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

APPLICATION OF SOLARIS WATER MIDSTREAM, LLC FOR APPROVAL OF SALT WATER DISPOSAL WELL, EDDY COUNTY, NEW MEXICO.

CASE NO. 20473

APPLICATION

Solaris Water Midstream, LLC (Solaris), by and through undersigned counsel of record, hereby applies for an order approving a salt water disposal well in Eddy County, New Mexico. In support of this Application, Solaris states as follows:

 Solaris proposes to drill Jessie Spano State SWD, located 295 feet from the North line and 2505 feet from the west line of Section 36, Township 26 South, Range 30 East, NMPM, Eddy County, New Mexico.

2. Solaris seeks authority to inject salt water into the Devonian formation at a depth of 16,689 to 18,167 feet.

3. Form C-108, dated March 20, 2019 is attached hereto as Exhibit A.

4. The granting of this application with prevent waste and protect correlative rights.

5. A Proposed Advertisement is attached hereto.

WHEREFORE, Solaris requests that this application be set for hearing before an Examiner of the Oil Conservation Division on May 2, 2019, and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted. raineHollinguos

PROPOSED ADVERTISEMENT

CASE NO.______. Application of Solaris Water Midstream, LLC for approval of a salt water disposal well, Eddy County, New Mexico. Applicant seeks an order approving disposal of salt water in the Devonian formation at depths of 16,689 to 18,167 feet through the Jesse Spano State SWD well, located 295 feet from the North line and 2505 feet from the west line of Section 36, Township 26 South, Range 30 East, NMPM, Eddy County, New Mexico.

x				Revised March 23, 2017
RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geologi	ABOVE THIS TABLE FOR OCCOD CO OIL CONSERV Cal & Engineering rancis Drive, Santo	ATIÓN DIVISION 9 Bureau –	
	ADMINIST	RATIVE APPLICATI	ON CHECKLIST	
THI	S CHECKLIST IS MANDATORY FOR A REGULATIONS WHICH R	LL ADMINISTRATIVE APPLICA EQUIRE PROCESSING AT THE		
	Water Midstream, LLC e Spano State SWD 1			ID Number: <u>371643</u> 30-015-45434
ol: SWD; Devoni			Code: 96101	
		INDICATED BELC	W	THE TYPE OF APPLICATION
A. Locatio	LICATION: Check those n – Spacing Unit – Simul]NSL 🛛 NSP _P	taneous Dedicatio	n	ISD
 [I] Cor [II] Inje NOTIFICATIC A. Offse BRoyo C App D Noti E Noti F Surfo G For o 	one only for [1] or [1] mmingling – Storage – N DHC CTB F ection – Disposal – Press WFX PMX S N REQUIRED TO: Check et operators or lease ho alty, overriding-royalty-o lication requires publish fication and/or concurr fication and/or concurr ace owner all of the above, proof condice required	PLC PC C ure Increase – Enho WD IPI E those which apply Iders whers, revenue ow ed notice ent approval by SL ent approval by BL	anced Oil Recove OR PPR mers O M	FOR OCD ONLY Notice Complete Application Content Complete
administrativ understand	DN: I hereby certify that the approval is accurate that no action will be to are submitted to the Di	and complete to t ken on this applicc	he best of my kn	owledge. I also
	Note: Statement must be compl	eted by an individual with	managerial and/or su	pervisory capacity.
rian Wood int or Type Name	; ;		3-20-19 Date	
•	Bliked		505 466-8120 Phone Number	ſ
ignature			brian@pcrmitsw e-mail Address	

2. >

٩%.

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

:

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

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: Secondary Recovery Pressure Maintenance XXX Disposal Storage Application qualifies for administrative approval? XXX Yes No
H.	OPERATOR:SOLARIS WATER MIDSTREAM, LLC
	ADDRESS:907 TRADEWINDS BLVD., SUITE B, MIDLAND TX 79706
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
IŲ.	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 XXX 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: <u>Jessie Spano State SWD 1</u> <u>30-015-45434</u>
•	 Proposed average and maximum daily rate and volume of fluids to be injected; SWD; Devonian Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and; 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: BRIAN WOOD
	SIGNATURE: DATE: MAR. 18, 2019
*	E-MAIL ADDRESS: brian@permitswest.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:
DIST	RIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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:

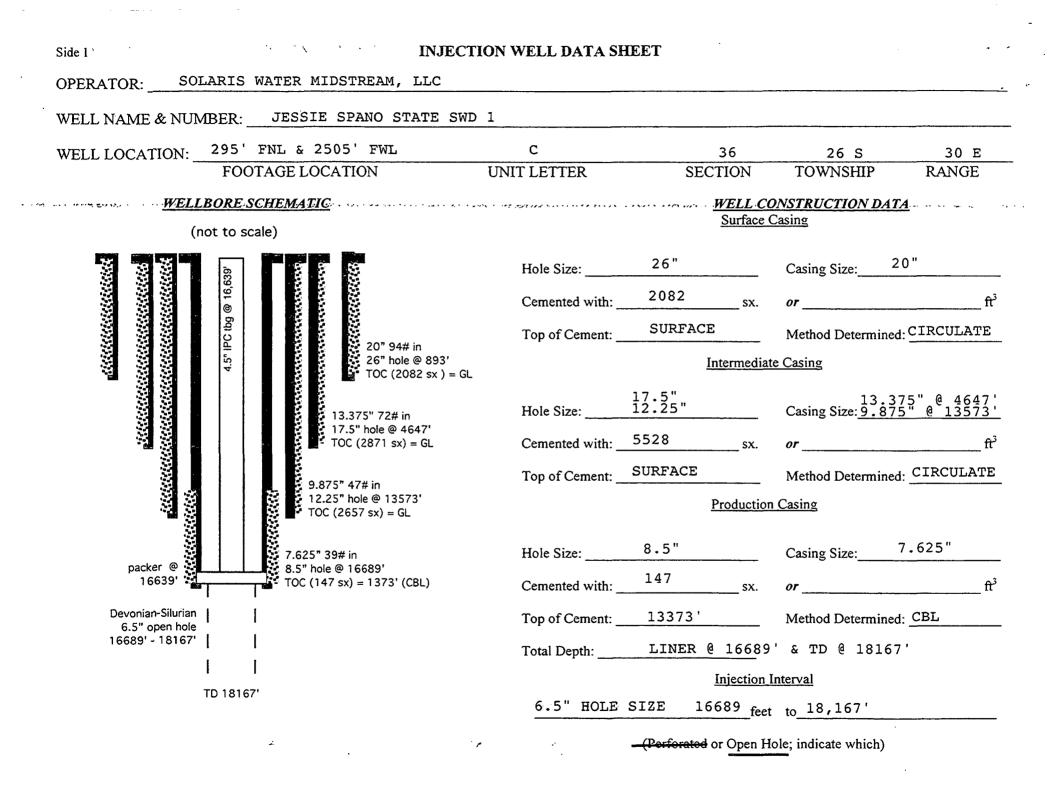
- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(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 5t. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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



	INJECTION	WELL	DATA	SHEET
--	------------------	------	------	-------

Tubing Size: 4.5" Lining Material: DUOLINE GLASSBORE
Type of Packer: NICKEL PLATED DOUBLE GRIP RETRIEVABLE
 Packer Setting Depth: ~16,639 '
Other Type of Tubing/Casing Seal (if applicable):
Additional Data
1. Is this a new well drilled for injection?YesNo
If no, for what purpose was the well originally drilled?
2. Name of the Injection Formation: DEVONIAN
3. Name of Field or Pool (if applicable): SWD; DEVONIAN (96101)
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. <u>NOT IN OTHER ZONES</u>
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
OVER: DELAWARE BRUSHY CANYON (5847'), BONE SPRING (8273'),
WOLFCAMP (10808'), & MORROW (14,330')
UNDER: NONE

30-015-45434

I. Goal is to drill an 18,167' deep commercial saltwater disposal well on NM State Land Office surface. Proposed disposal interval will be 16,689' – 18,167' in the SWD; Devonian (96101). See Exhibit A for C-102 and map.

- II. Operator: Solaris Water Midstream, LLC [OGRID 371643]
 Operator phone number: (432) 203-9020
 Operator address: 907 Tradewinds Blvd., Suite B Midland TX 79706
 Contact for Application: Brian Wood (Permits West, Inc.) Phone: (505) 466-8120
- III. A. (1) Lease name: Jessie Spano State SWD (state surface)
 Well name and number: Jessie Spano State SWD 1
 Location: 295' FNL & 2505' FWL Section 36, T. 26 S., R. 30 E.
 - A. (2) Surface casing (20", 94#, H-40) will be set at 893' in a 26" hole and cemented to GL with 2082 sacks.

First intermediate casing (13.375", 72#, HCL-80, BTC) will be set at 4,647' in a 17.5" hole and cemented to GL with 2,871 sacks

Second intermediate casing (9.875", 47#, HCP-110) will be set at 13,573' in a 12.25" hole and cemented to GL with 2,657 sacks.

Liner (7.625", 39#, P-110) will be set at 16,689' in an 8.5" hole and cemented to 13,373' (TOL) with 147 sacks.

A 6.5" open hole will be drilled to 18,167'.

1

ï

2

A. (3) Tubing will be CLS 4.5" duoline 20 Glassbore[®] or its equivalent. Setting depth will be ≈16,639'. (Disposal interval will be 16,689' to 18,127'.)



PAGE 1

PAGE 2

- A. (4) A nickel plated double grip retrievable packer will be set at $\approx 16,639'$ (or $\leq 100'$ above the top of the open hole which will be at 16,689').
- B. (1) Disposal zone will be the Devonian (SWD; Devonian (96101) pool). Estimated fracture gradient is ≈0.65 psi/foot.
- B. (2) Disposal interval will be open hole from 16,689' to 18,167'.
- B. (3) Well has not been drilled. It will be drilled as a saltwater disposal well.
- B. (4) No perforated intervals are in the well.

í

1

- B. (5) Only zones currently or historically producing in the 1-mile area of review and above the Devonian (16,689') are the Delaware Brushy Canyon (5,847'), Bone Spring (8,273'), Wolfcamp (10,808'), and Morrow (14,330'). Delaware is both a producing zone and has been used for injection and disposal. No oil or gas zone is below the Devonian within 1 mile.
- IV. This is not an expansion of an existing injection project. It is disposal only.

V. Exhibit B shows and tabulates the 24 wells (14 oil or gas + 8 P&A + 2 SWD) within a mile radius. Deepest well within a mile is 14,438' TVD. Exhibit C shows all 68 existing wells (43 oil or gas wells + 20 P & A wells + 4 injection or disposal wells + 1 water well) within a two-mile radius. No Devonian or deeper SWD well is within a minimum 2-mile radius.

All leases within a 1-mile or 2-mile radius are BLM, fee, or State. Exhibits D and E show all the leases within a 1-mile radius and lessors within a 2-mile radius.

VI. No Devonian penetrator is within a mile. Deepest (14,438' TVD) well (30-015-22810) within a mile bottomed in the Morrow, >2,000' above the Devonian.



s.

i

ķ

VII. 1. Average injection rate will be ≈30,000 bwpd.
 Maximum injection rate will be 40,000 bwpd.

- 2. System will be open and closed. Water will both be trucked and piped.
- Average injection pressure will be ≈2,500 psi Maximum injection pressure will be 3,337 psi (= 0.2 psi/foot x 16,689' (top of open hole)).
- 4. Disposal water will be produced water, mainly from Delaware, Bone Spring, and Wolfcamp wells. There are 113 approved Delaware wells, 38 approved Bone Spring wells, and 81 approved Wolfcamp wells in T. 26 S., R. 30 E. The well will take other Permian Basin waters. Abstracts of produced water analyses (from Go-Tech) from wells in T. 25 S., R. 28 30 E. are in Exhibit F. A Devonian well from further north in Eddy County is also in Exhibit F. The table below shows the ranges of the produced waters in relation to Devonian water.

Parameter (mg/l)	Devonian	Delaware	Avalon	Bone Spring	Morrow
Chloride	34,400	89,700 - 38,189 - 212,544 129,012		119,078 - 125,493	N/A
Sulfate	3,600	85 - 3,756	1,249 - 2,127	0 - 17	N/A
TDS :	63,260	100,240 - 311,052	65,461 - 219,574	190,675 - 208,312	102,849

Solaris has not experienced any compatibility problems in the first 7 months of operating its Solaris Eddy State 2 (30-015-44001) Devonian SWD well. Over 4,571,124 barrels have been disposed to date in the first 9 months.

5. No Devonian well has been drilled within 2 miles in New Mexico or Texas. Closest Devonian producer in New Mexico is more than half dozen miles away. Closest Devonian SWD (30-015-45223) in New Mexico is 4 miles north-northwest. This well has an approved APD, but SWD order has not yet been approved.

VIII. The Devonian (\approx 1,578' thick) is mainly limestone and dolomite. Closest possible underground source of drinking water above the proposed disposal

30-015-45434

30-015-45434

interval are the red beds above the Rustler. According to State Engineer records (Exhibit G), the closest water well (440' deep C 02165) is 1.56 miles northwest. This appears to be the Gyp Windmill which is 1.42 miles northwest. This was dry during a January 18-19 2019 field inspection. No underground source of drinking water is below the proposed disposal interval.

Formation tops are:

7

?

Quaternary = 0'
Rustler anhydrite = $873'$
Castile = $2179'$
Lamar (base of salt) = 3660'
Bell Canyon = 3697'
Cherry Canyon = 4597'
Brushy Canyon = 5847'
Bone Spring limestone = $7520'$
Wolfcamp = 10808'
Strawn = 13593'
Atoka = 13714'
Morrow = 14330'
Mississippian = 16212'
Woodford shale = 16554'
Devonian/Silurian = 16689'
disposal interval = 16689' - 18167'
Fusselman = 17646'
TD = 18167'
Montoya = 18267'

One water well is within a 2-mile radius according to State Engineer records (Exhibit G). Depth is 440'. Neither it nor any other water wells were found during a January 18-19 2019 field inspection. There will be >15,000' of vertical separation and shale, salt, and anhydrite strata between the bottom of the only likely underground water source (red beds) and the top of the Devonian.

IX. The well will be stimulated with acid.



í

30-015-45434

X. A CBL will be run from production casing setting depth to TOC. GR log will be run from the second intermediate to TD.

XI. No active water well was found within 2-miles during a January 18-19 2019 field inspection.

XII. Solaris Water Midstream, LLC (Exhibit H) is not aware of any geologic or engineering data that may indicate the Devonian is in hydrologic connection with any underground sources of water. Deepest water well within a 2-mile radius is 440'. There are 259 approved Devonian SWD wells in New Mexico. Closest Quaternary fault is \approx 61 miles west-southwest.

XIII. A legal ad (see Exhibit I) was published on March 12, 2019. Notice (this application) has been sent (Exhibit J) to the surface owner (NM State Land Office), BLM, and all well operators (EOG, Mewbourne, RKI, Tap Rock, WPX) regardless of depth, lessees of record (Chevron, Energen, EOG, Flat Creek, Marshall & Winston, Occidental Permian, RKI, Tap Rock, WPX), and operating right holders within a mile.



PAGE 5

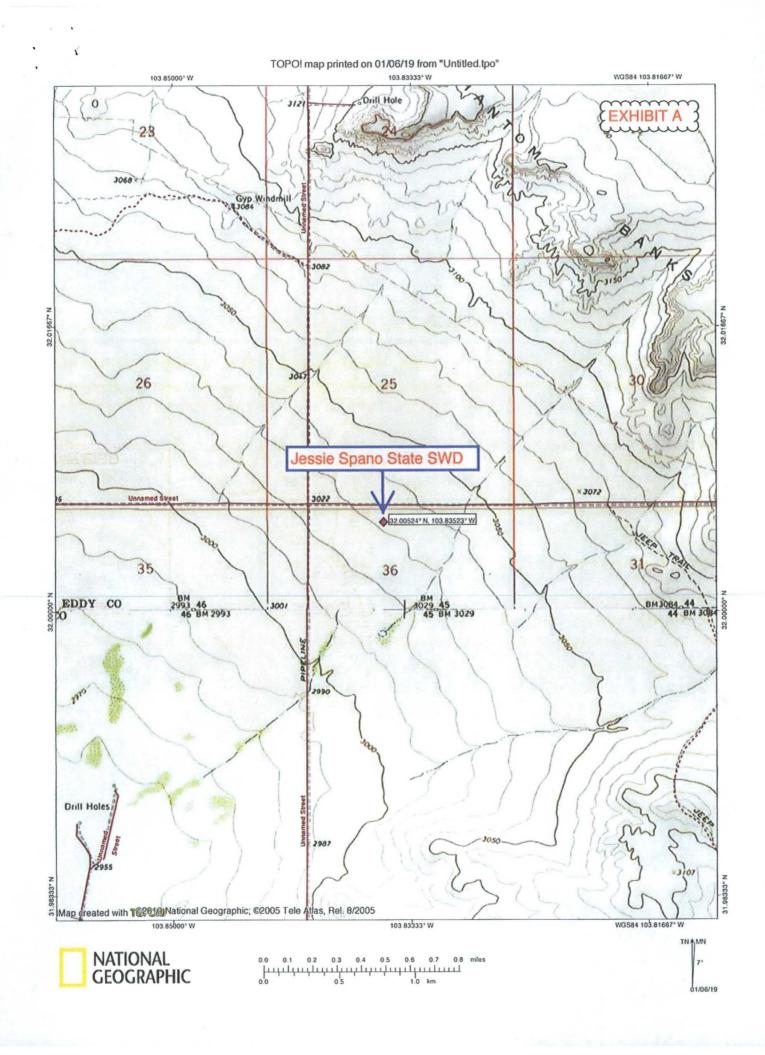
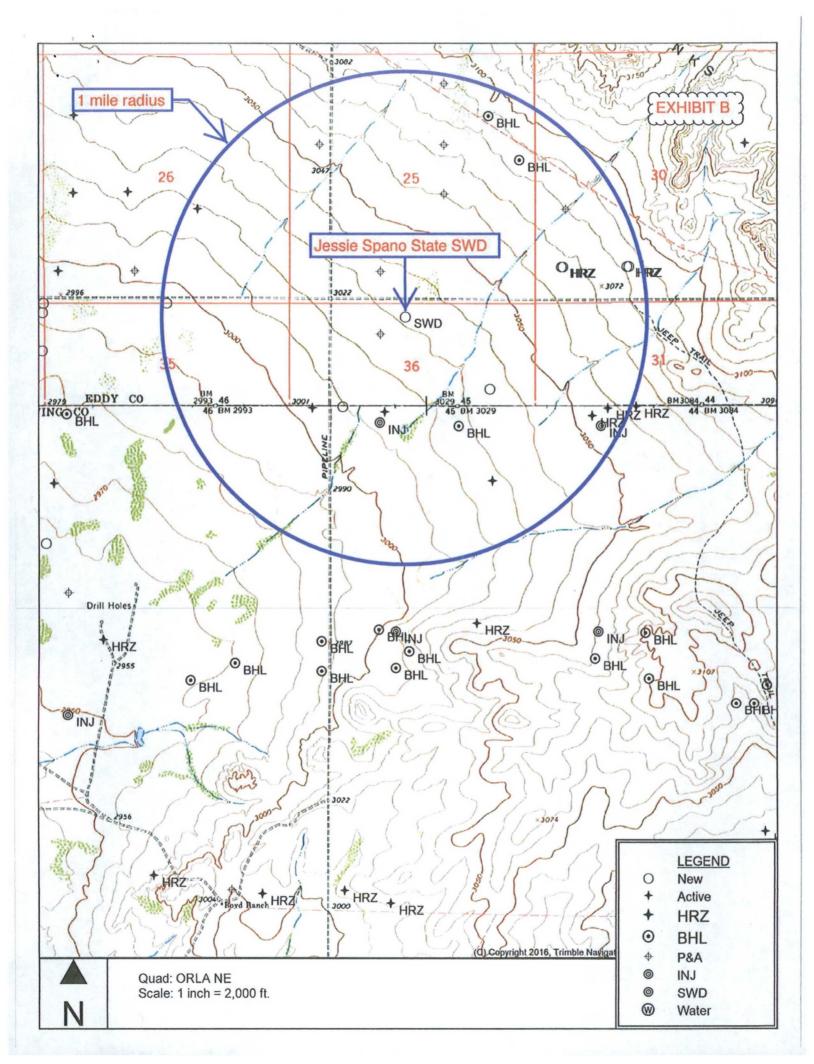


EXHIBIT A Form C-102 DISTRICT I State of New Mexico Energy, Minerals and Natural Resources Department NOV 0 5 2018 1625 N. French Dr., Hobbs, NM 68240 Phone (678) 893-6161 Fast (678) 893-6780 Bovised August 1, 2011 DISTRICT II 011 S. First St., Artenin, NM 68210 Phone (578) 748-4183 Face (\$78) 748-4720 Submit one copy to appropriate OIL CONSERVATION DIVERTION II-ARTESIA O.C.D. DISTRICT III 1220 South St. Francis Dr. 1000 Rio Brazos Ed., Asteo, NM 87410 Phone (608) 834-6178 Paxi (608) 834-6170 Santa Fe, New Mexico 87505 DISTRICT IV 1220 B. St. Francis Dr., Banta Fe, Nil 67505 Phone (500) 476-3450 Fam (500) 478-3458 CI AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT API Number Pool Code Pool Name 30-015-45434 96101 SWD; Devonian Property Code Property Name Well Number 322864 JESSIE SPANO STATE SWD 1 OGRID No. Operator Name Elevation 371643 3033' SOLARIS WATER MIDSTREAM, LLC Surface Location North/South line UL or lot No. Section Township Range Lot Idn Feet from the Feet from the East/West line County С 36 26 S 30 E 295 NORTH 2505 WEST EDDY Bottom Hole Location If Different From Surface UL or lot No. Section Township Lot Idn Feet from the North/South line Feet from the East/West line Range County Dedicated Acres Joint or Infill Consolidation Code Order No. 2.50 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organisation either owns a working interest or unlekteed mineral interest in the 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 therest, or to a voluntary pooling agreement or a compulsory pooling order herelefore entered by the division. **OPERATOR CERTIFICATION** SURFACE LOCATION Lat - N 32.005244' Long - W 103.835233' NMSPCE- N 366002.7 E 695734.7 (NAD-83) N:366293.4 E:693228.3 (NAD 83) N:386298.0 E:695892.3 Jonne 295 N:366302.6 E:698558.1 110/31/18 (NAD 83) (NAD 83) Signature Date 2505 **Bonnie Atwater** Printed Name bonnie.atwater@solarismidstream.com Email Address SURVEYOR CERTIFICATION I hereby certify that the well location shown Lot 4 Lot 3 Lot 2 Lot 1 on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and N:364166.5 E:698569.6 correct to the best of my belief. AUGONT LIG N:364138.9 E:693238.7 N:364152.7 E:695903.7 New Mexico (NAD 83) (NAD 83) (NAD 83) Texas MEXIC Date Sul SEM Signat 0 \$ Profe lon rveyor Certifi 7977 0' 500' 1000* 1500' 2000' SCALE: 1" = 1000' WO Num.: 34065

RECEIVED



÷

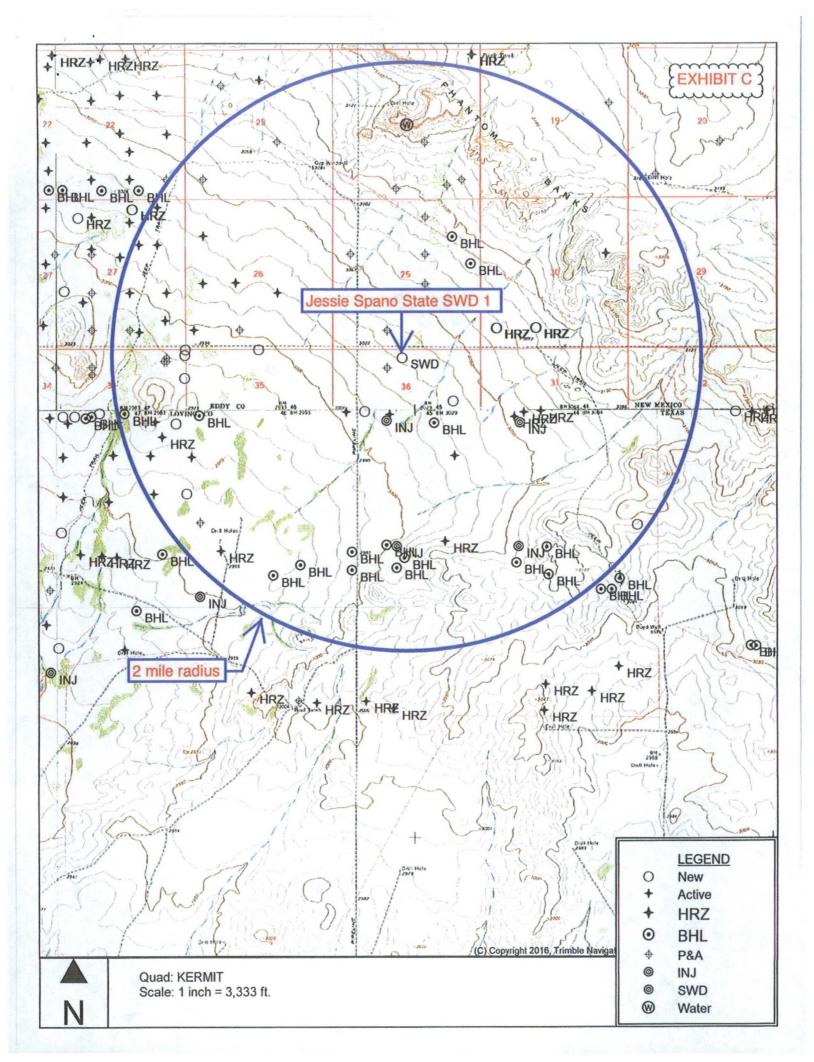
۰.

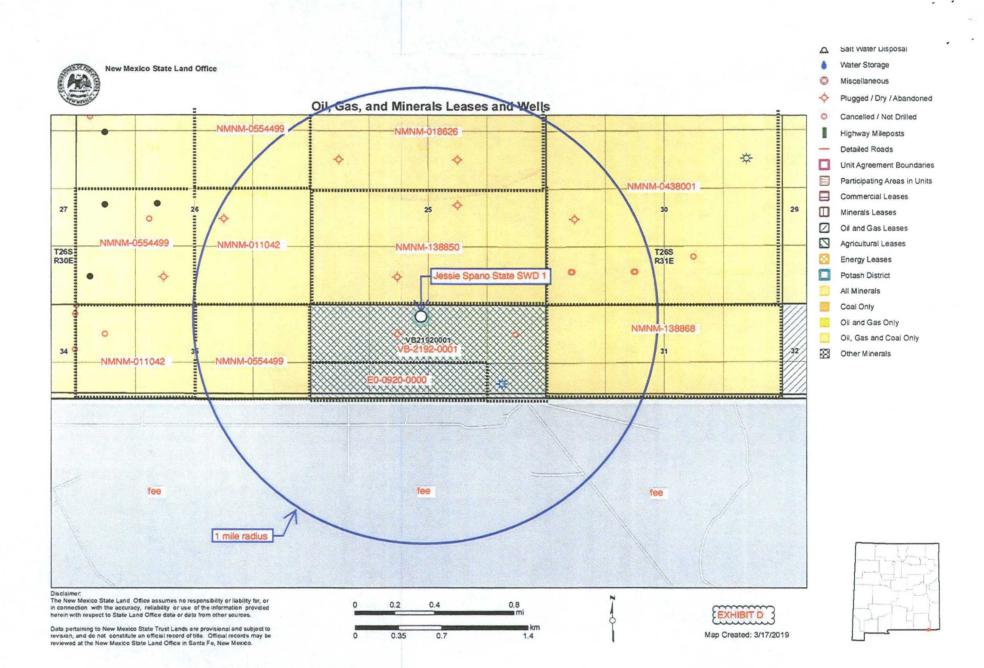
ΑΡΙ	OPERATOR	WELL	ТҮРЕ	UNIT- SECTION	TVD	ZONE @ TD	FEET FROM JESSIE SPANO STATE SWD 1
3001525762	Corinne Grace	Win St 001	P&A	C-36	201	Tertiary red beds	651
3001525745	RKI	Grace CG Federal 002	P&A	N-25	7020	Delaware	1084
30131387	WPX	MedicineBow 56-1-3 #1H	G	тх	11167	Wolfcamp	2200
30131961	WPX	Stateline SWD 2 #1	SWD	тх	5162	Bone Spring	2271
3001544384	Tap Rock	Nailed It State Com 001	G	1-36	11737	Wolfcamp	2384
-30132639	WPX	CBR 2 #4H	G	тх	11119	Wolfcamp	2500
30131827	WPX 🧃	TXL #A001PA	0	тх	8173	Bone Spring	2640
3001525603	Claco	Grace CG Federal 001	P&A	J-25	7025	Delaware	2713
30131555	RKI -	CBR2 1H	0	ТΧ	8283	Bone Spring	2743
3001544920 EOG Ea		Easy Wind 30 Federal Com 701H	G	4-30	10322	Wolfcamp	3530
3001544921 EOG F		Easy Wind 30 Federal Com 702H	G	4-30	Plan: 11015	Wolfcamp	3564
		Lindale 24 25 W1AH Federal 001H	G	A-24	11195	Wolfcamp	3709 (BHL)
3001525450 RKI		Spitfire 25 001	P&A	G-25	12790	Wolfcamp	3724
· · · · · · · · · · · · · · · · · · ·		Lindale 24 25 W1AH Federal 002H	G	A-24	11424	Wolfcamp	4060 (BHL)
		Amoco Federal 001	P&A	E-25	7143	Delaware	4091
3001522476	Texas Pacific	Phantom Draw Unit 002	P&A	L-30	12820	Wolfcamp	4137
30131706	WPX -	CBR 2 #23	0	тх	7842	Delaware	, 4225 -
- 30132372	WPX	CBR 2 #2H	G	тх	11165	Wolfcamp	4600
30132916	WPX	CBR 11-2 #1H	G	тх	10251	Wolfcamp	4800
30131958	RKI :	Stateline SWD 2 #2	SWD	тх	5190	Delaware	4833
3001544922	EOG	Easy Wind 30 Federal Com 703H	G	N-30	Plan: 11015	Wolfcamp	4920

SORTED BY DISTANCE FROM JESSIE SPANO STATE SWD 1

ΑΡΙ	OPERATOR WELL Easy Wind 30		ТҮРЕ	UNIT- SECTION	TVD	ZONE @ TD	FEET FROM JESSIE SPANO STATE SWD 1
3001544923	8001544923 EOG Eas Feder		G	N-30	Plan: 11015	Wolfcamp	4955
3001525951	5951 RKI Amoco Federal 002		P&A	B-25	5990	Delaware	5021
3001522810	RKI	Ross Draw Unit 007	P&A	J-26	14438	Morrow	5054
3001535865	RKI _	Ross Draw Unit 028	P&A	N-26	6900	Delaware	5896

٠.



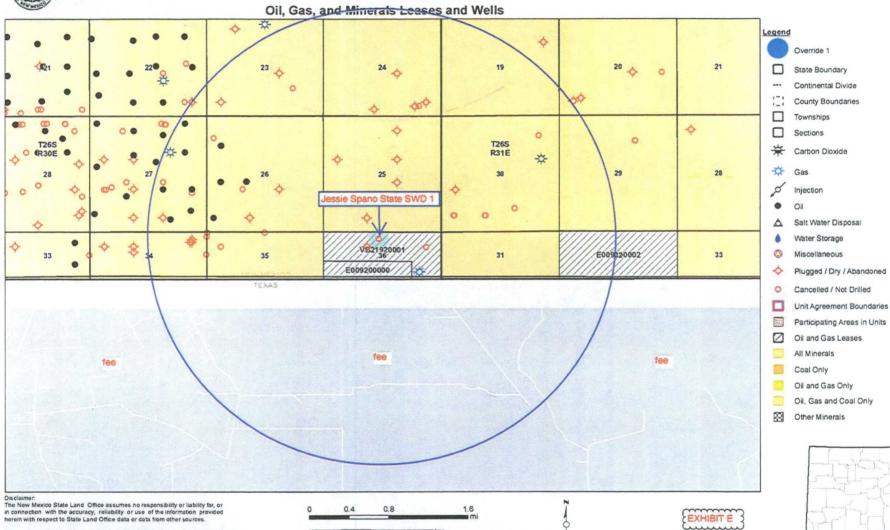


•

Aliquot Parts in Area of Review	Lessor	Lease	Lessee of Record	Operators (all shallower than Devonian)
N2 25-26s-30e	BLM	NMNM-018626	Occidental Permian	Mewbourne
S2 25-26s-30e	BLM	NMNM-138850	Tap Rock	Mewbourne
E2NE4 & SWNE 26-26s-30e	BLM	NMNM-0554499	Marshall & Winston	EOG & WPX
SE4 26-26s-30e	BLM	' NMNM-011042	NVDY RKI	WPX
SESW 26-26s-30e	BLM	NMNM-0554499	Marshall & Winston	WPX
NENW 35-26s-30e	BLM	NMNM-011042	RKI	none
N2NE4 and Lots 1 & 2 35-26s-30e	BLM	NMNM-0554499	Marshall & Winston	none
N2N2 & Lot 1 36-26s-30e	NMSLO	VB-2192-0001	Energen	Tap Rock
Lots 2-4 36-26s-30e	NMSLO	E0-0920-0000	Chevron USA	Tap Rock
NWNW, S2NW, & SW4 30-26s-31e	BLM	NMNM-0438001	EOG	EOG & WPX
NENW & Lots 1-3 31-26s-31e	BLM	NMNM-138868	Flat Creek	none
Texas	fee	fee	WPX	WPX & RKI



New Mexico State Land Office



0

0.5 1

Data pertaining to New Mexico State Trust Lands are provisional and subject to revision, and do not constitute an official record of title. Official records may be reviewed at the New Mexico State Land Office in Santa Fo, New Mexico.

Map Created: 3/17/2019

14 1. ¹

and the second s

a second provide the second second

PRODUCED WATER ANANLYSES (mg/l) FROM T. 25 S., R. 28 - 30E.

	API	Section	Township	Range	Formation	TDS	Sodium	Chloride	Carbonate	Sulfate
	3001537626	16	255	29E	Avalon Upper	129595	49316	76682	366	1747
	3001537625	16	255	29E	Avalon Upper	208454	79520	121800	3208	1994
The De Torie	3001537626	_ 1 <u>6</u>	<u>, , , , ,</u> 25S	29E	Avalon Upper	219574	84ุ179	129012	3,179	1497
	3001537627	16	255	29E	Avalon Upper	201311	77136	117265	3343	2127
	3001537628	16	255	29E	Avalon Upper	190431	71871	111478	3225	1389
	3001537875	16	255	29E	Avalon Upper	187759	71166	109624	3212	1623
	3001538272	8	255	29E	Avalon Upper	65466	24094	38189	183	1589
	3001537877	16	255	29E	Avalon Upper	200382	76518	118991	1464	1277
	3001537878	16	255	29E	Avalon Upper	207678	79392	123161	1708	1342
	3001538242	8	255	29E	Avalon Upper	190364	72196	113348	708	1578
	3001538272	8	255	29E	Avalon Upper	150472	55164	89777	610	1249
	3001537876	16	255	29E	Avalon Upper	193732	74028	113441	1830	2665
	3001529367	1	255	28E	Delaware	301207	109024	221998	74	85
	3001530754	1	255	28E	Delaware	289700	104602	212544	50	508
	3001541311	4	255	28E	Bone Spring 2nd Sand	190675	57102	119078	93	17
	3001502520	28	255	28E	Morrow	102849				

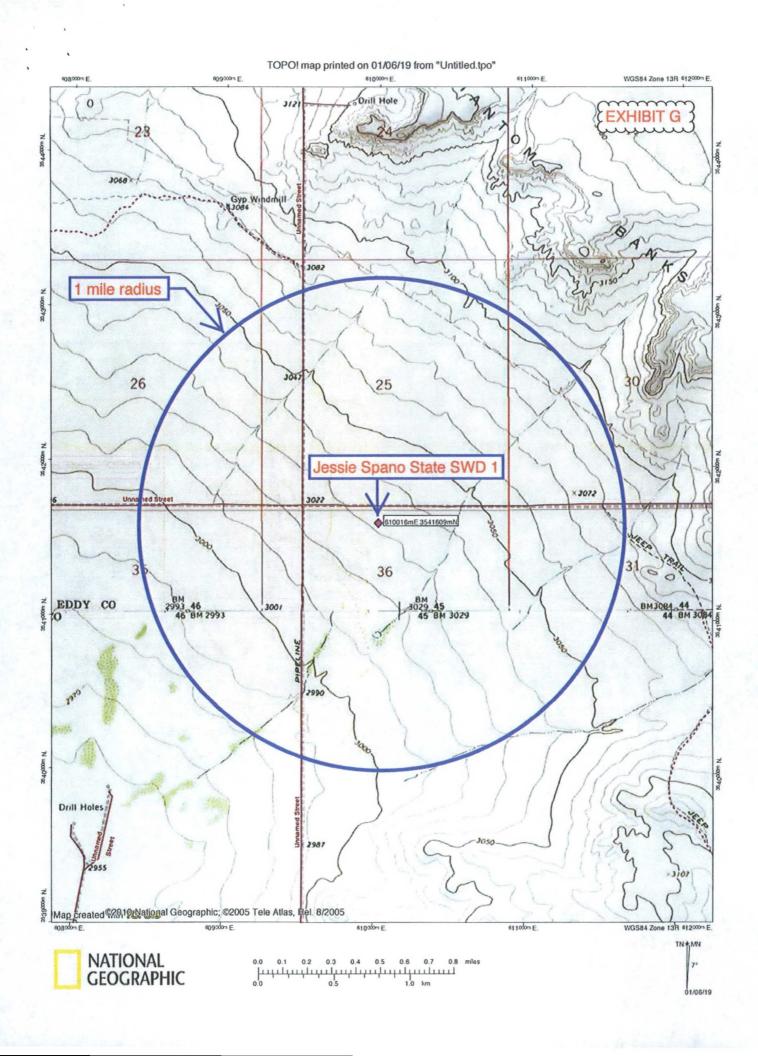
EXHIBIT F

17

and an entry of the second of the second sec

PRODUCED WATER ANANLYSES (mg/l) FROM T. 25 S., R. 28 - 30E.

3001541239	4	255	28E	Bone Spring 2nd Sand	208312	67903	123723	61	2
3001541241	4	255	28E	Bone Spring 2nd Sand	204577	63037	125493	49	0
3001530754	1	255	28E	Delaware	170840	61640	116903	111	1668
3001510172	20	255	30E	Delaware	157068		97030	6 <u>8</u>	510
3001504752	17 😁	25 S	30E	` Delaware `	146809	e 1. 12 . 12	*** 89710	24	346
3001504738	4	255	30E	Delaware	146106		89810	40	403
3001504738	4	255	30E	Delaware	180137		110500	232	1199
3001504753	17	255	30E	Delaware	146130		89700	24	346
3001524071	30	255	30E	Delaware	100240	51658	93000	640	3756
3001524071	30	255	30E	Delaware	103300	53495	97000	100	
3001510048	20	255	30E	Delaware	311052		186800	86	2820
3001510048	20	255	30E	Delaware	170607	-	104300	81	1003
3001510048	20	255	30 <u>E</u>	Delaware	193989		119700	82	1446
3001510181	8	255	30E	Delaware	155173		92820	122	133
3001510181	8	255	30E	Delaware	150830				
3001503979	33	16S	30E	Devonian	63260		34400		3600



			λ 7		•		200		6 .1.	<u><u> </u></u>	<i>Г</i> '	{	EXHIBI	TG
	W	/ate									e Engin pth to		ter	للند
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the file closed)	neđ, e is	1	••			√ 2=NE est to lar	3=SW 4 gest)	'	3 UTM in n	neters)	(in	feet)	
DOD Number	Colo	POD Sub-	Country	QQQ	-	m	D		v	V	DistanceDe		•	Vater
POD Number <u>C 02165</u>	Code	Dasin C	County ED	04 10 4	4 Sec 24		Kng 30E	6100	X 36 354	Y 4121* 🏈	DistanceDe 2512	pinwenDep 440	180	260
										Avera	ge Depth to Wa	ter:	180 fee	:t
											Minimum De	epth:	180 fee	:1
											Maximum De	pth:	180 fee	:t
Record Count: 1														• • • • • •
UTMNAD83 Radius	<u>Search (in</u>	<u>meters)</u>	<u>:</u>											
Easting (X): 610	016		North	dag (Y):	3541	609			Radi	ùs: 3220				
*UTM location was derived	from PLSS	- see Hol	р											
The data is furnished by the I the accuracy, completeness, r									ing that the	e OSE/ISC 1	nake no warranti	cs, expressed o	r implied, con	cerning
1/6/1 <u>9</u> 5:13 PM											WATER CO WATER	LUMN/ AVE	RAGE DEPT	нто





Geologic Assessment Solaris Water Midstream, LLC Jessie Spano State SWD No. 1 Section 36, Township 26 South, Range 30 East Eddy County, New Mexico

Cory Walk

Cory Walk

B.S., M.S.

Geologist

Permits West Inc.

December 4, 2018

Solaris Water Midstream, LLC Jessie Spano State SWD No. 1

Introduction



Jessie Spano State SWD #1 is located in section 36, T26S, R30E, about 20 miles southeast of Malaga, NM in the Permian Basin. Solaris Water Midstream, LLC proposes the injection zone to be within the "Devonian" (Silurian Wristen Group) and Fusselman formations through an open hole from 16,689'- 18,267' below ground surface. This report assesses any potential concerns relating to induced seismicity along deep penetrating Precambrian faults or the connection between the injection zone and known underground potable water sources.

Groundwater Sources

Quaternary Alluvium acts as the principal aquifer used for potable ground water near the Jessie Spano State SWD #1 location (Hendrickson and Jones, 1952). Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is regarded as the effective lower limit of 'potable' ground water." Around the Jessie Spano State SWD #1 well, the top of a thick anhydrite unit interpreted to represent the Rustler Formation lies at a depth of ~873 feet bgs.

Faults and Fractures

Fault data from the Geologic Map of New Mexico (2003) shows the nearest surface fault to the SWD location is found 30 miles to the northwest (Figure 1). This fault is inferred based on a mapped discontinuity of stratigraphy. Greater than 40 miles southwest of the Jessie Spano State well is a large accumulation of northwest trending Basin and Range style normal faults. This fault zone is interpreted to be a southeastern extension of the Rio Grande Rift zone (Muchlberger et al., 1978) and is the only area in the region in which deeply penetrating faults also penetrate the shallow aquifer systems.

A structure contour map (Fig. 2) of the Precambrian basement shows the Jessie Spano State SWD #1 well is ~9 miles from a basement-penetrating fault documented by Ewing et al (1990). Montgomery (1997) indicates that these faults do not penetrate anything above the Delaware Mountain group and therefore cannot act as a conduit for transferring deeply injected fluids to the shallow aquifer systems used for domestic, municipal or livestock purposes (Figure 3).

Induced seismicity is a growing concern of deep SWD wells. Relatively new software developed by the Stanford Center for Induced and Triggered Seismicity allows for the probabilistic screening of deeply penetrating faults near the proposed injection zone (Walsh and Zoback, 2016; Walsh et al., 2017). This software uses parameters such as stress orientations, fault strike and dip, injection rates, fault friction coefficients, etc. to estimate the potential for fault slip. Using the best available data as input parameters (Table 1), fault slip potential was modeled through the year 2040. Model results give a maximum of 1 percent (0.01) probability of slip on a fault to the northwest (Fig. 4).

Stratigraphy

Thick permeability barriers exist above (Woodford shale; 165 ft thick) and below (Simpson Group; 620 ft thick) the targeted Devonian-Silurian injection zone (Plate 2, Comer et al., 1991; Fig. 8, Frenzel et al., 1988). Approximately 15,800 feet of rock separate the top of the proposed injection zone from the previously stated lower limit of potable water at the top of the Rustler formation.



GEOLOGIC ASSESSMENT PAGE 2

ł

Solaris Water Midstream, LLC Jessie Spano State SWD No. 1

Conclusions



Geologic data evaluated around the Jessie Spano State SWD #1 well show no potential structural or stratigraphic connection between the Silurian-Devonian injection zone and any subsurface potable water sources. Based on Fault Slip Potential modeling there is a 1% probability (0.01) of inducing seismic activity along a deeply penetrating Precambrian fault.



Solaris Water Midstream, LLC Jessie Spano State SWD No. 1 GEOLOGIC ASSESSMENT PAGE 3

EXHIBIT H

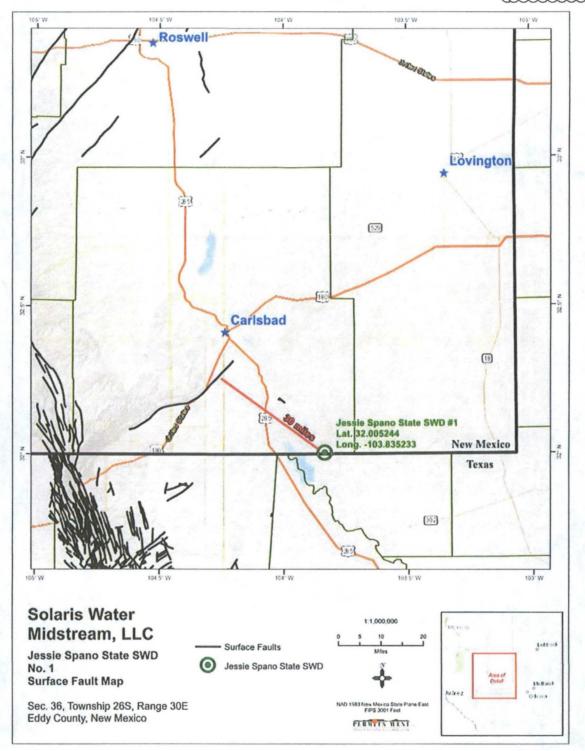


Figure 1. Shaded relief of the northwestern Permian Basin. Thick black lines represent locations of fault traces and show that the nearest fault to the proposed Jessie Spano State SWD #1 well lies ~30 miles away.



Solaris Water Midstream, LLC Jessie Spano State SWD No. 1



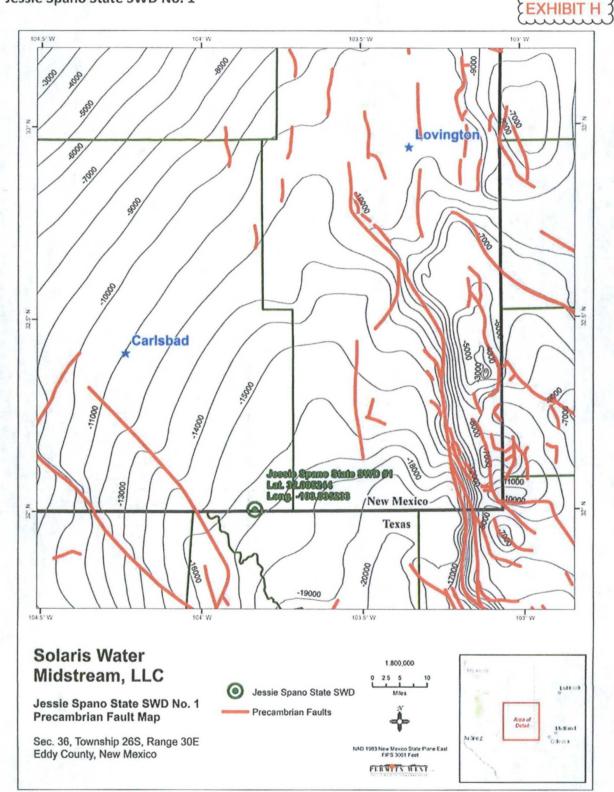


Figure 2. Structural contour map of the Precambrian basement in feet below sea level. Red lines represent the locations of Precambrian basement-penetrating faults (Ewing et al., 1990). The Jessie Spano State SWD #1 well lies ~9 miles east of a deeply penetrating fault.



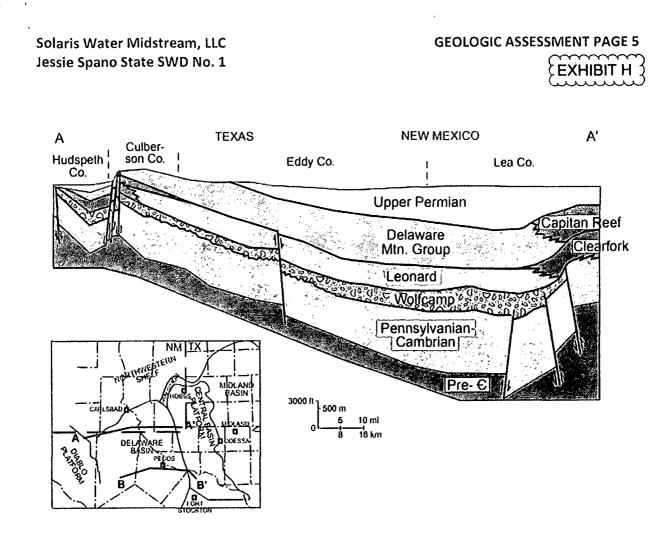


Figure 3. Cross section of the Permian Basin from Montomery (1997). Notice the majority of basement faults only penetrate through the Leonard and deeper formations and therefore cannot act as conduits to the near surface potable water sources.



Solaris Water Midstream, LLC Jessie Spano State SWD No. 1

GEOLOGIC ASSESSMENT PAGE 6

EXHIBIT H

		otential model input parameters
Faults	Value	Notes
Friction Coefficient	0.58	Ikari et al. (2011)
Dip Angle (deg)	70	Snee and Zoback (2018)
Stress		
Vertical stress gradient (psi/ft)	1.1	Hurd and Zoback (2012)
Max Horizontal Stress Direction (deg)	85	Snee and Zoback (2018)
Depth for calculations (ft)	18000	Proposed injection zone
Initial Reservoir Pressure Gradient (psi/ft)	0.7	calculated from mud wt (ppg) used in drilling at these depths
A Phi Parameter	0.60	Snee and Zoback (2018)
Reference Friction Coefficient	0.58	Ikari et al. (2011)
Hydrology		
Aquifer thickness (ft)	1600	Proposed injection zone
Porosity (%)	4	
Permeability (mD)	150	
Injection Rate (bbl/day)	30000	Maximum proposed injection rate

Table 1. Eault Ollin Data deal . . .



Solaris Water Midstream, LLC Jessie Spano State SWD No. 1 GEOLOGIC ASSESSMENT PAGE 7

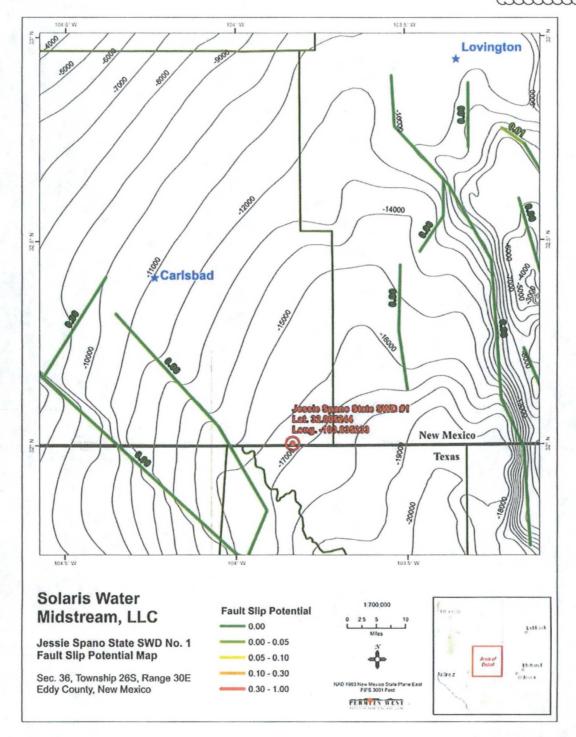


Figure 4. Precambrian fault map of southeastern New Mexico as mapped by Ewing et al. (1990). Faults are colored based on probability of fault slip as modeled using Fault Slip Potential software (Walsh and Zoback, 2016). Labeled values represent the calculated fault slip potential using the parameters indicated in Table 1. Contours show the top of the Precambrian basement in feet below sea level.



Solaris Water Midstream, LLC Jessie Spano State SWD No. 1

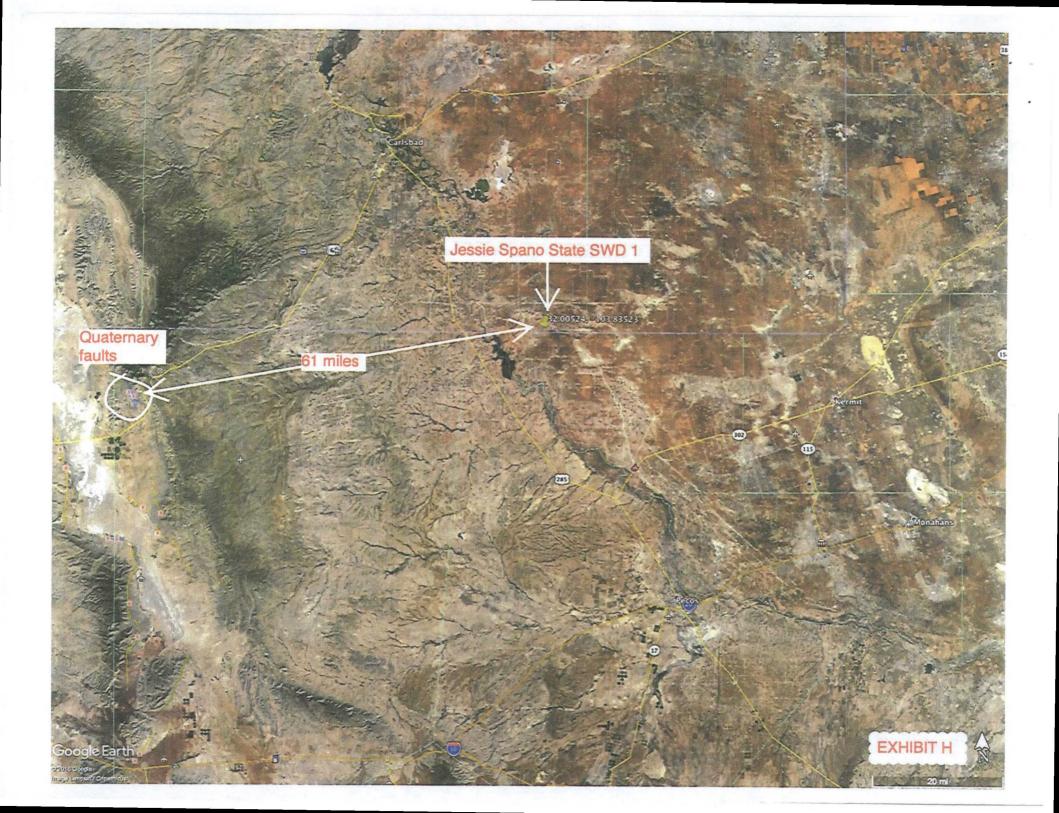
GEOLOGIC ASSESSMENT PAGE 8

EXHIBIT H

References Cited

- Comer, J. B., 1991, Stratigraphic Analysis of the Upper Devonian Woodford Formation, Permian Basin, West Texas and Southeastern New Mexico: The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 201, 63 p.
- Ewing, T. E., 1990, The tectonic map of Texas: Austin, Bureau of Economic Geology, The University of Texas at Austin.
- Frenzel, H. N., Bloomer, R. R., Cline, R. B., Cys, J. M., Galley, J. E., Gibson, W. R., Hills, J. M., King, W. E., Seager, W. R., Kottlowski, F. E., Thompson, S., III, Luff, G. C., Pearson, B. T., and Van Siclen, D. C., 1988, The Permian Basin region, in Sloss, L. L., ed., Sedimentary cover—North American Craton, U.S.: Boulder, Colorado, Geological Society of America, The Geology of North America, v. D-2, p. 261–306.
- Geologic Map of New Mexico, New Mexico Bureau of Geology and Mineral Resources, 2003, Scale 1:500,000.
- Hendrickson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 3, 179 pp., 6 plates.
- Hurd, O; Zoback, MD, 2012, Intraplate earthquakes, regional stress and fault mechanics in the Central and Eastern U.S. and Southeastern Canada. Tectonophysics, 581:182-92.
- Ikari, M. J.; C. Marone, and D. M. Saffer, 2011, On the relation between fault strength and frictional stability, Geology, 39, 83-86.
- Montgomery, S. L., 1997, Permian Bone Spring Formation: Sandstone play in the Delaware basin: Part I. Slope: AAPG Bulletin, v. 81, p. 1239–1258.
- Muehlberger, W.R., Belcher, R.C., and Goetz, L.K., 1978, Quaternary faulting in Trans-Pecos Texas: Geology, v. 6, p. 337–340.
- Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and ground-water conditions in southern Lea County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 6, 123 pp., 2 plates.
- Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.
- Walsh, F. R., and Zoback, M. D., (2016) Probabilistic assessment of potential fault slip related to injection induced earthquakes: Application to north central Oklahoma, USA, Geology, Data Repository item 2016334, doi:10.1130/G38275.1
- Walsh, F. R., Zoback, M. D., Pais, D., Weingarten, M., and Tyrrell, T. (2017) FSP 1.0: A Program for Probabilistic Estimation of Fault Slip Potential Resulting From Fluid Injection, User Guide from the Stanford Center for Induced and Triggered Seismicity, available at SCITS.Stanford.edu/software





CURRENT-ARGUS



Ad No. 0001279830

PERMITS WEST, INC. 37 VERANO LOOP

SANTA FE NM 87508

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

<u>03/12/19</u>

Subscribed and sworn before me this 12th of March 2019.

State of WI, Gounty of Brown NOTARY PUBLIC

My Commission Expires

Ad#:0001279830 P O : # of Affidavits :0.00 Solaris Water Midstream, LLC is applying to drill the Jessie Spano State SWD 1 as a saltwater disposal well. The well is staked at 295 FNL & 2505 FWL Sec. 36, T. 26 S., R. 30 E., Eddy County and is 13 miles northeast of Orla, Texas and 20 miles southeast of Malaga, NM. Disposal will be in the Silurian from 16,689' to 18,167'. Maximum injection pressure will be 3,337 psi. Maximum disposal rate will be 40,000 bwpd. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.

March 12, 2019 #1279830









March 18, 2019

NM State Land Office PO Box 1148 Santa Fe NM 87504

TYPICAL LETTER

(505) 466-8120

Solaris Water Midstrem, LLC is applying (see attached application) to drill its Jessie Spano State SWD 1 well as a saltwater disposal well (SWD). As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed SWD. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Jessie Spano State SWD 1 TD = 18,167'Proposed Disposal Zone: Devonian from 16,689' to 18,167' Where: 295' FNL & 2505' FWL Sec. 36, T. 26 S., R. 30 E., Eddy County, NM Approximate Location: 20 air miles east of Malaga, NM Applicant Name: Solaris Water Midstrem, LLC (432) 203-9020 Applicant's Address: 907 Tradewinds Blvd., Suite B, Midland, TX 79706

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. NMOCD address is 1220 South St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

PROFILITA	
Constraints (from the constraints constraints)	Australing and a second an
Surprise Agina Potroloum Corporation	Restriction Blanco Holdings I, Ltd.
0 Dánier, CO.60217 00	t Houston, TX 772161
Construction of the second sec	G7.547,7471
	Transferrention from the second se
Control of Tests clash law and the a start front Poly of the start front of the start for the start	The second strategy of the second sec
economic and a second s	Control 1
Midland, TX 79702	1 Midland, TX.19101. (\$23,.092) 3 Midland, TX.19102.1788 \$51.092 5x20 b Solaris Jesse Spano 5 Solaris Jesse Spano 5 5x80 b Solaris Jesse Spano 5 Solaris Jesse Spano 5 5x80 b Solaris Jesse Spano 5 Solaris Jesse Spano 5 5x80 b Solaris Jesse Spano 5 Solaris Jesse Spano 5
ראיין איין איין איין איין איין איין איין	PERCENTION PROPERTY AND
Cost And For Cost And For Co	Child San General Concerned and the second of the second sec
Pourie Pourie Pourie Pourie P.O. Box 1330 Humber to vinet	Deality and States and States LP
P.O. Box 1330 itousion, TX.27261. Solaris Jesso Spano S.KSC: //S.C., 2400 (3) Supervised States	Bio Boo Box 1123 Bio Chemidge, TX 15424 Solaris Jesso Spano Solaris Jesso Spano Solaris Jesso Spano
Cursuar Darie	
Contractor a March 2010 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Construction and the second seco
Attivell Interest, Inc	Chargent Perceloting -
Housen, TX 77227	Image: Strate Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth Strate Image: Strate Strate 730 Soventeenth Strate 730 Soventeenth
UCSPECTIC SILET TO CONTRACT OF THE OWNER OWNE	
A CALENDER AND	
THE COS . MAN	
Dires And Martin States	A CARENTER THE FORMER AND A COS IN A STREET AND A STREET
Questa contraction	Basensaufungereining is hrs
1214 Parta States 4131 N. Central Expressivay	Guarrenter I
i Dallas, TX 75204 Seer-3 Solaris Josse Spano	Gas Company Gas Co
C1 321 2>-17	Solars Jesse Guard
χ. δ. δ. δ. δ. δ. δ. δ. δ. δ. δ	

Lesterity Interestion Million and Light Control of Cont	
Charlen in Andre in A	Construite faithing Image: Construit faithing Construite faithing Image: Construit faithing Construite faithing Image: Construite faithing
Anie Panise zarran Chosapoako Permian LP 6100 N. Wostern Avenue Oklahoma City, OK 73118 Solaris Jesse Spano	Interfective reserves COG Operating: LeC Solution Interfective reserves 600 V/. Illinio: Avenue Solution Interfective reserves Foreitive reserves PO Box 3768 Solution TX. 19701-1882 Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution Solution
Christ Structure Structure Structure Structure Christ Structure Structure Christ Structure Structure Christ Structure Chrin Structure	Destroyments and the second se
Line Service Service U.S. Arring 1400 Smith Street Hous Smith Street	Intervention Intervention Intervention Intervention Intervention
Sólaris Jesto Spano	Solaris Jesse Spano Sever State Jesse Spano State State St
Carrent North Stern Street Carrier in Sector 1	
Benser (a Practicitation) (1 (2) (2	COS C
Antonia Antonia Chevron U.S.A-Ind 6101 Deauville Bivd Antonia Antonia Antonia Antonia Solaris Jesso Spano.	Concho Oll & Gas (LC Histi Postiga at a feet 600 W. Illinois Avanju Mildland, TX 19701 4882 5 range South South Jesso Spano Jun 200 Solida Jesso Spano Jun 200 Solida Jesso Spano Jun 200 Solida Jesso Spano
USIRCEELES WICC GERNIALED MAILY RECEIPT	
Entreter String Storing Autority Storing Discriber Storing Storing Discriber Storing D	Construction of the maximum of the maximum of the second of the sec
Autority of the second	Multiple
	Solaris Jesse Spino Solaris J
Cloins for (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
Solaris Jesse Spano	Image: Sector
69. T	

Image: Sector Duily Wagner & Coopenny. Image: Sector	
Durfedunt af en Duer Wagner Himmer Finden State	
is in contraction of the state	
LUR 19 2019	
Artesta, Min Baz 10-2170 Sert 10 Solaris Jesso Spano Sert 10 Solaris Jesso Spano Sert 10 Solaris Jesso Spano Sert 10 Solaris Jesso Spano	
The state of the second street state of the second street street state of the second street s	
Solaris Jesso Spano	
Distribution in the second interval inter	
Image: Second	

Configuration of the second states of the second seco	
	N
Second Mathew	J Cardentla Fey
Ren Person participant and a state and a s	H Drass Persitas unit
AS De reelloures 1	CI Classe Vitaritationer
a marcha Marcha Odarr 1	Cational for all they t
Pastora are ferr Halloran Family Joint Venturo LLC	D How Patters and Fresh P Petroleum Company
Highland Village, TX-76077	D Smith Houston TX 77710
Solaris Jesse Spano HYNAXXXX BASHANA	Start avr. ats 327, 2710 Ter 12
5. Shara 7. Shara 1.	647.5 BA 257.7
f Sing 2400 Y and the 1 period to an and a period for the second of the second second second second second second	Fill Francisco Care and Francisco Contractor and Barris
	US POSICISAVICO
comente Kell Only	
ordenity/information/variousnepsies/nymeural.com/assass	
14-0 112170	nu State I.
I Server at the provider and the at the server of the server at the serv	rel Constant Marifers 27- 3 -D Edit Services (Front Pression, etcher et apparent
territe Vision I. Primet	
Construction of the second sec	Counterstantersteil Counterstantersteil Counterstantersteil Counterstantersteil Counterstantersteil Counterstantersteil Counterstantersteil Counterstantersteil
(φ	
Antitute 12 - Antite Marting Stonestreet 2550 . on the	aussi tatti Foster Jul Fert 214 W. Texas Avenue
175 Salt Lako City ÚT 84117 Solaris Jesse Spano	D Sulta 1250
u: \$597,7 K5, \$780 B: 185 - SUN 749,7	C Strata and the week of a set of spano
	C.F. 3516 X. 10
USIPostal Servico CERTIFIED MAILS RECEIPT	PS Formatico (and Mill Internet Consult The St
	THE STATE OF THE STATE OF THE STATE
To LOW YOU MIGHT ALLOD ALL OF AND THE ALL AND THE COMPANY	USPORTISTICE CHERTISTED MAIL RECE
REAL PLANE	Domostic Usil Only and Shi Lasherin
AT SPACE AT AT AT A SPACE AT	
(And a substance)	Consection of the section of the sec
Tensburning Jahren 1	Diga day certa instanti se sathering and the
offalle (Oranin Daria Designer 5
ANT Parts Hawkins Oil & Gas Inc.	
Tuisa-OK-74103	C) F2154(1)
Solaris Jesso Spano Transitive Molecularia	D S J Patra State C. Williamson
5 / Seaso 200-11	C Solaria Josse Spano
	C 3388 97/00, 37 7 25 105
UG Rostal Satvice:	10, 10, 10, 20, 10, 111, 10, 10, 10, 10, 10, 10, 10,
Dome the Mail Only as an All State State and State State	US Postal Service Contract
San Yerran Construction State Contracts and Discourse and State St	GERTIFIEDMAILPREGE
A STATE OF A	
CLUS IS	n <u>Hereitan ren staan</u>
Beite Straft (1992) 1	
20012111111120221211111 1	D CONSTRUCTS & Farther and A Construction
Carlaya	Cantas Wither to Cantas Wither
San Antonio, TX 78217-3412	A La
Solaris Jesso Spano	D s
7/11/22/27 117/17/90 03/110 57/52/27/26/14	I COLOR Y TOTOL
	Sev is Solaris Jesse Spano
no to an Conference and a second	C. 54. 00 11
GERUISEDMAILS RECEIPT	27 FORTH SOLAT, APRIL \$115 (577-54) \$556 (59) 336
	RATE STREET
SCHEMES .	
ara dof. ars S Foes & West tas and the et a p tor and	
	Hiorisellier Hiermaneny sallen work
	81
Teatterunterstationer I Han	- A TATA STATE OF THE AVERAGE AND A TATA AND A
Contraction in the second seco	
Contraction of the second seco	
С. Молинентистия I Цат Des Experimentationer I Цат (sea by constructions I Цат (sea by constructions I Цат Experimentations I P.O. Box 233 di Odessa, TX.19750-0233 di Solari J sea se Borno	
Culture and the second	
Construction	Criticipulite T Criticipulite T Criticipulite
Construction of the second secon	Citizi Districti Antipartati atti antipartati Citizi Citizi Antipartati atti antipartati atti antipartati Citizi Citizi Antipartati atti antipartati atti antipartati Citizi Citizi Antipartati atti antipartati atti antipartati atti antipartati atti atti atti atti atti atti att
Contervention in the second se	Citizi Direct Annu Statistic Statistic Annu Statistic Statistics Statistuport Statistics Statistics Statistics Statistics Statistics Stati
Contractor and Contra	Citizi Direct Annu Statistics Statistis Statistis Statistics Statistics Statistics Statistics Statistics
Construction Image: Construction Construction P.O. Box 233 State Construction	Citizi Directi Anni 2011 (2012) Citizi Citizi Anni 2012 (2012) Citizi Citizi Anni 2012 (2012) Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citizi Citiz

elar i	CERTIFICATION CONTRACTOR OF THE CONTRACTOR OF TH
illand to a company	EXHIBIT J
A DESCRIPTION OF THE OWNER OF THE	
	Charles and Anna I
Parny	D Contract View March
HEALING	Distantisti yezhigi i
•	(Bustersteinersteiner 1
- 3 (), 3 () ()	i otte ouger mir Dirto
	- Houston-TX-770571 Solaria Jesse Spano
	Solaria Jasse Spano
	C67. 5 91. 2 # 11
NY lent we be an investory	
TELES SALES	U.S. Rostal Service
EDT	
7	
······································	
Printers .	Lithun feastly and a
Hay	Occurs (La Romona Dellaw) a Posteria Occurs / Posteria Has
	[] 1.2.1 % + + + + + + + + + + + + + + + + + +
	Stat Portage States K-P Acquisition Corporation 500 IV. Toxas, #1450
······································	i SOD IV. Toxas, #1650
	Solaria Jesso Spano
•	C. CH. T
SCORESCONDER CONTRACTOR	FSTern Sales (Fail 11) Permanen anter anter Service State and Sales and
	U.S. Postal Sarvice
STORE STREET	
	GERNIFIED MAIL RECEIPT
GEIPLE STAV	- Internet and the second states and the sec
Manufacture and second	
i international and the second	
<u>han in the second seco</u>	
1.277	
T ALLENDA	
Formak	Certa un cita can
4.1 6 8 9 1	[]////////////////////////////////////
-	
_	
	B Sort B Solats Jesse Spano.
ino	Steel Set Ave No. or FOUSING
	CY SING WATH
	Param Salar, And Mill and marking the set of
AND DESCRIPTION OF	
	US Postal Service
AHDT	
GEIRD	
va al miniuspacom?	To a Fortueling Womeston, Silling website at presilipacon /8
	In Berry Service Section and a service of the
Perinak	
- Parinak - Huo	C Contestuaria Association 1
-	
-	Q As(1+3)
anity Trust	Autoria
2	
ino.	Contraction Contra
	C.S. S20, ZPV7
Num Des Des Hautes bei mei Des des D	PERSONAL ALL SOLS POINTS AND
	OG Condervice
	GENTELEDIMALEREGERT
COLORADO AND	
-OFF	
THAT IS NOT THE OWNER OF THE OWNE	
	T A REPORT AND A REAL AND A REAL AND A REAL
il	
AN 24COS MAN	General Variation of the second states of the secon
- Wa 19 2319	D 1 D 1 D 1 D 1 Ferty Mindy Land & Minerals Company D 1 Dial Perusy Millert 210 Park Avenue, Sullo 800,
` .	i Solans Jesse Solans
/02	
pano	25. 1844 1914 1
	Parlant Labor () probable spectra context of the set of the Parlane Kill
o con su con contra los de las los de las los de las los de las de la	
C C C C C C C C C C C C C C C C C C C	

CITATINE CONTRACTOR STATES	Generalized and other interpret
US POSICI CONTROL	
	STUDIES CONTRACTOR AND
US POLITIS OTICO CERTIFICEDMAILS RECEIPT	USSESSEISENCE CERTIFIEDMAILSREECEIDT CERTIFIEDMAILSRE
OS PECIDISET LOVING COUNTY MINERALS, LP	

67	CIERTIALE MALE GIERE AND CENTRES OF	Ś	GERUFIED MALE GEREGER		CHANGELEDINALS (LECTRONALE)
		11.1	London 2/GUSII Colly a second s	87	CALIFORNIA CONTRACTOR CONTRA
		ស		ד ת	
	in the second se	643	Certified In a Fee	7	Surger De Les Contractions de la contraction de la contraction de la contraction de la contraction de la contra
	Live San Oct A Plat Bar Loc 20 B II Lo COLOR	r-1	Berrfaniland	а -	Danager standard standa
	Designment Market Same	000	Dierr Pred fein ginne 3	000	Charles (instant) Consequences Consequences Consequences Consequences Consequ
	Disasses fortes (ever 1		0+361 years Ferroust mey 1 (119 1 9 2019		Clock 57 New Frank Charles And
	(1011 Postars and Free Hew Mexico State Land Office	06.80	Total Parties and Parts Oxy Y-1-Company-	0681	Star Pestici and Area Rick Carlisle and Dee Ann Carlisle 2625 Nost Avenue
	Toru Porter: Der Mex Mexico State Land Office PO Box 1148 Santa Fer NM 87504		5 Greenway Plaza Sov 70 Flaza Sov 70 Solaris Jesso Spano		2626 Note Avenue
	2	701/8	Solaris Jesso Spano Skyl av // raz in Kristika		Solaria Josse Spano Sector State Stat
	CS) SH2 24-10		Ch Bure 20. 11	~	cir sin 2011
	The rest of the sense		rd control and all the methods of the booking is a contract of		US Postal Service
	US Rosal Savice Asta	;	US:Rostal Services (and)		CERTIFIED MAIL ORE CEIPT
	CERTIFIED MAIL RECEIPT	ណ៍		Č,	
i	Controller Control and the Control of Contro		Donnestic Lean Conversion and the second states and the second second second second second second second second	ב ת	
	In the state of the second s	ů.	CO. CAMPES PARAMETER AND	5	Centesweren
1		3	www.Walfer	ۍ س	COLSMUTER FOR AND SHI AND
i	Conserved Maria and a management	ا م. ا ہے	Distantente foreiten in the annual in annual i	.000	
l	Clauminary Harmondy, 1 Portras	51	Crever Nation Sector (Construction of Construction of Construc		[Distinging the same
	LIGA ST PARTICIPATION I		UAR 1.9 2019	680	Via (3 j)
	NY-Life OG Oper Plod	05.6	Stufforuge and Associates, Inc. P.O. Box 10886	0 8	And Antonia Science Sc
÷	Tatu Putts : a thir the OG Oper Plod	-0		701	Solaris Jesse Spano
	Serito Solaris Jesso Spano Sectau Act N. Crive Busso	- 11	Solaris Jesse Spano	ţ.	CN 515 26.71
	CHANSE BOTT		2% Still No. ().	•	STORE TO AND AND AN ALL WITH A GOOD BOD THE CON REPORT OF A STORE
			Stonishow And 2011 For Section Car May Sol For Inveliding Installant		USIPostal Service
2		Ę	USI Confiserico	ŕ	
	US/Postal/SetUce CERT(FIED/MAIL?/RECEIPT/ Instrumental/Day	_	GERTIFIED MAIL RECEIPT	, C	LAND THE REAL PROPERTY AND A
•	Toometic Autoby	j.	Domestic (Usil Only	n n	A COMPANY AND A CONTRACT OF A COMPANY
		ц Ц	For the tray information wolf out would be allowed up to the set	5	Contration
-	Confid thiffer,	구	and Million	ب ب	Drens i Premer Padary
÷	TITE STARTS THE STATEL OF GOAL STATE OF ALL AND GOAL AND THE STATE OF ALL AND GOAL AND GOAL AND THE STATE OF ALL AND GOAL AND GOA	<u>م</u>	Development & Fert a Series 25 10 11 apression	000	Branding with the second secon
ļ	Dipariferin Principal Elefane Respirational - Postional Bourissi Baana Deberg 1	9	Daniela (Sili Maria Calar) S Picture (Sili Maria)	ċ	1 1 Martin Strengthere and a
	Chan Spinis Restautoring	·0·	NAR 19201	06,8	
1		06.81	P.O. Box 10886	-0	Sulta DED
Ì	lt	ų.		701	Oklahoma City, OK 73112 Sixy 1974 NJ: WA Solaris Josse Spano
1	Solaris Jesso Spano	701	Solana Joaso Spano		(9. 53#1.72,11
Ì	Carter Stort and a stort and a stort and a stort a sto	- t-	(Y. S.). 2047		PATATISADA ANII MITTANTASADAAA / ANA SI SAN REASTA IS LUINA
;	The second s		en la ser la la ser la la ser la s		
	PLANE PARTY AND THE PLANE PARTY AND THE PLANE PARTY AND THE PARTY AND THE PLANE PARTY				(US (Postal Service) CERTIFIED MAIL? RECEIPT:
			US Postal Service		CERTIFIEDMAILORECEIPI
	Comercia Automatica Contraction of the second se	<u>ب</u> ر		220	Demotific Hall Only IT FOR UNIVERY (Identication: 1411 OF Interestion of American Street Provider American Street Provider American
		215	BFor delivery informations while but web iller at immediate from a substant	្រីដ ហ	
	Circellizites	പ്	Constativitie	, L	Second Standard Section Streets
		541		ڊ ب	Carrier Postial
	Constant and a construction of the second and a construction of th	5	Disar Profession Via	0	Ofering the Arm of the main a
	Dies Brechtsteinen 1	00	Besterentierenterny same (1999) Desterentierenterne same (1999)	. a	Dala Sigina alist alse totter 1
		80	Antisyo	с, Г	s Royal Oak Oll 8-Gas, LLC
	And Postings and Prov Otwick Corporation P.O. Box 10886 Midland, TX.79702	06,	P.O. Box 994	/ ⊑ . a	
:	Biel D Solarla Jasse Spano	ер С	sou /: Sou /: Solaris Josse Spano		STEL MARTIN AN ATORINA
•		202	serie weize ka, w Po Estra	ר ר	East Star 2001
			ey an 1977 Feldessen and the state of the second state of the		PS Prote 1889 Ac7/100151 cultural Street Ac7/1998 State Protect and States
i t			in the second walk of a loss of the second of the second second second second second second second second secon	1	US Costal Service
	UAIDOULIE			ŀ.	GERTIFIED MAIL PRECEIPT
1	USIPOSIAL BOTTLES CERTIFIED MAILS RECEIPT		THE REAL PROPERTY OF THE REAL	1	
1	(Comedia Coloritory)		OT THE DITAL PRESS	ม ส	ти
1	A REAL PROPERTY AND A REAL	ti d		1	
1	And	ŝ	STOLETNEY MICH		BANN REALTS SAL
1	Change and A for and by a start a special Constraint and the start was special Diversity and start and the start of the special special Diversity and special start of the special		6		Comparing a second seco
	Destroiting Patrick		1 STATE CANTER AND A CONTRACT (Parents		United and the second s
•	Charter a constant				D (viti); D (1) Postion red Fort Samson Resources, Inc.
,	12 W13-1 1 Cara				Z W. Second Suger
	10389 Wilshire Boulevard		Robekah S. West	1	District Construction
	Los Angoles, CA 90024		A THE FALLOP HATTER 4302 Lanham Bullet Midland-TX 79706 Solarla Jasse Spano		NY SIVE SALE
	2730 Entrementation and an and a state of the state of th		Solaria Solaria		TELEPENERY, MARINE CONTRACTOR STATISTICS
	In the second second second second			12	3
			W		

GENTIFEDMAICREGEDR		EVLIDIT I
Constitution	Construction of the second secon	Parton (WAR'T'9 2019
C) Salizator Parameter (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally, 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-081 gravet isser (Bally 1 VAN 1 9 2010 Order Section (Antroat Gally 1 1-08	
		Aliantic States
And State American State Americ	Operational Approximation in the second s	ne:
Solaris Josés Spano	Solaris Jesse Spano	A STORED FOR ALL STORE
USITESIAISONICO CERTIFIEDMAISRECEIPU CONTRACTORISTICATIONI CONTRACTORISTICATION CONTRACTORIST		
Constant of the instant and the statement Constant and th	Construction of the algorithm of th	Näun 9101 e 1319
Ser /2 Ser /2	Star Ford Start SW Comm Income brill Ford Start P.O. Box 10503 Star Ford Start P.O. Box 11390 Ford Start P.O. Box 10503 Middland, TX: 9702 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start Start P.O. Box 10503 Start Start P.O. Box 11390 Start P.O. Box 10503 Start Start P.O. Box 11390 Start P.O. Box 10503 Start Start P.O. Box 11390 Start P.O. Box 10503 Start Start P.O. Box 11390 Start P.O. Box 10503 Start Start P.O. Box 11390 Start P.O. Box 10503 Start Start P.O. Box 1000 Start P.O. Box 1000 Start Start P.O. Box 1000 Start P.O. Box 1000 Start Start P.O. Box 1000 Start P.O. Box 1000 Start Start P.O. Box 1000 Start P.O. Box 1000 Start P.O. Box 1000	0
	US Postal Service CERTIFIED MAILS RECEIPT	IPT
Construction a Antiport for Construction of Co	Constanting of the second seco	hid 1.2510 brain
Class Definition of the set of th	Okta Sprezi naškateka i V/2 Diverzi i	
C. F. H. CONIC ELECTICICAL PARENTS	US Desial Service	CEIPT
		U Perioan Itas
Control	Chart of a reason in the second secon	
	Dillas, TX 75201	

ţ

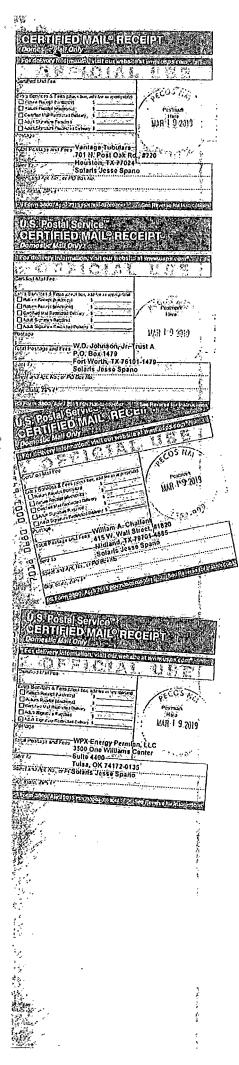


EXHIBIT J

. :