

**STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES  
OIL CONSERVATION DIVISION**

**APPLICATION OF SOLARIS WATER  
MIDSTREAM, LLC FOR APPROVAL  
OF A SALTWATER DISPOSAL WELL,  
LEA COUNTY, NEW MEXICO**

Case No. \_\_\_\_\_

**APPLICATION**

Pursuant to 19.15.26.8 NMAC, Solaris Water Midstream, LLC (“Solaris”) requests that the New Mexico Oil Conservation Division (“Division”) issue an order approving a saltwater disposal well in Lea County, New Mexico. In support of its application, Solaris states the following.

1. Solaris (OGRID No. 371643) seeks an order approving its proposed Ragin Rutley SWD No. 1, to be drilled at a location 857’ from the south line and 228’ from the east line, in Unit P of Section 14, Township 20 South, Range 32 East, Lea County, New Mexico for the purpose of operating the Ragin Rutley SWD No.1 as a saltwater disposal well.
2. Solaris seeks authorization to inject produced water into the Devonian, Fusselman Formation (SWD; Devonian-Silurian pool; Code 97869) at a depth of approximately 14,463 to 16,263 feet.
3. Solaris proposes to inject an average of 30,000 barrels of water per day up to a maximum of 40,000 barrels of water per day.
4. Solaris requests that the Division approve a maximum surface injection pressure of 2,892 psi.
5. A Division Form C-108 is attached as Exhibit A.

6. An updated area of review map and accompanying list of wells is attached as Exhibit B, and an updated list of affected parties is attached as Exhibit C.

7. The granting of this application will prevent waste and protect correlative rights.

WHEREFORE, Solaris requests that this application be set for hearing on May 2, 2024, and that, after notice and hearing, the Division enter an order approving this application and authorizing Solaris to inject produced water into the Ragin Rutley SWD No.1 well for disposal.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy

Jaclyn M. McLean

P.O. Box 2068

Santa Fe, NM 87504-2068

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*Counsel for Solaris Water Midstream, LLC*

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

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



**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Applicant:** Solaris Water Midstream, LLC \_\_\_\_\_ **OGRID Number:** 371643 \_\_\_\_\_  
**Well Name:** Ragin Rutley SWD No. 1 \_\_\_\_\_ **API:** \_\_\_\_\_  
**Pool:** SWD: Devonian-Silurian \_\_\_\_\_ **Pool Code:** 97869 \_\_\_\_\_

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

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

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

**FOR OCD ONLY**

Notice Complete

Application Content Complete

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

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

December 9, 2019

**Ramona K. Hovey – Agent of Solaris Water Midstream**

Date

Print or Type Name

(512) 600-1777

\_\_\_\_\_  
 Signature

Phone Number

ramona@lonquist.com

e-mail Address

**Solaris Water Midstream, LLC**

**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance \_\_\_\_\_ X \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ X \_\_\_\_\_ Yes \_\_\_\_\_ No

II. OPERATOR: Solaris Water Midstream, LLC

ADDRESS: 701 Tradewinds Blvd., Suite C, Midland, TX 79706

CONTACT PARTY: Whitney McKee

PHONE: 432-203-9020

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: Ramona Hovey

TITLE: Consulting Engineer – Agent for Solaris Water Midstream

SIGNATURE: Ramona K Hovey

DATE: 12/9/2019

E-MAIL ADDRESS: ramona@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: \_\_\_\_\_

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

Side 2

### III. WELL DATA

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

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

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

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

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

### XIV. PROOF OF NOTICE

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

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

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

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

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

Side 1

### INJECTION WELL DATA SHEET

OPERATOR: Solaris Water Midstream, LLC

WELL NAME & NUMBER: Ragin' Rutley SWD No. 1

WELL LOCATION: 857' FSL 228' FEL  
FOOTAGE LOCATION

LOT 16  
UNIT LETTER

14  
SECTION

20S  
TOWNSHIP

32E  
RANGE

#### WELLBORE SCHEMATIC

#### WELL CONSTRUCTION DATA

##### Surface Casing

Hole Size: 26"

Casing Size: 20"

Cemented with: 953 sx.

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

Top of Cement: surface

Method Determined: circulation

##### Intermediate 1 Casing

Hole Size: 18.125"

Casing Size: 16"

Cemented with: 1,357 sx.

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

Top of Cement: surface

Method Determined: circulation

##### Intermediate 2 Casing

Hole Size: 14.75"

Casing Size: 13.375"

Cemented with: 1,048 sx.

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

Top of Cement: surface

Method Determined: circulation

Production Casing

Hole Size: 12.250"

Casing Size: 9.625"

Cemented with: 2.668 sx.

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

Top of Cement: surface

Method Determined: circulation

Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 422 sx.

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

Top of Cement: 10.625'

Method Determined: logging

Total Depth: 16.263'

Injection Interval

14.463 feet to 16.263 feet

(Open Hole)

Side 2

**INJECTION WELL DATA SHEET**

Tubing Size: 5.5", 20 lb/ft, HCL-80, BTC from 0' – 10,425' and 5", 18 lb/ft, HCL-80, LTC from 10,425' – 14,413'

Lining Material: Duoline

Type of Packer: 7-5/8" X 5" Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

Packer Setting Depth: 14,413'

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?

\_\_\_\_\_

2. Name of the Injection Formation: Devonian, Fusselman

3. Name of Field or Pool (if applicable): SWD; Devonian-Silurian 97869

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: 5,049'

Strawn: 11,918'

Atoka: 12,290'

Morrow: 12,917'



**Solaris Water Midstream, LLC**

**Ragin Rutley SWD No. 1**

**FORM C-108 Supplemental Information**

III. Well Data

A. Wellbore Information

1.

Well information	
<b>Lease Name</b>	Ragin Rutley SWD
<b>Well No.</b>	1
<b>Location</b>	S-14 T-20S R-32E
<b>Footage Location</b>	857' FSL & 228' FEL

2.

a. Wellbore Description

Casing Information					
Type	Surface	Intermediate 1	Intermediate 2	Production	Liner
<b>OD</b>	20"	16"	13.375"	9.625"	7.625"
<b>WT</b>	0.500"	0.656"	0.480"	0.545"	0.500"
<b>ID</b>	19.000"	14.688"	12.347"	8.535"	6.625"
<b>Drift ID</b>	18.936"	15.062"	12.559"	8.379"	6.500"
<b>COD</b>	21.000"	17.000"	13.375"	10.625"	7.625"
<b>Weight</b>	106.5 lb/ft	109 lb/ft	72 lb/ft	53.5 lb/ft	39 lb/ft
<b>Grade</b>	J-55 BTC	J-55 BTC	HCL-80 FJ	HCP-110 BTC	Q-125 EZ-GO FJ3
<b>Hole Size</b>	26"	18.125"	14.75"	12.25"	8.5"
<b>Depth Set</b>	1,385'	2,844'	4,932'	10,825'	10,625' – 14,463'

## b. Cementing Program

<b>Casing String</b>	Surface	Intermediate 1	Intermediate 2	Production	Liner
<b>Lead Cement</b>	HALCEM™	HALCEM™	HALCEM™	HALCEM™	NeoCem™
<b>Lead Cement Volume (sacks)</b>	642	700	817	Stage 1: 1,604 Stage 2: 262	421
<b>Lead Cement Yield (ft3/sack)</b>	1.664	1.664	1.664	Stage 1: 2.731 Stage 2: 1.336	1.223
<b>Tail Cement</b>	HALCEM™	HALCEM™	HALCEM™	HALCEM™	-
<b>Tail Cement Volume (sacks)</b>	311	657	231	Stage 1: 623 Stage 2: 178	-
<b>Tail Cement Yield (ft3/sack)</b>	1.332	1.332	1.332	Stage 1: 1.056 Stage 2: 1.336	-
<b>Cement Excess</b>	100%	100%	100%	100%	50%
<b>Total Sacks</b>	953	1,357	1,048	2,668	421
<b>TOC</b>	Surface	Surface	Surface	Surface	10,625'
<b>Method</b>	Circulate to Surface	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information	
OD	5.5"
	5.0"
WT	0.361"
	0.362"
ID	4.778"
	4.276"
Drift ID	4.653"
	4.151"
COD	6.050"
	5.563"
Weight	20 lb/ft
	18 lb/ft
Grade	HCL-80 BTC
	HCL-80 LTC
Depth Set	0-'10,425'
	10,425-11,413'

Tubing will be lined with Duoline.

4. Packer Description

7-5/8" x 5" TCPC Permanent Packer with High Temp Elastomer and Full Inconel 925 trim

B. Completion Information

1. Injection Formation: Devonian
2. Gross Injection Interval: 14,463' – 16,263'

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	5,049'
Wolfcamp	10,725'
Strawn	11,918'
Atoka	12,290'
Morrow	12,917'

## 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 Injected:

Average Volume: 30,000 BPD

Maximum Volume: 40,000 BPD

### 2. Closed System

### 3. Anticipated Injection Pressure:

Average Injection Pressure: 2,169 PSI (surface pressure)

Maximum Injection Pressure: 2,892 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 Artesia, Bone Spring, Delaware, Morrow, Pennsylvanian, Strawn, and Wolfcamp formations.

### 5. The disposal interval is non-productive. No water samples are available from the surrounding area.

## VIII. Geological Data

### Devonian Formation Lithology:

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.

### Fusselman Formation Lithology:

The Silurian/Ordovician Fusselman Formation is stratigraphically below the Wristen Group and is above and separated from the Montoya Formation by the Sylvan Shale. The Sylvan Shale is the lower confining layer for the proposed Texas Ranger SWD No. 1 well. Fusselman facies include a laminated skeletal wackestone in the upper part and a buildup complex in the lower part composed of ooid and bryozoan grainstones. These grainstones can also be potentially prolific zones for disposal.

## A. Injection Zone: Devonian-Silurian Formation

Formation	Depth
Rustler	1,079'
Salado	1,375'
Capitan Reef Top	2,834'
Capitan Reef Base	4,922'
Delaware Mountain Group	5,049'
Wolfcamp	10,725'
Strawn	11,918'
Atoka	12,290'
Morrow	12,917'
Barnett	13,433'
Mississippian Lime	13,758'
Woodford	14,318'
Devonian	14,463'
Fusselman	15,315'

## B. Underground Sources of Drinking Water

Seven (7) water wells exist within one-mile of the proposed well. Across the area, fresh water wells are usually drilled at an average depth of 388'. Average water depth in this region is approximately 239'. The Rustler exists in this area at a depth of 1,079' and will be protected by setting 20" surface casing 10' past the Rustler formation into the Salado salt at approximately 1,385'

The proposed well is located within the Capitan Reef Complex; thus, the proposed wellbore design is a 4-string design that is intended to protect the Capitan Reef from any potential contamination while drilling. The first intermediate casing string will be set approximately 10' into the top of the Capitan Reef at 2,844'. The second intermediate casing will isolate the Capitan Reef by setting a second intermediate casing string approximately 10' past the base of the Capitan Reef. A depiction of the 4-string casing design is included in this application.

## IX. Proposed Stimulation Program

50,000 gallon acid job

## 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

Attached is a map of the seven (7) water wells that exist within one-mile of the well location. A 3rd party is currently attempting to identify active wells and obtain sample. If samples can be obtained, analysis results will be provided as soon as possible.

State of New Mexico

Energy Minerals and Natural Resources

Oil Conservation Division

AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

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

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

<sup>1</sup> Operator Name and Address SOLARIS WATER MIDSTREAM, LLC 701 TRADEWINDS BLVD., SUITE C MIDLAND, TX 79706		<sup>2</sup> OGRID Number 371643
		<sup>3</sup> API Number TBD
<sup>4</sup> Property Code	<sup>5</sup> Property Name RAGIN' RUTLEY SWD	<sup>6</sup> Well No. 1

**7. Surface Location**

UL - Lot LOT 16	Section 14	Township 20S	Range 32E	Lot Idn	Feet from 857	N/S Line S	Feet From 228	E/W Line E	County LEA
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**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; Devonian-Silurian	Pool Code 97869
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**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 3,531'
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 16,263'	<sup>18</sup> Formation Silurian-Devonian	<sup>19</sup> Contractor TBD	<sup>20</sup> Spud Date ASAP
Depth to Ground water 239'		Distance from nearest fresh water well 3,282'		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"	106.5 lb/ft	1,385'	953	Surface
Intermediate 1	18.125"	16"	109 lb/ft	2,844'	1,357	Surface
Intermediate 2	14.75"	13.375"	72 lb/ft	4,932'	1,048	Surface
Production	12.25"	9.625"	53.5 lb/ft	10,825'	2,668	Surface
Liner	8.5"	7.625"	39 lb/ft	10,625' - 14,463'	422	10,625'
Tubing		5.5" & 5"	20 lb/ft & 18 lb/ft	0'-10,425' & 10,425'-14,413'	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	8,000 psi	10,000 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  and/or 19.15.14.9 (B) NMAC  if applicable.

Signature:

*Ramona Hovey*

Printed name: Ramona Hovey

Title: Consulting Engineer

E-mail Address: ramona@lonquist.com

Date: December 9, 2019

Phone: 512-600-1777

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

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

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

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

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number		<sup>2</sup> Pool Code 97869		<sup>3</sup> Pool Name DEVONIAN-SILURIAN	
<sup>4</sup> Property Code		<sup>5</sup> Property Name RAGIN' RUTLEY SWD			<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 371643		<sup>8</sup> Operator Name SOLARIS WATER MIDSTREAM, LLC			<sup>9</sup> Elevation 3,531'

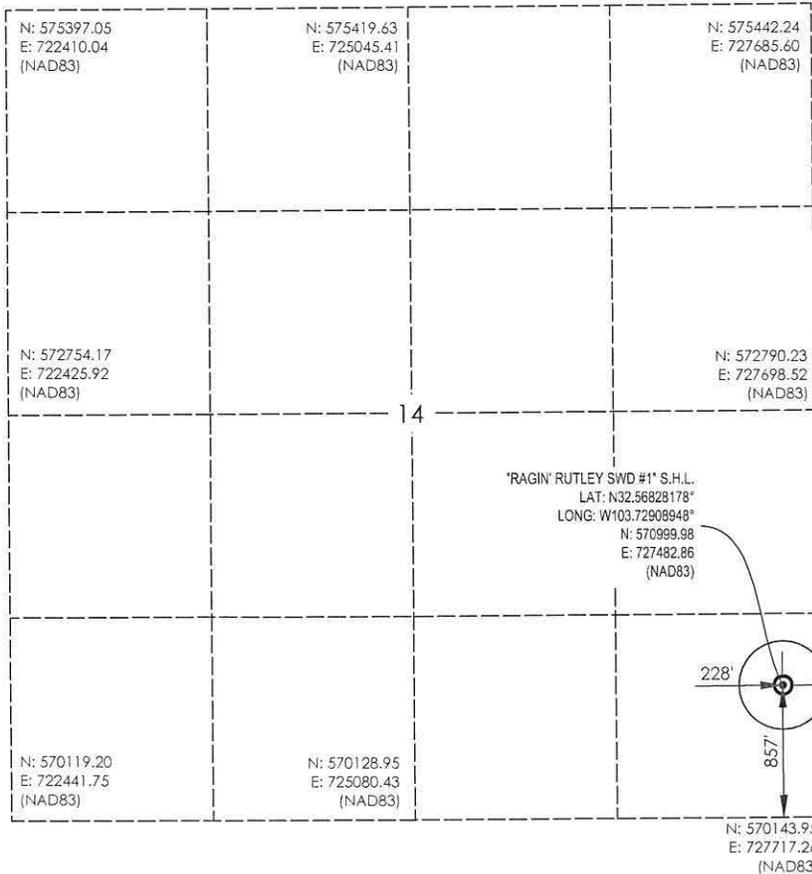
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
16	14	20 S	32 E		857'	SOUTH	228'	EAST	LEA

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

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

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.



**<sup>17</sup> 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.

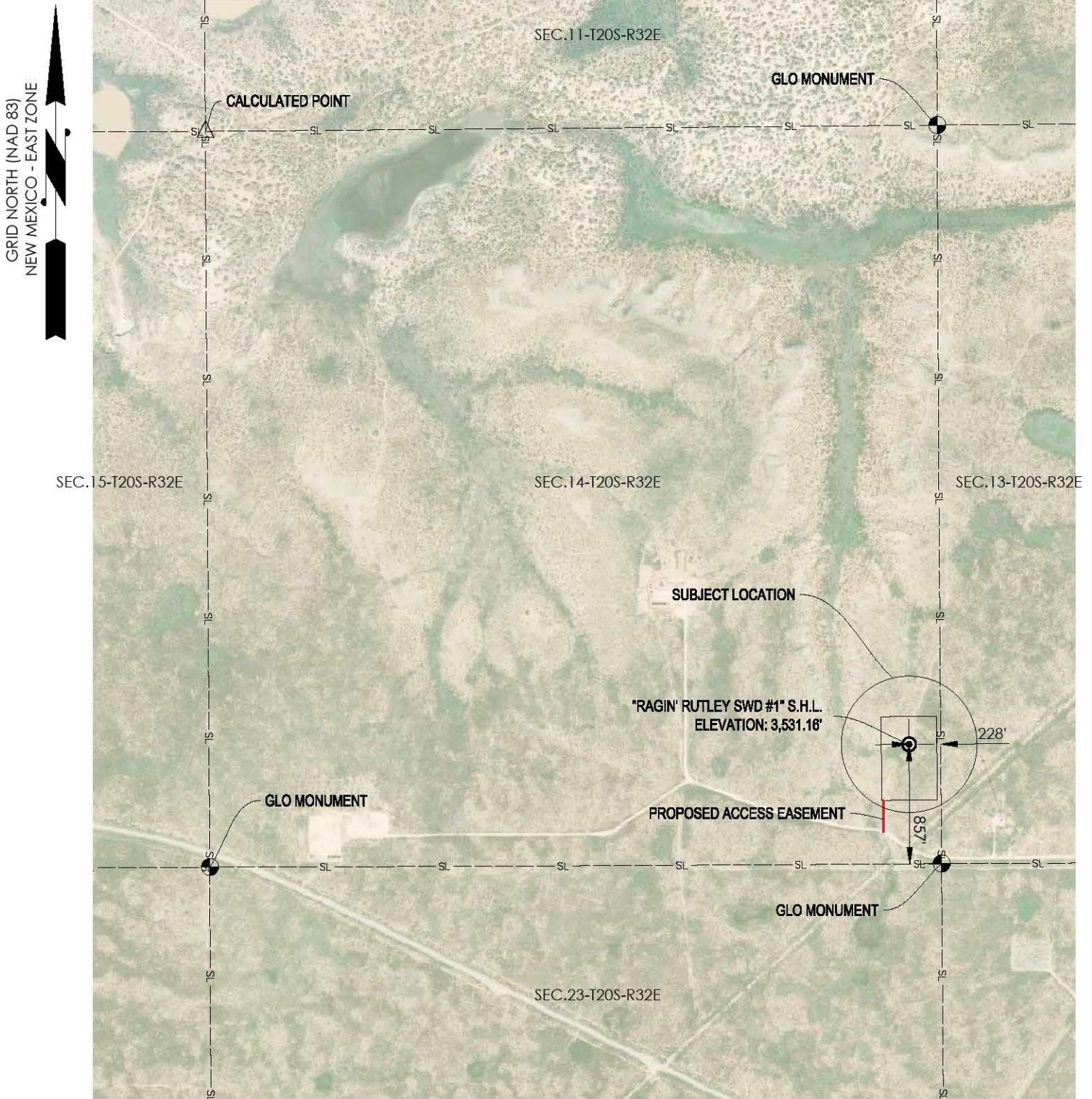
Signature: Ramona K. Hovey Date: 12/9/19  
Printed Name: RAMONA K. HOVEY  
E-mail Address: ramona@longquist.com

**<sup>18</sup> SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from actual surveys made by me or under my direct supervision, and that the same is true and correct to the best of my knowledge.

Date of Survey: \_\_\_\_\_  
Signature and Seal of Professional Surveyor: [Signature]  
Certificate Number: 23783  
10/30/2019



# WELL PAD LOCATION OVERVIEW



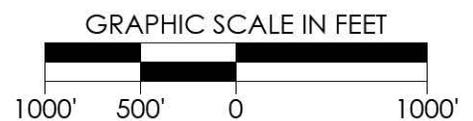
REFERENCE	ELEVATION	NAD83 (1986)		NAD27	
		STATE PLANE NEW MEXICO EAST	GEOGRAPHIC	STATE PLANE NEW MEXICO EAST	GEOGRAPHIC
S. H. L.	3,531.16'	N: 570999.98 E: 727482.86	LAT: 32.56828178° LONG: -103.72908948°	N: 570937.81 E: 686302.41	LAT: 32.56816009° LONG: -103.72859362°

### CALLS FROM SECTION LINE

S.H.L.	857' FSL, 228' FEL (SEC.14)
--------	-----------------------------

### DISTANCE & DIRECTION

FROM HWY JCT OR TOWN: ±0.9 MILES NORTHEAST OF THE INTERSECTION OF HWY 243 & HWY 62  
 FROM THE INTERSECTION OF HWY 243 & HWY 62, HEAD NORTH ON HWY 243 FOR ±0.7 MILES, TURN RIGHT ONTO A LEASE ROAD AND HEAD EAST FOR ±0.5 MILES, TURN LEFT ONTO HYDRA LANE AND HEAD NORTH FOR ±280 FEET, TURN RIGHT ONTO THE PROPOSED LEASE ROAD, HEAD NORTH FOR ±230 FEET TO LOCATION.



REVISION	"RAGIN' RUTLEY SWD #1"		
---	PROPOSED PAD AND ACCESS EASEMENT SURVEY BUREAU OF LAND MANAGEMENT SEC.14-T20S-R32E LEA COUNTY, NEW MEXICO		
	SCALE: 1" = 1000'	CHECKED BY: JWB	APPROVED BY: J.PARKER
	PLOT DATE: 10-30-2019	DRAWN BY: L.DOW	SHEET NO.: 1 OF 4



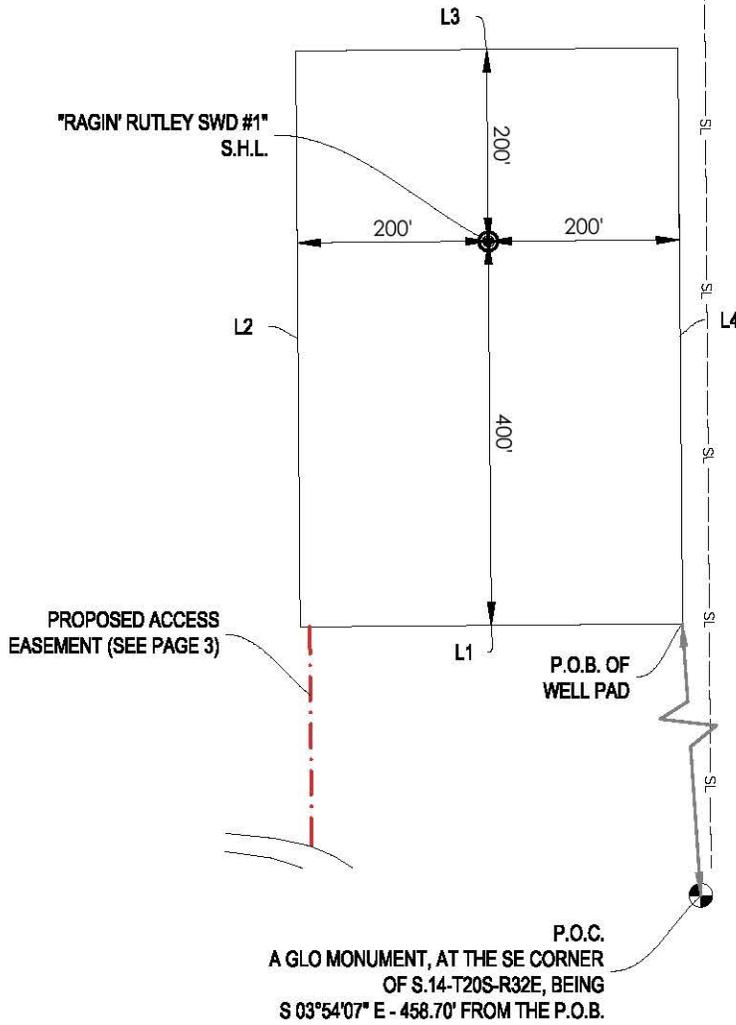
# PROPOSED PAD (5.51 ACRES)

## LEGEND

- SL SECTION LINE
- PL PROPERTY LINE
- EPR EXISTING PIPELINE ROUTE
- OHE OVERHEAD ELECTRIC
- FENCE
- EER EDGE OF EXISTING ROAD
- CLP CL OF PROPOSED ACCESS EASEMENT
- EEP EDGE OF PROPOSED ACCESS EASEMENT
- EPP EDGE OF PROPOSED PAD
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINATION
- LF LINEAR FEET
- PP POWER POLE
- PWL PROPOSED WELL LOCATION
- EWL EXISTING WELL LOCATION
- FM FOUND MONUMENT (AS NOTED)

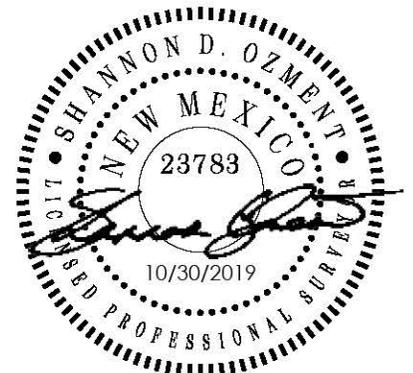
GRID NORTH (NAD 83)  
NEW MEXICO - EAST ZONE

**BUREAU OF LAND MANAGEMENT**  
**SEC. 14-T20S-R32E**  
**(240,000 SQ. FT. OR 5.51 ACRES)**

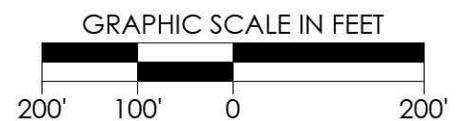


LINE #	BEARING	DISTANCE
L1	S 89°32'35" W	400'
L2	N 00°27'25" W	600'
L3	N 89°32'35" E	400'
L4	S 00°27'25" E	600'

SECTION 14  
SE1/4 SE1/4 ±5.51 ACRES



- GENERAL NOTES**
- THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON REASONABLE VISUAL OBSERVATION. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREIN. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES. BEFORE EXCAVATIONS ARE BEGUN, THE OFFICES OF THE VARIOUS UTILITIES SERVICING THIS AREA SHOULD BE CONTACTED FOR THEIR UTILITY LOCATION.
  - BASIS OF BEARINGS : NEW MEXICO STATE PLANE GRID, EAST ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.
  - VERTICAL DATUM IS NAVD 88
  - AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.
  - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.
  - ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGE SHOWN ARE BY DEED AND LEASE CALL EXCEPT WHERE NOTED.



REVISION	"RAGIN' RUTLEY SWD #1"		
---	PROPOSED PAD AND ACCESS EASEMENT SURVEY BUREAU OF LAND MANAGEMENT SEC. 14-T20S-R32E LEA COUNTY, NEW MEXICO		
	SCALE: 1" = 200'	CHECKED BY: JWB	APPROVED BY: J.PARKER
	PLOT DATE: 10-30-2019	DRAWN BY: L.DOW	SHEET NO.: 2 OF 4



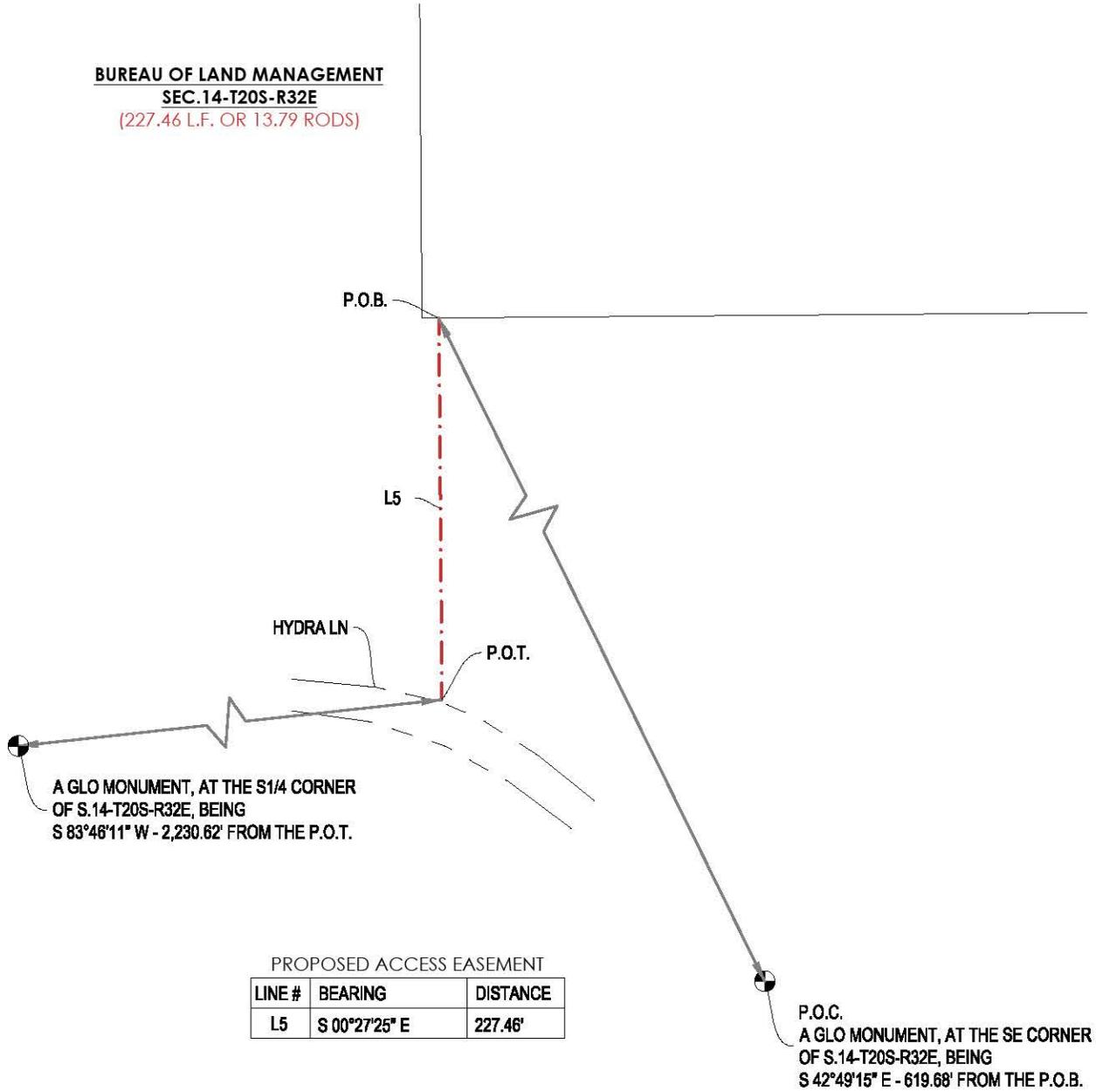
LEGEND

- SL --- SECTION LINE
- PL --- PROPERTY LINE
- EXISTING PIPELINE ROUTE
- OVERHEAD ELECTRIC
- FENCE
- EDGE OF EXISTING ROAD
- CL OF PROPOSED ACCESS EASEMENT
- EDGE OF PROPOSED ACCESS EASEMENT
- EDGE OF PROPOSED PAD
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINATION
- LF LINEAR FEET
- POWER POLE
- PROPOSED WELL LOCATION
- EXISTING WELL LOCATION
- FOUND MONUMENT (AS NOTED)

**PROPOSED ACCESS EASEMENT  
(227.46 L.F. OR 13.79 RODS)**

GRID NORTH (NAD 83)  
NEW MEXICO - EAST ZONE

**BUREAU OF LAND MANAGEMENT  
SEC. 14-T20S-R32E  
(227.46 L.F. OR 13.79 RODS)**



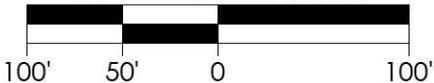
PROPOSED ACCESS EASEMENT

LINE #	BEARING	DISTANCE
L5	S 00°27'25\" E	227.46'

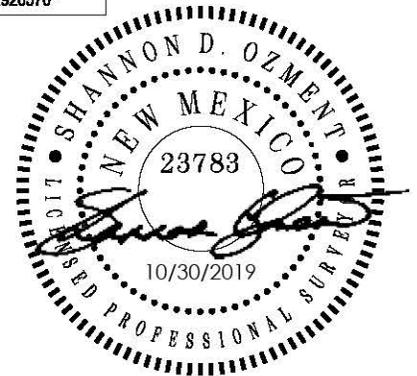
SITE COORDINATES

REFERENCE	ELEVATION	NAD83 (1988)		NAD27	
		STATE PLANE NEW MEXICO EAST	GEOGRAPHIC	STATE PLANE NEW MEXICO EAST	GEOGRAPHIC
P.O.B.	3,532.95'	N: 570598.48 E: 727296.06	LAT: 32.56718112° LONG: -103.72970322°	N: 570536.32 E: 686115.58	LAT: 32.56705943° LONG: -103.72920738°
P.O.T.	3,533.71'	N: 570371.03 E: 7727297.87	LAT: 32.56655592° LONG: -103.72970152°	N: 570308.87 E: 686117.40	LAT: 32.56643422° LONG: -103.72920570°

GRAPHIC SCALE IN FEET



SECTION 14  
SE1/4 SE1/4 277.46 L.F. OR 13.79 RODS



- GENERAL NOTES
- THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON REASONABLE VISUAL OBSERVATION. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREIN. ADDITIONAL BURIED UTILITIES/ STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/ STRUCTURES. BEFORE EXCAVATIONS ARE BEGUN, THE OFFICES OF THE VARIOUS UTILITIES SERVICING THIS AREA SHOULD BE CONTACTED FOR THEIR UTILITY LOCATION.
  - BASIS OF BEARINGS : NEW MEXICO STATE PLANE GRID, EAST ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.
  - VERTICAL DATUM IS NAVD 88
  - AREAS, DISTANCES, AND COORDINATES ARE "GRID" BASED ON U.S. SURVEY FEET.
  - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY.
  - ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGE SHOWN ARE BY DEED AND LEASE CALL EXCEPT WHERE NOTED.

REVISION	"RAGIN' RUTLEY SWD #1"		
---	PROPOSED PAD AND ACCESS EASEMENT SURVEY BUREAU OF LAND MANAGEMENT SEC. 14-T20S-R32E LEA COUNTY, NEW MEXICO		
	SCALE: 1" = 100'	CHECKED BY: JWB	APPROVED BY: J.PARKER
	PLOT DATE: 10-30-2019	DRAWN BY: L.DOW	SHEET NO.: 3 OF 4



# LEGAL DESCRIPTIONS

"RAGIN' RUTLEY SWD #1 PROPOSED WELL PAD":

A METES AND BOUNDS DESCRIPTION OF A PROPOSED WELL PAD BEING OUT OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 32 EAST, LEA COUNTY, NEW MEXICO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A GLO MONUMENT, AT THE SOUTHEAST CORNER OF SAID SECTION 14; THENCE N 03°54'07" W A DISTANCE OF 458.70 FEET TO THE POINT OF BEGINNING;

THENCE S 89°32'35" W A DISTANCE OF 400 FEET TO A POINT;  
 THENCE N 00°27'25" W A DISTANCE OF 600 FEET TO A POINT;  
 THENCE N 89°32'35" E A DISTANCE OF 400 FEET TO A POINT;  
 THENCE S 00°27'25" E A DISTANCE OF 600 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED WELL PAD HAS A TOTAL OF 240,000 SQUARE FEET OR 5.51 ACRES, MORE OR LESS.

"RAGIN' RUTLEY SWD #1 PROPOSED ACCESS EASEMENT":

A CENTERLINE DESCRIPTION OF A PROPOSED ACCESS EASEMENT IN, OVER, ACROSS, AND THROUGH SECTION 14, TOWNSHIP 20 SOUTH, RANGE 32 EAST, LEA COUNTY, NEW MEXICO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A GLO MONUMENT, AT THE SOUTHEAST CORNER OF SAID SECTION 14; THENCE N 42°49'15" W A DISTANCE OF 619.68 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED CENTERLINE;

THENCE S 00°27'25" E A DISTANCE OF 227.46 FEET THE POINT OF TERMINATION, SAID POINT BEING N 83°46'11" E A DISTANCE OF 2,230.62 FEET FROM A GLO MONUMENT, AT THE SOUTH QUARTER CORNER OF SAID SECTION 14.

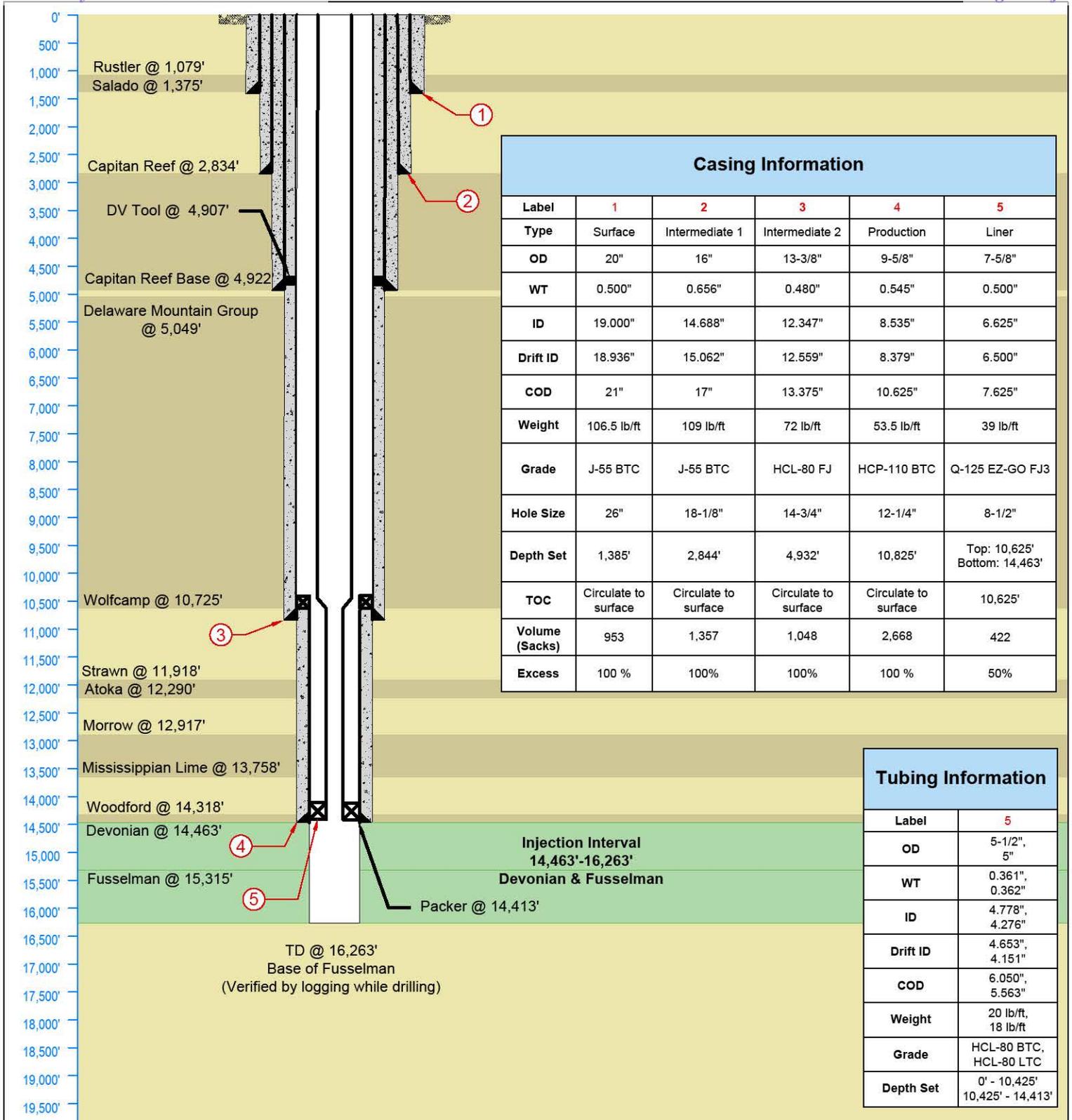
THE ABOVE DESCRIBED CENTERLINE HAS A TOTAL LENGTH OF 227.46 FEET OR 13.79 RODS, MORE OR LESS.

BASIS OF BEARINGS: NEW MEXICO STATE PLANE GRID, EAST ZONE, NAD83 AS DETERMINED BY GPS OBSERVATION.

ALL DISTANCES ARE GRID DISTANCES BASED ON U.S. SURVEY FEET  
 THIS LEGAL DESCRIPTION ACCOMPANIES A SKETCH PREPARED FOR THIS TRACT OF LAND.



REVISION		"RAGIN' RUTLEY SWD #1"		
---	---			
		CHECKED BY: JWB DRAWN BY: L.DOW	APPROVED BY: J.PARKER SHEET NO.: 4 OF 4	
		PLOT DATE: 10-30-2019		



Casing Information					
Label	1	2	3	4	5
Type	Surface	Intermediate 1	Intermediate 2	Production	Liner
OD	20"	16"	13-3/8"	9-5/8"	7-5/8"
WT	0.500"	0.656"	0.480"	0.545"	0.500"
ID	19.000"	14.688"	12.347"	8.535"	6.625"
Drift ID	18.936"	15.062"	12.559"	8.379"	6.500"
COD	21"	17"	13.375"	10.625"	7.625"
Weight	106.5 lb/ft	109 lb/ft	72 lb/ft	53.5 lb/ft	39 lb/ft
Grade	J-55 BTC	J-55 BTC	HCL-80 FJ	HCP-110 BTC	Q-125 EZ-GO FJ3
Hole Size	26"	18-1/8"	14-3/4"	12-1/4"	8-1/2"
Depth Set	1,385'	2,844'	4,932'	10,825'	Top: 10,625' Bottom: 14,463'
TOC	Circulate to surface	Circulate to surface	Circulate to surface	Circulate to surface	10,625'
Volume (Sacks)	953	1,357	1,048	2,668	422
Excess	100 %	100%	100%	100 %	50%

Tubing Information	
Label	5
OD	5-1/2", 5"
WT	0.361", 0.362"
ID	4.778", 4.276"
Drift ID	4.653", 4.151"
COD	6.050", 5.563"
Weight	20 lb/ft, 18 lb/ft
Grade	HCL-80 BTC, HCL-80 LTC
Depth Set	0' - 10,425', 10,425' - 14,413'

<b>LONQUIST &amp; CO. LLC</b> PETROLEUM ENGINEERS   ENERGY ADVISORS HOUSTON   CALGARY AUSTIN   WICHITA   DENVER Texas License F-9147 12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Solaris Water Midstream, LLC		<b>Ragin' Rutley SWD No. 1</b>	
	Country: USA	State/Province: New Mexico	County/Parish: Lea	
	Location:	Site: 857' FSL, 228' FEL	Survey: S14-T20S-R32E	
	API No: NA	Field: Silurian-Devonian (Code: 97869)	Well Type/Status: SWD	
	NMOCD District No: 2	Project No: 2241	Date: 12/05/2019	
Drawn: KAS	Reviewed: TFM	Approved: TFM		
Rev No:	Notes:			



**LONQUIST & CO. LLC**

**PETROLEUM  
ENGINEERS**

**ENERGY  
ADVISORS**

AUSTIN • HOUSTON | CALGARY • WICHITA  
BATON ROUGE • DENVER • COLLEGE STATION

**SOLARIS WATER MIDSTREAM, LLC**

**Ragin Rutley SWD No. 1**

**Section 14-T20S-R32E**

**857' FSL & 228' FEL**

**Lea County, New Mexico**

**GEOLOGICAL PROGNOSIS**

**12/2/2019**

**GL: 3,531'**

**KB: 3,551' (Depth Reference)**

**Proposed Injection Interval: 14,463' – 16,263'**

<u>Tops</u>	<u>Depths (est.)</u>	<u>Subsea (est.)</u>
Rustler	1,079'	+2,472'
Salado	1,375'	+2,176'
Capitan Reef Top	2,834'	+717'
Capitan Reef Base	4,922'	-1,371'
Bell Canyon	5,049'	-1,498'
Cherry Canyon	5,745'	-2,194'
Brushy Canyon	7,080'	-3,529'
Bone Spring	7,809'	-4,258'
Wolfcamp	10,725'	-7,154'
Strawn	11,918'	-8,367'
Atoka	12,290'	-8,739'
Morrow	12,917'	-9,366'
Mississippian Lime	13,758'	-10,207'
Woodford	14,318'	-10,767'
Devonian	14,463'	-10,912'
Fusselman	15,315'	-11,764'

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

ENERGY  
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## INJECTION INTERVAL CONFINING LAYERS – RAGIN RUTLEY SWD NO. 1

The Devonian-Silurian injection interval for the proposed Ragin Rutley SWD No. 1 is contained by upper and lower confining layers. The upper confining layer is the Woodford Shale, which is approximately 145 feet thick on top of the Devonian Formation. The lower confining layer is the Sylvan Shale equivalent, which serves as a boundary between the Montoya and Fusselman. This shale layer provides a basal region for the injection interval of the Devonian and Fusselman formations. The low permeability nature of both the Woodford and Sylvan Shale equivalent would provide the Devonian and Fusselman formations appropriate confinement for saltwater disposal during the life of the well.



Emily Olson

Geologist

Lonquist & Co., LLC

December 9, 2019

Project: Solaris Water Midstream  
Ragin Rutley SWD No. 1

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

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## GEOLOGIC AFFIRMATION

I have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and underground sources of drinking water.



Emily Olson  
Geologist

Project: Solaris Water Midstream, LLC  
Ragin Rutley SWD No. 1

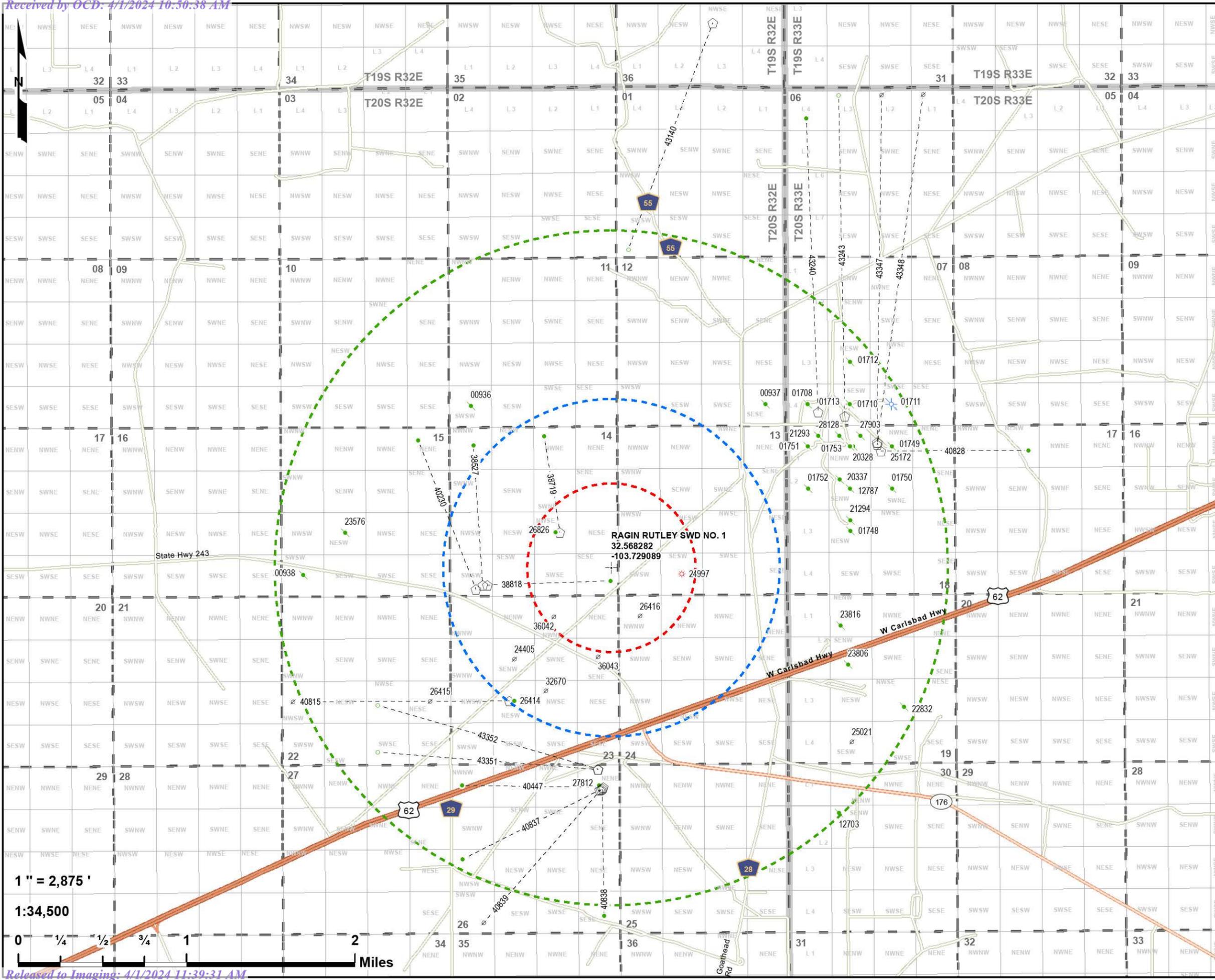
# Ragin Rutley SWD No. 1 2 Mile Area of Review Solaris Water Midstream, LLC Lea., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)  
Drawn by: ASG | Date: 11/15/2019 | Approved by: ELR

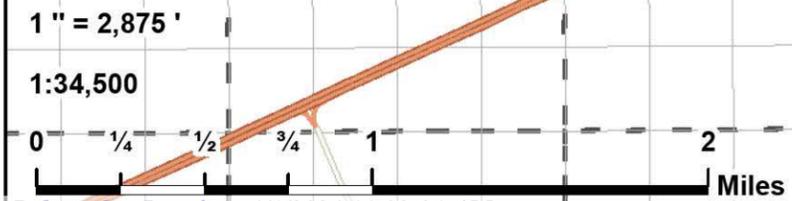
## LONQUIST & CO. LLC

PETROLEUM ENGINEERS  
ENERGY ADVISORS

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- ⊕ Ragin Rutley SWD No. 1 SHL
  - ⊕ 1/2-Mile
  - ⊕ 1-Mile
  - ⊕ 2-Mile
  - QQ-Section (NM-PLSS 2nd Div.)
  - ▬ Section (NM-PLSS 1st Div.)
  - ▬ Township/Range (NM-PLSS)
  - Lateral
- API (30-025-...) SHL Status-Type (Count)**
- ⊕ Horizontal Surface Location (17)
  - ★ Active - Gas (1)
  - Active - Oil (3)
  - ⊗ Cancelled/Abandoned Location (7)
  - ⊕ Plugged/Site Released - Oil (26)
  - ★ Plugged/Site Released - SWD (1)
- API (30-025-...) BHL Status-Type (Count)**
- Active - Oil (9)
  - ⊗ Cancelled/Abandoned Location (4)
  - Permitted - Oil (4)
- Source: Well SHL Data - NM-OCD (2019)



Ragin Rutley SWD No. 1  
1 Mile Area of Review List

API (30-025-...)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT.)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	SPUD DATE	FIELD
24405	PRE-ONGARD WELL #001	O	C	PRE-ONGARD WELL OPERATOR	0	32.5604924446	-103.739016415	-	-
24997	HANSON STATE #001	G	A	COG OPERATING LLC	13363	32.5677414000	-103.721931500	8/10/1975	[53560] SALT LAKE, BONE SPRING; [96041] WILDCAT, GROUP 10; [96049] WC, ATOKA DO NOT USE; [96070] WC, MORROW (GAS); [96344] SALT LAKE, ATOKA (GAS); [96345] SALT LAKE, MORROW (GAS)
26414	BAETZ 23 FEDERAL #001	O	A	FASKEN OIL & RANCH LTD	13640	32.5568771000	-103.739051800	8/25/1975	[53560] SALT LAKE, BONE SPRING
26416	PRE-ONGARD WELL #001	O	C	PRE-ONGARD WELL OPERATOR	0	32.5641141820	-103.726202357	-	-
26826	BELCO AIA FEDERAL #001	O	A	EOG RESOURCES INC	13250	32.5713806000	-103.734787000	2/15/1991	[53565] SALT LAKE, DELAWARE
32670	BAETZ 23 #002	O	C	BARBARA FASKEN	0	32.5577398901	-103.735845650	-	-
36042	BAETZ 23 FEDERAL #003C	O	C	FASKEN OIL & RANCH LTD	0	32.5641164586	-103.734975129	-	-
36043	BAETZ 23 FEDERAL #009	O	C	FASKEN OIL & RANCH LTD	0	32.5606242796	-103.730501700	-	-
38527	BELCO AIA FEDERAL #002H	O	A	EOG RESOURCES INC	5057	32.56685260000	-103.74221800000	12/5/2006	[53565] SALT LAKE, DELAWARE
38719	BELCO AIA FEDERAL #003H	O	A	EOG RESOURCES INC	4855	32.5713806000	-103.734298700	2/19/2008	[53565] SALT LAKE, DELAWARE
38818	BELCO AIA FEDERAL #004H	O	A	EOG RESOURCES INC	5083	32.56685260000	-103.74173740000	4/3/2008	[53565] SALT LAKE, DELAWARE
40230	QUEENIE 15 FEDERAL #001H	O	A	MARATHON OIL PERMIAN LLC	5032	32.5664978000	-103.742889400	10/4/2011	[53565] SALT LAKE, DELAWARE
40815	BAETZ 23 FEDERAL #002C	O	C	FASKEN OIL & RANCH LTD	0	32.5568771000	-103.739540100	-	[53560] SALT LAKE, BONE SPRING

**Ragin Rutley SWD No. 1**  
**1 Mile Offset Operators - OCD**  
Solaris Water Midstream, LLC  
Lea., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: ASG | Date: 11/18/2019 | Approved by: ELR

**LONQUIST & CO. LLC**

**PETROLEUM ENGINEERS** | **ENERGY ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

✚ Ragin Rutley SWD No. 1 SHL

⋯ 1-Mile

□ QQ-Section (NM-PLSS 2nd Div.)

▬ Section (NM-PLSS 1st Div.)

▬ Township/Range (NM-PLSS)

--- Lateral

**API (30-025-...) SHL Status-Type (Count)**

⬡ Horizontal Surface Location (5)

⊛ Active - Gas (1)

● Active - Oil (2)

⊘ Cancelled/Abandoned Location (5)

**API (30-025-...) BHL Status-Type (Count)**

● Active - Oil (4)

⊘ Cancelled/Abandoned Location (1)

**Offset Operators**

■ -COG OPERATING LLC

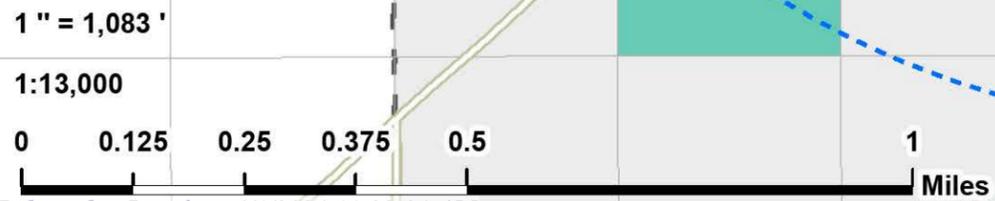
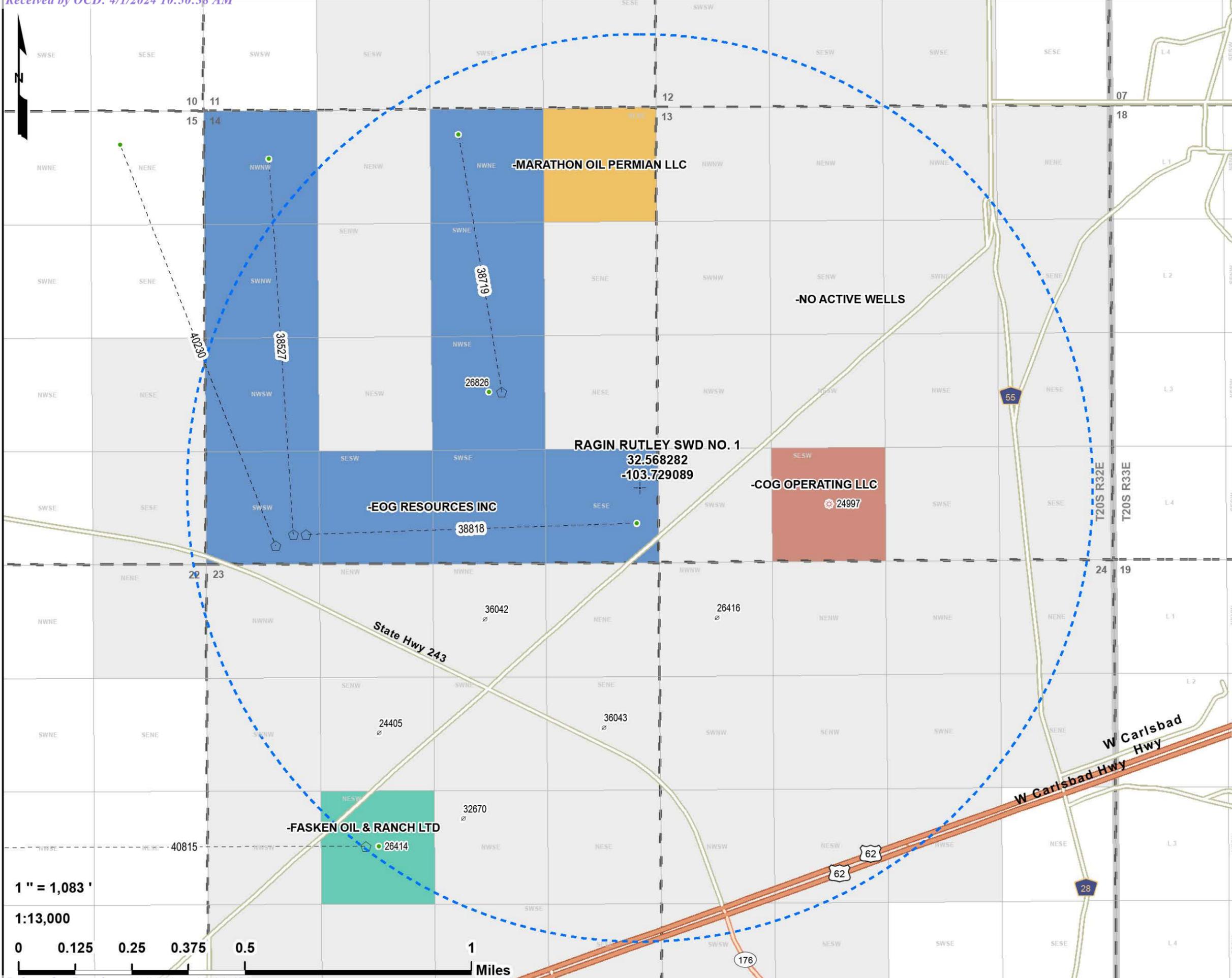
■ -EOG RESOURCES INC

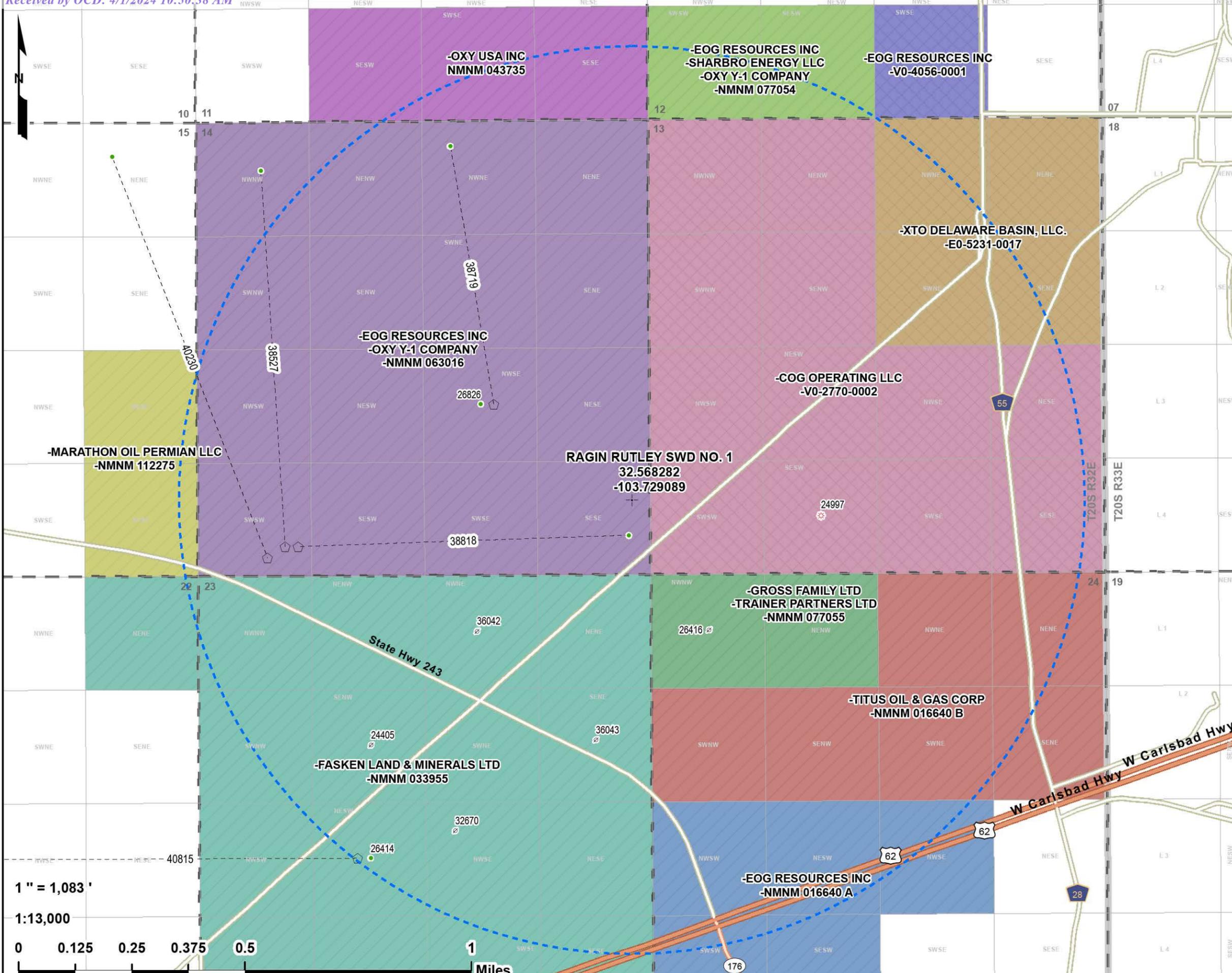
■ -FASKEN OIL & RANCH LTD

■ -MARATHON OIL PERMIAN LLC

■ -NO ACTIVE WELLS

Source: Water Well Data - NM-OCD (2019)





**Ragin Rutley SWD No. 1**  
**1 Mile Lessee(s) - BLM/SLO**  
 Solaris Water Midstream, LLC  
 Lea., NM

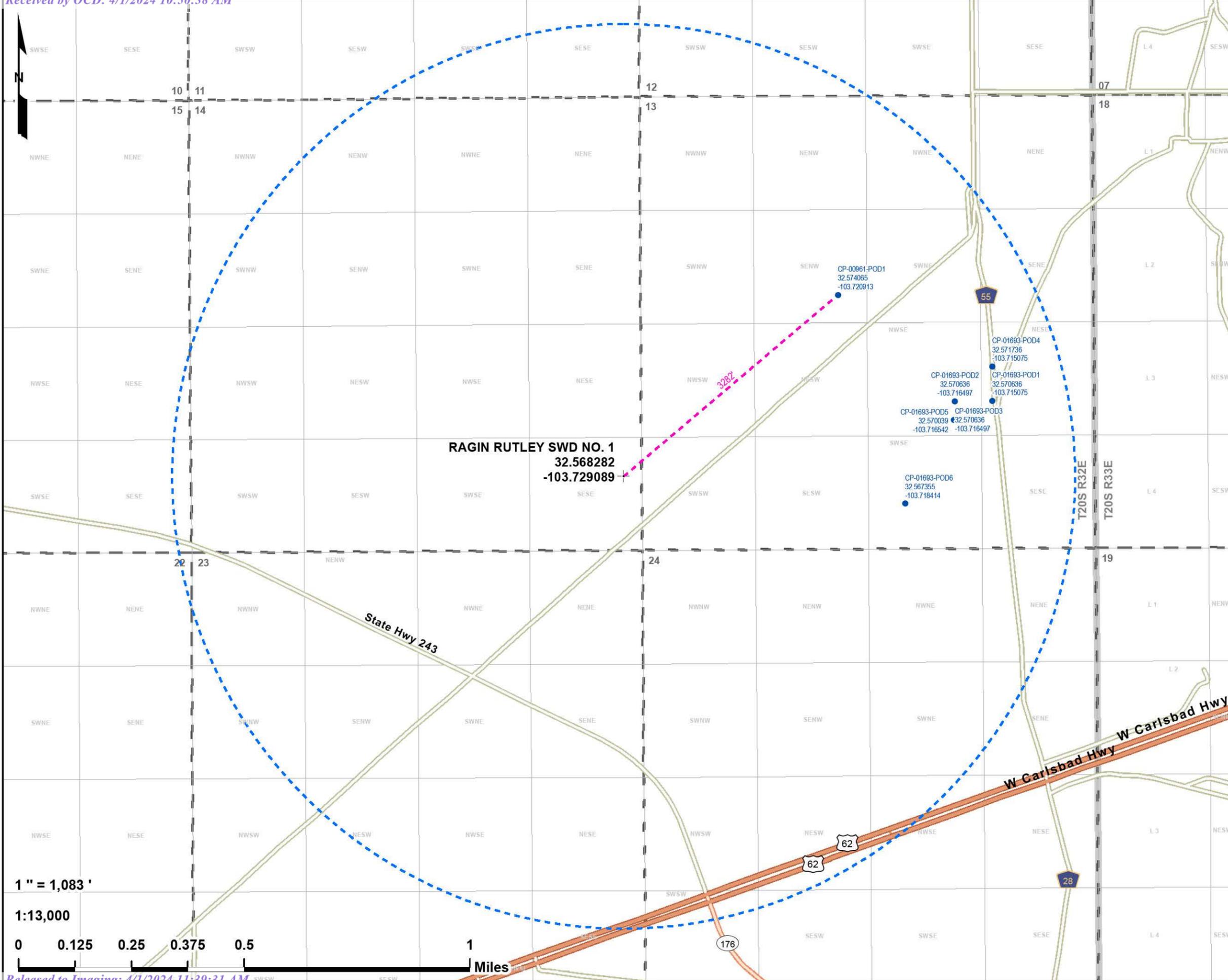
PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)  
 Drawn by: ASG | Date: 11/18/2019 | Approved by: ELR

**LONQUIST & CO. LLC**  
**PETROLEUM ENGINEERS** | **ENERGY ADVISORS**  
 AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- ✚ Ragin Rutley SWD No. 1 SHL
  - ▭ 1-Mile
  - ▭ NM-BLM
  - ▭ NM-SLO
  - ▭ QQ-Section (NM-PLSS 2nd Div.)
  - ▭ Section (NM-PLSS 1st Div.)
  - ▭ Township/Range (NM-PLSS)
  - Lateral
- API (30-025-...) SHL Status-Type (Count)**
- ⬢ Horizontal Surface Location (5)
  - ⊛ Active - Gas (1)
  - Active - Oil (2)
  - ⊘ Cancelled/Abandoned Location (5)
- API (30-025-...) BHL Status-Type (Count)**
- Active - Oil (4)
  - ⊘ Cancelled/Abandoned Location (1)
- Lessee**
- ▭ -COG OPERATING LLC; -V0-2770-0002
  - ▭ -EOG RESOURCES INC; -NMNM 016640 A
  - ▭ -EOG RESOURCES INC; -OXY Y-1 COMPANY; -NMNM 063016
  - ▭ -EOG RESOURCES INC; -SHARBRO ENERGY LLC; -OXY Y-1 COMPANY; -NMNM 077054
  - ▭ -EOG RESOURCES INC; -V0-4056-0001
  - ▭ -FASKEN LAND & MINERALS LTD; -NMNM 033955
  - ▭ -GROSS FAMILY LTD; -TRAINER PARTNERS LTD; -NMNM 077055
  - ▭ -MARATHON OIL PERMIAN LLC; -NMNM 112275
  - ▭ -OXY USA INC; NMNM 043735
  - ▭ -TITUS OIL & GAS CORP; -NMNM 016640 B
  - ▭ -XTO DELAWARE BASIN, LLC.; -E0-5231-0017
- Source: Water Well Data - NM-OCD (2019)



1" = 1,083'  
 1:13,000  
 0 0.125 0.25 0.375 0.5 1 Miles



**Ragin Rutley SWD No. 1**  
**1 Mile Water Wells - OSE**  
 Solaris Water Midstream, LLC  
 Lea., NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)

Drawn by: ASG | Date: 11/15/2019 | Approved by: ELR

**LONQUIST & CO. LLC**

**PETROLEUM ENGINEERS** | **ENERGY ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

- Ragin Rutley SWD No. 1 SHL
- Water Well (7) [NM-OSE 2019]
- 1-Mile
- QQ-Section (NM-PLSS 2nd Div.)
- Section (NM-PLSS 1st Div.)
- Township/Range (NM-PLSS)

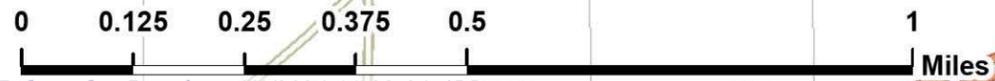
Source: Water Well Data - NM-OCD (2019)

Lat/Long Coordinates: NAD 83



1" = 1,083'

1:13,000





# New Mexico Office of the State Engineer

## Water Right Summary



[get image list](#)

WR File Number: CP 00961      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres: 0      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Owner: GLOBAL NUCLEAR ENERGY PTP

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">get images</a>	<a href="#">601878</a>	<a href="#">EXPL</a>	<a href="#">2007-03-07</a>	PMT	APR	CP 00961	T	0	0

Current Points of Diversion

POD Number	Well Tag	Source	Q (NAD83 UTM in meters)						Other Location Desc				
			64	Q	16	Q	4	Sec		Tws	Rng	X	Y
<a href="#">CP 00961 POD1</a>			4	4	1	13	20	S	32	E	620062	3604791*	

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	0		MON		GW

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.

12/5/19 7:06 AM

WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



[get image list](#)

WR File Number: CP 00961      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres: 0      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Owner: GLOBAL NUCLEAR ENERGY PTP

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">601878</a>	<a href="#">EXPL</a>	<a href="#">2007-03-07</a>	PMT	APR	CP 00961	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q				(NAD83 UTM in meters)		Other Location Desc		
			64Q16Q4Sec	Tws	Rng	X	Y				
<a href="#">CP 00961 POD1</a>			4	4	1	13	20S	32E	620062	3604791*	

\*An (\*) after northing value indicates UTM location was derived from PLSS - see Help

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	0		MON		GW

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12/5/19 7:09 AM

WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



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WR File Number: CP 01693      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres:      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Agent: GEOMECHANICS SOUTHWEST INC  
 Contact: BRANDEN SANDERS

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">615074</a>	<a href="#">EXPL</a>	<a href="#">2017-10-16</a>	PMT	APR	CP 01693	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q						(NAD83 UTM in meters)		Other Location Desc
			64	Q	16	Q	4	Sec	Tws	Rng	
<a href="#">CP.01693.POD1</a>	NA		3	2	4	13	20S	32E	620615	3604417	B101
<a href="#">CP.01693.POD2</a>	NA		4	1	4	13	20S	32E	620481	3604415	B105
<a href="#">CP.01693.POD3</a>	NA		2	1	4	13	20S	32E	620481	3604415	B106
<a href="#">CP.01693.POD4</a>	NA		1	2	4	13	20S	32E	620613	3604539	B107
<a href="#">CP.01693.POD5</a>	NA		4	1	4	13	20S	32E	620478	3604349	B108
<a href="#">CP.01693.POD6</a>	NA		3	3	4	13	20S	32E	620306	3604049	B109

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WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



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WR File Number: CP 01693      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres:      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Agent: GEOMECHANICS SOUTHWEST INC  
 Contact: BRANDEN SANDERS

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">615074</a>	<a href="#">EXPL</a>	<a href="#">2017-10-16</a>	PMT	APR	CP 01693	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q						(NAD83 UTM in meters)		Other Location Desc
			64	Q16	Q4	Sec	Tws	Rng	X	Y	
<a href="#">CP.01693.POD1</a>	NA		3	2	4	13	20S	32E	620615	3604417	B101
<a href="#">CP.01693.POD2</a>	NA		4	1	4	13	20S	32E	620481	3604415	B105
<a href="#">CP.01693.POD3</a>	NA		2	1	4	13	20S	32E	620481	3604415	B106
<a href="#">CP.01693.POD4</a>	NA		1	2	4	13	20S	32E	620613	3604539	B107
<a href="#">CP.01693.POD5</a>	NA		4	1	4	13	20S	32E	620478	3604349	B108
<a href="#">CP.01693.POD6</a>	NA		3	3	4	13	20S	32E	620306	3604049	B109

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12/5/19 7:11 AM

WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



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WR File Number: CP 01693      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres:      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Agent: GEOMECHANICS SOUTHWEST INC  
 Contact: BRANDEN SANDERS

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">615074</a>	<a href="#">EXPL</a>	<a href="#">2017-10-16</a>	PMT	APR	CP 01693	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q						(NAD83 UTM in meters)		Other Location Desc
			64	Q	16	Q	4	Sec	Tws	Rng	
<a href="#">CP.01693.POD1</a>	NA		3	2	4	13	20S	32E	620615	3604417	B101
<a href="#">CP.01693.POD2</a>	NA		4	1	4	13	20S	32E	620481	3604415	B105
<a href="#">CP.01693.POD3</a>	NA		2	1	4	13	20S	32E	620481	3604415	B106
<a href="#">CP.01693.POD4</a>	NA		1	2	4	13	20S	32E	620613	3604539	B107
<a href="#">CP.01693.POD5</a>	NA		4	1	4	13	20S	32E	620478	3604349	B108
<a href="#">CP.01693.POD6</a>	NA		3	3	4	13	20S	32E	620306	3604049	B109

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WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



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WR File Number: CP 01693      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres:      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Agent: GEOMECHANICS SOUTHWEST INC  
 Contact: BRANDEN SANDERS

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">615074</a>	<a href="#">EXPL</a>	<a href="#">2017-10-16</a>	PMT	APR	CP 01693	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q						(NAD83 UTM in meters)		Other Location Desc
			64Q	16Q	4Sec	Tws	Rng	X	Y		
<a href="#">CP.01693.POD1</a>	NA		3	2	4	13	20S	32E	620615	3604417	B101
<a href="#">CP.01693.POD2</a>	NA		4	1	4	13	20S	32E	620481	3604415	B105
<a href="#">CP.01693.POD3</a>	NA		2	1	4	13	20S	32E	620481	3604415	B106
<a href="#">CP.01693.POD4</a>	NA		1	2	4	13	20S	32E	620613	3604539	B107
<a href="#">CP.01693.POD5</a>	NA		4	1	4	13	20S	32E	620478	3604349	B108
<a href="#">CP.01693.POD6</a>	NA		3	3	4	13	20S	32E	620306	3604049	B109

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12/5/19 7:14 AM

WATER RIGHT SUMMARY



# New Mexico Office of the State Engineer

## Water Right Summary



[get image list](#)

WR File Number: CP 01693      Subbasin: CP      Cross Reference: -  
 Primary Purpose: MON MONITORING WELL  
 Primary Status: PMT PERMIT  
 Total Acres:      Subfile: -      Header: -  
 Total Diversion: 0      Cause/Case: -  
 Agent: GEOMECHANICS SOUTHWEST INC  
 Contact: BRANDEN SANDERS

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
<a href="#">615074</a>	<a href="#">EXPL</a>	<a href="#">2017-10-16</a>	PMT	APR	CP 01693	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q						(NAD83 UTM in meters)		Other Location Desc
			64	Q	16	Q	4	Sec	Tws	Rng	
<a href="#">CP.01693.POD1</a>	NA		3	2	4	13	20S	32E	620615	3604417	B101
<a href="#">CP.01693.POD2</a>	NA		4	1	4	13	20S	32E	620481	3604415	B105
<a href="#">CP.01693.POD3</a>	NA		2	1	4	13	20S	32E	620481	3604415	B106
<a href="#">CP.01693.POD4</a>	NA		1	2	4	13	20S	32E	620613	3604539	B107
<a href="#">CP.01693.POD5</a>	NA		4	1	4	13	20S	32E	620478	3604349	B108
<a href="#">CP.01693.POD6</a>	NA		3	3	4	13	20S	32E	620306	3604049	B109

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12/5/19 7:14 AM

WATER RIGHT SUMMARY

Ragin' Rutley SWD No. 1 - Offset Produced Water Analysis																				
Wellname	API	Section	Township	Range	Unit	County	Formation	ph	tds_mgl	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl		
LEA 886 STATE #002	3002501744	16	20S	33E	B	LEA	ARTESIA	6.34	133829						82525	785	1427			
LEA 886 STATE #002	3002501744	16	20S	33E	B	LEA	ARTESIA	6.34	133741						82536	851	1427			
ATLANTIC STATE #001	3002501742	16	20S	33E	C	LEA	ARTESIA		13495						7002	1024	609			
LITTLE EDDY UNIT #016	3002521942	16	20S	32E	F	LEA	ARTESIA		30600						15090	608	3947			
WEST TEAS YATES SEVEN RIVERS UNIT #433	3002520232	4	20S	33E	J	LEA	ARTESIA	7.9	17898.7	5960.49	455.85	7.5975	249.198		9682.25	580.449	1093.03			
PLAINS #006	3002520769	21	19S	32E	E	LEA	ARTESIA		135266						84150	144	290			
PLAINS #006	3002520769	21	19S	32E	E	LEA	ARTESIA		137149						84930	290	521			
PLAINS #006	3002520769	21	19S	32E	E	LEA	ARTESIA		163755						101000	195	300			
BONDURANT FEDERAL #001	3002500895	13	19S	32E	I	LEA	ARTESIA		239594						145300	271	820			
BOWMAN FEDERAL #001	3002500923	28	19S	32E	D	LEA	ARTESIA		15821						7812	1502	655			
MAGNOLIA STATE #001	3002501701	32	19S	33E	B	LEA	ARTESIA		8771						4301	1538	180			
NELLIS FEDERAL #003	3002526091	6	19S	33E	F	LEA	ARTESIA	6.8	70660						42600	549	365			
BATE FEDERAL #003	3002522597	35	19S	33E	C	LEA	ARTESIA	7.8	117622						66700	506	5800			
MAHAFFEY ARC FEDERAL #001	3002501735	14	20S	33E	C	LEA	BONE SPRING	7.03	28079						14810	791	1885			
MAHAFFEY ARC FEDERAL #001	3002501735	14	20S	33E	C	LEA	BONE SPRING	7.03	28696						15136	808	1926			
LUSK 16 STATE #002	3002520904	16	19S	32E	K	LEA	BONE SPRING		148331						91520	188	506			
JENNINGS FEDERAL #001	3002524836	15	19S	32E	F	LEA	BONE SPRING	5.8	164916						101031	452	1308			
NELLIS A FEDERAL #004	3002525912	8	19S	33E	E	LEA	BONE SPRING	6.9	48582						28900	763	160			
MALACHITE 22 FEDERAL #001H	3002540318	22	19S	33E	D	Lea	BONE SPRING 1ST SAND	6.4		73407	1293		33	265	0.26	116995	780	480	250	
MALACHITE 22 FEDERAL #001H	3002540318	22	19S	33E	D	Lea	BONE SPRING 1ST SAND	6.3		79136	1414		26	271	0.07	125827	1281	300	330	
MALACHITE 22 FEDERAL #002H	3002540389	22	19S	33E	C	Lea	BONE SPRING 1ST SAND	6.65	94146	30411.4	4261		16.3	1102	0.3	56987.2	122	1085	120	
MALACHITE 22 FEDERAL #001H	3002540318	22	19S	33E	D	Lea	BONE SPRING 1ST SAND	7	153753.1	57364.9	1261		3.5	277	0.2	91996	732	593	250	
TAYLOR DRAW 7 FEDERAL #001H	3002541146	7	19S	32E	I	Lea	BONE SPRING 2ND SAND	5.9		86621	9467		153	1801	1.9	154922	207	840	420	
TAYLOR DRAW 7 FEDERAL #001H	3002541146	7	19S	32E	I	Lea	BONE SPRING 2ND SAND	6.6	184810	55567.9	10172.4		36.7	1572.6	2.8	114300	122	0	30	
HAWKEYE 7 FEDERAL #001	3002500892	7	19S	32E	M	Lea	BONE SPRING 2ND SAND	6.86	91688.5	34069.7	1168		7.1	246.4	0.21	54987.6	366	560	200	
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	8.04	20582			100	130		61	11997	635	0		
LUSK AHB FEDERAL #002	3002531042	35	19S	32E	G	LEA	DELAWARE	6.05	220235			22044	45	3525		136969	122	450		
LUSK AHB FEDERAL #005	3002531151	35	19S	32E	B	LEA	DELAWARE	6.86	172408			12024	28	1945		104976	146	1800		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	6.86	125179			4509	8	1520		74983	220	2900		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	7.1	125396			3507	8	912		69984	303	7400		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	6.65	124441			2116	0	1284		69984	400	6750		
LUSK AHB FEDERAL #002	3002531042	35	19S	32E	G	LEA	DELAWARE	6.25	248495			29659	15	3890		154965	98	500		
LUSK AHB FEDERAL #005	3002531151	35	19S	32E	B	LEA	DELAWARE	7.31	187800			14028	0	2188		114974	156	1400		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	7.65	121459			3006	0	1580		69984	400	5000		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	6.65	127100			4409	15	1580		74983	273	3500		
LUSK AHB FEDERAL #002	3002531042	35	19S	32E	G	LEA	DELAWARE	6.21	253165			27054	9	9603		160964	103	150		
LUSK AHB FEDERAL #005	3002531151	35	19S	32E	B	LEA	DELAWARE	6.87	193757			18236	8	6564		121973	137	700		
POLEWSKI FEDERAL #001	3002520161	31	19S	32E	D	LEA	DELAWARE		25908							12546	457	3662		
POLEWSKI FEDERAL #001	3002520161	31	19S	32E	D	LEA	DELAWARE		29793							17950	390	454		
POLEWSKI FEDERAL #001	3002520161	31	19S	32E	D	LEA	DELAWARE		26318											
POLEWSKI FEDERAL #001	3002520161	31	19S	32E	D	LEA	DELAWARE		61165							36500	380	1230		
LUSK AHB FEDERAL #005	3002531151	35	19S	32E	B	LEA	DELAWARE	6.83				13267	0	2086		114974	171	950		
LUSK AHB FEDERAL #006	3002531314	35	19S	32E	A	LEA	DELAWARE	7.23				1769	0	715		59986	415	5000		
LUSK AHB FEDERAL #002	3002531042	35	19S	32E	G	LEA	DELAWARE	5.35				20.1	0	12.2		35.5	61.1	48.8		
PLAINS UNIT FEDERAL #007	3002520770	33	19S	32E	D	LEA	DELAWARE		250653							159500	488	425		
PLAINS FEDERAL UNIT #009	3002523121	33	19S	32E	F	LEA	DELAWARE		257806							162000	0	120		
USA LITTLE EDDY UNIT #001	3002500960	25	20S	32E	P	LEA	MORROW		28815							16160	593	1176		
USA LITTLE EDDY UNIT #001	3002500960	25	20S	32E	P	LEA	MORROW		28550							14320	818	1280		
LITTLE EDDY UNIT #003	3002501770	31	20S	33E	O	LEA	MORROW		195142							120000	142	1350		
LITTLE EDDY UNIT #003	3002501770	31	20S	33E	O	LEA	MORROW		59475							34730	380	1560		
LUSK AHB FEDERAL #001	3002530808	35	19S	32E	B	LEA	MORROW	6.8	128189			2505	93	1216		74983	195	3900		
LUSK AHB FEDERAL #001	3002530808	35	19S	32E	B	LEA	MORROW	6.2	158447			6878	75	1797		91979	303	6100		
LUSK AHB FEDERAL #001	3002530808	35	19S	32E	B	LEA	MORROW	6.96	164047			9018	41	1216		96978	225	4250		
LUSK AHB FEDERAL #001	3002530808	35	19S	32E	B	LEA	MORROW	6.59				4717	0	1311		86980	244	2350		
LUSK AHB FEDERAL #001	3002530808	35	19S	32E	B	LEA	MORROW	6.77				3931	138	2086		74983	259	2800		
INEXCO AHY FEDERAL #001	3002525470	7	19S	33E	H	LEA	PENNSYLVANIAN	6.5				5600	50	975.3		37062	610	12.5		
BUFFALO FEDERAL UNIT #004	3002501661	4	19S	33E	H	LEA	PENNSYLVANIAN		163468							99880	415	848		
BUFFALO FEDERAL UNIT #004	3002501661	4	19S	33E	H	LEA	PENNSYLVANIAN		17108							9398	610	991		
BUFFALO FEDERAL UNIT #004	3002501661	4	19S	33E	H	LEA	PENNSYLVANIAN		21444							11400	881	1537		
BUFFALO FEDERAL UNIT #004	3002501661	4	19S	33E	H	LEA	PENNSYLVANIAN		154414							94260	377	688		
NELLIS FEDERAL #001	3002501663	5	19S	33E	O	LEA	PENNSYLVANIAN		38798							23050	366	360		
NELLIS FEDERAL #001	3002501663	5	19S	33E	O	LEA	PENNSYLVANIAN		67912							40630	398	934		
NELLIS FEDERAL #001	3002501663	5	19S	33E	O	LEA	PENNSYLVANIAN		24440							13420	825	990		
FEDERAL AC #002	3002501675	18	19S	33E	E	LEA	PENNSYLVANIAN		46219							26980	734	850		
FEDERAL AC #002	3002501675	18	19S	33E	E	LEA	PENNSYLVANIAN		1305							140	232	510		
ELLIOTT HALL A #001	3002520104	30	19S	32E	A	LEA	STRAWN		38680							22980	620	310		
MIDDELTON A FEDERAL #001	3002508104	18	19S	32E	H	LEA	STRAWN		147995							93600	300	140		
MIDDELTON A FEDERAL #001	3002508104	18	19S	32E	H	LEA	STRAWN		136947											
MIDDELTON A FEDERAL #001	3002508104	18	19S	32E	H	LEA	STRAWN		146300							92500	320	140		
LAGUNA PLATA FEDERAL #001	3002501678	22	19S	33E	I	LEA	WOLFCAMP		46915							27270	714	1116		

Seismicity and Faults in the Vicinity of the Proposed Solaris Water Midstream, LLC  
Ragin Rutley SWD No. 1 Devonian Disposal wells in Lea County, New Mexico

The proposed well is located in Lea County, New Mexico. The proposed Ragin Rutley SWD No.1 well is located in Township 20 South, Range 32 East, Section 14; thirty miles east of Carlsbad. The proposed well is located near the Northwest Shelf of the Delaware Basin.

Seismicity:

Historically, the area near the proposed Devonian disposal wells has not seen any major seismic activity. A search of the USGS Earthquake Hazards Program Earthquake Catalog revealed the nearest event to be located 22 miles south of the proposed location, where a magnitude 3.1 earthquake was recorded on March 18, 2012 at a depth of 5 kilometers. Review of the USGS Earthquake Hazard map indicates a very low risk of seismic activity. The USGS surface geologic map of the area shows no Quaternary-aged faulting, also indicating no recent tectonic activity. In addition to a search of the USGS Earthquake Hazards Program Earthquake Catalog, a seismic event research was conducted on the Bureau of Economic Geology's Seismic Monitoring Program, TexNet. TexNet's seismic history dates from January 1, 2017 to present date. A 15-kilometer radius of investigation detected no seismic events during this time period.

Faulting:

The USGS surface geologic map, a USGS published Devonian structure map, and subscription Geomap regional subsurface structure maps at the Yates, Strawn Lime and Devonian levels were reviewed for faults. The nearest faults mapped at the Devonian level were 10.0 and 17.12 miles northwest and southeast of the proposed locations.

The Snee and Zoback paper "State of Stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity" was also reviewed to evaluate the presence of faults and fault slip potential risk. These regional maps show no faulting in the area of the proposed wells. Faulting in the New Mexico portion of the Delaware Basin generally shows less than a 10% probability of fault slip movement.

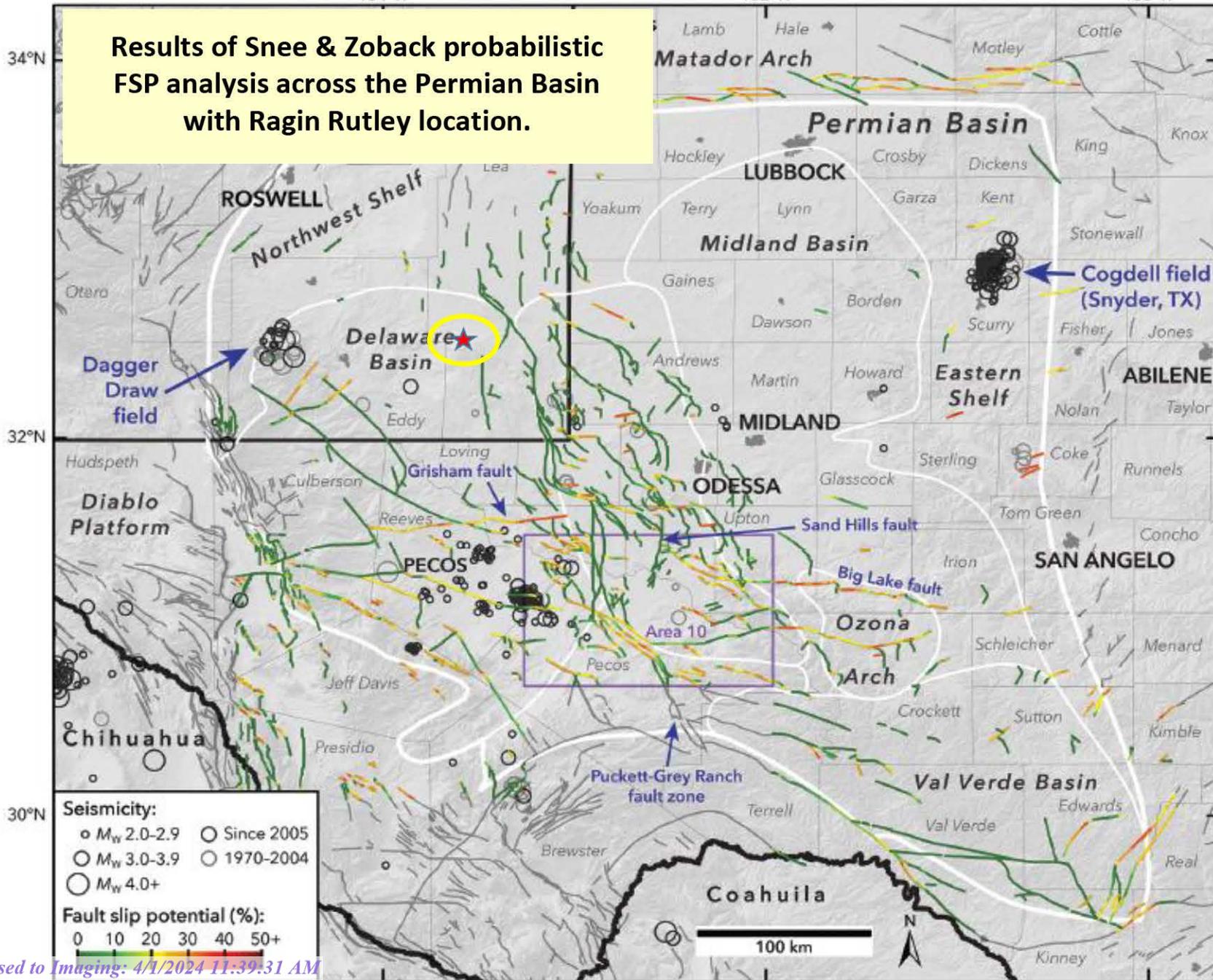
The distance from the proposed wells to the closest mapped faults yields an extremely low probability that the faults will become critically stressed by injection into the referenced wells.



Tyler F. Moehlman

Petroleum Engineer, Lonquist & Co. LLC

**Results of Snee & Zoback probabilistic  
FSP analysis across the Permian Basin  
with Ragin Rutley location.**



**Earthquakes**

Final Preliminary

- ◆ 1.5 < Magnitude <= 2.0
- ◇ 2.0 < Magnitude <= 2.5
- ◇ 2.5 < Magnitude <= 3.0
- ◇ 3.0 < Magnitude <= 3.5
- ◇ 3.5 < Magnitude <= 4
- ◇ 4 < Magnitude <= 5.5
- ◇ Magnitude > 5.5

**Stations**

- TexNet Permanent
- TexNet Portable
- Temporary
- Other Networks

**Seismic Regions**

**Require Focal Mechanism?**

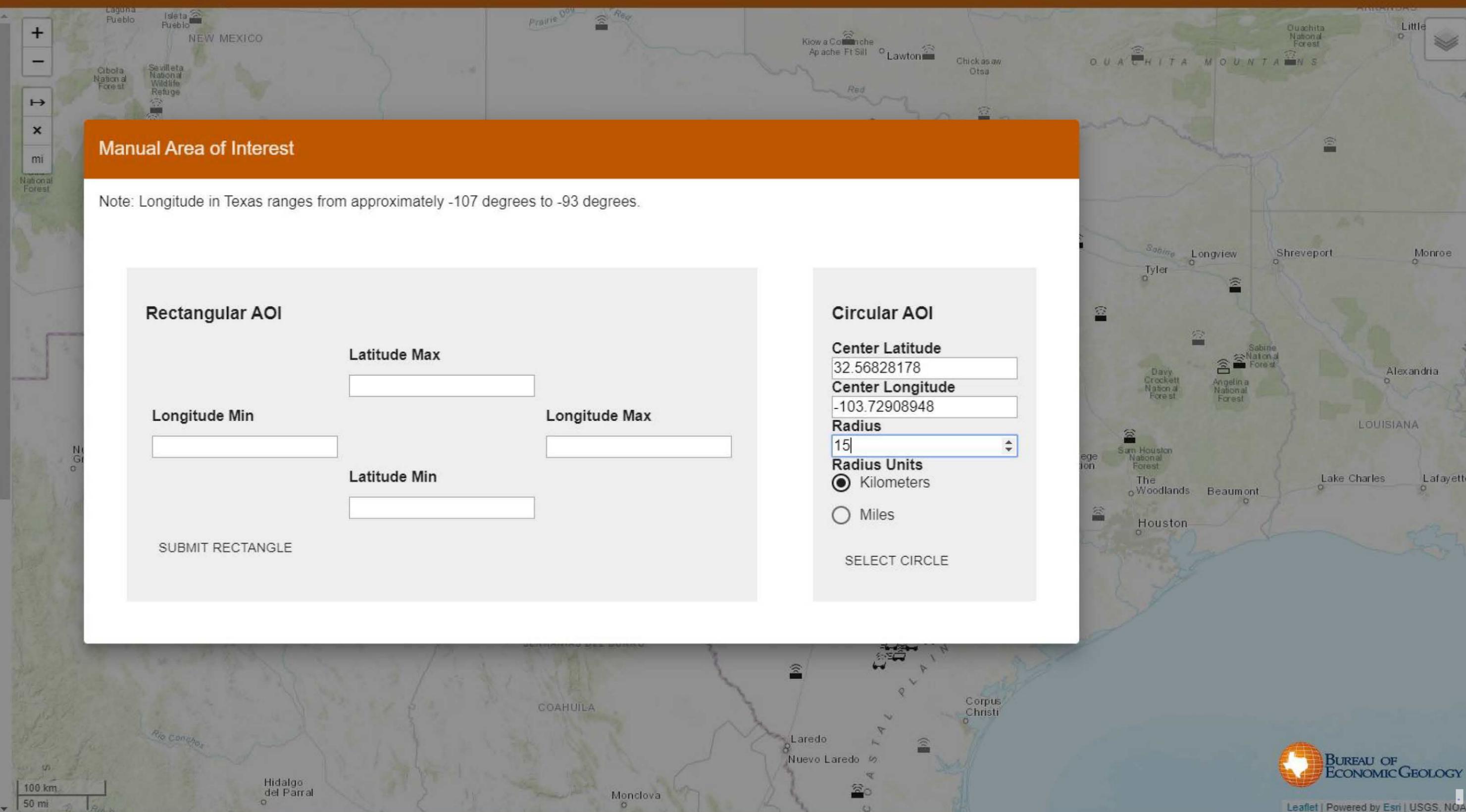
**Earthquake Magnitude**

2.5 6

Lock Magnitude

**Date Range**

SELECT DATE RANGE...



### Manual Area of Interest

Note: Longitude in Texas ranges from approximately -107 degrees to -93 degrees.

**Rectangular AOI**

Longitude Min

Latitude Max

Longitude Max

Latitude Min

SUBMIT RECTANGLE

**Circular AOI**

Center Latitude

Center Longitude

Radius

Radius Units

Kilometers

Miles

SELECT CIRCLE

- TexNet Permanent
- TexNet Portable
- Temporary
- Other Networks

**Seismic Regions**



**Require Focal Mechanism?**

**Earthquake Magnitude**



Lock Magnitude

**Date Range**

SELECT DATE RANGE...

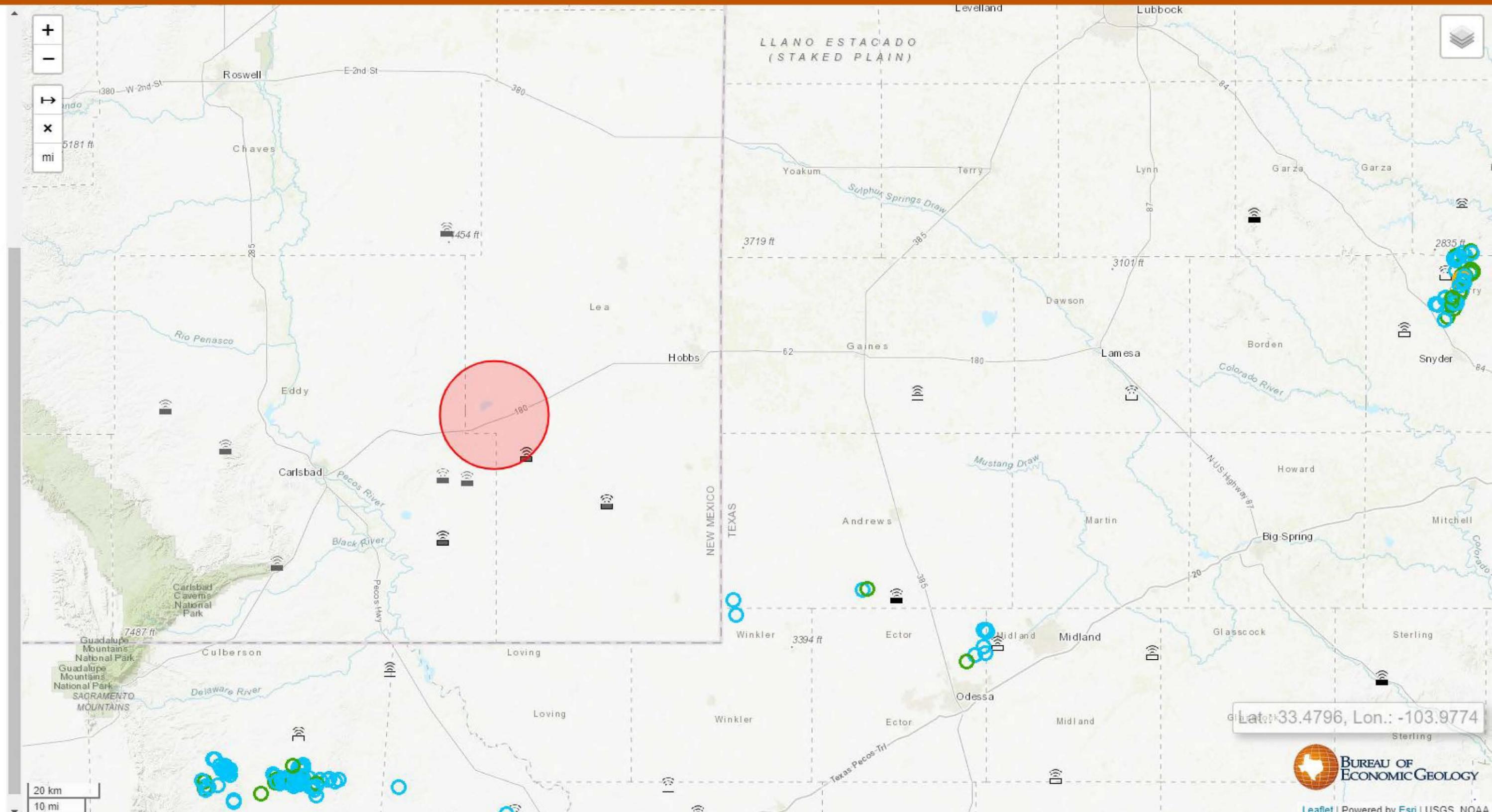
Earliest Date

Latest Date

Did you feel an earthquake? You can report it to USGS [here](#).

Last Earthquake Added: 2019-12-06 21:50:18 (UTC)

Selected Events (Total 0)  
Released to Imaging: 4/1/2024 11:39:31 AM





### Search Results

0 of - earthquakes in map area.

Click for more information

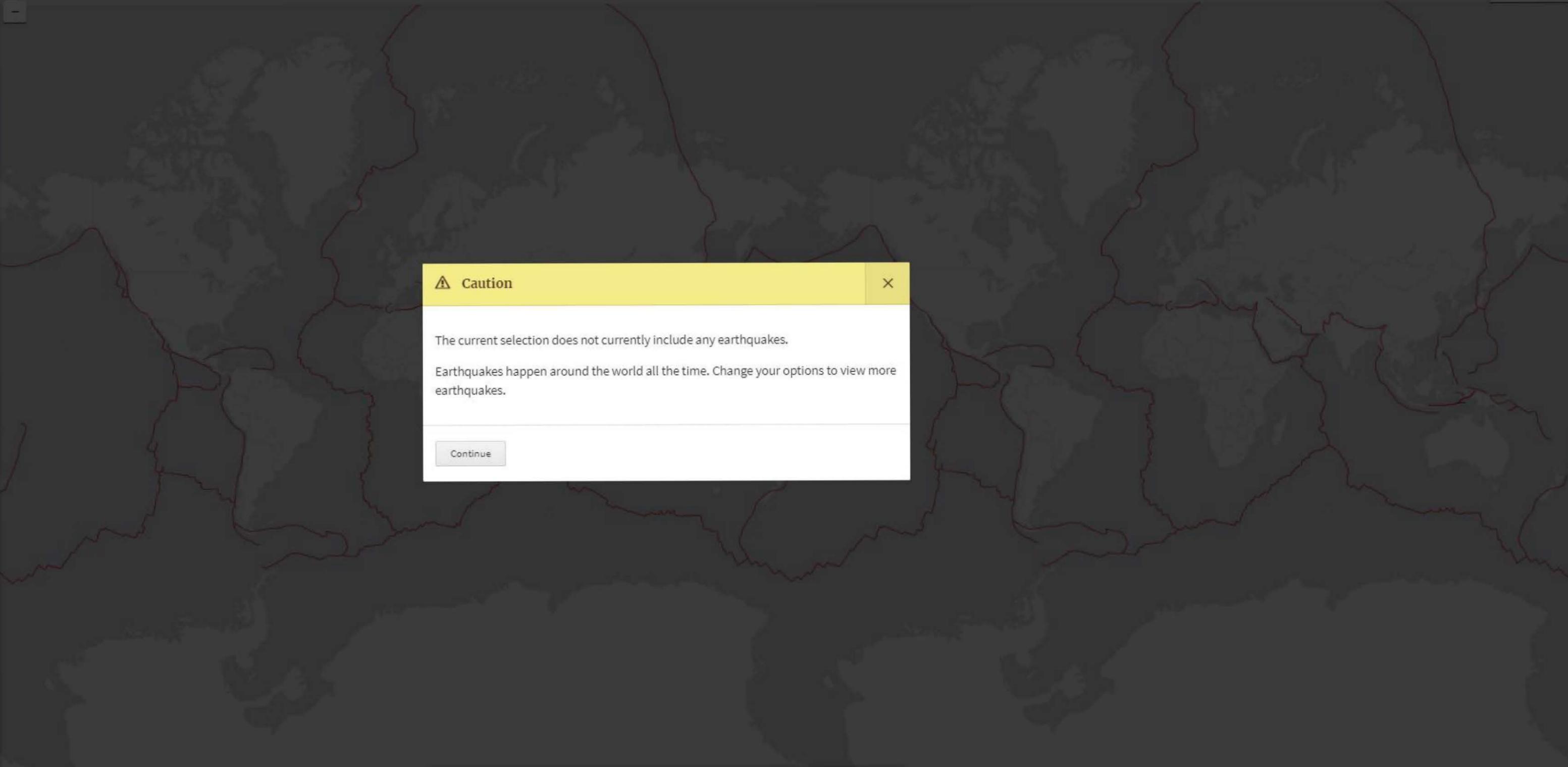
There are no events in the current feed.

#### Didn't find what you were looking for?

- [Check your Settings.](#)
- [Which earthquakes are included on the map and list?](#)
- [Felt something not shown - report it here.](#)



Zoom to...



⚠ **Caution** ✕

The current selection does not currently include any earthquakes.

Earthquakes happen around the world all the time. Change your options to view more earthquakes.

Continue

Earthquakes loading ✕



- 2.5+
- 4.5+
- Custom

Minimum

Maximum

### Date & Time

- Past 7 Days
- Past 30 Days
- Custom

Start (UTC)

End (UTC)

### Geographic Region

- World
- Conterminous U.S.<sup>1</sup>
- Custom

Custom Circle

- 32.56828178 Latitude
- -103.72908948 Longitude
- 25 Radius (km)

Draw Rectangle on Map

## - Advanced Options

### Geographic Region

Decimal degree coordinates. North must be greater than South. East must be greater than West.

North

West
East

South

### Depth (km)

Minimum

Maximum

### Azimuthal Gap

Minimum

Maximum

### Circle

Center Latitude

Center Longitude

Outer Radius (km)

### Review Status

- Any
- Automatic
- Reviewed

### Search Results

0 of - earthquakes in map area.

Click for more information

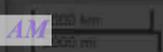
There are no events in the current feed.

### Didn't find what you were looking for?

- Check your [Settings](#).
- [Which earthquakes are included on the map and list?](#)
- [Felt something not shown - report it here.](#)



Zoom to... ▾



⚠ **Caution** ✕

The current selection does not currently include any earthquakes.

Earthquakes happen around the world all the time. Change your options to view more earthquakes.

Earthquakes loading ✕

- 2.5+
- 4.5+
- Custom

Minimum

Maximum

**Date & Time**

- Past 7 Days
- Past 30 Days
- Custom

Start (UTC)

End (UTC)

**Geographic Region**

- World
- Conterminous U.S.<sup>1</sup>
- Custom

Custom Circle

- 32.56828178 Latitude
- -103.72908948 Longitude
- 50 Radius (km)

Draw Rectangle on Map

**- Advanced Options**

**Geographic Region**

Decimal degree coordinates. North must be greater than South. East must be greater than West.

North	
West	
South	

**Circle**

Center Latitude

Center Longitude

Outer Radius (km)

*Released to Imaging: 4/1/2024 11:39:31 AM*

**Depth (km)**

Minimum

Maximum

**Azimuthal Gap**

Minimum

Maximum

**Review Status**

- Any
- Automatic
- Reviewed

**Search Results**

3 of 3 earthquakes in map area.

Click for more information

3.1	New Mexico	2012-03-18 10:57:22 (UTC)	5.0 km
2.9	New Mexico	1984-12-04 20:36:36 (UTC)	5.0 km
3.9	New Mexico	1974-11-28 03:35:20 (UTC)	5.0 km

Didn't find what you were looking for?

- Check your [Settings](#).
- [Which earthquakes are included on the map and list?](#)
- [Felt something not shown - report it here.](#)



# Affidavit of Publication

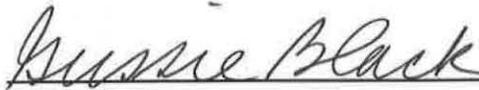
STATE OF NEW MEXICO  
COUNTY OF LEA

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).

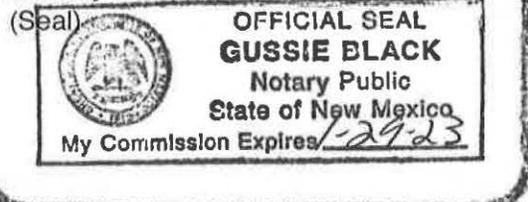
Beginning with the issue dated  
December 04, 2019  
and ending with the issue dated  
December 04, 2019.

  
\_\_\_\_\_  
Publisher

Sworn and subscribed to before me this  
4th day of December 2019.

  
\_\_\_\_\_  
Business Manager

My commission expires  
January 29, 2023



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

**LEGALS**

**LEGAL NOTICE  
DECEMBER 4, 2019**

Solaris Water Midstream, LLC, 907 Tradewinds Blvd., Suite B, Midland, TX 79706, 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, Ragin Rutley SWD No. 1. The proposed well will be located 857' FSL & 228' FEL in Section 14, Township 20S, Range 32E in Lea County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Devonian-Silurian formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 14,463 feet to a maximum depth of 16,263 feet. The maximum surface injection pressure will not exceed 2,893 psi with a maximum rate of 40,000 BWP. 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) 600-1777. #34940

67112661

00236790

LONQUIST & CO., LLC  
12912 HILL COUNTRY BLVD, STE F200  
AUSTIN, TX 78738

# LONQUIST & CO. LLC

PETROLEUM  
ENGINEERS

ENERGY  
ADVISORS

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

## DETERMINATION AND NOTICE OF AFFECTED PARTIES – NEW MEXICO

If an operator or mineral lessee has legal acreage or leases within one mile of the proposed salt water disposal well, their contact information is collected for notification purposes. Legal acreage of offset operators is gathered from the New Mexico Oil Conservation District's Permitting website. Minerals leased from the federal government are determined by referencing the Bureau of Land Management's Land and Mineral System Reports database. Minerals leased from the state government are determined by referencing the New Mexico State Land Office's Data Access database. Contact information for the affected parties is then extracted from the reports that were filed with the appropriate regulatory agency. Should any private minerals that are not public information fall within the one-mile radius, a title search was performed to discover the current lessee of those minerals or identifying the mineral owner of the acreage.

Notices were sent for the Ragin Rutley SWD No. 1 application by mailing them a copy of Form C-108 on 12/9/2019. The individual tracking numbers are attached in the following pages of this application. Receipt of each application will be monitored and presented to the Oil Conservation Division upon request.



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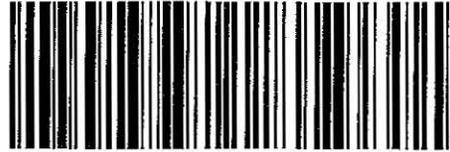
Tyler Moehlman  
Petroleum Engineer

Project: Solaris Water Midstream, LLC  
Ragin Rutley SWD No. 1

Ragin Rutley SWD No. 1  
1 Mile Offset Operators and Lessees List

S/T/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	MINERAL OWNER	SURFACE OWNER	ADDRESS 1	ADDRESS 2
11/T20S/R32E	N,O,P	-	OXY USA INC	-	-	PO BOX 27570	HOUSTON TX 772277570
	N,O,P	-	BP AMERICA PRODUCTION CO (OPERATING RIGHTS)	-	-	PO BOX 3092	HOUSTON TX 772533092
	N,O,P	-	ANADARKO E & P ONSHORE LLC (OPERATING RIGHTS)	-	-	PO BOX 173779	DENVER CO 802173779
12/T20S/R32E	M,N	-	EOG RESOURCES INC	-	-	PO BOX 4362	HOUSTON TX 772104362
	M,N	-	SHARBRO ENERGY LLC	-	-	PO BOX 840	ARTESIA NM 882110840
	M,N	-	OXY Y-1 COMPANY	-	-	PO BOX 27570	HOUSTON TX 772277570
	O	-	EOG RESOURCES INC	-	-	P.O. BOX 2267	MIDLAND, TX 79702
13/T20S/R32E	N	COG OPERATING LLC	-	-	-	600 W ILLINOIS AVE	MIDLAND, TX 79701
	C,D,E,F,L,K,M,N	-	COG OPERATING LLC	-	-	600 W ILLINOIS AVE	MIDLAND, TX 79701
	A,B,G,H	-	XTO DELAWARE BASIN, LLC.	-	-	22777 SPRINGWOODS VILLAGE PKWY	SPRING, TX 77389
14/T20S/R32E	B,D,E,G,J,L,M,N,O,P	EOG RESOURCES INC	-	-	-	P.O. Box 2267	MIDLAND, TX 79702
	A	MARATHON OIL PERMIAN LLC	-	-	-	5555 SAN FELIPE St.	HOUSTON, TX 77056
	ENTIRE SECTION	-	EOG RESOURCES INC	-	-	PO BOX 4362	HOUSTON TX 772104362
	ENTIRE SECTION	-	OXY Y-1 COMPANY	-	-	PO BOX 27570	HOUSTON TX 772277570
15/T20S/R32E	I,P	-	MARATHON OIL PERMIAN LLC (LESSEE)	-	-	5555 SAN FELIPE ST	HOUSTON TX 770562701
	I,P	-	HANLEY PETROLEUM LLC (OPERATING RIGHTS)	-	-	415 W WALL ST STE 1500	MIDLAND TX 797014455
	I,P	-	SLADE JARVIS J (OPERATING RIGHTS)	-	-	535 MADISON AVE FL 4	NEW YORK NY 100224291
	I,P	-	H6 HOLDING LLC (OPERATING RIGHTS)	-	-	PO BOX 1212	MIDLAND TX 797021212
	I,P	-	TBO OIL & GAS LLC (OPERATING RIGHTS)	-	-	4505 MOCKINGBIRD LN	MIDLAND TX 797071617
	I,P	-	MARATHON OIL PERMIAN LLC (OPERATING RIGHTS)	-	-	5555 SAN FELIPE ST	HOUSTON TX 770562701
	I,P	-	VERITAS PERMIAN RESOURCES LLC (OPERATING RIGHTS)	-	-	PO BOX 10850	FORT WORTH TX 761140850
	I,P	-	LHAH PROPERTIES LLC (OPERATING RIGHTS)	-	-	415 W WALL ST STE 1500	MIDLAND TX 797014455
22/T20S/R32E	A	-	FASKEN LAND & MINERALS LTD	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	A	-	WHITING 1988 PROD (OPERATING RIGHTS)	-	-	1700 BROADWAY #2300	DENVER CO 802902301
	A	-	FASKEN BARBARA (OPERATING RIGHTS)	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 797071631
	A	-	FASKEN LAND & MINERALS LTD (OPERATING RIGHTS)	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 79707
23/T20S/R32E	K	FASKEN OIL & RANCH LTD	-	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	ENTIRE SECTION	-	FASKEN LAND & MINERALS LTD	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	ENTIRE SECTION	-	WHITING 1988 PROD (OPERATING RIGHTS)	-	-	1700 BROADWAY #2300	DENVER CO 802902301
	ENTIRE SECTION	-	FASKEN BARBARA (OPERATING RIGHTS)	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 797071631
	ENTIRE SECTION	-	FASKEN LAND & MINERALS LTD (OPERATING RIGHTS)	-	-	6101 HOLIDAY HILL RD	MIDLAND TX 79707
24/T20S/R32E	A,B,E,F,G,H	-	TITUS OIL & GAS CORP	-	-	100 THROCKMORTON ST STE 1630	FORT WORTH TX 761022846
	C,D	-	GROSS FAMILY LTD	-	-	PO BOX 358	ROSWELL NM 88202
	C,D	-	TRAINER PARTNERS LTD	-	-	PO BOX 3788	MIDLAND TX 79702378
	C,D	-	TITUS OIL & GAS CORP (OPERATING RIGHTS)	-	-	100 THROCKMORTON ST STE 1630	FORT WORTH TX 761022846
	J,K,L,M,N	-	EOG RESOURCES INC	-	-	PO BOX 2267	MIDLAND TX 79702
Surface Location	-	-	-	-	BLM	-	-

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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Hobbs, NM 88240

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HOUSTON , TX 77210-4362

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1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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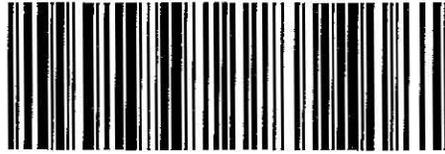


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P.O. BOX 2267  
2241-RAGIN RUTLEY SWD #1  
MIDLAND, TX 79702

Reference Number: 2241-RAGIN RUTLEY SWD #1

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Houston, TX 77002



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MIDLAND , TX 79707-1631

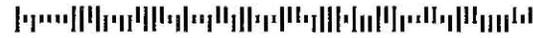
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Ste 1650  
Houston, TX 77002



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MIDLAND , TX 79702-1212

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1001 McKinney Street  
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Houston, TX 77002



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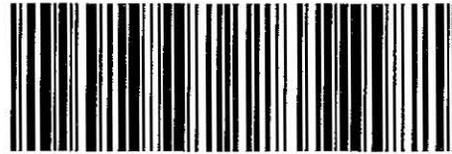


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LHAH PROPERTIES  
415 W WALL ST STE 1500  
2241-RAGIN RUTLEY SWD #1  
MIDLAND , TX 79701-4455

Reference Number: 2241-RAGIN RUTLEY SWD #1

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Ste 1650  
Houston, TX 77002



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HOUSTON, TX 77056

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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OXY USA INC  
OXY Y-1 COMPANY  
PO BOX 27570  
2241-RAGIN RUTLEY SWD #1  
HOUSTON , TX 77227-7570

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
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Houston, TX 77002



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SHARBRO ENERGY LLC  
PO BOX 840  
2241-RAGIN RUTLEY SWD #1  
ARTESIA , NM 88211-0840

Reference Number: 2241-RAGIN RUTLEY SWD #1

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Lonquist & CO LLC  
1001 McKinney Street  
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Houston, TX 77002



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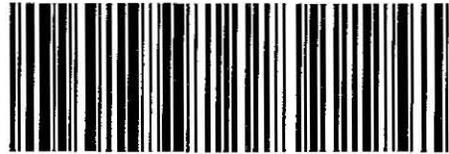


Total Postage: \$6.55

JARVIS J SLADE  
535 MADISON AVE FL 4  
2241-RAGIN RUTLEY SWD #1  
NEW YORK , NY 10022-4291

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
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TBO OIL & GAS LLC  
4505 MOCKINGBIRD LN  
2241-RAGIN RUTLEY SWD #1  
MIDLAND , TX 79707-1617

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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TITUS OIL & GAS CORP  
100 THROCKMORTON ST STE 1630  
2241-RAGIN RUTLEY SWD #1  
FORT WORTH, TX 76102-2846

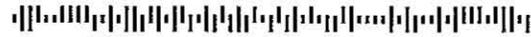
Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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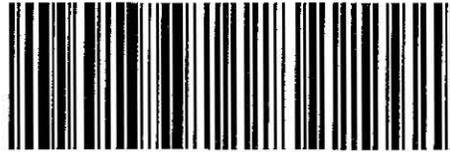


Total Postage: \$6.55

TRAINER PARTNERS LTD  
PO BOX 3788  
2241-RAGIN RUTLEY SWD #1  
MIDLAND , TX 79702-2378

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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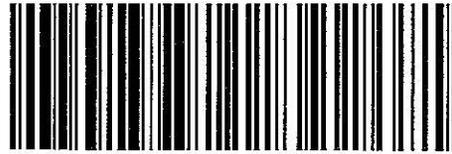


Total Postage: \$6.55

VERITAS PERMIAN RESOURCES LLC  
PO BOX 10850  
2241-RAGIN RUTLEY SWD #1  
FORT WORTH, TX 76114-0850

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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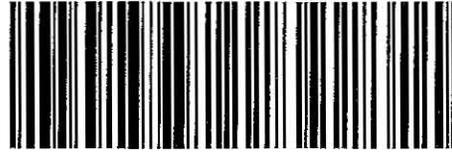


Total Postage: \$6.55

WHITING 1988 PROD  
1700 BROADWAY #2300  
2241-RAGIN RUTLEY SWD #1  
DENVER , CO 80290-2301

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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XTO DELAWARE BASIN, L.L.C.  
22777 SPRINGWOODS VILLAGE PKWY  
2241-RAGIN RUTLEY SWD #1  
SPRING, TX 77389

Reference Number: 2241-RAGIN RUTLEY SWD #1

Ramona Hovey  
Lonquist & CO LLC  
1001 McKinney Street  
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Houston, TX 77002



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Ralph E Williamson  
PO Box 994  
2241-RAGIN RUTLEY SWD #1  
Midland, TX 79702

Reference Number: 2241-RAGIN RUTLEY SWD #1

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Lonquist & CO LLC  
1001 McKinney Street  
Ste 1650  
Houston, TX 77002



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WPX Energy Permian LLC  
3500 One Williams Center  
2241-RAGIN RUTLEY SWD #1  
Tulsa, OK 74172

Reference Number: 2241-RAGIN RUTLEY SWD #1



### C-108 APPLICATION FOR AUTHORIZATION TO INJECT ADMINISTRATIVE COMPLETENESS FORM

**Well Name:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_

**PO Number:** \_\_\_\_\_

**Admin. App. No:** \_\_\_\_\_

C-108 Item	Description of Required Content	Yes	No
<b>I. PURPOSE</b>	Selection of proper application type.		
<b>II. OPERATOR</b>	Name; address; contact information.		
<b>III. WELL DATA</b>	Well name and number; STR location; footage location within section.		
	Each casing string to be used, including size, setting depth, sacks of cement, hole size, top of cement, and basis for determining top of cement.		
	Description of tubing to be used including size, lining material, and setting depth.		
	Name, model, and setting depth of packer to be used, or description of other seal system or assembly to be used.		
	Well diagram: Existing (if applicable).		
	Well diagram: Proposed (either Applicant's template or Division's Injection Well Data Sheet).		
<b>IV. EXISTING PROJECT</b>	For an expansion of existing well, Division order number authorizing existing well (if applicable).		
<b>V. LEASE AND WELL MAP</b>	AOR map identifying all wells and leases within 2 mile radius of proposed well, and depicting a 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.		
<b>VI. AOR WELLS</b>	Tabulation of data for all wells of public record within AOR which penetrate the proposed injection zone, including well type, construction, date drilled, location, depth, and record of completion.		
	Schematic of each plugged well within AOR showing all plugging detail.		
<b>VII. PROPOSED OPERATION</b>	Proposed average and maximum daily rate and volume of fluids to be injected.		
	Statement that the system is open or closed.		
	Proposed average and maximum injection pressure.		
	Sources and analysis of injection fluid, and compatibility with receiving formation if injection fluid is not produced water.		
	A chemical analysis of the disposal zone formation water if the injection is for disposal and oil or gas is not produced or cannot be produced from the formation within 1 mile of proposed well. Chemical analysis may be based on sample, existing literature, studies, or nearby well.		
<b>VIII. GEOLOGIC DATA</b>	Proposed injection interval, including appropriate lithologic detail, geologic name, thickness, and depth.		
	USDW of all aquifers overlying the proposed injection interval, including geologic name and depth to bottom.		
	USDW of all aquifers underlying the proposed injection interval, including including the geologic name and depth to bottom.		



### C-108 (SWD) APPLICATION FOR AUTHORIZATION TO INJECT ADMINISTRATIVE COMPLETENESS FORM

**Well Name:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_

**PO Number:** \_\_\_\_\_

**Admin. App. No:** \_\_\_\_\_

C-108 Item	Description of Required Content	Yes	No
<b>IX. PROPOSED STIMULATION</b>	Description of stimulation process or statement that none will be conducted.		
<b>X. LOGS/WELL TESTS</b>	Appropriate logging and test data on the proposed well or identification of well logs already filed with OCD.		
<b>XI. FRESH WATER</b>	Chemical analysis of fresh water from two or more fresh water wells (if available and producing) within 1 mile of the proposed well, including location and sampling date(s).		
<b>XII. AFFIRMATION STATEMENT</b>	Statement of qualified person endorsing the application, including name, title, and qualifications.		
<b>XIII. PROOF OF NOTICE</b>	Identify of all "affected persons" identified on AOR map in Section V, including all affected persons within 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.		
	Identification and notification of all surface owners.		
	BLM and/or NMSLO notified per 19.15.2.7(A)(8)(d) NMAC.		
	Notice of publication in local newspaper in county where proposed well is located with the following specific content:		
	<ul style="list-style-type: none"> <li>• Name, address, phone number, and contact party for Applicant;</li> </ul>		
	<ul style="list-style-type: none"> <li>• Intended purpose of proposed injection well, including exact location of a single well, or the section, township, and range location of multiple wells;</li> </ul>		
	<ul style="list-style-type: none"> <li>• Formation name and depth, and expected maximum injection rates and pressures; and</li> </ul>		
<b>XIV. CERTIFICATION</b>	Signature by operator or designated agent, including date and contact information.		

**Review Date\*:**

**Reviewer:**

**Administratively COMPLETE**

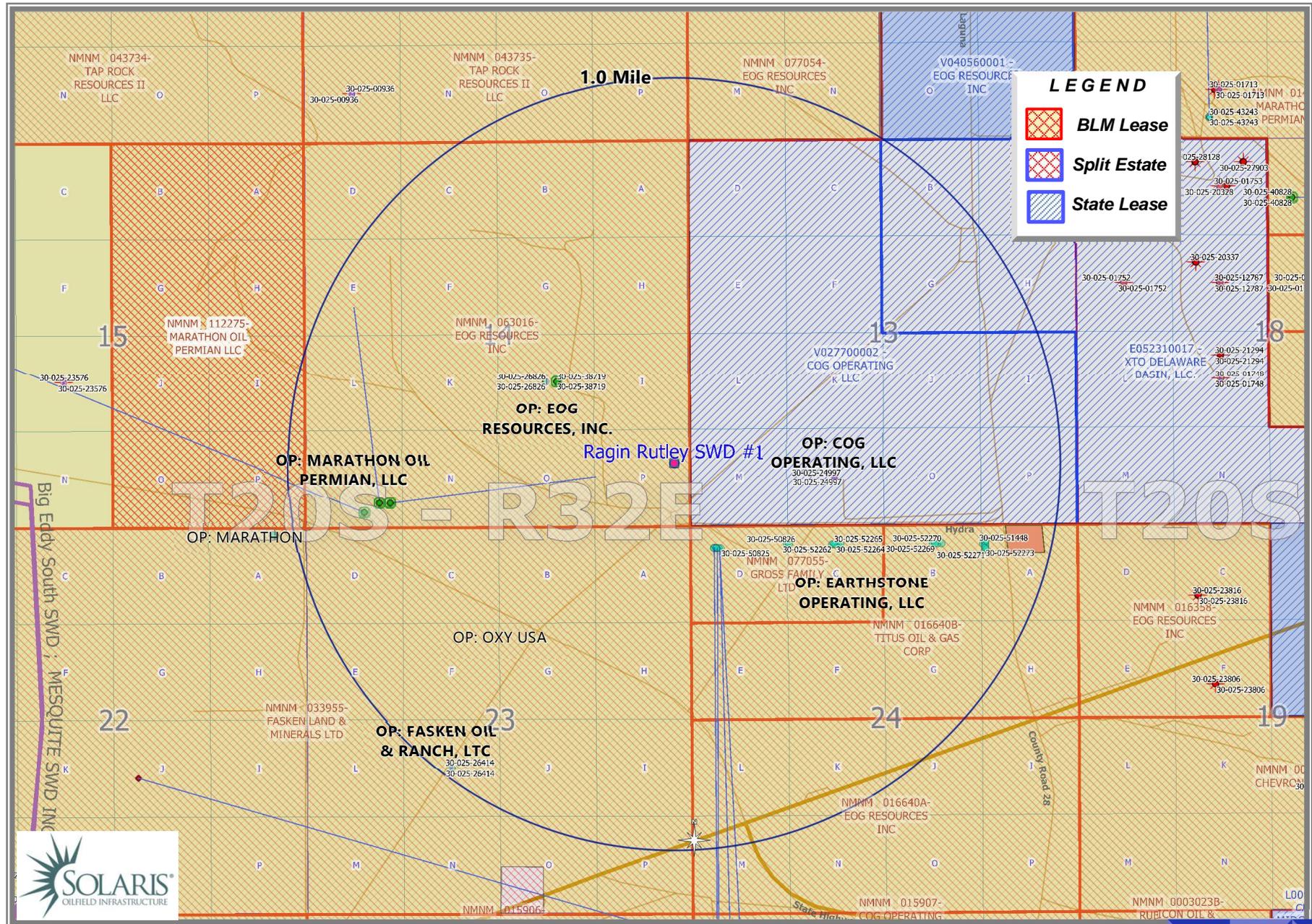
**Administratively INCOMPLETE**

NOTES:

\* The Review Date is the date of administrative completeness determination that commences the 15 day protest period in 19.15.26.8 (C)(2) NMAC.

# Ragin' Rutley [Fed] SWD #1 - Lease/ Affected Party Map

(ADDENDUM 'New Notice' to NMOCD Form C-108, Application for Authority to Inject.)



**LEGEND**

- BLM Lease**
- Split Estate**
- State Lease**



**Ragin' Rutley SWD #1 - 1-Mile Area of Review Wells**  
**March 28, 2024**

<i>API</i>	<i>OGRID Name</i>	<i>Well Name</i>	<i>Well Type</i>	<i>Well Status</i>	<i>PLSS Location (ULSTR)</i>	<i>Lease Type</i>	<i>SPUD Date</i>
30-025-24997	COG OPERATING LLC	HANSON STATE #001	Gas	Active	N-13-20S-32E	State	8/10/1975
30-025-26826	EOG RESOURCES INC	BELCO AIA FEDERAL #001	Oil	Active	J-14-20S-32E	Federal	12/31/9999
30-025-38719	EOG RESOURCES INC	BELCO AIA FEDERAL #003H	Oil	Active	J-14-20S-32E	Federal	2/19/2008
30-025-40230	MARATHON OIL PERMIAN LLC	QUEENIE 15 FEDERAL #001H	Oil	Active	M-14-20S-32E	Federal	10/4/2011
30-025-38818	EOG RESOURCES INC	BELCO AIA FEDERAL #004H	Oil	Active	M-14-20S-32E	Federal	4/3/2008
30-025-38527	EOG RESOURCES INC	BELCO AIA FEDERAL #002H	Oil	Active	M-14-20S-32E	Federal	12/5/2006
30-025-36042	FASKEN OIL & RANCH LTD	BAETZ 23 FEDERAL #003C	Oil	Cancelled	B-23-20S-32E	Federal	12/31/9999
30-025-24405	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #001	Oil	Cancelled	F-23-20S-32E	Federal	12/31/9999
30-025-36043	FASKEN OIL & RANCH LTD	BAETZ 23 FEDERAL #009	Oil	Cancelled	H-23-20S-32E	Federal	12/31/9999
30-025-32670	BARBARA FASKEN	BAETZ 23 #002	Oil	Cancelled	J-23-20S-32E	Federal	12/31/9999
30-025-40815	FASKEN OIL & RANCH LTD	BAETZ 23 FEDERAL #002C	Oil	Cancelled	K-23-20S-32E	Federal	12/31/9999
30-025-26414	FASKEN OIL & RANCH LTD	BAETZ 23 FEDERAL #001	Oil	Active	K-23-20S-32E	Federal	12/31/9999
30-025-51448	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #224H	Oil	New	A-24-20S-32E	Federal	12/31/9999
30-025-52271	EARTHSTONE OPERATING, LLC	PAKSE 5 SOUTH FEDERAL COM #114H	Oil	New	A-24-20S-32E	Federal	12/31/9999
30-025-52272	EARTHSTONE OPERATING, LLC	PAKSE 5 SOUTH FEDERAL COM #304H	Oil	New	A-24-20S-32E	Federal	12/31/9999
30-025-52273	EARTHSTONE OPERATING, LLC	PAKSE 5 SOUTH FEDERAL COM #324H	Oil	New	A-24-20S-32E	Federal	12/31/9999
30-025-52274	EARTHSTONE OPERATING, LLC	PAKSE 5 SOUTH FEDERAL COM #434H	Oil	New	A-24-20S-32E	Federal	12/31/9999
30-025-51447	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #223H	Oil	New	B-24-20S-32E	Federal	12/31/9999
30-025-52267	EARTHSTONE OPERATING, LLC	PAKSE 4 SOUTH FEDERAL COM #303H	Oil	New	B-24-20S-32E	Federal	12/31/9999
30-025-52268	EARTHSTONE OPERATING, LLC	PAKSE 4 SOUTH FEDERAL COM #223H	Oil	New	B-24-20S-32E	Federal	12/31/9999
30-025-52269	EARTHSTONE OPERATING, LLC	PAKSE 4 SOUTH FEDERAL COM #213H	Oil	New	B-24-20S-32E	Federal	12/31/9999
30-025-52270	EARTHSTONE OPERATING, LLC	PAKSE 4 SOUTH FEDERAL COM #114H	Oil	New	B-24-20S-32E	Federal	12/31/9999
30-025-52262	EARTHSTONE OPERATING, LLC	PAKSE 3 SOUTH FEDERAL COM #432H	Oil	New	C-24-20S-32E	Federal	12/31/9999
30-025-52263	EARTHSTONE OPERATING, LLC	PAKSE 3 SOUTH FEDERAL COM #322H	Oil	New	C-24-20S-32E	Federal	12/31/9999
30-025-52264	EARTHSTONE OPERATING, LLC	PAKSE 3 SOUTH FEDERAL COM #302H	Oil	New	C-24-20S-32E	Federal	12/31/9999
30-025-52265	EARTHSTONE OPERATING, LLC	PAKSE 3 SOUTH FEDERAL COM #112H	Oil	New	C-24-20S-32E	Federal	12/31/9999
30-025-52266	EARTHSTONE OPERATING, LLC	PAKSE 3 SOUTH FEDERAL COM #113H	Oil	New	C-24-20S-32E	Federal	12/31/9999
30-025-26416	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL #001	Oil	Cancelled	D-24-20S-32E	Federal	12/31/9999
30-025-50824	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #111H	Oil	New	D-24-20S-32E	Federal	12/31/9999
30-025-50825	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #221H	Oil	New	D-24-20S-32E	Federal	12/31/9999
30-025-50826	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #301H	Oil	New	D-24-20S-32E	Federal	12/31/9999
30-025-50827	EARTHSTONE OPERATING, LLC	PAKSE SOUTH FEDERAL COM #321H	Oil	New	D-24-20S-32E	Federal	12/31/9999

**Ragin' Rutley SWD #1 - Affected Parties List (within 1-Mile Area of Review)**  
**March 28, 2024**

S/T/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	SURFACE OWNER	ADDRESS	CITY, STATE, ZIP
11/T20S/R32E	N,O,P	-	OXY USA INC	BLM	PO BOX 27570	HOUSTON TX 772277570
	N,O,P		BP AMERICA PRODUCTION CO (OPERATING RIGHTS)	BLM	PO BOX 3092	HOUSTON TX 772533092
	N,O,P		ANADARKO E & P ONSHORE LLC (OPERATING RIGHTS)	BLM	PO BOX 173779	DENVER CO 802173779
12/T20S/R32E	M,N	-	EOG RESOURCES INC	BLM	PO BOX 4362	HOUSTON TX 772104362
	M,N		SHARBRO ENERGY LLC	BLM	PO BOX 840	ARTESIA NM 882110840
	M,N		OXY Y-1 COMPANY	BLM	PO BOX 27570	HOUSTON TX 772277570
	O		EOG RESOURCES INC	BLM	P.O. BOX 2267	MIDLAND, TX 79702
13/T20S/R32E	N	COG OPERATING LLC	-	STATE	600 W ILLINOIS AVE	MIDLAND, TX 79701
	C,D,E,F,L,K,M,N		COG OPERATING LLC	STATE	600 W ILLINOIS AVE	MIDLAND, TX 79701
	A,B,G,H		XTO DELAWARE BASIN, LLC.	STATE	22777 SPRINGWOODS VILLAGE PKWY	SPRING, TX 77389
14/T20S/R32E	B,D,E,G,J,L,M,N,O,P	EOG RESOURCES INC	-	BLM	P.O. Box 2267	MIDLAND, TX 79702
	A ,M	MARATHON OIL PERMIAN LLC	-	BLM	5555 SAN FELIPE St.	HOUSTON, TX 77056
	ENTIRE SECTION		EOG RESOURCES INC	BLM	PO BOX 4362	HOUSTON TX 772104362
	ENTIRE SECTION		OXY Y-1 COMPANY	BLM	PO BOX 27570	HOUSTON TX 772277570
15/T20S/R32E	I,P	-	MARATHON OIL PERMIAN LLC (LESSEE)	BLM	5555 SAN FELIPE ST	HOUSTON TX 770562701
	I,P		HANLEY PETROLEUM LLC (OPERATING RIGHTS)	BLM	415 W WALL ST STE 1500	MIDLAND TX 797014455
	I,P		SLADE JARVIS J (OPERATING RIGHTS)	BLM	535 MADISON AVE FL 4	NEW YORK NY 100224291
	I,P		H6 HOLDING LLC (OPERATING RIGHTS)	BLM	PO BOX 1212	MIDLAND TX 797021212
	I,P		TBO OIL & GAS LLC (OPERATING RIGHTS)	BLM	4505 MOCKINGBIRD LN	MIDLAND TX 797071617
	I,P		MARATHON OIL PERMIAN LLC (OPERATING RIGHTS)	BLM	5555 SAN FELIPE ST	HOUSTON TX 770562701
	I,P		VERITAS PERMIAN RESOURCES LLC (OPERATING RIGHTS)	BLM	PO BOX 10850	FORT WORTH TX 761140850
	I,P		LHAH PROPERTIES LLC (OPERATING RIGHTS)	BLM	415 W WALL ST STE 1500	MIDLAND TX 797014455
22/T20S/R32E	A	-	FASKEN LAND & MINERALS LTD	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	A		WHITING 1988 PROD (OPERATING RIGHTS)	BLM	1700 BROADWAY #2300	DENVER CO 802902301
	A		FASKEN BARBARA (OPERATING RIGHTS)	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 797071631
	A		FASKEN LAND & MINERALS LTD (OPERATING RIGHTS)	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 79707
23/T20S/R32E	K	FASKEN OIL & RANCH LTD	-	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	ENTIRE SECTION		FASKEN LAND & MINERALS LTD	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 79707
	ENTIRE SECTION		WHITING 1988 PROD (OPERATING RIGHTS)	BLM	1700 BROADWAY #2300	DENVER CO 802902301

	ENTIRE SECTION		FASKEN BARBARA (OPERATING RIGHTS)	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 797071631
	ENTIRE SECTION		FASKEN LAND & MINERALS LTD (OPERATING RIGHTS)	BLM	6101 HOLIDAY HILL RD	MIDLAND TX 79707
24/T20S/R32E	E,F,G,H	-	TITUS OIL & GAS CORP	BLM	100 THROCKMORTON ST STE 1630	FORT WORTH TX 761022846
	A,B,C,D	EARTHSTONE OPERATING, LLC	-		300 N. MARIENFELD ST., STE 1000	MIDLAND, TX 79701
	C,D		GROSS FAMILY LTD	BLM	PO BOX 358	ROSWELL NM 88202
	C,D		TRAINER PARTNERS LTD	BLM	PO BOX 3788	MIDLAND TX 79702378
	C,D		TITUS OIL & GAS CORP (OPERATING RIGHTS)	BLM	100 THROCKMORTON ST STE 1630	FORT WORTH TX 761022846
J,K,L,M,N	-		EOG RESOURCES INC	BLM	PO BOX 2267	MIDLAND TX 79702