

DATE IN 8/21/2017	SUSPENSE	ENGINEER M/M	LOGGED IN 8/21/2017	TYPE SWD	APP NO. PMAM1728352567
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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

Chris Weyand
Signature

Consulting Engineer
Title

8/15/2017
Date

chris@lonquist.com
e-mail Address

- SWD
- NGL Water Solutions
Permian, LLC
372338
- well
- Striken 2 SWD
#1
30-015-pending

pod

- SWD, Devcon, etc -
Silurian
47869

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

RECEIVED OCD

AUSTIN

HOUSTON

WICHITA

DENVER

CANARY

2017 AUG 21 P 2:48

August 15, 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

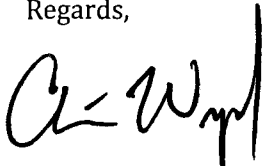
RE: STRIKER 2 SWD NO. 1 AUTHORIZATION TO INJECT

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-2 SWD No. 1. 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.

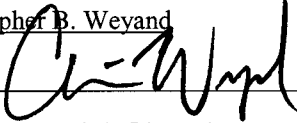
Regards,



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

(512) 600-1764
chris@lonquist.com

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. Weyand TITLE: Consulting Engineer
SIGNATURE:  DATE: 8/15/2017
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, LLC

WELL NAME & NUMBER: STRIKER 2 SWD #1

WELL LOCATION: 1,025' FNL & 440' FWL D UNIT LETTER 23 SECTION 24S TOWNSHIP 31E RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA
Surface Casing

Hole Size: 26.000" Casing Size: 20.000"
Cemented with: 1,840 sx. *or* _____ ft³
Top of Cement: surface Method Determined: circulation
1st Intermediate Casing
Hole Size: 17.500" Casing Size: 13.375"
Cemented with: 2,480 sx. *or* _____ ft³
Top of Cement: surface Method Determined: circulation
2nd Intermediate Casing
Hole Size: 12.250" Casing Size: 9.625"
Cemented with: 2,110 sx. *or* _____ ft³
Top of Cement: surface Method Determined: circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 595 sx.

or _____ ft³

Top of Cement: 11,600'

Method Determined: calculation

Total Depth: 17,850'

Injection Interval

16,300 feet to 17,850 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.500", 17 lb/ft, L-80, BT&C from 0' - 11,600' and 4.500", 11.6 lb/ft, HCP-110 LTC from 11,600' - 16,250'
 Lining Material: Duoline

Type of Packer: D&L Oil Tools 7.625" Permapack Packer – Single Bore

Packer Setting Depth: 16,250'

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:

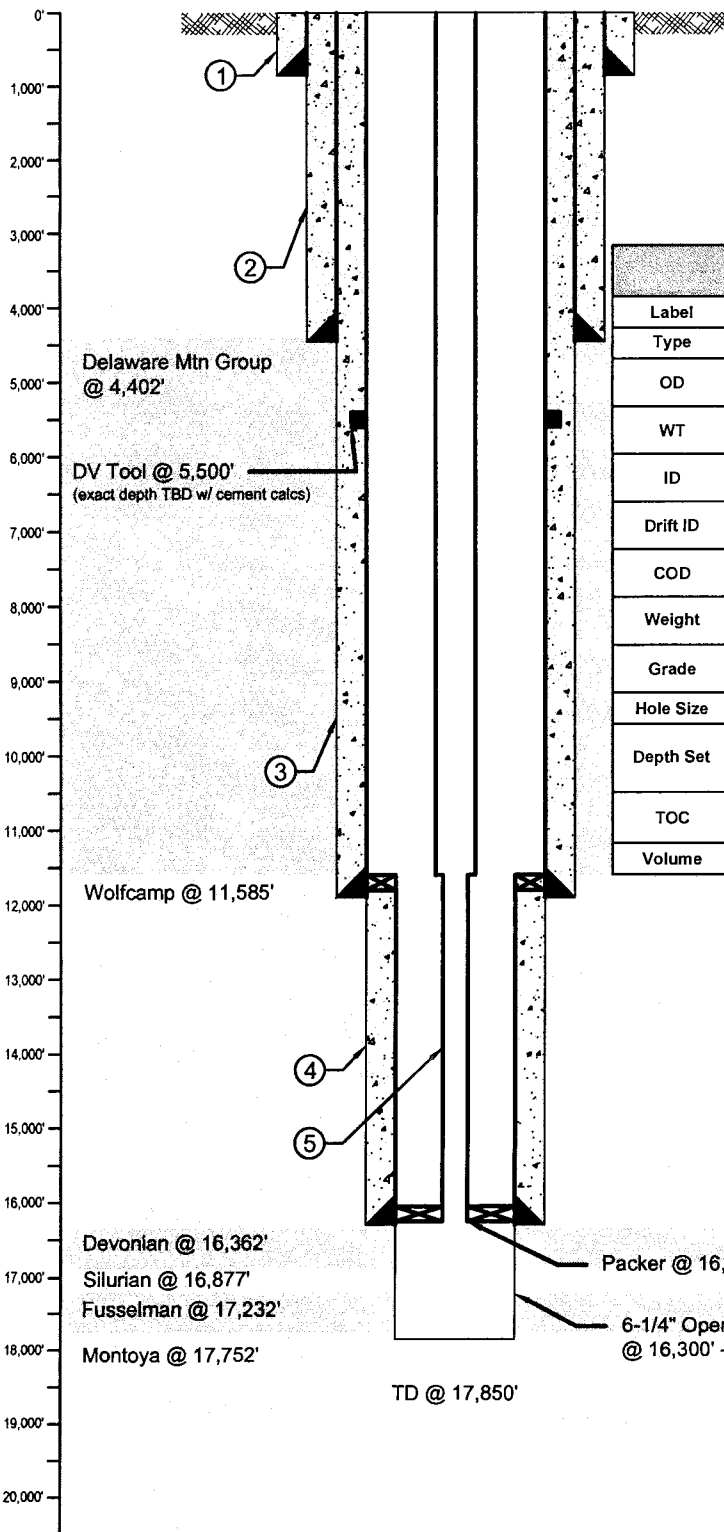
Delaware: 4,402'

Bone Spring: 8,242'

Wolfcamp: 11,585'

Pennsylvanian: 13,152'

Atoka: 13,632'



KB:	NA
BHF:	NA
GL:	3564.62'
Spud:	NA

Casing/Tubing Information					
Label	1	2	3	4	5
Type	Surface	Intermediate 1	Intermediate 2	Liner	Tubing
OD	20"	13-3/8"	9-5/8"	7-5/8"	5-1/2" 4-1/2"
WT	0.438"	0.480"	0.472"	0.562"	0.304" 0.250"
ID	19.124"	12.415"	8.681"	6.501"	4.892" 4.000"
Drift ID	18.936"	12.259"	8.525"	6.376"	4.767" 3.976"
COD	21.000"	14.375"	10.625"	7.625"	6.050" 5.000"
Weight	94 lb/ft	68 lb/ft	47 lb/ft	42.8 lb/ft	17 lb/ft 11.6 lb/ft
Grade	J-55 STC	HCL-80 STC	HCL-80 LTC	P-110 UFJ	L-80 BTC HCP-110 LTC
Hole Size	26"	17-1/2"	12-1/4"	8-1/2"	Varies
Depth Set	850'	4,450'	11,900'	11,600' - 16,300'	0' - 11,600' 11,600' - 16,250'
TOC	Surface (circulation)	Surface (circulation)	Surface (circulation)	11,600'	NA
Volume	1,840 sks	2,480 sks	2,110 sks	595 sks	NA

LONQUIST

FIELD SERVICE

AUSTIN WICHITA
HOUSTON CALGARY

NGL Water Solutions Permian LLC

Striker 2 SWD No. 1

Country: USA

State/Province: New Mexico

County/Parish: Eddy

Location:

Site:

Survey/STR: 23-24S-31E

API No:

Field:

Well Type/Status: SWD

Texas License F-9147

State ID No:

Project No: 1469

Date: 8/9/17

3345 Bee Cave Road, Suite 201
Austin, Texas 78746
Tel: 512.732.9812
Fax: 512.732.9816

Drawn: CJG

Reviewed: CW

Approved: CW

Rev No: 1

Notes:

NGL Water Solutions Permian, LLC

Striker 2 SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Striker 2 SWD
Well No.	1
Location	S-23 T-24S R-31E
Footage Location	1,025' FNL & 440' FWL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	20"	13.375"	9.625"	7.625"
WT	0.438"	0.480"	0.472"	0.562"
ID	19.124"	12.415"	8.681"	6.501"
Drift ID	18.936"	12.259"	8.525"	6.376"
COD	21.000"	14.375"	10.625"	7.625"
Weight	94 lb/ft	68 lb/ft	47 lb/ft	42.8 lb/ft
Grade	J-55	HCL-80	HCL-80	P-110
Hole Size	26"	17.5"	12.25"	8.5"
Depth Set	850'	4,450'	11,900'	11,600' – 16,300'

b. Cementing Program

Cement Information				
Casing String	Surface	Intermediate	Production	Liner
Lead Cement	C	C	NeoCem	H
Lead Cement Volume	815 sks	1,800 sks	Stage 1: 895 sks Stage 2: 675 sks	595 sks
Tail Cement	C	C	NeoCem/HALCEM	
Tail Cement Volume	1,025 sks	680 sks	Stage 1: 390 sks Stage 2: 150 sks	
Cement Excess	100%	25%	25%	25%
TOC	Surface	Surface	Surface	11,600'
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"	3.976"
COD	6.050"	5.000"
Weight	17 lb/ft	11.6 lb/ft
Grade	L-80 BTC	HCP-110 LTC
Depth Set	0'-11,600'	11,600'-16,250'

Tubing will be lined with Duoline.

4. Packer Description

D&L Oil Tools 7.625" Permapack Packer – Single Bore

B. Completion Information

1. Injection Formation: Devonian, Silurian, Fusselman, Montoya (Top 100')

2. Gross Injection Interval: 16,300' – 17,850'

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
Delaware	4,402'
Bone Spring	8,242'
Wolfcamp	11,585'
Pennsylvanian	13,152'
Atoka	13,632'

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: 26,000 BPD
Maximum Volume: 32,500 BPD

2. Closed System

3. Anticipated Injection Pressure:

Average Injection Pressure: 2,200 PSI (surface pressure)
Maximum Injection Pressure: 3,260 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 Delaware, Bone Spring, Wolfcamp, and Atoka 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

Formation	Depth
Rustler Anhydrite	530'
Salado	850'
Delaware	4,402'
Bone Spring	8,242'
Wolfcamp	11,585'
Pennsylvanian	13,152'
Strawn	13,392'
Atoka	13,632'
Mississippian Lime	15,210'
Woodford	16,242'
Devonian	16,362'

B. Underground Sources of Drinking Water

There is limited data on USDWs in the area. The most closely offsetting water wells were drilled to 350' or shallower. One in Section 2-24s-31E (C-02460) noted water from 278' – 228'. In general, any USDWs would be expected to fall above the salt. The top of the Rustler Anhydrite is estimated at approximately 530'.

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

No fresh water wells exist within one mile of the well location as shown on the attached map. As a result, fresh water samples were not obtained for analysis purposes.

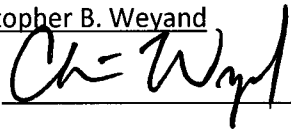
XII. Affirmative Statement of Examination of Geologic and Engineering Data

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: _____

8/15/2017

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

¹ Operator Name and Address NGL WATER SOLUTIONS PERMIAN, LLC 1509 W WALL ST, STE 306 MIDLAND, TEXAS 79701		² OGRID Number 372338 ³ API Number 30-015-TBD
⁴ Property Code	⁵ Property Name STRIKER 2 SWD	⁶ Well No. 1

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	23	24S	31E		1,025	NORTH	440	WEST	EDDY

⁸ Proposed Bottom Hole Location

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

⁹ Pool Information

Pool Name SWD; Silurian-Devonian	Pool Code 96101
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Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,565'
¹⁶ Multiple N	¹⁷ Proposed Depth 17,850'	¹⁸ Formation Siluro-Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water <530'		Distance from nearest fresh water well > 1 mile		Distance to nearest surface water > 1 mile

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

²¹ Proposed Casing and Cement Program

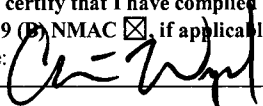
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94 lb/ft	850'	1,840	Surface
Intermediate	17.5"	13.375"	68 lb/ft	4,450'	2,480	Surface
Production	12.25"	9.625"	47 lb/ft	11,900'	2,110	Surface
Prod. Liner	8.5"	7.625"	42.8 lb/ft	11,600' – 16,300'	595	11,600'
Tubing	N/A	5.5"	17 lb/ft	11,600'	N/A	N/A
Tubing	N/A	4.5"	11.6 lb/ft	11,600' – 16,250'	N/A	N/A

Casing/Cement Program: Additional Comments

See attached schematic.

²² Proposed Blowout Prevention Program

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

²³ 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: 8/15/2017	OIL CONSERVATION DIVISION Approved By: Title: Approved Date: Expiration Date: Conditions of Approval Attached
Phone: 512-600-1764	

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Phone: (575) 393-6161 Fax: (575) 393-0720
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Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96101	³ Pool Name SWD; Silurian-Devonian
⁴ Property Code	⁵ Property Name STRIKER 2 SWD		⁶ Well Number #1
⁷ OGRID No. 372338	⁸ Operator Name NGL WATER SOLUTIONS PERMIAN, LLC		⁹ Elevation 3564.62'

* 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	23	24 S	31 E		1,025'	NORTH	440'	WEST	EDDY

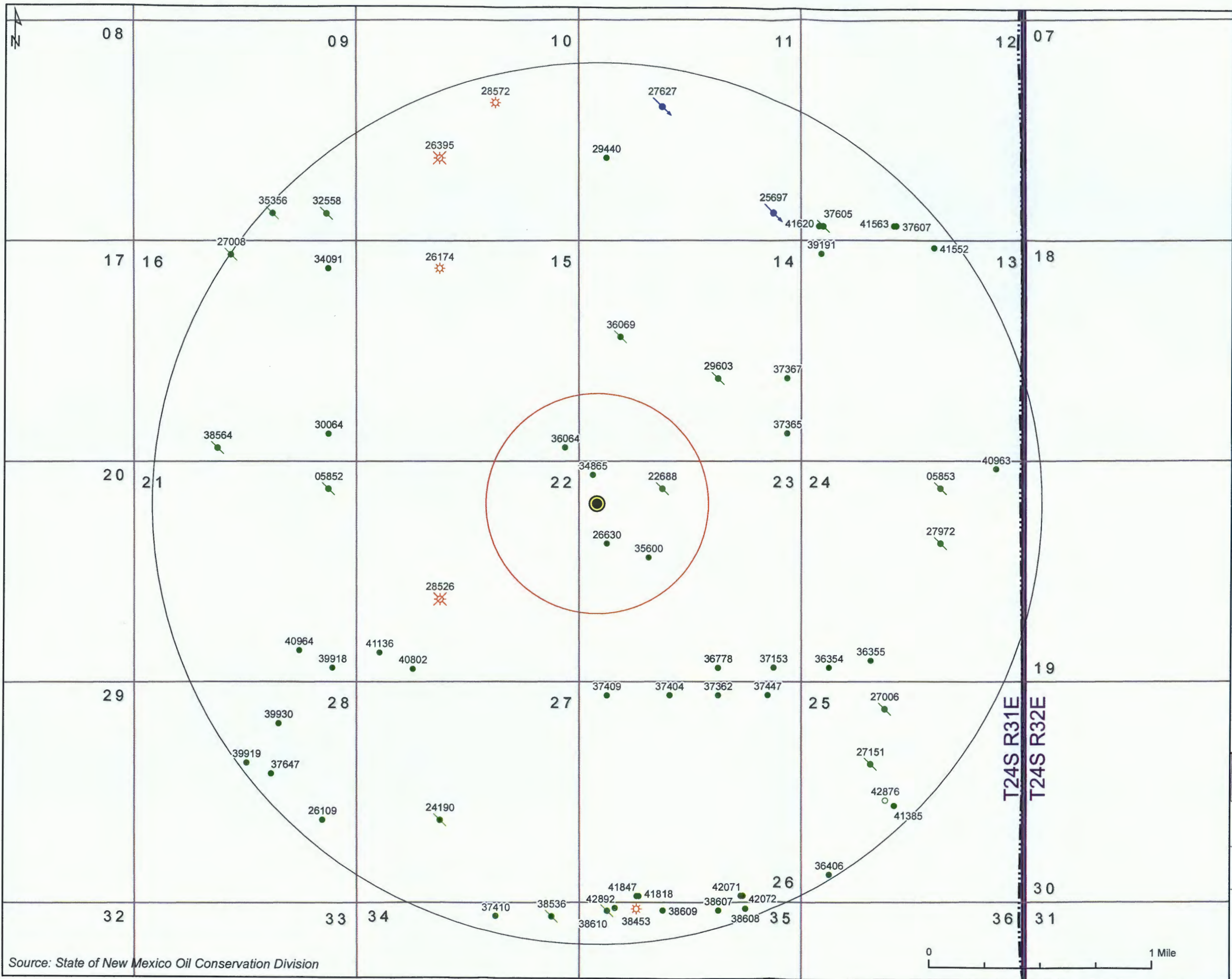
" Bottom Hole Location If Different From Surface

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

¹⁰ Dedicated Acres	¹¹ Joint or Infill	¹² Consolidation Code	¹³ Order No.
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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>(A)</p> <p>(B)</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>STRIKER 2 SWD #1 Y=439623.42 N X=719982.94 E LAT=32.207282N LONG=-103.755737W ELEV=3564.62'</p> <p>CORNER DATA NAD 83 GRID - NM EAST</p> <p>A - Y=440645.94, X=719536.67 B - Y=440678.25, X=724819.63 C - Y=435395.56, X=724854.17 D - Y=435365.76, X=719569.54</p> <p>(D)</p> <p>(C)</p>	<p>" OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Chris Weyand</i> 8/15/2017 Signature Date</p> <p>chris@lonquist.com Printed Name</p> <p>Christopher Weyand E-mail Address</p>	
	<p>"SURVEYOR CERTIFICATION</p> <p>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.</p> <p>6/11/2017 Date of Survey</p> <p><i>Robert P. Alley</i> Signature and Seal of Professional Surveyor</p> <p>23572 Certificate Number</p>	



Striker 2 SWD #1
2 mile Area of Review
Eddy County, NM
NGL Water Solutions Permian, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001
Drawn by: SAH Date: 6/16/2017 Approved by: NLB

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- Striker 2 SWD #1
- Gas Well
- Plugged Gas Well
- Oil Well
- Permitted Oil Well
- Plugged Oil Well
- SWD Well
- 1/2 mile Radius
- 2 mile Radius
- County Boundary
- Section Boundary
- Township Boundary



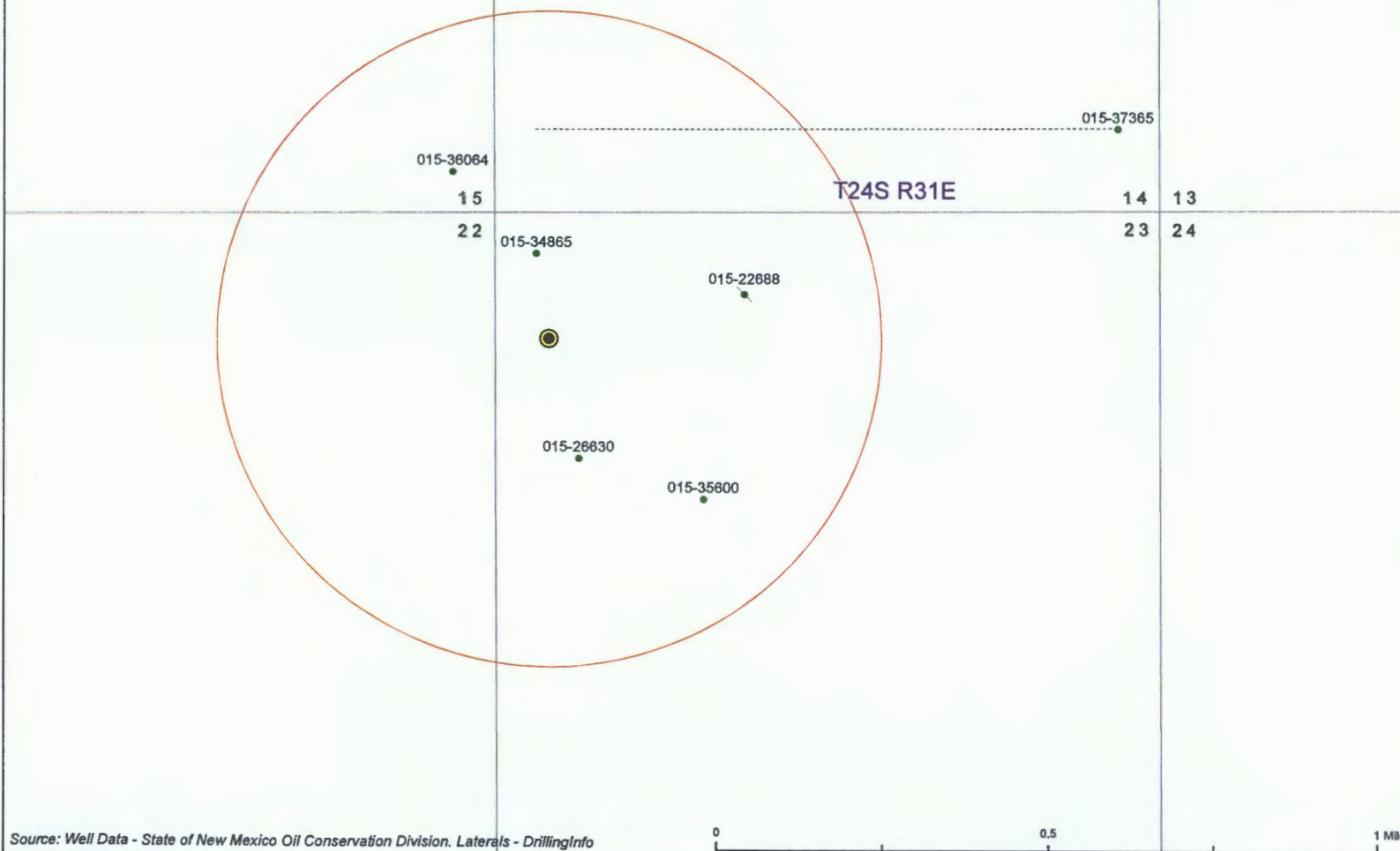
27

Striker 2 SWD #1
1/2 mile Area of Review
 Eddy County, NM
 NGL Water Solutions Permian, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001
 Drawn by: SAH Date: 6/16/2017 Approved by: NLB



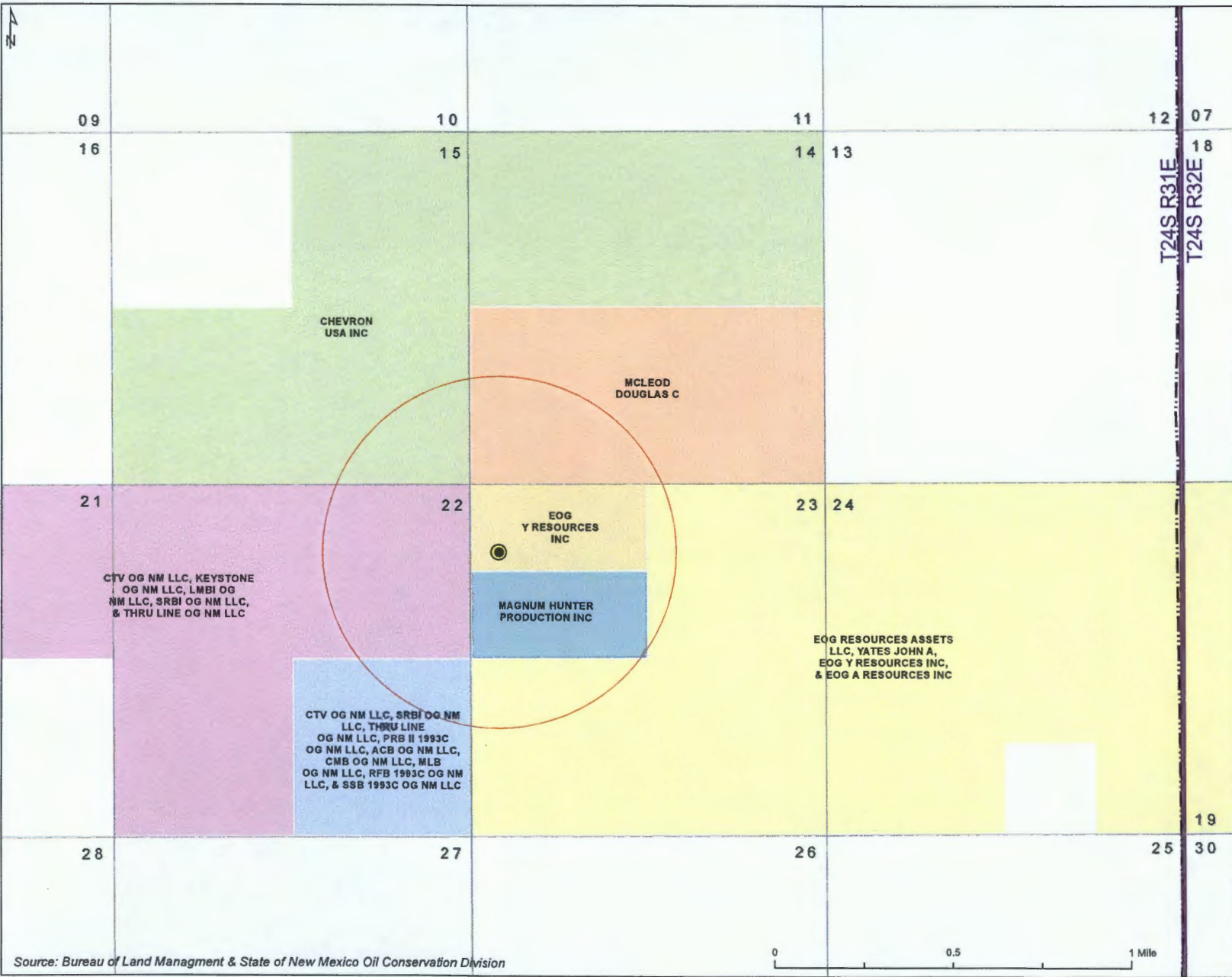
- Striker 2 SWD #1
- Oil Well
- Plugged Oil Well
- Lateral
- 1/2 mile Radius
- Section Boundary



Source: Well Data - State of New Mexico Oil Conservation Division. Laterals - DrillingInfo

Half-Mile AOR
Striker 2 SWD #1

API (30-015-)	Well Name	Well Type	Status	Operator	TD (TVD)	Location	Date Drilled
22688	PRE-ONGARD WELL #001	Oil	Plugged	PRE-ONGARD WELL OPERATOR	4624	C-23-24S-31E	9/15/1978
26630	COTTON DRAW AJT FEDERAL #001	Oil	Active	EOG Y RESOURCES, INC.	15450	E-23-24S-31E	2/10/1991
34865	POKER BIX #001	Oil	Active	EOG Y RESOURCES, INC.	8508	D-23-24S-31E	7/17/2006
35600	COTTON DRAW AJT FEDERAL #002	Oil	Active	EOG Y RESOURCES, INC.	8600	F-23-24S-31E	12/8/2007
36064	LOTOS 15 FEDERAL #001	Oil	Active	CHEVRON U S A INC	8664	P-15-24S-31E	1/30/2008
37365	PETROGULF BJT FEDERAL #001H	Oil	Active	EOG Y RESOURCES, INC.	8312	P-14-24S-31E	10/28/2009



Source: Bureau of Land Management & State of New Mexico Oil Conservation Division

Striker 2 SWD #1 Offset Leases

Eddy County, NM

NGL Water Solutions Permian, LLC

Projection: NAD 1983 State Plane NM East FIPS 3001

Drawn by: SAH	Date: 6/16/2017	Approved by: NLB
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LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN HOUSTON WICHITA DENVER CALGARY

Striker 2 SWD #1

1/2 mile Radius

Section Boundary

Lessee

- CHEVRON USA INC
- CTV OG NM LLC, KEYSTONE OG NM LLC, LMBI OG NM LLC, SRBI OG NM LLC, & THRU LINE OG NM LLC
- CTV OG NM LLC, SRBI OG NM LLC, THRU LINE OG NM LLC, PRB II 1993C OG NM LLC, ACB OG NM LLC, CMB OG NM LLC, MLB OG NM LLC, RFB 1993C OG NM LLC, & SSB 1993C OG NM LLC
- EOG RESOURCES ASSETS LLC, YATES JOHN A, EOG Y RESOURCES INC, & EOG A RESOURCES INC
- EOG Y RESOURCES INC
- MAGNUM HUNTER PRODUCTION INC
- MCLEOD DOUGLAS C

New Mexico

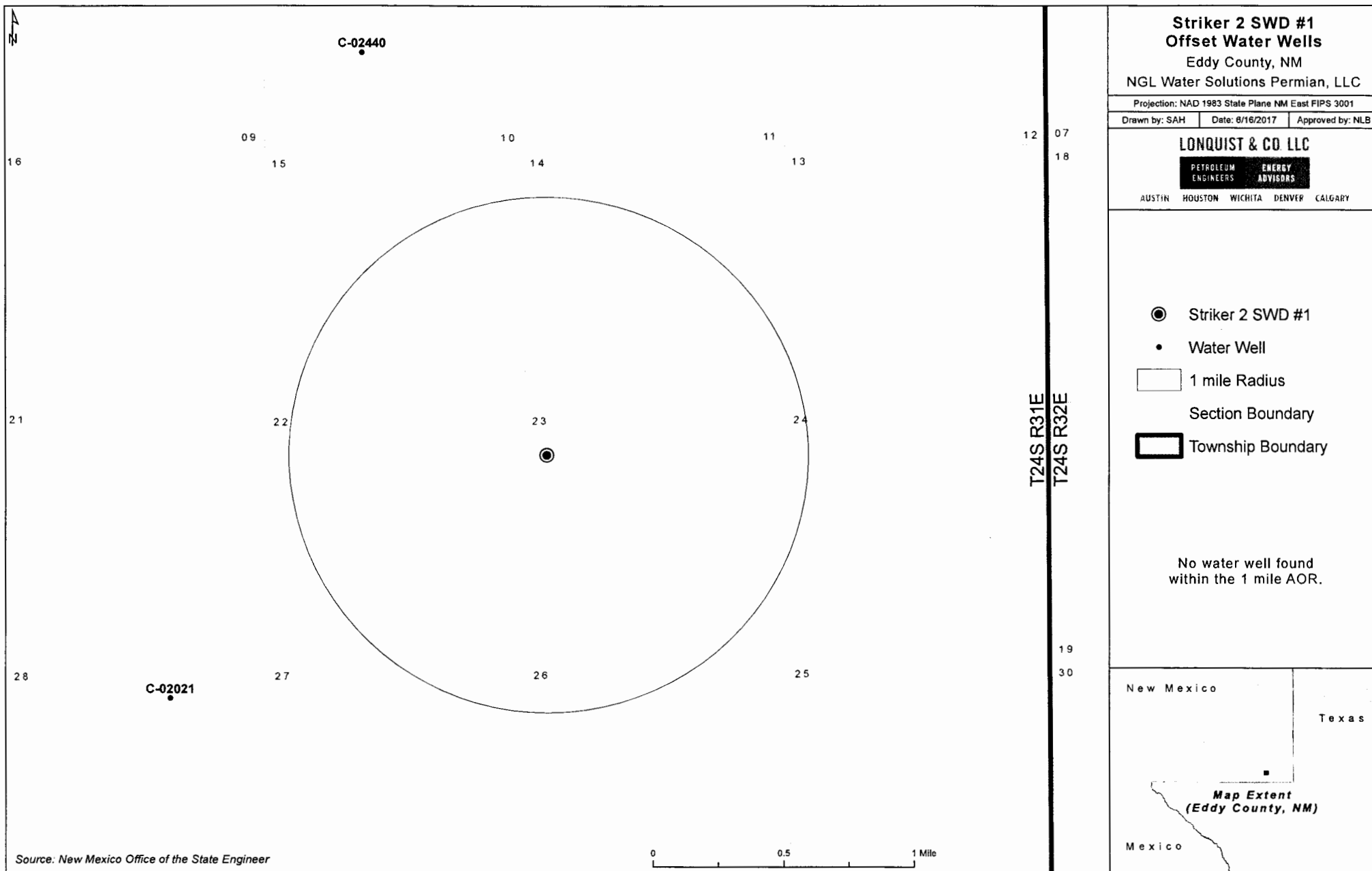
Texas

Mexico

**Map Extent
(Eddy County, NM)**

Striker 2 SWD No. 1 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	8/15/2017
Oil Conservation Division District II	811 S. First St., Artesia, NM 88210	(575) 748-1283	8/15/2017
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			
CHEVRON U S A INC	6301 DEAUVILLE, MIDLAND, TX 79706	(866) 212-1212	8/15/2017
MAGNUM HUNTER PRODUCTION INC	202 S CHEYENNE AVE STE 1000, TULSA, OK 74103		8/15/2017
EOG A RESOURCES, INC.	105 S 4TH ST, ARTESIA, NM 88210		8/15/2017
EOG Y RESOURCES, INC.	105 S 4TH ST, ARTESIA, NM 88210		8/15/2017
EOG RESOURCES ASSETS LLC	105 S 4TH ST, ARTESIA, NM 88210		8/15/2017
JOHN A YATES	105 S 4TH ST, ARTESIA, NM 88210		8/15/2017
DOUGLAS C MCLEOD	PO BOX 18481, DENVER, CO 80218		8/15/2017
ACB OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
CMB OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
CTV OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
MLB OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
PRB II 1993C OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
RFB 1993C OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
SRBI OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
SSB 1993C OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
THRU LINE OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
TRB OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
KEYSTONE OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017
LMBI OG NM LLC	201 MAIN ST STE 2700, FORT WORTH, TX 76102		8/15/2017

Striker 2 SMD #1: Offsetting Produced Water Analysis																
wellname	api	S-T-R	county	formation	ph	tdc_mgl	resistivity_ohm_cm	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl
TODD 26 G FEDERAL #001	3001520242	26-235-31E	EDDY	ATOKA	6.7	202478										
COTTON DRAW UNIT #115H	3001537898	34-245-31E	EDDY	AVALON LOWER	6.2	247257.5		65970	15480	31	2650		3	126000	93	540
COTTON DRAW UNIT #115H	3001537898	34-245-31E	EDDY	AVALON LOWER	6.9	118579.6		44633.2	514	57	86	0.9	167021	3343	2278	430
COTTON DRAW UNIT #203H	3001541847	26-245-31E	EDDY	BONE SPRING 2ND SAND	6.1	155991.9		50515.3	8322.8	41.1	1105.1	1.24	93761.5	93761.5	122	0
COTTON DRAW UNIT #211H	3001541941	34-245-31E	EDDY	BONE SPRING 2ND SAND	6.4	155270.6		50208.1	8326.3	38.3	1039.4	1.07	93761.5	93761.5	122	0
COTTON DRAW UNIT #205H	3001542071	26-245-31E	EDDY	BONE SPRING 2ND SAND	7.1	151345.4	0.06496	46111.9	8090.5	79.4	1023.4		93688	93688	1053.3	300
COTTON DRAW UNIT #206H	3001542072	26-245-31E	EDDY	BONE SPRING 2ND SAND	7.1	146515.3	0.0649	44562.9	6413	35.4	814.2		92434.8	92434.8	1023.3	300
COTTON DRAW UNIT #244H	3001542331	36-245-31E	EDDY	BONE SPRING 3RD SAND	6.2	113124.8	0.0798	34288.2	4803.6	24.8	608.1		71446.6	71446.6	527	100
COTTON DRAW UNIT #244H	3001542331	36-245-31E	EDDY	BONE SPRING 3RD SAND	6.6	110826.1	0.07879	35027.8	4891.4	30	619.4		68229.9	68229.9	520.1	200
COTTON DRAW UNIT #244H	3001542331	36-245-31E	EDDY	BONE SPRING 3RD SAND	6.7	104968.4	0.1081	31519.4	4562.1	30.8	587.4		66479.3	66479.3	517.4	240
COTTON DRAW UNIT #244H	3001542331	36-245-31E	EDDY	BONE SPRING 3RD SAND	6.7	108465		33597.8	4943.2	26.4	648.5		67351.3	67351.3	517.4	200
ADELINE ALN FEDERAL #003	3001527244	6-245-31E	EDDY	DELAWARE	4.85				0	0	0		148966	68	8	
ADELINE ALN FEDERAL #007	3001527248	6-245-31E	EDDY	DELAWARE	5			22035	3645	0	7		189957	49	7	
LILLY ALY FEDERAL #006	3001527276	3-245-31E	EDDY	DELAWARE	5.2	293782			17720	37.5	1080.5		180198	159	25	
POKER LAKE UNIT #036	3001510859	28-245-31E	EDDY	DELAWARE	6.6	120326							73100	427	470	
HEFLIN FED #001	3001505853	24-245-31E	EDDY	DELAWARE		133002							82400	122	500	
HEFLIN FED #001	3001505853	24-245-31E	EDDY	DELAWARE		37824							133003	850	10000	
COTTON DRAW UNIT #114	3001537410	34-245-31E	EDDY	DELAWARE-BRUSHY CANYON	6.2	258924		74706	17975.5	103.2	2991.4	3.98	160043.3	122	0	400
COTTON DRAW UNIT #115H	3001536607	35-245-31E	EDDY	DELAWARE-BRUSHY CANYON	6	250734.8		73645	16781	50.9	2758	3.27	154666.1	122	0	250
COTTON DRAW UNIT #115H	3001536609	35-245-31E	EDDY	DELAWARE-BRUSHY CANYON	6	258919.1		76040.7	19025.4	82.8	3087.5	4.56	157593.1	122	0	350
COTTON DRAW UNIT #114	3001537410	34-245-31E	EDDY	DELAWARE-BRUSHY CANYON	6	268137.4	0.0477	79525.2	19507.6	122.9	3261.8	4.54	161607.2	863	0	7.8
COTTON DRAW UNIT #119H	3001537447	26-245-31E	EDDY	DELAWARE-BRUSHY CANYON	5.81	254883.3	0.04844	78338.6	16486.4	52.9	2759.4	2.81	152004	171	0	4.3
HEFLIN FED #001	3001505853	24-245-31E	EDDY	DELAWARE-BRUSHY CANYON		47726										
HEFLIN FED #001	3001505853	24-245-31E	EDDY	DELAWARE-BRUSHY CANYON		256580										
BELLOQ 2 STATE #000H	3001542895	2-235-31E	EDDY	WOLF CAMP	6.8	119471.8	0.07612	37359.2	5659.1	22.4	746.1			158000	690	200
															1035.5	250



Affidavit of Publication

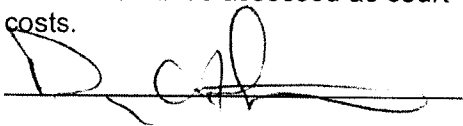
State of New Mexico,
County of Eddy, ss.

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

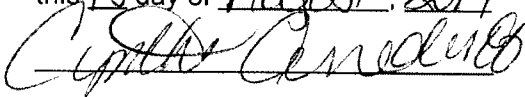
That he is the Publisher of the
Carlsbad Current-Argus, a
newspaper published daily at the
City of Carlsbad, in said county of
Eddy, state of New Mexico and of
general paid circulation in said
county; that the same is a duly
qualified newspaper under the laws
of the State wherein legal notices
and advertisements may be
published; that the printed notice
attached hereto was published in the
regular and entire edition of said
newspaper and not in supplement
thereof on the date as follows, to wit:

August 17 2017

That the cost of publication is **\$72.82**
and that payment thereof has been
made and will be assessed as court
costs.

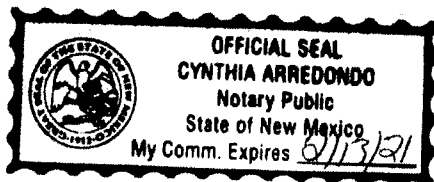


Subscribed and sworn to before me
this 18 day of August, 2017



My commission Expires 2/13/21

Notary Public



August 17, 2017

Legal Notice

NGL Water Solutions
Permian, LLC,
1509 W. Wall Street,
Suite 306,
Midland, Texas 79701
is filing Form C-108
(Application for Au-
thorization to Inject)
with the New Mexico
Oil Conservation Divi-
sion for administrative
approval for its salt
water disposal well
Striker 2 SWD No. 1.
The proposed well will
be located 1,025' FNL
& 440' FWL in Section
23, Township 24S,
Range 31E
in Eddy County,
New Mexico. Disposal
water will be sourced
from area production,
and will be injected in-
to the Siluro-Devonian
Formation (deter-
mined by offset log
analysis) through an
open hole completion
between a maximum
applied for top of
16,300 feet to a
maximum depth of
17,850 feet. The maxi-
mum surface injection
pressure will not ex-
ceed 3,260 psi with a
maximum rate of
32,500 BWPD. Inter-
ested parties oppos-
ing the action must
file objections or re-
quests for hearing
with the Oil
Conservation Division,
1220 South St. Francis
Drive, Santa Fe,
New Mexico 87505,
within 15 days. Addi-
tional information can
be obtained from the
applicant's agent,
Lonquist & Co., LLC, at
(512) 600-1764.

SENDER, COMPLETE THIS SECTION

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

New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division District IV
1220 South St., Francis Drive
Santa Fe, New Mexico 87505

9590 9402 2818 7088 5823 71
7014 1A2D 0000 3203 6106
PS Form 3811, July 2015 PSN 7550-02-000-9003

SENDER, COMPLETE THIS SECTION

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

LMBI CO NM, LLC
201 Main Street
Suite 2700
Fort Worth, Texas 76102

9590 9402 2818 7088 5823 97
7014 1A2D 0000 3203 9147
PS Form 3811, July 2015 PSN 7550-02-000-9003

SENDER, COMPLETE THIS SECTION

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

Chesron USA, Inc.
6301 Deauville
Midland, Texas 79708

9590 9402 2818 7088 5823 97
7014 1A2D 0000 3203 6182
PS Form 3811, July 2015 PSN 7550-02-000-9003

SENDER, COMPLETE THIS SECTION

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

EOG Resources, Inc.
105 South 4th Street
Artesia, New Mexico 88210

9590 9402 2818 7088 5823 953
7014 1A2D 0000 3203 6182
PS Form 3811, July 2015 PSN 7550-02-000-9003

COMPLETE THIS SECTION ON RECEIPT

A. Signature ☒ Agent
B. Received by Postal Agent ☐ Address
C. Date of Delivery ☐ Day of Delivery
D. Is delivery address different from item 1? ☐ Yes ☒ No
E. If YES, enter delivery address below: ☐ No

Alis 21 2017

9590 9402 2818 7088 5823 33
7014 1A2D 0000 3203 6196
PS Form 3811, July 2015 PSN 7550-02-000-9003

COMPLETE THIS SECTION ON RECEIPT

A. Signature ☒ Agent
B. Received by Postal Agent ☐ Address
C. Date of Delivery ☐ Day of Delivery
D. Is delivery address different from item 1? ☐ Yes ☒ No
E. If YES, enter delivery address below: ☐ No

John A. Yates

9590 9402 2818 7088 5823 02
7014 1A2D 0000 3203 6177
PS Form 3811, July 2015 PSN 7550-02-000-9003

COMPLETE THIS SECTION ON RECEIPT

A. Signature ☒ Agent
B. Received by Postal Agent ☐ Address
C. Date of Delivery ☐ Day of Delivery
D. Is delivery address different from item 1? ☐ Yes ☒ No
E. If YES, enter delivery address below: ☐ No

Justin Wallace

9590 9402 2818 7088 5823 40
7014 1A2D 0000 3203 6193
PS Form 3811, July 2015 PSN 7550-02-000-9003

COMPLETE THIS SECTION ON RECEIPT

A. Signature ☒ Agent
B. Received by Postal Agent ☐ Address
C. Date of Delivery ☐ Day of Delivery
D. Is delivery address different from item 1? ☐ Yes ☒ No
E. If YES, enter delivery address below: ☐ No

Magnum Hunter Production, Inc.

9590 9402 2818 7088 5823 40
7014 1A2D 0000 3203 6193
PS Form 3811, July 2015 PSN 7550-02-000-9003

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Monday, August 21, 2017 4:19 PM
To: 'Chris Weyand'
Subject: NGL Water Solutions Permian, LLC Striker 2 SWD Well No. 1

Chris:

The OCD received your administrative application for the GL Water Solutions Permian, LLC Striker 2 SWD Well No. 1 on Monday August 21, 2017.

I need the following

Proof of mailing for the affected parties.

I am most likely wrong, but should XTO have been notified-your Fort Worth address is probably Bass Enterprises

Affidavit of publication

Your application has been suspended, and you have until September 1, or your application will be cancelled

Mike

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

McMillan, Michael, EMNRD

From: Chris Weyand <chris@lonquist.com>
Sent: Friday, December 8, 2017 10:08 AM
To: McMillan, Michael, EMNRD
Subject: RE: NGL Water Solutions Permian, LLC Striker 2 SWD Well No. 1

Yes sir. Still working on that one.

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, December 08, 2017 11:07 AM
To: Chris Weyand
Subject: RE: NGL Water Solutions Permian, LLC Striker 2 SWD Well No. 1

What about XTO?
You were notified they protested.
Mike

From: Chris Weyand [mailto:chris@lonquist.com]
Sent: Friday, December 8, 2017 9:59 AM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: RE: NGL Water Solutions Permian, LLC Striker 2 SWD Well No. 1

Michael,

EOG has dropped their protest of the Striker 2 SWD #1 application. Please see attached.

Thanks,

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

From: Chris Weyand
Sent: Tuesday, December 05, 2017 2:03 PM
To: 'McMillan, Michael, EMNRD'
Subject: RE: NGL Water Solutions Permian, LLC Striker 2 SWD Well No. 1

Mike,

Pertaining to the Striker 2 SWD #1 application here are two additional green cards received.



EOG Resources, Inc.
P.O. Box 2267
Midland, TX 79702
(432) 686-3600

December 07, 2017

New Mexico Oil Conservation Division
Attn: Hearing Examiner
1220 South Francis Drive
Santa Fe, New Mexico 87505

Re: NGL Water Solutions Permian, LLC
Administrative SWD Application (Form C-108)
Striker 2 SWD #001
API # - Pending
1025' FNL & 440' FWL, UL D, Section 23, T24S, R31E
Eddy County, New Mexico

To Whom It May Concern:

EOG Y Resources, Inc. wishes to withdraw our objection to the above application.

If additional information is needed, please contact me at 432-686-3689 or email at stan_wagner@eogresources.com.

Sincerely,

EOG Y RESOURCES, INC.

A handwritten signature in black ink, appearing to read "Stan W.", with a long horizontal flourish extending to the right.

Stan Wagner
Regulatory Specialist



P.O. Box 2267, Midland, Texas 79702
Phone: (432) 686-3600 Fax: (432) 686-3773

September 12, 2017

New Mexico Oil Conservation Division
ATTN: Hearing Examiner
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: NGL Water Solutions Permian, LLC
Administrative SWD Application (Form C-108)
Striker 2 SWD #001
API # - Pending
1,025' FNL & 440' FWL, UL D, Section 23, T24S, R31E
Eddy County, New Mexico

To Whom It May Concern:

EOG Y Resources, Inc. hereby objects to the above application because it may adversely affect its operations on the proposed acreage.

If you have any questions or comments, please feel free to contact me at (432) 686-3633 or via email at brian_levea@eogresources.com.

Sincerely,

EOG Resources, Inc.

A handwritten signature in black ink, appearing to read "Brian Levea", with a long horizontal flourish extending to the right.

Brian Levea

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Tuesday, September 12, 2017 4:36 PM
To: 'Chris Weyand'
Subject: RE: Protested Application: NGL Water Solutions Permian, LLC Striker 2 SWD No. 1 Well Eddy Co-EOG Resources
Attachments: Objection to NGL Water Solutions Application to Inject for the Striker 2 SWD #001 _EOG.pdf

Here it is
Mike

From: Chris Weyand [mailto:chris@lonquist.com]
Sent: Tuesday, September 12, 2017 4:34 PM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: RE: Protested Application: NGL Water Solutions Permian, LLC Striker 2 SWD No. 1 Well Eddy Co-EOG Resources

Michael – Are you able to send over a copy of the actual protest?

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: Tuesday, September 12, 2017 5:29 PM
To: Chris Weyand
Cc: Jones, William V, EMNRD; Goetze, Phillip, EMNRD; Lowe, Leonard, EMNRD
Subject: Protested Application: NGL Water Solutions Permian, LLC Striker 2 SWD No. 1 Well Eddy Co-EOG Resources

Mr. Weyand:

XTO Energy Inc. is protesting this application for approval of a salt water disposal well into Silurian and Devonian formations. EOG Resources, Inc. has been identified as an affected person for the proposed salt-water disposal well. Therefore, you are being notified that if NGL Water Solutions Permian, LLC wishes for this application to be considered, it must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained by OCD, but suspended from further administrative review. Please contact OCD once you have made a decision regarding the application within the next 30 days. If the protest remains after 30 days, OCD will initiate the process for the application to be reviewed at hearing. Please contact me with any questions regarding this matter.

If the application goes to hearing, NGL Water Solutions Permian, LLC must notify all affected parties

Thank You

Mike



Christian Holcomb
XTO Energy Inc.
6401 N Holiday Hill Road Bldg 5
Midland, Texas 79701

MAR 16 2018 PM02:57

03/12/2018

Lonquist & Co., LLC.
201 Main St Ste 2700
Fort Worth, Texas 76102

Re: Striker 2 SWD No. 1 Injection Application Protest
24S-31E, Section 23
Eddy County, New Mexico

To Whom It May Concern:

XTO Energy, Inc., as legal authority over BOPCO, L.P., respectfully rescinds the protest made on August 30, 2017, of the Striker 2 SWD No. 1 injection application applied for by Lonquist & Co., LLC ("Lonquist") for authorization to inject on behalf of NGL Water Solutions Permian, LLC ("NGL") on the referenced well located in Section 23 of Township 24 South, Range 31 East, in Eddy County, New Mexico. All parties involved have come to a mutual agreement satisfying concerns.

If there are any further questions or concerns, please contact Christian Holcomb, surface landman, at: 432-571-8226 or christian_holcomb@xtoenergy.com

Respectfully,

A handwritten signature in black ink, appearing to read 'Christian C. Holcomb', written over a horizontal line.

Christian C. Holcomb

Cc: Chistopher Weyand – Lonquist & Co., LLC
Joshua Patterson, NGL
NMOCD, Santa FE
Allen Armstrong – XTO Energy



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2017 SEP -7 P 12: 54

Stephanie Rabadue
Regulatory Analyst
XTO Energy Inc.
500 W. Illinois St Ste 100
Midland, Texas 79701
(432)620-6714
stephanie_rabadue@xtoenergy.com

8/28/2017

Lonquist & Co., LLC.
201 Main St Ste 2700
Fort Worth, Texas 76102

Re: Striker 2 SWD No. 1 Injection Application Protest
24S-31E, Section 23
Eddy County, New Mexico

To Whom It May Concern:

Reference is made to the notification of the Striker 2 SWD No. 1, dated August 15, 2017, wherein Lonquist & Co., LLC's ("Lonquist") filed an application for authorization to inject on behalf of NGL Water Solutions Permian, LLC ("NGL") for the referenced well located in Section 23 of Township 24 South, Range 31 East, in Eddy County, New Mexico.

As of March 1, 2017, XTO Energy, Inc ("XTO") acquired BOPCO, L.P. ("BOPCO") and is the legal authority to conduct business on behalf of the operator. As the legal authority within ½ mile of the proposed location, we believe that the disposal of salt water will impede upon the long-term development and disposal within BOPCO L.P.'s ("BOPCO") Poker Lake Unit.

XTO Energy, Inc is willing to work with NGL and Lonquist on this project but respectfully protest the location of this well and request that Lonquist and NGL contact us regarding this application.

For your information, I have attached the notification, as sent by Lonquist & Co, LLC, which is the basis for XTO's objection. Should you have any questions, please do not hesitate to contact Law Armstrong at (817) 885-2453.

Respectfully,

A handwritten signature in cursive script that reads "Stephanie Rabadue".

Stephanie Rabadue

Cc: Christopher Weyand – Lonquist & Co., LLC
NMOCD, Santa FE
Allen Armstrong – XTO Energy

LONQUIST & CO. LLC

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

AUSTIN HOUSTON WICHITA DENVER CALGARY

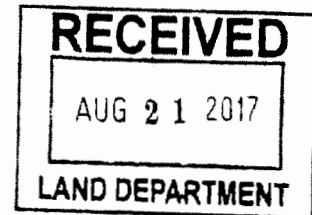
RECEIVED

AUG 23 2017

LAND DEPARTMENT

August 15, 2017

LMBI OG NM LLC
201 MAIN ST STE 2700
FORT WORTH, TX 76102



RE: STRIKER 2 SWD NO. 1 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 2 SWD No. 1. Section XIV of Form C-108 requires that the surface land owner on which the well is located and each leasehold operator within a one-half mile radius of the proposed well location be furnished with the application.

According to the New Mexico Oil Conservation Division, surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date in which this application was mailed to them.

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

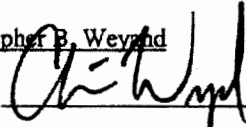
Regards,

A handwritten signature in black ink, appearing to read "Chris Weyand".

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

(512) 600-1764
chris@lonquist.com

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. Weyand TITLE: Consulting Engineer
SIGNATURE:  DATE: 8/15/2017
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: _____



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

DATE RECORD: First Rec: 8/21/17 Admin Complete: 9/1/17 or Suspended: 8/30/17* Add. Request/Reply: 8/21/17

ORDER TYPE: WFX / PMX / (SWD) Number: 1721 Order Date: 03/30/18 Legacy Permits/Orders: —

Well No. 1 Well Name(s): Striker 2 SWD *Protested by XTO & EOG; both withdrawn

API: 30-0 15-44416 Spud Date: March 2018 New or Old (EPA): New (UIC Class II Primacy 03/07/1982)

Footages 1025 FNL / 440 FWL Lot — or Unit D Sec 23 Tsp 24S Rge 31E County Eddy

General Location: 18 miles E of Malaga; south of NM 128 Pool: SWD; Devonian-Silurian Pool No.: —

BLM 100K Map: Jal Operator: NGL Water Solutions Permian LLC GRID: 372 338 Contact: Weyand/Longquist

COMPLIANCE RULE 5.9: Total Wells: 4 Inactive: 0 Fincl Assur: OK Compl. Order? No IS 5.9 OK? Yes Date: 03/30/18

WELL FILE REVIEWED ☒ Current Status: APD approved

WELL DIAGRAMS: NEW: Proposed ☒ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: notes CBL for Liner

Planned Rehab Work to Well: NA

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sz or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <u>Surface</u>		<u>26 / 20</u>	<u>0 to 850</u>	<u>1840</u>	<u>Cir to surf</u>
Planned <input checked="" type="checkbox"/> or Existing <u>Interm/Prod</u>		<u>17 1/2 / 13 3/8</u>	<u>0 to 4450</u>	<u>2480</u>	<u>Cir to surf</u>
Planned <input checked="" type="checkbox"/> or Existing <u>Interm/Prod</u>		<u>12 1/4 / 9 5/8</u>	<u>0 to 11900</u>	<u>5500/DV</u>	<u>Cir to surf</u>
Planned <input checked="" type="checkbox"/> or Existing <u>Prod/Liner</u>		<u>8 1/2 / 7 5/8</u>	<u>11,600 to 16,300</u>	<u>595</u>	<u>TOL- calc.</u>
Planned <input type="checkbox"/> or Existing <u>Liner</u>		<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Planned <input checked="" type="checkbox"/> or Existing <u>OH/PERF</u>		<u>6 1/4</u>	<u>16,300 to 17,850</u>	<u>Inj Length</u>	

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		<u>Mississippian</u>	<u>15210</u>
Confining Unit: <u>Litho</u> Struc. <u>Por</u>		<u>Woodford</u>	<u>16242</u>
Proposed Inj Interval TOP:	<u>16300</u>	<u>Devonian</u>	<u>16362</u>
Proposed Inj Interval BOTTOM:	<u>17850</u>	<u>Fuselman</u>	<u>17232</u>
Confining Unit: <u>Litho</u> Struc. <u>Por</u>	<u>-100</u>	<u>Montoya</u>	<u>17750</u>
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:	
Drilled TD <u>—</u>	PBTD <u>—</u>
NEW TD <u>—</u>	NEW PBTD <u>—</u>
NEW Open Hole <input checked="" type="checkbox"/> or NEW Perfs <input type="checkbox"/>	
Tubing Size <u>—</u> in. Inter Coated? <u>Yes</u>	
Proposed Packer Depth <u>—</u> ft	
Min. Packer Depth <u>—</u> (100-ft limit)	
Proposed Max. Surface Press. <u>—</u> psi	
Admin. Inj. Press. <u>—</u> (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information

POTASH: R-111-P NA Noticed? NA BLM Sec Ord NA WIPP NA Noticed? NA Salt/Salado T: 850 B: 4100 NW: Cliff House fm NA

FRESH WATER: Aquifer Alluvial/Rustler (No Dock) Max Depth < 700' HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Catsbad CAPITAN REEF: thru — adj — NA ☒ No. GW Wells in 1-Mile Radius? 0 FW Analysis? —

Disposal Fluid: Formation Source(s) Permian & Penn Analysis? Yes On Lease ☐ Operator Only ☐ or Commercial ☒

Disposal Interval: Inject Rate (Avg/Max BWPD): 26000/32000 Protectable Waters? Low probability System: Closed or Open

HC Potential: Producing Interval? No Formerly Producing? No Method: Logs/DST/P&A/Other Mudlog needed 2-Mi Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map and Well List? Yes No. Penetrating Wells: 0 [AOR Horizontals: 0 AOR SWDs: 0]

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

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

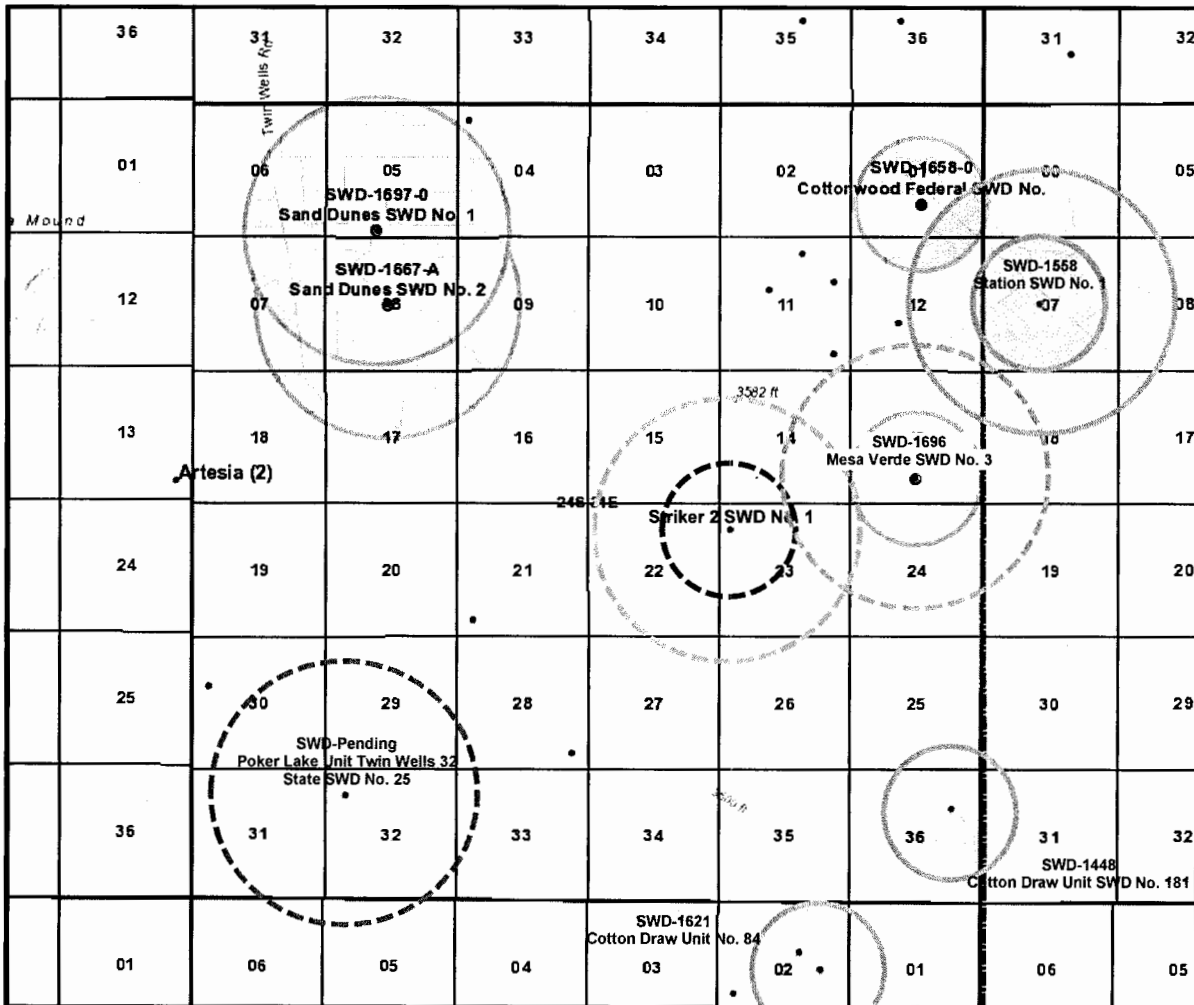
NOTICE: Newspaper Date 08/17/2017 Mineral Owner Private Surface Owner Private / NGL N. Date —

RULE 26.7(A): Identified Tracts? Yes Affected Persons: Chevron / EOG A / Yates / Magnum Hunter / EOG Y / LNBI N. Date 08/21/2017

Order Conditions: Issues: HC potential / cmt on liner / DV tool on 9 5/8 / stratigraphy

Additional COAs: Mudlog / CBL for liner into 9 5/8 & 9 5/8 above DV tool / formation picks

**Pending Application for High-Volume Devonian Disposal Well
C-108 Application for Striker 2 SWD No. 1 – NGL Water Solution Permian**



Striker 2 SWD No. 1; NGL Water Solutions Permian

API 30-015-44416; Application No. pMAM1723357567

Proposed interval: 16,300' to 17,850'

Protested by XTO and EOG; both protests retracted.

RBDM Suspns: 8.30.2017; processing application with current design.

Closest Devonian Well with Large-Volume Potential: Mesa Verde SWD No. 3 (30-015-44676) spud 2.25.2018; approved current tubing: 5-in tapering to 4.5-in; pending application for tubing size modification.

Goetze, Phillip, EMNRD

From: Chris Weyand <chris@lonquist.com>
Sent: Tuesday, March 27, 2018 11:58 AM
To: Goetze, Phillip, EMNRD
Cc: McMillan, Michael, EMNRD
Subject: RE: Striker 2 EOG Withdrawal

Mr. Goetze,

Thank you for the timely response and additional info on tubing size increase requests. For now we will stick with the proposed design.

Please let me know if you need anything else.

Best,

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

From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Monday, March 26, 2018 11:23 AM
To: Chris Weyand
Cc: McMillan, Michael, EMNRD
Subject: RE: Striker 2 EOG Withdrawal

Mr. Weyand:

Your observation is correct. I see no issues with providing a draft order for the Director's review with the current application. If you want to increase the tubing diameters then the Division request the following supplemental information:

1. Increased notification of affected persons to a radius of one-mile;
2. Increase AOR for wells to a radius of one-mile; and
3. A statement regarding the potential for induced seismicity as a result of long-term injection by the well.

The last item that the Division is stipulating is to address the long-term potential for induced seismic events related to the injection activity over the life of the well. The principle focus of this potential has been basement faulting which has the highest potential stress energy. Included are examples from the latest hearings which have directly dealt with IS and increased disposal volumes. The Mesquite case info is attached – it includes the additional geo/pore pressure info. The modeling is done on the last eight pages and was developed by Susan Bilek (<https://www.passcal.nmt.edu/content/general-information/contacts/staff-directory>) in Socorro.

There are numerous prediction models available. The Zobach model is available at the Stanford's SEEES: <https://scits.stanford.edu/>. The model is free and can be found at the software portal: <https://scits.stanford.edu/software> . Matador and Chevron have provided detailed analysis which included proprietary data – the reason they submitted affidavits of the results. Zobach report has sources for faults already mapped.

If you plan to prepare any submittal "in-house", make sure that the person preparing the assessment is qualified. "Qualified" would mean an individual capable of being an expert witness at hearing to explain the final report and answer questions related to the process.

At this point, I am not aware of any application by Mesquite to increase the tubing sizes for the Mesa Verde. PRG

Phillip Goetze, PG
Engineering Bureau, Oil Conservation Division, NM EMNRD
1220 South St. Francis Drive, Santa Fe, NM 87505
Direct: 505.476.3466
E-mail: phillip.goetze@state.nm.us

From: Chris Weyand <chris@lonquist.com>
Sent: Monday, March 26, 2018 8:49 AM
To: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>
Subject: RE: Striker 2 EOG Withdrawal

Mr. Goetze,

Regarding the proposed Striker 2 SWD #1 well, there is one Devonian SWD within 2 miles. It is the Mesa Verde SWD #003 operated by Mesquite. It is about 1.5 miles away.

Thanks,

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

From: Chris Weyand
Sent: Monday, March 26, 2018 9:35 AM
To: Phillip.Goetze@state.nm.us
Subject: Striker 2 EOG Withdrawal

Mr. Goetze,

Please see attached.

Thanks,

LONQUIST & CO. LLC **Chris Weyand • Staff Engineer •** Lonquist & Co., LLC • 12912 Hill Country Blvd., Suite F-200 • Austin, Texas, USA 78738
Direct: 512-600-1764 • Cell: 210-846-2673 • Fax: 512-732-9816 • chris@lonquist.com • www.lonquist.com



HOUSTON CALGARY
AUSTIN WICHITA DENVER

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