DATE IN 04/05/16	SUSPENSE	ENGINEER PRG	LOGGED IN 04/14/16	TYPE SWD	APP NO. pPRG1611138501

No coversheet

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-1625
Delaware Energy LLC
371195
Pardue 31 Com. No.1
30-015-10842
Devonian

[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 _____

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[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 Stern		VICE-PRESIDENT	3/29/16
Print or Type Name	Signature	Title	Date

prestonms@gmail.com
e-mail Address

Side 1

INJECTION WELL DATA SHEET

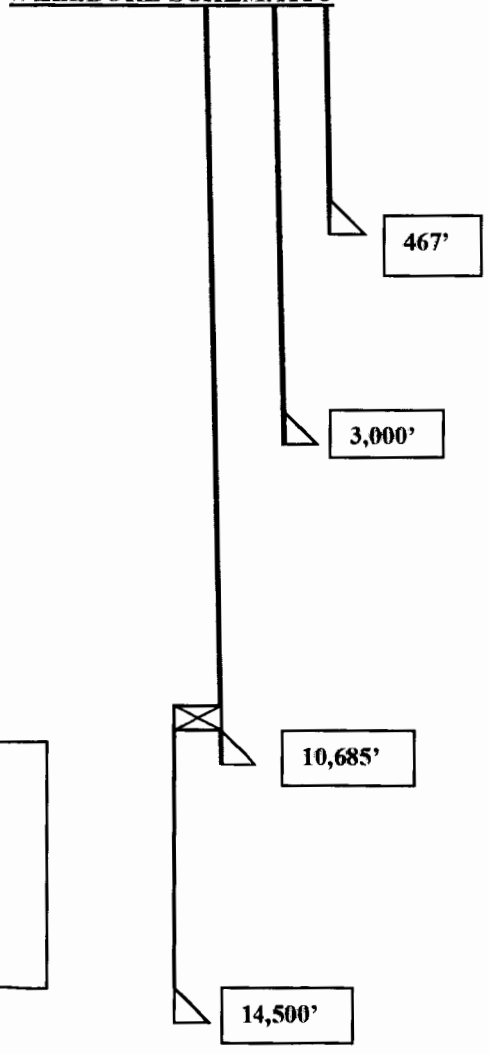
OPERATOR: DELAWARE ENERGY, LLC

WELL NAME & NUMBER: PARDUE 31 COM #1 API 30-015-10842

WELL LOCATION: 990' FSL, 1980' FWL | N | 31 | 23S | 28E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC



** PROPOSED

5" 15# L80 liner flush joint, 6.15" hole, cement to top of liner w/ 175 sacks, Top of liner is 10,600'

WELL CONSTRUCTION DATA

Surface Casing

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

Cemented with: 400 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

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

Cemented with: 1900 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

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

Cemented with: 1150 sx. *or* _____ ft³

Top of Cement: 1600' Method Determined: _____

Total Depth: SURFACE

Injection Interval

13,650 feet to 14,500

PERFORATED

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3.5", 9.3# J-55 Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection Packer

Packer Setting Depth: 50ft above top perf

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? MORROW GAS TEST

   TD 12,770 VERTICAL WELL

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.

   NO PERFORATIONS OR CIBP.
   CEMENT PLUGS: 12,551 -12,420; 10,753 – 10,622, 3,050 – 2,930; 2,795 – 2,676'; 188-69'

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

   ABOVE: DELAWARE 5600', BONE SPRING 8000, WOLFCAMP 9,100 -10,970, ATOKA 11,100; MORROW 12,200

   BELOW: NONE

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? ____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: _____DATE: ___3/30/2016_____

E-MAIL ADDRESS: ____PRESTONMS@GMAIL.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: _____

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.

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 BWPD, Max 15,000 BWPD

2. **Whether the system is open or closed;**
   Open System

3. **Proposed average and maximum injection pressure;**
   Average 4000-100 PSIG, Max 2,730 PSIG

4. **Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,**
   Bone Spring, Wolfcamp, and Delaware produced water. Water is compatible; Devonian is used as disposal interval throughout the Delaware Basin for Wolfcamp and Bone Springs produced water. No incompatibility exists.

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 is barren and does not produce.

***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 the Devonian formation. Injection interval consists of dolomite. The top of the Devonian formation is at a depth of 13,650' TVD at the base of the Woodford Shale. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the top of the Rustler at 193', the water source is older alluvium (quaternary).

IX. Describe the proposed stimulation program, if any.

20,000 gallons 15% HCL acid job with packer

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, LLC has reviewed and examined available geologic and engineering data in the area of interest for the Pardue 31 Com #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.

Preston Stein

III. WELL DATA

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

Pardue 31 Com #1, UL N Sec. 31-T23S-R27E, 990' FSL & 1980' FWL, 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"	467'	400	17-1/2"	Surface	Circulated
9-5/8"	3,000'	1,900	12-1/4"	Surface	Circulated
7"	10,700'	1,050	8-3/4"	1,600	
*5"	10,600-14,500	175	6.125"	10,600	circulate

***proposed**

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

3-1/2" or 2-7/8" OD, Internally Plastic Coated Tubing set @ 13,600'

(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

Set within 50-100 feet above top Devonian perforations

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

Pool Name: SWD (Devonian)

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

13,650' to 14,500' (Perforated)

(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.

(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.

No perforated intervals. Cement plugs at 12,420'-12,551; 10,622'-10,753'; 2,930'-3,050', 69'-188'

(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 +/-12,200 / Next Lower: None

Martin Water Laboratories, Inc.

Analysts & Consultants since 1953
Bacterial & Chemical Analysis

TO:	Preston Stein	LABORATORY NO.	16-03-76
ADDRESS:	3001 W. Loop 250 N. Suite C-105-318 Midland T	SAMPLE RECEIVED:	3/4/16
COMPANY:	Delaware Energy, LLC	RESULTS REPORTED:	3/7/16
LEASE:	Vicky	COUNTY, STATE:	
FORMATION:		FIELD OR POOL:	

DESCRIPTION OF SAMPLES

No. 1 Submitted water sample - taken 03/03/16 from Vicky

Chemical and Physical Properties (milligrams per liter)	No. 1
Specific Gravity @ 60°F.	1.0055
pH When Received	7.80
Bicarbonate as HCO_3	134
Total Hardness, as CaC03	2,150
Calcium, as Ca	700
Magnesium, as Mg	97
Sodium and/or Potassium	119
Sulfate, as SO4	1,497
Chloride, as Cl	525
Iron, as Fe	16
Barium, as Ba	0
Total Dissolved Solids, Calculated	3,072
Hydrogen Sulfide	0.00
Resistivity, ohms/m @ 77°F.	2.420

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819
Remit to Address: P.O. Box 98, Midland, Texas 79702

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Impact Chemical***

Lab Ref #:	15-apr-w68267	Sample Temp:	70
Formation:	Bone Springs	Date Sampled:	4/10/2015
Location:		Sampled by:	Sherry Hogue
Date Run:	4/21/2015	Analyzed by:	GR

Dissolved Gases

			Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide	(H2S)		3.40	16.00	.21
Carbon Dioxide	(CO2)		230.00	22.00	10.45
Dissolved Oxygen	(O2)	**NOT ANALYZED**			

Cations

Calcium	(Ca++)		10,886.16	20.10	541.60
Magnesium	(Mg++)		1,742.16	12.20	142.80
Sodium	(Na+)		56,575.73	23.00	2,459.81
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		1.53	27.50	.06
Strontium	(Sr++)	**NOT ANALYZED**			

Anions

Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		146.64	61.10	2.40
Sulfate	(SO4=)		320.00	48.80	6.56
Chloride	(Cl-)		111,021.99	35.50	3,127.38
Total Iron	(Fe)		46.91	18.60	2.52
Total Dissolved Solids			180,974.52		
Total Hardness as CaCO3			34,358.26		
Conductivity MICROMHOS/CM			209,000		

pH 5.200 Specific Gravity 60/60 F. 1.126

CaSO4 Solubility @ 80 F. 21.88MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-.704	100.0	-.304	130.0	.446
80.0	-.604	110.0	.016	140.0	.446
90.0	-.304	120.0	.016	150.0	.876

Formation: Delaware

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	Mosaic 34 Federal 1
Source :	WH	Date Sampled:	May 7, 2015
Number :	43546	Account Manager:	David Garcia
County:		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	5.74				
2. Specific Gravity 60/60 F	1.212				
3. Hydrogen Sulfide	3.4	PPM			
4. Carbon Dioxide	720.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	49	/	61.1	=	0.80
9. Chloride (Cl^-)	179,959	/	35.5	=	5,069.27
10. Sulfate (SO_4^{-2})	140	/	48.8	=	2.87
11. Calcium (Ca^{+2})	28,720	/	20.1	=	1,428.86
12. Magnesium (Mg^{+2})	4,529	/	12.2	=	371.23
13. Sodium (Na^+)	75,276	/	23.0	=	3,272.85
14. Barium (Ba^{+2})	1.75				
15. Total Iron (Fe)	18.61				
16. Manganese	9.55				
17. Strontium	1,105.00				
18. Total Dissolved Solids	289,808				
19. Resistivity @ 75 °F (calculated)	0.027	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.9490
@ 100 °F	-0.6390
@ 120 °F	-0.3790
@ 140 °F	-0.0190
@ 160 °F	0.3310

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.4092
@ 90 °F	0.5418
@ 110 °F	0.3990
@ 130 °F	0.3896
@ 150 °F	0.3893

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		0.80	65
$CaSO_4$	68.07		2.87	195
$CaCl_2$	55.50		1,425.19	79,098
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		371.23	17,678
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		3,272.85	191,331

Analyst: Tamara Davault Date: May 8, 2015

Formation: Wolfcamp

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	
Source:	Wellhead	Date Sampled:	July 15, 2015
Number:	45813	Account Manager:	David Garcia
County:		Foreman:	

ANALYSIS	mg/L		EQ. WT		MEQ/L
1. pH	6.70				
2. Specific Gravity 60/60 F	1.067				
3. Hydrogen Sulfide	10.2	PPM			
4. Carbon Dioxide	120.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	244	/	61.1	=	3.99
9. Chloride (Cl^-)	57,987	/	35.5	=	1,633.44
10. Sulfate (SO_4^{-2})	664	/	48.8	=	13.61
11. Calcium (Ca^{+2})	2,792	/	20.1	=	138.91
12. Magnesium (Mg^{+2})	389	/	12.2	=	31.92
13. Sodium (Na^+)	34,045	/	23.0	=	1,480.21
14. Barium (Ba^{+2})	2.71				
15. Total Iron (Fe)	7.92				
16. Manganese	0.51				
17. Strontium	594.40				
18. Total Dissolved Solids	96,727				
19. Resistivity @ 75 °F (calculated)	0.082	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.3041
@ 100 °F	0.0059
@ 120 °F	0.2659
@ 140 °F	0.6259
@ 160 °F	0.9759

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.2391
@ 90 °F	0.2384
@ 110 °F	0.2406
@ 130 °F	0.2438
@ 150 °F	0.2469

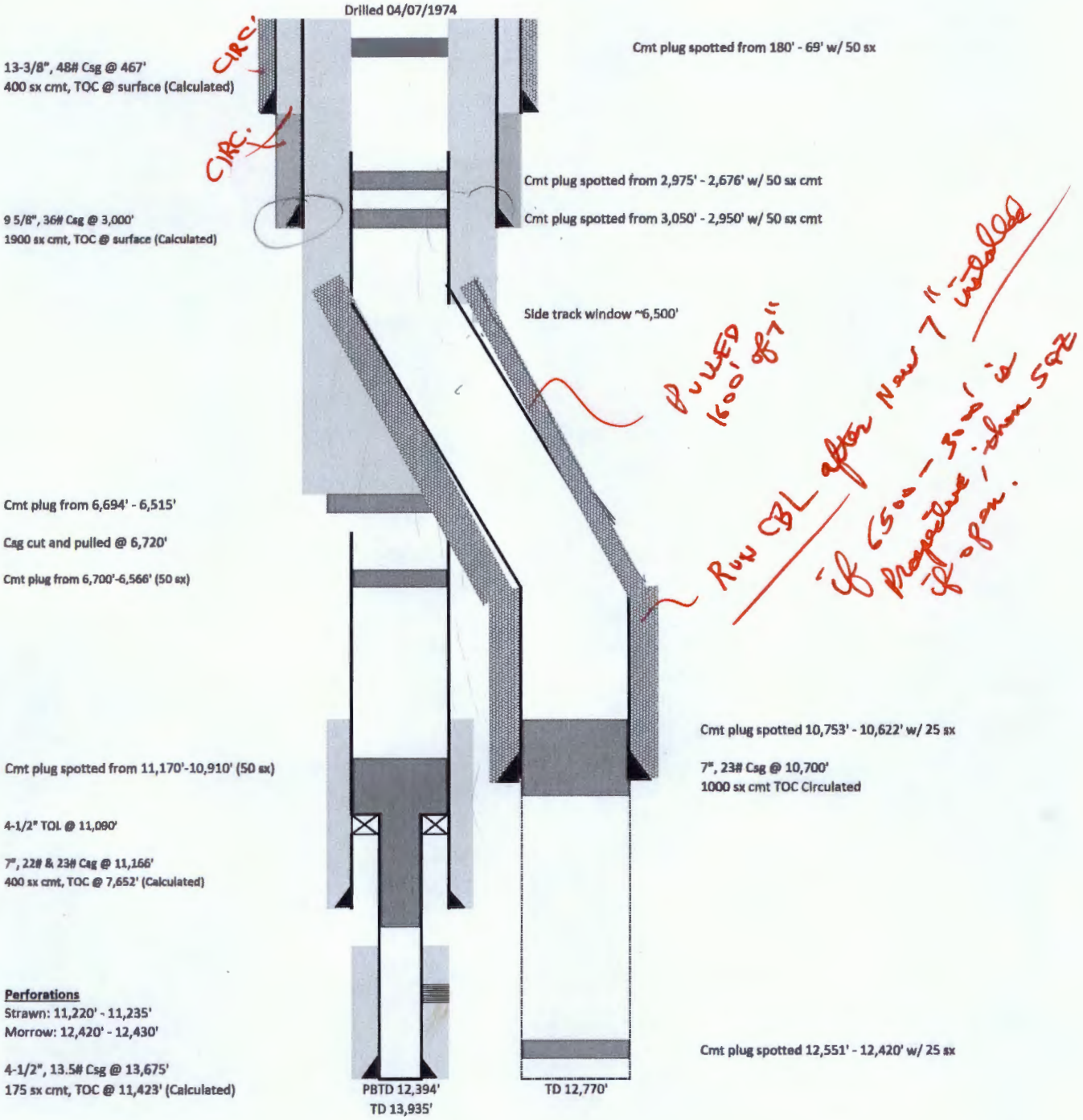
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		3.99	323
$CaSO_4$	68.07		13.61	926
$CaCl_2$	55.50		121.31	6,733
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		31.92	1,520
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		1,480.21	86,533

Analyst: Sylvia Garcia Date: July 17, 2015

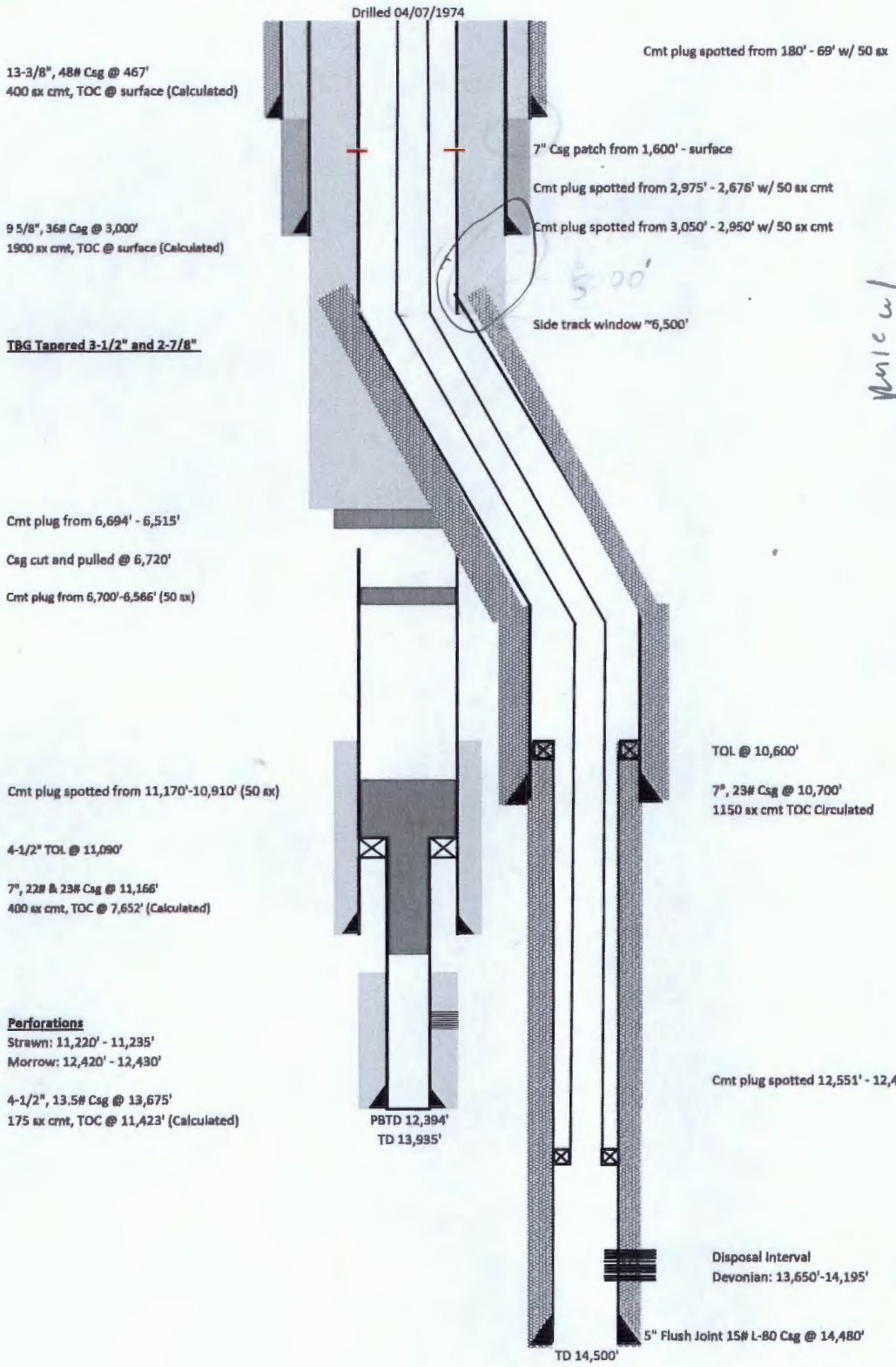
Delaware Energy LLC.

Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10842



Delaware Energy LLC.

Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10842



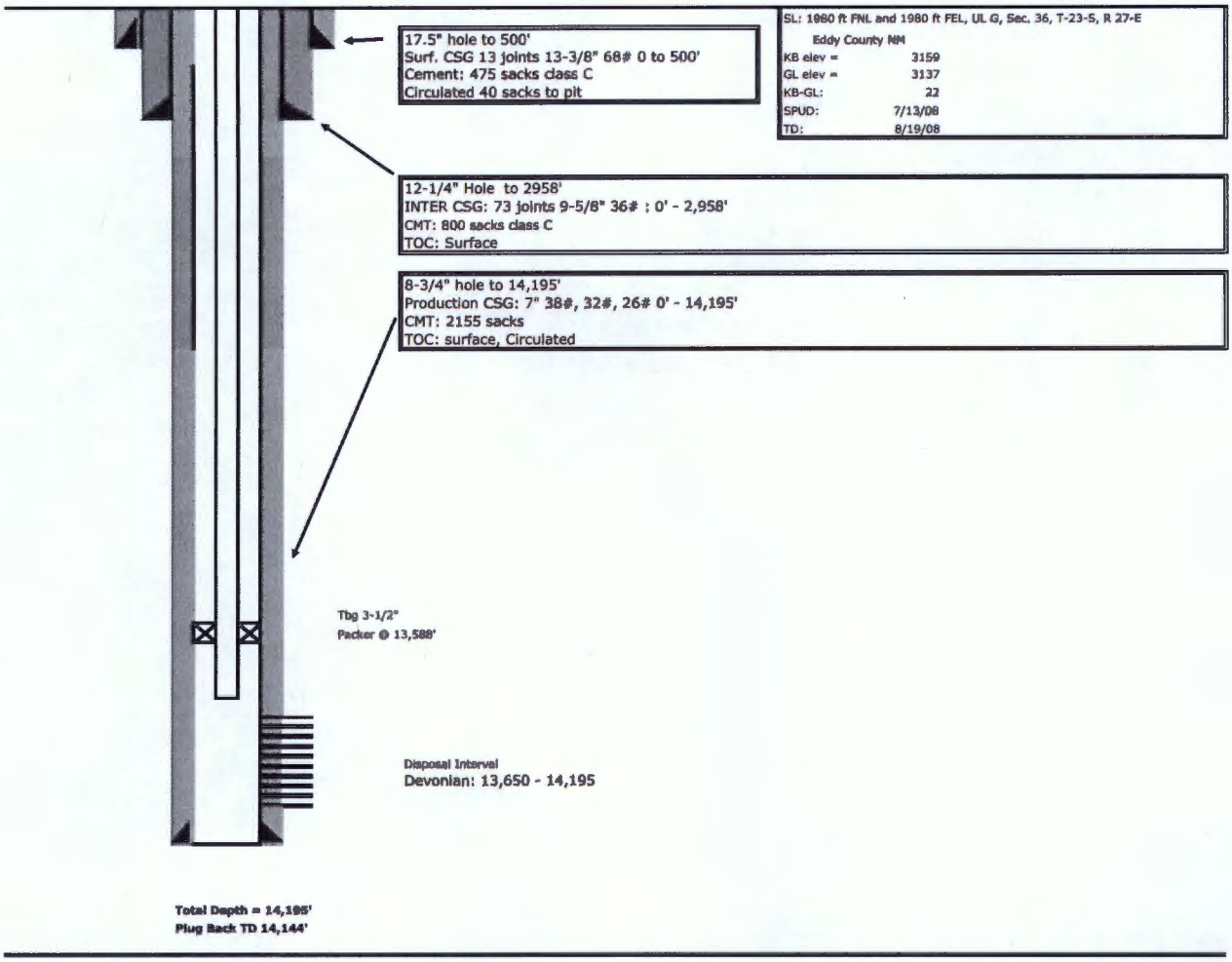
WELLS INSIDE AREA REVIEW OF Pardue 31 Com #1

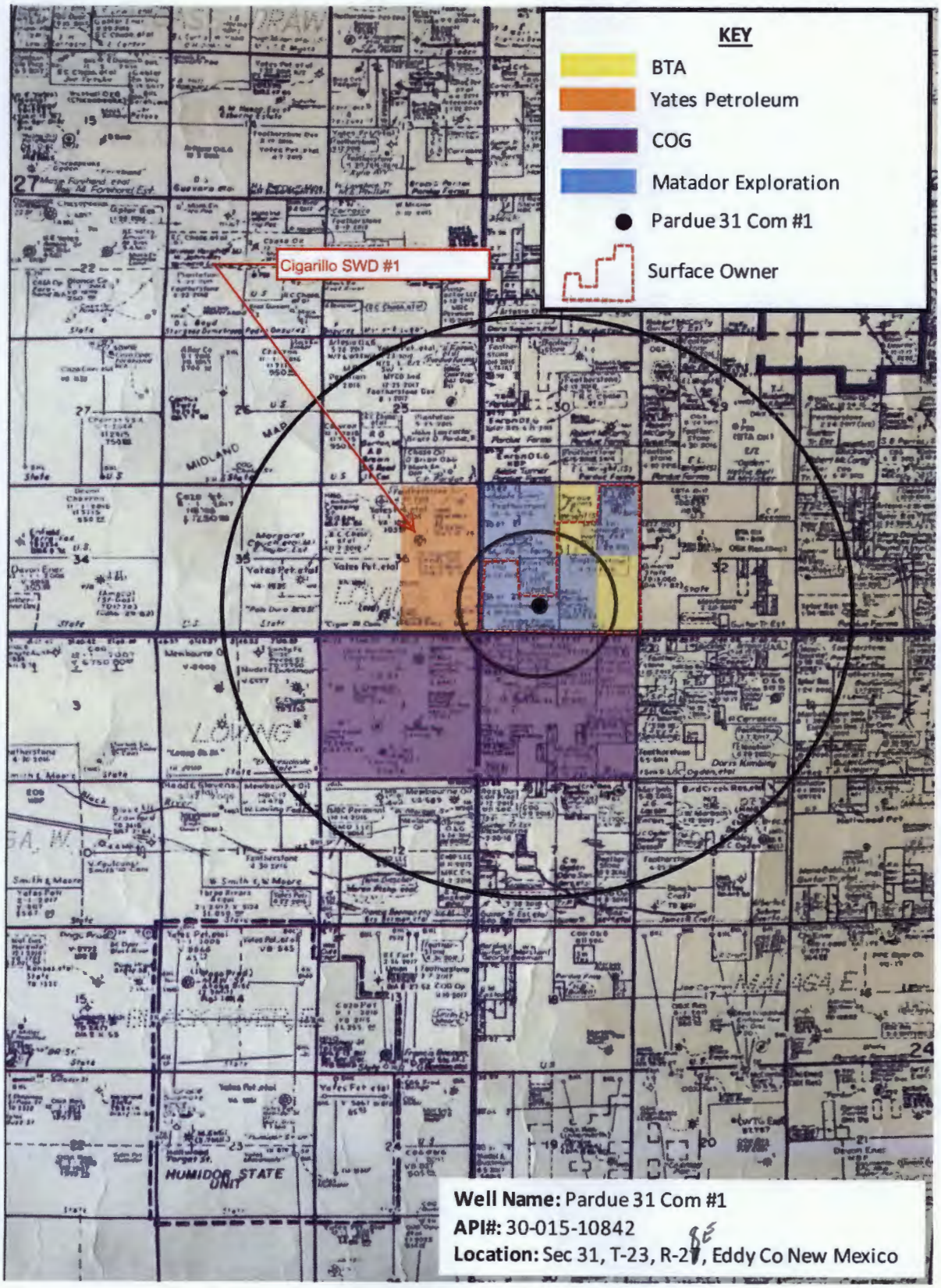
**** no wells exist inside 1/2 mile radius, one well inside 2 mile radius penetrates the Devonian Formation**

Well	Type	Date drill	Location	Depth	Completion	Status	
Cigarillo SWD #1	Vertical SWD	7/13/2008	T-23-S, R-27-E, Sec 36 1980' FNL, 1980' FEL UL G, Eddy Co. NM	14,195' MD/TVD	Devonian 13,650-14,130'	Active SWD see diagram	Yates Petroleum

Cigarillo SWD #1
Wellbore Diagram
Devonian
Eddy County NM
API # 30-015-21643

As Drilled 08/19/2008




KEY
BTA
Yates Petroleum
COG
Matador Exploration
Pardue 31 Com #1
Surface Owner
Cigarillo SWD #1
Well Name: Pardue 31 Com #1
API#: 30-015-10842
Location: Sec 31, T-23, R-27E, Eddy Co New Mexico

DELAWARE ENERGY, L.L.C.

March 30, 2016

Surface Owner / Offset Operators

Re: Notification of Application for Authorization to Inject
Pardue 31 Com #1 SWD Well

Ladies and Gentlemen:

Delaware Energy, LLC is seeking administrative approval to utilize the Pardue 31 Com #1 (API – 30-015-10842) 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.

Well:	Pardue 31 Com #1
Proposed Disposal Zone:	Devonian Formation (from 13,650'- 14,500')
Location:	990' FSL & 1980' FWL, Sec. 31, T23S, R2[redacted]E, Eddy Co., NM
Applicants Name:	Delaware Energy, LLC
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. Delaware Energy can be reached at 214-558-1371

Sincerely,

Preston Stein

DISTRIBUTION LIST

Surface Owner Sec 31, T-23, R-28
Vickie Connally
211 R Ash Rd
Loving, NM 88256

Sec 36, T-23, R-27
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210

Sec 1, T-24, R-27 / Sec 6, T-24, R-28
COG Operating LLC
600 W. Illinois Ave.
Midland, TX 79701

Sec 31, T-23, R-28
Matador Resources
5400 Lyndon B Johnson Fwy #1500
Dallas, TX 75240

Sec 31, T-23, R-28
BTA Oil Producers, LLC
104 S. Pecos St
Midland, TX 79701

Pardue 31 Com #1

Formation Tops

Rustler	375
Base Salt, T/ Lamar lime	2,300'
Delaware Mountain Group / Bell Canyon	2,350'
Bone Spring Lime	5,900'
Wolfcamp	9,200'
Atoka	11,400'
Morrow	11,900
Mississippi	13,225
Woodford Shale	13,550
Devonian	13,650

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SANTA FE	1	
FILE	1	
U.S.G.S.	2	
LAND OFFICE		
OPERATOR		

Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State ☐ Fee ☒

5. State Oil & Gas Lease No.

Bur. of Mines

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ARTESIA, OFFICE

1a. TYPE OF WELL

b. TYPE OF COMPLETION: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ____ NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name

8. Farm or Lease Name: Pardue

2. Name of Operator: Mobil Oil Corporation ✓

9. Well No.: 1

3. Address of Operator: P. O. Box 633, Midland, Texas 79701

10. Field and Pool, or Wildcat: Wildcat

4. Location of Well: UNIT LETTER N LOCATED 990 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM

12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR etc.)	19. Elev. Cashinghead
6-25-66	12-2-66	P & A	3095.2	3095.2 GR

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
13,935	12,394	No	→	X	

24. Producing Interval(s), of this completion — Top, Bottom, Name: P & A

25. Was Directional Survey Made: Yes

26. Type Electric and Other Logs Run: Schlumberger-GR-Caliper-Microlog & Sonic-Composite Resistivity

27. Was Well Cored: Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	467'	17-1/2"	Cmt. W/400 sx.Incor Neat	0
9-5/8"	36#	3,000'	12-1/4"	Cmt.W/1900 sx.IncorNeat	0
7"	23-26#	11,166'	8-3/4"	Cmt.W/400 sx. T.Inferno	145 jts.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4-1/2"	11,009'	13,675'	175	

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number)
12,420-12,430 - Morrow
11,220-11,235 - Strawn

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
12,420 to 12,430	1,000 gals 15% NE Acid
11,220 to 11,235	2,500 gals 15% NE Acid
11,220 to 11,235	reacidize w/10,000 gals.CRA Acid

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
Drilled Dry		

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED John J. Hunt TITLE Authorized Agent DATE January 18, 1967

INSTRUCTIONS

[illegible]

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

T. Anhy [illegible]	T. Canyon	T. Ojo Alamo	T. [illegible]
T. Salt	T. Strawn [illegible]	T. Kirtland-Fruitland	T. [illegible]
B. Salt	T. Atoka [illegible]	T. Pictured Cliffs	T. [illegible]
T. Yates	T. Miss	T. Cliff House	T. [illegible]
T. 7 Rivers	T. Devonian 13,7[illegible]	T. Menefee	T. [illegible]
T. Queen	T. Silurian	T. Point Lookout	T. [illegible]
T. Grayburg	T. Montoya	T. Mancos	T. [illegible]
T. San Andres	T. Simpson	T. Gallup	T. [illegible]
T. Glorieta	T. McKee	Base Greenhorn	T. [illegible]
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Granite	T. Todilto	T.
T. Drinkard	T. Delaware Sand	T. Entrada	T.
T. Abo	T. Bone Springs	T. Wingate	T.
T. Wolfcamp [illegible]	T. [illegible]	T. Chinle	T.
T. Penn	T. [illegible] 12,[illegible]	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	677	677	Potash	8954	9336	382	Lime & Sn.
677	900	223	Shale, Potash-Lm.Sn.	9336	9459	123	Dolomite-Sn.
900	1269	369	Anhydrite & Sn.	9459	11144	1685	Sn.-Lime-Shale
1269	1442	173	Anhydrite & Lime	11144	11152	8	Sn.-Pyrite-Lime
1442	2292	850	Anhydrite & Salt	11152	11245	93	Shale-Sn.
2292	2581	289	Anhydrite, Lime & Sn.	11245	11432	187	Lime & Chert
2581	3000	419	Sand	11432	11468	36	Lime
3000	3150	150	Sand & Lime	11468	11549	81	Lime, Shale
3150	3325	175	Lime Dolomite Sn.	11549	12332	783	Lime & Shale
3325	4340	1015	Sandy Lime	12332	12792	460	Sn.-Lime
4340	4404	64	Lime Dolomite Sn.	12792	12866	74	Lime-Sn.
4404	5105	701	Lm., Shale & Sn.	12866	13210	344	Lime-Sh.
5105	5425	320	Sn. & Shale	13210	13477	267	Lime-Shale
5425	5562	137	Shale, Dolomite	13477	13656	[illegible]	Lime-Chert
5562	5745	183	Sn. & Shale	13656	13766	110	Shale
5745	5927	182	Sn., Shale & Lime	13766	13935	169	Dolomite - T.D.
5927	5955	28	Lime				
5955	6711	756	Lime & Shale				
6711	6968	257	Lime				
6968	7112	144	Lime & Sn.				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	Shale, Sn. & Lime				
[illegible]	[illegible]	[illegible]	Lime				
8450	[illegible]	[illegible]	[illegible]				

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Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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ARTESIA, OFFICE

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.

Basin Morrow

1a. TYPE OF WELL
b. TYPE OF COMPLETION
OIL WELL ☐ GAS WELL ☐ DRY ☒ OTHER
NEW WELL ☐ WORK OVER ☐ DEEPEN ☒ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER P&A

7. Unit Agreement Name

8. Farm or Lease Name: Pardue 31 Com.

2. Name of Operator: HNG Oil Company

9. Well No.: 1

3. Address of Operator: P. O. Box 2267, Midland, Texas 79701

10. Field and Pool, or Wildcat: Wildcat

4. Location of Well
UNIT LETTER N LOCATED 990 FEET FROM THE south LINE AND 1980 FEET FROM THE West LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM

12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
2-18-74	3-13-74	P&A 4-7-74	3095.2 GR	

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
12,770'			→	0-12,770'	

24. Producing Interval(s), of this completion — Top, Bottom, Name: None

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: Comp. Neutron - Formation Density

27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8" *	48#	400	17-1/2"	Circ	None
9-5/8" *	36#	3000	12-1/4"	Circ	None
7"	23#	10,685	8-3/4"	1150 sks Trinity Lt. Wt. 1600'	

* Left in hole by Mobil Oil Corp.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
None		None

31. Perforation Record (Interval, size and number): None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
None	

revised 9-20-74

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
None		P&A

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

35. List of Attachments: Copy of Elect. Log & copies of DST #1 & #2

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED R. R. Frazier TITLE Petroleum Engineer DATE 9/11/74

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn 11,208	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka 11,590	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. ~~Xxxx~~ Morrow 12,270	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Qtzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Granite	T. Todilto	T.
T. Drinkard	T. Delaware Sand	T. Entrada	T.
T. Abo	T. Bone Springs	T. Wingate	T.
T. Wolfcamp	T.	T. Chinle	T.
T. Penn.	T.	T. Permian	T.
T Cisco (Bough C)	T.	T. Penn. "A"	T.

SEE ORIGINAL HOLE (MOBIL PARDUE FOR UPHOLE TOPS)

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
6012	8910	2898	Bone Springs				
8910	11208	2298	Wolfcamp				
11208	11590	382	Strawn				
11590	12270	680	Atoka				
12270	12770	500	Morrow				

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O. C. C.
ARTESIA, OFFICE

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LAND OFFICE		
OPERATOR	✓	

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NEW MEXICO OIL CONSERVATION COMMISSION

APR 1 1 1974

O. C. C.
ARTESIA, OFFICE

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

5a. Indicate Type of Lease
State ☐ Fee ☒

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☒ OTHER- **Re-enter**

7. Unit Agreement Name

2. Name of Operator
HNG Oil Company ✓

8. Farm or Lease Name
Pardue 31 Comm

3. Address of Operator
P. O. Box 767, Midland, Texas 79701

9. Well No.
1

4. Location of Well
UNIT LETTER **N**, **990** FEET FROM THE **south** LINE AND **1980** FEET FROM THE **west** LINE, SECTION **31** TOWNSHIP **23S** RANGE **28E** NMPM.

10. Field and Pool, or Wildcat
Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*
3095.2 GR

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 ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

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

4-7-74 - Pulled approx. 1600' of 7" casing.
1) 12,551 to 12,420 25 sks Class H cement
10,753 to 10,622 25 sks Class H cement
3,050 to 2,930 50 sks Class H cement
2,795 to 2,676 50 sks Class H cement
188 to 69' 50 sks Class H cement
Weld plate at surface.

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

SIGNED RR Frazier R. R. Frazier TITLE Petroleum Engineer DATE 4-10-74

APPROVED BY Leslie Mennis TITLE OIL AND GAS INSPECTOR DATE SEP 18 1974

CONDITIONS OF APPROVAL, IF ANY:

Delaware Energy, LLC

Application for Injection/SWD

Pardue 31 Com #1, API # 30-015-10842

UL N, Sec. 31, T-23-S, R-28-E, 990' FSL & 1980' FWL, Eddy Co., NM

March 30, 2016

Contents:

Delaware Energy, LLC (371195)
3001 W. Loop 250 North, Suite C-105-318
Midland, TX 79705
(214) 558-1371
prestonms@gmail.com
March 31, 2016

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 1 2016
RECEIVED

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

Dear New Mexico Oil Conservation Division:

Enclosed please find one (1) copy of Delaware Energy's Application for Salt Water Disposal Well Pardue 31 Com #1 in Eddy County, New Mexico. Enclosed herein as well is all necessary supporting documentation. One (1) original and one (1) copy were also sent to the attention of the New Mexico Oil Conservation Division's Santa Fe office. Should you have any questions or concerns, please feel free to contact me using the information found at the top of this letter. Thank you in advance for your consideration.

Sincerely,

Preston M. Stein
Vice President
Delaware Energy, LLC

Delaware Energy, LLC

Application for Injection/SWD

Pardue 31 Com #1, API # 30-015-10842

UL N, Sec. 31, T-23-S, R-28-E, 990' FSL & 1980' FWL, Eddy Co., NM

March 30, 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? ____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).

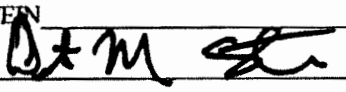
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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:  DATE: ___3/30/2016_____

E-MAIL ADDRESS: ____PRESTONMS@GMAIL.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: _____

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

Side 2

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

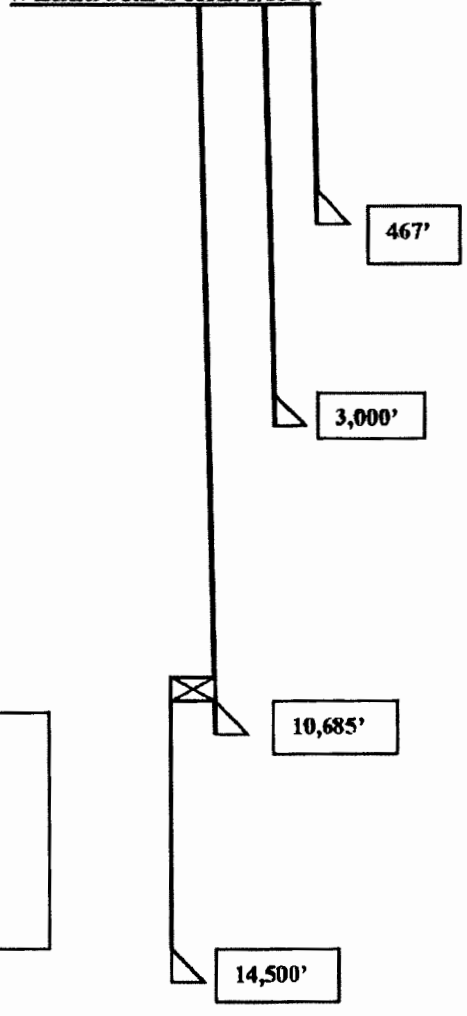
INJECTION WELL DATA SHEET

OPERATOR: DELAWARE ENERGY, LLC

WELL NAME & NUMBER: PARDUE 31 COM #1 API 30-015-10842

WELL LOCATION:	990' FSL, 1980' FWL	N	31	23S	28E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



** PROPOSED

5" 15# L80 liner flush joint, 6.15" hole, cement to top of liner w/ 175 sacks, Top of liner is 10,600'

WELL CONSTRUCTION DATA

Surface Casing

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

Cemented with: 400 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

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

Cemented with: 1900 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

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

Cemented with: 1150 sx. *or* _____ ft³

Top of Cement: 1600' Method Determined: _____

Total Depth: SURFACE

Injection Interval

13,650 feet to 14,500

PERFORATED

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3.5", 9.3# J-55 Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection Packer

Packer Setting Depth: 50ft above top perf

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? MORROW GAS TEST

   TD 12,770 VERTICAL WELL

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.

   NO PERFORATIONS OR CIBP.
   CEMENT PLUGS: 12,551 -12,420; 10,753 – 10,622, 3,050 – 2,930; 2,795 – 2,676'; 188-69'

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

   ABOVE: DELAWARE 5600', BONE SPRING 8000, WOLFCAMP 9,100 -10,970, ATOKA 11,100; MORROW 12,200

   BELOW: NONE

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 BWPD, Max 15,000 BWPD

2. **Whether the system is open or closed;**
   Open System

3. **Proposed average and maximum injection pressure;**
   Average 4000-100 PSIG, Max 2,730 PSIG

4. **Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,**
   Bone Spring, Wolfcamp, and Delaware produced water. Water is compatible; Devonian is used as disposal interval throughout the Delaware Basin for Wolfcamp and Bone Springs produced water. No incompatibility exists.

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 is barren and does not produce.

***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 the Devonian formation. Injection interval consists of dolomite. The top of the Devonian formation is at a depth of 13,650' TVD at the base of the Woodford Shale. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the top of the Rustler at 193', the water source is older alluvium (quaternary).

IX. Describe the proposed stimulation program, if any.

20,000 gallons 15% HCL acid job with packer

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, LLC has reviewed and examined available geologic and engineering data in the area of interest for the Pardue 31 Com #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.

Preston Stein

III. WELL DATA

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

Pardue 31 Com #1, UL N Sec. 31-T23S-R27E, 990' FSL & 1980' FWL, 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"	467'	400	17-1/2"	Surface	Circulated
9-5/8"	3,000'	1,900	12-1/4"	Surface	Circulated
7"	10,700'	1,050	8-3/4"	1,600	
*5"	10,600-14,500	175	6.125"	10,600	circulate

***proposed**

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

3-1/2" or 2-7/8" OD, Internally Plastic Coated Tubing set @ 13,600'

(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

Set within 50-100 feet above top Devonian perforations

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

Pool Name: SWD (Devonian)

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

13,650' to 14,500' (Perforated)

(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.

(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.

No perforated intervals. Cement plugs at 12,420'-12,551; 10,622'-10,753'; 2,930'-3,050', 69'-188'

(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 +/-12,200 / Next Lower: None

Martin Water Laboratories, Inc.

Analysts & Consultants since 1953
Bacterial & Chemical Analysis

TO:	Preston Stein	LABORATORY NO.	16-03-76
ADDRESS:	3001 W. Loop 250 N. Suite C-105-318 Midland T	SAMPLE RECEIVED:	3/4/16
COMPANY:	Delaware Energy, LLC	RESULTS REPORTED:	3/7/16
LEASE:	Vicky	COUNTY, STATE:	
FORMATION:		FIELD OR POOL:	

DESCRIPTION OF SAMPLES

No. 1 Submitted water sample - taken 03/03/16 from Vicky

Chemical and Physical Properties (milligrams per liter)	No. 1
Specific Gravity @ 60°F.	1.0055
pH When Received	7.80
Bicarbonate as HCO_3	134
Total Hardness, as CaC03	2,150
Calcium, as Ca	700
Magnesium, as Mg	97
Sodium and/or Potassium	119
Sulfate, as SO4	1,497
Chloride, as Cl	525
Iron, as Fe	16
Barium, as Ba	0
Total Dissolved Solids, Calculated	3,072
Hydrogen Sulfide	0.00
Resistivity, ohms/m @ 77°F.	2.420

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819
Remit to Address: P.O. Box 98, Midland, Texas 79702

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Impact Chemical***

Lab Ref #:	15-apr-w68267	Sample Temp:	70
Formation:	Bone Springs	Date Sampled:	4/10/2015
Location:		Sampled by:	Sherry Hogue
Date Run:	4/21/2015	Analyzed by:	GR

			Mg/L	Eq. Wt.	MEq/L
		Dissolved Gases			
Hydrogen Sulfide	(H2S)		3.40	16.00	.21
Carbon Dioxide	(CO2)		230.00	22.00	10.45
Dissolved Oxygen	(O2)	**NOT ANALYZED**			
		Cations			
Calcium	(Ca++)		10,886.16	20.10	541.60
Magnesium	(Mg++)		1,742.16	12.20	142.80
Sodium	(Na+)		56,575.73	23.00	2,459.81
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		1.53	27.50	.06
Strontium	(Sr++)	**NOT ANALYZED**			
		Anions			
Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		146.64	61.10	2.40
Sulfate	(SO4=)		320.00	48.80	6.56
Chloride	(Cl-)		111,021.99	35.50	3,127.38
Total Iron	(Fe)		46.91	18.60	2.52
Total Dissolved Solids			180,974.52		
Total Hardness as CaCO3			34,358.26		
Conductivity MICROMHOS/CM			209,000		

pH 5.200 Specific Gravity 60/60 F. 1.126

CaSO4 Solubility @ 80 F. 21.88MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-.704	100.0	-.304	130.0	.446
80.0	-.604	110.0	.016	140.0	.446
90.0	-.304	120.0	.016	150.0	.876

Formation: Delaware

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	Mosaic 34 Federal 1
Source :	WH	Date Sampled:	May 7, 2015
Number :	43546	Account Manager:	David Garcia
County:		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	5.74				
2. Specific Gravity 60/60 F	1.212				
3. Hydrogen Sulfide	3.4	PPM			
4. Carbon Dioxide	720.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	49	/	61.1	=	0.80
9. Chloride (Cl)	179,959	/	35.5	=	5,069.27
10. Sulfate (SO_4^{-2})	140	/	48.8	=	2.87
11. Calcium (Ca^{+2})	28,720	/	20.1	=	1,428.86
12. Magnesium (Mg^{+2})	4,529	/	12.2	=	371.23
13. Sodium (Na^+)	75,276	/	23.0	=	3,272.85
14. Barium (Ba^{+2})	1.75				
15. Total Iron (Fe)	18.01				
16. Manganese	9.55				
17. Strontium	1,105.00				
18. Total Dissolved Solids	289,808				
19. Resistivity @ 75 °F (calculated)	0.027	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.9400
@ 100 °F	-0.6360
@ 120 °F	-0.3760
@ 140 °F	-0.0160
@ 160 °F	0.3310

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.4092
@ 90 °F	0.5418
@ 110 °F	0.3990
@ 130 °F	0.3896
@ 150 °F	0.3893

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		0.80	65
$CaSO_4$	68.07		2.87	195
$CaCl_2$	55.50		1,425.19	79,098
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		371.23	17,678
$NaHCO_3$	84.00		0.00	0
Na_2SO_4	71.03		0.00	0
NaCl	58.46		3,272.85	191,331

Analyst: Tamara Davault Date: May 8, 2015

Formation: Wolfcamp

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	
Source :	Wellhead	Date Sampled:	July 15, 2015
Number :	45813	Account Manager:	David Garcia
County		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	6.70				
2. Specific Gravity 60/60 F	1.067				
3. Hydrogen Sulfide	10.2	PPM			
4. Carbon Dioxide	120.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	244	/	61.1	=	3.99
9. Chloride (Cl^-)	57,967	/	35.5	=	1,633.44
10. Sulfate (SO_4^{-2})	664	/	48.8	=	13.61
11. Calcium (Ca^{+2})	2,792	/	20.1	=	138.91
12. Magnesium (Mg^{+2})	389	/	12.2	=	31.92
13. Sodium (Na^+)	34,045	/	23.0	=	1,480.21
14. Barium (Ba^{+2})	2.71				
15. Total Iron (Fe)	7.92				
16. Manganese	0.51				
17. Strontium	594.40				
18. Total Dissolved Solids	96,727				
19. Resistivity @ 75 °F (calculated)	0.082	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.3041
@ 100 °F	0.0059
@ 120 °F	0.2659
@ 140 °F	0.6259
@ 160 °F	0.9759

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.2391
@ 90 °F	0.2384
@ 110 °F	0.2406
@ 130 °F	0.2438
@ 150 °F	0.2469

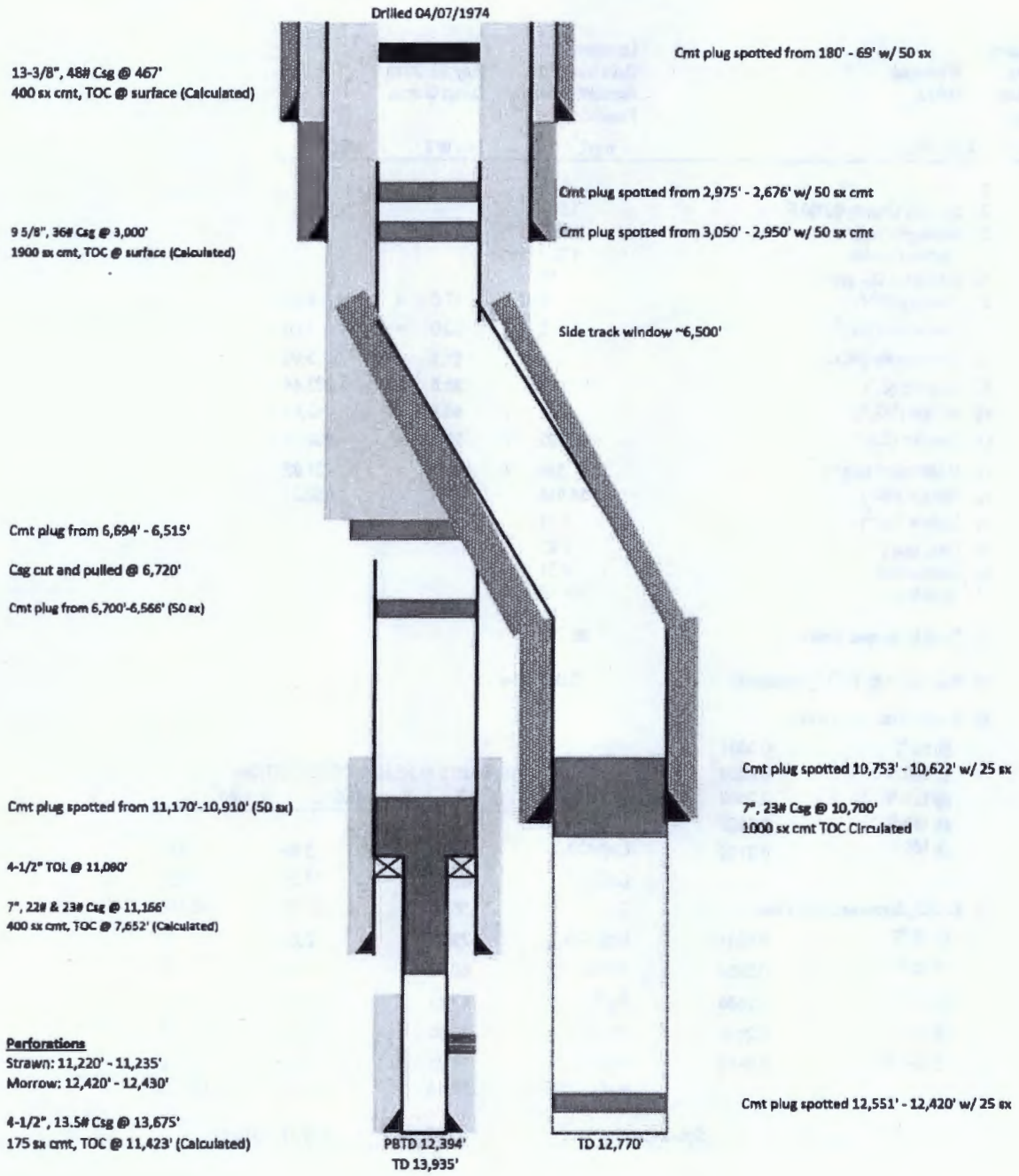
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		3.99	323
$CaSO_4$	68.07		13.61	926
$CaCl_2$	55.50		121.31	6,733
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		31.92	1,520
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		1,480.21	86,533

Analyst: Sylvia Garcia Date: July 17, 2015

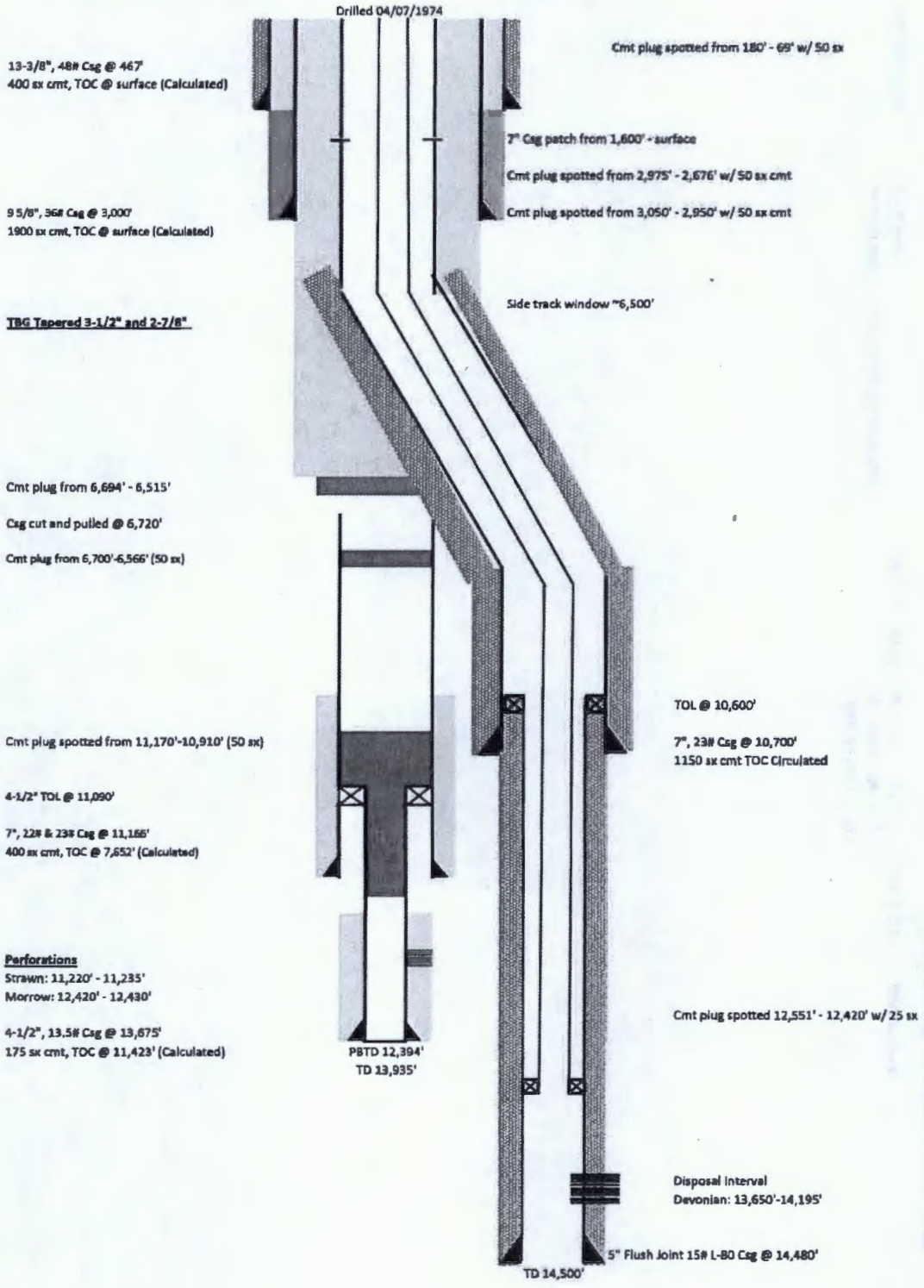
Delaware Energy LLC.

Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10842



Delaware Energy LLC.

Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10642



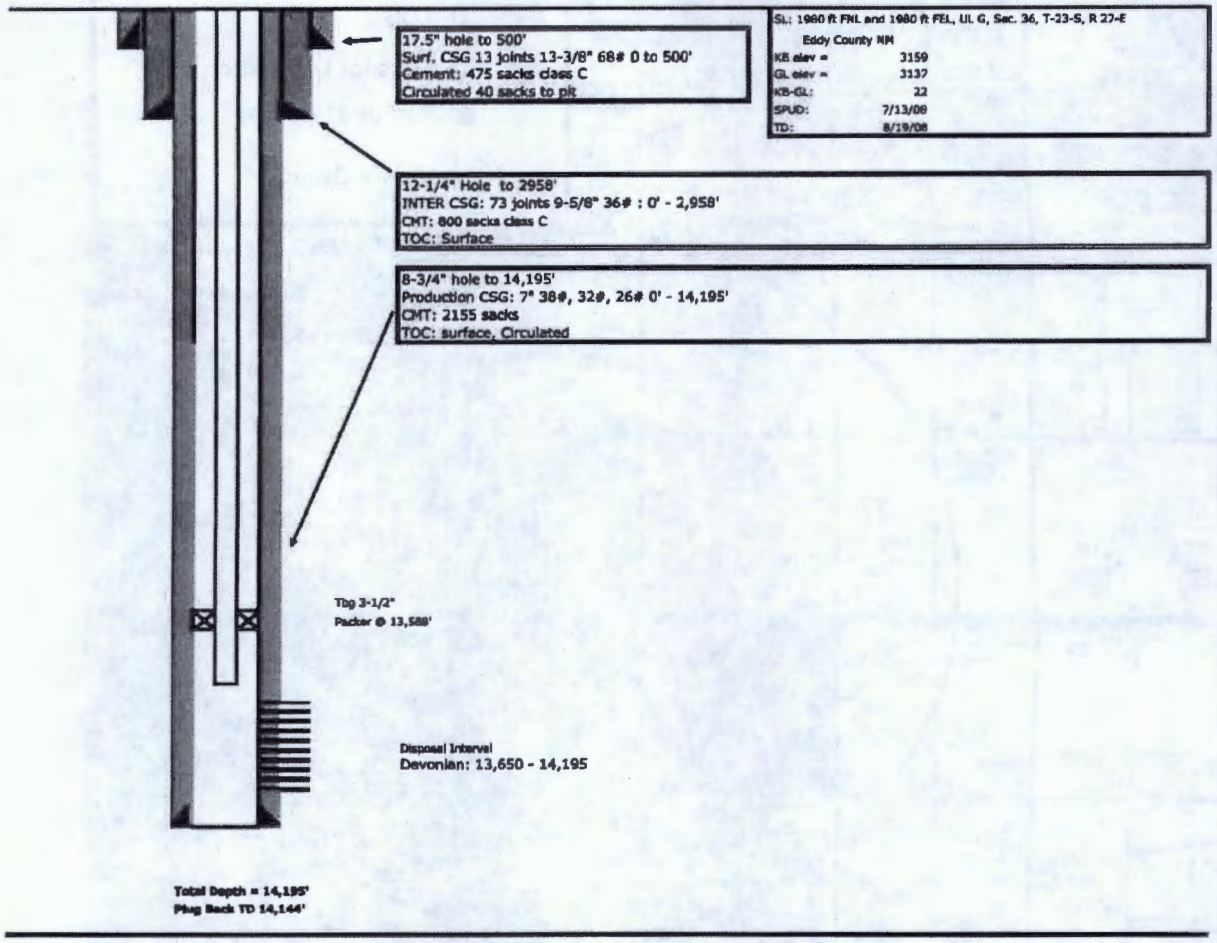
WELLS INSIDE AREA REVIEW OF Pardue 31 Com #1

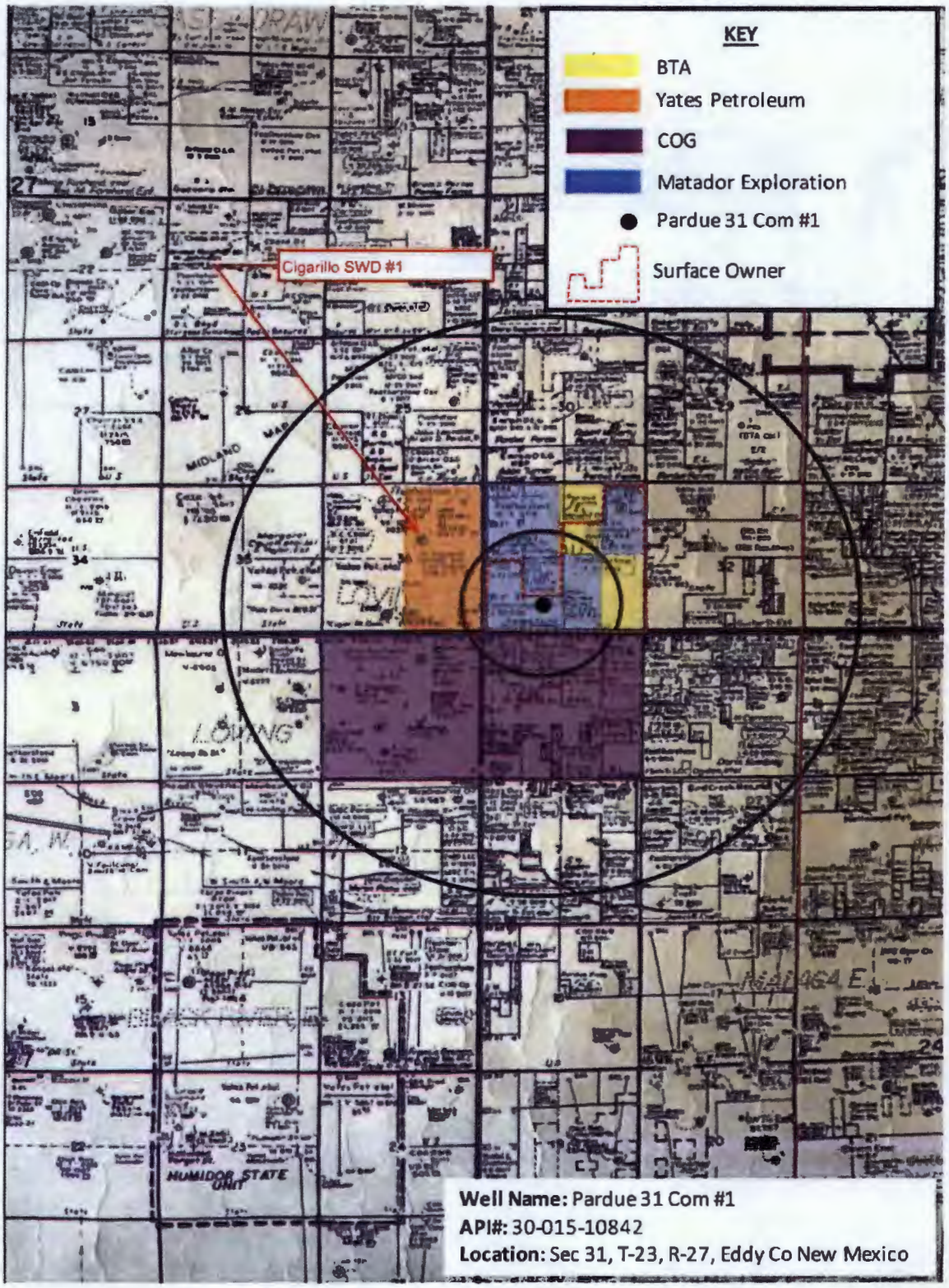
**** no wells exist inside 1/2 mile radius, one well inside 2 mile radius penetrates the Devonian Formation**

Well	Type	Date drill	Location	Depth	Completion	Status	
Cigarillo SWD #1	Vertical SWD	7/13/2008	T-23-S, R-27-E, Sec 36 1980' FNL, 1980' FEL UL G, Eddy Co. NM	14,195' MD/TVD	Devonian 13,650-14,130'	Active SWD see diagram	Yates Petroleum

Cigarillo SWD #1
Wellbore Diagram
Devonian
Eddy County NM
API # 30-015-21643

As Drilled 08/19/2008




KEY
BTA
Yates Petroleum
COG
Matador Exploration
Pardue 31 Com #1
Surface Owner
Cigarillo SWD #1
MIDLAND
LOVING
HUMIDOR STATE
Well Name: Pardue 31 Com #1
API#: 30-015-10842
Location: Sec 31, T-23, R-27, Eddy Co New Mexico

DELAWARE ENERGY, L.L.C.

March 30, 2016

Surface Owner / Offset Operators

Re: Notification of Application for Authorization to Inject
Pardue 31 Com #1 SWD Well

Ladies and Gentlemen:

Delaware Energy, LLC is seeking administrative approval to utilize the Pardue 31 Com #1 (API – 30-015-10842) 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.

Well:	Pardue 31 Com #1
Proposed Disposal Zone:	Devonian Formation (from 13,650'- 14,500')
Location:	990' FSL & 1980' FWL, Sec. 31, T23S, R2[redacted]E, Eddy Co., NM
Applicants Name:	Delaware Energy, LLC
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. Delaware Energy can be reached at 214-558-1371

Sincerely,

Preston Stein

DISTRIBUTION LIST

Surface Owner Sec 31, T-23, R-28
Vickie Connally
211 R Ash Rd
Loving, NM 88256

Sec 36, T-23, R-27
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210

Sec 1, T-24, R-27 / Sec 6, T-24, R-28
COG Operating LLC
600 W. Illinois Ave.
Midland, TX 79701

Sec 31, T-23, R-28
Matador Resources
5400 Lyndon B Johnson Fwy #1500
Dallas, TX 75240

Sec 31, T-23, R-28
BTA Oil Producers, LLC
104 S. Pecos St
Midland, TX 79701

Pardue 31 Com #1

Formation Tops

Rustler	375
Base Salt, T/ Lamar lime	2,300'
Delaware Mountain Group / Bell Canyon	2,350'
Bone Spring Lime	5,900'
Wolfcamp	9,200'
Atoka	11,400'
Morrow	11,900
Mississippi	13,225
Woodford Shale	13,550
Devonian	13,650

NO. OF COPIES RECEIVED	5	
DISTRIBUTION		
SANTA FE	1	
FILE	1	
U.S.G.S.	2	
LAND OFFICE		
OPERATOR		

Bur. of Mines

Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State ☐ Fee ☒

5. State Oil & Gas Lease No.

RECEIVED
FEB 9 1967
O. C. C.
ARTESIA, OFFICE

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name

8. Farm or Lease Name: Pardue

9. Well No.: 1

2. Name of Operator: Mobil Oil Corporation

3. Address of Operator: P. O. Box 633, Midland, Texas 79701

10. Field and Pool, or Wildcat: Wildcat

4. Location of Well: UNIT LETTER N LOCATED 990 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM

12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR etc.)	19. Elev. Cashinghead
6-25-66	12-2-66	P & A	3095.2	3095.2 GR

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
13,935	12,394	No	→	X	

24. Producing Interval(s), of this completion — Top, Bottom, Name: P & A

25. Was Directional Survey Made: Yes

26. Type Electric and Other Logs Run: Schlumberger-GR-Caliper-Microlog & Sonic-Composite Resistivity

27. Was Well Cored: Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	467'	17-1/2"	Cmt. W/400 sx.Incor Neat	0
9-5/8"	36#	3,000'	12-1/4"	Cmt.W/1900 sx.IncorNeat	0
7"	23-26#	11,166'	8-3/4"	Cmt.W/400 sx. T.Inferno	145 jts.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4-1/2"	11,009'	13,675'	175	

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number)
12,420-12,430 - Morrow
11,220-11,235 - Strawn

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
12,420 to 12,430	1,000 gals 15% NE Acid
11,220 to 11,235	2,500 gals 15% NE Acid
11,220 to 11,235	reacidize w/10,000 gals.CRA Acid

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
Drilled Dry		

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED John J. Hurst TITLE Authorized Agent DATE January 18, 1967

T. Anhy	T.	T.	T.
T.	T.	T.	T.
T. Salt	T.	T.	T.
B. Salt	T.	T.	T.
T. Yates	T.	T.	T.
T. 7 Rivers	T.	T.	T.
T. Queen	T.	T.	T. Point Lookout
T. Grayburg	T.	T.	T. Mancos
T. San Andres	T.	T.	T. Gallup
T. Glorieta	T.	T.	Base Greenhorn
T. Paddock	T.	T.	T. Dakota
T. Blinebry	T.	T.	T. Morrison
T. Tubb	T.	T.	T. Todilto
T. Drinkard	T.	T.	T. Entrada
T. Abo	T.	T.	T. Wingate
T. Wolfcamp	T.	T.	T. Chinle
T. Penn	T.	T.	T. Permian
T. Cisco (Bough C)	T.	T.	T. Penn. "A"

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	877	877	Potash	9934	9936	3[illegible]	[illegible] Sh.
877	1[illegible]	2[illegible]	Shale, Potash-Lm.Sn.	9333	9439	1[illegible]	[illegible] Lm-Sh.
1[illegible]	1[illegible]	3[illegible]	Anhydrite & Sn.	9439	11144	1685	Lm.-Lime-Shale
1269	1[illegible]	173	Anhydrite & Lime	11144	11152	8	Lm. -Quartzite-Lime
1442	1[illegible]	8[illegible]	Anhydrite & Salt	11152	11245	93	Quartz-Sh.
2092	2[illegible]	2[illegible]	Anhydrite, Lime & Sn.	11245	11482	237	Lime & Chert
2561	3[illegible]	4[illegible]	Lime	11482	11488	66	Lime
3008	3[illegible]	1[illegible]	Sand & Lime	11488	11642	1[illegible]	Lime, Chert
3180	3325	145	Lime Dolomite Sn.	11[illegible]	12332	6[illegible]	Lm. & Shale
3325	4340	1015	Salt, Lime	12332	12792	460	Lime
4340	4404	64	Lime Dolomite Sn.	12792	12[illegible]	14	[illegible]
4404	5105	701	Lm.,Shale & Sn.	12[illegible]	13[illegible]	2[illegible]	[illegible]
5105	5426	321	Sh. & Shale	13[illegible]	13477	3[illegible]	[illegible]
5426	5[illegible]	137	Shale, Dolomite	13477	13[illegible]	[illegible]	Shale-Sh[illegible]
5[illegible]	5[illegible]	2[illegible]	Sh. & Shale	13[illegible]	13[illegible]	1[illegible]	Shale
5745	5927	182	Sh.,Shale & Lime	13766	13955	189	Dolomite - T.D.
5927	5[illegible]	[illegible]	[illegible]				
5955	6[illegible]	7[illegible]	Lime & Shale				
67[illegible]	6[illegible]	2[illegible]	Lime				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				

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OPERATOR		

Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

RECEIVED
SEP 12 1974
O. C. C.
ARTESIA, OFFICE

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ OTHER
b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEPEN ☒ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER P&A

7. Unit Agreement Name:
8. Farm or Lease Name: Pardue 31 Com.
9. Well No.: 1
10. Field and Pool, or Wildcat: Wildcat

2. Name of Operator: HNG Oil Company
3. Address of Operator: P. O. Box 2267, Midland, Texas 79701
4. Location of Well: UNIT LETTER N LOCATED 990 FEET FROM THE south LINE AND 1980 FEET FROM THE west LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM
12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
2-18-74	3-13-74	P&A 4-7-74	3095.2 GR	

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
12,770'			→	0-12,770'	

24. Producing Interval(s), of this completion — Top, Bottom, Name: None
25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: Comp. Neutron - Formation Density
27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8" *	48#	400	17-1/2"	Circ	None
9-5/8" *	36#	3000	12-1/4"	Circ	None
7"	23#	10,685	8-3/4"	1150 sks Trinity Lt. Wt. 1600'	

* Left in hole by Mobil Oil Corp.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
None		None

31. Perforation Record (Interval, size and number): None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
None	

plugged 9-20-74

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
None		P&A

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.):
Test Witnessed By:

35. List of Attachments: Copy of Elect. Log & copies of DST #1 & #2

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED R. R. Frazier TITLE Petroleum Engineer DATE 9/11/74

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	11,208	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	11,590	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. ~~Miss~~ Morrow	12,270	T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand		T. Entrada		T.	
T. Abo		T. Bone Springs		T. Wingate		T.	
T. Wolfcamp		T.		T. Chinle		T.	
T. Penn.		T.		T. Permian		T.	
T Cisco (Bough C)		T.		T. Penn. "A"		T.	

SEE ORIGINAL HOLE (MOBIL PARDUE FOR UPHOLE TOPS)

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
6012	8910	2898	Bone Springs				
8910	11208	2298	Wolfcamp				
11208	11590	382	Strawn				
11590	12270	680	Atoka				
12270	12770	500	Morrow				

RECEIVED

SEP 18 1974

O. C. C.
ARTESIA, OFFICE

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NEW MEXICO OIL CONSERVATION COMMISSION

APR 1 1 1974

O. C. C.
ARTESIA, OFFICE

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

5a. Indicate Type of Lease
State ☐ Fee ☒

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☒ OTHER- **Re-enter**

7. Unit Agreement Name

2. Name of Operator
HNG Oil Company

8. Farm or Lease Name
Pardue 31 Comm

3. Address of Operator
P. O. Box 767, Midland, Texas 79701

9. Well No.
1

4. Location of Well
UNIT LETTER **N** , **990** FEET FROM THE **south** LINE AND **1980** FEET FROM THE **west** LINE, SECTION **31** TOWNSHIP **23S** RANGE **28E** NMPM.

10. Field and Pool, or Wildcat
Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*
3095.2 GR

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 ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

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

4-7-74 - Pulled approx. 1600' of 7" casing.
1) 12,551 to 12,420 25 sks Class H cement
10,753 to 10,622 25 sks Class H cement
3,050 to 2,930 50 sks Class H cement
2,795 to 2,676 50 sks Class H cement
188 to 69' 50 sks Class H cement
Weld plate at surface.

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

SIGNED R R Frazier R. R. Frazier TITLE Petroleum Engineer DATE 4-10-74

APPROVED BY Leslie Clements TITLE OIL AND GAS INSPECTOR DATE SEP 18 1974

CONDITIONS OF APPROVAL, IF ANY:

Delaware Energy, LLC
3001 W. Loop 250 North, Suite C-105-318
Midland, TX 79705
(214) 558-1371
prestonms@gmail.com
March 31, 2016

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

Dear New Mexico Oil Conservation Division:

Enclosed please find one (1) original and one (1) copy of Delaware Energy's Application for Salt Water Disposal Well Pardue 31 Com #1 in Eddy County, New Mexico. Enclosed herein as well is all necessary supporting documentation. Should you have any questions or concerns, please feel free to contact me using the information found at the top of this letter. Thank you in advance for your consideration.

Sincerely,

Preston M. Stein
Vice President
Delaware Energy, LLC

Delaware Energy, LLC

Application for Injection/SWD

Pardue 31 Com #1, API # 30-015-10842

UL N, Sec. 31, T-23-S, R-28-E, 990' FSL & 1980' FWL, Eddy Co., NM

March 30, 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? ____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).

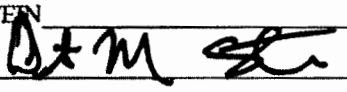
*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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:  DATE: ___3/30/2016_____

E-MAIL ADDRESS: ____PRESTONMS@GMAIL.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: _____

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

Side 2

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

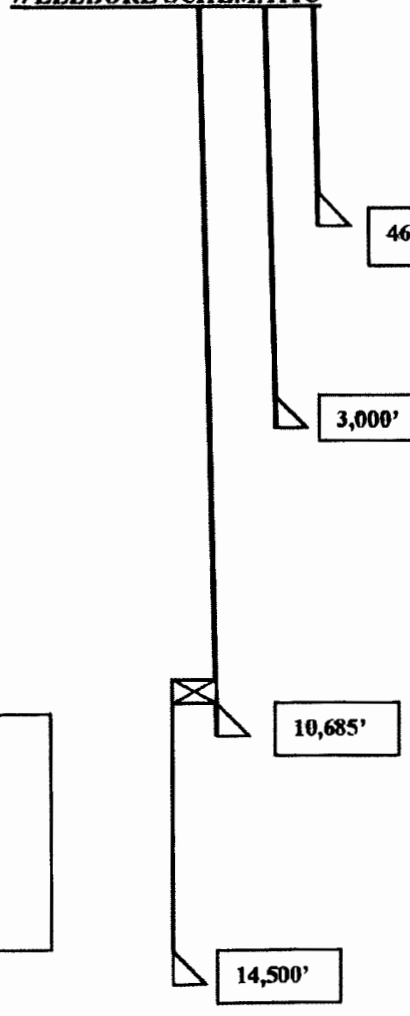
INJECTION WELL DATA SHEET

OPERATOR: DELAWARE ENERGY, LLC

WELL NAME & NUMBER: PARDUE 31 COM #1 API 30-015-10842

WELL LOCATION:	990' FSL, 1980' FWL	N	31	23S	28E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



** PROPOSED

5" 15# L80 liner flush joint, 6.15" hole, cement to top of liner w/ 175 sacks, Top of liner is 10,600'

WELL CONSTRUCTION DATA

Surface Casing

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

Cemented with: 400 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATED

Intermediate Casing

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

Cemented with: 1900 sx. *or* _____ ft³

Top of Cement: SURFACE Method Determined: CIRCULATE

Production Casing

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

Cemented with: 1150 sx. *or* _____ ft³

Top of Cement: 1600' Method Determined: _____

Total Depth: SURFACE

Injection Interval

13,650 feet to 14,500

PERFORATED

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 3.5", 9.3# J-55 Lining Material: Internally plastic coated

Type of Packer: Weatherford Arrow Set 1X Injection Packer

Packer Setting Depth: 50ft above top perf

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? MORROW GAS TEST

   TD 12,770 VERTICAL WELL

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.

   NO PERFORATIONS OR CIBP.
   CEMENT PLUGS: 12,551 -12,420; 10,753 – 10,622, 3,050 – 2,930; 2,795 – 2,676'; 188-69'

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

   ABOVE: DELAWARE 5600', BONE SPRING 8000, WOLFCAMP 9,100 -10,970, ATOKA 11,100; MORROW 12,200

   BELOW: NONE

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 BWPD, Max 15,000 BWPD

2. **Whether the system is open or closed;**
   Open System

3. **Proposed average and maximum injection pressure;**
   Average 4000-100 PSIG, Max 2,730 PSIG

4. **Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,**
   Bone Spring, Wolfcamp, and Delaware produced water. Water is compatible; Devonian is used as disposal interval throughout the Delaware Basin for Wolfcamp and Bone Springs produced water. No incompatibility exists.

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 is barren and does not produce.

***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 the Devonian formation. Injection interval consists of dolomite. The top of the Devonian formation is at a depth of 13,650' TVD at the base of the Woodford Shale. There are no fresh water zones underlying the proposed injection zone. Usable water depth is from surface to the top of the Rustler at 193', the water source is older alluvium (quaternary).

IX. Describe the proposed stimulation program, if any.

20,000 gallons 15% HCL acid job with packer

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, LLC has reviewed and examined available geologic and engineering data in the area of interest for the Pardue 31 Com #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.

Preston Stein

III. WELL DATA

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

Pardue 31 Com #1, UL N Sec. 31-T23S-R27E, 990' FSL & 1980' FWL, 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"	467'	400	17-1/2"	Surface	Circulated
9-5/8"	3,000'	1,900	12-1/4"	Surface	Circulated
7"	10,700'	1,050	8-3/4"	1,600	
*5"	10,600-14,500	175	6.125"	10,600	circulate

***proposed**

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

3-1/2" or 2-7/8" OD, Internally Plastic Coated Tubing set @ 13,600'

(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

Set within 50-100 feet above top Devonian perforations

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

Pool Name: SWD (Devonian)

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

13,650' to 14,500' (Perforated)

(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.

(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.

No perforated intervals. Cement plugs at 12,420'-12,551; 10,622'-10,753'; 2,930'-3,050', 69'-188'

(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 +/-12,200 / Next Lower: None

Martin Water Laboratories, Inc.

Analysts & Consultants since 1953
Bacterial & Chemical Analysis

TO:	Preston Stein	LABORATORY NO.	16-03-76
ADDRESS:	3001 W. Loop 250 N. Suite C-105-318 Midland T	SAMPLE RECEIVED:	3/4/16
COMPANY:	Delaware Energy, LLC	RESULTS REPORTED:	3/7/16
LEASE:	Vicky	COUNTY, STATE:	
FORMATION:		FIELD OR POOL:	

DESCRIPTION OF SAMPLES

No. 1 Submitted water sample - taken 03/03/16 from Vicky

Chemical and Physical Properties (milligrams per liter)	No. 1
Specific Gravity @ 60°F.	1.0055
pH When Received	7.80
Bicarbonate as HCO_3	134
Total Hardness, as CaC03	2,150
Calcium, as Ca	700
Magnesium, as Mg	97
Sodium and/or Potassium	119
Sulfate, as SO4	1,497
Chloride, as Cl	525
Iron, as Fe	16
Barium, as Ba	0
Total Dissolved Solids, Calculated	3,072
Hydrogen Sulfide	0.00
Resistivity, ohms/m @ 77°F.	2.420

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819
Remit to Address: P.O. Box 98, Midland, Texas 79702

MITCHELL ANALYTICAL LABORATORY

2638 Faudree
Odessa, Texas 79765-8538
561-5579

Company: ***Impact Chemical***

Lab Ref #:	15-apr-w68267	Sample Temp:	70
Formation:	Bone Springs	Date Sampled:	4/10/2015
Location:		Sampled by:	Sherry Hogue
Date Run:	4/21/2015	Analyzed by:	GR

			Mg/L	Eq. Wt.	MEq/L
		Dissolved Gases			
Hydrogen Sulfide	(H2S)		3.40	16.00	.21
Carbon Dioxide	(CO2)		230.00	22.00	10.45
Dissolved Oxygen	(O2)	**NOT ANALYZED**			
		Cations			
Calcium	(Ca++)		10,886.16	20.10	541.60
Magnesium	(Mg++)		1,742.16	12.20	142.80
Sodium	(Na+)		56,575.73	23.00	2,459.81
Barium	(Ba++)	**NOT ANALYZED**			
Manganese	(Mn+)		1.53	27.50	.06
Strontium	(Sr++)	**NOT ANALYZED**			
		Anions			
Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		146.64	61.10	2.40
Sulfate	(SO4=)		320.00	48.80	6.56
Chloride	(Cl-)		111,021.99	35.50	3,127.38
Total Iron	(Fe)		46.91	18.60	2.52
Total Dissolved Solids			180,974.52		
Total Hardness as CaCO3			34,358.26		
Conductivity MICROMHOS/CM			209,000		

pH 5.200 Specific Gravity 60/60 F. 1.126

CaSO4 Solubility @ 80 F. 21.88MEq/L, CaSO4 scale is unlikely

CaCO3 Scale Index

70.0	-.704	100.0	-.304	130.0	.446
80.0	-.604	110.0	.016	140.0	.446
90.0	-.304	120.0	.016	150.0	.876

Impact Chemical

Formation: Delaware

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	Mosaic 34 Federal 1
Source :	WH	Date Sampled:	May 7, 2015
Number :	43546	Account Manager:	David Garcia
County:		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	5.74				
2. Specific Gravity 60/60 F	1.212				
3. Hydrogen Sulfide	3.4	PPM			
4. Carbon Dioxide	720.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	49	/	61.1	=	0.80
9. Chloride (Cl^-)	179,959	/	35.5	=	5,069.27
10. Sulfate (SO_4^{-2})	140	/	48.8	=	2.87
11. Calcium (Ca^{+2})	28,720	/	20.1	=	1,428.86
12. Magnesium (Mg^{+2})	4,529	/	12.2	=	371.23
13. Sodium (Na^+)	75,276	/	23.0	=	3,272.85
14. Barium (Ba^{+2})	1.75				
15. Total Iron (Fe)	18.81				
16. Manganese	9.55				
17. Strontium	1,105.00				
18. Total Dissolved Solids	289,808				
19. Resistivity @ 75 °F (calculated)	0.027	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.9490
@ 100 °F	-0.6390
@ 120 °F	-0.3790
@ 140 °F	-0.0190
@ 160 °F	0.3310

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.4092
@ 90 °F	0.5418
@ 110 °F	0.3990
@ 130 °F	0.3896
@ 150 °F	0.3893

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		0.80	65
$CaSO_4$	68.07		2.87	195
$CaCl_2$	55.50		1,425.19	79,098
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		371.23	17,678
$NaHCO_3$	84.00		0.00	0
Na_2SO_4	71.03		0.00	0
NaCl	58.46		3,272.85	191,331

Analyst: Tamara Davault Date: May 8, 2015

Formation: Wolfcamp

Impact Water Analysis Analytical Report

IMPACT!

Company:		Location:	
Source :	Wellhead	Date Sampled:	July 15, 2015
Number :	45813	Account Manager:	David Garcia
County		Foreman:	

ANALYSIS	mg/L		EQ. WT.		MEQ/L
1. pH	6.70				
2. Specific Gravity 60/60 F	1.067				
3. Hydrogen Sulfide	10.2	PPM			
4. Carbon Dioxide	120.0	PPM			
5. Dissolved Oxygen	ND				
6. Hydroxyl (OH^-)	0	/	17.0	=	0.00
7. Carbonate (CO_3^{-2})	0	/	30.0	=	0.00
8. Bicarbonate (HCO_3^-)	244	/	61.1	=	3.99
9. Chloride (Cl^-)	57,987	/	35.5	=	1,633.44
10. Sulfate (SO_4^{-2})	664	/	48.8	=	13.61
11. Calcium (Ca^{+2})	2,792	/	20.1	=	138.91
12. Magnesium (Mg^{+2})	389	/	12.2	=	31.92
13. Sodium (Na^+)	34,045	/	23.0	=	1,480.21
14. Barium (Ba^{+2})	2.71				
15. Total Iron (Fe)	7.92				
16. Manganese	0.51				
17. Strontium	594.40				
18. Total Dissolved Solids	96,727				
19. Resistivity @ 75 °F (calculated)	0.062	Ω-m			

20. $CaCO_3$ Saturation Index

@ 80 °F	-0.3041
@ 100 °F	0.0059
@ 120 °F	0.2859
@ 140 °F	0.6259
@ 160 °F	0.9759

21. $CaSO_4$ Supersaturation Ratio

@ 70 °F	0.2391
@ 90 °F	0.2384
@ 110 °F	0.2406
@ 130 °F	0.2438
@ 150 °F	0.2469

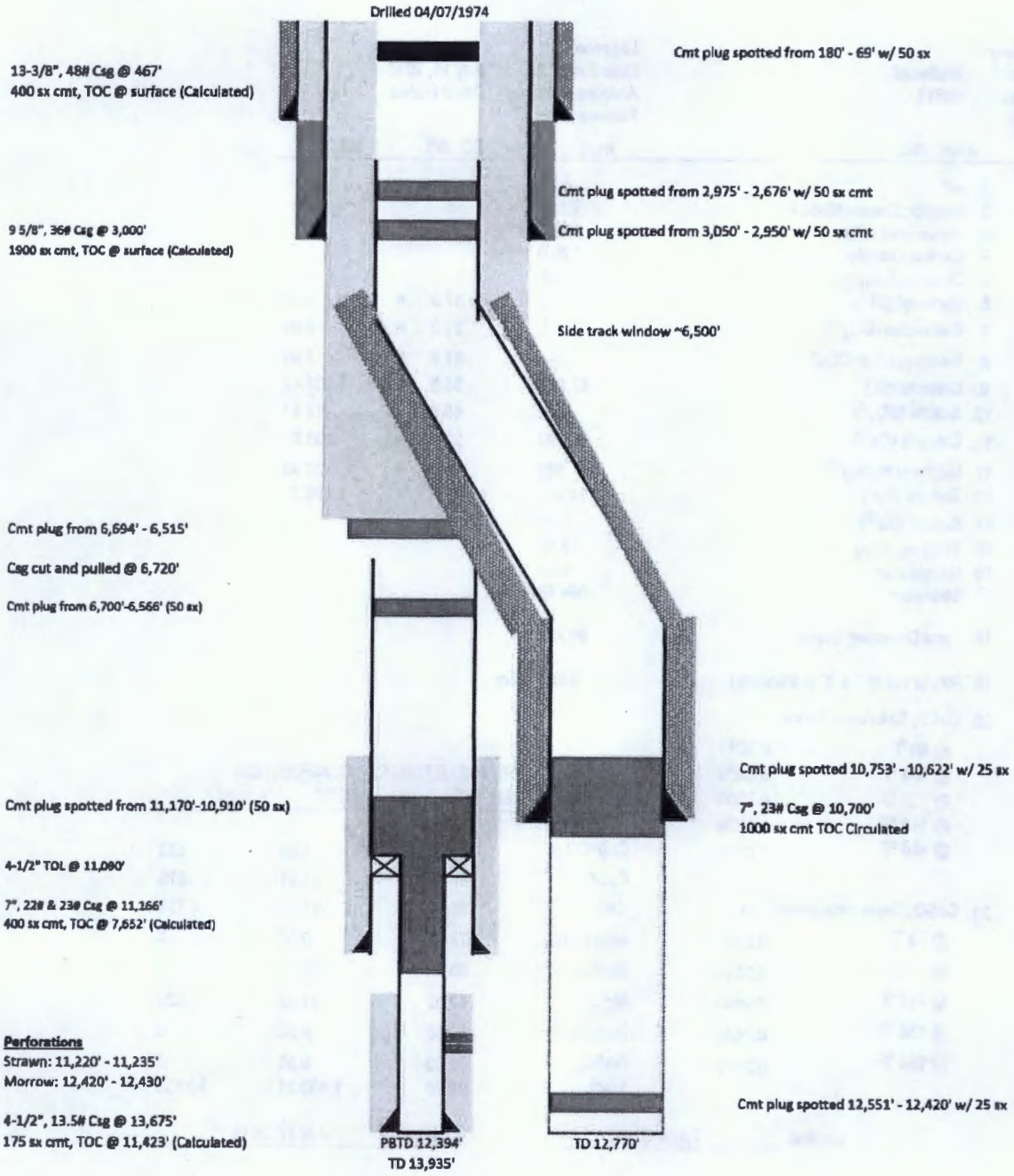
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	MEQ/L	= mg/L
$Ca(HCO_3)_2$	81.04		3.99	323
$CaSO_4$	68.07		13.61	926
$CaCl_2$	55.50		121.31	6,733
$Mg(HCO_3)_2$	73.17		0.00	0
$MgSO_4$	60.19		0.00	0
$MgCl_2$	47.62		31.92	1,520
$NaHCO_3$	84.00		0.00	0
$NaSO_4$	71.03		0.00	0
NaCl	58.46		1,480.21	86,533

Analyst: Sylvia Garcia Date: July 17, 2015

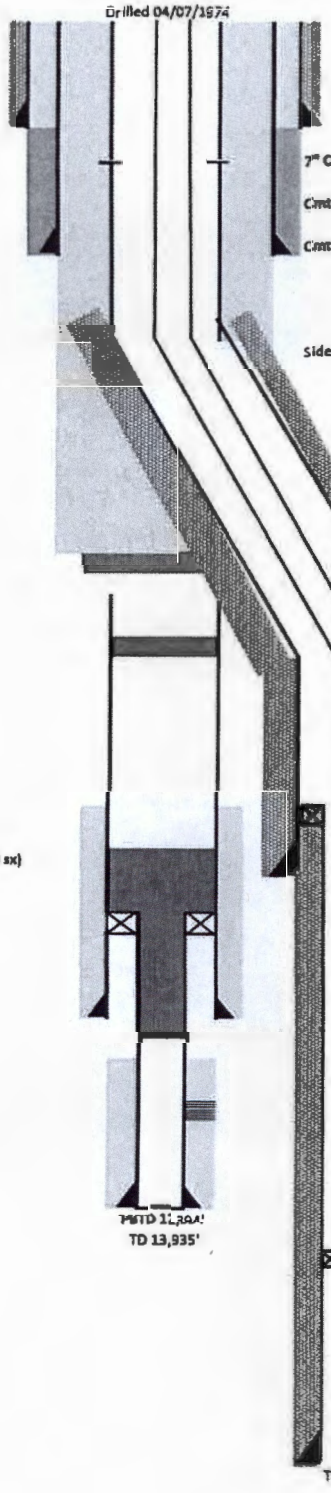
Delaware Energy LLC.

Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10842



Delaware Energy LLC.

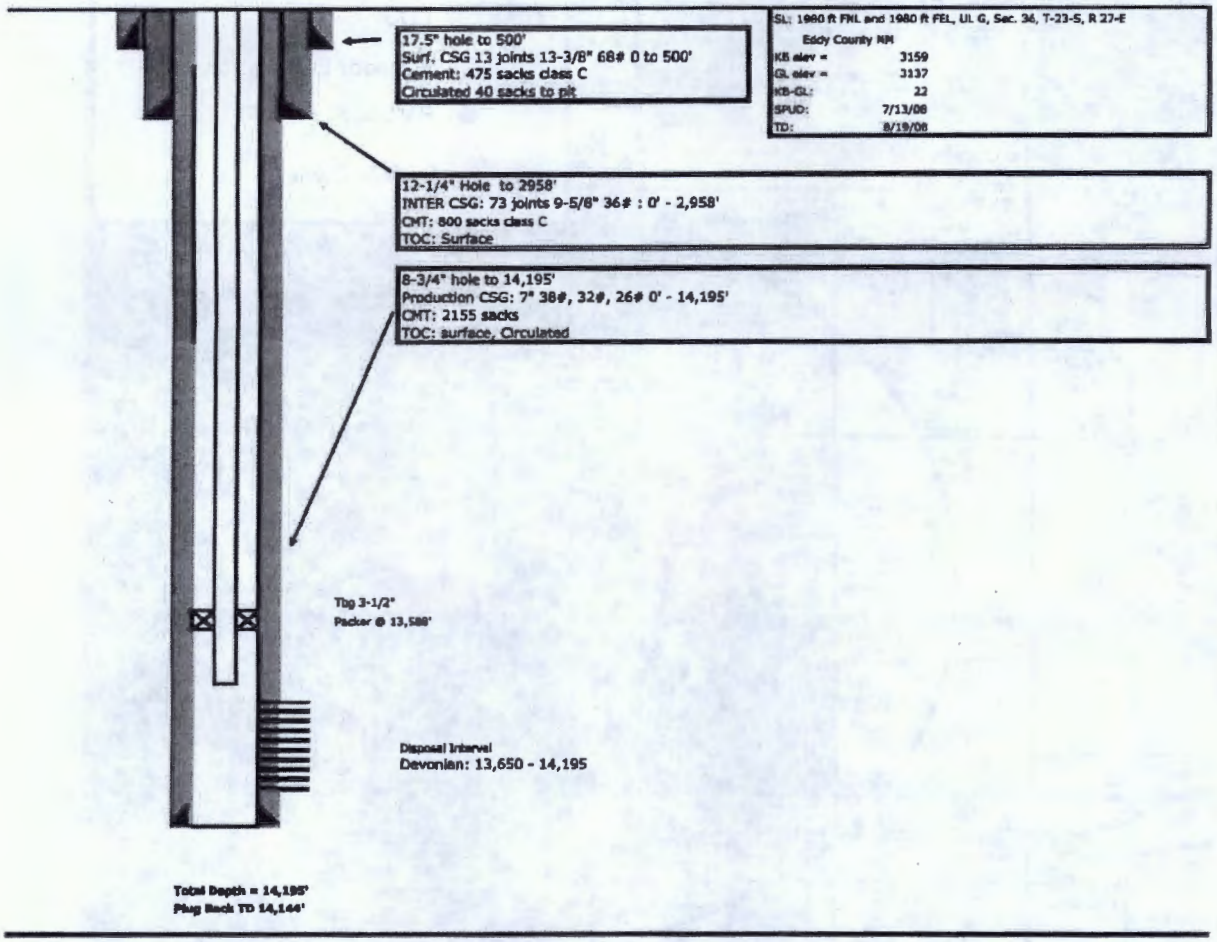
Pardue 31 Com #1
990' FSL & 1980' FWL, UL N, SEC. 31, T23S R28E, Eddy County, NM
API # 30-015-10842



Cigarillo SWD #1
Wellbore Diagram

Devonian
Eddy County NM
API # 30-015-21643

As Drilled 08/19/2008



DELAWARE ENERGY, L.L.C.

March 30, 2016

Surface Owner / Offset Operators

Re: Notification of Application for Authorization to Inject
Pardue 31 Com #1 SWD Well

Ladies and Gentlemen:

Delaware Energy, LLC is seeking administrative approval to utilize the Pardue 31 Com #1 (API – 30-015-10842) 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.

Well:	Pardue 31 Com #1
Proposed Disposal Zone:	Devonian Formation (from 13,650'- 14,500')
Location:	990' FSL & 1980' FWL, Sec. 31, T23S, R28E, Eddy Co., NM
Applicants Name:	Delaware Energy, LLC
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. Delaware Energy can be reached at 214-558-1371

Sincerely,

Preston Stein

DISTRIBUTION LIST

Surface Owner Sec 31, T-23, R-28
Vickie Connally
211 R Ash Rd
Loving, NM 88256

Sec 36, T-23, R-27
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210

Sec 1, T-24, R-27 / Sec 6, T-24, R-28
COG Operating LLC
600 W. Illinois Ave.
Midland, TX 79701

Sec 31, T-23, R-28
Matador Resources
5400 Lyndon B Johnson Fwy #1500
Dallas, TX 75240

Sec 31, T-23, R-28
BTA Oil Producers, LLC
104 S. Pecos St
Midland, TX 79701

Pardue 31 Com #1

Formation Tops

Rustler	375
Base Salt, T/ Lamar lime	2,300'
Delaware Mountain Group / Bell Canyon	2,350'
Bone Spring Lime	5,900'
Wolfcamp	9,200'
Atoka	11,400'
Morrow	11,900
Mississippi	13,225
Woodford Shale	13,550
Devonian	13,650

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Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State ☐ Fee ☒

5. State Oil & Gas Lease No.

RECEIVED
FEB 9 1967
O. C. C.
ARTESIA, NEW MEXICO

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

7. Unit Agreement Name

8. Farm or Lease Name: Pardue

9. Well No.: 1

2. Name of Operator: Mobil Oil Corporation ✓

10. Field and Pool, or Wildcat: Wildcat

3. Address of Operator: P. O. Box 633, Midland, Texas 79701

4. Location of Well: UNIT LETTER N LOCATED 990 FEET FROM THE South LINE AND 1980 FEET FROM THE West LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM

12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR etc.)	19. Elev. Cashinghead
6-25-66	12-2-66	P & A	3095.2	3095.2 GR

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
13,935	12,394	No	→	X	

24. Producing Interval(s), of this completion — Top, Bottom, Name: P & A

25. Was Directional Survey Made: Yes

26. Type Electric and Other Logs Run: Schlumberger-GR-Caliper-Microlog & Sonic-Composite Resistivity

27. Was Well Cored: Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	467'	17-1/2"	Cmt. W/400 sx.Incor Neat	0
9-5/8"	36#	3,000'	12-1/4"	Cmt.W/1900 sx.IncorNeat	0
7"	23-26#	11,166'	8-3/4"	Cmt.W/400 sx. T.Inferno	145 jts.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4-1/2"	11,009'	13,675'	175	

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number)
12,420-12,430 - Morrow
11,220-11,235 - Strawn

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
12,420 to 12,430	1,000 gals 15% NE Acid
11,220 to 11,235	2,500 gals 15% NE Acid
11,220 to 11,235	reacidize w/10,000 gals.CRA Acid

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
Drilled Dry		

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED John J. Hurst TITLE Authorized Agent DATE January 18, 1967

T. Devonian 12,7[illegible]

T. Point Lookout

Base Greenhorn

T. Dakota

T. Morrison

T. Gr. Wash

T. Chinle

T. Permian

T. Penn.

T. Cisco (Bough C)

T. Penn. "A"

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	677	677	Potash	[illegible]	9336	30[illegible]	[illegible] & Sn.
677	[illegible]	2[illegible]5	Shale, Potash-Lm.Sn.	9336	9459	[illegible]	[illegible]-Sn.
[illegible]	[illegible]	[illegible]	Anhydrite & Sn.	9459	11144	1685	Sn.-Lime-Sha.
1269	[illegible]	173	Anhydrite & Lime	11144	[illegible]	[illegible]	[illegible]-Pyrite-Lime
1442	[illegible]	[illegible]	Anhydrite & Salt	[illegible]	11245	[illegible]	[illegible]-Sn.
[illegible]	[illegible]	[illegible]	Anhydrite, Lime & Sn.	11245	[illegible]	[illegible]7	Lime & Chert
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Sand & Lime	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	3325	[illegible]	Lime Dolomite Sn.	[illegible]	[illegible]	[illegible]	[illegible] Shale
3325	[illegible]	[illegible]	Sand, Lime	[illegible]	[illegible]	[illegible]	[illegible]
4340	[illegible]	[illegible]	Lime Dolomite Sn.	[illegible]	[illegible]	[illegible]	[illegible]
4404	5105	[illegible]	Lm., Shale & Sn.	[illegible]	[illegible]	[illegible]	[illegible]
5105	5425	[illegible]	[illegible] & Shale	[illegible]	[illegible]77	[illegible]	[illegible]
5425	[illegible]	[illegible]	Shale, Dolomite	[illegible]77	[illegible]	[illegible]	[illegible]-Chert
[illegible]	5745	[illegible]	Sn. & Shale	[illegible]	[illegible]	[illegible]	Shale
5745	[illegible]	[illegible]	Sn., Shale & Lime	13766	[illegible]	169	Dolomite - T.D.
5927	[illegible]	[illegible]	[illegible]				
5955	[illegible]	[illegible]	Lime & Shale				
[illegible]	[illegible]	[illegible]	Lime				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible] Lime				
[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]				

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Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

RECEIVED
SEP 12 1974
O. C. C.
ARTESIA, OFFICE

5a. Indicate Type of Lease: State ☐ Fee ☒
5. State Oil & Gas Lease No.

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ OTHER
b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEPEN ☒ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER P&A

7. Unit Agreement Name:
8. Farm or Lease Name: Pardue 31 Com.
9. Well No.: 1
10. Field and Pool, or Wildcat: Wildcat

2. Name of Operator: HNG Oil Company
3. Address of Operator: P. O. Box 2267, Midland, Texas 79701
4. Location of Well: UNIT LETTER N LOCATED 990 FEET FROM THE south LINE AND 1980 FEET FROM THE west LINE OF SEC. 31 TWP. 23-S RGE. 28-E NMPM
12. County: Eddy

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
2-18-74	3-13-74	P&A 4-7-74	3095.2 GR	

20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	Rotary Tools	Cable Tools
12,770'			→	0-12,770'	

24. Producing Interval(s), of this completion — Top, Bottom, Name: None
25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: Comp. Neutron - Formation Density
27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8" *	48#	400	17-1/2"	Circ	None
9-5/8" *	36#	3000	12-1/4"	Circ	None
7"	23#	10,685	8-3/4"	1150 sks Trinity Lt. Wt. 1600'	

* Left in hole by Mobil Oil Corp.

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
None		None

31. Perforation Record (Interval, size and number): None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
None	

posted 9-20-74

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
None		P&A

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)
Test Witnessed By

35. List of Attachments: Copy of Elect. Log & copies of DST #1 & #2

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED R. R. Frazier TITLE Petroleum Engineer DATE 9/11/74

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	11,208	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	11,590	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. ~~Miss~~ Morrow	12,270	T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand		T. Entrada		T.	
T. Abo		T. Bone Springs		T. Wingate		T.	
T. Wolfcamp		T.		T. Chinle		T.	
T. Penn.		T.		T. Permian		T.	
T Cisco (Bough C)		T.		T. Penn. "A"		T.	

SEE ORIGINAL HOLE (MOBIL PARDUE FOR UPHOLE TOPS)

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
6012	8910	2898	Bone Springs				
8910	11208	2298	Wolfcamp				
11208	11590	382	Strawn				
11590	12270	680	Atoka				
12270	12770	500	Morrow				

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ARTESIA, OFFICE

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NEW MEXICO OIL CONSERVATION COMMISSION

APR 1 1 1974

O. C. C.
ARTESIA, OFFICE

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

5a. Indicate Type of Lease State ☐ Fee ☒

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☒ OTHER- **Re-enter**

7. Unit Agreement Name

2. Name of Operator
HNG Oil Company

8. Farm or Lease Name
Pardue 31 Comm

3. Address of Operator
P. O. Box 767, Midland, Texas 79701

9. Well No.
1

4. Location of Well
UNIT LETTER **N** , **990** FEET FROM THE **south** LINE AND **1980** FEET FROM THE **west** LINE, SECTION **31** TOWNSHIP **23S** RANGE **28E** NMPM.

10. Field and Pool, or Wildcat
Wildcat

15. Elevation *(Show whether DF, RT, GR, etc.)*
3095.2 GR

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 ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

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

4-7-74 - Pulled approx. 1600' of 7" casing.
1) 12,551 to 12,420 25 sks Class H cement
10,753 to 10,622 25 sks Class H cement
3,050 to 2,930 50 sks Class H cement
2,795 to 2,676 50 sks Class H cement
188 to 69' 50 sks Class H cement
Weld plate at surface.

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

SIGNED R R Frazier R. R. Frazier TITLE Petroleum Engineer DATE 4-10-74

APPROVED BY Leslie Mennis TITLE OIL AND GAS INSPECTOR DATE SEP 18 1974

CONDITIONS OF APPROVAL, IF ANY:

Goetze, Phillip, EMNRD

From: Goetze, Phillip, EMNRD
Sent: Wednesday, April 13, 2016 10:40 AM
To: 'Preston Stein'
Subject: Application Coversheet - Delaware Energy Application for the Pardue 31 Com. No. 1
Attachments: AdminApplicationChecklist20090826.doc; admnapp.pdf

Mr. Stein:

Please complete one version of the attached coversheet and return the completed form as a PDF when possible. Thank you. PRG

Phillip R. Goetze, PG
Engineering and Geological Services Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Direct: 505.476.3466
e-mail: phillip.goetze@state.nm.us

Goetze, Phillip, EMNRD

From: Preston Stein <prestonms@gmail.com>
Sent: Wednesday, April 20, 2016 11:41 AM
To: Goetze, Phillip, EMNRD
Subject: RE: Application Coversheet - Delaware Energy Application for the Pardue 31 Com. No. 1
Attachments: Pardue 31 Com #1 Notices.pdf

Mr. Goetze,

Attached please find proofs of notice and Affidavit of Publication for the subject application.

Best Regards,

Preston Stein
Petroleum Attorney / Landman
(214) 558-1371

From:
Sent: None
To: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Subject: RE: Application Coversheet - Delaware Energy Application for the Pardue 31 Com. No. 1

Mr. Goetze

Attached please find what you requested.

Best Regards,

Preston Stein
Petroleum Attorney / Landman
(214) 558-1371

From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Wednesday, April 13, 2016 11:42 AM
To: Preston Stein <prestonms@gmail.com>
Subject: Application Coversheet - Delaware Energy Application for the Pardue 31 Com. No. 1

Mr. Stein:

Please complete one version of the attached coversheet and return the completed form as a PDF when possible. Thank you. PRG

Phillip R. Goetze, PG
Engineering and Geological Services Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Direct: 505.476.3466
e-mail: phillip.goetze@state.nm.us

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

VICKIE CONNALLY
211 R ASH ROAD
LOVING, NM 88256

[redacted]

9590 9402 1604 5362 5783 60

2. Article Number *(Transfer from service label)*

7015 3010 0000 2212 1546

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X [signature] ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* [illegible] C. Date of Delivery 4/2/16

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

YATES PETROLEUM CORP.
105 S. FOURTH ST.
ARTESIA, NM 88210

[redacted]

9590 9402 1604 5362 5783 53

2. Article Number *(Transfer from service label)*

7015 3010 0000 2212 2253

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X [signature] ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* [illegible] C. Date of Delivery 4/4/16

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- Insured Mail Restricted Delivery over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

BTA Oil Producers
104 S. Pecos St.
Midland, TX 79701

9590 9402 1604 5362 5783 39

2. Article Number *(Transfer from service label)*
7015 3010 0000 2212 1560

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Louise Brown
☑ Agent
☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ ured Mail
☐ ured Mail Restricted Delivery
(over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

COG Operating, LLC
600 W. Illinois Ave
Midland, TX 79701

9590 9402 1604 5362 5783 46

2. Article Number *(Transfer from service label)*
7015 3010 0000 2212 1553

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Andrea Arispe
☐ Agent
☐ Addressee

B. Received by *(Printed Name)*
Andrea Arispe

C. Date of Delivery
4-1-16

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ sured Mail
☐ sured Mail Restricted Delivery
☐ er $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

MATADOR RESOURCES
5400 Lyndon B Johnson Fwy
#1500
DALLAS, TX 75240

9590 9402 1604 5362 5783 22

2. Article Number *(Transfer from service label)*

7015 3010 0000 2212 1577

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☐ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ed Mail
- ed Mail Restricted Delivery
- $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Rynni Henderson, being first duly sworn, on oath says:

That she 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:

April 12 2016

That the cost of publication is **$72.15** and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me this 12 day of April, 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

April 12, 2016

Delaware Energy, LLC ran a legal notice regarding the Pardue 31 Com #1 on Wednesday, April 6, 2016. That notice mistakenly contained incorrect legal description of Range. Following is amended notice for Pardue 31 Com #1:

Delaware Energy, L.L.C., has filed a form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to utilize the Pardue 31 Com #1 (API - 30-015-10842) as a Salt Water Disposal well.

Pardue 31 Com #1 is located at 990' FSL and 1980' FWL, Unit Letter N, Section 31, Township 23 South, Range 28 East, Eddy County, New Mexico. The well will dispose of water produced from oil and gas wells into the Devonian Formation at 13,650' to 14,500' at a maximum rate of 15,000 barrels of water per day at a maximum pressure of 2730 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. Delaware Energy LLC contact number is (214)-558-1371.

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-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00108	CUB	ED	1	1	4	29	23S	28E	583974	3571285*	152	10	142
C 01648	C	ED		2	3	29	23S	28E	583667	3571184*	65	15	50
C 02037	C	ED		2	3	29	23S	28E	583667	3571184*	260		

Average Depth to Water: **12 feet**

Minimum Depth: **10 feet**

Maximum Depth: **15 feet**

Record Count: 3

PLSS Search:

Section(s): 29-32 **Township:** 23S **Range:** 28E

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

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	Twp	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00010		CUB	ED	1	2	2	25	23S	27E	581129	3572075*	250	103	147
C 00010 CLW191724	O		ED	2	3	2	25	23S	27E	580926	3571666*	259		
C 00010 CLW191759	O		ED	1	2	2	25	23S	27E	581129	3572075*	259		
C 00010 ENLGD		CUB	ED	1	2	2	25	23S	27E	581129	3572075*	259		

Average Depth to Water: **103 feet**

Minimum Depth: **103 feet**

Maximum Depth: **103 feet**

Record Count: 4

PLSS Search:

Section(s): 25, 36 **Township:** 23S **Range:** 27E

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

C-108 Review Checklist: Received 4/05/2016 Add. Request: 4/13/2016 Reply Date: 4/14/2016 Suspended: ________ [Ver 15]

ORDER TYPE: WFX / PMX / (SWD) Number: ________ Order Date: ________ Legacy Permits/Orders: ________

Well No. 1 Well Name(s): Panda C 31 Com

API: 30-0 25- ________ Spud Date: 6-25-1966 / 2-14-74 New or Old: O (UIC Class II Primacy 03/07/1982)

Footages 990FSL 1980FWL Lot ____ or Unit N Sec 31 Tsp 23S Rge 28E County Eddy

General Location: ½ 2 miles SW/ ____ 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: 0 Fincl Assur: Y Compl. Order? NA IS 5.9 OK? Y Date: 4-5-2016

WELL FILE REVIEWED ○ Current Status: P&A

WELL DIAGRAMS: NEW: Proposed ○ or **RE-ENTER:** Before Conv. ○ After Conv. ○ Logs in Imaging: C-N-D-L - ____, Sonic DU

Planned Rehab Work to Well: *After operator cleans out 7", operator shall run C-13-L ... C-13-L from bottom up to 10,000'.

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)		Cement Sx or Cf	Cement Top and Determination Method
Planned __ or Existing __ Surface	17½/13⅜	467	Stage Tool	400	Surface
Planned __ or Existing __ Interm/Prod	12¼/9⅝	3000		1500	Surface
Planned __ or Existing __ Interm/Prod	8¾/7*	14480		1000	10600/C13L
Planned __ or Existing __ Prod/Liner	5				
Planned __ or Existing __ Liner					
Planned __ or Existing __ OH / (PERF)	13650/14500		Inj Length 850		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		DV	13650
Confining Unit: Litho. Struc. Por.		wc	13355
Proposed Inj Interval TOP:			
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD 13435 PBTD 12354

NEW TD 12770 NEW PBTD 10685

NEW Open Hole ○ or NEW Perfs ○

Tubing Size 3½ in. Inter Coated? ______

Proposed Packer Depth 13600 ft

Min. Packer Depth 13550 (100-ft limit)

Proposed Max. Surface Press. 2730 psi

Admin. Inj. Press. 2730 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

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

FRESH WATER: Aquifer Quaternary Max Depth 103 **HYDRO AFFIRM STATEMENT By Qualified Person** ○

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

Disposal Fluid: Formation Source(s) Bone Springs, Delaware, Wolfcamp Analysis? ✓ On Lease ○ Operator Only ○ or Commercial ○

Disposal Int: Inject Rate (Avg/Max BWPD): 8K/15K Protectable Waters? ____ Source: ________ System: Closed or (Open)

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

AOR Wells: 1/2-M Radius Map? Y Well List? Y 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 4/12 Mineral Owner ________ Surface Owner Ricci Connolly N. Date 4/2/2016

RULE 26.7(A): Identified Tracts? Y Affected Persons: Matador, COG, Yates, BTA N. Date 4/4/2016

Order Conditions: Issues: ________

Add Order Cond: - MIT every 2 years

- Chart

- 2 CBL Runs

- Follow the prescribed w/o procedures

- ...

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-015-10842

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

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

7. Lease Name or Unit Agreement Name
Pardue 31 Com

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

8. Well Number #1

2. Name of Operator
Delaware Energy LLC

9. OGRID Number
371195

3. Address of Operator
3001 W. Loop 250 N. Suite C-105-318, Midland TX 79705

10. Pool name or Wildcat
SWD (Devonian)

4. Well Location
Unit Letter N : 990' feet from the South line and 1980' feet from the West line
Section: 31 Township: 23 Range: 28 NMPM County: Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☒			OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PROCDURE FOR REENTRTY AND COMPLETION TO DEVONIAN SWD:

1. R/U WORK OVER UNIT, DRILL OUT SURFACE PLUG FROM 0-188'. TEST CASING TO 500PSI. DRILL OUT CEMENT PLUGS AT 2676' AND 2930' AND CLEAN OUT TO PBTD OF 10,622'. TEST CASING TO 500 PSI AND HOLD FOR 30 MINUTES, RECORD TEST.
2. R/U WIRE LINE AND RUN CEMENT BOND LOG FROM 10,622' TO 1,600' AND DETERMINE TOP OF CEMENT IN 7" BY 9-5/8" ANNULUS.
3. DRESS OFF 7" STUB IN PREPERATION FOR 7" CASING PATCH.
4. IF CEMENT TOP IS DETERMINED TO BE WITHIN 50FT OF STUB, PLAN TO UTILIZE DV TOOL ABOVE CASING PATCH. IF CEMENT TOP IS GREATER THAN 50FT FROM 7" CASING STUB, SHOOT SQUEEZE HOLES AT CEMENT TOP PRIOR TO RUNNING CASING PATCH, SQUEEZE HOLES WILL BE USED TO CIRCULATE CEMENT FOLLOWING INSTALLATION OF CASING PATCH.
5. RUN CASING PATCH AND CEMENT 7" BY 9-5/8" ANNULUS TO SURFACE. TEST CASING TO 500 PSI AND HOLD FOR 30 MINUTES, RECORD TEST.
6. CONTINUE WITH DEEPENING, CLEAN OUT TO 12,770' AND DEEPEN TO DEVONIAN TO A DEPTH OF 14,500', RUN 5" LINER FROM 14,500' TO 10,600', AND CEMENT TO 5" LINER TOP.

Spud Date: | Rig Release Date:

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

SIGNATURE_____ TITLE_____ DATE_____

Type or print name _____ E-mail address: _____ PHONE: _____

For State Use Only

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):