

MM 4/03/2018  
MM 3/16/2018

RECEIVED:	REVIEWER:	TYPE: SWD	APP NO: DMAM1807831581
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & 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

**Applicant:** Mack Energy Corporation **OGRID Number:** 013837  
**Well Name:** Denali SWD #1 **API:** 30-015-3244497803  
**Pool:** SWD; Devonian & SWD; Montoya **Pool Code:** 96101 & 96112 (97083)

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
- A. Location – Spacing Unit – Simultaneous Dedication  
 NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]
- [ I ] Commingling – Storage – Measurement  
 DHC    CTB    PLC    PC    OLS    OLM
- [ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A.  Offset operators or lease holders  
 B.  Royalty, overriding royalty owners, revenue owners  
 C.  Application requires published notice  
 D.  Notification and/or concurrent approval by SLO  
 E.  Notification and/or concurrent approval by BLM  
 F.  Surface owner  
 G.  For all of the above, proof of notification or publication is attached, and/or,  
 H.  No notice required

FOR OCD ONLY	
<input type="checkbox"/>	Notice Complete
<input type="checkbox"/>	Application Content Complete

3) **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.

Deana Weaver

Print or Type Name

Deana Weaver

Signature

3.14.18  
Date

575-748-1288  
Phone Number

dweaver@mecc.com  
e-mail Address



### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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

**INJECTION WELL DATA SHEET**

OPERATOR: Mack Energy Corporation

WELL NAME & NUMBER: Denali SWD #1

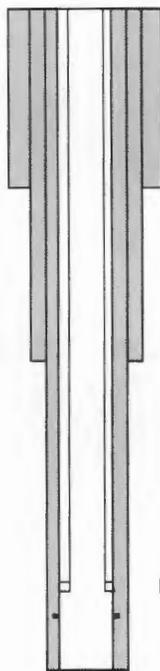
WELL LOCATION: 660 FSL & 1980 FEL      O      3      16S      28E  
 FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

**WELLBORE SCHEMATIC**

**WELL CONSTRUCTION DATA**

Surface Casing

13 3/8" csg @ 352'  
w/600sx, circ



8 5/8" csg @ 2013'  
w/850sx, circ

2 7/8" PC tubing @  
10,100' set w/ 10k  
Nickel Plated PRK

5 1/2" csg @ 11,000'  
w/1710sx, circ

Perf- 10,150-10,900'

TD- 10,975'

Hole Size: 17 1/2      Casing Size: 13 3/8

Cemented with: 600 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 0      Method Determined: Circ

Intermediate Casing

Hole Size: 12 1/4      Casing Size: 8 5/8

Cemented with: 850 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 0      Method Determined: Circ

Production Casing

Hole Size: 7 7/8      Casing Size: 5 1/2

Cemented with: 1190 sx.      or \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 0      Method Determined: Circ

Total Depth: 10,975

Injection Interval

10,150'      feet to 10,900'

(Perforated or Open Hole; indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 2 7/8" Lining Material: Plastic Coated

Type of Packer: Halliburton Trump Packer

Packer Setting Depth: 10,100'

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

Additional Data

1. Is this a new well drilled for injection?        Yes   X   No  
If no, for what purpose was the well originally drilled? Gas Well (Dry Well)

2. Name of the Injection Formation: Devonian & Montoya

3. Name of Field or Pool (if applicable): Diamond Mound

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. Not Perforated- plugged  
w/ 150sx cmt @ 7480-7580, 5270-5370, 2900-3000, 2053-2063, 275-375, 50-surface

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Grayburg - Oil/Gas 1487-1850', Wolfcamp- Oil/Gas 6617-7271'  
Atoka- Oil/Gas 9023-9150', Morrow- Oil/Gas 9150-9431'

## VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;  
**Respectively, 2000 BWPD and 4000 BWPD**
2. The system is closed or open;  
**Closed**
3. Proposed average and maximum injection pressure;  
**0-2,030#**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water;  
**We will be re-injecting produced water**
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water;  
**N/A**

## VIII. GEOLOGICAL DATA

1. Lithologic Detail; **Dolomite**
2. Geological Name; **SWD; Devonian & Montoya**
3. Thickness; **750'**
4. Depth; **10,150-10,900'**

## IX. PROPOSED STIMULATION PROGRAM

1. To be treated with 10000 gallons 15% acid

## X. LOGS AND TEST DATA

1. Well data will be filed with the OCD.

## XI. ANALYSIS OF FRESHWATER WELLS

1. Windmill over 1 mile away from the Denali SWD #1, will forward analysis when complete.

Additional Information

### **Waters Injected:**

Grayburg – Oil/Gas 1487-1850'

Wolfcamp- Oil/Gas 6617-7271'

Atoka- Oil/Gas 9023-9150'

Morrow- Oil/Gas 9150-9431'

## XII. AFFIRMATIVE STATEMENT

RE: Denali SWD #1

We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

Mack Energy Corporation

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

3/14/18



Charles Sadler, Geologist

District I  
1625 N French Dr., Hobbs, NM 88240  
Phone (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name
	96101	SWD; Devonian
<sup>4</sup> Property Code	<sup>5</sup> Property Name	
	DENALI SWD	
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name	
13837	MACK ENERGY CORPORATION	
	<sup>6</sup> Well Number	<sup>9</sup> Elevation
	I	3601.6

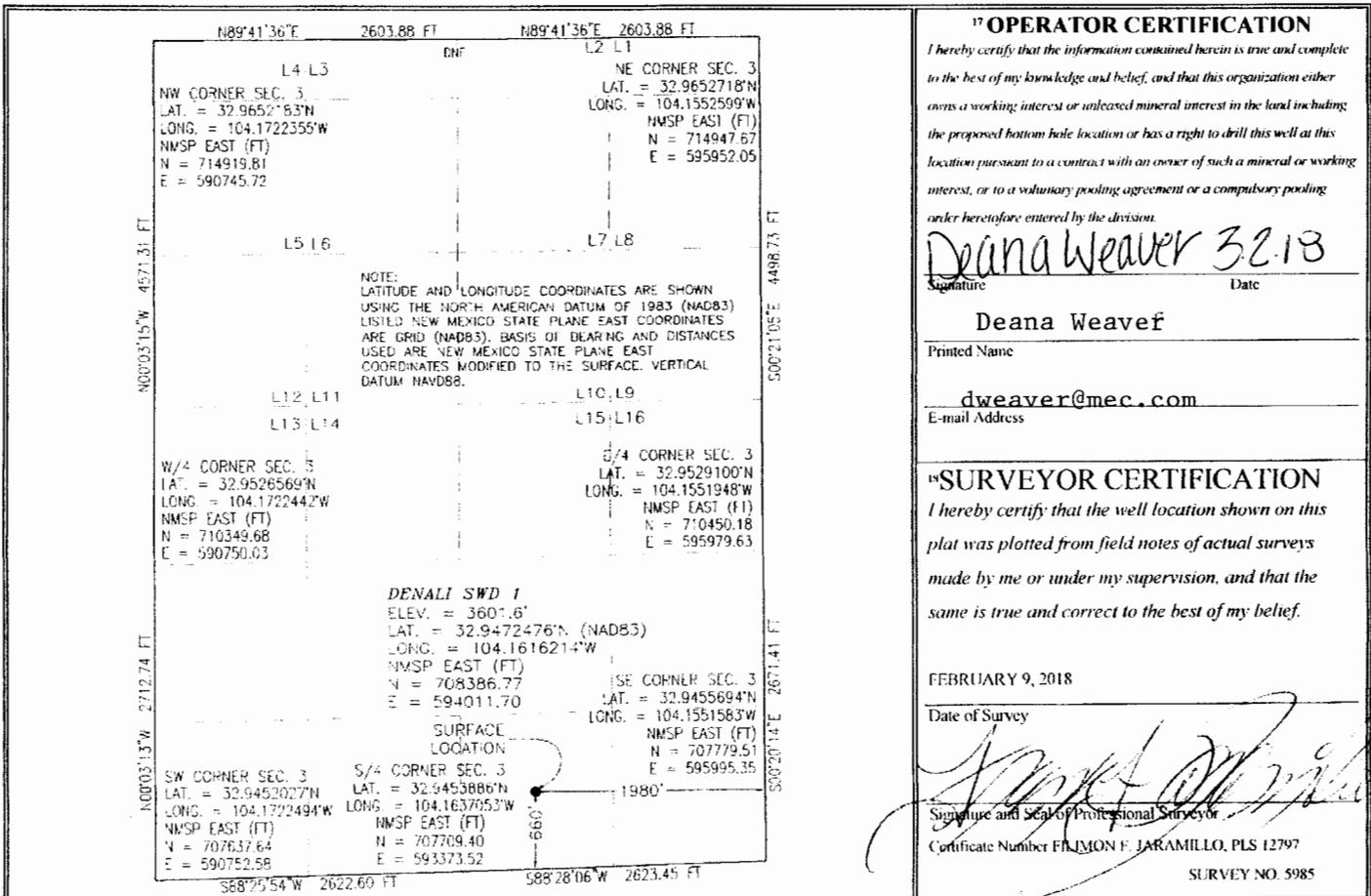
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	3	16 S	28 E		660	SOUTH	1980	EAST	EDDY

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

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/ West line	County
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.					
40									

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



District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-0720  
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1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code 96112	<sup>3</sup> Pool Name SWD; Montoya
<sup>4</sup> Property Code	<sup>5</sup> Property Name DENALI SWD	
<sup>7</sup> OGRID No. 13837	<sup>8</sup> Operator Name MACK ENERGY CORPORATION	<sup>6</sup> Well Number 1
		<sup>9</sup> Elevation 3601.6

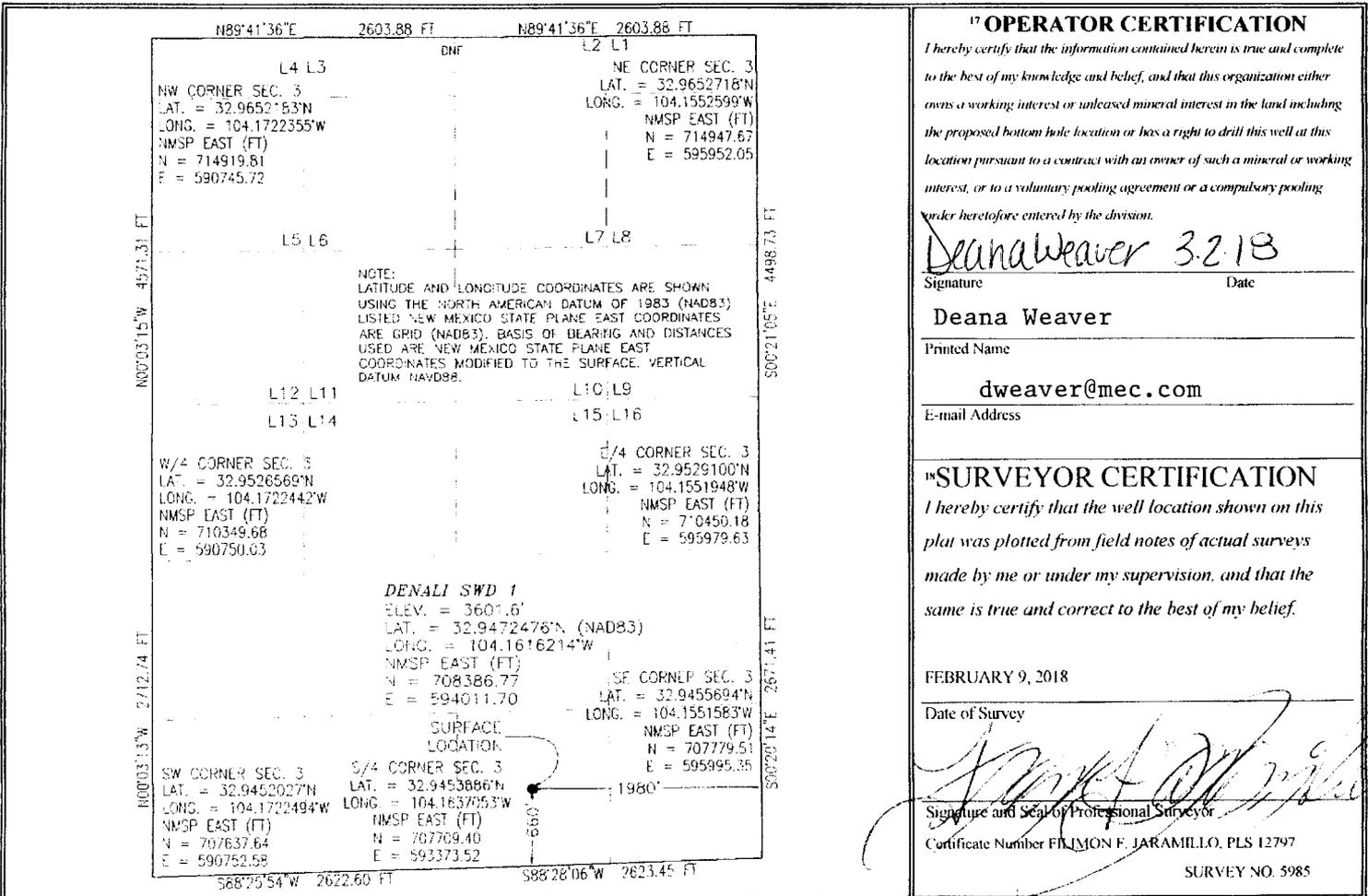
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	3	16 S	28 E		660	SOUTH	1980	EAST	EDDY

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

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/ West line	County
<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

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



### AREA OF REVIEW WELL DATA

LEASE/API	WELL#	LOCATION	TD (PBTD)	TYPE & DATE DRILLED	HOLE SIZE	CASING SIZE & WEIGHT	SETTING DEPTH	SX CMT	TOC	PERFS
Denali SWD	1	660 FSL 1980 FEL 3-16S-28E	10,975'	Dry Hole 10/29/02	17 1/2 12 1/4 7 7/8 (New)	13 3/8, 48 8 5/8, 32 5 1/2, 17 (New)	352 2013 11000 (New)	600 850 1710 (New)	Circ Circ Circ	10150-10900' (New)
Cave Lake Federal 30-015-24008	1	2160 FNL 660 FWL 3-16S-28E	9400'	DRY HOLE - 1/30/1982	17 1/2 11	13 3/8, 54.5 8 5/8, 24 & 28	551 1940	600 700	CIRC CIRC	
Crow Flats 3 Federal 30-015-30706	1	960 FSL 760 FWL 3-16S-28E	9550' PBTD- 9463'	GAS 10/09/1999	17 1/2 11 7 7/8	13 3/8, 48 8 5/8, 24 & 32 5 1/2, 17	350 2022 9552	350 650 250	CIRC CIRC TOC 8590	9127.5-9134 9322.5-9329
Purple Gosling BBD State 30-015-32469	1	710 FSL 1040 FWL 2-16S-28E	9630' PBTD- 9579'	GAS 4/27/2003	26 17 1/2 12 1/4 8 3/4	20 13 3/8, 48 9 5/8, 36 5 1/2, 15.5 & 17	40 430 1957 9625	445 1325 2005	CIRC CIRC CIRC	9098-9190 9246-9346
Coquina Federal 30-015-23744	1	2190 FNL 660 FEL 4-16S-28E	9450' PBTD- 9405'	GAS 7/26/1981 P&A 8/13/1996	17 1/2 11 7 7/8	13 3/8, 48 8 5/8, 24 & 32 4 1/2, 11.6	578 1950 9450	635 1325 1450	CIRC CIRC TOC 8100	9100-9191
Crow Flats 10 Federal 30-015-30168	1	2310 FNL 1310 FEL 10-16S-28E	9600 PBTD- 9523	GAS 9/23/1998	17 1/2 11 7 7/8	13 5/8, 68 8 5/8, 32 5 1/2, 17	320 1987 9600	650 500 300	CIRC CIRC TOC 7000	9383-9418
Diamond Vista 10 Federal Com 30-015-34393	1	1410' FSL 660' FWL 10-16S-28E	9615' PBTD- 9554'	GAS 9/13/2006	17 1/2 11 7 7/8	13 3/8, 54.5 8 5/8, 32 5 1/2, 17	415' 1800' 9605'	430 220 660	CIRC CIRC TOC 1438'	9134-9144

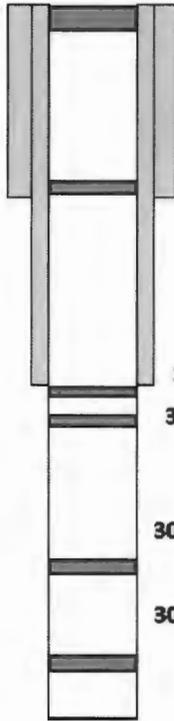


Before

13 3/8" csg @ 352'  
w/600sx, circ

8 5/8" csg @ 2013'  
w/850sx, circ

Formation Tops  
Yates: 370  
7Rivers: 510  
Queen: 1090  
Grayburg: 1490  
San Andres: 1850  
Glorieta: 3380  
Tubb: 4580  
Abo: 5370  
Wolfcamp: 6630  
Cisco: 7640  
Atoka: 9030  
Miss: 9430



cmt plug @ suface - 50'

30sx cmt plug @ 275-375'

30sx cmt plug @ 2053-2063'

30sx cmt plug @ 2900-3000'

30sx cmt plug @ 5270-5370'

30sx cmt plug @ 7480-7580'

TD-9575'  
PBTD- Surface

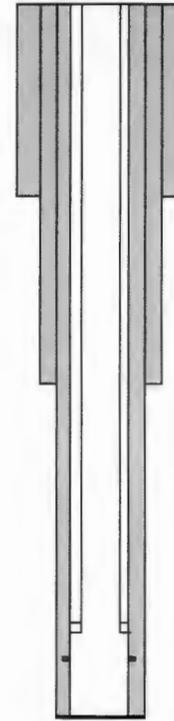
Denali SWD #1  
Sec. 3 T16S R28E  
660 FSL 1980 FEL

After

13 3/8" csg @ 352'  
w/600sx, circ

8 5/8" csg @ 2013'  
w/850sx, circ

5 1/2" csg @ 11,000'  
w/1710sx, circ

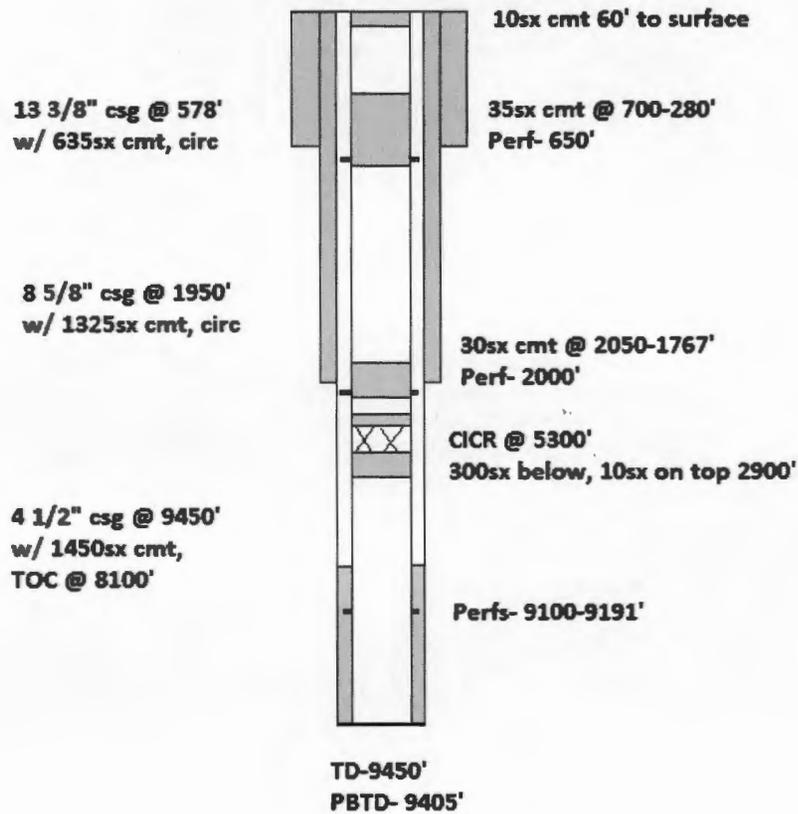


2 7/8" PC tubing @  
10,100' set w/ 10k  
Nickel Plated PRK

Perf- 10,150-10,900'

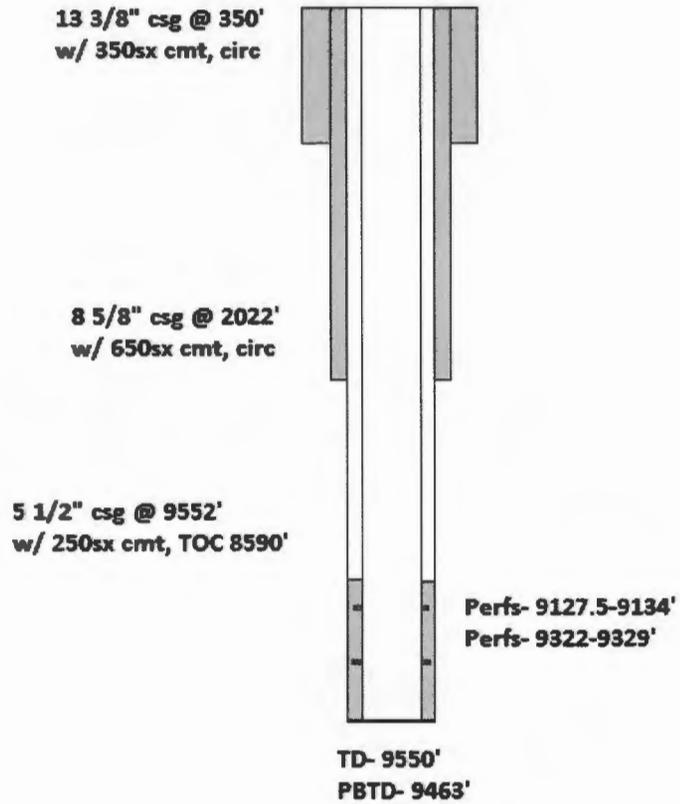
TD- 10,975'

Coquina Federal #1  
Sec. 4 T16S R28E  
2190 FNL 660 FEL  
30-015-23744  
Gas Well- 7/26/1981  
P&A- 8/13/1996



Gas Well  
10/9/1999

Crow Flats 3 Federal #1  
Sec. 3 T16S R28E  
960 FSL 760 FWL  
30-015-30706

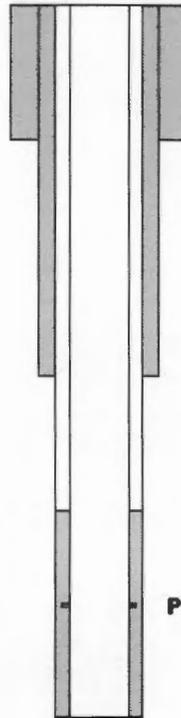


Crow Flats 10 Federal #1  
Sec. 10 T16S R28E  
2310 FNL 1310 FEL  
30-015-30168  
Gas Well - 9/23/1998

13 5/8" csg @ 320'  
w/ 650sx cmt, circ

8 5/8" csg @ 1987'  
w/ 500sx cmt, circ

5 1/2" csg @ 9600'  
w/ 300sx cmt  
TOC @ 7000'



Perfs- 9383-9418'

TD- 9600'  
PBTD- 9523'

Crow Flats 11 Federal Com #1  
Sec. 11 T16S R28E  
1980 FSL 660 FWL  
30-015-30592  
Gas Well- 5/25/1999  
P&A - 11/15/2015

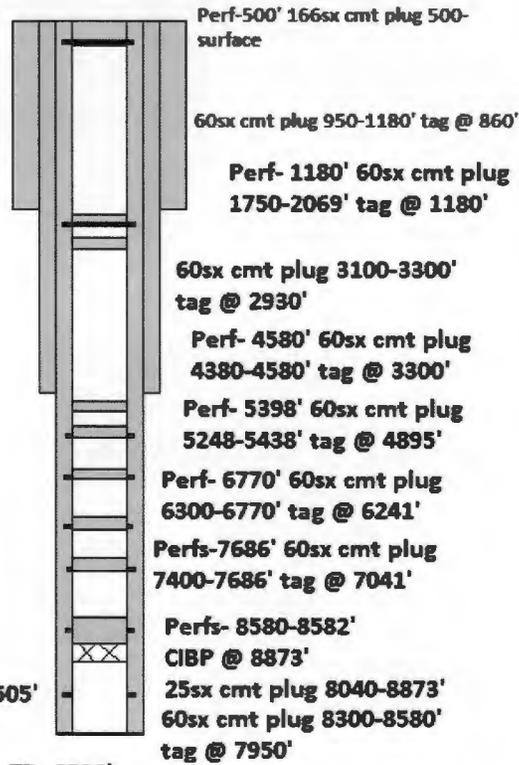
13 3/8" csg @ 354'  
w/ 400sx cmt, circ

8 5/8" csg @ 1980'  
w/ 675sx cmt, circ

5 1/2" csg @ 9722'  
w/ 700sx cmt, circ

Perfs- 9372-9505'

TD- 9722'  
PBTD- 9524'

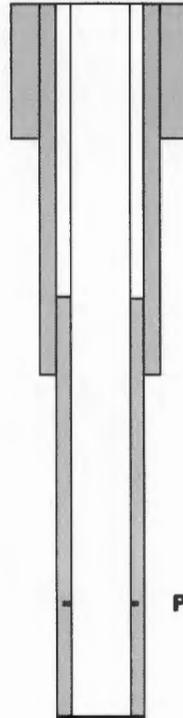


Diamond Vista 10 Federal Com #1  
Sec. 10 T16S R28E  
1410 FSL 660 FWL  
30-015-34393  
Gas Well- 9/13/2006

13 3/8" csg @ 415'  
w/ 415sx cmt, circ

8 5/8" csg @ 1800'  
w/ 220sx cmt, circ

5 1/2" csg @ 9605'  
w/ 660sx cmt  
TOC @ 1438'



Perfs- 9134-9144'

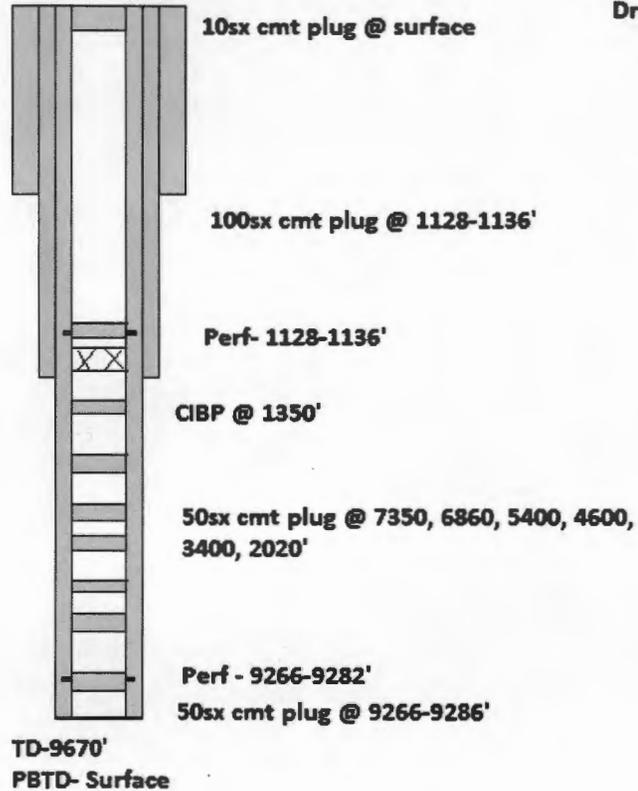
TD- 9615'  
PBTD- 9554'

North Crow Flats Unit #1  
Sec. 11 T16S R28E  
1980 FNL 1980 FWL  
30-015-20186  
Dry Hole- 1/6/1969

13 3/8" csg @ 301'  
w/ 350sx cmt, circ

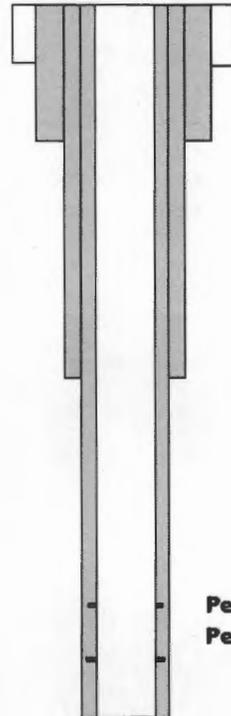
9 5/8" csg @ 1980'  
w/ 1300sx cmt, circ

5 1/2" csg @ 9670'  
w/ 550sx cmt, circ



Purple Gosling BBD State #1  
Sec. 2 T16S R28E  
710 FSL 1040 FWL  
30-015-32469  
Gas Well - 4/27/2003

20" csg @ 40'  
13 3/8" csg @ 430'  
w/ 445sx cmt, circ  
9 5/8" csg @ 1957'  
1325sx cmt, circ  
5 1/2" csg @ 9625'  
2005sx cmt, circ



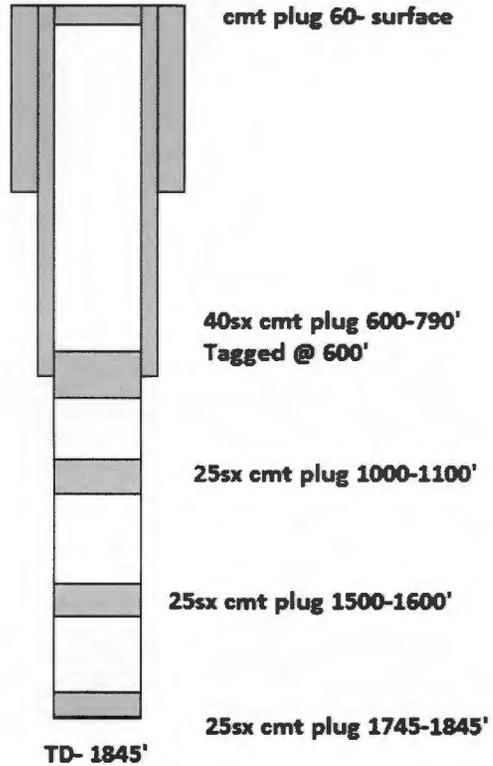
Perfs - 9098-9190'  
Perfs- 9246-9346'

TD- 9630'  
PBTD- 9579'

Sara Federal #1  
Sec. 10 T16S R28E  
1980 FSL 1980 FEL  
30-015-25415  
Dry Hole- 11/26/1985

10 3/4" csg @ 350'  
w/ 300sx cmt, circ

8 5/8" csg @ 732'  
w/ 200sx cmt, circ





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*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

**POD Search:**

POD Basin: Roswell Artesian

**PLSS Search:**

Q4: SE      Section(s): 3      Township: 16S      Range: 28E



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*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

**POD Search:**

POD Basin: Carlsbad

**PLSS Search:**

Q4: SE      Section(s): 3      Township: 16S      Range: 28E



---

*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

**POD Search:**

POD Basin: Carlsbad

**PLSS Search:**

Q4: SE      Section(s): 10      Township: 16S      Range: 28E



---

*New Mexico Office of the State Engineer*  
**Active & Inactive Points of Diversion**  
(with Ownership Information)

---

No PODs found.

PLSS Search:

Q4: SE Section(s): 2

Township: 16S

Range: 28E

Chase Oil  
7-1-2018 V-5443  
\$152.00

TD 7735  
D/A 11-12-59

Chase Oil  
5-1-2018 V-9382  
\$100.16

Yates Pet.  
HBP  
K-5109

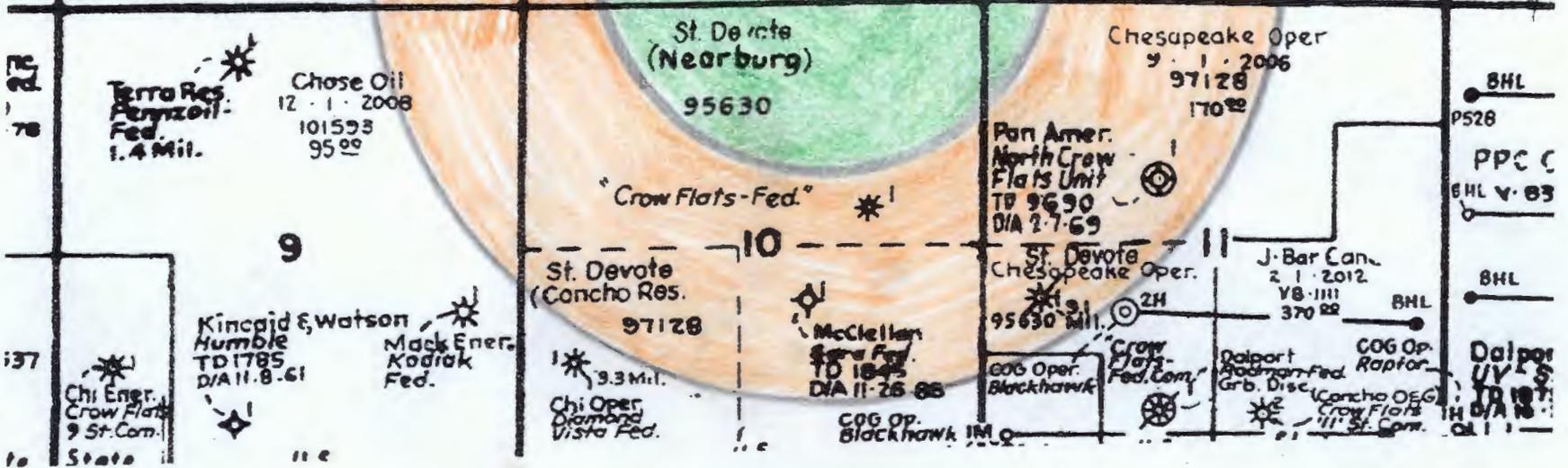
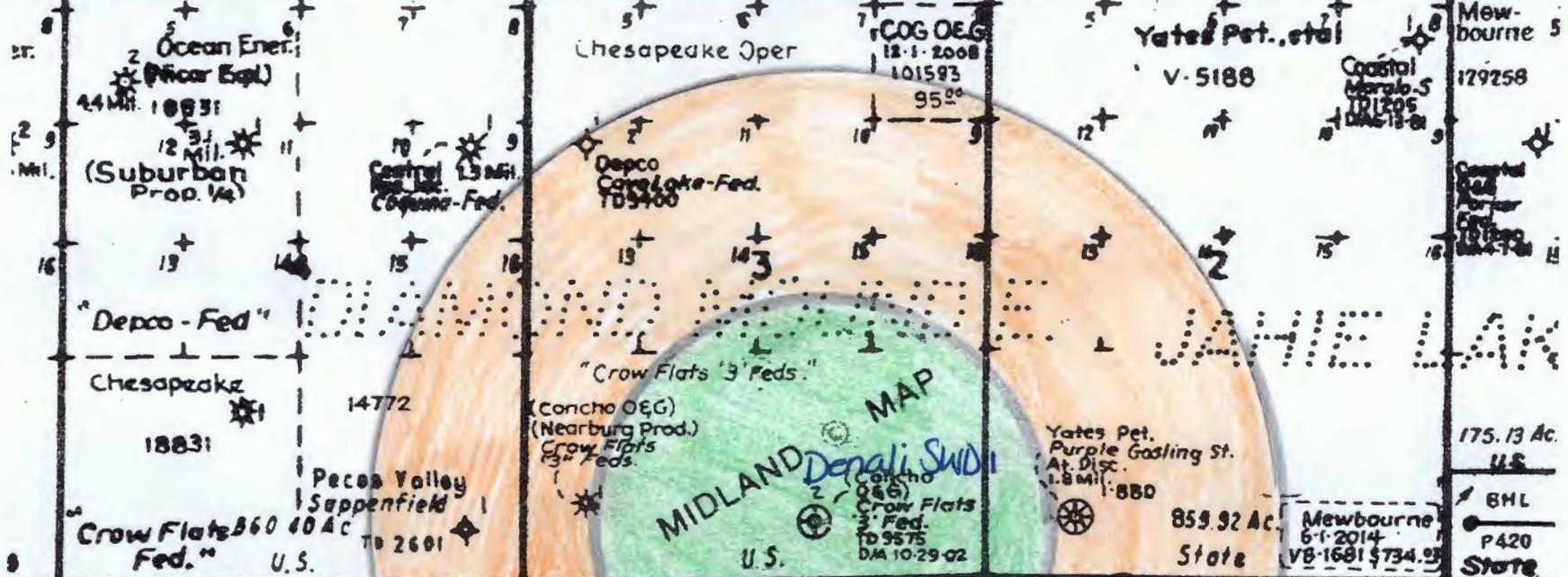
U.S.

State

U.S.

State

1 15.33 4 15.10 3 15.02 2 14.87 14.80 4 14.78 3 14.77 2 14.76 14.87 3 14.92 2 16.04 1 15.15 15.13



10 9 8 7 6 5 4 3 2 1



## **Denali SWD #1**

### **Offset Operators:**

- Percussion Petroleum Operating, LLC  
1010 Lamar St., Suite 1540  
Houston, TX 77002
- EOG Y Resources, Inc.  
105 S. Fourth Street  
Artesia, NM 88210
- Sellers & Fulton Oil LLC  
P.O. Box 1176  
Artesia, NM 88211
- Legacy Reserves Operating, LP  
P.O. Box 10848  
Midland, TX 79702

### **Surface Owner:**

- Federal Surface – Grazing Lessee is Bogle, Ltd.

## McMillan, Michael, EMNRD

---

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Tuesday, April 3, 2018 3:26 PM  
**To:** McMillan, Michael, EMNRD  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County  
**Attachments:** denali swd affidavit.pdf

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, March 19, 2018 8:46 AM  
**To:** Deana Weaver  
**Cc:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** Mack Energy Denali SWD Well No. 1 Eddy County

Deana:

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- Estimated Log tops for the top of Woodford
- Estimated log Top of Devonian
- Estimated log Top of Montoya
- Clarify on the tract map which tract who is the operator or affected

Thanks

Mike

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
[Michael.mcmillan@state.nm.us](mailto:Michael.mcmillan@state.nm.us)

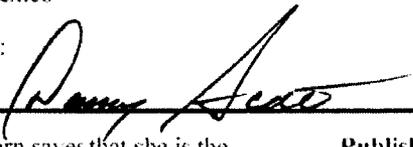
# Affidavit of Publication

No. 24599

State of New Mexico

County of Eddy:

**Danny Scott**



being duly sworn says that she is the Publisher

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

## Legal Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same

day as follows:

First Publication March 16, 2018

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

Fifth Publication \_\_\_\_\_

Sixth Publication \_\_\_\_\_

Seventh Publication \_\_\_\_\_

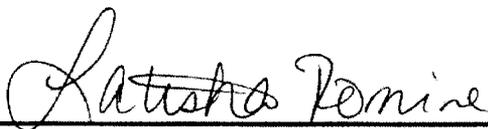
Subscribed and sworn before me this

19th day of March 2018



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2019



Latisha Romine

Notary Public, Eddy County, New Mexico

# Copy of Publication:

## Legal Notice

Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-0960, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced water into the Denali SWD #1 660 FSL & 1980 FEL of Section 3, T16S R28E, NMPM, Eddy County, New Mexico. The water will be injected into the Devonian and Montoya formations at a disposal depth of 10,150-10,900'. Water will be injected at a maximum surface pressure of 2030# pounds and a maximum injection rate of 2000-4000 BWPD. Any interested party with questions or comments may contact Deana Weaver at Mack Energy Corporation, Post Office Box 960, Artesia, New Mexico 88211-0960 or call (575) 748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice.

Published in the Artesia Daily Press, Artesia, N.M., March 16, 2018 Legal No. 24599.

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Published in the Artesia Daily Press, Artesia, N.M., March 16, 2018 Legal No. 24599.



REG-00000000  
Artesia, NM 88211-0000  
Office (505) 751-1188  
Fax (505) 751-1189

March 14, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 7024 4493**  
**RETURN RECEIPT REQUESTED**

Percussion Petroleum Operating, LLC  
1010 Lamar St., Suite 1540  
Houston, TX 77002

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in black ink that reads "Deana Weaver". The signature is written in a cursive, flowing style.

Deana Weaver  
Production Clerk

DW

Attachments



P.O. Box 600  
Artesia, NM 88211-0000  
Office (575) 748-4188  
Fax (575) 748-9114

March 14, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 7024 4509**  
**RETURN RECEIPT REQUESTED**

EOG Y Resources, Inc.  
105 S. Fourth Street  
Artesia, NM 88210

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.

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Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Deana Weaver".

Deana Weaver  
Production Clerk

DW

Attachments



P.O. Box 100  
Artesia, NM 88011-0100  
Office (505) 748-1285  
Fax (505) 748-0332

March 14, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 7024 4516**  
**RETURN RECEIPT REQUESTED**

Sellers & Fulton Oil LLC  
P.O. Box 1176  
Artesia, NM 88211

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.

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Sincerely,

MACK ENERGY CORPORATION

Deana Weaver  
Production Clerk

DW

Attachments



P.O. Box 9641  
Artesia, NM 88211-0941  
Office (505) 748-1288  
Fax (505) 746-9539

March 14, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 7024 4523**  
**RETURN RECEIPT REQUESTED**

Legacy Reserves Operating, LP  
P.O. Box 10848  
Midland, TX 79702

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.

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Deana Weaver  
Production Clerk

DW

Attachments



P.O. Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

March 19, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 7024 4530**  
**RETURN RECEIPT REQUESTED**

BLM  
620 E. Green Street  
Carlsbad, NM 88220

Gentlemen:

*Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.*

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Sincerely,

MACK ENERGY CORPORATION

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Deana Weaver  
Production Clerk

DW

Attachments

## McMillan, Michael, EMNRD

---

**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, March 19, 2018 8:46 AM  
**To:** Deana Weaver  
**Cc:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** Mack Energy Denali SWD Well No. 1 Eddy County

Deana:

I need for the following information for the Denali SWD Well No. 1

- Affidavit of publication-your application will be suspended until the OCD receives a copy of that
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- Estimated Log tops for the top of Woodford
- Estimated log Top of Devonian
- Estimated log Top of Montoya
- Clarify on the tract map which tract who is the operator or affected

Thanks

Mike

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
Michael.mcmillan@state.nm.us

## McMillan, Michael, EMNRD

---

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Monday, April 16, 2018 11:56 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** RE: Water Analysis  
**Attachments:** devon letter.pdf

Mike

I just sent notification to Devon, the letter is attached.

Thanks  
Deana

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, April 16, 2018 9:30 AM  
**To:** Deana Weaver  
**Cc:** Matt Buckles  
**Subject:** RE: Water Analysis

Deana:  
I see that your tract map shows Devon as an affected party, but did not notify them?  
Did they sell to Legacy?

Thanks

Mike

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Monday, April 16, 2018 8:48 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Cc:** Matt Buckles <mattbuckles@mec.com>  
**Subject:** RE: Water Analysis

Yes to both questions.

Thanks

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, April 16, 2018 8:47 AM  
**To:** Deana Weaver  
**Cc:** Matt Buckles  
**Subject:** RE: Water Analysis

Deana:  
Is this for Mack Energy production only?  
Is it for only San Andres produced water?

Thanks



P.O. Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9592

April 16, 2018

**VIA CERTIFIED MAIL 7015 0640 0006 4547**  
**RETURN RECEIPT REQUESTED**

Devon Energy Production Co. LP  
333 West Sheridan Ave.  
Oklahoma City, OK 73102-5010

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian -Montoya SWD well. Produced water will be injected at a proposed depth of 10,150-10,900'. The Denali SWD #1 located 660 FSL & 1980 FEL, Sec. 3 T16S R28E, Eddy County.

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Deana Weaver  
Production Clerk

DWA

Attachments

## McMillan, Michael, EMNRD

---

**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, March 19, 2018 11:02 AM  
**To:** 'Deana Weaver'  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

Deana:

the OCD has permitted the upper 100` of the Montoya only, for rat-hole.

So if your permitted is approved it will have this stipulation that says that injection is approved for the Devonian and upper 100 feet of the Montoya.

The OCD is just making sure that the Ellenburger is not penetrated.

Mike

**From:** Deana Weaver [mailto:dweaver@mec.com]  
**Sent:** Monday, March 19, 2018 10:59 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

Estimated Top of the Woodford: 10,093'

Estimated Top of the Devonian: 10,150'

Estimated Top of the Montoya: 10,750'

---

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, March 19, 2018 8:46 AM  
**To:** Deana Weaver  
**Cc:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** Mack Energy Denali SWD Well No. 1 Eddy County

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Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
[Michael.mcmillan@state.nm.us](mailto:Michael.mcmillan@state.nm.us)

## **Denali SWD #1**

### **Offset Operators:**

- N/2 Sec. 10, T16S-R28E  
Percussion Petroleum Operating, LLC  
1010 Lamar St., Suite 1540  
Houston, TX 77002
- SW/4 Sec. 2, T16S-R28E  
EOG Y Resources, Inc.  
105 S. Fourth Street  
Artesia, NM 88210
- SW/4 Sec. 3, T16S-R28E  
Sellers & Fulton Oil LLC  
P.O. Box 1176  
Artesia, NM 88211
- N/2 Sec. 3 & NW/4 Sec. 11, T16S-R28E  
Devon Energy Production Co. LP  
333 West Sheridan Ave.  
Oklahoma City, OK 73102-5010

### **Surface Owner:**

- Federal Surface – Grazing Lessee is Bogle, Ltd.

## McMillan, Michael, EMNRD

---

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Tuesday, April 3, 2018 3:26 PM  
**To:** McMillan, Michael, EMNRD  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County  
**Attachments:** denali swd affidavit.pdf

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[Michael.mcmillan@state.nm.us](mailto:Michael.mcmillan@state.nm.us)

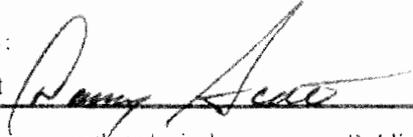
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No. 24599

State of New Mexico

County of Eddy:

**Danny Scott**



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Fifth Publication \_\_\_\_\_

Sixth Publication \_\_\_\_\_

Seventh Publication \_\_\_\_\_

Subscribed and sworn before me this

19th day of March 2018



OFFICIAL SEAL  
**Latisha Romine**  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2019



Latisha Romine

Notary Public, Eddy County, New Mexico

# Copy of Publication:

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Published in the Artesia Daily Press, Artesia, N.M., March 16, 2018 Legal No. 24599.

# Untitled Map

Write a description for your map.

## Legend

-  32.9472476, -104.1551583
-  Circle Measure
-  EASEMENT PROPOSED CENTERLINE

N32°58'30"

N32°57'54"

N32°57'18"

32.9472476, -104.1551583

N32°56'42"

W104°0

Janie Lake

Flat Lake

Google Earth

© 2018 Google

1 mi





Catalyst Oilfield Services  
 11999 E Hwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

### Water Analysis Report

Customer: Mack Energy Corporation      Sample #: 60177  
 Area: Artesia      Analysis ID #: 58000  
 Lease: Denali  
 Location: FW 1      0  
 Sample Point: Water Tank

<b>Sampling Date:</b>	3/13/2018	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
<b>Analysis Date:</b>	4/3/2018	<b>Chloride:</b>	5375.9	151.63	<b>Sodium:</b>	1961.0	85.3
<b>Analyst:</b>	Catalyst	<b>Bicarbonate:</b>	131.8	2.16	<b>Magnesium:</b>	1418.0	116.65
<b>TDS (mg/l or g/m3):</b>	14043	<b>Carbonate:</b>			<b>Calcium:</b>	800.9	39.97
<b>Density (g/cm3):</b>	1.009	<b>Sulfate:</b>	4300.0	89.53	<b>Potassium:</b>	55.3	1.41
Hydrogen Sulfide:	0	<b>Borate*:</b>	0.0	0.	<b>Strontium:</b>	0.0	0.
Carbon Dioxide:	0	<b>Phosphate*</b>			<b>Barium:</b>	0.0	0.
<b>Comments:</b>		<b>*Calculated based on measured elemental boron and phosphorus.</b>			<b>Iron:</b>	0.1	0.
		pH at time of sampling:		7	<b>Manganese:</b>	0.000	0.
		pH at time of analysis:			<b>Conductivity (micro-ohms/cm):</b>		17728
		pH used in Calculation:		7	<b>Resistivity (ohm meter):</b>		.5641
		<b>Temperature @ lab conditions (F):</b>		75			

**Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl**

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	-0.16	0.00	0.03	72.58	-0.03	0.00	0.00	0.00	0.00	0.00
100	-0.04	0.00	0.02	51.84	0.02	40.44	0.00	0.00	0.00	0.00
120	0.09	1.38	0.03	58.07	0.11	174.54	0.00	0.00	0.00	0.00
140	0.22	4.15	0.04	85.72	0.21	318.32	0.00	0.00	0.00	0.00
160	0.36	6.91	0.06	129.27	0.33	455.88	0.00	0.00	0.00	0.00
180	0.51	10.02	0.09	182.84	0.47	576.85	0.00	0.00	0.00	0.00
200	0.65	13.13	0.12	242.29	0.62	676.74	0.00	0.00	0.00	0.00
220	0.80	16.24	0.15	303.12	0.79	755.20	0.00	0.00	0.00	0.00



Catalyst Oilfield Services  
 11999 E Ilwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

### Water Analysis Report

Customer: Mack Energy Corporation      Sample #: 54438  
 Area: Artesia      Analysis ID #: 52580  
 Lease: Klondike  
 Location: 1H      0  
 Sample Point: Wellhead

Sampling Date:	11/10/2017	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
Analysis Date:	11/27/2017	Chloride:	95974.1	2707.08	Sodium:	59980.0	2608.98
Analyst:	Catalyst	Bicarbonate:	351.4	5.76	Magnesium:	845.8	69.58
TDS (mg/l or g/m3):	164693.2	Carbonate:			Calcium:	2357.0	117.61
Density (g/cm3):	1.109	Sulfate:	4500.0	93.69	Potassium:	467.4	11.95
Hydrogen Sulfide:	20	Borate*:	178.5	1.13	Strontium:	39.0	0.89
Carbon Dioxide:	148.8	Phosphate*:			Barium:	0.0	0.0
Comments:		*Calculated based on measured elemental boron and phosphorus.			Iron:	0.0	0.0
		pH at time of sampling:		7.15	Manganese:	0.000	0.0
		pH at time of analysis:			Conductivity (micro-ohms/cm):		189002
		pH used in Calculation:		7.15	Resistivity (ohm meter):		.0529
		Temperature @ lab conditions (F):		75			

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.78	22.38	-0.01	0.00	0.00	8.06	-0.09	0.00	0.00	0.00
100	0.80	25.67	-0.08	0.00	0.00	0.00	-0.12	0.00	0.00	0.00
120	0.81	29.55	-0.14	0.00	0.02	47.45	-0.13	0.00	0.00	0.00
140	0.83	33.43	-0.19	0.00	0.06	154.60	-0.14	0.00	0.00	0.00
160	0.85	37.90	-0.23	0.00	0.12	299.65	-0.14	0.00	0.00	0.00
180	0.87	42.68	-0.26	0.00	0.20	467.08	-0.14	0.00	0.00	0.00
200	0.91	47.45	-0.30	0.00	0.29	643.77	-0.13	0.00	0.00	0.00
220	0.95	52.23	-0.32	0.00	0.39	819.56	-0.11	0.00	0.00	0.00

## McMillan, Michael, EMNRD

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**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Monday, April 16, 2018 8:48 AM  
**To:** McMillan, Michael, EMNRD  
**Cc:** Matt Buckles  
**Subject:** RE: Water Analysis

Yes to both questions.

Thanks

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**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, April 16, 2018 8:47 AM  
**To:** Deana Weaver  
**Cc:** Matt Buckles  
**Subject:** RE: Water Analysis

Deana:  
Is this for Mack Energy production only?  
Is it for only San Andres produced water?

Thanks

Mike

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Tuesday, April 10, 2018 2:11 PM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Cc:** Matt Buckles <mattbuckles@mec.com>  
**Subject:** FW: Water Analysis

Please see attached.

Thanks  
Deana Weaver

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**From:** Jerry Sherrell  
**Sent:** Tuesday, April 10, 2018 2:10 PM  
**To:** Deana Weaver  
**Subject:** Water Analysis

This is from our Klondike well, 3.5 miles northeast(same formation)

Jerry W. Sherrell  
Mack Energy Corporation  
PO Box 960  
Artesia, NM 88210  
Office 575-748-1288  
Cell 575-703-7382

## **McMillan, Michael, EMNRD**

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**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, March 19, 2018 11:30 AM  
**To:** 'Deana Weaver'  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

No-it has been done on numerous permits including Mesquite's recent permits

Mike

**From:** Deana Weaver [mailto:dweaver@mec.com]  
**Sent:** Monday, March 19, 2018 11:18 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

Mike

Is this a new rule from OCD? Can you tell me where I can find and rule it?

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, March 19, 2018 11:02 AM  
**To:** Deana Weaver  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

Deana:

the OCD has permitted the upper 100' of the Montoya only, for rat-hole.

So if your permitted is approved it will have this stipulation that says that injection is approved for the Devonian and upper 100 feet of the Montoya.

The OCD is just making sure that the Ellenburger is not penetrated.

Mike

**From:** Deana Weaver [mailto:dweaver@mec.com]  
**Sent:** Monday, March 19, 2018 10:59 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Subject:** RE: Mack Energy Denali SWD Well No. 1 Eddy County

Estimated Top of the Woodford: 10,093'  
Estimated Top of the Devonian: 10,150'  
Estimated Top of the Montoya: 10,750'

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Monday, March 19, 2018 8:46 AM  
**To:** Deana Weaver  
**Cc:** Jones, William V, EMNRD; Goetze, Phillip, EMNRD  
**Subject:** Mack Energy Denali SWD Well No. 1 Eddy County

Deana:

I need for the following information for the Denali SWD Well No. 1

- Affidavit of publication-your application will be suspended until the OCD receives a copy of that
- Notification of the surface owner-your application will be suspended until the OCD receives a copy of that
- Estimated Log tops for the top of Woodford
- Estimated log Top of Devonian
- Estimated log Top of Montoya
- Clarify on the tract map which tract who is the operator or affected

Thanks

Mike

Michael McMillan  
1220 South St. Francis  
Santa Fe, New Mexico  
505-476-3448  
[Michael.mcmillan@state.nm.us](mailto:Michael.mcmillan@state.nm.us)

## McMillan, Michael, EMNRD

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**From:** McMillan, Michael, EMNRD  
**Sent:** Monday, April 16, 2018 11:58 AM  
**To:** 'Deana Weaver'  
**Subject:** RE: Water Analysis

Because Devon was not notified, the Application will be suspended, and the 15-day clock will start today.  
Mike

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Monday, April 16, 2018 11:56 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Subject:** RE: Water Analysis

Mike

I just sent notification to Devon, the letter is attached.

Thanks  
Deana

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**From:** McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]  
**Sent:** Monday, April 16, 2018 9:30 AM  
**To:** Deana Weaver  
**Cc:** Matt Buckles  
**Subject:** RE: Water Analysis

Deana:  
I see that your tract map shows Devon as an affected party, but did not notify them?  
Did they sell to Legacy?

Thanks

Mike

**From:** Deana Weaver <dweaver@mec.com>  
**Sent:** Monday, April 16, 2018 8:48 AM  
**To:** McMillan, Michael, EMNRD <[Michael.McMillan@state.nm.us](mailto:Michael.McMillan@state.nm.us)>  
**Cc:** Matt Buckles <[mattbuckles@mec.com](mailto:mattbuckles@mec.com)>  
**Subject:** RE: Water Analysis

Yes to both questions.

Thanks

---

**From:** McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]  
**Sent:** Monday, April 16, 2018 8:47 AM  
**To:** Deana Weaver



FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V16.2]

DATE RECORD: First Rec: 3/14/2018 Admin Complete: 4/11/2018 or Suspended: 4/16/2018 Add. Request/Reply:

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

Well No. 7 Well Name(s): Decezi

API : 30-0 15-32 444 Spud Date: 10/03/02 (P&A) New or Old (EPA): N (UIC Class II Primacy 03/07/1982)

Footages 660FSL 190FEL Lot or Unit 3 Sec 3 Tsp 16S Rge 28E County Eddy

General Location: ~ 12 miles NE Antesi Pool: SWD Pool No.:

BLM 100K Map: Antesi Operator: MAW Energy Corp OGRID: 13837 Contact: Weaver's Regulatory Tech

COMPLIANCE RULE 5.9: Total Wells: Inactive: Fincl Assur: Compl. Order? IS 5.9 OK? Date:

WELL FILE REVIEWED Current Status: P & A

WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging: Y (Old)

Planned Rehab Work to Well: deepen well from 9575 to 10900 circulate cement with casing to surface

Well Construction Details table with columns: Sizes (in) Borehole / Pipe, Setting Depths (ft), Cement Sx or Cf, Cement Top and Determination Method. Rows include Surface, Interm/Prod, Prod/Liner, and OH/PERF.

Injection Lithostratigraphic Units table with columns: Depths (ft), Injection or Confining Units, Tops. Includes rows for Adjacent Unit, Confining Unit, Proposed Inj Interval, and another Adjacent Unit.

Completion/Operation Details: Drilled TD 9575 PBDT NEW TD 10900 NEW PBDT NEW Open Hole or NEW Perfs Tubing Size 2 7/8 in. Inter Coated? Proposed Packer Depth 0100 ft Min. Packer Depth 10050 (100-ft limit) Proposed Max. Surface Press. 2030 psi Admin. Inj. Press. 2030 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P Noticed? BLM Sec Ord WIPP Noticed? Salt/Salado T: B: NW: Cliff House fm FRESH WATER: Aquifer Roswell Antesi Max Depth 200' HYDRO AFFIRM STATEMENT By Qualified Person NMOSE Basin: CAPITAN REEF: thru adj NA No. GW Wells in 1-Mile Radius? FW Analysis? Disposal Fluid: Formation Source(s) San Andres Analysis? On Lease Operator Only or Commercial Disposal Interval: Inject Rate (Avg/Max BWPD): 24/412 Protectable Waters? Source: System: Closed or Open HC Potential: Producing Interval? Formerly Producing? Method: Logs/DST/P&A/Other regional 2-Mi Radius Pool Map AOR Wells: 1/2-M Radius Map and Well List? No. Penetrating Wells: [AOR Horizontals: AOR SWDs: ] Penetrating Wells: No. Active Wells Num Repairs? on which well(s)? Diagrams? Penetrating Wells: No. P&A Wells Num Repairs? on which well(s)? Diagrams?

NOTICE: Newspaper Date 3-16-2018 Mineral Owner BLM Surface Owner BLM N. Date 3-19-2018

RULE 26.7(A): Identified Tracts? Affected Persons: EOG, Reussim, Legacy, Fuller N. Date 3-19-2018

Order Conditions: Issues: Limit S.A. Produced H2O operator only

Additional COAs: Limit injection interval sil-vent upon Montoya for 105 days...