

# Additional Information

Extension Request 4/15/21



ConocoPhillips  
600 W. Illinois Ave.  
Midland, TX 79701  
[www.conocophillips.com](http://www.conocophillips.com)

April 15, 2021

New Mexico Oil Conservation Division  
1220 S. St. Francis  
Santa Fe, NM 87504

Attn: Ms. Adrienne Sandoval, Director

Re: Request for Extension of Injection Permit – Columbus Fee SWD #1  
Administrative Order SWD-1978  
Located: Unit C, Sec 3, T26S, R33E, NMPM, Lea County, New Mexico  
Order Date: April 23, 2020

Dear Ms. Sandoval:

COG Operating LLC hereby requests approval from the Division for a one (1) year extension from the deadline stipulated in Order SWD-1978 to commence injection on the Columbus Fee SWD #1 well.

According to the GIS on the NMOCD website the AOR for the above referenced well has not changed.

I have enclosed a copy of the approved permit for your convenience. If you or your staff have any questions or require additional information, please do not hesitate to contact me at [robyn.m.russell@conocophillips.com](mailto:robyn.m.russell@conocophillips.com) or (432) 685-4385.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Robyn M. Russell', written over a light blue rectangular background.

Robyn M. Russell  
COG Operating LLC / ConocoPhillips  
Regulatory Compliance Lead

State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Michelle Lujan Grisham**  
Governor

**Sarah Cottrell Propst**  
Cabinet Secretary

**Todd E. Leahy, JD, PhD**  
Deputy Secretary

**Adrienne Sandoval**, Director  
Oil Conservation Division



Administrative Order SWD-1978  
April 23, 2020

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, COG Operating, LLC. (“the operator”) seeks an administrative order for its Columbus Fee SWD No.1 (“the well”) with a location of 1165 feet from the North line and 1895 feet from the West line, Unit letter C of Section 3, Township 26 South, Range 33 East, NMPM, Lea County, New Mexico, for the purpose of commercial disposal of produced water.

**THE DIVISION DIRECTOR FINDS THAT:**

The application has been duly filed under the provisions of Division Rule 19.15.26.8(B) NMAC and satisfactory information has been provided that affected parties have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Division Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Division Rule 19.15.5.9 NMAC.

**Application for Disposal in Devonian and Silurian Formations:** Due to the potential for the projected injection volume of the proposed well to impact an area greater than the one-half mile radius applied in Division Form C-108 and Division rule, the applicant has provided the following supplementary information:

1. Notification following Division Rule 19.15.26.8(B) NMAC for a radius of one mile from the surface location of the proposed well;
2. An expanded Area of Review for wells penetrating the disposal interval for a radius of one mile from the surface location of the proposed well; and
3. A statement by a qualified person assessing the potential of induced-seismic events associated with the disposal activities for the predicted service life of the proposed well.

**IT IS THEREFORE ORDERED THAT:**

The applicant, COG Operating, LLC. (OGRID 229137), is hereby authorized to utilize its Columbus Fee SWD No.1 (API 30-025-Pending) with a location of 1165 feet from the North line and 1895 feet from the West line, Unit letter C of Section 3, Township 26 South, Range 33 East, NMPM, Lea County, for disposal of oil field produced water (UIC Class II only) through open-hole completion into an interval consisting of the Devonian and Silurian formations from

approximately 17,450 feet to approximately 19,450 feet. Injection will occur through internally-coated 5-inch or smaller tubing within the 7 $\frac{5}{8}$ -inch liner with a packer set within 100 feet of the top of the disposal interval. This permit does not allow disposal into:

1. The Woodford Shale and formations above the lower contact of the Woodford Shale;
2. Formations below the Silurian formations including the Montoya formation and the Ellenburger formation (lower Ordovician); and
3. Any lost circulation intervals directly on top and obviously connected to these formations.

*Prior to commencing disposal, the operator shall submit mudlog and geophysical logs information, to the Division's District geologist and Santa Fe Engineering Bureau, showing evidence agreeable that only the permitted formation is open for disposal including a summary of depths (picks) for contacts of the formations which the Division shall use to amend this order for a final description of the depth for the injection interval. If significant hydrocarbon shows occur while drilling, the operator shall notify the Division's District office and the operator shall be required to receive written permission prior to commencing disposal.*

*The operator shall set surface casing 25 feet below the top of the Rustler anhydrite in order to seal off protectable water.*

*The operator shall circulate to surface the cement for the 9 $\frac{5}{8}$ -inch production casing.*

*If cement does not circulate on any casing string, the operator shall run a cement bond log ("CBL") or other log to determine top of cement and shall notify the Hobbs District with the top of cement on the emergency phone number prior to continuing with any further cement activity with the proposed well. If cement did not tie back into the next higher casing shoe, the operator shall perform remedial cement job to bring cement, at a minimum, 200 feet above the next higher casing shoe.*

*The operator shall run a CBL (or equivalent) for the 7 $\frac{5}{8}$ -inch liner to demonstrate the placement of cement and the cement bond with the tie-in with 9 $\frac{5}{8}$ -inch production casing string. The operator shall provide a copy of the CBL to the Division's District office prior to commencing disposal.*

*Prior to commencing disposal, the operator shall obtain a bottom-hole pressure measurement representative of the open-hole completion. This information shall be provided with the written notice of the date of commencement of disposal.*

**IT IS FURTHER ORDERED THAT:**

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the completion and construction of the well as described in the application and, if necessary, as modified by the District Supervisor or the Bureau of Land Management.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11(A) NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

If the disposal well fails a MIT or if there is evidence that the mechanical integrity of said well is impacting correlative rights, the public health, any underground sources of fresh water, or the environment, the Division Director shall require the well to be shut-in within 24 hours of discovery and the operator shall redirect all disposal waters to another facility. The operator shall take the necessary actions to address the impacts resulting from the mechanical integrity issues in accordance with Division Rule 19.15.26.10 NMAC, and the well shall be tested pursuant to Rule 19.15.26.11 NMAC prior to returning to injection.

The wellhead injection pressure on the well shall be limited to **no more than 3,490 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formations. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable step-rate test.

The operator shall notify the supervisor of the Division's District office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations that includes number of days of operation, injection volume, and injection pressure on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate one (1) year after the effective date of this Order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this Order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



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ADRIENNE SANDOVAL  
Director

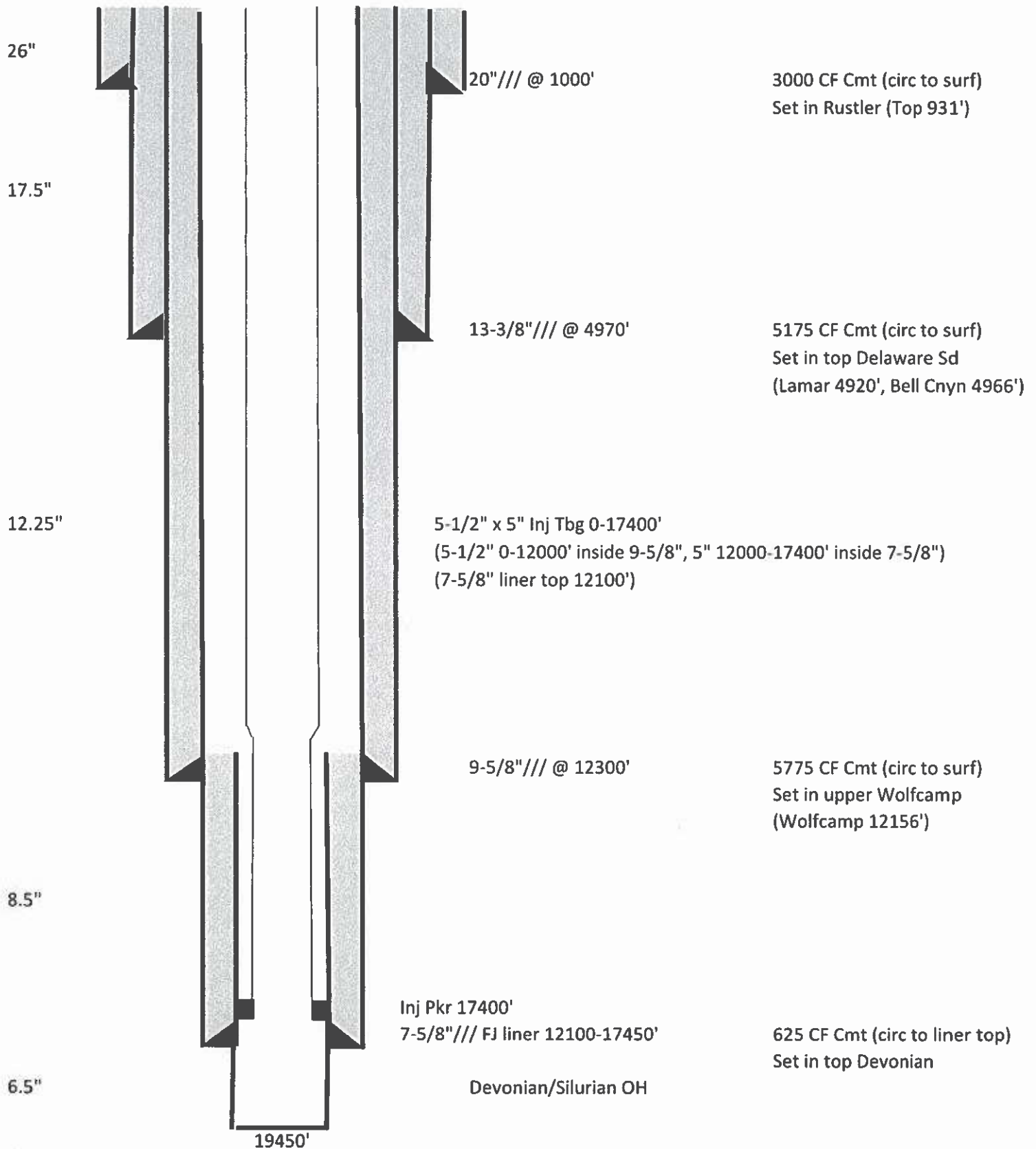
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cc: Oil Conservation Division – Hobbs District Office  
Bureau of Land Management – Carlsbad Field Office

Attachment: C-108 well completion diagram

Columbus Fee SWD 1  
1165' FNL, 1895' FWL  
C-3-26s-33e  
Lea, NM  
30-025-xxxxx

Zero:  
KB elev:  
GL elev: 3321'

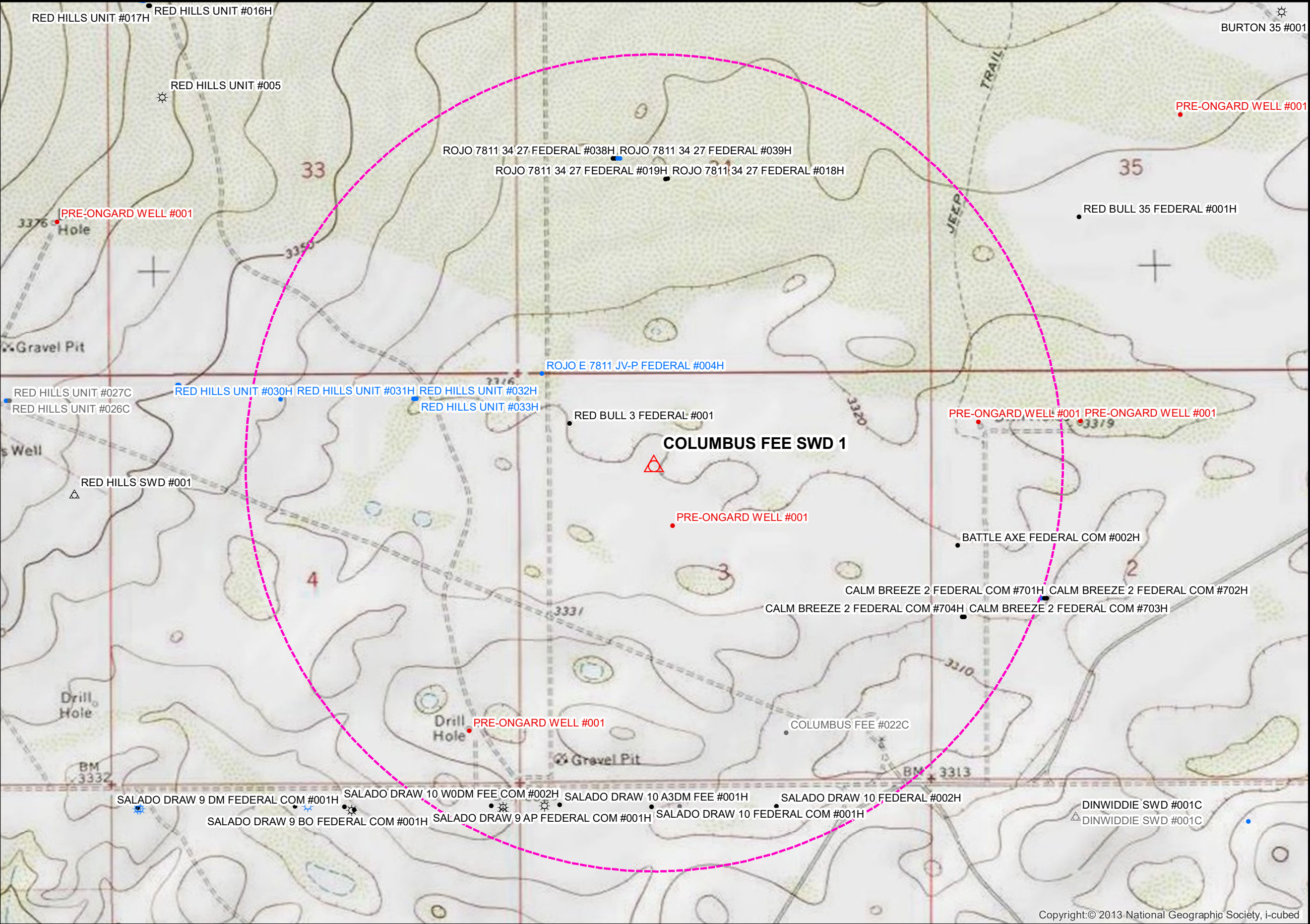
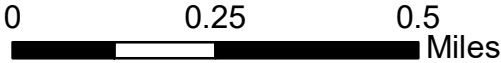
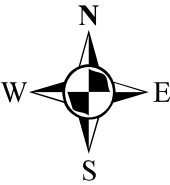






Legend

- COLUMBUS FEE SWD 1
- 1.0 Mile Radius
- NM Wells**
  - Oil, Active
  - Oil, Cancelled
  - Oil, New
  - Oil, Plugged
  - ☀ Gas, Active
  - ☀ Gas, Cancelled
  - ☀ Gas, New
  - ☀ Gas, Plugged
  - Injection, Active
  - Injection, Cancelled
  - Injection, New
  - Injection, Plugged
  - △ Salt Water Disposal, Active
  - △ Salt Water Disposal, Cancelled
  - △ Salt Water Disposal, New
  - △ Salt Water Disposal, Plugged



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Vicinity Wells

Solaris Water Midstream - Columbus Fee SWD #1 - Lea County NM

Date: 4/6/2021



Table 1  
NM Wells Within 1 Mile





Columbus Fee SWD #1

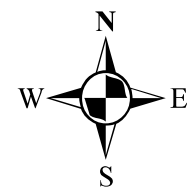
API	Well Name	Well Type	Well Status	ogrid	ogrid_name	ULSTR	Measured Depth	Vertical Depth
30-025-44298	ROJO 7811 34 27 FEDERAL #019H	Oil	Active	260297	BTA OIL PRODUCERS, LLC	K-34-25S-33E	20035	12323
30-025-39896	LA PINTA 10 FEE #002H	Oil	Cancelled	7377	EOG RESOURCES INC	C-10-26S-33E	0	0
30-025-39812	RED BULL 3 FEDERAL #001	Oil	Active	229137	COG OPERATING LLC	D-03-26S-33E	13900	13900
30-025-44297	ROJO 7811 34 27 FEDERAL #018H	Oil	Active	260297	BTA OIL PRODUCERS, LLC	K-34-25S-33E	20110	12409
30-025-27897	PRE-ONGARD WELL #001	Oil	Plugged	214263	PRE-ONGARD WELL OPERATOR	F-03-26S-33E	0	5200
30-025-43361	SALADO DRAW 10 W0DM FEE COM : Gas	Gas	Active	14744	MEWBOURNE OIL CO	D-10-26S-33E	16640	12257
30-025-40755	SALADO DRAW 9 AP FEDERAL COM	Oil	Active	14744	MEWBOURNE OIL CO	A-09-26S-33E	14270	9931
30-025-44913	SALADO DRAW 9 16 W1AP FEDERAL	Gas	Active	14744	MEWBOURNE OIL CO	A-09-26S-33E	22825	12626
30-025-44648	SALADO DRAW 9 16 W0AP FEDERAL	Gas	Active	14744	MEWBOURNE OIL CO	A-09-26S-33E	20109	12276
30-025-41843	SALADO DRAW 10 A3DM FEE #001H	Oil	Active	14744	MEWBOURNE OIL CO	D-10-26S-33E	14245	9984
30-025-42810	COLUMBUS FEE #022C	Oil	Cancelled	229137	COG OPERATING LLC	O-03-26S-33E	0	0
30-025-40124	SALADO DRAW 10 FEDERAL COM #	Oil	Active	14744	MEWBOURNE OIL CO	C-10-26S-33E	13548	9261
30-025-43649	CALM BREEZE 2 FEDERAL COM #70	Oil	Active	7377	EOG RESOURCES INC	L-02-26S-33E	19640	12404
30-025-43647	CALM BREEZE 2 FEDERAL COM #70	Oil	Active	7377	EOG RESOURCES INC	L-02-26S-33E	19770	12423
30-025-41370	BATTLE AXE FEDERAL COM #002H	Oil	Active	229137	COG OPERATING LLC	E-02-26S-33E	16233	9325
30-025-08398	PRE-ONGARD WELL #001	Oil	Plugged	214263	PRE-ONGARD WELL OPERATOR	D-02-26S-33E	0	5243
30-025-40056	SALADO DRAW 10 FEDERAL #002H	Oil	Active	14744	MEWBOURNE OIL CO	B-10-26S-33E	13770	9319
30-025-42331	RED HILLS UNIT #030H	Oil	New	162683	CIMAREX ENERGY CO. OF COLORA	I-C-04-26S-33E	0	0
30-025-42310	RED HILLS UNIT #033H	Oil	New	162683	CIMAREX ENERGY CO. OF COLORA	I-A-04-26S-33E	0	0
30-025-42332	RED HILLS UNIT #031H	Oil	New	162683	CIMAREX ENERGY CO. OF COLORA	I-B-04-26S-33E	0	0
30-025-42309	RED HILLS UNIT #032H	Oil	New	162683	CIMAREX ENERGY CO. OF COLORA	I-B-04-26S-33E	0	0
30-025-08399	PRE-ONGARD WELL #001	Oil	Plugged	214263	PRE-ONGARD WELL OPERATOR	P-04-26S-33E	0	5258
30-025-43464	ROJO E 7811 JV-P FEDERAL #004H	Oil	New	260297	BTA OIL PRODUCERS, LLC	M-34-25S-33E	0	0
30-025-46147	ROJO 7811 34 27 FEDERAL #038H	Oil	Active	260297	BTA OIL PRODUCERS, LLC	E-34-25S-33E	19958	12301
30-025-46098	ROJO 7811 34 27 FEDERAL #041H	Oil	New	260297	BTA OIL PRODUCERS, LLC	F-34-25S-33E	0	0
30-025-46096	ROJO 7811 34 27 FEDERAL #039H	Oil	Active	260297	BTA OIL PRODUCERS, LLC	E-34-25S-33E	20068	12357
30-025-46097	ROJO 7811 34 27 FEDERAL #040H	Oil	New	260297	BTA OIL PRODUCERS, LLC	F-34-25S-33E	0	0
30-025-44300	ROJO 7811 34 27 FEDERAL #021H	Oil	New	260297	BTA OIL PRODUCERS, LLC	L-34-25S-33E	0	0



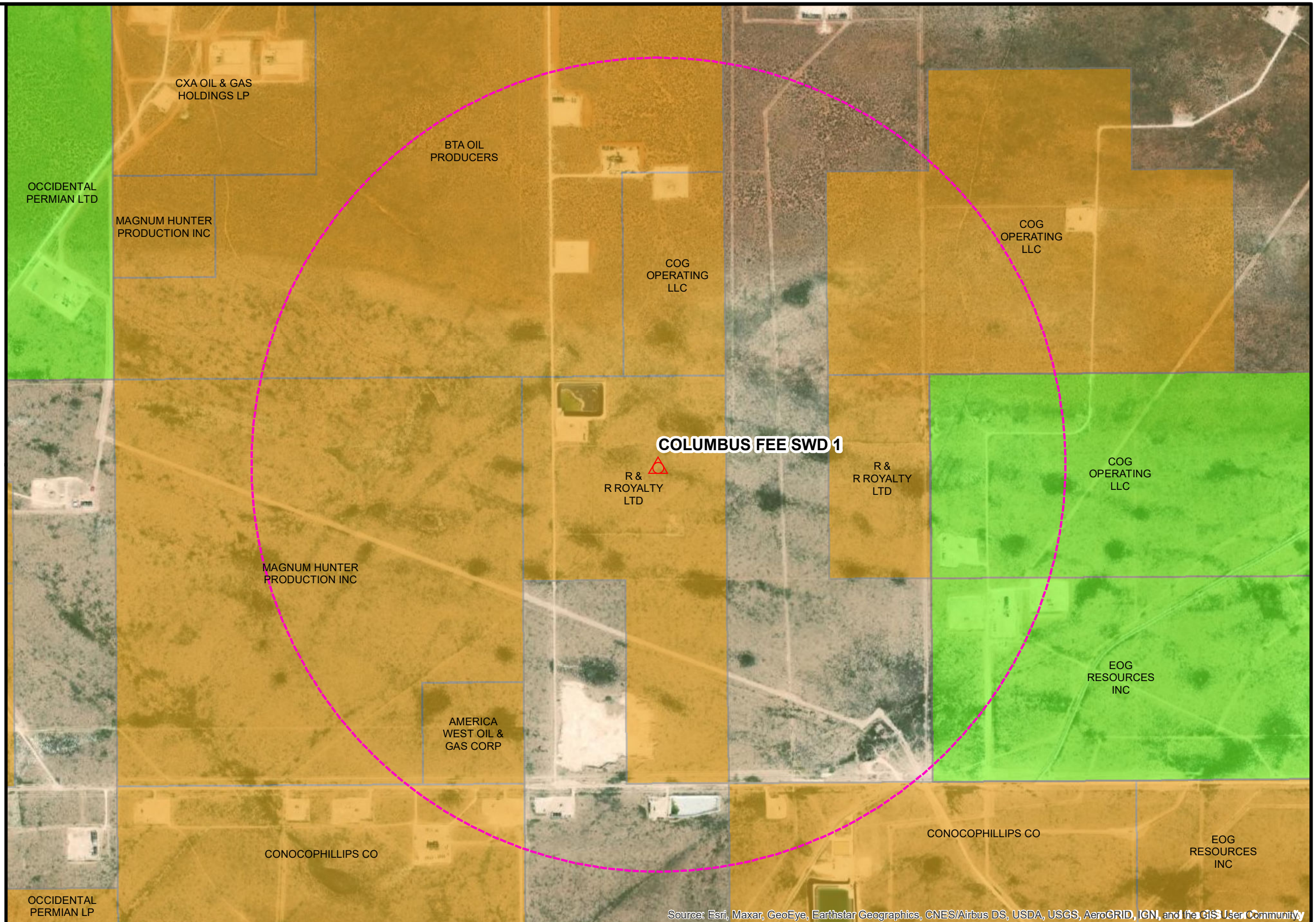


**Legend**

-  COLUMBUS FEE SWD 1
-  1.0 Mile Radius
-  BLM Lease
-  SLO Lease



0 0.25 0.5  
Miles



**State and Federal Leases**  
**Solaris Water Midstream - Columbus Fee SWD #1 - Lea County NM**

Date: 4/6/2021



4/6/2021

Table 2  
BLM Leases Within 1 Mile

Solaris Water Midstream  
Columbus Fee SWD #1

SerialNumb		Name1	Name2
NMNM	089425	MAGNUM HUNTER PRODUCTION INC	
NMNM	0000127H	RESOURCE DEVELOPMENT TECHNOLOGY LLC	
NMNM	0000127A	CONOCOPHILLIPS CO	
NMNM	0359292	CONOCOPHILLIPS CO	
NMNM	119278	R & R ROYALTY LTD	UNIFIED ASSESTS LTD
NMNM	119277	COG OPERATING LLC	
NMNM	0005792	BTA OIL PRODUCERS	

4/6/2021

Table 3  
SLO Leases Within 1 Mile

Solaris Water Midstream  
Columbus Fee SWD #1

Lease Number	Lessee
VB-1506-0002	COG OPERATING LLC
VB-1507-0001	EOG RESOURCES INC






**Legend**

 COLUMBUS FEE SWD 1


 1.0 Mile Radius

 PLSSTownship

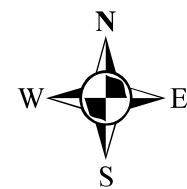
 PLSSFirstDivision

**NM Surface Ownership**

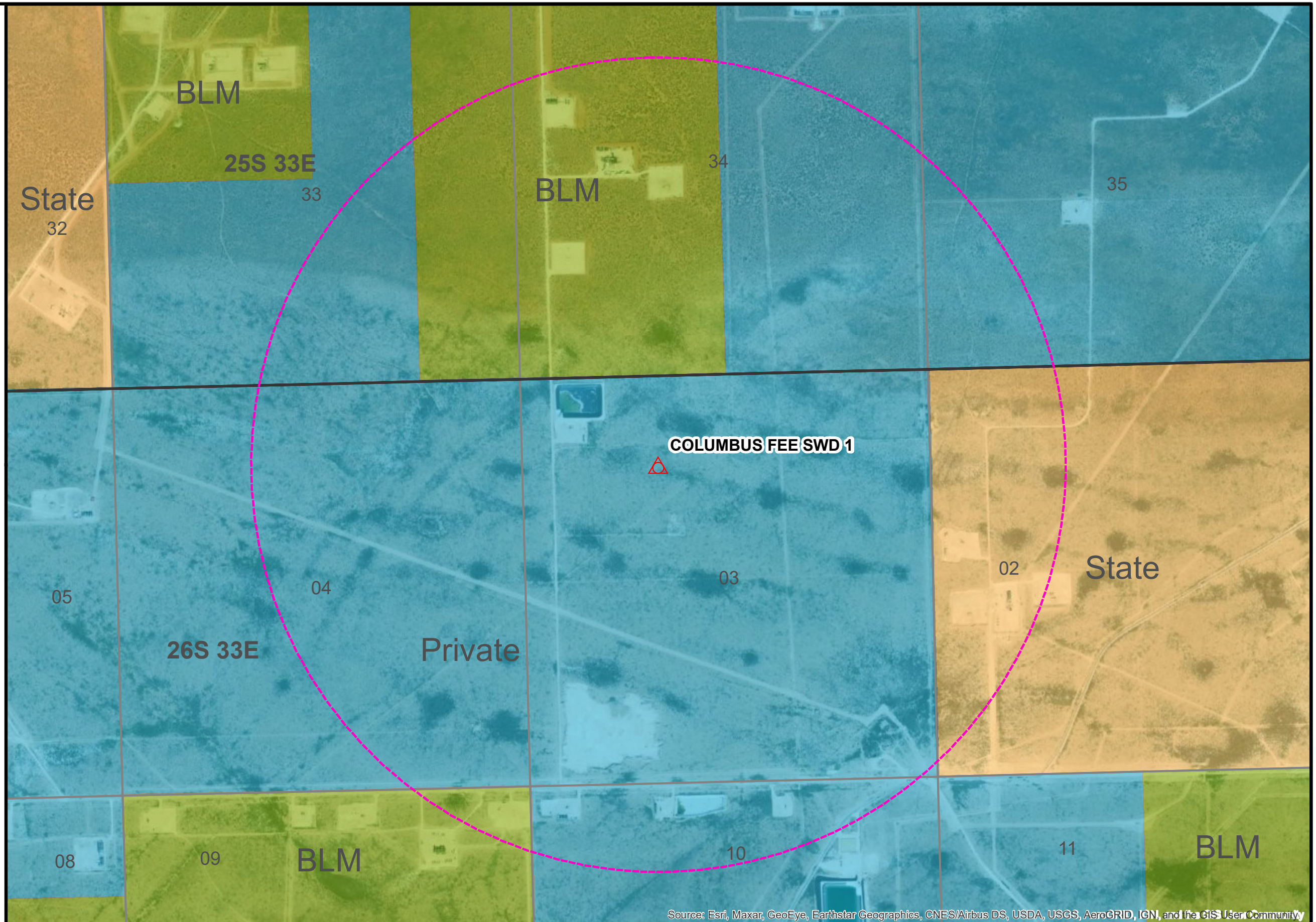
 BLM

 State

 Private



0 0.25 0.5  
Miles



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Surface Ownership**

**Solaris Water Midstream - Columbus Fee SWD #1 - Lea County NM**

Date: 4/6/2021



4/6/2021

Table 4  
Surface Owners Within 1 Mile

Solaris Water Midstream  
Columbus Fee SWD #1

Owner Name
INTREPID POTASH-NEW MEXICO
SANDRA RUDY BROWN ET AL