carbon Dioxide Partial Pressure



Celestite - SrSO4



Wolfcamp

BAKER HUGHES

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~~ Eddy	New Mexico 1-26S-29E

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	77,962	in PPM	66,520
Calcium	in Mg/L	4,000	in PPM	3,413
Magnesium	in Mg/L	1,200	in PPM	1,024
Soluable 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	156,031

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 - 10,000,00 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

Sec 16, T23S R28E

MCI CHEMICALS and CONSULTING

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

1856	*Ca <----- *HCO3	15
82	*Mg -----> *SO4	10
3375	*Na -----> *Cl	5287

Saturation Values Dist. Water 20 C
CaCO3 13 mg/L
CaSO4 * 2H2O 2090 mg/L
BaSO4 2.4 mg/L

Compound	Equiv wt	X meq/L	= mg/L
Ca(HCO3)2	81.0	15.2	1231
CaSO4	68.1	10.4	709
CaCl2	55.5	1830.7	101584
Mg(HCO3)2	73.2		
MgSO4	60.2		
MgCl2	47.6	82.0	3902
NaHCO3	84.0		
Na2SO4	71.0		
NaCl	58.4	3374.8	197223

REMARKS:

~~OCD-Hobbs~~ Artesia

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM0540701A

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other: INJECTION

8. Well Name and No
TOP GUN FEDERAL SWD 1

2. Name of Operator
MEWBOURNE OIL COMPANY
Contact: JACKIE LATHAN
E-Mail: jlathan@mewbourne.com

9. API Well No.
30-015-~~30175~~ 31075

3a. Address
PO BOX 5270
HOBBS, NM 88241

3b. Phone No. (include area code)
Ph: 575-393-5905

10. Field and Pool, or Exploratory
~~SALT WATER DISPOSAL~~
SWD; Devonian

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

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 recomplete 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 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 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.

Accepted for record - NMOCD

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 10 2016

Bond on file: NM1693 nationwide & NMB000919

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 ****

P
6/13/16

6/3/2016

Geological Summary: Top Gun SWD #1

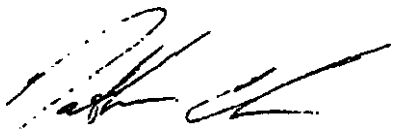
The Devonian formation in the Top Gun Federal SWD #1 consists of mainly limestone, dolomite, and a trace of shale. While drilling the Top Gun SWD #1, we encountered no hydrocarbon shows of any kind throughout the entire Devonian formation.

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

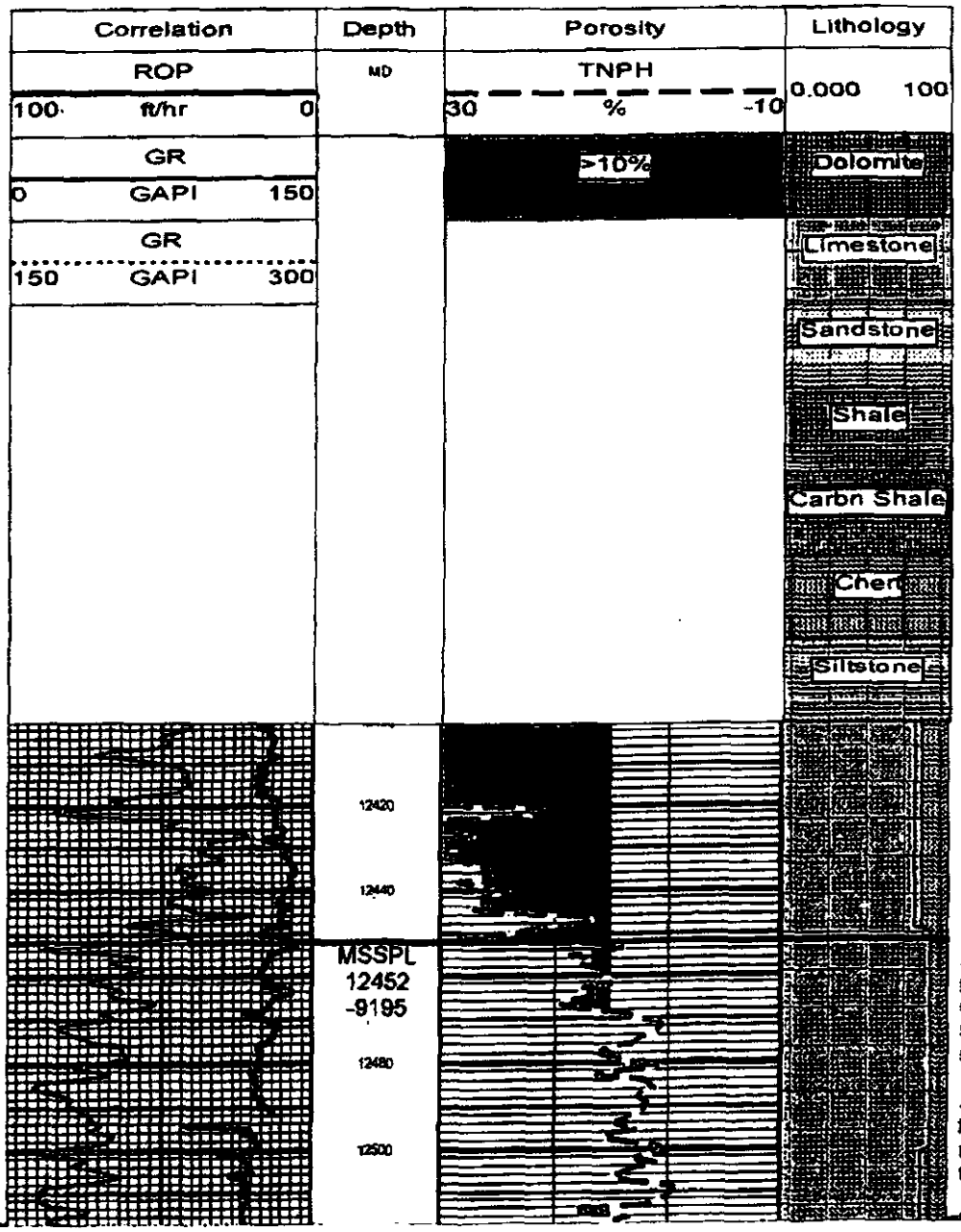
Geologist

Mewbourne Oil Company

Top Gun Federal SWD #1

300153107500

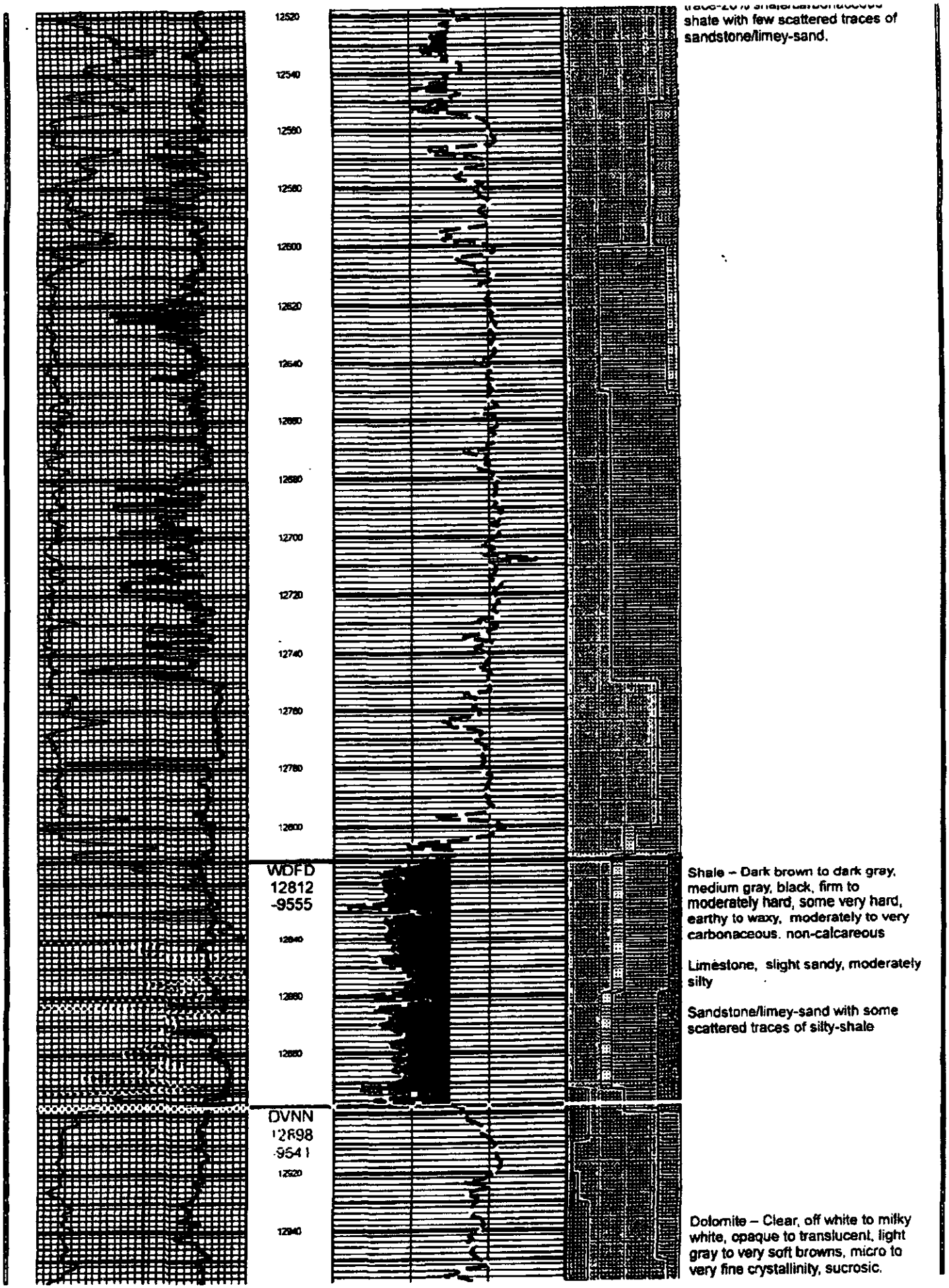
MEWBOURNE OIL CO
TOP GUN FEDERAL SWD 1
660 FNL 660 FEL
TWP: 23 S - Range: 27 E - Sec. 18
Ground=3230.00
Reference=KB
Datum=3257.00

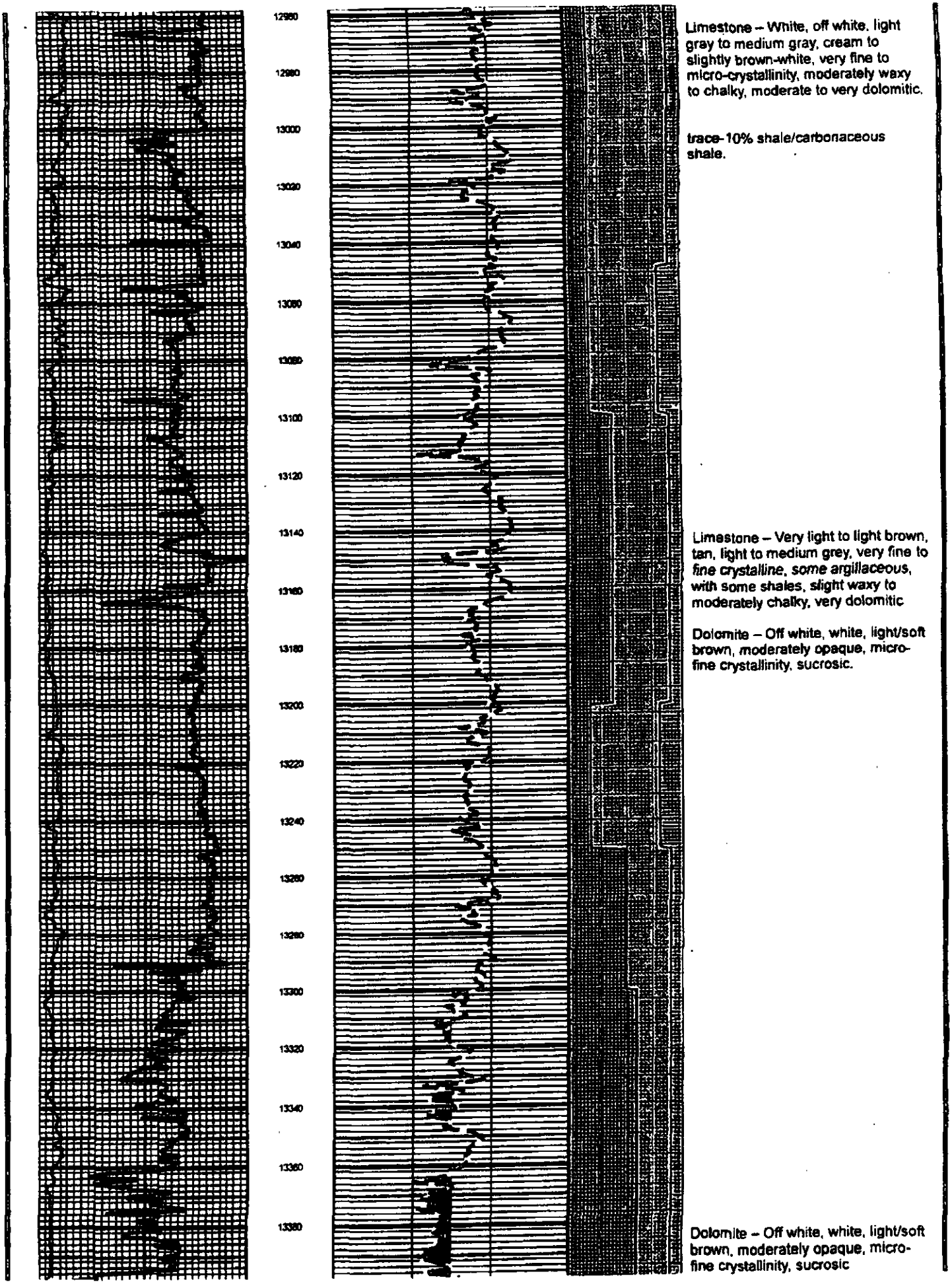


Limestone – Off white, white, light gray, light brown, pinkish-white to cream, very fine to micro-crystallinity, some waxy to moderate chalky, some dark chert

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

trace 20% shale/carbonaceous


12520
12540
12560
12580
12600
12620
12640
12660
12680
12700
12720
12740
12760
12780
12800
WDFD
12812
-9555
12840
12860
12880
DVNN
12698
-9541
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.



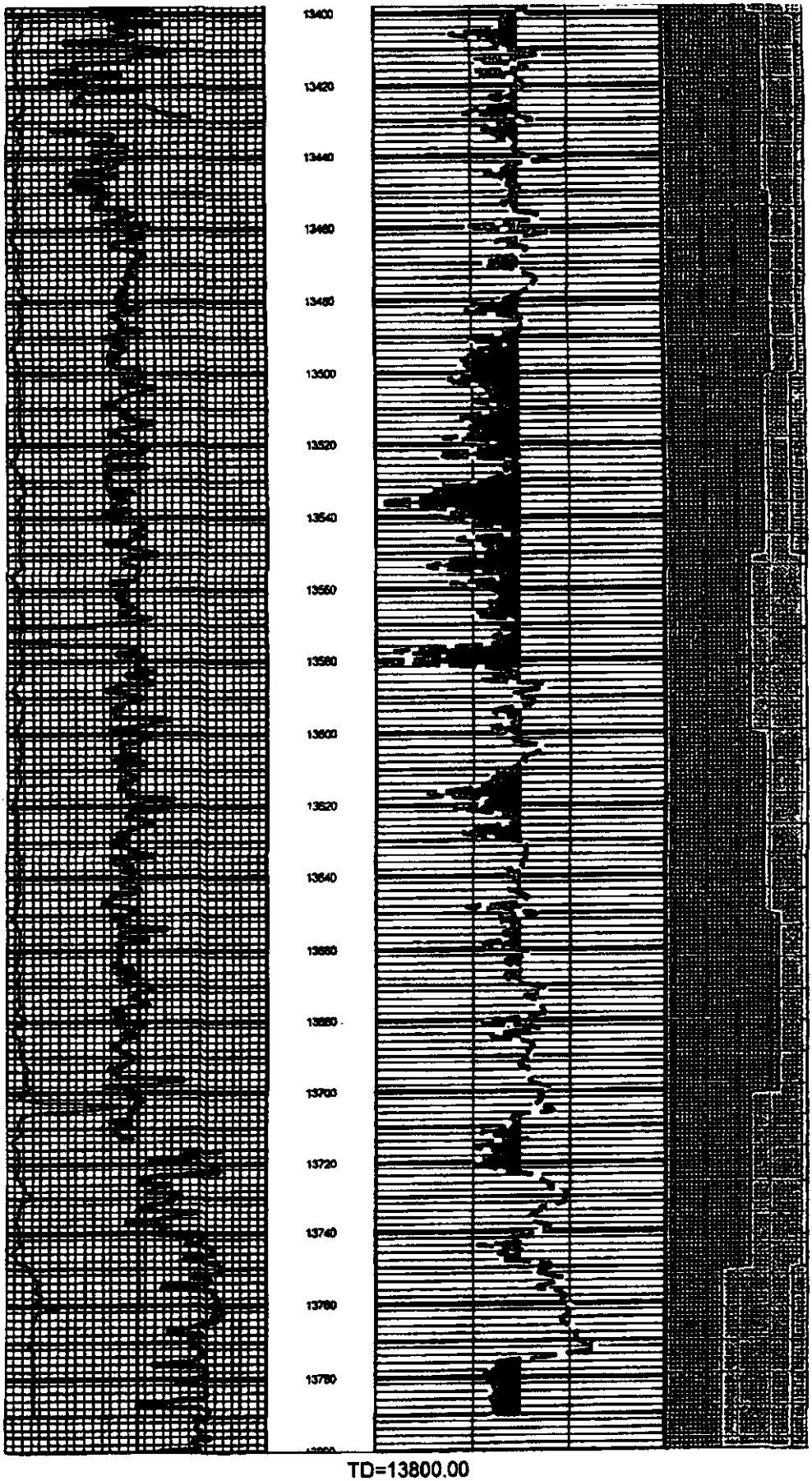
Limestone – White, off white, light gray to medium gray, cream to slightly brown-white, very fine to micro-crystallinity, moderately waxy to chalky, moderate to very dolomitic.

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.

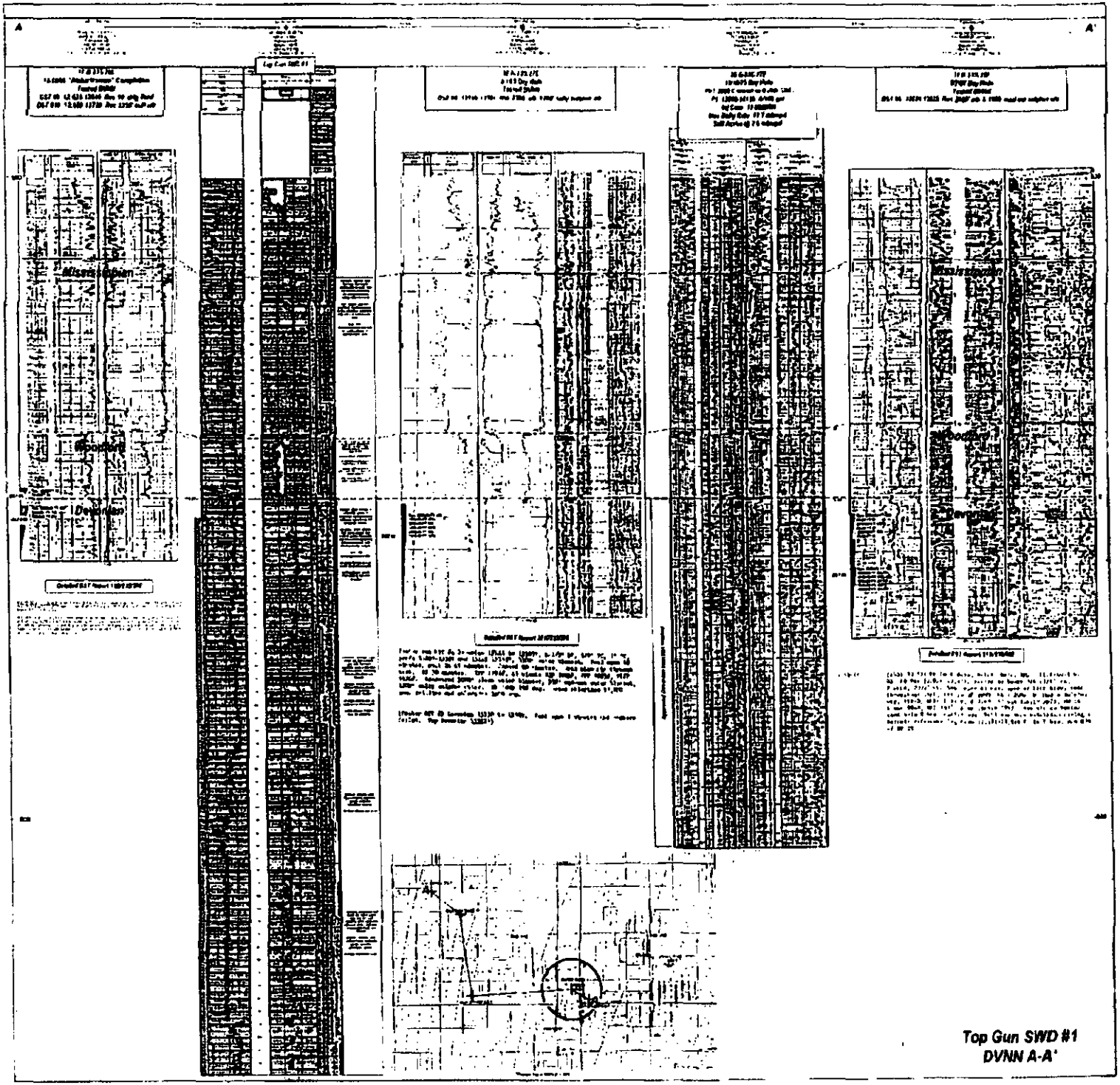
Dolomite – Off white, white, light/soft brown, moderately opaque, micro-fine crystallinity, sucrosic



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


A
A'
Mississippian
Devonian
Woodford
Mississippian
Devonian
Woodford
Top Gun SWD #1
DVNN A-A'

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 0psig 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

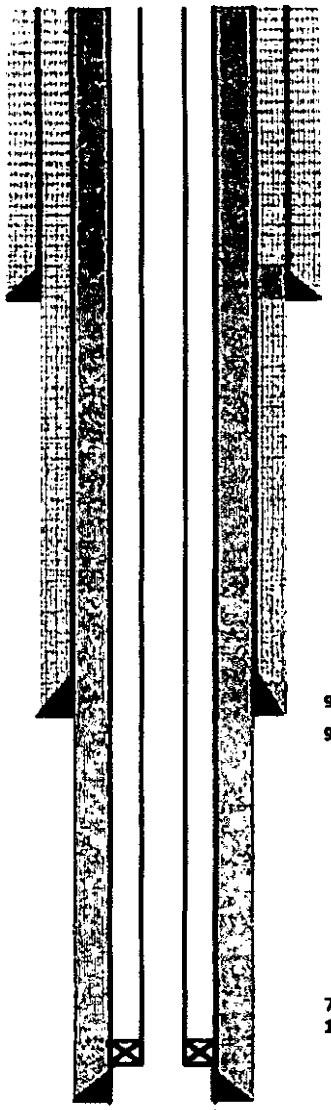
1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential between tubing and casing pressure (at test time) but 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 0psia. 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.

Iceman State No 1
660 'FSL & 660' FWL, Lil M, SEC. 17, T-23S R-27E, Eddy County, NM
API # 30-015-



400'

13-3/8", 48# J-55 STC @ 400'
550 sx cmt, will circulate

2,500'

9-5/8" 36# J-55 BTC to 2,500ft
900sx plan to circulate

4.5" IPC tubing to 12,850'
12.6#/ft L-80 premium threads
to 12,850'

7" 26# P-110 BTC to 12,900'
1600sx plan to circulate

Proposed packer @ 12

12,850'

12,900'

12,800 Woodford Shale

12,900 Devonian Carbonate

13,900' Total Depth

6.125" Hole Open Hole

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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	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

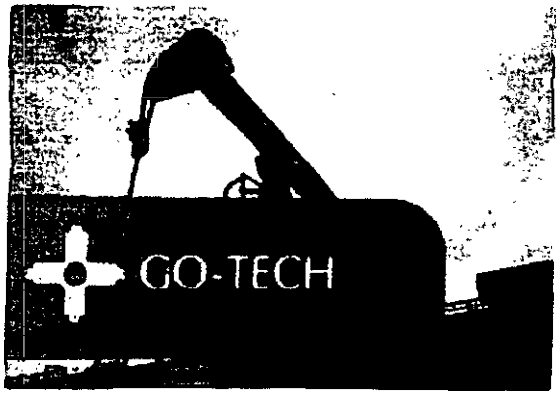
Basin/County Search:

Basin: Carlsbad

PLSS Search:

Section(s): 7 **Township:** 23S **Range:** 27E

***UTM location was derived from PLSS - see Help**



- 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 #691			
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	QAL	TDS	0

- NM WAIDS
  - Data
    - Produced Water
    - Conversion Tools
  - Scale
    - Scale details
    - Stiff
    - Oddo
    - Probable Mineral Composition
    - mix
  - Corrosion
    - Theory
      - Uniform
      - Galvanic
      - Crevice
      - Hydrogen Damage
      - ElC
      - Erosion
    - Equipment
      - Artificial
      - Casing and Tubing
      - Surface
      - Enhanced
    - Gases
      - O2
      - CO2
      - H2S
      - Microbes
    - Prevention
    - References
  - Maps
    - Trend Maps
      - GW
      - PW
      - Geology
      - PLSS
      - Help
    - Online Map

Ground Water Samples Query

Water Sample Search

SECTION	19
Township	23S
Range	27E
Formation	
DATE	
CHLORIDE (mg/L)	

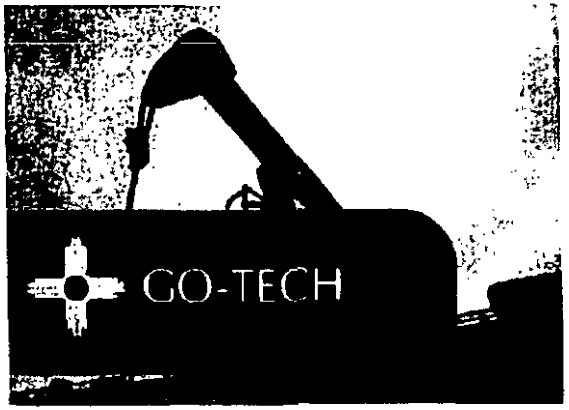
Find | Export Data

Water Samples for TOWNSHIP 23S RANGE 27E SECTION 19

select	2		19	23S	27E	23S.27E.19.421232

Water Samples for Township 23SRANGE 27E Section 19 Location 23S.27E.19.421232

select	9877	23S	27E	19	OAL	23S.27E.19.421232	7/7/1987	48
select	8691	23S	27E	19	OAL	23S.27E.19.421232	3/26/1992	73



- 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

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

Fleman

4/D

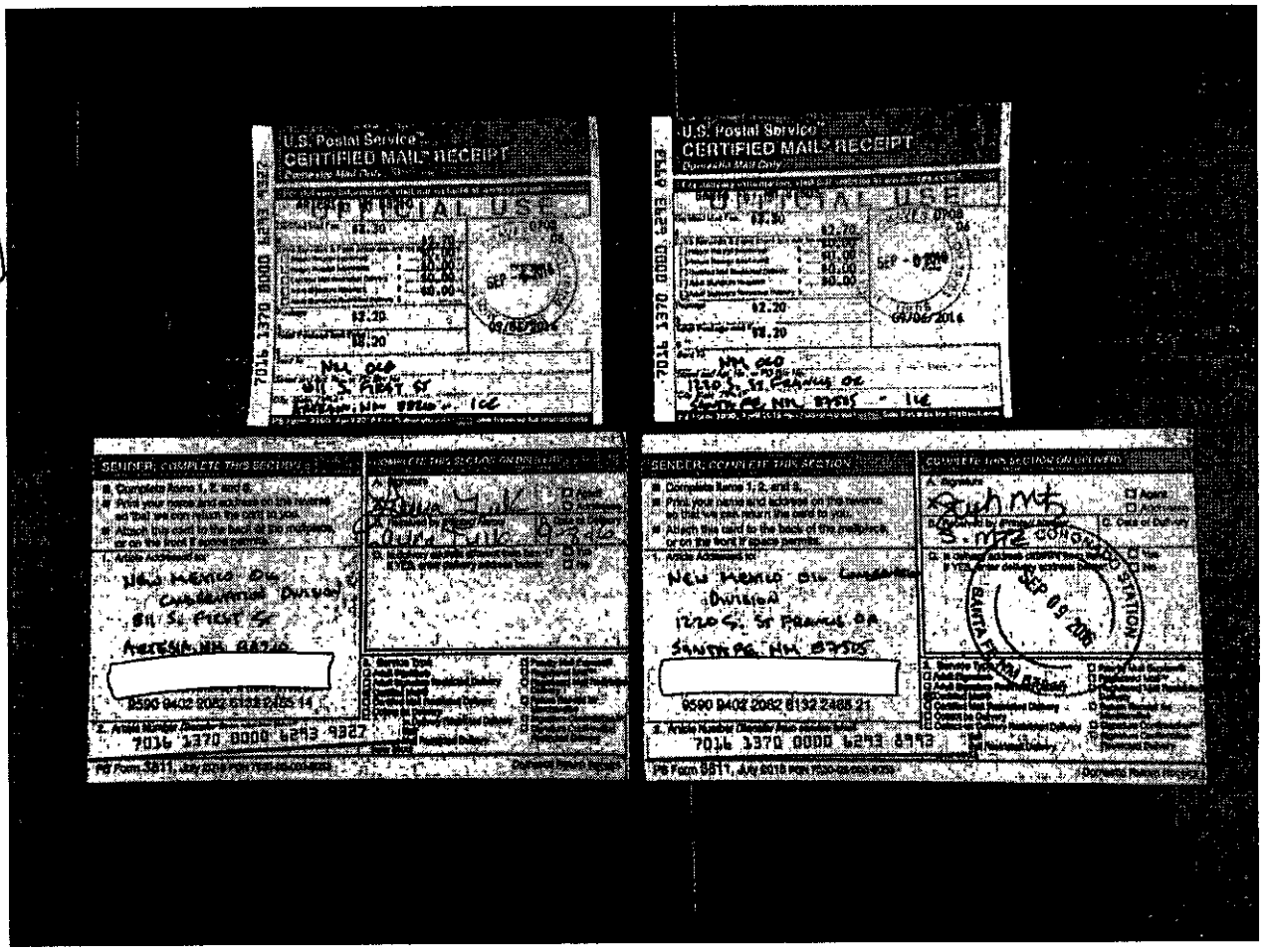
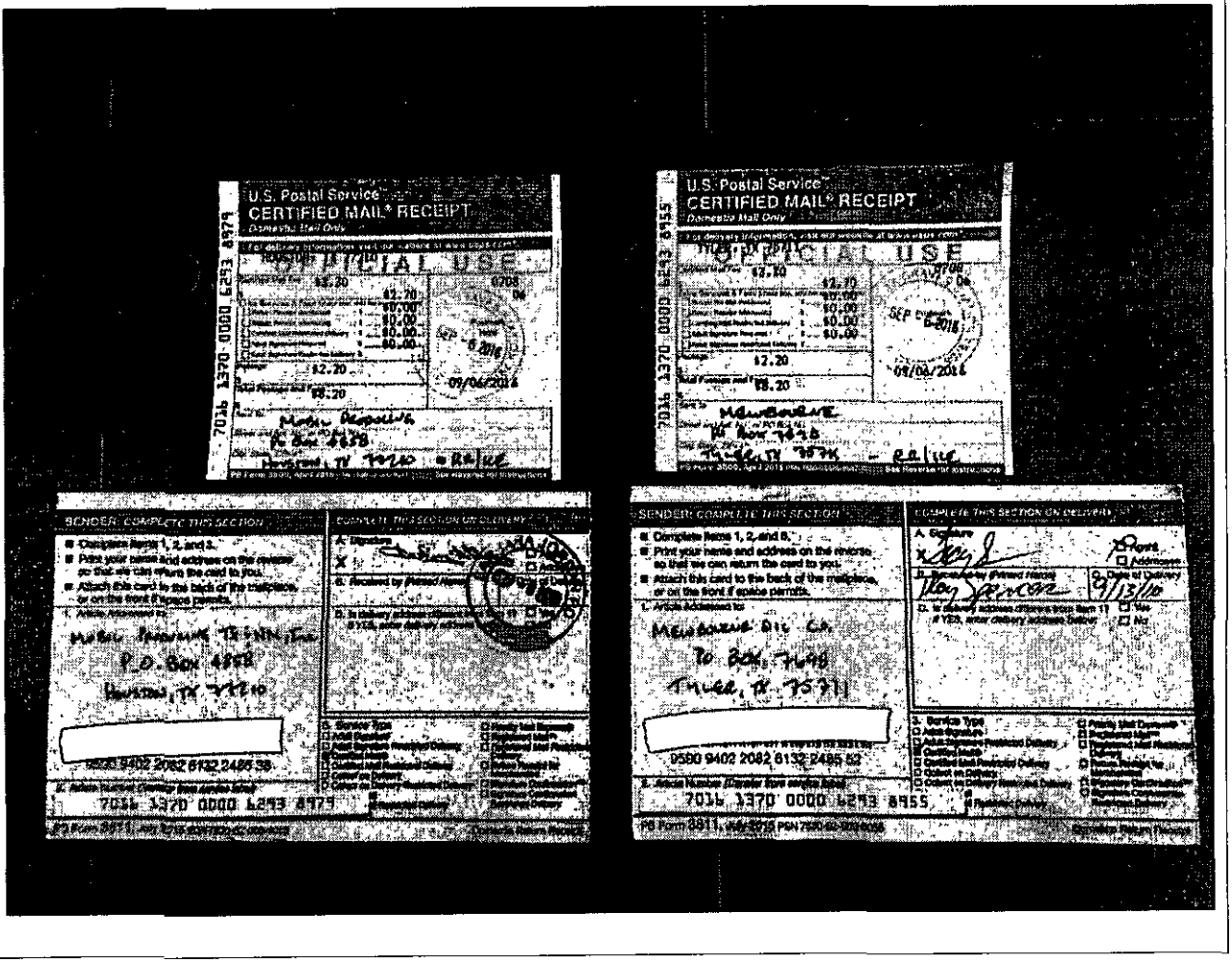

U.S. Postal Service
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
OFFICIAL USE
7016 1370 0000 6293 8993
7016 1370 0000 6293 8986
SENDER: COMPLETE THIS SECTION
COMPLETE THIS SECTION ON DELIVERY
NEW MEXICO ST. LAND OFFICE
310 OLD SANTA FE TRAIL
SANTA FE, NM 87501
DC OPERATING, LLC
4000 N. BIG SPRING #310
MIDLAND, TX 79705
9590 9402 2082 8132 2485 21
9590 9402 2082 8132 2485 07
PS Form 3811, July 2015 PSN 7530-02-000-9053
Domestic Return Receipt

Exhibit D/T


U.S. Postal Service
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
SPECIAL USE
$2.70
$0.00
$0.00
$0.00
$2.20
$8.20
09/06/2016
7016 1370 0000 6293 8974
U.S. Postal Service
CERTIFIED MAIL® RECEIPT
Domestic Mail Only
SPECIAL USE
$2.70
$0.00
$0.00
$0.00
$2.20
$8.20
09/06/2016
7016 1370 0000 6293 8955
SENDER: COMPLETE THIS SECTION
COMPLETE THIS SECTION ON DELIVERY
9590 9402 2082 6132 2485 52
7016 1370 0000 6293 8974
SENDER: COMPLETE THIS SECTION
COMPLETE THIS SECTION ON DELIVERY
9/13/16
9590 9402 2082 6132 2485 52
7016 1370 0000 6293 8955

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:

August 4 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 5 day of August, 2016

Cynthia Arredondo

My commission Expires
2/13/17

Notary Public

OFFICIAL SEAL
Cynthia Arredondo
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 2/13/17

August 4, 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 proposed Iceman State #1 as a Salt Water Disposal well.

The Iceman State #1 will be located at 660' FSL and 660' FWL, Unit Letter M, 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.

New Mexico Office of the State Engineer
Point of Diversion Summary

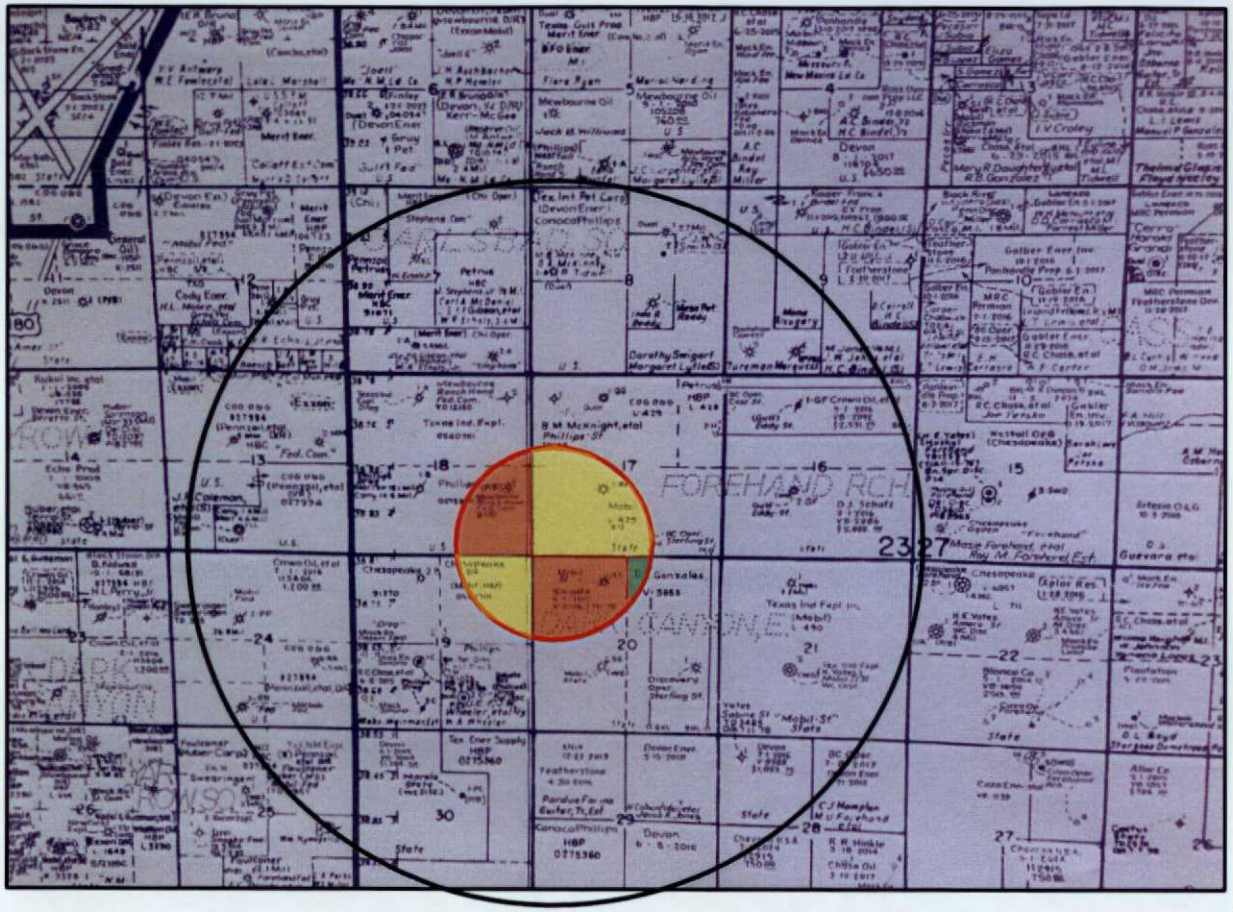
POD Number	Q64	Q16	Q4	Sec	Twp	Rng	X	Y
C 01195			2	19	23S	27E	572958	3573260*

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)
(NAD83 UTM in meters)

Driller License:	108	**Driller Company:**	SMITH, SAM S.		
Driller Name:	SMITH, SAM S.				
Drill Start Date:	07/01/1964	**Drill Finish Date:**	07/15/1964	**Plug Date:**	
Log File Date:	08/14/1964	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.00	**Depth Well:**	180 feet	**Depth Water:**	100 feet

Water Bearing Stratifications:	Top	Bottom	Description
	168	173	Limestone/Dolomite/Chalk

*UTM location was derived from PLSS - see Help



Mobil Producing Texas & NM, Inc.

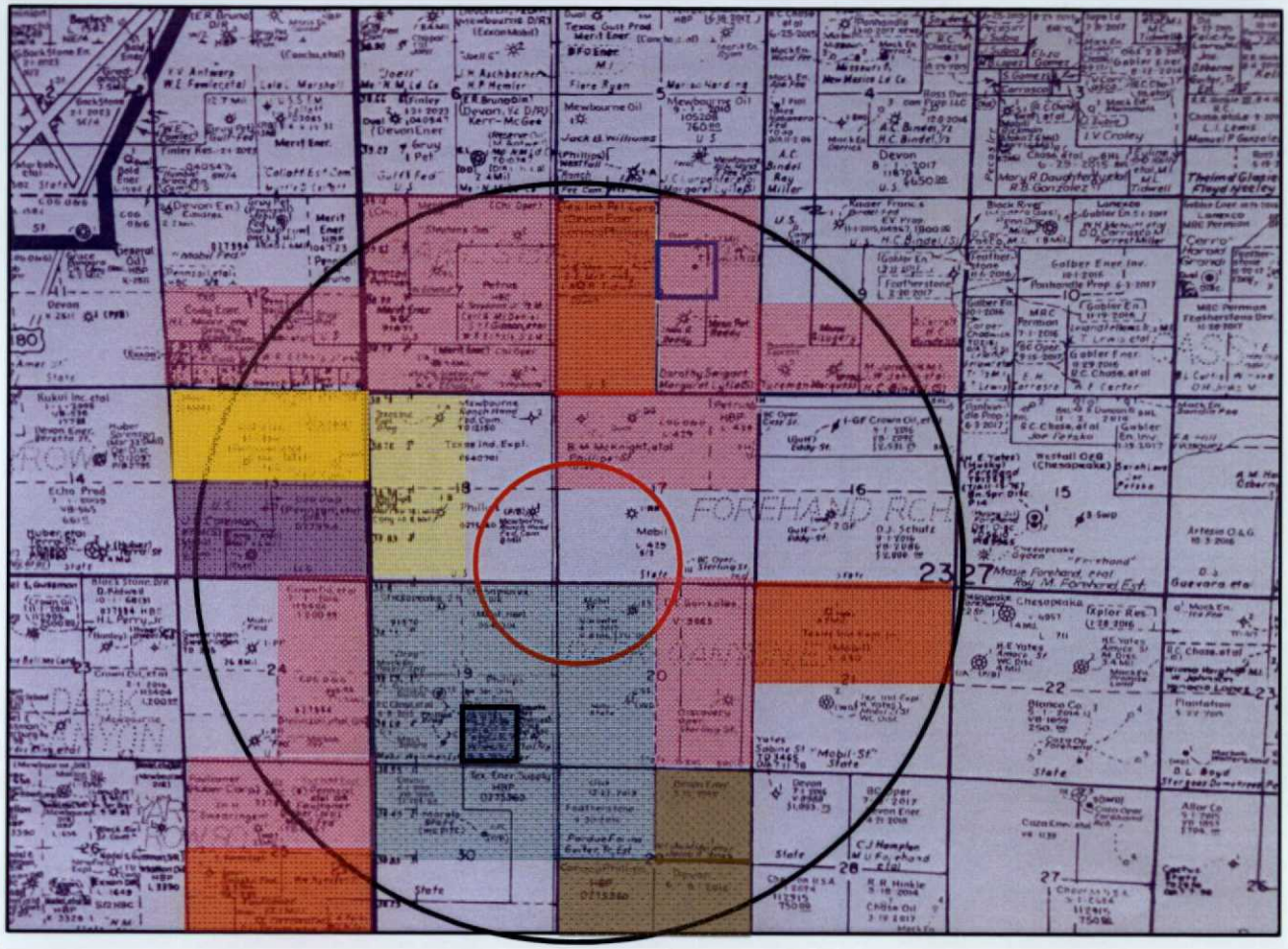
Mewbourne Oil Co.

BC Operating, Inc.

Iceman State No 1
API#: 30-015-
Location: Sec. 17, T-23S, R-27E, UL M

Formation Tops

Lamar	2,000'
Delaware Sand	2,100'
Bone Springs	5,327'
Wolfcamp	8,855'
Strawn	10,620'
Atoka	10,999'
Morrow	11,482'
Barnett/Upper Miss	12,000'
Mississippian Lime	12,600'
Woodford Shale	12,800'
Devonian	12,900'



Carlsbad;Morrow, South (Gas)

Carlsbad;Strawn, South (Gas)

Dark Canyon; Delaware, East

Forehand Ranch; Wolfcamp, SW (Gas)

Carlsbad; Atoka, South (Gas)

Forehand Ranch; Delaware

Forehand Ranch; Wolfcamp (Gas)

Black River; Atoka, North (Gas)

Carlsbad; Upper Penn (Gas)

Carlsbad; Canyon, South (Gas)

C-108 Review Checklist: Received 9/13/2010 Add. Request: _____ Reply Date: _____ Suspended: _____ [Ver 15]

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

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

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

Footages 660 FSL 660 FWL Lot ___ or Unit M Sec 17 Tsp 23S Rge 27E County Eddy

General Location: ~3 miles SE Carlsbad Pool: SWD; Devonian Pool No.: _____

BLM 100K Map: Carlsbad Operator: Delaware Energy, LLC OGRID: 371195 Contact: Preston Stein

COMPLIANCE RULE 5.9: Total Wells: 0 Inactive: _____ Finc! Assur: _____ Compl. Order? _____ IS 5.9 OK? ___ Date: _____

WELL FILE REVIEWED ○ Current Status: Proposed

WELL DIAGRAMS: NEW: Proposed ✓ or **RE-ENTER:** Before Conv. ○ After Conv. ○ Logs in Imaging: _____

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __ Surface	17½/13 3/8	400'		550	Surface/Visual
Planned__or Existing __ Interm/Prod	12¼/9 5/8	2500		900	Surface/Visual
Planned__or Existing __ Interm/Prod	8¾/7"	12500		1600	Surface/Visual
Planned__or Existing __ Prod/Liner					
Planned__or Existing __ Liner					
Planned__or Existing __ OH / PERF	12500/13900		Inj Length 1000		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.	[redacted]	wd	12800
Confining Unit: Litho. Struc. Por.		DV	12500
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.	[redacted]		

Completion/Operation Details:

Drilled TD 13900 PBTD _____

NEW TD _____ NEW PBTD _____

NEW Open Hole ○ or NEW Perfs ○

Tubing Size 4½ In. Inter Coated? Y

Proposed Packer Depth 12450 ft

Min. Packer Depth 12800 (100-ft limit)

Proposed Max. Surface Press. 2580 psi

Admin. Inj. Press. 2580 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ___ Noticed? ___ BLM Sec Ord ○ WIPP ○ Noticed? ___ Salt/Salado T: 250 B: 1380 **NW:** Cliff House fm ___

FRESH WATER: Aquifer ~~Chinle~~ Santa Rosa Max Depth 180 **HYDRO AFFIRM STATEMENT** By Qualified Person ✓

NMOSE Basin: Carlsbad **CAPITAN REEF:** thru adj NA **No. Wells within 1-Mile Radius?** 0 FW Analysis ✓

Disposal Fluid: Formation Source(s) Bs Dol, Wc Analysis? X On Lease ○ Operator Only ○ or Commercial ✓

Disposal Int: Inject Rate (Avg/Max BWPD): 10K / 15K Protectable Waters? ___ Source: ___ System: Closed or Open

HC Potential: Producing Interval? NA Formerly Producing? ___ Method: Logs/DST/P&A/Other Modified 2-Mile Radius Pool Map ○

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

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 6-4-2010 Mineral Owner NMSLO Surface Owner NMSLO N. Date 9-12-2010

RULE 26.7(A): Identified Tracts? Y Affected Persons: Melbourne, BL, Mobil, Melbourne N. Date ___

Order Conditions: Issues: C-B-L of 7"/ Surface

Add Order Cond: _____