Additional

Information

AOR review and Extension 3/25/20



March 16, 2020

New Mexico Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Attention: Adrienne Sandoval

Re: Injection Permit Extension SWD-1816

Ms. Sandoval:

Solaris Water Midstream is requesting an extension on our Injection Permit (SWD-1816) Road Runner SWD #1 in Eddy Co., NM. This permit is due to expire on April 12, 2020. Plans for drilling this well will be the 3rd quarter of 2020.

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 need additional information I can be contacted at whitney.mckee@solarismidstream.com or 432-203-9020.

Thank you.

Sincerely,

Whitney Mckee Regulatory Specialist

State of New Mexico Energy, Minerals and Natural Resources Department

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-1816 April 12, 2019

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Solaris Water Midstream, LLC (the "operator") seeks an administrative order for its Road Runner SWD Well No. I (the "proposed well") with a location of 830 feet from the North line and 200 feet from the East line, Unit letter A of Section 33, Township 25 South, Range 27 East, NMPM, Eddy 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. One objection from an affected party was received within the prescribed waiting period and the application was set for hearing in Case No. 20405. Subsequently, the objection was withdrawn at hearing and the case dismissed with the application remanded to the Division administrative review process.

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, Solaris Water Midstream, LLC (OGRID 371643), is hereby authorized to utilize its Road Runner SWD Well No. 1 (API 30-015-45099) with a location of 830 feet from the North line and 200 feet from the East line, Unit letter A of Section 33, Township 25 South, Range 27 East, NMPM, Eddy 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 13305 feet to approximately 14325 feet. Injection will occur through internally-coated, 5-inch or smaller tubing within the 7½-inch liner and a packer set within 100 feet of the top of the disposal interval. This order 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 II and the operator shall be required to receive written permission prior to commencing disposal.

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 Artesia 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 in to next higher casing shoe, the operator shall perform remedial cement action 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%-inch liner to demonstrate placement cement and the cement bond with the tie-in with 9%-inch casing string. The operator shall provide a copy of the CBL to the Division's District II 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.

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 II 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 2661 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 II 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 II 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.

ANDRIENNE SANDOVAL

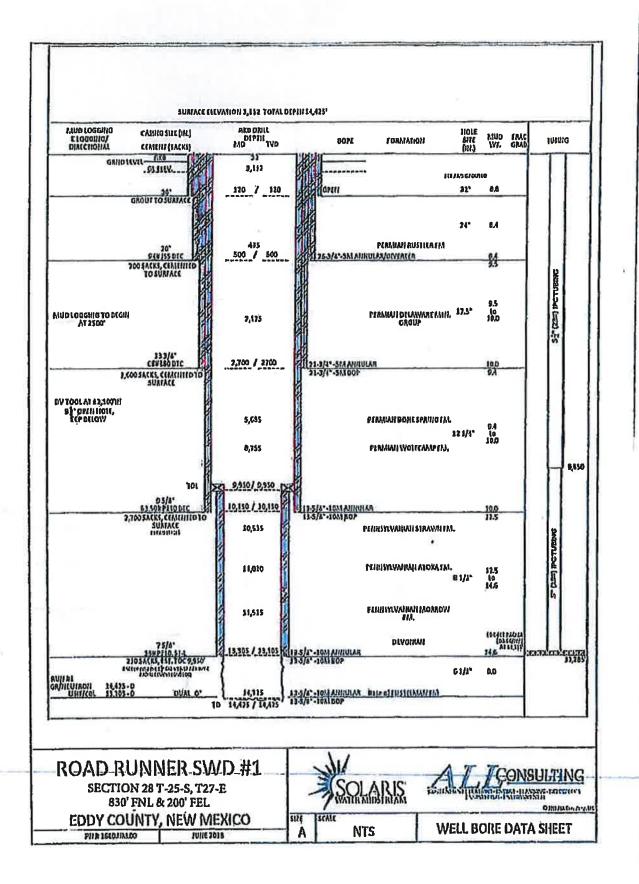
Director

AS/prg

cc: Oil Conservation Division - Artesia District Office

Well file 30-015-45099

Attachment: C-108 well completion diagram





March 16, 2020

New Mexico Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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If you need additional information I can be contacted at whitney.mckee@solarismidstream.com or 432-203-9020.

Thank you.

Sincerely,

Whitney McKee Regulatory Specialist



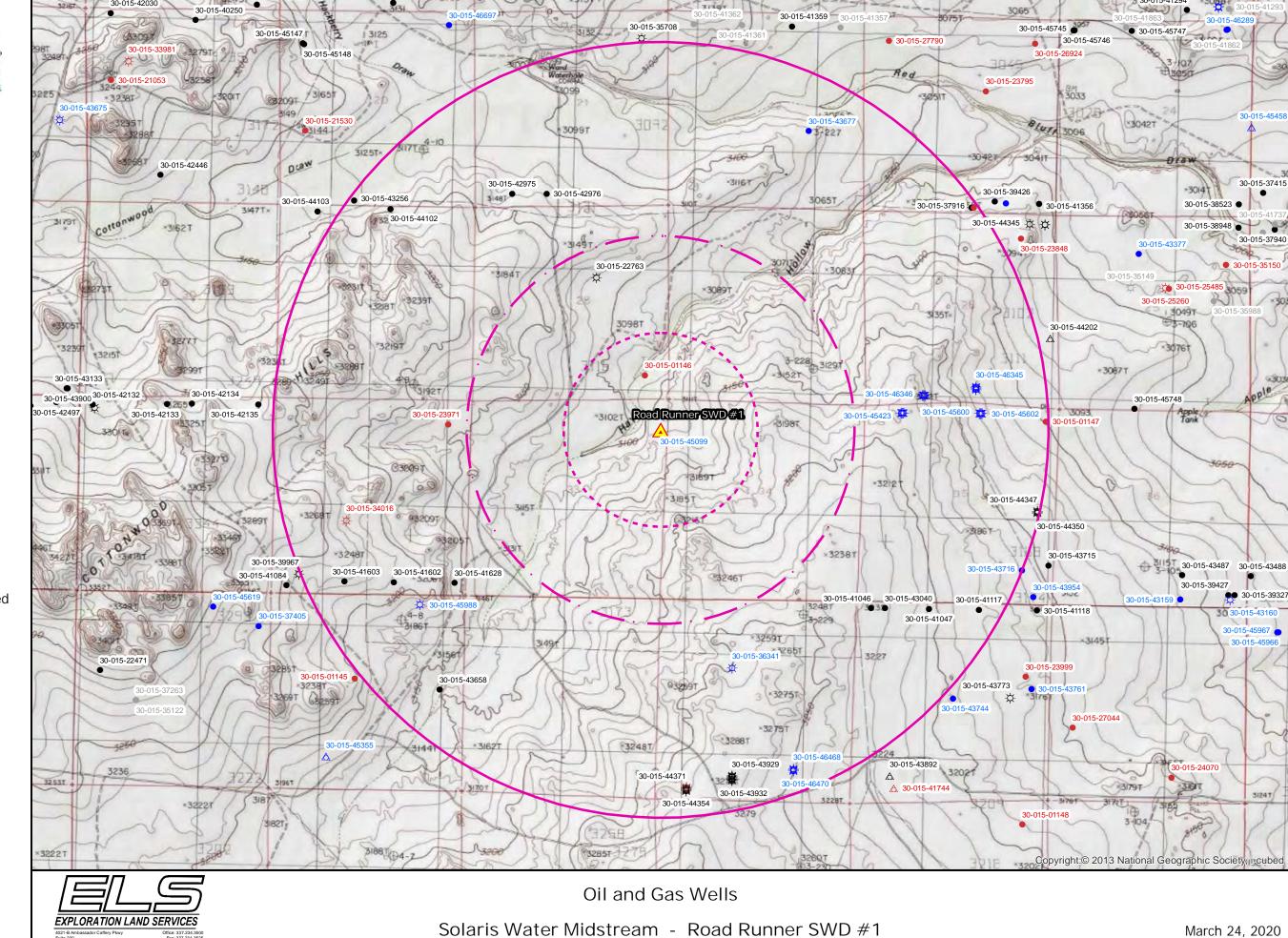
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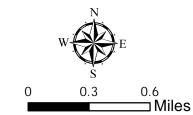
Distance (miles)



Oil and Gas (NMOCD)

- Gas, Active
- Gas, Cancelled
- Gas, New
- Gas, Plugged
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Salt Water Injection, Active
- Salt Water Injection, New
- Salt Water Injection, Plugged





API	wellname	well type	uletr	ogrid	agrid name	ctatus	tot donth	and id li
	BLACK RIVER 25 FEDERAL COM #003H	well_type	O-25-24S-26E		ogrid_name CIMAREX ENERGY CO.	N	tot_depth	96415] WILLOW LAKE, BONE SPRING, WEST
	SKEEN 2 26 27 STATE #001H	0	D-02-26S-27E		CHEVRON U S A INC	Λ		16800] DELAWARE RIVER, BONE SPRING
	MIDNIGHT SUN 2 26 27 #005H	0	D-02-26S-27E		CHEVRON U S A INC	A		16800] DELAWARE RIVER, BONE SPRING
30-015-45423	CICADA UNIT #022H	G	D-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #019H	G	D-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-45424	CICADA UNIT #021H	G	D-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-45425	CICADA UNIT #021H	G	D-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	SKEEN 2 26 27 STATE #002H	0	C-02-26S-27E		CHEVRON U S A INC	Λ		16800] DELAWARE RIVER, BONE SPRING
30-015-37916	COOKSEY 26 FEDERAL COM #001H	0	O-23-25S-27E		CHEVRON U S A INC	A		30216] HAY HOLLOW, BONE SPRING, NORTH
	SKEEN 2 26 27 STATE #003H	0	B-02-26S-27E		CHEVRON U S A INC	Δ		16800] DELAWARE RIVER, BONE SPRING
	CICADA UNIT #024H	G	B-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-45602	CICADA UNIT #023H	G	B-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-45600	CICADA UNIT #026H	G	B-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #025H	G	B-35-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-44350	CICADA UNIT #009H	G	I-35-25S-27E		CHEVRON U S A INC	A		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #008H	G	I-35-25S-27E	4323		A		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-44347	CICADA UNIT #007H	G	I-35-25S-27E	4323		Α		98220] PURPLE SAGE, WOLFCAMP (GAS)
	PRE-ONGARD WELL #001	0	A-35-25S-27E		PRE-ONGARD WELL OPERATOR	P	0	30220] 1 0111 22 31102) 11021 3 11111 (3.15)
	HAYHURST 23 STATE COM #001H	0	O-23-25S-27E		MEWBOURNE OIL CO	P	92	96403] WILDCAT, BONE SPRING
30-015-41628	COTTONWOOD HILLS 32 STATE COM #005H	0	P-32-25S-27E		CIMAREX ENERGY CO.	Α		97818] WC-015 G-03 S252636M, BONE SPRING
30-015-42975	WHITE CITY 21 25 27 FEDERAL COM #005H	0	M-21-25S-27E		CHEVRON U S A INC	A		30216] HAY HOLLOW, BONE SPRING, NORTH
	WHITE CITY 21 25 27 FEDERAL COM #006H	0	N-21-25S-27E		CHEVRON U S A INC	Α		30216] HAY HOLLOW, BONE SPRING, NORTH
50 013 12370	Willie Giff E1 E3 E7 FEBERAL GOM NOOON		17 22 233 272	1525	GILLANOIT G STAING	, ·		96070] WC, MORROW (GAS); [96785] HACKBERRY, MORROW, NORTH (G); [97474]
30-015-22763	LEONARDO BKL FEDERAL COM #001	G	G-28-25S-27E	7377	EOG RESOURCES INC	Α	1	HACKEBERRY DRAW, MORROW, NORTH (G)
	PRE-ONGARD WELL #001	0	A-28-25S-27E		PRE-ONGARD WELL OPERATOR	P	0	steresemi stern, memori, nemi (e)
30-015-45099	ROAD RUNNER SWD #001	ς	A-33-25S-27E		SOLARIS WATER MIDSTREAM, LLC	N.	0 1	[97869] SWD, DEVONIAN-SILURIAN
30-015-44371	CICADA UNIT #014H	G	M-03-26S-27E	4323		A		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #015H	G	M-03-26S-27E		CHEVRON U S A INC	A		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-44354	CICADA UNIT #017H	G	M-03-26S-27E		CHEVRON U S A INC	Δ		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-44367	CICADA UNIT #013H	G	M-03-26S-27E	4323		7		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #016H	G	M-03-26S-27E		CHEVRON U S A INC	Δ		98220] PURPLE SAGE, WOLFCAMP (GAS)
								98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43936	CICADA UNIT #004H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α		GAS)
30 013 13330	Clarify Civil 1100 III		1, 03 203 272	1525	GILLANOIT G STAING	<u> </u>		98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43932	CICADA UNIT #006H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α		GAS)
50 013 13332	Crons result incom		1, 03 203 272	1525	one vitori o o vitino	, ·		98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43937	CICADA UNIT #003H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α	1	GAS)
								98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43929	CICADA UNIT #001H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α		GAS)
	SCRABBLE BLE FEDERAL #001	G	F-03-26S-27E		EOG RESOURCES INC	N		96070] WC, MORROW (GAS)
								98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43930	CICADA UNIT #002H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α		GAS)
								[98140] WC-015 S262714M, WOLFCAMP (GAS) (ABO; [98220] PURPLE SAGE, WOLFCAMP
30-015-43926	CICADA UNIT #005H	G	N-03-26S-27E	4323	CHEVRON U S A INC	Α	9211	
	CICADA UNIT #036H	G	O-26-25S-27E		CHEVRON U.S.A.INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-46346	CICADA UNIT #037H	G	N-26-25S-27E	4323	CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-46469	CICADA UNIT #028H	G	O-03-26S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #035H	G	O-26-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
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30-015-46349	CICADA UNIT #040H	G	N-26-25S-27E	4323		N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #034H	G	O-26-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-46468	CICADA UNIT #027H	G	O-03-26S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-46347	CICADA UNIT #038H	G	N-26-25S-27E	4323		N		98220] PURPLE SAGE, WOLFCAMP (GAS)
	CICADA UNIT #029H	G	O-03-26S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-46342	CICADA UNIT #033H	G	O-26-25S-27E		CHEVRON U S A INC	N		98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-43256	POPULUS FEDERAL #003H	0	N-20-25S-27E	229137		Α		97818] WC-015 G-03 S252636M, BONE SPRING
	COTTONWOOD HILLS 32 STATE COM #003	0	N-32-25S-27E		CIMAREX ENERGY CO.	Α		97818] WC-015 G-03 S252636M, BONE SPRING
30-015-41602	COTTONWOOD HILLS 32 STATE COM #004H	0	O-32-25S-27E	215099		Α		97818] WC-015 G-03 S252636M, BONE SPRING
	PRE-ONGARD WELL #001	0	A-32-25S-27E		PRE-ONGARD WELL OPERATOR	Р	0	•
	COTTONBERRY 20 FEDERAL COM #004H	0	A-20-25S-27E		CIMAREX ENERGY CO.	Α	7445	[97816] WC-015 G-02 S252715A, BONE SPRING
							, , , , , , ,	

API	wellname	well_type	ulstr	ogrid	ogrid_name	status	s tot_depth pool_id_li
30-015-45988	HH SO 8 5 FEDERAL 004 #002H	G	B-17-26S-27E	4323	CHEVRON U S A INC	N	0 [98220] PURPLE SAGE, WOLFCAMP (GAS)
30-015-44102	POPULUS FEDERAL #002H	0	B-29-25S-27E	229137	COG OPERATING LLC	Α	7472 [97818] WC-015 G-03 S252636M, BONE SPRING
30-015-34016	TAMBORIL BGQ STATE COM #001	G	K-32-25S-27E	25575	EOG Y RESOURCES, INC.	P	125 [96070] WC, MORROW (GAS)



Legend

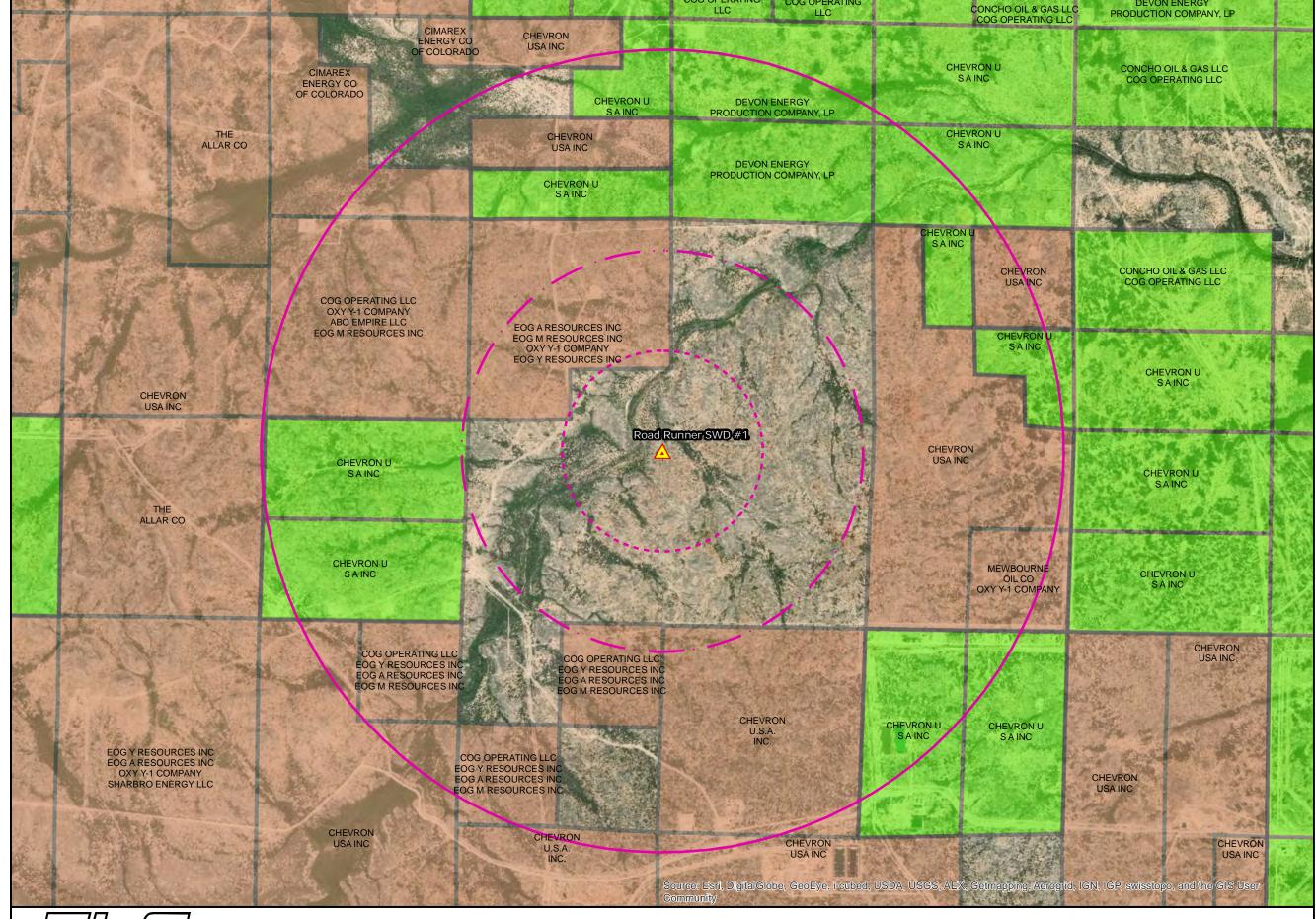
△ Subject SWD

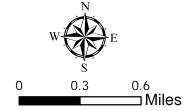
Distance (miles)

Oil and Gas Leases

BLM Lease

SLO Lease



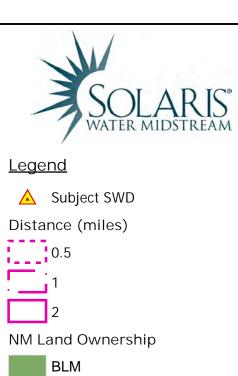


EXPLORATION LAND SERVICES

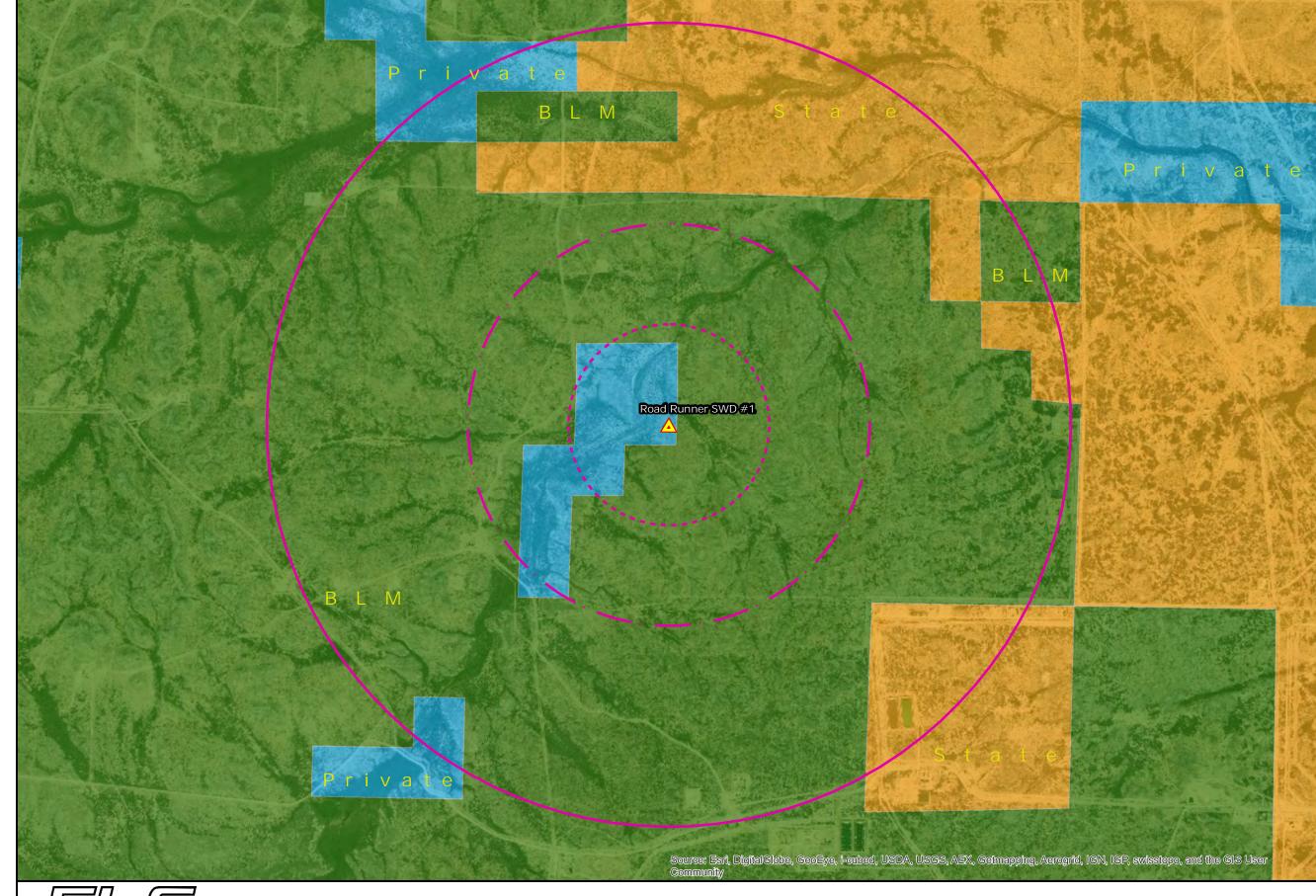
New Mexico State and Federal Leases

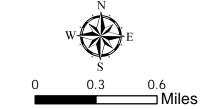
SerialNumb	Name1	PerInt1 Name2	PerInt2 Name3	PerInt3 Name4	PerInt4
NMNM 092167	EOG A RESOURCES INC	32 EOG M RESOURCES INC	32 OXY Y-1 COMPANY	32 EOG Y RESOURCES INC	4
NMNM 107369	CHEVRON USA INC	100	0	0	0
NMNM 118108	CHEVRON USA INC	100	0	0	0
NMNM 113399	COG OPERATING LLC	91.667 EOG Y RESOURCES INC	2.083 EOG A RESOURCES INC	2.083 EOG M RESOURCES INC	2.083
NMNM 114348	COG OPERATING LLC	33.33 OXY Y-1 COMPANY	22.23 ABO EMPIRE LLC	22.22 EOG M RESOURCES INC	22.22
NMNM 114349	THE ALLAR CO	100	0	0	0
NMNM 114968	MEWBOURNE OIL CO	66.66 OXY Y-1 COMPANY	33.34	0	0
NMNM 109756	CHEVRON USA INC	100	0	0	0
NMNM 121473	CHEVRON USA INC	100	0	0	0
NMNM 130854	CIMAREX ENERGY CO OF COLORADO	100	0	0	0
NMNM 138826	CHEVRON U.S.A. INC.	100	0	0	0
NMNM 138827	CHEVRON U.S.A. INC.	100	0	0	0

UNIQUEKEY	LSE_PREFIX	LSE_NUMBER	LSE_SUFFIX	OGRID	OGRID_NAM
V079660001	V0	7966	1	4323	CHEVRON U S A INC
V079760001	V0	7976	1	4323	CHEVRON U S A INC
VB06730002	VB	673	2	4323	CHEVRON U S A INC
VB07340002	VB	734	2	4323	CHEVRON U S A INC
VB09940002	VB	994	2	4323	CHEVRON U S A INC
VB10050002	VB	1005	2	4323	CHEVRON U S A INC
VB17790001	VB	1779	1	6137	DEVON ENERGY PRODUCTION COMPANY, LP
VB17800001	VB	1780	1	6137	DEVON ENERGY PRODUCTION COMPANY, LP
VB17960002	VB	1796	2	4323	CHEVRON U S A INC
VB18050002	VB	1805	2	4323	CHEVRON U S A INC



State Private







Surface Owners

Solaris Water Midstream - Road Runner SWD #1

Solaris Water Midstream Road Runner SWD #1

OWNER NAME

BUREAU OF LAND MANAGEMENT STATE OF NEW MEXICO DAVID AND LAVERNE MALEY FOREHAND RANCHES, INC HAYHURST FAMILY, LLC