

District I1625 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

Form C-101
Revised July 18, 2013

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

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

¹ Operator Name and Address Solaris Water Midstream, LLC 907 Tradewinds Blvd., Suite B Midland, TX 79706		² OGRID Number 371643
		³ API Number 30-025-49289
⁴ Property 326246	⁵ Property Name Mills 19 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
2	19	22 South	32 East	E	2,430	N	1170	W	Lea

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
2	19	22 South	32 East	E	2,430	N	1170	W	Lea

⁹ Pool Information

SWD-1878

SWD; Devonian-Silurian	Pool Code 97869
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Additional Well Information

¹¹ Work Type Drill	¹² Well Type SWD	¹³ Cable/Rotary Rotary	¹⁴ Lease Type SWD	¹⁵ Ground Level Elevation 3,589
¹⁶ Multiple No	¹⁷ Proposed Depth 17,457	¹⁸ Formation Devonian / Fusselman SWD	¹⁹ Contractor	²⁰ Spud Date
Depth to Ground water 380'	Distance from nearest fresh water well 3650'		Distance to nearest surface water N/A	

☐ We will be using a closed-loop system in lieu of lined pits²¹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	18.125"	16	84.0# J-55	802'	600	Surface
1 st Int	14.75"	13.625"	68.0# FJ	5,482'	1875	Surface
2 nd Int	12.25"	9.625"	35.5# HCP110	13,312'	2,400	Surface
Liner	8.5"	7.625"	39.0# P110	13,112' - 16,207'	140	Top of Liner

Casing/Cement Program: Additional Comments

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²² Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	10,000 psi.	10,000 psi.	Shaffer or Equivalent

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 ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Printed name: Whitney McKee

Title: Regulatory Specialist

E-mail Address: whitney.mckee@solariswater.com

Date: 7/29/2021

Phone: 432-203-9020

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date: 08/09/2021

Expiration Date: 08/09/2023

Conditions of Approval Attached

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State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-49289	Pool Code 97869	Pool Name SWD; SILURO-DEVONIAN
Property Code 326246	Property Name MILLS 19 SWD	Well Number 1
OGRID No. 371643	Operator Name SOLARIS WATER MIDSTREAM, LLC	Elevation 3589'

Surface Location

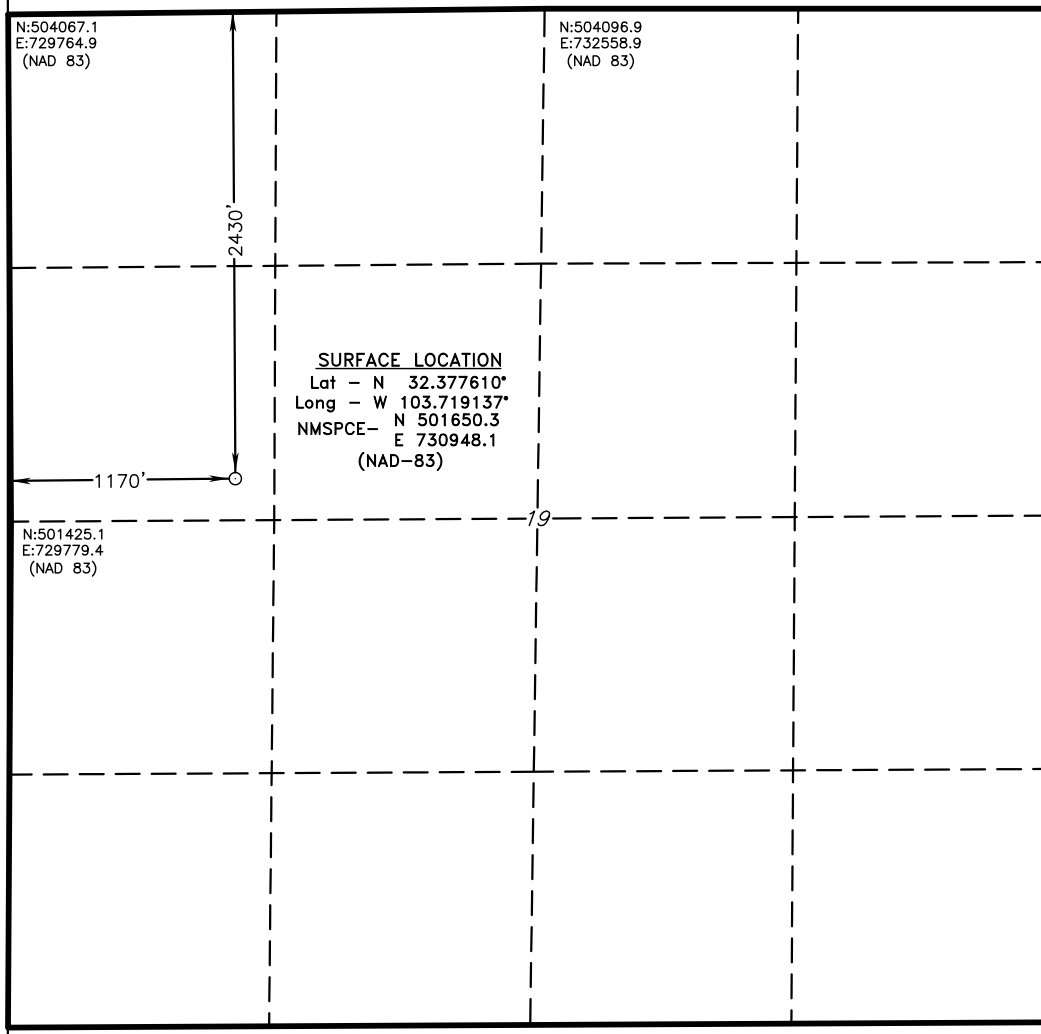
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	22 S	32 E		2430	NORTH	1170	WEST	LEA

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.
			SWD-1878

**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**



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 _____ Date _____

Bonnie Atwater

Printed Name

bonnie.atwater@solarismidstream.com

Email Address

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.

NOVEMBER 13, 2018

Date Surveyed

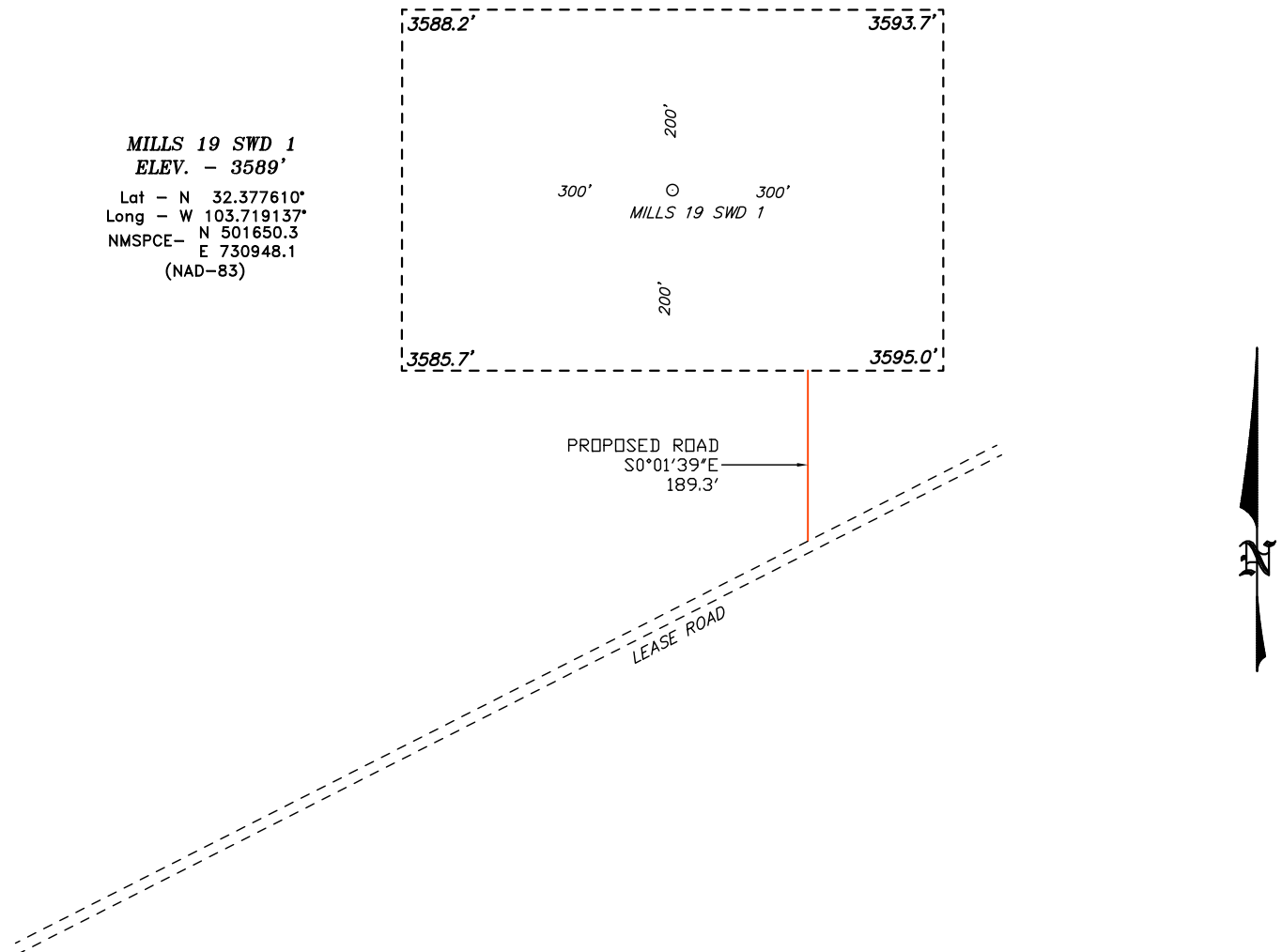
Signature & Seal of
Professional Surveyor

Certificate No. **Gary L. Jones 7977**

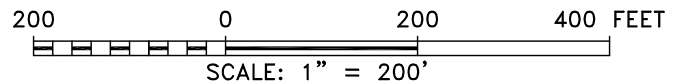
Professional Land Surveyor

0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 34181

**SECTION 19 TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



EUNICE, NM IS ± 32 MILES TO THE EAST OF LOCATION.



SOLARIS WATER MIDSTREAM

REF: MILLS 19 SWD 1 / WELL PAD TOPO

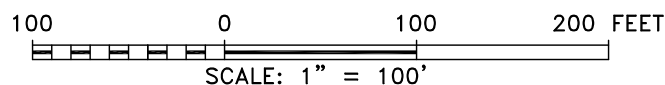
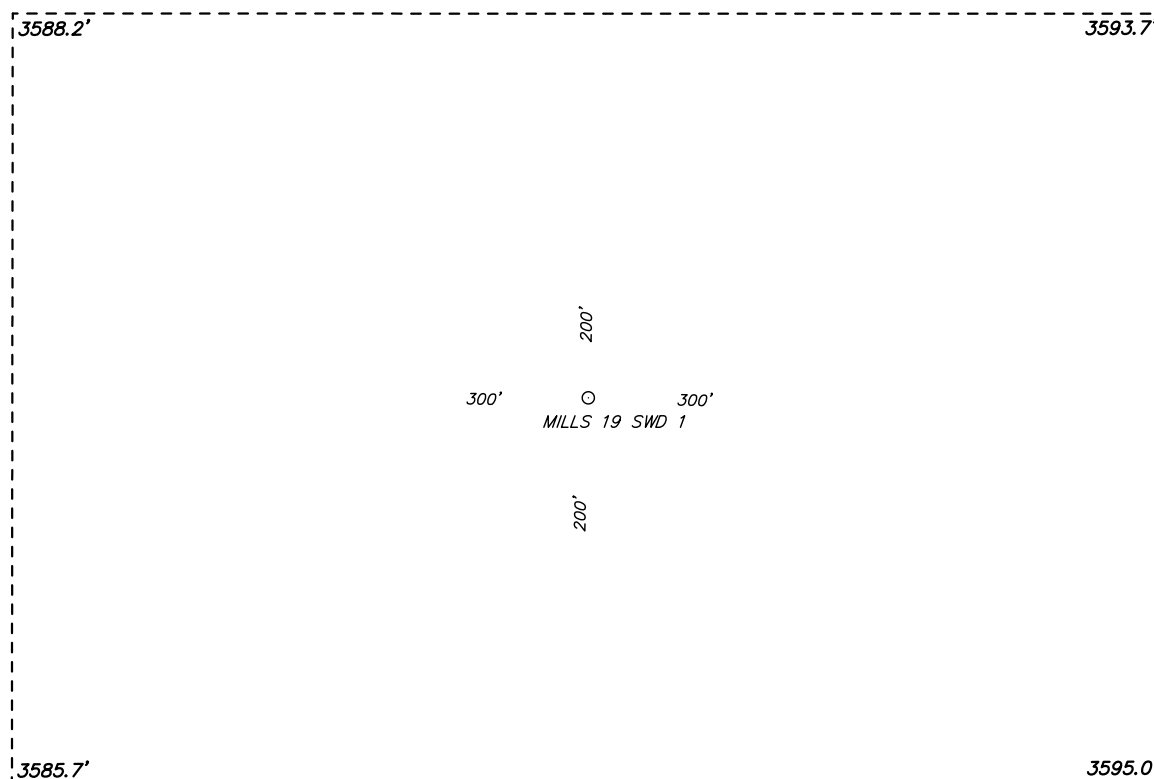
THE MILLS 19 SWD 1 LOCATED 2430' FROM
THE NORTH LINE AND 1170' FROM THE WEST LINE OF
SECTION 19, TOWNSHIP 22 SOUTH, RANGE 32 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

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P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basin-surveys.com

W.O. Number: 34181	Drawn By: J GOAD	Date: 11-14-2018	Survey Date: 11-13-2018	Sheet 1 of 1 Sheets
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**SECTION 19 TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



SOLARIS WATER MIDSTREAM

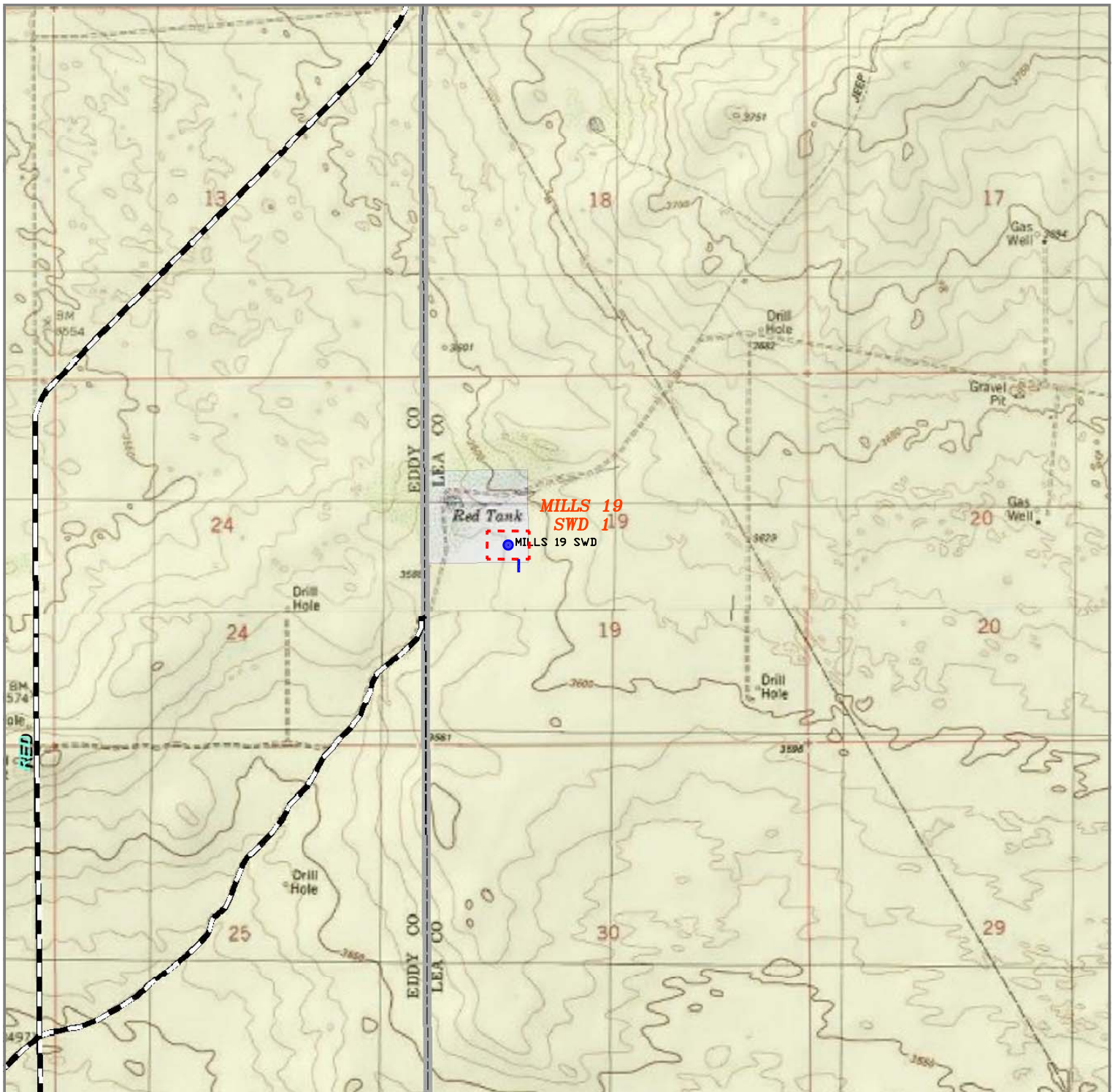
REF: MILLS 19 SWD 1 / WELL PAD • TOPO

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MILLS 19 SWD 1

Located 2430' FNL & 1170' FWL
 Section 19, Township 22 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



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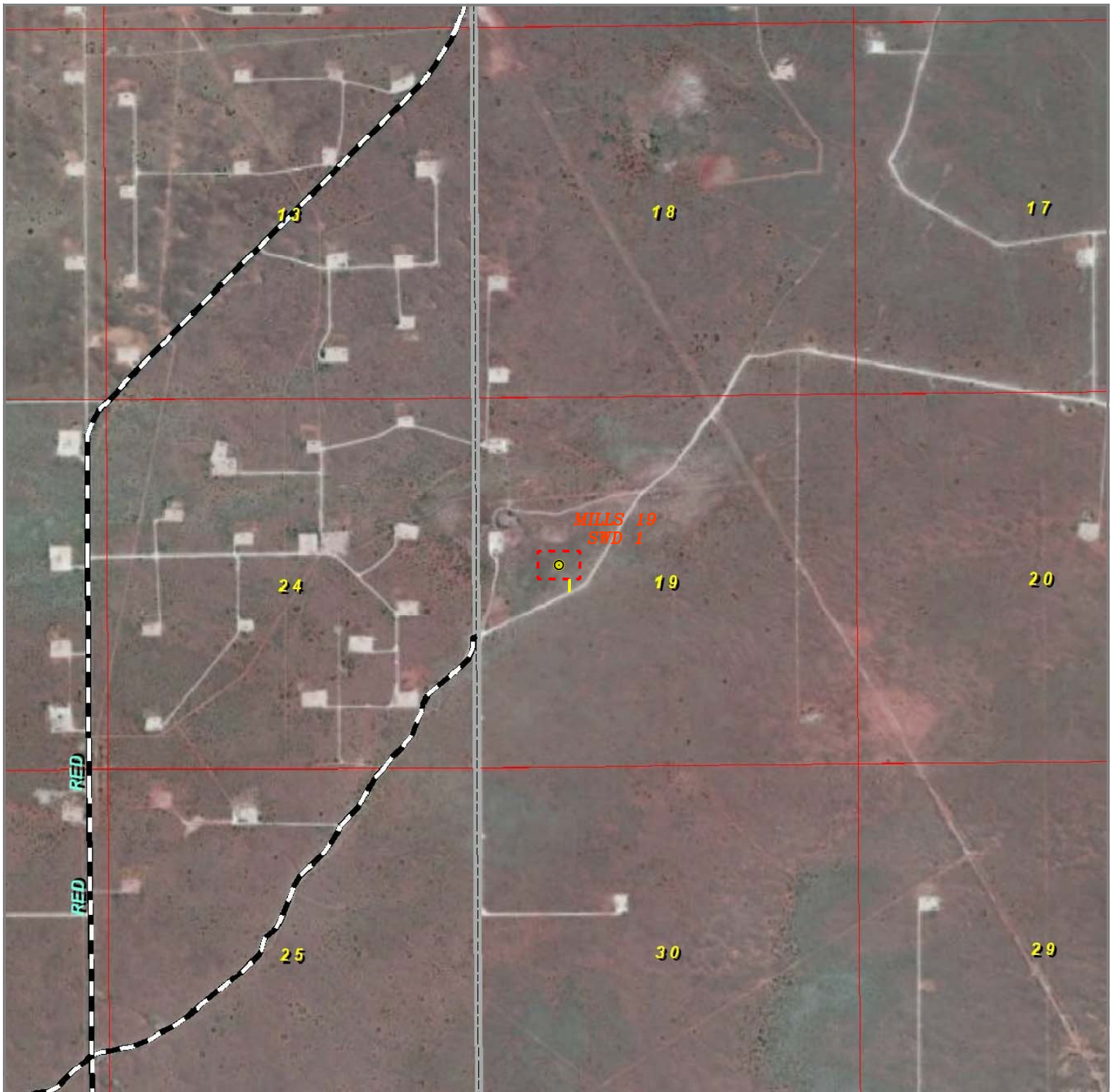
0' 1000' 2000' 3000' 4000'
 SCALE: 1" = 2000'

W.O. Number: JG - 34181

Survey Date: 11-13-2018

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND





MILLS 19 SWD 1

Located 2430' FNL & 1170' FWL
 Section 19, Township 22 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



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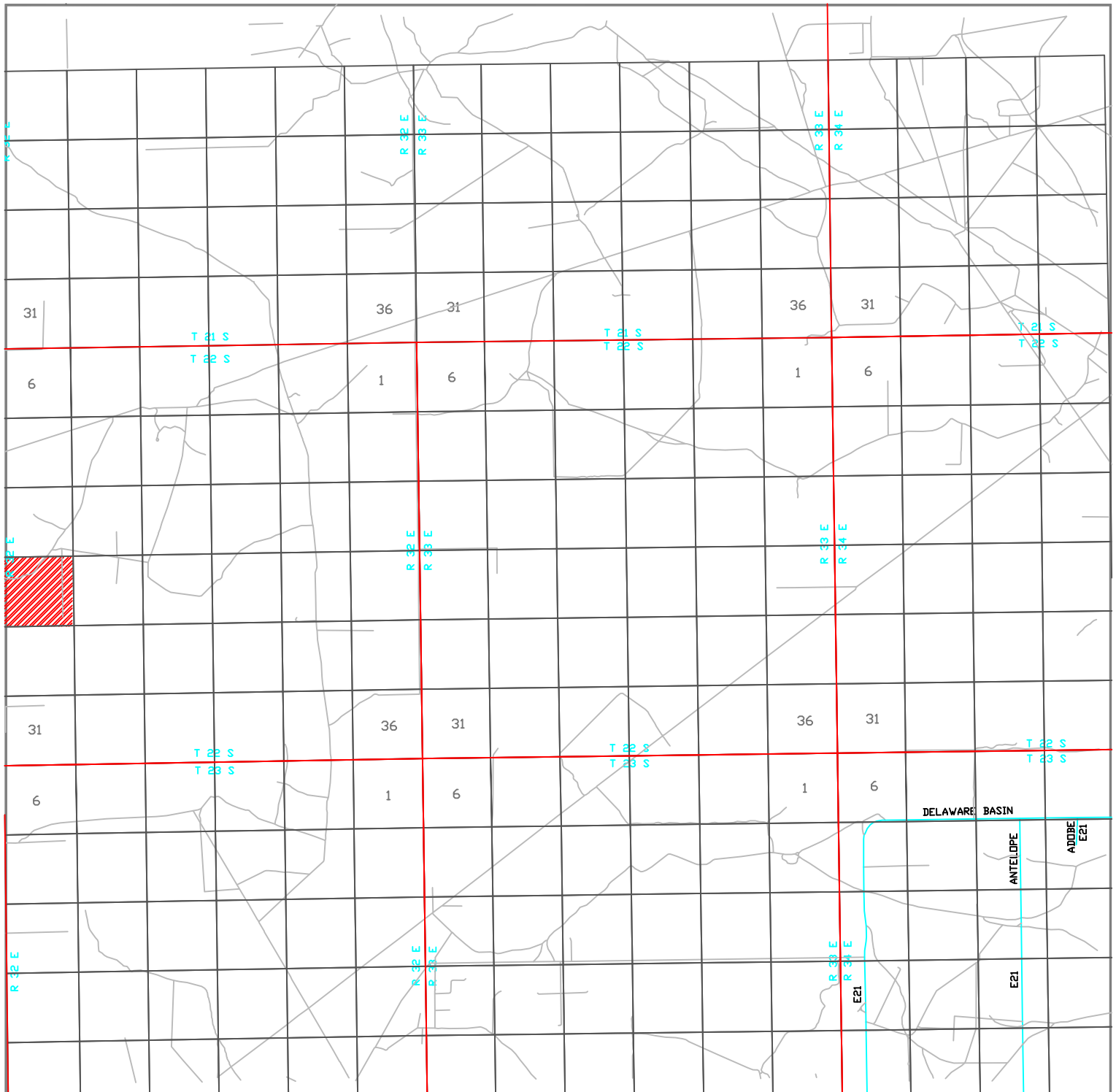
0' 1000' 2000' 3000' 4000'
 SCALE: 1" = 2000'

W.O. Number: JG - 34181

Survey Date: 11-13-2018

YELLOW TINT - USA LAND
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 NATURAL COLOR - FEE LAND





MILLS 19 SWD 1

Located 2430' FNL & 1170' FWL
Section 19, Township 22 South, Range 32 East,
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0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

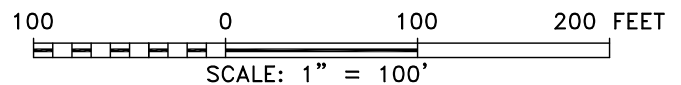
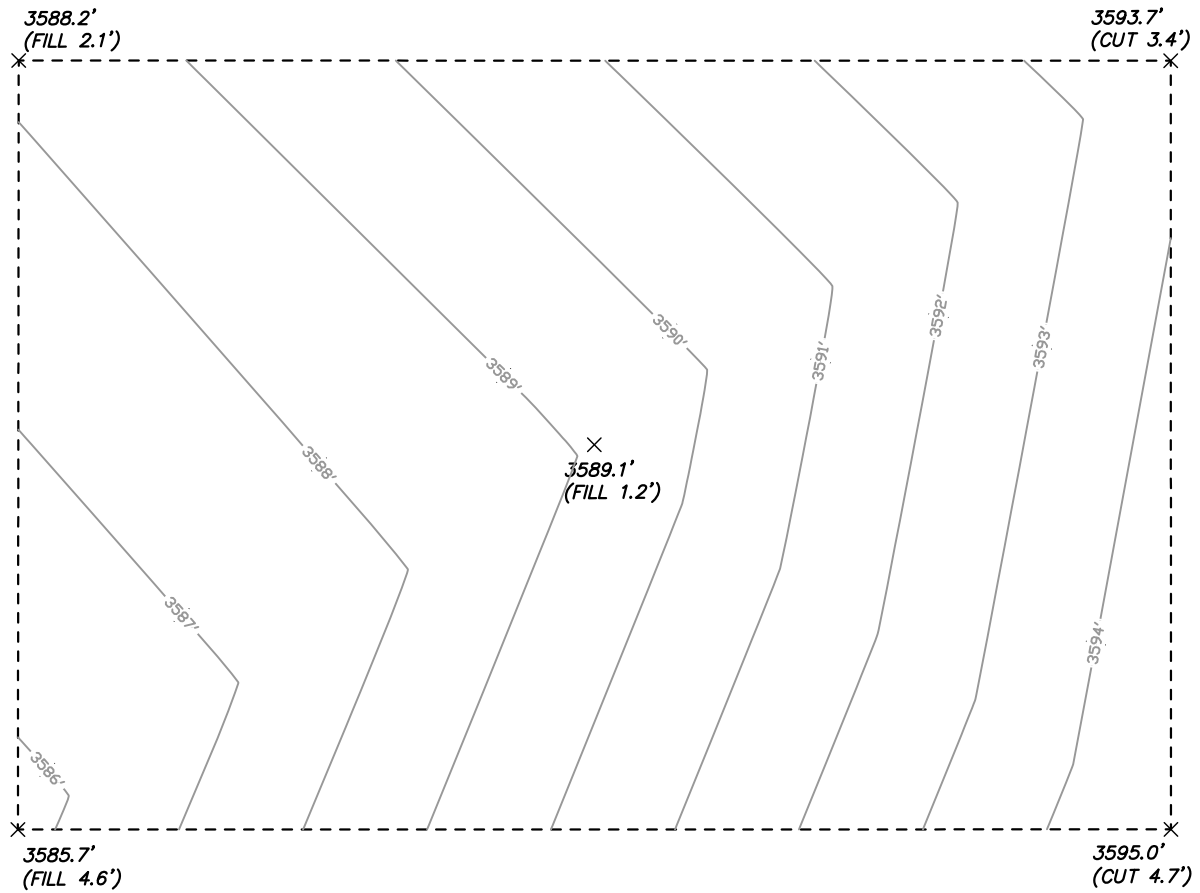
W.O. Number: JG - 34181

Survey Date: 11-13-2018

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NATURAL COLOR - FEE LAND



**SECTION 19 TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M.,
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SOLARIS WATER MIDSTREAM

REF: MILLS 19 SWD 1 / CUT & FILL

THE MILLS 19 SWD 1 LOCATED 2430' FROM
THE NORTH LINE AND 1170' FROM THE WEST LINE OF
SECTION 19, TOWNSHIP 22 SOUTH, RANGE 32 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 34181	Drawn By: J GOAD	Date: 11-14-2018	Survey Date: 11-13-2018	Sheet 1 of 1 Sheets
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State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Solaris Water Midstream, LLC **OGRID:** 371643 **Date:** 08 / 03 / 2021

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Mills 19 SWD #1 30-025-49289	25-49289	Sec. 19, T22S-R32E	2430' FNL & 170' FWL	N/A	N/A	N/A

IV. Central Delivery Point Name: N/A [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
N/A						

VI. Separation Equipment: ☐ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☐ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☐ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☐ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices


1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Whitney McKee
Title: Regulatory Specialist
E-mail Address: whitney.mckee@solariswater.com
Date: 08/03/2021
Phone: 432-203-9020
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Solaris Water Midstream, LLC

Mills 19 SWD SWD #1

Natural Gas Management Plan

N/A – This is a SWD well.

REGULATORY: NMOC
API:
COUNTY: Lea
RIG:
KB:
GL: 3589

Enchantment Water, LLC

WELLHEAD:
13-5/8" 5K MN-DS
13-3/8" x 9-5/8" x 7"

Mills 19 SWD #1

PROPOSED SWD WELL INJECTION STRING

NAD 83
Lat:
Long:
SHL:
BHL:

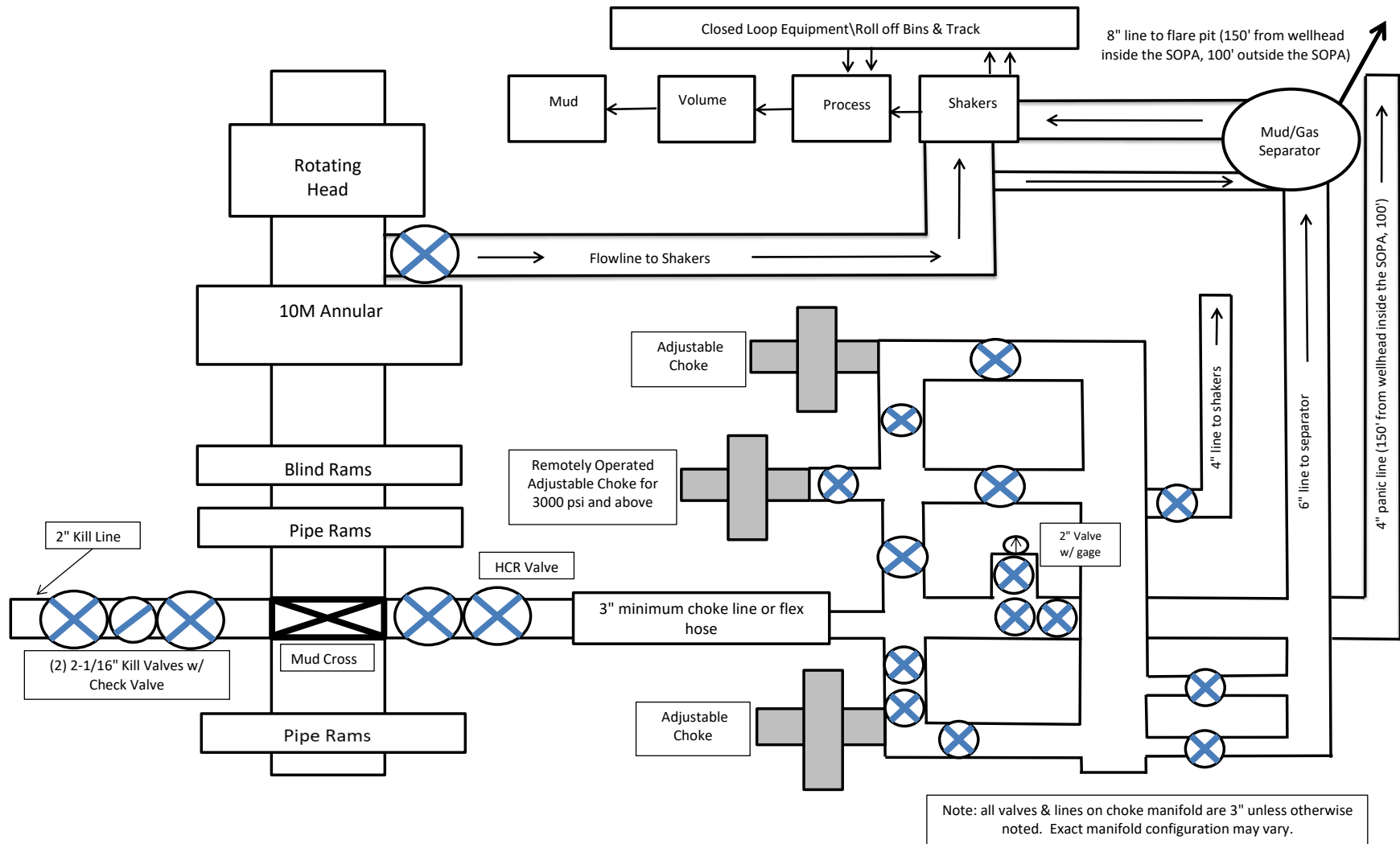
HOLE SIZE	MD TD	FORMATION Conductor	CSG SET	MUD	CASING	SPECIAL INSTRUCTIONS
36.0"				SPUD MW 8.4 ppg FRESH TD MW	30.0"	SET AND GROUTED
120' CONDUCTOR CSG 120'				DRLOUT MW 10.0 ppg BRINE TD MW 10.5 ppg	16.0" 84# J-55 CSG. 10 Bowsprings 1 joint Shoe Track	600 SX CIRCULATED TO SURFACE
18.125"				DRLOUT MW 9.5 ppg BRINE / CUT BRINE TD MW 10.5 ppg	13.375" 68.0# FJ CSG 17 Bowsprings 1 joint Shoe Track	1875 SX CIRCULATED TO SURFACE
14.750"				DRLOUT MW 9.0 ppg CUT BRINE TD MW 9.2 ppg	9-5/8" ID: 8.835" 35.5# HCP-110 46 Bowsprings 1 joint shoe track	2400SX - STAGED; CIRCULATE TO SURFACE (DV @ 7,300')
5,482' 1st INTERMEDIATE CSG 5,482'				DRLOUT MW 11.5 ppg OBM TD MW 12.6 ppg	DRILLING LINER 7-5/8" ID: 6.625 39# HCP-110 LTC 25 Bowsprings 1 joint shoe track	TAIL: 14.2 ppg/140 sxs Top of Tail: TOL 20% excess
12.250"						Allamon 7-5/8" 39# x 9-5/8" 40# Hydraulic-Set Liner Hanger
13,312' 2nd INTERMEDIATE CSG 13,312'						
8.5"						
16,150 PERM PACKER 16,150						
13,112 LINER 16,207'						
16,207 Devonian 17,457				DRLOUT MW 8.4 ppg FRESH TD MW 8.4 ppg	INJECTION STRING 7" 29 P110 HC EZGO FJ3 Surface - 11,700' 5.5" 19.8# P110 HC EZGO FJ3 11,700' - 16,150'	PACKER FLUID
6-1/2"						OPEN HOLE COMPLETION 7.625" Baker Perm Nickel plated packer Injection Csg will be Internally Coated
17,457 TD 17,457						

Est BHT = 240* F

DIRECTIONS TO LOCAITON:

Drilling Engineer:

Date: 7/27/2021



13-5/8" X 10-M BOPE (3 Rams and Rotating Head) & Closed Loop System Equipment Schematic

SOLARIS WATER MIDSTREAM, LLC
PROPOSED MILLS 19 SWD #1
Section 19-T22S-R32E
2,430' FNL & 1,223' FWL
Lea County, New Mexico
11/30/2018
Jim Brannigan, C.P.G., R.G.

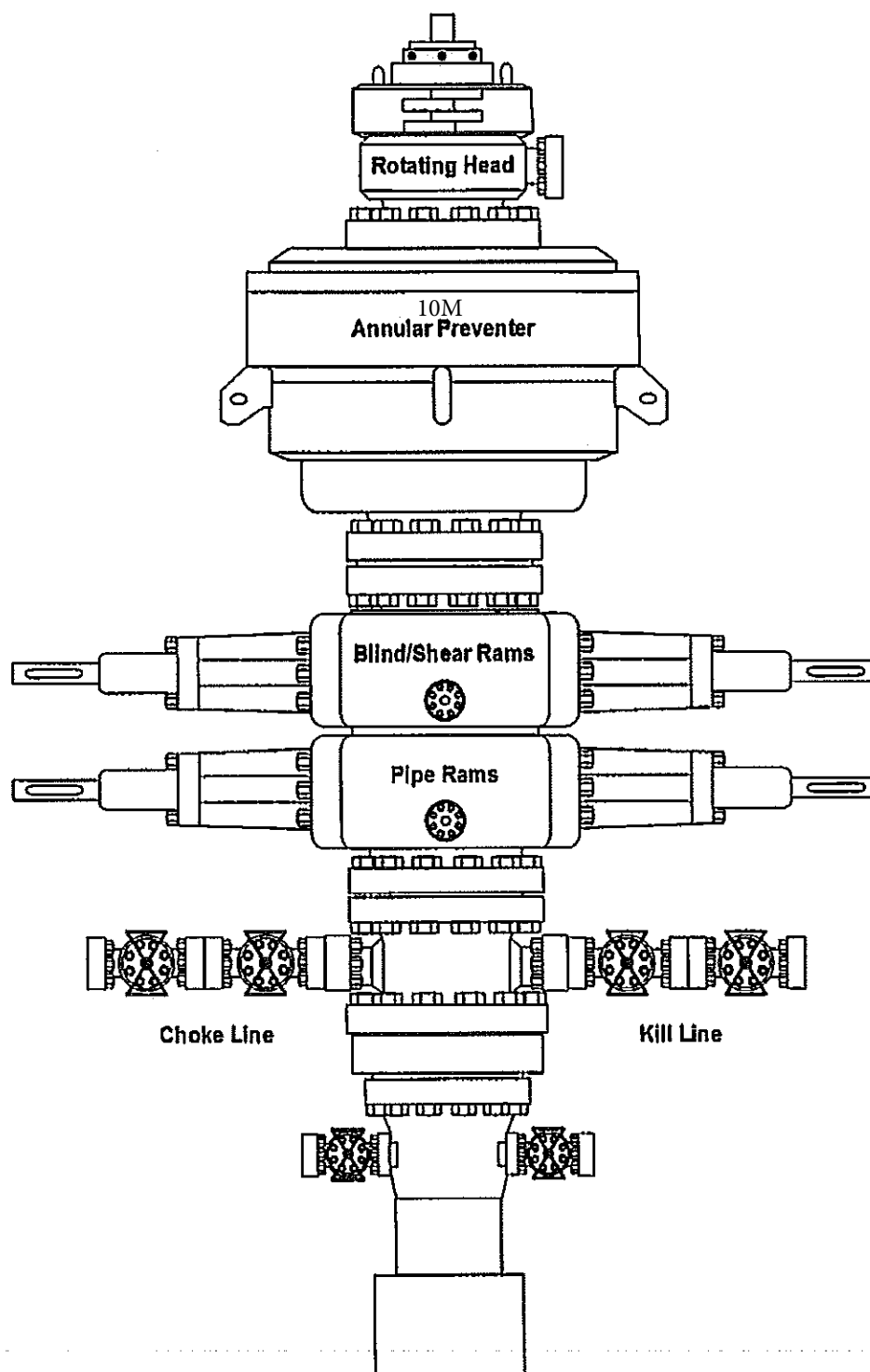
GL: 3,590' (est.)

KB: 3,612' (est.)

<u>Tops</u>	<u>Depths (est.)</u>	<u>Subsea (est.)</u>
Rustler	775'	+2,837
T/Salt	1,150'	+2,462
B/Salt	4,375'	-763
T/Bell Canyon – Oil	4,700'	-1,088
T/Cherry Canyon – Oil	5,425'	-1,813
T/ Brushy Canyon – Oil	6,700'	-3,088
T/Bone Spring LM	8,425'	-4,813
T/1 st BS Sand – Oil	9,500'	-5,888
T/2 nd BS Sand – Oil	10,450'	-6,838
T/3 rd BS Sand – Oil	11,500'	-7,888
T/Wolfcamp – Oil	12,050'	-8,438
T/Strawn – Gas	13,325'	-9,713
T/Atoka – Gas	13,700'	-10,088
T/Morrow – Gas	14,525'	-10,913
T/Barnett	15,225'	-11,613
T/Miss LM	15,675'	-12,063
T/Woodford	16,000'	-12,388
T/Devonian	16,200'	-12,588
T/Fusselman	16,950'	-13,338
T/Montoya	17,650'	-14,038
T/Simpson	18,175'	-14,563
T/Ellenburger	18,825'	-15,213
T/Pre-Cambrian	19,500'	-15,888

Deeper tops picked in part using the Mesquite SWD, Inc. Deep Purple SWD #1 in Section 30-T22S-R32E. TD @ 17,673' (Devonian).

Attachment 1 – Representative BOP Setup



District I

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Phone:(575) 393-6161 Fax:(575) 393-0720

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 39589

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 907 Tradewinds Blvd, Suite B Midland, TX 79706	OGRID: 371643
	Action Number: 39589
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
pkautz	MUST SUBMIT DEVIATION SURVEY WITH C-105	8/9/2021
pkautz	CEMENT MUST BE BROUGHT TO TOP ON ALL STRINGS	8/9/2021
pkautz	SURFACE CASING MUST BE SET 25 FEET BELOW TOP OF RUSTLER	8/9/2021
pkautz	MUST COMPLY WITH ALL REQUIREMENTS OF SWD-1878	8/9/2021