

DATE IN 10/27/2017	SUSPENSE	ENGINEER MAM	LOGGED IN 10/27/2017	TYPE SUD	APP NO. DMA1730046509
-----------------------	----------	-----------------	-------------------------	-------------	--------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

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



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

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

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

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

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

- [D] Other: Specify \_\_\_\_\_

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☒ Offset Operators, Leaseholders or Surface Owner  
 [C] ☒ Application is One Which Requires Published Legal Notice  
 [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Chris Weyand  
 Print or Type Name

Signature

Consulting Engineer  
 Title

10/25/2017  
 Date

chris@lonquist.com  
 e-mail Address

*SUD-1705*  
*- NGL WATER SOLUTIONS*  
*Permian, LLC*  
*372338*  
*well 6*  
*- Strickland #2*  
*30-025-pending*  
*POW*  
*- SUD, Deviation*  
*SILVERMAN*  
*97869*

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

AUSTIN • HOUSTON • WICHITA • DENVER • CALGARY

October 25, 2017

New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division District IV  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
(505) 476-3440

**RE: STRIKER 6 SWD NO. 2 AUTHORIZATION TO INJECT**

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for NGL Water Solutions Permian, LLC's Striker 6 SWD No. 2. In addition, Forms C-101 and C-102 have also been included with this package. Notices have been sent to offset leaseholders and the surface owner. Proof of notice will be sent to the OCD upon receipt.

Any questions should be directed towards NGL Water Solutions Permian, LLC's agent Lonquist & Co., LLC.

Regards,



Christopher B. Weyand  
Staff Engineer  
Lonquist & Co., LLC

(512) 600-1764  
[chris@lonquist.com](mailto:chris@lonquist.com)

2017 OCT 27 A 10:10  
RECEIVED OCD

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC  
ADDRESS: 1509 W WALL ST // STE 306 // MIDLAND, TEXAS 79701  
CONTACT PARTY: SARAH JORDAN PHONE: (432) 685-0005 x1989
- 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 X 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: Christopher B. Wever

TITLE: Consulting Engineer

SIGNATURE: 

DATE: 10/25/2017

E-MAIL ADDRESS: chris@lonquist.com

- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.  
Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

### III. WELL DATA

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

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

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

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

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

### XIV. PROOF OF NOTICE

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

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

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

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

---

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

## INJECTION WELL DATA SHEET

OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLCWELL NAME & NUMBER: STRIKER 6 SWD #2

WELL LOCATION: 827' FNL & 942' FWL D 20 24S 34E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 26.000"Casing Size: 20.000"Cemented with: 2,700 sx.or \_\_\_\_\_ ft<sup>3</sup>Top of Cement: surfaceMethod Determined: circulation1<sup>st</sup> Intermediate CasingHole Size: 17.500"Casing Size: 13.375"Cemented with: 2,850 sx.or \_\_\_\_\_ ft<sup>3</sup>Top of Cement: surfaceMethod Determined: circulation2<sup>nd</sup> Intermediate CasingHole Size: 11.500"Casing Size: 9.625"Cemented with: 1,700 sx.or \_\_\_\_\_ ft<sup>3</sup>Top of Cement: surfaceMethod Determined: circulation

Production Liner

Hole Size: 8.375"

Casing Size: 7.000"

Cemented with: 505 sx.

*or* \_\_\_\_\_ ft<sup>3</sup>

Top of Cement: 12,000'

Method Determined: calculation

Total Depth: 18,100'

Injection Interval

16,250 feet to 18,100 feet

(Open Hole)

### INJECTION WELL DATA SHEET

Tubing Size: 5.500", 17 lb/ft, L-80, BT&C from 0'- 12,000' and 4.500", 11.6 lb/ft, HCP-110 UFJ from 12,000'- 16,200'

Lining Material: Duoline

Type of Packer: D&L Oil Tools 7.000" Permapack Packer – Single Bore

Packer Setting Depth: 16,200'

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

#### Additional Data

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

If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Devonian, Silurian, Fusselman and Montoya (Top 100')

3. Name of Field or Pool (if applicable): SWD; Silurian-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, new drill.

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

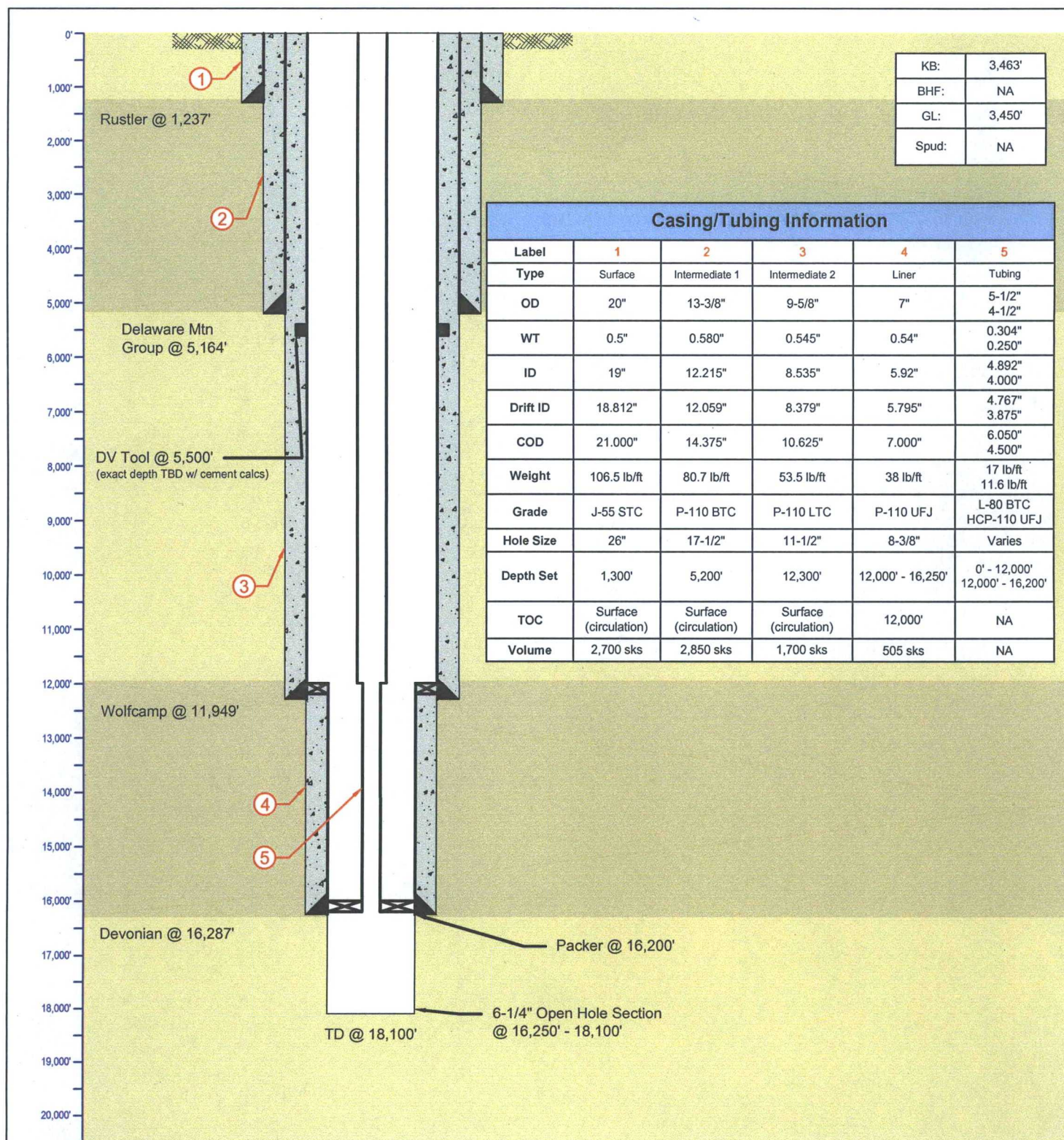
Bone Spring: 9,014'

Wolfcamp: 11,949'

Strawn: 13,188'

Atoka: 13,442'

Morrow: 14,148'



<b>LONQUIST</b> <b>FIELD SERVICE</b> AUSTIN   WICHITA HOUSTON   CALGARY	NGL Water Solutions Permian LLC		Striker 6 SWD No. 2	
	Country: USA	State/Province: New Mexico		County/Parish: Eddy
	Location:	Site:		Survey/STR: 20-24S-34E
	API No:	Field:		Well Type/Status: SWD
	Texas License F-9147	State ID No:		Project No: 1526
3345 Bee Cave Road, Suite 201 Austin, Texas 78746 Tel: 512.732.9812 Fax: 512.732.9816	Date: 10/20/2017		Approved: CW	
	Drawn: C.JG		Reviewed: CW	
	Rev No: 1		Notes:	

**NGL Water Solutions Permian, LLC**

**Striker 6 SWD No. 2**

**FORM C-108 Supplemental Information**

**III. Well Data**

**A. Wellbore Information**

1.

Well information	
Lease Name	Striker 6 SWD
Well No.	2
County	Lea
Location	S-20 T-24S R-34E
Footage Location	827' FNL & 942' FWL

2.

**a. Wellbore Description**

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20.000"	13.375"	9.625"	7.000"
WT	0.500"	0.580"	0.545"	0.540"
ID	19.000"	12.215"	8.535"	5.920"
Drift ID	18.812"	12.059"	8.379"	5.795"
COD	21.000"	14.375"	10.625"	7.000"
Weight	106.5 lb/ft	80.7 lb/ft	53.5 lb/ft	38 lb/ft
Grade	J-55	P-110	P-110	P-110
Hole Size	26"	17.5"	11.5"	8.375"
Depth Set	1,300'	5,200'	12,300'	12,000' – 16,250'

b. Cementing Program

Cement Information				
Casing String	Surface	Intermediate	Production	Liner
Lead Cement	C	C	NeoCem	H
Lead Cement Volume	1,310 sks	2,195 sks	Stage 1: 680 sks Stage 2: 640 sks	505 sks
Tail Cement	C	C	NeoCem/HALCEM	
Tail Cement Volume	1,390 sks	655 sks	Stage 1: 270 sks Stage 2: 110 sks	
Cement Excess	100%	25%	25%	25%
TOC	Surface	Surface	Surface	12,000'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information		
OD	5.5"	4.5"
WT	0.304"	0.250"
ID	4.892"	4.000"
Drift ID	4.767"	3.875"
COD	6.050"	4.500"
Weight	17 lb/ft	11.6 lb/ft
Grade	L-80 BTC	HCP-110 UFJ
Depth Set	0'-12,000'	12,000'-16,200'

Tubing will be lined with Duoline.

4. Packer Description

D&L Oil Tools 7.000" Permapack Packer – Single Bore

B. Completion Information

1. Injection Formation: Devonian, Silurian, Fusselman, Montoya (Top 100')
2. Gross Injection Interval: 16,250' – 18,100'

Completion Type: Open Hole

3. Drilled for injection.

4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Bone Spring	9,014'
Wolfcamp	11,949'
Strawn	13,188'
Atoka	13,442'
Morrow	14,148'

#### VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

#### VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injection:

Average Volume: 25,000 BPD  
Maximum Volume: 32,500 BPD

2. Closed System

3. Anticipated Injection Pressure:

Average Injection Pressure: 1,900 PSI (surface pressure)  
Maximum Injection Pressure: 3,250 PSI (surface pressure)

4. The injection fluid is to be locally produced water. Attached are produced water sample analyses taken from the closest wells that feature samples from the Bone Spring, Wolfcamp, Strawn, Atoka, and Morrow formations.
5. The disposal interval is non-productive. No water samples are available from the surrounding area.

## VIII. Geological Data

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

### A. Injection Zone: Siluro-Devonian

Formation	Depth
Rustler Anhydrite	1,237'
Salado	1,577'
Delaware	5,164'
Brushy Canyon	7,794'
Bone Spring	9,014'
Wolfcamp	11,949'
Pennsylvanian	13,024'
Strawn	13,188'
Atoka	13,442'
Morrow	14,148'
Mississippian Lime	15,064'
Woodford	16,085'
Devonian	16,287'

### B. Underground Sources of Drinking Water

There is limited data on USDWs in the area. The most closely offsetting water wells were drilled to 610' or shallower. Fresh water depth appears to vary from 40' to 475' (300' on average) in the area in the form of sporadic alluvial sources rather than a fresh water aquifer. In general, any USDWs would be expected to fall above the salt. The top of the Rustler Anhydrite is estimated at approximately 1,237'.

IX. Proposed Stimulation Program

No proposed stimulation program.

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

The only fresh water well (C-03932) within one mile of the well location as shown on the attached map could not be located. As a result, fresh water samples were not obtained for analysis purposes.

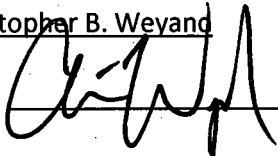
XII. Affirmative Statement of Examination of Geologic and Engineering Data

Based on the available engineering and geologic data we find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

NAME: Christopher B. Weyand

TITLE: Consulting Engineer

SIGNATURE: \_\_\_\_\_



DATE: 10/25/2017

**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 and Natural Resources**  
**Oil Conservation Division**  
**1220 South St. Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
Revised July 18, 2013

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address NGL WATER SOLUTIONS PERMIAN, LLC 1509 W WALL ST, STE 306 MIDLAND, TEXAS 79701		<sup>2</sup> OGRID Number 372338 <sup>3</sup> API Number 30-025-TBD
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>STRIKER 6 SWD</b>	<sup>6</sup> Well No. 2

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	20	24S	34E		827	NORTH	942	WEST	LEA

**<sup>8</sup> Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

**<sup>9</sup> Pool Information**

Pool Name SWD; Silurian-Devonian	Pool Code 96101
-------------------------------------	--------------------

**Additional Well Information**

<sup>11</sup> Work Type N	<sup>12</sup> Well Type SWD	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Private	<sup>15</sup> Ground Level Elevation 3,542'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 18,100'	<sup>18</sup> Formation Siluro-Devonian	<sup>19</sup> Contractor TBD	<sup>20</sup> Spud Date ASAP
Depth to Ground water <1,237'		Distance from nearest fresh water well 3,730'		Distance to nearest surface water > 1 mile

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

**<sup>21</sup> Proposed Casing and Cement Program**

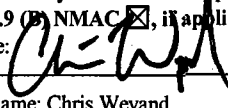
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	106.5 lb/ft	1,300'	2,700	Surface
Intermediate	17.5"	13.375"	80.7 lb/ft	5,200'	2,850	Surface
Production	11.5"	9.625"	53.5 lb/ft	12,300'	1,700	Surface
Prod. Liner	8.375"	7"	38 lb/ft	12,000' – 16,250'	505	12,000'
Tubing	N/A	5.5"	17 lb/ft	12,000'	N/A	N/A
Tubing	N/A	4.5"	11.6 lb/ft	12,000' – 16,200'	N/A	N/A

**Casing/Cement Program: Additional Comments**

See attached schematic.

**<sup>22</sup> Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	5,000 psi	8,000 psi	TBD – Schaffer/Cameron

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature:  Printed name: Chris Weyand Title: Consulting Engineer E-mail Address: chris@lonquist.com Date: 10/25/2017	<div style="text-align: center;"><b>OIL CONSERVATION DIVISION</b></div> Approved By:  Title:  Approved Date:      Expiration Date:  Conditions of Approval Attached
Phone: 512-600-1764	

**DISTRICT I**  
1825 N. French Dr., Hobbs, NM 88240  
Phone (575) 393-6101 Fax: (575) 393-0720

**DISTRICT II**  
811 S. First St., Artesia, NM 88210  
Phone (575) 748-1223 Fax: (575) 748-0720

**DISTRICT III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 334-6176 Fax: (505) 334-6170

**DISTRICT IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-8460 Fax: (505) 476-3465

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to appropriate  
District Office

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

☐ AMENDED REPORT

API Number		Pool Code 96101	Pool Name SWD; Silurian-Devonian
Property Code	Property Name STRIKER 6 SWD		Well Number 2
OGRID No. 372338	Operator Name NGL WATER SOLUTIONS PERMIAN LLC		Elevation 3542'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	20	24 S	34 E		827	NORTH	942	WEST	LEA

**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
Dedicated Acres		Joint or Infill	Consolidation Code		Order No.				

**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

<p>N: 441247.5 E: 798931.1 (NAD83)</p> <p>827'</p> <p>942'</p> <p><b>SURFACE LOCATION</b> Lat - N 32.208049° Long - W 103.497420° NADSPCE - E 799877.7 (NAD-83)</p> <p><b>SURFACE LOCATION</b> Lat - N 32.207925° Long - W 103.496945° NADSPCE - E 758693.1 (NAD-27)</p>		<p>N: 441286.8 E: 804197.2 (NAD83)</p>	
<p>N: 438608.0 E: 798947.6 (NAD83)</p>		<p>N: 438647.3 E: 804219.7 (NAD83)</p>	

**OPERATOR CERTIFICATION**

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

Signature: Christopher Weyand Date: 10/25/2017

Printed Name: Christopher Weyand

Email Address: chris@lonquist.com

**SURVEYOR CERTIFICATION**

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

DATE SURVEYED: OCTOBER 19, 2017

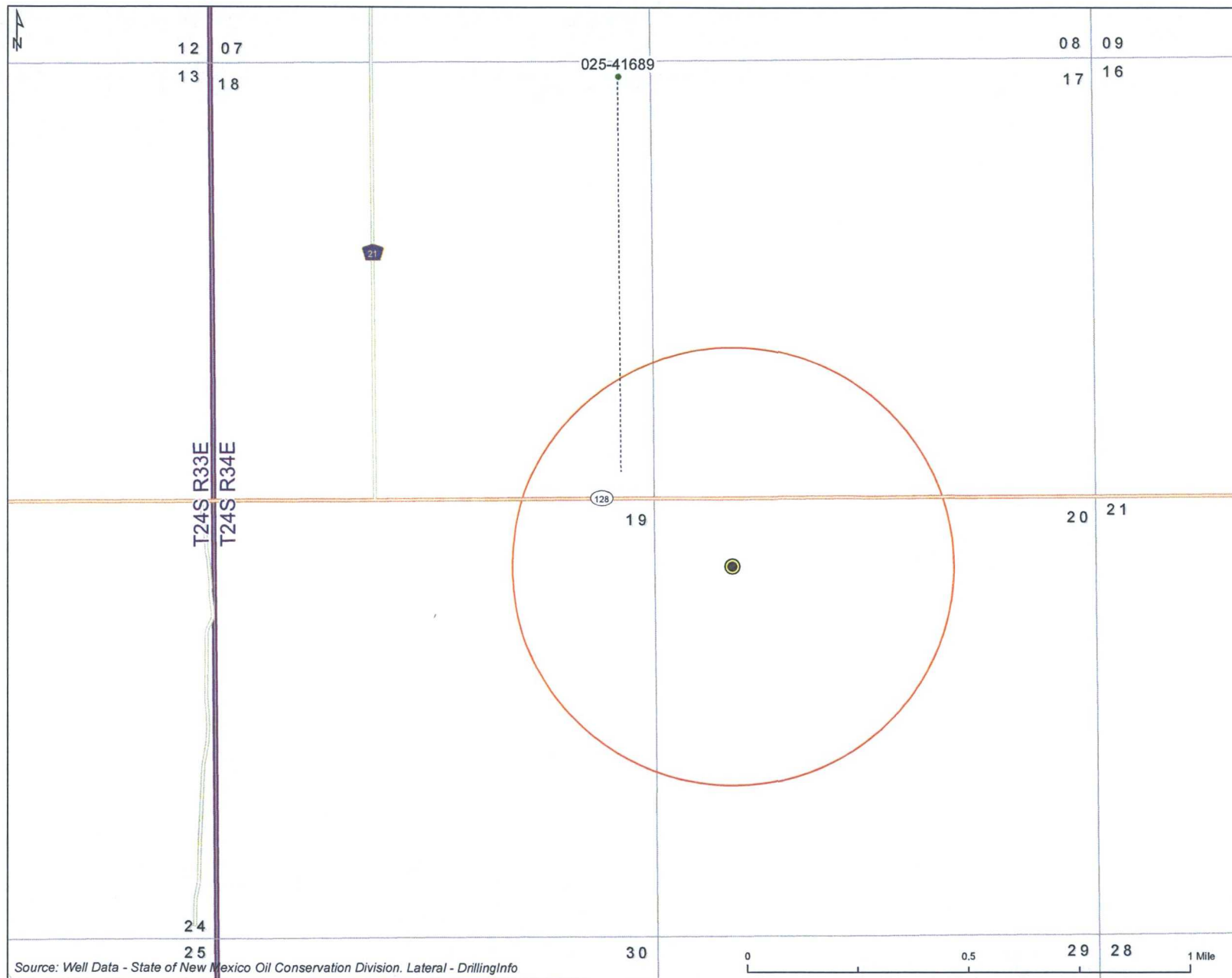
Signature of Professional Surveyor: [Signature]

Certification Number: 7977

Scale: 1" = 2000'

WO Num.: 33362





## Striker 6 SWD #2 1/2 mile Area of Review

Lea County, NM  
NGL Water Solutions Permian, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH Date: 10/23/2017 Approved by: NLB

**LONQUIST & CO. LLC**

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

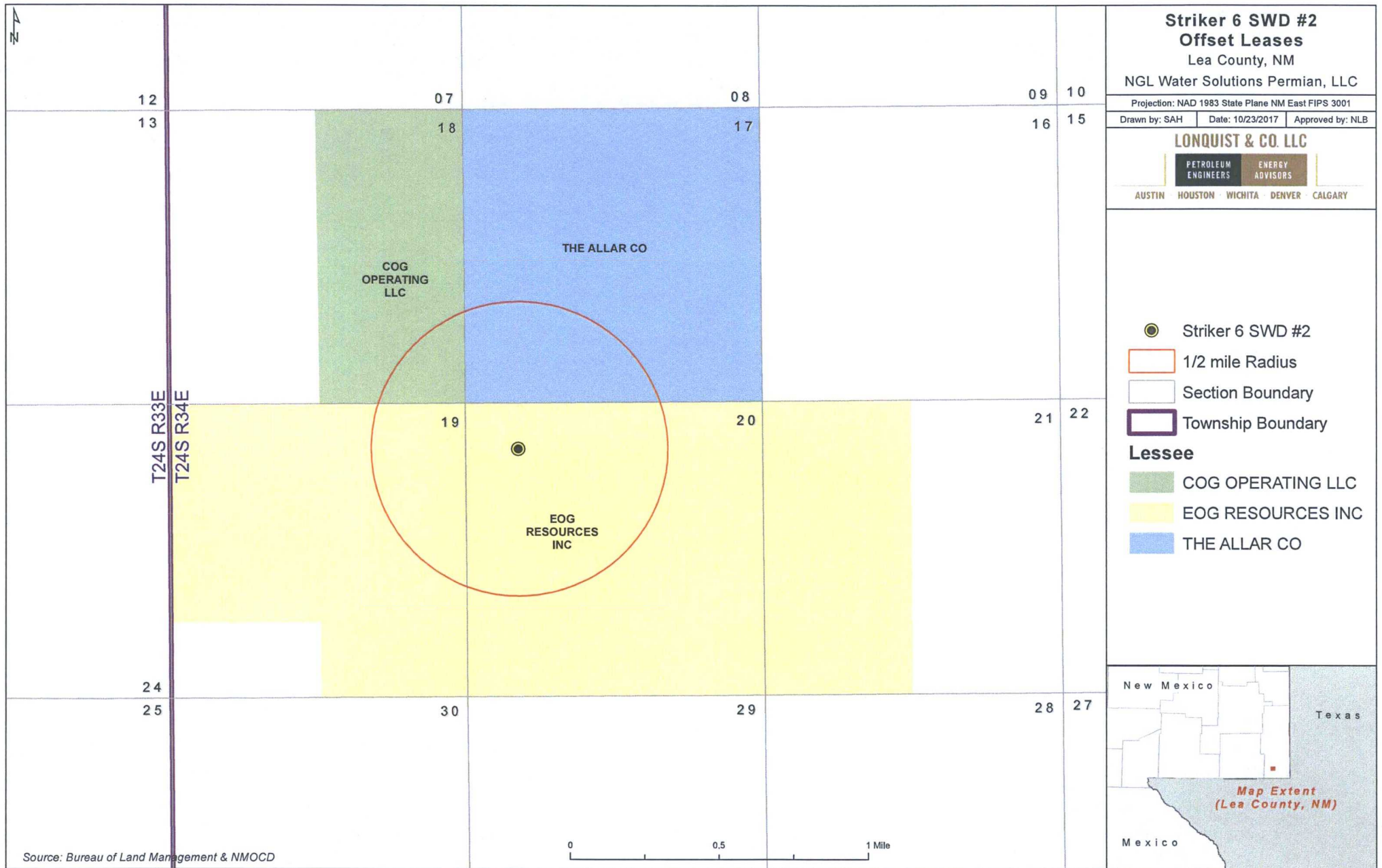
AUSTIN HOUSTON WICHITA DENVER CALGARY

- Striker 6 SWD #2
- Oil Well
- Lateral
- Major Road
- Local Street
- 1/2 mile Radius
- Section Boundary
- Township Boundary



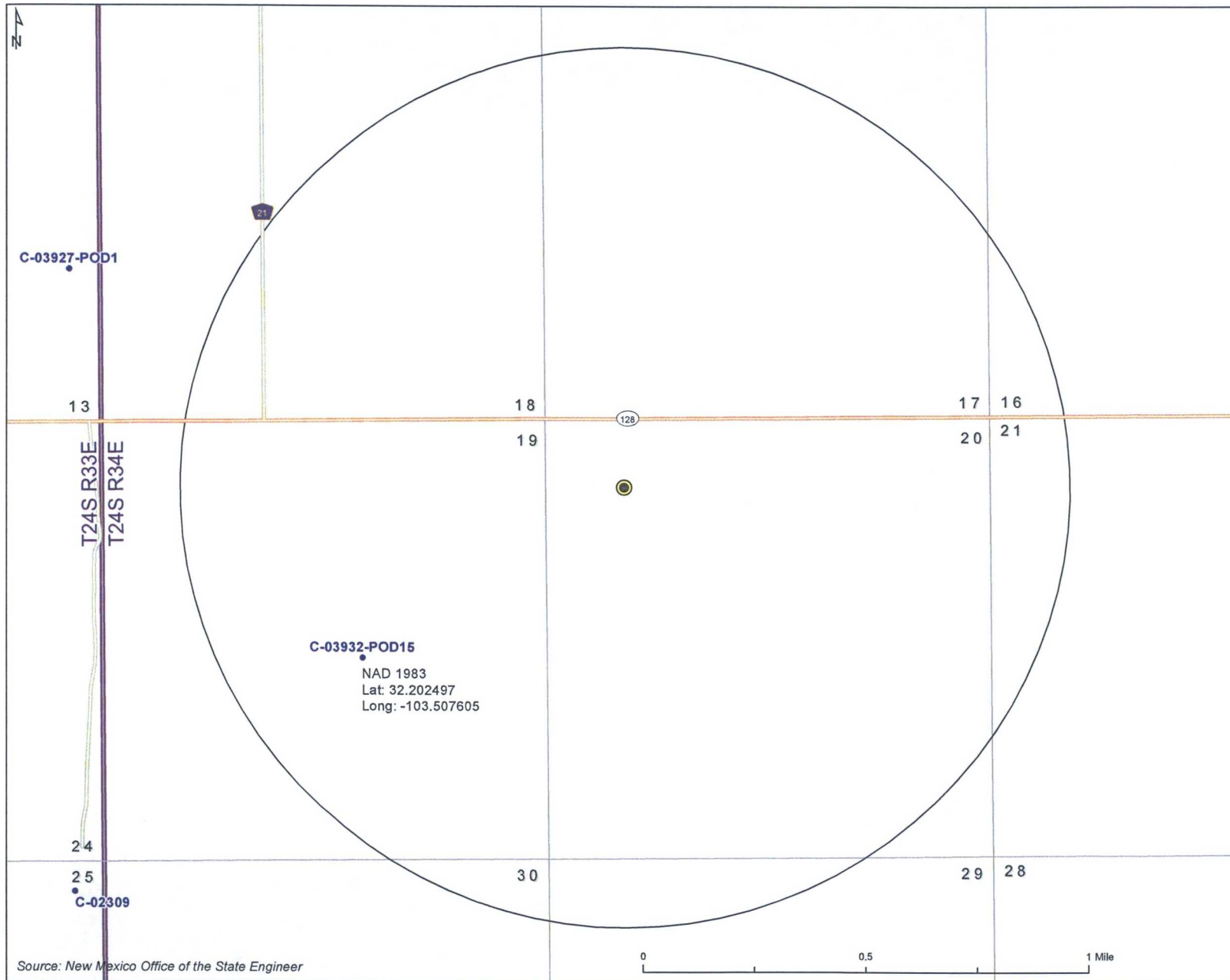
Half-Mile AOR  
Striker 6 SWD #2

API (30-025-)	Well Name	Well Type	Status	Operator	TD (TVD)	Location	Date Drilled
41689	SEBASTIAN FEDERAL COM #004H	Oil	Active	COG OPERATING LLC	10877	A-18-24S-34E	7/2/2014



Striker 6 SWD No. 2 Notice List			
Notice	Address	Phone Number	Date Noticed
Oil Conservation Division District IV	1220 South St. Francis Drive, Santa Fe, NM 87505	(505) 476-3440	10/25/2017
Oil Conservation Division District I	1625 N. French Drive, Hobbs, NM 88240	(575) 393-6161	10/25/2017
Surface Owner			
NGL WATER SOLUTIONS PERMIAN, LLC	1509 W Wall St., Ste. 306, Midland, TX 79701	(432) 685-0005	N/A
Leasehold Operators - 1/2 Mile			
THE ALLAR CO	PO BOX 1567, GRAHAM TX 76450		10/25/2017
EOG RESOURCES INC	PO BOX 4362, HOUSTON TX 772104362		10/25/2017
COG OPERATING LLC	600 W ILLINOIS AVE, MIDLAND TX 797014882	(432) 221-0500	10/25/2017

Striker 6 SWD #2: Offsetting Produced Water Analysis														
wellname	api	county	formation	ph	tds_mgL	sodium_mgL	calcium_mgL	iron_mgL	magnesium_mgL	manganese_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL	co2_mgL
ANTELOPE RIDGE UNIT #002	3002520444	LEA	ATOKA	6.7	51475						31000	317	340	
BELL LAKE UNIT #009	3002520261	LEA	BONE SPRING		204652						130000	512	260	
THISTLE UNIT #071H	3002542425	Lea	BONE SPRING 1ST SAND	5.6	171476.3	55363.2	9140	40.4	1023	1.1	104576.4	244	560	770
BELL LAKE 19 STATE #002H	3002541515	Lea	BONE SPRING 2ND SAND	6.2		47148	6419	15	854	0	86572	232	670	240
BELL LAKE 19 STATE #004H	3002541517	Lea	BONE SPRING 2ND SAND	6.3		47537	6950	11	886	0	88389	171	650	210
BELL LAKE 19 STATE #001H	3002541024	Lea	BONE SPRING 2ND SAND	7		60725	8703	52	1020	0.88	113193	145	700	100
CUSTER MOUNTAIN UNIT #001	3002520756	LEA	MORROW		282741						176800	161	650	
PRONGHORN AHO FEDERAL #001	3002526496	LEA	STRAWN	5.5			20.1	0	12.2		35.5	61.1	48.8	
BELLOQ 2 STATE #002H	3001542895	EDDY	WOLFCAMP	6.8	119471.8	37359.2	5659.1	22.4	746.1		73172.5		1035.5	250



## Striker 6 SWD #2 Offset Water Wells

Lea County, NM

NGL Water Solutions Permian, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH Date: 10/23/2017 Approved by: NLB

**LONQUIST & CO. LLC**

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- Striker 6 SWD #2
- Water Well
- Major Road
- Local Street
- 1 mile Radius
- Section Boundary
- Township Boundary





# New Mexico Office of the State Engineer

## Water Right Summary



**WR File Number:** C 03932      **Subbasin:** CUB      **Cross Reference:-**  
**Primary Purpose:** EXP      EXPLORATION  
**Primary Status:** PMT      PERMIT  
**Total Acres:**      **Subfile:** -  
**Total Diversion:** 0      **Cause/Case:** -  
**Owner:** BRYCE KARGER  
**Contact:** ROBERT H. HOLDER

### Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
581433	EXPL	2016-01-27	PMT	APR	C 03932	T	0	0	

### Current Points of Diversion

POD Number	Source	Q Q Q			(NAD83 UTM in meters)		Other Location Desc
		64	16	4	X	Y	
C 03932 POD1	3 1 2 05 24S 34E	642187	3569284				S5-BH-01
C 03932 POD10	4 4 3 07 24S 34E	640623	3566514				S8-BH-05
C 03932 POD11	1 2 4 15 24S 34E	644835	3565448				S15-BH-01
C 03932 POD12	1 2 4 15 24S 34E	645834	3565459				S15-BH-02
C 03932 POD13	4 2 3 15 24S 34E	645314	3565203				S15-BH-03
C 03932 POD14	4 3 3 15 24S 34E	644841	3564948				S15-BH-04
C 03932 POD15	1 1 4 19 24S 34E	640661	3563857				S15-BH-05
C 03932 POD2	4 2 2 05 24S 34E	642686	3569290				S5-BH-02
C 03932 POD3	4 3 2 05 24S 34E	642442	3568787				S5-BH-03
C 03932 POD4	1 3 4 05 24S 34E	642197	3568285				S5-BH-04
C 03932 POD5	2 4 4 05 24S 34E	642697	3568290				S5-BH-05
C 03932 POD6	1 1 4 07 24S 34E	640617	3567013				S8-BH-01
C 03932 POD7	4 1 3 08 24S 34E	641616	3567025				S8-BH-02
C 03932 POD8	4 2 4 07 24S 34E	641120	3566769				S8-BH-03
C 03932 POD9	4 3 3 08 24S 34E	641623	3566525				S8-BH-04

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

# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated  
October 24, 2017  
and ending with the issue dated  
October 24, 2017.

  
Publisher

Sworn and subscribed to before me this  
24th day of October 2017.

  
Administrative Coordinator

My commission expires  
February 09, 2021  
(Seal)



OFFICIAL SEAL  
Jennifer Warden  
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 2-9-2021

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

## LEGAL NOTICE

LEGAL NOTICE  
October 24, 2017

NGL Water Solutions Permian, LLC, 1509 W. Wall Street, Suite 308, Midland, Texas 79701 is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Striker 6 SWD No. 2. The proposed well will be located 827' FNL & 942' FWL in Section 20, Township 24S, Range 34E in Lea County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Siluro-Devonian Formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 16,250 feet to a maximum depth of 18,100 feet. The maximum surface injection pressure will not exceed 3,250 psi with a maximum rate of 32,500 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1764. #32191

67112661

00201631

LONQUIST & CO., LLC  
3345 BEE CAVE ROAD, STE 201  
AUSTIN, TX 78746

## McMillan, Michael, EMNRD

**From:** TrackingUpdates@fedex.com  
**Sent:** Friday, October 27, 2017 10:03 AM  
**To:** Chris Weyand  
**Subject:** FedEx Shipment 770588527670 Delivered

# Your package has been delivered

Tracking # 770588527670

Ship date:  
Wed, 10/25/2017

Maria Rivas  
Lonquist and Co., LLC  
Austin, TX 78738  
US



Delivered

Delivery date:  
Fri, 10/27/2017 10:00  
am

1220 South Street  
Oil Conservation Div. - District  
IV  
Francis Drive  
SANTA FE, NM 87505  
US

## Shipment Facts

Our records indicate that the following package has been delivered.

<b>Tracking number:</b>	<u>770588527670</u>
<b>Status:</b>	Delivered: 10/27/2017 10:00 AM Signed for By: N.BARELA
<b>Reference:</b>	#1526
<b>Signed for by:</b>	N.BARELA
<b>Delivery location:</b>	SANTA FE, NM
<b>Delivered to:</b>	Mailroom
<b>Service type:</b>	FedEx 2Day A.M
<b>Packaging type:</b>	Your Packaging
<b>Number of pieces:</b>	1
<b>Weight:</b>	1.00 lb.
<b>Special handling/Services:</b>	Deliver Weekday
<b>Standard transit:</b>	10/27/2017 by 10:30 am

## McMillan, Michael, EMNRD

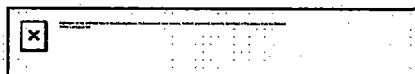
**From:** TrackingUpdates@fedex.com  
**Sent:** Friday, October 27, 2017 9:52 AM  
**To:** Chris Weyand  
**Subject:** FedEx Shipment 770588549789 Delivered

# Your package has been delivered

Tracking # 770588549789

Ship date:  
Wed, 10/25/2017

Maria Rivas  
Lonquist and Co., LLC  
Austin, TX 78738  
US



Delivered


Delivery date:  
Fri, 10/27/2017 9:49 am  
Oil Conservation Div. District

1  
NM Energy, Minerals & Nat Res  
Dept  
1625 North French Drive  
HOBBS, NM 88240  
US

## Shipment Facts

Our records indicate that the following package has been delivered.

<b>Tracking number:</b>	<u>770588549789</u>
<b>Status:</b>	Delivered: 10/27/2017 09:49 AM Signed for By: BCASCELLS
<b>Reference:</b>	Project #1526
<b>Signed for by:</b>	BCASCELLS
<b>Delivery location:</b>	Hobbs, NM
<b>Service type:</b>	FedEx Ground
<b>Packaging type:</b>	Package
<b>Number of pieces:</b>	1
<b>Weight:</b>	1.00 lb.
<b>Standard transit:</b>	10/27/2017

 Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 10:51 AM CDT on 10/27/2017.

All weights are estimated.

## McMillan, Michael, EMNRD

**From:** TrackingUpdates@fedex.com  
**Sent:** Friday, October 27, 2017 2:16 PM  
**To:** Chris Weyand  
**Subject:** FedEx Shipment 770588676590 Delivered

# Your package has been delivered

Tracking # 770588676590

Ship date:  
**Wed, 10/25/2017**

**Maria Rivas**  
Lonquist and Co., LLC  
Austin, TX 78738  
US



Delivered


Delivery date:  
**Fri, 10/27/2017 3:13 pm**

**COG Operating LLC**  
COG Operating LLC  
600 West Illinois Avenue  
MIDLAND, TX 79701  
US

## Shipment Facts

Our records indicate that the following package has been delivered.

<b>Tracking number:</b>	<u><a href="#">770588676590</a></u>
<b>Status:</b>	Delivered: 10/27/2017 3:13 PM Signed for By: UARANDA
<b>Reference:</b>	#1526
<b>Signed for by:</b>	UARANDA
<b>Delivery location:</b>	Midland, TX
<b>Service type:</b>	FedEx Ground
<b>Packaging type:</b>	Package
<b>Number of pieces:</b>	1
<b>Weight:</b>	1.00 lb.
<b>Standard transit:</b>	10/27/2017

 Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 3:15 PM CDT on 10/27/2017.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above.

Standard transit is the date the package should be delivered by, based on the selected service, destination, and ship date. Limitations and exceptions may apply. Please see the FedEx Service Guide for terms and conditions of service, including the FedEx Money-Back Guarantee, or contact your FedEx Customer Support representative.

**McMillan, Michael, EMNRD**

---

**From:** auto-reply@usps.com  
**Sent:** Tuesday, October 31, 2017 11:14 AM  
**To:** Chris Weyand  
**Subject:** USPS® Item Delivered, PO Box 70171000000034025457

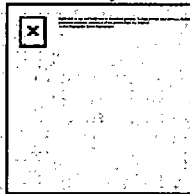


**Hello Chris Weyand,**

Your item has been delivered and is available at a PO Box at 5:08 am on October 30, 2017 in HOUSTON, TX 77201.

**Tracking Number:**  
**70171000000034025457**

**Delivered, PO Box**



Visit **USPS Tracking®** to check the most up-to-date status of your package. Sign up for **Informed Delivery®** to digitally preview the address side of your incoming letter-sized mail and manage your packages scheduled to arrive soon! To update how frequently you receive emails from USPS, log in to your **USPS.com** account.

Want regular updates on your package? **Set up text alerts.**



## McMillan, Michael, EMNRD

---

**From:** Chris Weyand <chris@lonquist.com>  
**Sent:** Friday, November 17, 2017 11:58 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** RE: Striker 6 SWD  
**Attachments:** scanner@lonquist.com\_20171109\_162940.pdf

Mike,

Please see attached.

Thanks,

**Chris Weyand**  
Staff Engineer  
Lonquist & Co., LLC  
(512) 600-1764 Direct  
(210) 846-2673 Mobile

---

**From:** McMillan, Michael, EMNRD [mailto:Michael.McMillan@state.nm.us]  
**Sent:** Friday, November 17, 2017 12:23 PM  
**To:** Chris Weyand  
**Subject:** RE: Striker 6 SWD

Looking at the Striker 6 SWD Well No. 2, I do not see that Allar Company was notified.  
Mike

---

**From:** Chris Weyand [mailto:chris@lonquist.com]  
**Sent:** Friday, November 17, 2017 8:35 AM  
**To:** McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>  
**Subject:** Striker 6 SWD

Hi Mike,

Are you able to provide any status updates on the Striker 6 SWD #1 and #2 applications?

Thanks,

**LONGQUIST & CO. LLC** **Chris Weyand** • Staff Engineer • Lonquist & Co., LLC • 12912 Hill Country Blvd., Suite F-200 • Bee Cave, Texas, USA 78738  
Direct: 512-600-1764 • Cell: 210-846-2673 • Fax: 512-732-9816 • [chris@lonquist.com](mailto:chris@lonquist.com) • [www.lonquist.com](http://www.lonquist.com)



AUSTIN | WICHITA  
HOUSTON | CALGARY

This email and any attachments thereto may contain private, confidential and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by others is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

**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:

EOG Resources Inc.  
 P. O. Box 4362  
 Houston, Texas 77210-4362

2. Article Number (Transfer from service label)

9590 9402 3107 7017 1000 0000 3402 5457

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

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature ☒ Agent ☒ Addressee  
 X *M. Crites*

B. Received by (Printed Name) *M Crites* C. Date of Delivery

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

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

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$  
☐ Return Receipt (electronic) \$  
☐ Certified Mail Restricted Delivery \$  
☐ Adult Signature Required \$  
☐ Adult Signature Restricted Delivery \$

Postage \$ *Striker 6 8WD #2*

Total Postage \$

Sent To **EOG Resources Inc.**  
 P. O. Box 4362  
 Houston, Texas 77210-4362

Street and A  
 City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

**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:

The Allar Company  
 P. O. Box 1567  
 Graham, Texas 76450

2. Article Number (Transfer from service label)

9590 9402 3107 7017 1000 0000 3402 5454

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

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature ☒ Agent ☒ Addressee  
 X *Melanie Barrett*

B. Received by (Printed Name) *Melanie Barrett* C. Date of Delivery *10-31-17*

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

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

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$  
☐ Return Receipt (electronic) \$  
☐ Certified Mail Restricted Delivery \$  
☐ Adult Signature Required \$  
☐ Adult Signature Restricted Delivery \$

Postage \$

Total Postage \$

Sent To **The Allar Company**  
 P. O. Box 1567  
 Graham, Texas 76450

Street and A  
 City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	County	Q	Q	Q	Sec	Tw	Rng	X	Y	DepthWell	DepthWater	Water Column
C 03943 POD1		CUB	LE	2	4	2	21	24S	34E	644523	3564266	610	431	179

Average Depth to Water: 431 feet

Minimum Depth: 431 feet

Maximum Depth: 431 feet

Record Count: 1

### PLSS Search:

Section(s): 18-21

Township: 24S

Range: 34E

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

11/17/17 11:32 AM

WATER COLUMN/ AVERAGE DEPTH TO  
WATER

**McMillan, Michael, EMNRD**

---

**From:** auto-reply@usps.com  
**Sent:** Tuesday, October 31, 2017 11:14 AM  
**To:** Chris Weyand  
**Subject:** USPS® Item Delivered, PO Box 70171000000034025457



Hello **Chris Weyand**,

Your item has been delivered and is available at a PO Box at 5:08 am on October 30, 2017 in HOUSTON, TX 77201.

Tracking Number: **70171000000034025457**

**Delivered, PO Box**



**Tracking & Delivery Options**

**My Account**

Visit **USPS Tracking®** to check the most up-to-date status of your package. Sign up for **Informed Delivery®** to digitally preview the address side of your incoming letter-sized mail and manage your packages scheduled to arrive soon! To update how frequently you receive emails from USPS, log in to your **USPS.com** account.

Want regular updates on your package? **Set up text alerts.**

**INFORMED DELIVERY®**

Sign up to view your mail online or via email.





C-108 Review Checklist: Received \_\_\_\_\_ Add. Request: \_\_\_\_\_ Reply Date: \_\_\_\_\_ Suspended: \_\_\_\_\_ [Ver 15]

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

Well No. 2 Well Name(s): Striken 6 SWD APPLICATION complete 11-17-2017

API: 30-0 25-Pending Spud Date: TBA New or Old: 2 (UIC Class II Primacy 03/07/1982)

Footages 942 RW Lot \_\_\_\_\_ or Unit 7 Sec 20 Tsp 24S Rge 34E County Lea

General Location: 32 miles NW of AL Pool: SWD, Devonian-Silurian Pool No.: 57861

BLM 100K Map: 5A1 Operator: NGL WATER SOLUTIONS PENNINC LLC OGRID: 372338 Contact: Chris Weyand

COMPLIANCE RULE 5.9: Total Wells: 3 Inactive: 0 Fincl Assur: OK Compl. Order N/A IS 5.9 OK? Y Date: 12-05-2017

WELL FILE REVIEWED ☐ Current Status: Proposed

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

Planned Rehab Work to Well: \_\_\_\_\_

Well Construction Details		Sizes (in)	Setting	Cement	Cement Top and Determination Method	
		Borehole / Pipe	Depths (ft)	Sx or Cf		
Planned ___ or Existing ___ Surface		<u>26 1/2" / 20"</u>	<u>1300</u>	<u>2700</u>	<u>SURFACE / VISUAL</u>	
Planned ___ or Existing ___ Interm/Prod		<u>17 1/2" / 13 3/8"</u>	<u>5200</u>	<u>2850</u>	<u>SURFACE / VISUAL</u>	
Planned ___ or Existing ___ Interm/Prod		<u>11 1/2" / 9 5/8"</u>	<u>12300</u>	<u>500</u>	<u>1700</u>	<u>SURFACE / VISUAL</u>
Planned ___ or Existing ___ Prod/Liner		<u>8 3/4" / 7"</u>	<u>16250</u>	<u>505</u>	<u>12000 / C-13-L</u>	
Planned ___ or Existing ___ Liner						
Planned ___ or Existing ___ OH / PERF		<u>16250 / 1800</u>		<u>Inj Length 1650</u>		

Injection Lithostratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.			<u>DV</u>	<u>16250</u>	Drilled TD <u>18100</u> PBDT _____
Confining Unit: Litho. Struc. Por.			<u>Wd</u>	<u>16085</u>	NEW TD <u>18100</u> NEW PBDT _____
Proposed Inj Interval TOP: _____					NEW Open Hole <input checked="" type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM: _____					Tubing Size <u>0</u> in. Inter Coated? _____
Confining Unit: Litho. Struc. Por.					Proposed Packer Depth <u>16200</u> ft
Adjacent Unit: Litho. Struc. Por.					Min. Packer Depth <u>16200</u> (100-ft limit)
					Proposed Max. Surface Press. <u>16150</u> psi
					Admin. Inj. Press. <u>5250</u> (0.2 psi per ft)

### AOR: Hydrologic and Geologic Information

POTASH: R-111-P N/A Noticed? \_\_\_\_\_ BLM Sec Ord ☐ WIPP ☐ Noticed? \_\_\_\_\_ Salt/Salado T: \_\_\_\_\_ B: 4600 NW: Cliff House fm \_\_\_\_\_

FRESH WATER: Aquifer DUSTICE Max Depth 430 HYDRO AFFIRM STATEMENT By Qualified Person ☒

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

Disposal Fluid: Formation Source(s) Stone, Atlat, main Analysis? \_\_\_\_\_ On Lease ☐ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 254/32.5K Protectable Waters? \_\_\_\_\_ Source: \_\_\_\_\_ System: Closed or Open

HC Potential: Producing Interval? N/A Formerly Producing? \_\_\_\_\_ Method: Logs/DST/P&A/Other region 1 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? Y Well List? 1 Total No. Wells Penetrating Interval: 0 Horizontals? 0 (NOT penetrative objection)

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 10-24-2017 Mineral Owner BLM Surface Owner NGL N. Date NA 10-24-2017

RULE 26.7(A): Identified Tracts? \_\_\_\_\_ Affected Persons: EOG, CUG, AIIAR N. Date 11-17-2017

Order Conditions: Issues: C-B-L 500' top liner / base of liner (AIIAR)

Add Order Cond: \_\_\_\_\_