

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

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

Case No. _____

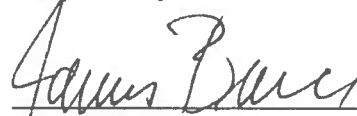
APPLICATION

Solaris Water Midstream, LLC applies for an order approving a salt water disposal well, and in support thereof, states:

1. Applicant proposes to drill the Ironside State SWD Well No. 1, located 1270 feet from the south line and 175 feet from the east line (Unit P) of Section 32, Township 25 South, Range 32 East, N.M.P.M., Lea County, New Mexico.
2. Applicant proposes to dispose of produced water into the Devonian and Fusselman formations in the well at depths of 17125 – 18550 feet subsurface.
3. A Form C-108 for the subject well is submitted herewith.
4. The granting of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,



James Bruce
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorney for Solaris Water Midstream, LLC

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996
Artesia ▲ Carlsbad ▲ Durango ▲ Midland

April 23, 2019

Mr. Phillip Goetze, P.G.
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Solaris Water Midstream Ironside State SWD #1
UL P Section 32 T25S R32E, Lea County

Dear Mr. Goetze:

On behalf of Solaris Water Midstream LLC, R.T. Hicks Consultants is providing data and an opinion regarding the probability that injection of wastewater in the above referenced well at the proposed rates will cause seismic events of sufficient magnitude to create damage. It is our understanding that OCD is interested in such an opinion as part of the SWD approval process. We elected to provide this opinion as a separate submission as the C-108 does not specifically require such an opinion.

We relied upon the following data to develop our opinion

- State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity, Jens-Erik Lund Snee and Mark D. Zoback, The Leading Edge, February 2018¹
- Plate 4, which is reproduced from the Snee and Zoback publication, which uses the following references
 - Crone, A. J., and R. L. Wheeler, 2000, Data for Quaternary faults, liquefaction features, and possible tectonic features in the Central and Eastern United States, east of the Rocky Mountain front; U.S. Geological Survey Open-File Report.
 - Ewing, T. E., R. T. Budnik, J. T. Ames, and D. M. Ridner, 1990, Tectonic map of Texas: Bureau of Economic Geology, University of Texas at Austin.
 - Green, G. N., and G. E. Jones, 1997, a digital geologic map of New Mexico in ARC/INFO format: U.S. Geological Survey Open-File Report.
 - Ruppel, S. C., R. H. Jones, C. L. Breton, and J. A. Kane, 2005, Preparation of maps depicting geothermal gradient and Precambrian structure in the Permian Basin: USGS Order no. 04CRSA0834 and Requisition no. 04CRPR01474.
 - NMOCD database of oil and gas wells

Plate 4 reproduces Figure 3 of the 2018 publication of Snee and Zoback and shows

1. Fault traces based upon the references provided above for which Dr. Snee and Dr. Zoback provide a value of the fault slip potential (FSP)

¹ https://scits.stanford.edu/sites/default/files/3702_tss_lundsnee_v2.pdf

April 23, 2019

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2. Areas of documented seismic activity, such as the Dagger Draw area and a magnitude 2.0-2.9 earthquake that occurred between 1970-2004 about 8-miles northeast of the proposed Ironside State SWD #1.
3. Although Plate 4 does not show faults that may be identified in confidential seismic data owned by oil and gas operators, the mapped fault that is closest to the Ironside State SWD #1 (about 11 miles to the east) exhibits a low FSP (less than 5%) based upon the modeling and analysis of Snee and Zoback referenced above
4. Other mapped faults in southern Lea County shown on Plate 4 also show a low FSP, except for part of southwest-northeast trending fault about 35 miles north-northwest of the Ironside State SWD #1 well that has a FSP of about 25 – 33% at the northeast end.

Plate 5 reproduces the major elements of Plate 4 in the inset map and also shows that within an 11-mile radius around the proposed Ironside State SWD #1, the OCD database shows 12 active or new Devonian SWDs, which translates into an average density of one SWD for every 10 square miles.

We contend that the data permit conclusion that unmapped faults (which may be located by confidential seismic data that Solaris does not possess) near the Ironside State SWD #1 would be dominantly north-south normal faults, as is common in Lea County. The data on Plate 4 permit a conclusion that faults near the Ironside State SWD #1 are also most likely to exhibit a low FSP, like the mapped faults shown on Plate 4.

Given the density of Devonian SWDs (planned/new and active) near the proposed Ironside State SWD #1 well and the high likelihood that any unmapped faults in the area would exhibit a low FSP, the probability that injection into the Ironside State SWD #1 would cause an increase in pore pressure to trigger a seismic event of sufficient magnitude to cause damage is very low.

The users of this letter should recognize the uncertainties of using seismic maps of the Permian Basin to determine probability that injection of wastewater into a single SWD well could cause seismic events of sufficient magnitude to cause damage.

Sincerely,
R.T. Hicks Consultants



Randall T. Hicks
Principal

Copy: Solaris Water Midstream LLC

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

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

**ADMINISTRATIVE APPLICATION CHECKLIST**

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

Applicant: Solaris Water Midstream, LLC **OGRID Number:** 371643
Well Name: Ironside SWD #1 **API:** _____
Pool: Proposed: SWD, Devonian-Silurian **Pool Code:** 97869

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

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

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

FOR OCD ONLY

- ☐ Notice Complete
☐ Application
 Content
 Complete

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

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

Randall Hicks (agent)

Print or Type Name

April 15, 2019

Date

505 238 9515

Phone Number

Randall Hicks

Signature

Digitally signed by Randall Hicks
 DN: cn=Randall Hicks, o=RT Hicks Consulting, ou, email=r@rthicksconsult.com, c=US
 Date: 2019.04.15 08:00:15 -0500

r@rthicksconsult.com

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance ☒ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No
- II. OPERATOR: Solaris Water Midstream, LLC
ADDRESS: 907 Tradewinds Blvd, Suite B, Midland, TX 79706
CONTACT PARTY: Randall Hicks (Agent) PHONE: 505 238 9515
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes ☒ No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
NAME: Randall Hicks TITLE: Agent
SIGNATURE:  DATE: 4/23/2019
E-MAIL ADDRESS: R@rthicksconsult.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: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

OPERATOR: Solaris Water Midstream, LLC WELL NAME & NUMBER: Ironside SWD #1 WELL LOCATION: 1270 FSL 175 FEL
FOOTAGE LOCATIONUNIT LETTER P SECTION 32 TOWNSHIP 25S RANGE 32E WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: See Attachments Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Intermediate CasingHole Size: Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Production CasingHole Size: Casing Size: Cemented with: sx. or ft³Top of Cement: Method Determined: Total Depth: Injection Interval feet to

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: See Attachments Lining Material:

Type of Packer:

Packer Setting Depth:

Other Type of Tubing/Casing Seal (if applicable):

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: Proposed: SWD, Devonian-Silurian

3. Name of Field or Pool (if applicable):

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: See Attachments

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240
Phone (505) 393-8161 Fax: (505) 393-0720

DISTRICT II

811 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-0720

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name IRONSIDE STATE SWD	Well Number 1
GRID No.	Operator Name SOLARIS WATER MIDSTREAM	Elevation 3317'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	32	25 S	32 E		1270	SOUTH	175	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

N:398525.6 E:735647.8 (NAD 83)	N:398556.9 E:738318.3 (NAD 83)	N:398579.9 E:740986.9 (NAD 83)
N:395891.4 E:735664.1 (NAD 83)	N:395936.7 E:740994.4 (NAD 83)	
N:393253.2 E:735675.2 (NAD 83)	N:393276.7 E:738338.9 (NAD 83)	N:393301.8 E:741002.9 (NAD 83)

SURFACE LOCATION
Lot - N 32.083115°
Long - W 103.689228°
NMSPCE - N 394569.9
E 740823.8
(NAD-83)

175'
1270'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

Email Address _____

SURVEYOR CERTIFICATION

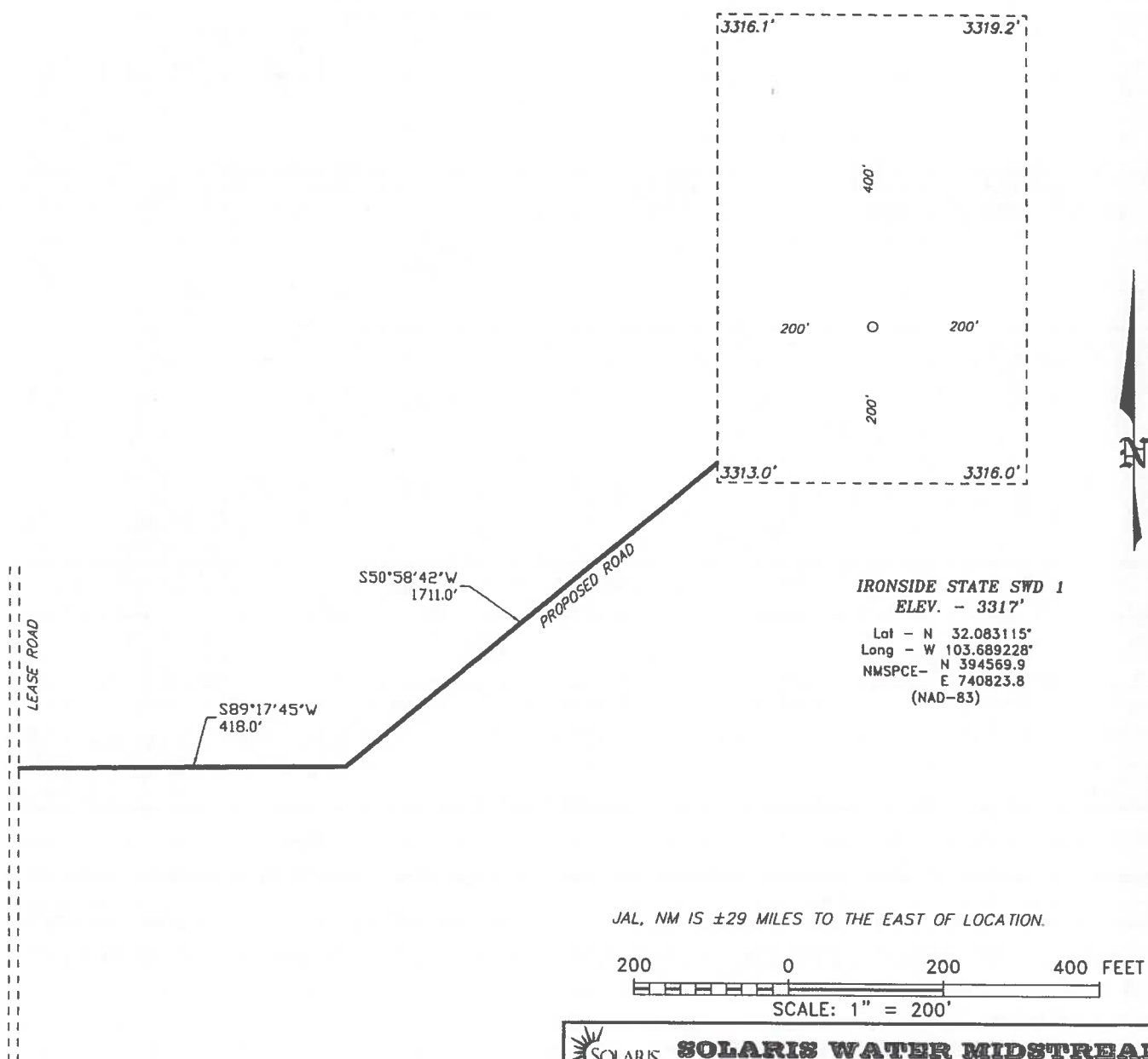
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

Date Surveyed _____
Signature of _____
Professional Surveyor

Certificate No. 7977

0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 34390

SECTION 32 TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



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in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241

(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

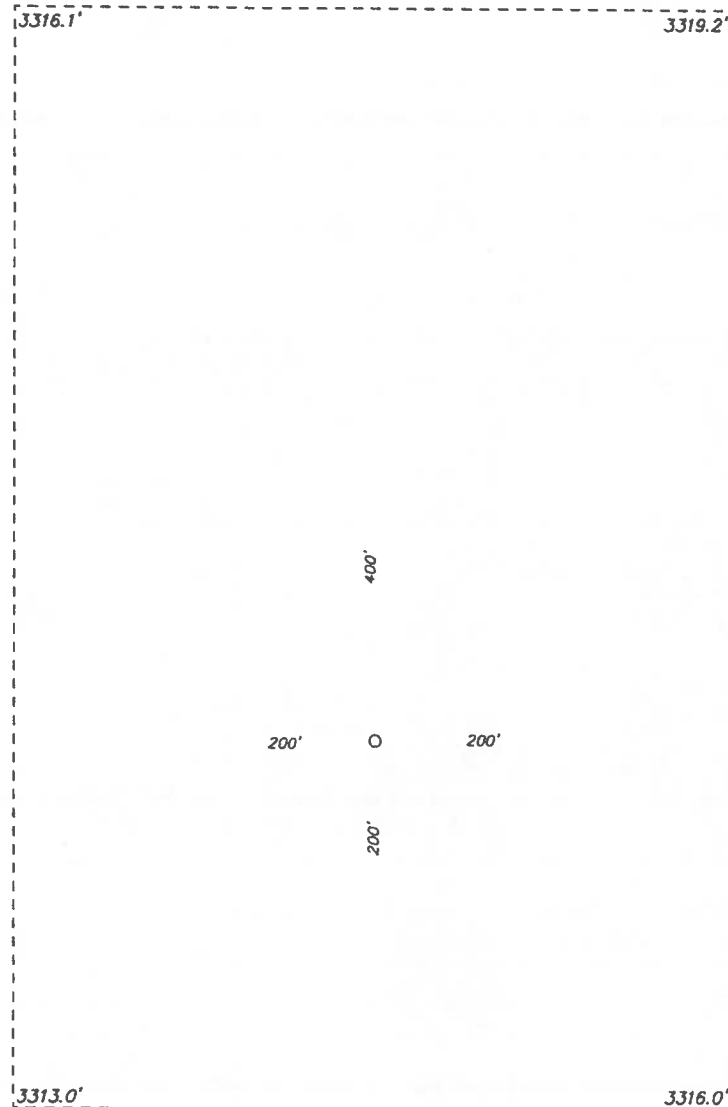


SOLARIS WATER MIDSTREAM

REF: IRONSIDE STATE SWD 1 / WELL PAD TOPO

THE IRONSIDE STATE SWD 1 LOCATED 1270' FROM
THE SOUTH LINE AND 175' FROM THE EAST LINE OF
SECTION 32, TOWNSHIP 25 SOUTH, RANGE 32 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

**SECTION 32 TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



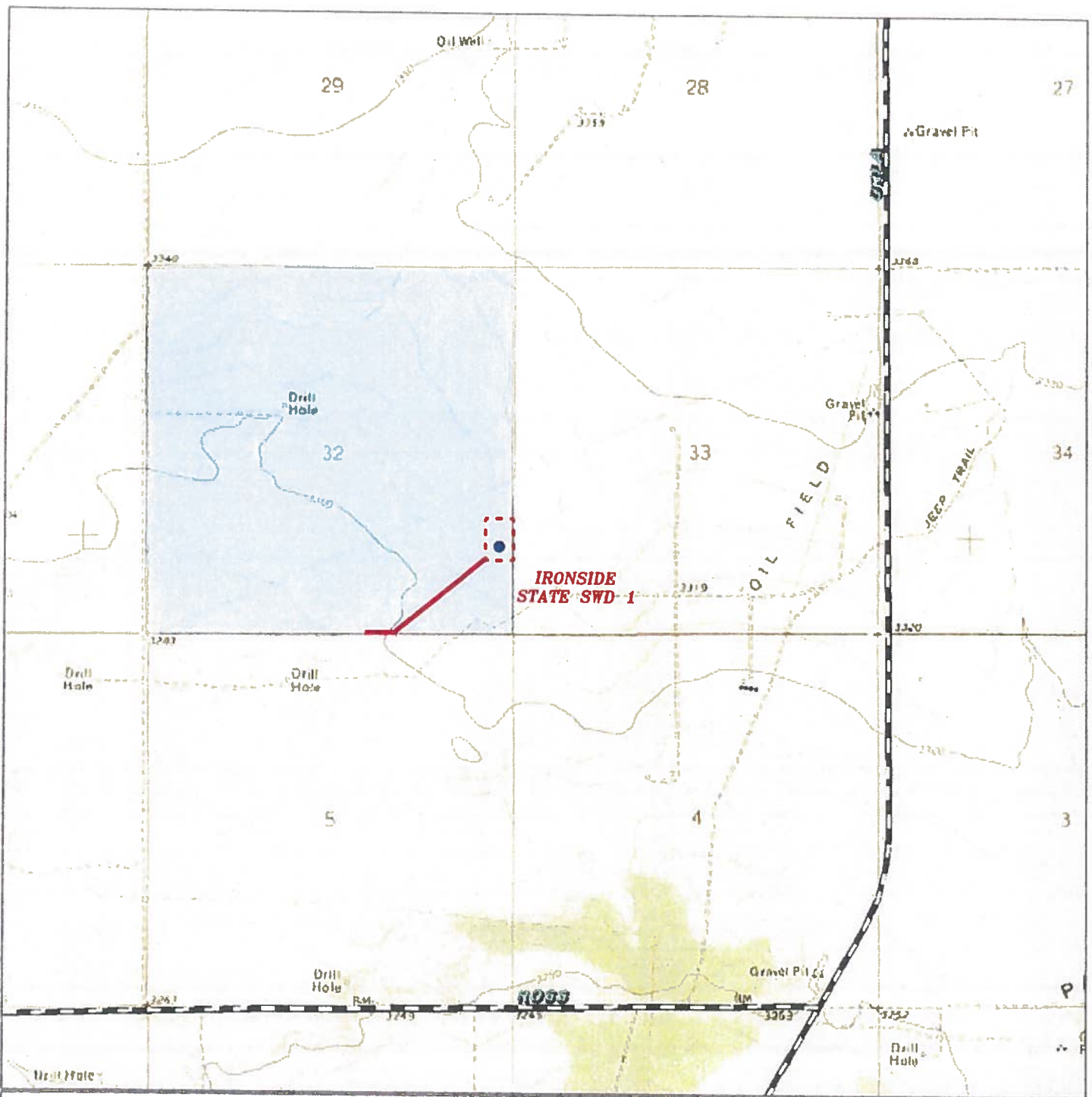
SOLARIS WATER MIDSTREAM

REF: IRONSIDE STATE SWD 1 / WELL PAD TOPO

*THE IRONSIDE STATE SWD 1 LOCATED 1270' FROM
THE SOUTH LINE AND 175' FROM THE EAST LINE OF
SECTION 32, TOWNSHIP 25 SOUTH, RANGE 32 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.*



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



IRONSIDE STATE SWD 1

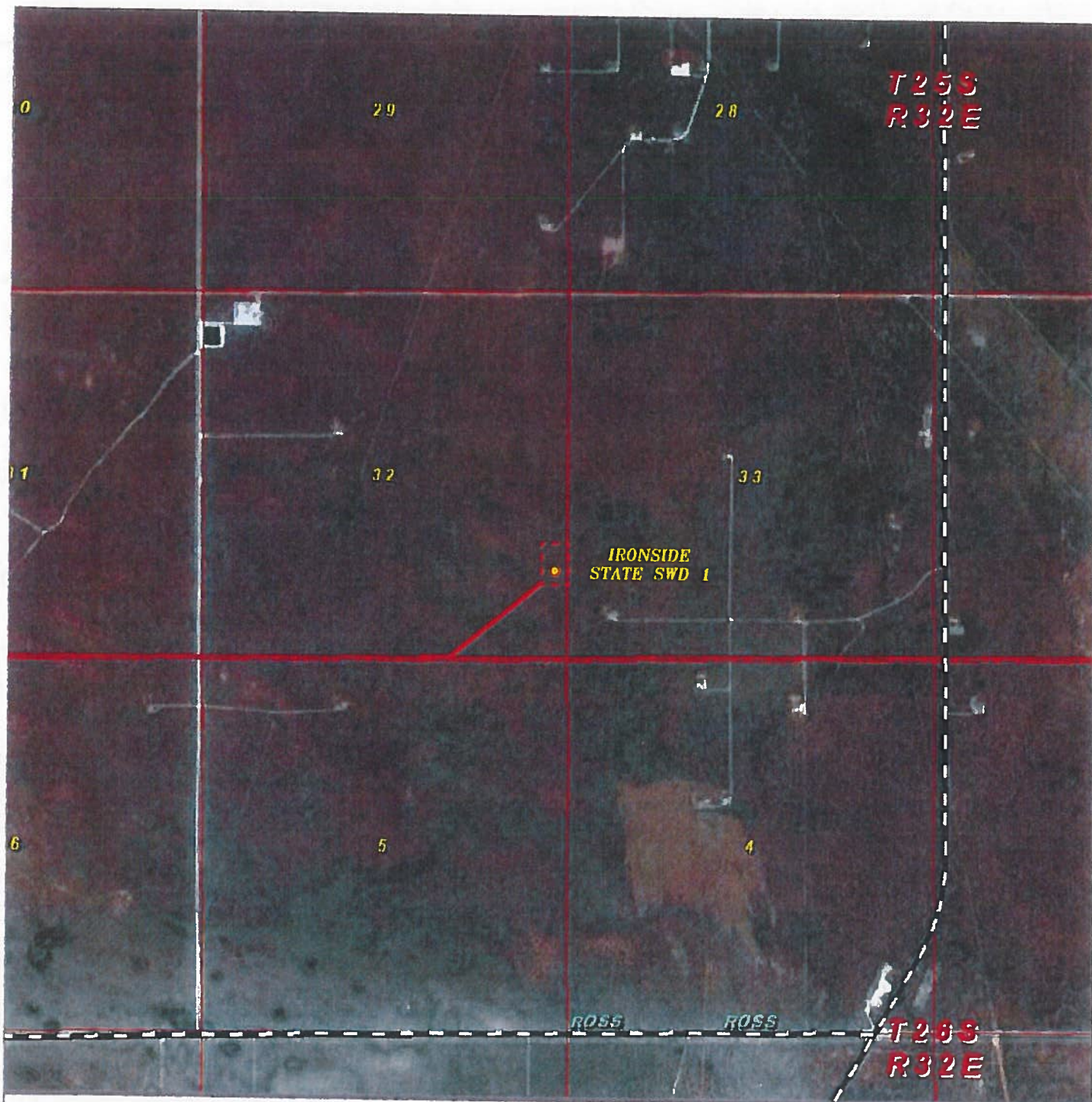
Located 1270' FSL & 175' FEL
Section 32, Township 25 South, Range 32 East,
N.M.P.M., Lea County, New Mexico.



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

0' 1000' 2000' 3000' 4000'
SCALE: 1" = 2000'
W.O. Number: JG - 34390
Survey Date: 3-19-2019
YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND





IRONSIDE STATE SWD 1

Located 1270' FSL & 175' FEL
 Section 32, Township 25 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



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0' 1000' 2000' 3000' 4000'

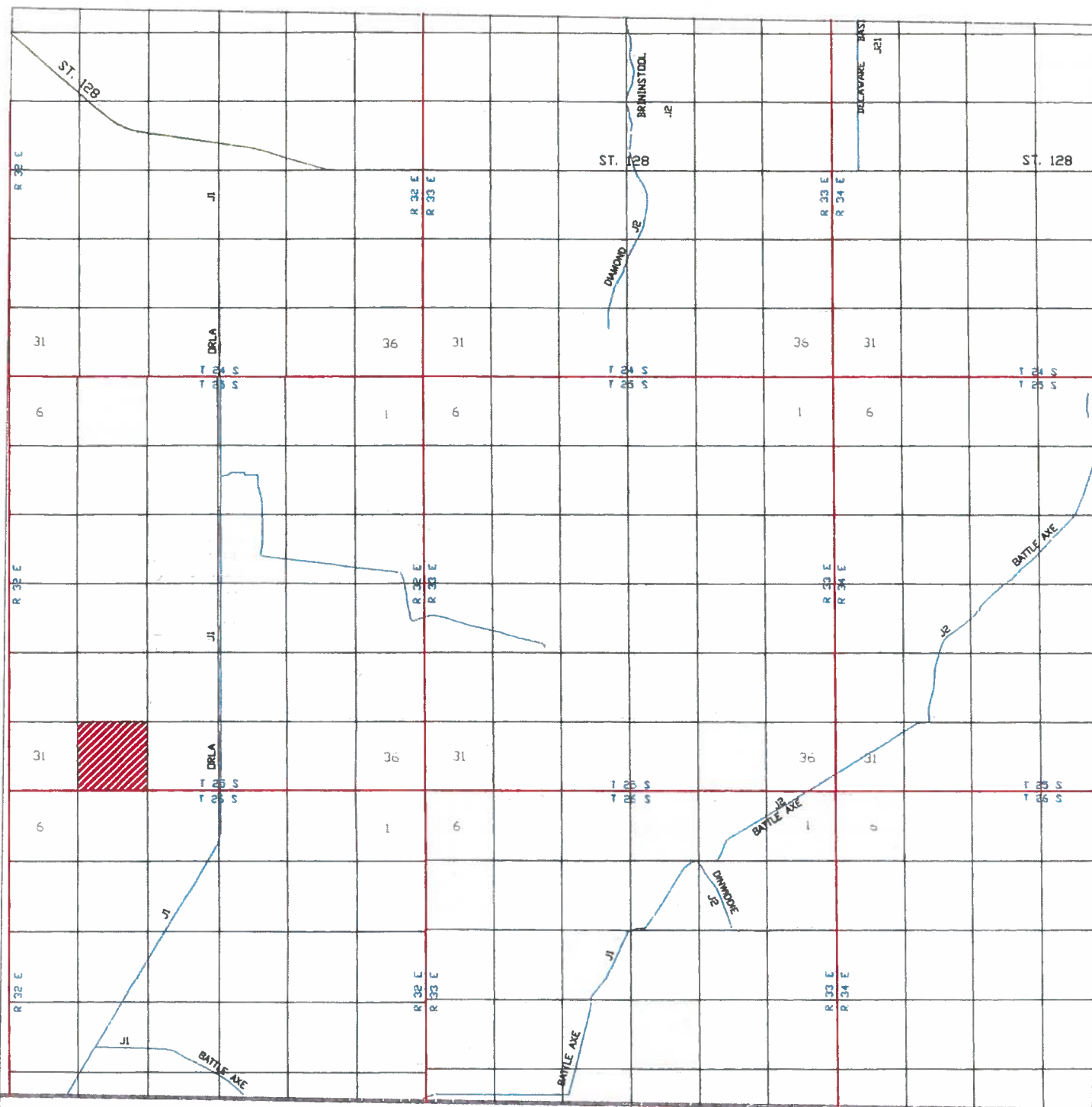
SCALE: 1" = 2000'

W.O. Number: JG - 34390

Survey Date: 3-19-2019

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





IRONSIDE STATE SWD 1

Located 1270' FSL & 175' FEL
 Section 32, Township 25 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.

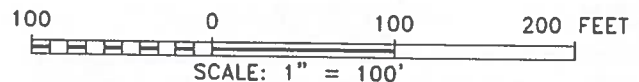
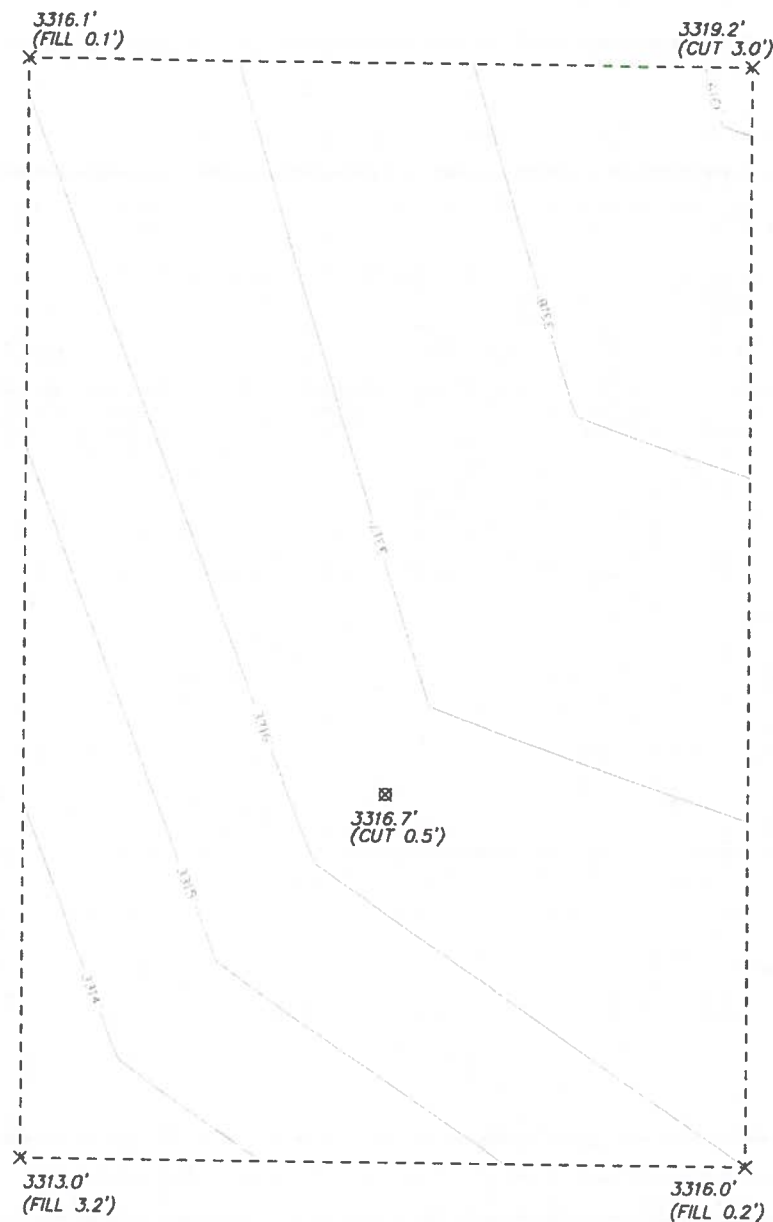


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 Hobbs, New Mexico 88241
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0	1 MI	2 MI	3 MI	4 MI
SCALE: 1" = 2 MILES				
W.O. Number: JG - 34390				
Survey Date: 3-19-2019				
YELLOW TINT - USA LAND				
BLUE TINT - STATE LAND				
NATURAL COLOR - FEE LAND				



**SECTION 32 TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.**



SOLARIS WATER MIDSTREAM

REF: IRONSIDE STATE SWD 1 / CUT & FILL

THE IRONSIDE STATE SWD 1 LOCATED 1270' FROM
THE SOUTH LINE AND 175' FROM THE EAST LINE OF
SECTION 32, TOWNSHIP 25 SOUTH, RANGE 32 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

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W.O. Number: 34390

Drawn By: J GOAD

Date: 3-21-2019

Survey Date: 3-19-2019

Sheet 1 of 1 Sheets

Attachments to C-108

Copy of well bore diagram

Section III-XII Written descriptions to supplement C-108

Plates referenced in written descriptions

Tables referenced in written descriptions

OSE well logs referenced in written descriptions

Section XIII Proof of Notice

SOLARIS WATER MIDSTREAM - WELLBORE DATA SHEET

Ironsides State SWD #1



AREA/SYSTEM: Pecos Star System
 WELL NAME: Ironsides State SWD #1
 OBJECTIVE: Devonian
 SHL: 1270' FSL & 175' FEL
 BHL: Same as SHL
 SURFACE ELEV.: 3317
 TOTAL DEPTH: 18,550'
 WELL DESIGN BY: CHRIS GIESE

REVIEWED BY: JIM BRANNIGAN AND ED MARTIN

MUD LOGGING/	CASING	MD	TVD	BOPE	FORMATION	HOLE SIZE (IN.)	MUD WT.	FRAC GRAD
DIRECTIONAL	SIZE (IN.)							
Grnd Level	RKB		30					
	GL ELEV							
	30"	0	0					
				Open	Set and grouted		8.8	
			1,125			18.125"	8.4	
	84 lb/ft J55, BTC	1,450	1,450	21-1/4"-5M Annular/Diverter	Rustler		8.4	
		1,500			T/Salt		9.5	
Mud Logging to begin @ 2,500'			4,300		B/Salt		9.5	
			4,500		T/Lamar	14.75"	to 10	
	68 lb/ft L-80, EZ-GO FJ3	4,550	4,550	13-5/8"-5M Annular			10.0	
				13-5/8"-5M BOP's			9.4	FIT
		5,550			Cherry Canyon			
		7,125			Brushy Canyon			
		8,600			Bone Spring			
		9,500			1st BS Sand			
		10,200			2nd BS Sand			
		11,325			3rd BS Sand	12.25"	9.4	
					Wolfcamp		to 10.0	
			11,750					
	TOL	11,650	11,650					
	53.50 lb/ft HCP-110, BTC	11,850	11,850	13-5/8"-5M Annular			10.0	
				13-5/8"-10M BOP's			12.5	15.6
		13,525			Canyon			
		13,725			Strawn			
		14,000			Atoka			
		14,550			Morrow			
		14,850			Morrow Classics		12.5	
		15,475			Morrow Lower	8.5"	to 13.5	
		15,975			Barnett			
			17,125		Devonian			
	Liner Wedge 512 7.625"	17,125	17,125	13-5/8"-5M Annular				
	39 lb/ft P-110			13-5/8"-10M BOP's			13.5	
Run #1								
GR/NEUTRON	18,550	0				8.5"	9.0	
USIT/CBL	17,125	0						
	Dual	0"						
		TD 18,550	18,550	13-5/8"-5M Annular	Base of Fusselman			
				13-5/8"-10M BOP's				

Casing Set Depths/ Cement							
Conductor = 120'	Hole Size	Casing Size	Casing Grade	Casing Weight	Setting Depth	Sacks of Cement	TOC
Surface	18.125"	16"	J55, BTC	84 lb/ft	0 - 1450	3,343	Surface
1st Intermediate	14.75"	13.375"	L-80, EZ-GO FJ3	68 lb/ft	0 - 4550	2,742	Surface
2nd Intermediate	12.25"	9.625"	HCP-110, BTC	53.50 lb/ft	0 - 11850	2,829	Surface
Liner Wedge 513	8.5"	7.625"	P-110	39 lb/ft	11650 - 17125	223	Liner Top
Openhole	6.5"				17125 - 18550		

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**

Lease Name: Ironside SWD #1

Property Code	Property Name IRONSIDE STATE SWD						Well Number 1		
OGRID No.	Operator Name SOLARIS WATER MIDSTREAM						Elevation 3317'		
Surface Location									
UL or lot No. P	Section 32	Township 25 S	Range 32 E	Lot Idn	Feet from the 1270	North/South line SOUTH	Feet from the 175	East/West line EAST	County LEA

- 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**

The attached Wellbore Data Sheet provides all of the design specifics required and a tabulation of these data are shown on the diagram...

The formation tops were established by Jim Brannigan, R.G. CPG. Tops below the 2nd Bone Spring Sand were picked using intervals from wells with e-logs or the NMOCD Form C-105. The upper section was picked by using the Yates Petroleum Corp. #1H Jefe BSJ Fed. Com. In Section 32-T25S-R32E. The result of the evaluation of Mr. Brannigan is presented to the right.

- 3. A description of the tubing to be used including its size, lining material, and setting depth**

5-1/2" (20#) internal plastic coated tubing swaged down to 5" (18#) with setting depth of 17,025'

- 4. The name, model, and setting depth of the packer used or a description of any other seal system or assembly used**

Halliburton BWS or equivalent packer set at 17,025'.

Formation	GL	3317
Tops	KB	3347
	SS	TVD
Brushy	2222	1125
T/Salt	1847	1500
B/Salt	-953	4300
T/Lamar	-1153	4500
Bell Canyon	-1178	4525
Cherry Canyon	-2203	5550
Brushy Canyon	-3778	7125
Bone Spring	-5253	8800
1st BS Sand	-6153	9500
2nd BS Sand	-6853	10200
3rd BS Sand	-7978	11325
Wolfcamp	-8403	11750
Canyon	-10178	13525
Strawn	-10378	13725
Atoka	-10653	14000
Morrow	-11203	14550
Morrow Clastics	-11503	14850
Morrow Lower	-12128	15475
Barnett	-12628	15975
Miss LS	-12828	16175
Woodford		
Devonian	-13778	17125
Fusselman		
T/Montoya	-15403	18750
Injection Interval	17125	18650
TD		18650

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

The proposed injection intervals include both the Devonian and Fusselman and the top 100' of The Montoya in an open-hole interval.

(2) The injection interval and whether it is perforated or open-hole.

The depth interval of the open-hole injection interval is 17,125-18,550 (1,425 feet).

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

The well will be drilled for disposal.

(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

There are no perforated intervals, only the open-hole completion described above.

(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.

Overlying Oil and Gas Zones:

Delaware (4,500')
Bone Spring (8,575')
Wolfcamp (11,725')
Canyon (13,500')
Strawn (13,700')
Atoka (13,975')
Morrow (14,825')

Underlying Oil and Gas Zones:

No underlying oil and gas zones exist.

IV. Is this an expansion of an existing project

No.

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

Plate 1 identifies all OCD listed wells and API numbers. Note that where numerous wells are closely-spaced, the API number may not be labeled for clarity. Table 1 lists all of these wells within the 2-mile area of review.

Plate 2 shows all of the leases and the leaseholder name within the 2-mile area of review. Tabular listing of all mapped leases are presented in

Table 2a BLM leases

Table 2b State of NM leases

Note that Plate 1 shows one apparent BLM lease on private land. This single parcel is the only private land within the area of review. Information on this parcel is presented below.

UPC	TWP	RNG	SECTION	Parcel Code	Number	Name	Address	City	State	Zip Code	Zip Ext
4186151686338	26	32	06	4950302104125	203021	BAKER, JESSE T	PO BOX 24	SILVER CITY	NM	88062	0024

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

One well is either several hundred feet inside or a similar distance outside the area of review, based upon examination of several maps. This well is:

Operator Name and Address MESQUITE SWD INC PO BOX 1479 CARLSBAD NM, 88221				OGRID Number 161968	
Property Code 316377				API Number 30-025-43379	
Property Name PADUCA 6 SWD				Well No 001Y	

Surface Location									
UL - Lot E 2	Section 6	Township 26S	Range 32E	Lot Idn	Feet from 2650	N/S Line S	Feet from 1175	E/W Line W	County LEA

All information on this well can be downloaded from
<http://ocdimage.emnrd.state.nm.us/imaging/WellFileView.aspx?RefType=WF&RefID=30025433790000> .

Data on this well are highlighted in Table 1 and form C-105 follows this text.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected

Proposed Maximum Injection Rate: 40,000 bbl/day

Proposed Average Injection Rate: 30,000 bbl/day

2. Whether the system is open or closed

This is will be an open system. All Solaris SWDs may receive produced water from recycling storage facilities, such as in-ground containments or above-ground steel-walled containments, which are registered or permitted under Rule 34.

3. Proposed average and maximum injection pressure

Proposed Maximum Injection Pressure: 4,081 psi

Proposed Average Injection Rate: 2,800 psi

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water

The attached Table 3 "Produced Water Chemistry of Nearby Wells" provides the requisite analyses. The Bone Springs and Avalon Formations are the subjects of most of the analyses. These formations, in addition to the Wolfcamp, will provide most of the produced water to the proposed SWD. At the time of writing, we are unaware of any problems associated with disposal of produced water derived from the Bone Springs, Avalon and Wolfcamp into the Devonian injection zone.

5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

Table 4 presents formational water quality data from the Go-Tech site for Devonian-producing wells. The closest wells represented in Table 4 are more than 30 miles to the east. The value of these data for the purpose of evaluating potential problems relating to the injections of produced water into the proposed injection interval is probably poor. As stated above, we are unaware of any problems associated with disposal of produced water derived from the Bone Springs, Avalon and Wolfcamp into the Devonian injection zone.

***VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth.**

The proposed injection intervals include both the Devonian and Fusselman and the top 100' of The Montoya in an open-hole interval. The highly cemented carbonate nature of the Devonian and Fusselman indicate that favorable open-hole integrity will exist, allowing for the saltwater to be injected without concern of collapse in the open-hole injection interval.

As indicated in Section III.A.2, the approximate depth to the top of the Devonian and Montoya are 17,125 and 18,750 respectively. The depth interval of the injection interval is 17,125-18,550 (1,425 feet).

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.

The Rustler Formation and the Chinle Formation yield water to supply wells in southeastern Eddy County and southwestern Lea County. In the area of the Ironside SWD, the Chinle yields water to wells from 100-200 feet below the ground surface to a depth of about 600 feet. The upper portion of the Rustler Formation yields fresh water to wells in Eddy County and in the area of the Ironside SWD, the depth interval of this potential source of fresh water is about 1125-1400.

The locations of all water supply wells listed in public databases are shown in Plate 3. The USGS database identified two wells about 1 mile southeast of the proposed SWD. Our examination of Google Earth images found no evidence of water supply wells at these locations. We conducted a ground survey of the area was April 17, 2019 and found several water troughs and evidence of water pipelines, but there is no evidence of the USGS wells shown on Plate 3. These wells are mis-located on the USGS database.

Two water well driller's logs are attached to this response and show the following relationships that will also exist in the area of the proposed Ironside SWD.

- Well C-4209 shows
 - groundwater was first encountered at a depth of 155 feet
 - red clay that did not yield water was penetrated at a depth of 350 feet
 - the nearly 200-foot water-bearing zone can produce at a rate of about 25 GPM
- Well C-4256 shows
 - Groundwater was first encountered at a depth of 340 feet
 - The red and tan sand logged from the depth interval 85-290 feet is probably the same unit that yielded water to well C-4209

- The red and blue clay logged from 290-330 feet below ground is probably the red clay observed in well C-4209
- The red and blue siltstone, sandstone and gravel logged from a depth of 330 to 610 are probably a mix of sandstones and siltstones that characterize the Chinle. Alternatively, the lower sandstones could be considered the Santa Rosa Sandstone horizon of the Chinle, which is the basal unit
- The variegated clay encountered from 610-690 may be the underlying Quartermaster Formation (AKA Dewey Lake)

In the area of the Ironside SWD, the depth interval of the Rustler is 1125-1500, according to the BLM and OCD and, we agree with this assessment. Thus, no water supply wells in the arear of the Ironside SWD penetrate the Rustler. The bottom of the Rustler Formation is characterized by evaporates (anhydrite) and is not considered an underground source of drinking water. Thus, in this area, surface casing required by OCD to prevent impairment of fresh water runs from ground surface to a depth of 1450 feet at the proposed Ironside SWD.

IX. Describe the proposed stimulation program, if any

A small cleanup acid job may be used to remove mud and drill cuttings from the formation. However, no other formation stimulation is currently planned.

***X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)**

Logs will be submitted to OCD upon completion of the well.

***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**

No active water supply wells were identified within one mile of the proposed SWD. Data from various sources permit a conclusion that groundwater within the Chinle Formation is potable.

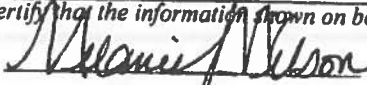
XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water

Randall T. Hicks, a Professional Geologist with decades of experience in hydrogeology, affirms, on behalf of Solaris Water Midstream, that

- The USGS has mapped quaternary faults in New Mexico and no such faults are mapped in the area of the proposed Ironside State SWD ¹
- The Texas Bureau of Economic Geology has mapped older faults (e.g. basement and Woodford) in New Mexico and the closest mapped fault is more than 11 miles to the east²
- With respect to migration of produced water from the injection zone to underground sources of drinking water via faults or other natural conduits, the following conditions were considered
 - The lowest underground source of drinking water is the middle and upper Rustler Formation. Within the area shown in Plate 3, several wells are thought to draw water from the Rustler (e.g. USGS-9141)
 - Wells in the USGS database are sometimes mis-located and examination of Google Earth images did not identify any evidence of wells in the area where the two USGS wells are shown southwest of the Ironside SWD location. A ground survey of the area identified water trough and water pipelines near the area of the USGS wells was conducted on April 17, 2019 and did not identify any evidence of the mapped USGS wells shown on Plate 3.
 - More than 15,000 feet of sedimentary rock separates the bottom of the Rustler Formation and the top of the injection zone. Many of the formations that lie between the injection zone and the lowermost aquifer are permeable and contain oil, gas or water at various pressures. Any excursion of injected fluids from the Devonian disposal zone would undoubtedly enter these permeable formations prior to moving through the 2800-foot low-permeability salt zone that underlies the Rustler Formation.
 - There is no evidence that the pressure regime in the oil and gas reservoirs is sufficient to cause the upward migration of formation water through the bedded salt and into the Rustler or Chinle aquifers.
- There is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water

¹ <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>

² Bureau of Economic Geology (Accessed April 2019). University of Texas at Austin. Basement Faults (Ewing 1990, Tectonic Map of Texas); Precambrian Faults (Frenzel et al. 1988, Figure 6); Woodford Faults (Comer 1991, plate 1). <http://www.beg.utexas.edu/resprog/permianbasin/gis.htm>

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 Revised August 1, 2011													
1. WELL API NO. 30-025-43379																			
2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN																			
3. State Oil & Gas Lease No.																			
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)																			
5. Lease Name or Unit Agreement Name PADUCA 6 SWD																			
6. Well Number: 1Y																			
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER																			
8. Name of Operator MESQUITE SWD, INC.																			
9. OGRID 161968																			
10. Address of Operator PO BOX 1479 CARLSBAD NM 88221																			
11. Pool name or Wildcat [96101] SWD;DEVONIAN																			
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County									
Surface:	E	6	26S	32E	2	2650	S	1175	W	LEA									
BH:																			
13. Date Spudded	14. Date T.D. Reached		15. Date Rig Released		16. Date Completed (Ready to Produce)		17. Elevations (DF and RKB, RT, GR, etc.)												
08/01/2016	03/04/2017		04/11/2017		04/09/2017		3285' GR												
18. Total Measured Depth of Well			19. Plug Back Measured Depth			20. Was Directional Survey Made?		21. Type Electric and Other Logs Run											
18881'			18881'			No		Comp GR/Borehole Profile/CBL											
22. Producing Interval(s), of this completion - Top, Bottom, Name 17310' - 18881' (OH) Devonian																			
23. CASING RECORD (Report all strings set in well)																			
CASING SIZE	WEIGHT LB./FT.	DEPTH SET		HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED													
20"	94#	950'		26"	1730 sx	0													
13 3/8"	68#	4329'		17 1/2"	2570 sx	0													
*9 5/8"	53.5#	11930'		12 1/4"	2860 sx	0													
*Cmt retainer set @ 11668' w/50 sx cmt on top. Milled window 11605-11627', Drd out w/ 8 1/2" bit to 17310'. Drd 6 1/2" hole to 18881'. TD.																			
24. LINER RECORD																			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	25. TUBING RECORD														
7 5/8"	10365'	17310'	2120 sx		SIZE	DEPTH SET	PACKER SET												
					4 1/2"	17329'	17284'												
					5 1/2"	9926'													
26. Perforation record (interval, size, and number) 17310' - 18881' Open Hole																			
27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>										DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED								
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED																		
28. PRODUCTION																			
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-In)													
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio												
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)													
29. Disposition of Gas (Sold, used for fuel, vented, etc.)							30. Test Witnessed By												
31. List Attachments																			
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.																			
33. If an on-site burial was used at the well, report the exact location of the on-site burial:																			
Latitude _____ Longitude _____ NAD 1927 1983																			
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief																			
Signature		Printed Name		Title		Date													
		Melanie J. Wilson		Regulatory Analyst		05/15/2017													
E-mail Address mjp1692@gmail.com																			

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico			Northwestern New Mexico	
T. Anhy		T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	4195'	T. Strawn 14056'	T. Kirtland	T. Penn. "B"
B. Salt		T. Atoka 14191'	T. Fruitland	T. Penn. "C"
T. Yates		T. Miss 16860'	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers		T. Devonian 17302'	T. Cliff House	T. Leadville
T. Queen		T. Silurian	T. Menefee	T. Madison
T. Grayburg		T. Montoya 18854'	T. Point Lookout	T. Elbert
T. San Andres		T. Simpson	T. Mancos	T. McCracken
T. Glorieta		T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock		T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry		T. Gr. Wash	T. Dakota	
T. Tubb		T. Delaware Sand	T. Morrison	
T. Drinkard		T. Bone Springs 9416'	T. Todilto	
T. Abo		T. Morrow 14956'	T. Entrada	
T. Wolfcamp 11852'		T. Barnett 16342'	T. Wingate	
T. Penn			T. Chinle	
T. Cisco (Bough C)			T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....feet.....

No. 3, from.....to.....feet.....

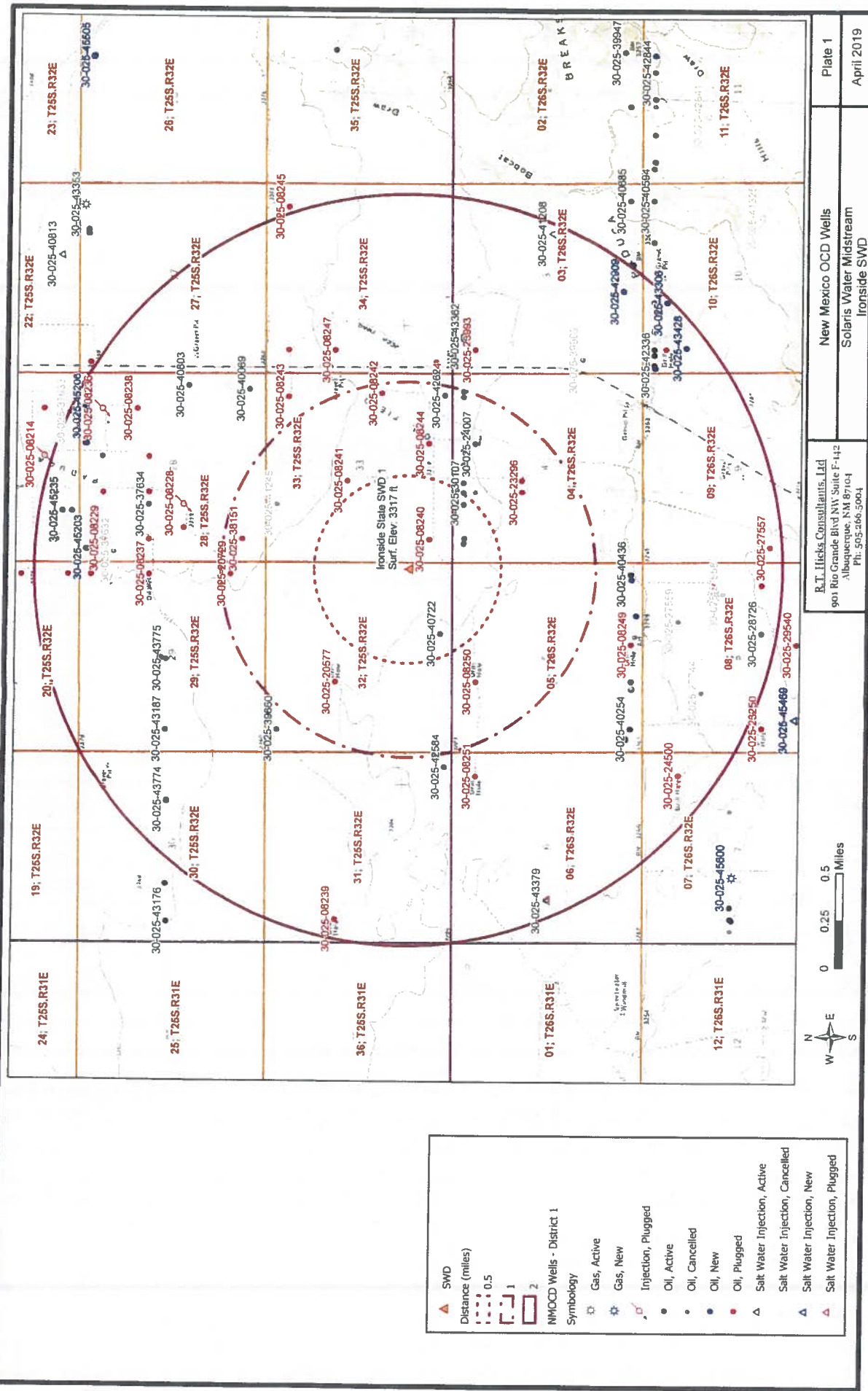
LITHOLOGY RECORD (Attach additional sheet if necessary)

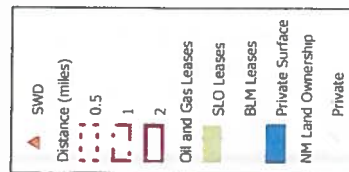
From	To	Thickness In Feet	Lithology

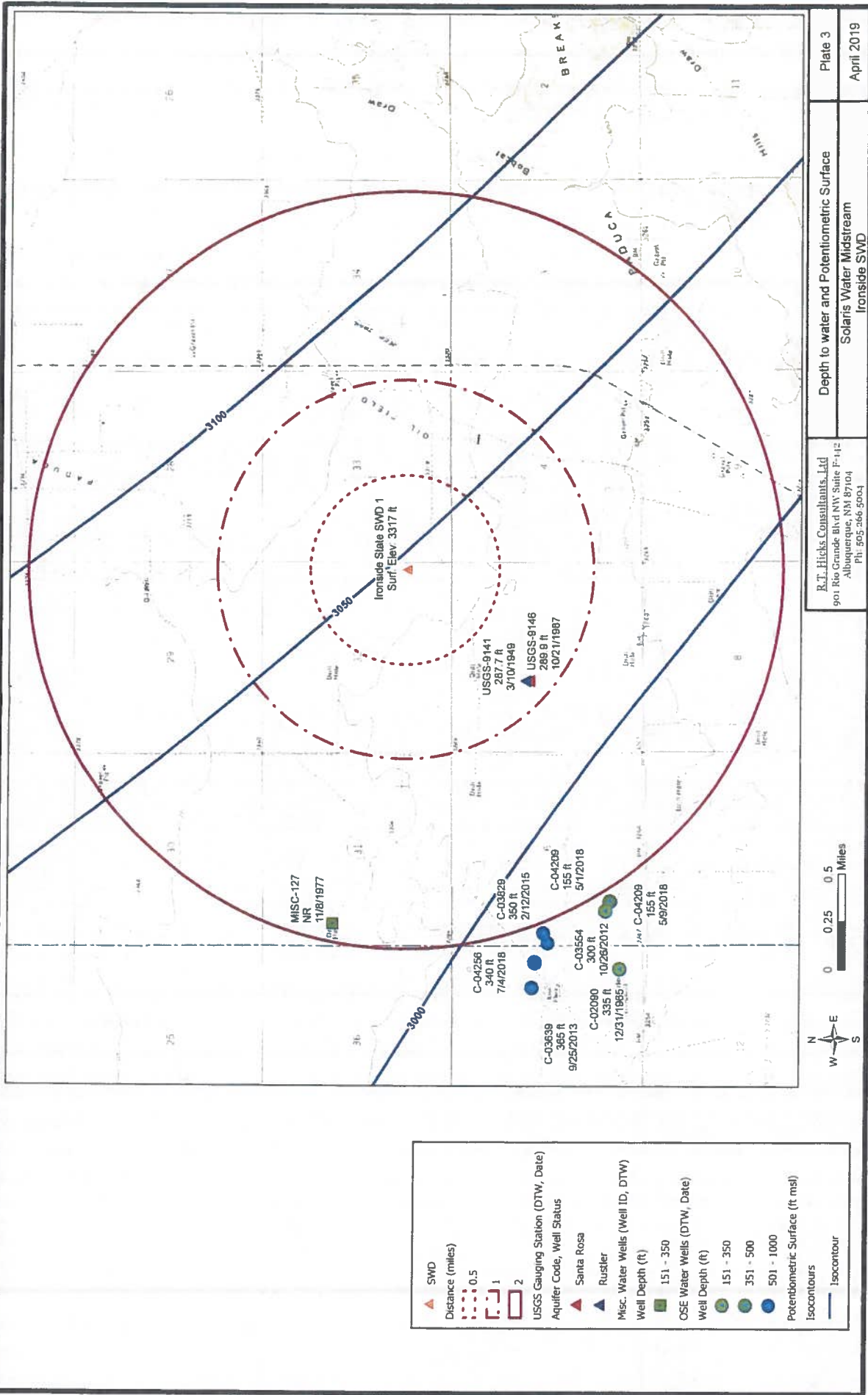
From	To	Thickness In Feet	Lithology

Plates

Plate 1	OCD wells within the area of review
Plate 2	Mineral leases within the area of review
Plate 3	Water supply wells within the area of review







Tables

Table 1	OCD wells within the area of review
Table 2a	BLM leases within the area of review
Table 2b	State leases within the area of review
Table 3	Produced Water Chemistry of Nearby Wells
Table 4	Available Devonian formational water quality data

Table 1 - NMOC Wells within 2-miles of Ironside State SWD #1

API	Well Name	Well Type	U1STR	OGRID	OGRID Name	Status	DIR	Status	Elevation	Measured Depth	Total Depth	Spud Date	Plug Date
30-025-08232	COTTON DRAW UNIT #051	O	B-28-255-32E	20077	SAHARA OPERATING CO	A	V		99999	4744	4744	6/17/1961	12/31/9999
30-025-24007	UNION FEDERAL #002	O	B-04-265-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	V		0	0	0	4/20/12/31/9999	12/31/9999
30-025-28726	AMOCO FEDERAL #001	O	J-08-265-32E	20077	SAHARA OPERATING CO	A	V		3200	4425	4425	6/29/1984	12/31/9999
30-025-30107	UNION B FEDERAL #001	O	C-04-265-32E	37636	ROBINSON OIL INC	A	V		99999	4578	4578	12/31/9999	12/31/9999
30-025-37634	COTTON DRAW UNIT #101	O	F-28-255-32E	20077	SAHARA OPERATING CO	A	V		3375	5000	5000	2/7/2006	12/31/9999
30-025-39660	PRESIDENTE BPD STATE COM #001H	O	D-32-255-32E	7377	EGG RESOURCES INC	A	H		3335	13132	8843	9/30/2010	12/31/9999
30-025-39911	RED HILLS WEST UNIT #002H	O	C-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3275	13678	9486	6/2/2011	12/31/9999
30-025-40069	SOL 28 FEDERAL #001H	O	C-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3373	13795	9344	7/5/2012	12/31/9999
30-025-40254	HALLERTAU 5 FEDERAL #004H	O	M-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3271	13840	9733	2/3/2012	12/31/9999
30-025-40496	HALLERTAU 5 FEDERAL #001H	O	P-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3253	15091	10542	2/24/2013	12/31/9999
30-025-40455	HALLERTAU 5 FEDERAL #003H	O	N-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3272	16552	12044	1/8/2015	12/31/9999
30-025-40474	HALLERTAU 4 FEDERAL #003H	O	B-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3306	13948	9463	9/10/2013	12/31/9999
30-025-40475	HALLERTAU 4 FEDERAL #004H	O	A-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3312	13484	9110	5/29/2012	12/31/9999
30-025-40476	HALLERTAU 4 FEDERAL #007H	O	A-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3308	15169	10713	10/28/2013	12/31/9999
30-025-40477	HALLERTAU 4 FEDERAL #008H	O	A-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3312	15202	10720	3/25/2012	12/31/9999
30-025-40687	RED HILLS WEST UNIT #004H	O	C-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3275	14761	9469	12/1/2012	12/31/9999
30-025-40722	JEFEE BSI FEDERAL COM #001H	O	I-28-255-32E	7377	EGG RESOURCES INC	A	H		3297	17319	10526	9/18/2012	12/31/9999
30-025-40803	SOL 28 FEDERAL #002H	O	I-28-255-32E	217955	COG PRODUCTION, LLC	A	H		3384	13840	9336	10/25/2012	12/31/9999
30-025-41062	HALLERTAU 4 FEDERAL #005H	O	D-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3310	13804	9400	5/21/2014	12/31/9999
30-025-41069	HALLERTAU 4 FEDERAL #001H	O	D-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3310	13558	9034	3/31/2013	12/31/9999
30-025-41119	HALLERTAU 4 FEDERAL #002H	O	C-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3314	13794	9408	6/13/2014	12/31/9999
30-025-41136	RED HILLS WEST UNIT #005H	O	D-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3251	15650	10648	6/1/2013	12/31/9999
30-025-41208	PINTAIL 3 FEDERAL SWD #001	S	I-03-265-32E	229137	COG OPERATING LLC	A	H		3273	6613	6613	7/16/2013	12/31/9999
30-025-41628	HALLERTAU 4 FEDERAL #006H	O	C-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3307	13739	9456	8/6/2014	12/31/9999
30-025-41849	RED HILLS WEST UNIT #007H	O	D-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3254	13403	9124	5/26/2014	12/31/9999
30-025-41878	HALLERTAU 4 FEDERAL #009H	O	B-04-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3304	13863	9440	7/12/2014	12/31/9999
30-025-42396	RED HILLS WEST UNIT #011H	O	D-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3250	13450	9087	12/13/2014	12/31/9999
30-025-42417	RED HILLS WEST UNIT #012H	O	D-10-265-32E	14744	MEWBOURNE OIL CO	A	H		3251	13685	9422	12/13/2014	12/31/9999
30-025-42584	ALMOST EDDY 31 FEDERAL #001H	O	P-31-255-32E	7377	EGG RESOURCES INC	A	H		3281	16126	8732	9/14/2015	12/31/9999
30-025-42624	VAN DOO OAH 33 FEDERAL #003H	O	P-33-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	H		3317	14011	9495	6/30/2015	12/31/9999
30-025-42666	HALLERTAU 5 FEDERAL #008H	O	E-29-255-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3271	16124	11843	9/27/2017	12/31/9999
30-025-43187	MORAB 29 20 FEDERAL COM #001H	O	M-05-265-32E	215099	CIMAREX ENERGY CO	A	H		3367	17692	10359	11/26/2016	12/31/9999
30-025-43303	HALLERTAU 5 FEDERAL #009H	O	N-05-265-32E	162683	CIMAREX ENERGY CO	A	H		3273	16394	11903	10/16/2017	12/31/9999
30-025-43362	JENNINGS 34 W1MD FEDERAL COM #001H	O	D-03-265-32E	14744	MEWBOURNE OIL CO	A	H		3317	17200	12083	11/7/2016	12/31/9999
30-025-43379	PADUCA 6 SWD #001Y	S	2-06-265-32E	161968	MESQUITE SWD, INC	A	V		3285	18881	18881	8/1/2016	12/31/9999
30-025-43774	ARABIAN 30 19 FEDERAL COM #003H	O	G-30-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	H		3362	17940	10436	8/2/2017	12/31/9999
30-025-43775	MORAB 29 20 FEDERAL COM #002H	O	F-29-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	H		3361	17807	10227	7/10/2018	12/31/9999
30-025-43776	MORAB 29 20 FEDERAL COM #003H	O	G-29-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	H		3361	18045	10366	8/1/2018	12/31/9999
30-025-43788	ARABIAN 30 19 FEDERAL COM #004H	O	H-30-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	H		3362	17950	10213	8/4/2017	12/31/9999
30-025-43886	HALLERTAU 5 FEDERAL #011H	O	M-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3272	16579	11891	12/7/2017	12/31/9999
30-025-43887	HALLERTAU 5 FEDERAL #016H	O	M-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3272	16529	12048	11/3/2017	12/31/9999
30-025-43911	HALLERTAU 5 FEDERAL #007H	O	N-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	A	H		3272	16532	11885	11/4/2017	12/31/9999
30-025-24158	PRE-ONGARD WELL #003	O	C-04-265-32E	214263	PRE-ONGARD WELL OPERATOR	C	O		0	0	0	0	12/31/9999
30-025-27558	PRE-ONGARD WELL #002	O	H-08-265-32E	214263	PRE-ONGARD WELL OPERATOR	C	O		0	0	0	0	12/31/9999
30-025-27559	PRE-ONGARD WELL #003	O	H-08-265-32E	214263	PRE-ONGARD WELL OPERATOR	C	O		0	0	0	0	12/31/9999
30-025-27744	PRE-ONGARD WELL #001	O	F-08-265-32E	214263	PRE-ONGARD WELL OPERATOR	C	O		0	0	0	0	12/31/9999
30-025-37632	COTTON DRAW UNIT #099	O	D-28-255-32E	256999	POGO PRODUCING COMPANY LLC	C	O		3365	0	0	0	12/31/9999
30-025-37633	COTTON DRAW UNIT #100	O	P-21-255-32E	256999	POGO PRODUCING COMPANY LLC	C	O		3387	0	0	0	12/31/9999
30-025-39903	RED HILLS WEST 3 FEDERAL COM #001	O	L-03-265-32E	14744	MEWBOURNE OIL CO	C	O		3271	0	0	0	12/31/9999
30-025-40454	HALLERTAU 5 FEDERAL COM #002C	O	O-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	C	H		3257	0	0	0	12/31/9999

Table 1 - NMOCD Wells within 2-miles of Ironside State SWD #1

API	Well Name	Effective Date	APR Date	Latitude	Longitude	District	Pool ID
30-025-08232	COTTON DRAW UNIT #051	6/3/2015	1/1/1900	32.1068764	-103.6789322	1	[49460] PADUCA, DELAWARE
30-025-24007	UNION FEDERAL #002	10/25/2012	1/1/1900	32.0778885	-103.6778183	1	[34010] JENNINGS, DELAWARE
30-025-28726	AMOCO FEDERAL #001	4/1/2004	10/1/1984	32.0557785	-103.695076	1	[44859] MASON, DELAWARE, NORTH
30-025-30107	UNION B FEDERAL #001	3/1/1997	1/1/1988	32.0787811	-103.682251	1	[34010] JENNINGS, DELAWARE
30-025-37634	COTTON DRAW UNIT #101	6/3/2015	1/5/2006	32.1032295	-103.6833191	1	[49460] PADUCA, DELAWARE
30-025-39660	PRESIDENTE BPD STATE COM #001H	1/16/2019	2/4/2010	32.0931969	-103.7037125	1	[96403] WILDCAT, BONE SPRING, [97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-39911	RED HILLS WEST UNIT #002H	12/1/2012	9/14/2010	32.0641365	-103.6650009	1	[96403] WILDCAT, BONE SPRING, [97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-40069	SOL 28 FEDERAL #001H	12/1/2011	2/16/2011	32.0954285	-103.6728516	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-40254	HALLERTAU 5 FEDERAL #004H	8/23/2011	8/23/2011	32.0658951	-103.7036896	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-40436	HALLERTAU 5 FEDERAL #001H	12/14/2011	12/14/2011	32.0658798	-103.6896973	1	[97838] JENNINGS, UPPER BONE SPRING SHALE; [98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-40455	HALLERTAU 5 FEDERAL #003H	2/21/2012	2/21/2012	32.0658531	-103.6994324	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-40474	HALLERTAU 4 FEDERAL #003H	2/28/2012	2/28/2012	32.0787964	-103.6784668	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-40475	HALLERTAU 4 FEDERAL #004H	2/28/2012	2/28/2012	32.0788116	-103.6735611	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-40476	HALLERTAU 4 FEDERAL #007H	2/28/2012	2/28/2012	32.0788002	-103.6767578	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-40477	HALLERTAU 4 FEDERAL #008H	2/28/2012	2/28/2012	32.0788116	-103.6730728	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-40687	RED HILLS WEST UNIT #004H	12/1/2012	7/1/2012	32.0638313	-103.6657257	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-40722	JEFF BSJ FEDERAL COM #001H	1/16/2019	8/10/2012	32.080555	-103.6950378	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-40803	SOL 28 FEDERAL #002H	9/28/2012	9/28/2012	32.1001587	-103.6725082	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41062	HALLERTAU 4 FEDERAL #005H	3/15/2013	3/15/2013	32.0787241	-103.686385	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-41069	HALLERTAU 4 FEDERAL #001H	3/15/2013	3/15/2013	32.0787659	-103.6863862	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41119	HALLERTAU 4 FEDERAL #002H	3/15/2013	3/15/2013	32.0787773	-103.6833115	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41136	RED HILLS WEST UNIT #005H	4/19/2013	4/19/2013	32.0641212	-103.6697845	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41208	PINTAIL 3 FEDERAL SWD #001	7/16/2013	6/5/2013	32.0719337	-103.6587219	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41628	HALLERTAU 4 FEDERAL #006H	1/21/2014	1/21/2014	32.0787849	-103.6813431	1	[97003] SWD, CHERRY CANYON
30-025-41849	RED HILLS WEST UNIT #007H	5/16/2014	5/14/2014	32.0641289	-103.6676865	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-41878	HALLERTAU 4 FEDERAL #009H	5/28/2014	5/6/2014	32.0787888	-103.6797256	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42336	RED HILLS WEST UNIT #011H	12/12/2014	12/12/2014	32.0641196	-103.6706947	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42417	RED HILLS WEST UNIT #012H	2/2/2015	1/27/2015	32.06412355	-103.6692546	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42584	ALMOST EDDY 31 FEDERAL #001H	5/26/2015	5/18/2015	32.08018608	-103.7071072	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42624	VAN DOO DAH 33 FEDERAL #003H	6/10/2015	6/6/2015	32.08026571	-103.6734083	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42666	HALLERTAU 5 FEDERAL #008H	7/6/2015	6/26/2015	32.06625	-103.704675	1	[97838] JENNINGS, UPPER BONE SPRING SHALE; [98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-43187	MORAB 29 20 FEDERAL COM #001H	4/25/2016	4/19/2016	32.1018807	-103.7037373	1	[96641] PADUCA, BONE SPRING (O); [97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-43303	HALLERTAU 5 FEDERAL #009H	6/17/2016	6/14/2016	32.0658182	-103.700072	1	[98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-43304	HALLERTAU 5 FEDERAL #010H	3/30/2017	7/11/2016	32.0658182	-103.680331	1	[97838] JENNINGS, UPPER BONE SPRING SHALE; [98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-43376	PADUCA 6 SWD #001V	8/1/2016	8/1/2016	32.07216184	-103.7192409	1	[96101] SWD, DEVONIAN
30-025-43774	ARABIAN 30 19 FEDERAL COM #003H	5/1/2017	4/25/2017	32.1017508	-103.7101203	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-43775	IMORAB 29 20 FEDERAL COM #002H	4/25/2017	4/25/2017	32.1018629	-103.6973335	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-43776	IMORAB 29 20 FEDERAL COM #003H	5/1/2017	4/25/2017	32.102242	-103.697207	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-43788	ARABIAN 30 19 FEDERAL COM #004H	5/8/2017	4/26/2017	32.101751	-103.7102171	1	[97903] WC-025 G-08 S253235G, LWR BONE SPRIN
30-025-43886	HALLERTAU 5 FEDERAL #011H	7/3/2017	6/27/2017	32.06625	-103.704544	1	[98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-43887	HALLERTAU 5 FEDERAL #016H	7/3/2017	6/27/2017	32.06625	-103.704608	1	[98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-43911	HALLERTAU 5 FEDERAL #007H	8/1/2017	7/21/2017	32.065817	-103.700008	1	[98065] WC-025 G-08 S263205N, UPPER WOLF CAMP
30-025-24158	PRE-ONGARD WELL #003	1/1/1900	1/1/1900	32.07787304	-103.6822183	1	
30-025-27558	PRE-ONGARD WELL #002	1/1/1900	1/1/1900	32.05878082	-103.6915358	1	
30-025-27559	PRE-ONGARD WELL #003	1/1/1900	1/1/1900	32.06223734	-103.6939764	1	
30-025-27744	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.06040397	-103.7004444	1	
30-025-37632	COTTON DRAW UNIT #009	2/14/2008	1/5/2006	32.10947551	-103.687588	1	
30-025-37633	COTTON DRAW UNIT #100	3/15/2012	9/14/2010	32.06956396	-103.6701765	1	[96403] WILDCAT, BONE SPRING
30-025-39903	RED HILLS WEST 3 FEDERAL COM #001	2/21/2012	2/21/2012	32.0655632	-103.695343	1	[97838] JENNINGS, UPPER BONE SPRING SHALE

Table 1 - NMOC D Wells within 2-miles of Ironside State SWD #1

Solaris Water Midstream

API	Well Name	Well Type	ULSTR	OGRID	OGRID Name	Status	DIR	Status	Elevation	Measured Depth	Total Depth	Spud Date	Plug Date
30-025-41063	HALLERTAU 5 FEDERAL #007C	O	N-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	C	H		3273	0	0	12/31/1999	12/31/1999
30-025-41248	VAN DOO DAH 33 FEDERAL #001C	O	C-33-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	H		3362	0	0	12/31/1999	12/31/1999
30-025-42438	RED HILLS WEST UNIT #010C	O	D-10-265-32E	14744	MEWBOURNE OIL CO	C	H		3255	0	0	12/31/1999	12/31/1999
30-025-42665	HALLERTAU 5 FEDERAL #005H	O	P-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	N	H		3255	0	0	12/31/1999	12/31/1999
30-025-42673	HALLERTAU 5 FEDERAL #006H	O	O-05-265-32E	162683	CIMAREX ENERGY CO. OF COLORADO	N	H		3260	0	0	12/31/1999	12/31/1999
30-025-42908	RED HILLS WEST UNIT #013H	O	D-10-265-32E	14744	MEWBOURNE OIL CO	N	H		3248	0	0	12/31/1999	12/31/1999
30-025-42909	RED HILLS WEST UNIT #016H	O	N-03-265-32E	14744	MEWBOURNE OIL CO	N	H		3199	0	0	12/31/1999	12/31/1999
30-025-43306	RED HILLS WEST UNIT #015H	O	C-10-265-32E	14744	MEWBOURNE OIL CO	N	H		3267	0	0	12/31/1999	12/31/1999
30-025-43374	JENNINGS 34 A3MD FEDERAL COM #002H	O	D-03-265-32E	14744	MEWBOURNE OIL CO	N	H		3317	0	0	12/31/1999	12/31/1999
30-025-43428	RED HILLS WEST UNIT #017C	O	D-10-265-32E	14744	MEWBOURNE OIL CO	N	H		3245	0	0	12/31/1999	12/31/1999
30-025-45202	VAN DOO DAH 28 33 FEDERAL COM #231H	O	D-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3377	0	0	12/31/1999	12/31/1999
30-025-45203	MARWARI 28 16 STATE FEDERAL COM #232H	O	D-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3377	0	0	12/31/1999	12/31/1999
30-025-45204	MARWARI 28 16 STATE FEDERAL COM #234H	O	D-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3390	0	0	12/31/1999	12/31/1999
30-025-45205	MARWARI 28 16 STATE FEDERAL COM #236H	O	B-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3389	0	0	12/31/1999	12/31/1999
30-025-45206	MARWARI 28 16 STATE FEDERAL COM #238H	O	A-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3384	0	0	12/31/1999	12/31/1999
30-025-45235	VAN DOO DAH 21 33 FEDERAL COM #233H	O	N-21-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3390	0	0	12/31/1999	12/31/1999
30-025-45236	VAN DOO DAH 28 33 FEDERAL COM #235H	O	B-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3389	0	0	12/31/1999	12/31/1999
30-025-45237	VAN DOO DAH 28 33 FEDERAL COM #237H	O	A-28-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	H		3384	0	0	12/31/1999	12/31/1999
30-025-08202	COTTON DRAW UNIT #043	O	P-20-255-32E	22351	TEXACO EXPLORATION & PRODUCTION INC	P	V		3369	4700	4700	3/25/1961	8/5/1995
30-025-08211	COTTON DRAW UNIT #037	O	M-21-255-32E	16696	IOX USA INC	P	V		99999	4784	4784	3/31/1961	11/7/2013
30-025-08212	COTTON DRAW UNIT #038	O	N-21-255-32E	22351	TEXACO EXPLORATION & PRODUCTION INC	P	V		3404	4750	4750	2/21/1986	2/21/1986
30-025-08227	PRE-ONGARD WELL #002	O	L-28-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08228	PRE-ONGARD WELL #001	O	K-28-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08229	COTTON DRAW UNIT #045	O	D-28-255-32E	22351	TEXACO EXPLORATION & PRODUCTION INC	P	V		3392	4770	4770	4/29/1985	4/29/1985
30-025-08230	COTTON DRAW UNIT #500	O	F-28-255-32E	22351	TEXACO EXPLORATION & PRODUCTION INC	P	V		99999	4750	4750	4/23/1961	11/11/2013
30-025-08231	COTTON DRAW UNIT #047	O	C-28-255-32E	16696	IOX USA INC	P	V		0	0	0	1/1/1900	1/1/1900
30-025-08233	PRE-ONGARD WELL #015	O	E-28-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08234	PRE-ONGARD WELL #016	O	G-28-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08235	COTTON DRAW UNIT #055	O	A-29-255-32E	22351	TEXACO EXPLORATION & PRODUCTION INC	P	V		3376	4727	4727	11/29/1989	11/29/1989
30-025-08236	COTTON DRAW UNIT #056	O	H-29-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	V		3387	4760	4760	8/30/1961	8/14/1995
30-025-08237	G E JORDAN NCT-1 #019	O	H-29-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	V		3350	4622	4622	10/6/1961	7/29/1997
30-025-08238	G E JORDAN NCT-1 #020	O	2-31-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	V		3385	10553	10553	10/4/1964	7/25/1997
30-025-08239	PRE-ONGARD WELL #001	O	H-29-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	V		0	0	0	1/1/1900	1/1/1900
30-025-08240	PRE-ONGARD WELL #001	O	M-33-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08241	PRE-ONGARD WELL #001	O	F-33-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08242	PRE-ONGARD WELL #001	O	I-33-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08243	PRE-ONGARD WELL #002	O	A-33-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08244	JENNINGS FEDERAL #001	O	O-33-255-32E	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	V		0	0	0	12/31/1999	9/1/2017
30-025-08246	PRE-ONGARD WELL #001	O	D-34-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08247	PRE-ONGARD WELL #001	O	E-34-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08249	PRE-ONGARD WELL #001	O	O-05-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08250	PRE-ONGARD WELL #001	O	C-05-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08251	PRE-ONGARD WELL #001	O	A-06-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08253	PRE-ONGARD WELL #001	O	H-08-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-08254	PRE-ONGARD WELL #001	O	D-10-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-20417	PRE-ONGARD WELL #001	O	F-04-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-20577	COTTON TREE STATE SWD #001	O	F-32-255-32E	245872	JUDAH OIL LLC	P	V		3297	5795	5795	6/3/1963	4/4/2016
30-025-20729	PRE-ONGARD WELL #001	O	P-29-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-23296	PRE-ONGARD WELL #001	O	F-04-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-23993	PRE-ONGARD WELL #001	O	D-03-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900
30-025-24500	PRE-ONGARD WELL #002	O	A-07-265-32E	214263	PRE-ONGARD WELL OPERATOR	P	O		0	0	0	1/1/1900	1/1/1900

Table 1 - NMOCD Wells within 2-miles of Ironside State SWD #1

API	Well Name	Effective Date	APR Date	Latitude	Longitude	District	Pool ID
30-025-41063	HALLERTAU 5 FEDERAL #007C	3/15/2013	3/15/2013	32.0658493	-103.699913	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-41248	VAN DOO DAH 33 FEDERAL #001C	6/24/2013	6/24/2013	32.0932693	-103.6832809	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42438	RED HILLS WEST UNIT #010C	7/12/2015	7/12/2015	32.06412849	-103.6674544	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42665	HALLERTAU 5 FEDERAL #005H	7/16/2015	7/16/2015	32.06583889	-103.6901944	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42673	HALLERTAU 5 FEDERAL #006H	7/16/2015	7/16/2015	32.06548611	-103.6934694	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42908	RED HILLS WEST UNIT #013H	10/30/2015	10/30/2015	32.06406944	-103.6709417	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-42909	RED HILLS WEST UNIT #016H	10/30/2015	10/30/2015	32.06650036	-103.6693946	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-43306	RED HILLS WEST UNIT #015H	6/17/2016	6/17/2016	32.06315929	-103.665017	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-43374	JENNINGS 34 A3MD FEDERAL COM #002H	7/10/2016	7/10/2016	32.0788473	-103.6682911	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-43428	RED HILLS WEST UNIT #017C	9/21/2016	9/21/2016	32.06168115	-103.6691228	1	[97838] JENNINGS, UPPER BONE SPRING SHALE
30-025-45202	VAN DOO DAH 28 33 FEDERAL COM #236H	9/18/2018	9/18/2018	32.1080191	-103.6873562	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-45203	MARWARI 28 16 STATE FEDERAL COM #232H	9/18/2018	9/18/2018	32.1081014	-103.6873562	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-45204	MARWARI 28 16 STATE FEDERAL COM #234H	9/18/2018	9/18/2018	32.1092557	-103.6839049	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-45205	MARWARI 28 16 STATE FEDERAL COM #236H	9/18/2018	9/18/2018	32.1081974	-103.6777937	1	[96715] WC-025 G-06 5253206M, BONE SPRING
30-025-45206	MARWARI 28 16 STATE FEDERAL COM #238H	9/18/2018	9/18/2018	32.1081211	-103.6744838	1	[96715] WC-025 G-06 5253206M, BONE SPRING
30-025-45235	VAN DOO DAH 21 33 FEDERAL COM #233H	9/27/2018	9/27/2018	32.1099971	-103.6839051	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-45236	VAN DOO DAH 28 33 FEDERAL COM #235H	9/27/2018	9/27/2018	32.1081149	-103.6777937	1	[96715] WC-025 G-06 5253206M, BONE SPRING
30-025-45237	VAN DOO DAH 28 33 FEDERAL COM #237H	9/27/2018	9/27/2018	32.1081298	-103.6744837	1	[96715] WC-025 G-06 5253206M, BONE SPRING
30-025-08202	COTTON DRAW UNIT #043	8/5/1995	8/5/1995	32.1095505	-103.6897354	1	[97903] WC-025 G-08 5253235G, LWR BONE SPRIN
30-025-08211	COTTON DRAW UNIT #037	3/1/2008	3/1/2008	32.1104736	-103.6865463	1	[49460] PADUCA, DELAWARE
30-025-08212	COTTON DRAW UNIT #038	2/21/1986	2/21/1986	32.1104927	-103.6822815	1	[49460] PADUCA, DELAWARE
30-025-08227	PRE-ONGARD WELL #002	1/1/1900	1/1/1900	32.1005211	-103.6854401	1	[49460] PADUCA, DELAWARE
30-025-08228	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.1005287	-103.6833038	1	[49460] PADUCA, DELAWARE
30-025-08229	COTTON DRAW UNIT #045	1/1/1900	1/1/1900	32.106842	-103.6865311	1	[49460] PADUCA, DELAWARE
30-025-08230	COTTON DRAW UNIT #500	4/29/1985	4/29/1985	32.1032333	-103.682251	1	[49460] PADUCA, DELAWARE
30-025-08231	COTTON DRAW UNIT #047	3/1/2008	3/1/2008	32.1068611	-103.6822662	1	[49460] PADUCA, DELAWARE
30-025-08233	PRE-ONGARD WELL #015	1/1/1900	1/1/1900	32.1032143	-103.6865158	1	[49460] PADUCA, DELAWARE
30-025-08234	PRE-ONGARD WELL #016	1/1/1900	1/1/1900	32.1032486	-103.6790161	1	[49460] PADUCA, DELAWARE
30-025-08235	COTTON DRAW UNIT #055	1/1/1989	1/1/1989	32.1077347	-103.6897354	1	[49460] PADUCA, DELAWARE
30-025-08236	COTTON DRAW UNIT #056	8/4/1995	8/4/1995	32.1068993	-103.6746674	1	[49460] PADUCA, DELAWARE
30-025-08237	G E JORDAN NCT-1 #019	7/29/1997	7/29/1997	32.103199	-103.6746597	1	[49460] PADUCA, DELAWARE
30-025-08239	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.1041756	-103.6746597	1	[49460] PADUCA, DELAWARE
30-025-08240	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0886154	-103.720932	1	[49460] PADUCA, DELAWARE
30-025-08241	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0814896	-103.6865082	1	[49460] PADUCA, DELAWARE
30-025-08242	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0878372	-103.681116	1	[49460] PADUCA, DELAWARE
30-025-08244	JENNINGS FEDERAL #001	1/1/1900	1/1/1900	32.0851631	-103.672233	1	[34010] JENNINGS, DELAWARE
30-025-08245	PRE-ONGARD WELL #001	10/25/2012	10/25/2012	32.0924034	-103.6735535	1	[34010] JENNINGS, DELAWARE
30-025-08247	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0924187	-103.6692886	1	[34010] JENNINGS, DELAWARE
30-025-08249	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0887871	-103.6692963	1	[34010] JENNINGS, DELAWARE
30-025-08250	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0658607	-103.6960907	1	[34010] JENNINGS, DELAWARE
30-025-08251	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0778198	-103.694553	1	[34010] JENNINGS, DELAWARE
30-025-08253	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0777931	-103.7079849	1	[34010] JENNINGS, DELAWARE
30-025-08254	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0595245	-103.6907501	1	[34010] JENNINGS, DELAWARE
30-025-20417	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0632172	-103.6692581	1	[34010] JENNINGS, DELAWARE
30-025-20577	COTTON TREE STATE SWD #001	1/1/1900	1/1/1900	32.0742493	-103.6811829	1	[34010] JENNINGS, DELAWARE
30-025-20729	PRE-ONGARD WELL #001	5/27/1963	5/27/1963	32.0886765	-103.6994553	1	[96838] DRY AND ABANDONED
30-025-23296	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0968742	-103.689682	1	[96838] DRY AND ABANDONED
30-025-23993	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0742455	-103.6822433	1	[96838] DRY AND ABANDONED
30-025-24500	PRE-ONGARD WELL #002	1/1/1900	1/1/1900	32.0779152	-103.6692963	1	[96838] DRY AND ABANDONED
30-025-24500	PRE-ONGARD WELL #002	1/1/1900	1/1/1900	32.0622025	-103.7079544	1	[96838] DRY AND ABANDONED

Table 1 - NMOC Wells within 2-miles of Ironside State SWD #1

API	Well Name	Well Type	ULSTR	OGRID	OGRID Name	Status	DIR	Status	Elevation	Measured Depth	Total Depth	Spud Date	Plug Date
30-025-27079	PRE-ONGARD WELL #001	O	M-34-255-32E	214263	PRE-ONGARD WELL OPERATOR	P	0	0	0	0	4650	1/1/1900	1/1/1900
30-025-27557	EXXON FEDERAL #001	O	L-09-265-32E	22223	TEMPO ENERGY INC	P	V		3198	4452	4452	9/4/1991	9/4/1991
30-025-28483	EXXON FEDERAL #001	O	L-08-265-32E	10461	QUAY VALLEY INC.	P	V		3195	4445	4445	4/27/1984	3/1/2004
30-025-38151	WE FEDERAL #001	O	M-28-255-32E	160825	BC OPERATING, INC.	P	V		3357	4771	4771	10/26/2006	3/10/2010
30-025-43277	PADUCA 6 SWD #001	S	3-06-265-32E	161968	MESQUITE SWD, INC	P	V		3285	960	960	7/20/2016	7/29/2016

Table 1 - NIMOD Wells within 2-miles of Ironside State SWD #1

Solaris Water Midstream

API	Well Name	Effective Date	APR Date	Latitude	Longitude	District	Pool ID
30-025-27079	PRE-ONGARD WELL #001	1/1/1900	1/1/1900	32.0810127	-103.6703644	1	1
30-025-27557	EXXON FEDERAL #001	9/4/1991	9/4/1991	32.0550995	-103.6873169	1	1
30-025-28483	EXXON FEDERAL #001	6/1/1984	6/1/1984	32.0557251	-103.6907425	1	1
30-025-38151	IKK FEDERAL #001	9/12/2006	9/12/2006	32.0959816	-103.6864853	1	1
30-025-43277	PADUCA 6 SWD #001	6/28/2016	5/25/2016	32.07216062	-103.7190976	1	1

[96101] SWD, DEVONIAN; [96838] DRY AND ABANDONED

Table 2a - Oil and Gas Leases on BLM Surface within 2-Miles of Ironside State SWD #1 Solaris Water Midstream

SerialNumb	Name 1	Name 2	Name 3	Name 4
NMLC 0062300	3-M ENERGY CO	CHEVRON USA INC	DEVON ENERGY	PROVIDENCE MINERALS LLC
NMLC 0061869	DEVON ENERGY PROD CO LP			
NMNM 027467	OCCIDENTAL PERMIAN LP			
NMNM 105560	MEWBOURNE OIL CO			
NMNM 108972	COG OPERATING LLC			
NMNM 105559	MEWBOURNE OIL CO			
NMNM 108971	OXY Y-1 COMPANY	EOG A RESOURCES INC	EOG M RESOURCES INC	
NMNM 105561	MEWBOURNE OIL CO			
NMNM 115421	OXY USA INC			
NMNM 128927	COG OPERATING LLC			
NMNM 120910	COG PRODUCTION LLC			
NMNM 115422	OGX RESOURCES INC			
NMNM 128928	MAGNUM HUNTER PRODUCTION INC			
NMNM 113968	DEVON ENERGY PROD CO LP			
NMNM 113967	DEVON ENERGY PROD CO LP			
NMNM 112935	OXY Y-1 COMPANY	EOG A RESOURCES INC	EOG M RESOURCES INC	
NMNM 115423	OXY USA INC			
NMNM 120909	CHEVRON USA INC			
NMNM 128929	OCCIDENTAL PERMIAN LP			
NMNM 0359295A	DEVON ENERGY OPER CO LP			
NMNM 0392082A	MAGNUM HUNTER PRODUCTION INC			

Table 2b Oil and Gas Leases On State Surface within 2-Miles of Ironside State SWD #1

Solaris Water Midstream

Unique Key	Lease Prefix	Lease Number	Lease Suffix	OGRID Number	OGRID Name
V076790001	V0	7679	1	90712	MEWBOURNE OIL COMPANY
VB07770001	VB	777	1	25575	EOG Y RESOURCES, INC.
VB07870001	VB	787	1	25575	EOG Y RESOURCES, INC.

Table 3 - Produced Water Chemistry of Nearby Wells

apl	S	TWO	RNG	CTY	formation	sampledate	ph	tds_mg/L	resistivity_ohm cm	sodium_mg/L	calcium_mg/L	iron_mg/L	magnesium_mg/L	manganese_mg/L	chloride_mg/L	bicarbonate_mg/L	sulfate_mg/L	co2_mg/L
3001542426	1.255	31E	EDDY	DELAWARE-BRUSHY CANYON	10/7/2015 0:00	6.3	245655.5	0.05108	71987.8	15105.6	76.4	2475.6	153168.3	15475.6	15475.6	545.1	400	
3001542515	1.255	31E	EDDY	DELAWARE-BRUSHY CANYON	10/7/2015 0:00	6.5	240893.6	0.05116	69999.9	13540.5	54	2248.5	152475.6	1	78403.1	317	481	30
3001542952	1.255	31E	EDDY	BONE SPRING 2ND SAND	4/27/2014 0:00	6.7	128946.5		41405	6715	16	588	88433.1	1.29	88011.8	244	0	200
3001542513	1.255	31E	EDDY	BONE SPRING 2ND SAND	4/27/2015 0:00	7.1	145420.8		45961.8	7771.4	35	973.4	144	1.25	89011.8	244	0	200
3001542952	1.255	31E	EDDY	BONE SPRING 2ND SAND	8/24/2005 0:00	7	135335.2		44886.9	7892.4	36	972.6	248	82003	477	477		
3001529522	1.255	31E	EDDY	BONE SPRING 2ND SAND	3/9/2011 0:00	7	133147.6		44488.8	5627	3.5	511	0.2	80547	341.6	468	0.2	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	6/30/2014 0:00	6.5	164473.4		53511.8	9168.8	44.7	1111.4	1.41	98461	244	0	200	
3001541363	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/27/2015 0:00	6.3	151759.9		46840.4	7768.3	47	933	1.22	93955.3	122	0	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/27/2015 0:00	6.3	151631		47257.6	7748.1	48.7	954	1.22	93154.3	122	875.3	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/27/2015 0:00	6.5	151433.6		47257.6	7748.1	48.7	954	1.31	93154.3	122	0	200	
3001538433	2.255	31E	EDDY	DELAWARE-BRUSHY CANYON	10/7/2015 0:00	6.5	257515.5	0.04973	74122.9	16699.4	79.5	2736.1	1.5	123033	976	1434	60	
3001538533	2.255	31E	EDDY	AVALLON LOWER	2/1/2013 0:00	7.1	204607.1		68549.6	7663	25	1369	1.5	123033	976	1434	60	
3001538534	2.255	31E	EDDY	AVALLON LOWER	2/1/2013 0:00	7.1	176370.9		63413.9	3351	36	615	0.8	104946	1537.2	1188	40	
3001529345	2.255	31E	EDDY	AVALLON MIDDLE	2/1/2013 0:00	7.2	212182.4		73317.3	11591	44	1987	2.5	140233	610	781	40	
3001538533	2.255	31E	EDDY	AVALLON MIDDLE	6/25/2013 0:00	6.5	221504.1		69200.7	13704	29	2349	2.5	131076	707.6	1106	50	
3001548533	2.255	31E	EDDY	BONE SPRING 2ND SAND	10/17/2013 0:00	6.5	99209		71676	11845	49	2099	2.5	131876	707.6	1106	50	
3001541363	2.255	31E	EDDY	AVALLON LOWER	1/27/2014 0:00	6.66	173840.4		33720	3384	38	912	3	56135	122	3635	150	
3001538533	2.255	31E	EDDY	AVALLON MIDDLE	1/27/2014 0:00	6.6	193809		59159	4411	73	912	1.5	105084	1403	0	350	
3001538534	2.255	31E	EDDY	AVALLON LOWER	1/27/2014 0:00	6.7	154676.5		55033	1169	47	261	2.5	120738	549	0	400	
3001538534	2.255	31E	EDDY	AVALLON MIDDLE	1/27/2014 0:00	6.7	154676.5		60669	9699	64	1785	0.8	94550	1220	0	300	
3001538556	2.255	31E	EDDY	AVALLON MIDDLE	2/10/2014 0:00	6.12	201266.5		73846	15965	56	2572	3.5	155756	122	0	350	
3001510843	2.255	31E	EDDY	AVALLON MIDDLE	2/12/2014 0:00	6.59	131449.7		42344	6992	6	601	0.2	79220	353	542	40	
3001529728	2.255	31E	EDDY	AVALLON MIDDLE	2/12/2014 0:00	4.74	87958.5		26036	3873	887	382	9	51300	59	380	410	
3001510843	2.255	31E	EDDY	AVALLON MIDDLE	2/20/2014 0:00	7.47	246826		74769	16401	65	2689	3.5	149839	158	410	410	
3001538556	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.3	194713		58546	10372	70	1733	3	120869	634	656	570	
3001541363	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.4	155083		46690.1	7728.7	132	945.5	1.8	97130.8	183	876.9	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.4	154900.7		47168.6	7450	48.1	989.6	1.15	93392.1	122	116.7	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.2	151545		46650.1	7728.7	132	945.5	1.15	93392.1	122	116.7	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.2	151722		47168.6	7450	48.1	989.6	1.15	93392.1	122	116.7	200	
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.2	160017		48268.6	7948.4	38.3	1005.5	1.06	100334.1	122	834.5	100	
3001541437	2.255	31E	EDDY	BONE SPRING 2ND SAND	11/18/2014 0:00	6.2	159879		48268.6	7948.4	38.3	1005.5	1.06	100334.1	122	834.5	100	
3001541437	2.255	31E	EDDY	BONE SPRING 2ND SAND	4/7/2015 0:00	6.9	149970.9	0.06035	47221.1	7739.3	48.6	945.9	1.39	91736.6	188	0	200	
3001549345	2.255	31E	EDDY	BONE SPRING 2ND SAND	7/21/2005 0:00	6	251350.9		72408	18324	168	2885	2.5	154636	124.4	253		
3001529345	2.255	31E	EDDY	BONE SPRING 2ND SAND	7/21/2005 0:00	7	125561		40610.6	5512	2	495		74201	290.4	456		
3001529728	2.255	31E	EDDY	BONE SPRING 2ND SAND	8/24/2005 0:00	5	264347.8		81366.6	15276	146	2599		162178	62.2	249		
3001529345	2.255	31E	EDDY	BONE SPRING 2ND SAND	8/24/2005 0:00	7	136044.8		45442.1	5998	0.7	450		82374	311.1	468		
3001529728	2.255	31E	EDDY	BONE SPRING 2ND SAND	8/24/2005 0:00	6.2	136576.4		45028.5	6334	280	485		82850	122.4	499		
3001538432	2.255	31E	EDDY	DELAWARE-BRUSHY CANYON	6/17/2014 0:00	6	202329		64882.1	13144.3	55.3	2199.6	3.77	119000	244	0	70	
3001541363	2.255	31E	EDDY	BONE SPRING 2ND SAND	6/30/2014 0:00	6.7	126424.8		40645.2	6514.4	11.4	810.1		0	75892	244	0	200
3001541364	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/7/2015 0:00	6	15357.9		48376.6	7952.2	44.4	957.3	1.18	95566.7	244	0	200	
3001541499	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/7/2015 0:00	6.2	152518		48678.5	7968.1	37.6	993.3	1.1	92365.3	122	846.7	150	
3001541499	2.255	31E	EDDY	BONE SPRING 2ND SAND	1/7/2015 0:00	6.2	152325.4		48678.5	7968	37.6	993.3	1.14	92365.3	122	0	150	
3001538293	2.255	31E	EDDY	AVALLON LOWER	3/29/2011 0:00	6.6	85262.9		31498.1	815	15	116		0.2	48116	2867	1368	200
3001510843	2.255	31E	EDDY	AVALLON LOWER	9/21/2011 0:00	6	222994.1		73657.1	10000	42	1944		136320	500	531		
3001542317	3.255	31E	EDDY	BONE SPRING 2ND SAND	1/27/2015 0:00	6.3	143226.8		42636.7	6947.7	35.4	881.4	1.06	90482.2	244	0	300	
3001541364	3.255	31E	EDDY	BONE SPRING 2ND SAND	1/27/2015 0:00	6.4	143721.9		43196.3	7185.3	47.3	911.9	1.17	90263.4	122	0	200	
3001538533	3.255	31E	EDDY	DELAWARE-BRUSHY CANYON	6/25/2013 0:00	6.7	271580.1		82640	18493	103	3404	5	163100	219.6	286	30	
3001531381	3.255	31E	EDDY	DELAWARE-BRUSHY CANYON	2/10/2014 0:00	6.2	240716		69047	14901	68	2407	3	151403	122	0	300	
3001531381	3.255	31E	EDDY	DELAWARE-BRUSHY CANYON	2/20/2014 0:00	7.4	255030.4		71818	14633	58	2445		162812	146.4	495	390	
3001531381	3.255	31E	EDDY	DELAWARE-BRUSHY CANYON	2/20/2014 0:00	7.4	242428.7		69222	14322	51	2315		153661	134.2	443	380	
3001531381	3.255	31E	EDDY	DELAWARE-BRUSHY CANYON	2/20/2014 0:00	7.67	250022.2		68772	14093	55	2298		161917	134.2	506	420	
3001542317	3.255	31E	EDDY	BONE SPRING 2ND SAND	4/7/2015 0:00	6.5	151449.4	0.05979	46958.4	7753.9	38.7	968.6		0	93214.6	122	0	200
3001542318	3.255	31E	EDDY	BONE SPRING 2ND SAND	4/7/2015 0:00	6.5	150344.4	0.05986	46535.7	7533.5	36	943.7		0	93134.6	122	0	200

Table 3 - Produced Water Chemistry of Nearby Wells

api	s	two	rmg	cty	formation	sampledate	ph	ids_mgl	resistivity_ohm_cm	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl
3001538353	3 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	12/27/2014 0:00	6	239673.7	0.06816	73189.3	17155.5	59.3	2948.2	3.44	163095.6	122	0	400
3001538952	3 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	12/13/2014 0:00	6	254937.3	0.06816	68394.1	15453.2	43.6	2523.9	3.49	148589.6	188	0	400
3001531381	3 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	8/11/2015 0:00	6.4	193507	0.06816	65637.5	10651.6	36.3	1522.3	3.49	122006.1	122	0	200
3001538635	3 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	9/21/2011 0:00	6.2	194556.7	0.06816	67591.7	5200	84	1944	2.5	117860	220	1657	200
3001539230	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	7/1/2013 0:00	7.4	254959.2	0.06816	79764.6	13961	35	2285	2.5	117860	220	1657	200
3001539320	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	11/4/2014 0:00	6	259892	0.06816	7181.8	15698.5	62	2546	3.39	166925.1	305	0	300
3001542126	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	11/4/2014 0:00	6	248781.7	0.06816	9168.6	1501.9	85.5	2497.6	3.39	159331.7	122	0	350
3001542126	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	11/4/2014 0:00	6.2	166762.2	0.06816	50511.3	8741.5	34.9	1113.3	1.09	104123.2	122	0	150
3001542126	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	11/18/2014 0:00	6	157230.6	0.06816	48594.2	8080.1	33.4	1039.4	1.05	97286	122	0	150
3001542127	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	11/18/2014 0:00	6	157444	0.06816	48594.2	8080.1	33.4	1039.4	1.05	97286	122	0	150
3001542126	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	4/7/2015 0:00	6.8	156876.4	0.06816	47995.3	8167.1	46.9	1037.2	1.36	97409	152	0	200
3001542127	10 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	4/7/2015 0:00	6.5	158125.7	0.06816	48703.1	8121.1	37.2	1022.8	1.08	98100	122	0	200
3001542414	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/25/2015 0:00	6.2	126263.1	0.06816	40466.7	5580.3	43.2	894	1.63	76140.7	122	0	200
3001542415	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/25/2015 0:00	6.1	13502.7	0.06816	40466.7	5580.3	43.2	894	1.63	76140.7	122	0	200
3001539375	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98	332	380
3001539376	11 255	31E	EDDY	DELAWARE	DELAWARE-BRUSHY CANYON	1/27/2014 0:00	6.3	249141.5	0.06816	72215	15714	45	2559	3	151636	98		

OSE Well Logs

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.osc.state.nm.us

2018 JUL 18 14:43

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-4236-POD;		WELL TAG ID NO.		OSE FILE NO(S):		
	WELL OWNER NAME(S): Haker Ranch				PHONE (OPTIONAL): 480-365-8463		
	WELL OWNER MAILING ADDRESS: P.O. Box 34				CITY: Silver City	STATE: NM	
					ZIP: 88062		
2. DRILLING & CASING INFORMATION	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 4	SECONDS 23.4	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LATITUDE		N			
		LONGITUDE	103	43	28.3	* DATUM REQUIRED: WGS 84	
				W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHEN AVAILABLE							
3. ANNULAR MATERIAL	LICENSE NO. WJD1706		NAME OF LICENSED DRILLER Bryce Wallace			NAME OF WELL DRILLING COMPANY Elite Drillers Corporation	
	DRILLING STARTED 06/28/18	DRILLING ENDED 07/04/18	DEPTH OF COMPLETED WELL (FT): 666	BORE HOLE DEPTH (FT): 680	DEPTH WATER FIRST ENCOUNTERED (FT): 340		
	COMPLETED WELL IS: ☒ ARTISIAN ☐ DRY HOLE ☐ SHALLOW UNCONFINED				STATIC WATER LEVEL IN COMPLETED WELL (FT): 330		
	DRILLING FLUID: ☐ AIR ☒ MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:						
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (incl coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
	0	100	17.5	ASTM53 Grade B	Welded	12.57	.133
	0	326	12.25	ASTM53 Grade B	Welded	6.065	.288
	326	666	12.25	SDR 17 PVC	Splice	5.8	SDR 17
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO					
	0	100	17.5	Portland III Cement	80	Tremie	
	0	315	12.25	Portland III Cement	137	Tremie	
	315	666	12.25	Silica Sand 8/16	219	Pour	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	C-4256	POD NO.	1	TRN NO.	626507
LOCATION	26S. 31E 1.2.4.4	EXPL		WELL TAG ID NO.	N/A
				PAGE	OF 2

PAGE : OF 2

[illegible]

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO. C-4256	POD NO. 1	TRN NO. 626509	
LOCATION 26S.31E.1.2.4.4	EXPL	WELL TAG ID NO. N/A	PAGE 2 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2018 MAY 21 AM 10:46

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-4209-POD1		WELL TAG ID NO.		OSE FILE NO(S)			
	WELL OWNER NAME(S) Baker Ranch				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. Box 24				CITY Silver City	STATE NM	ZIP 88062	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 04	SECONDS 02.5 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE, WHERE AVAILABLE)								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD1706		NAME OF LICENSED DRILLER Bryce Wallace			NAME OF WELL DRILLING COMPANY Elite Drillers Corporation		
	DRILLING STARTED 4/28/18	DRILLING ENDED 5/1/18	DEPTH OF COMPLETED WELL (FT) 360	BORE HOLE DEPTH (FT) 360	DEPTH WATER FIRST ENCOUNTERED (FT) 155			
	COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☒ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 155		
	DRILLING FLUID: ☐ AIR ☒ MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☒ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	+2	200	11	PVC	Spline	6	SDR 21	
	200	360	11	PVC	Spline	6	SDR 21	.032
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	25	11	Portland U/I	25	Slurry/Pour		
	25	360	11	8/16 Silica Sand	145	Pour		

FOR OSE INTERNAL USE

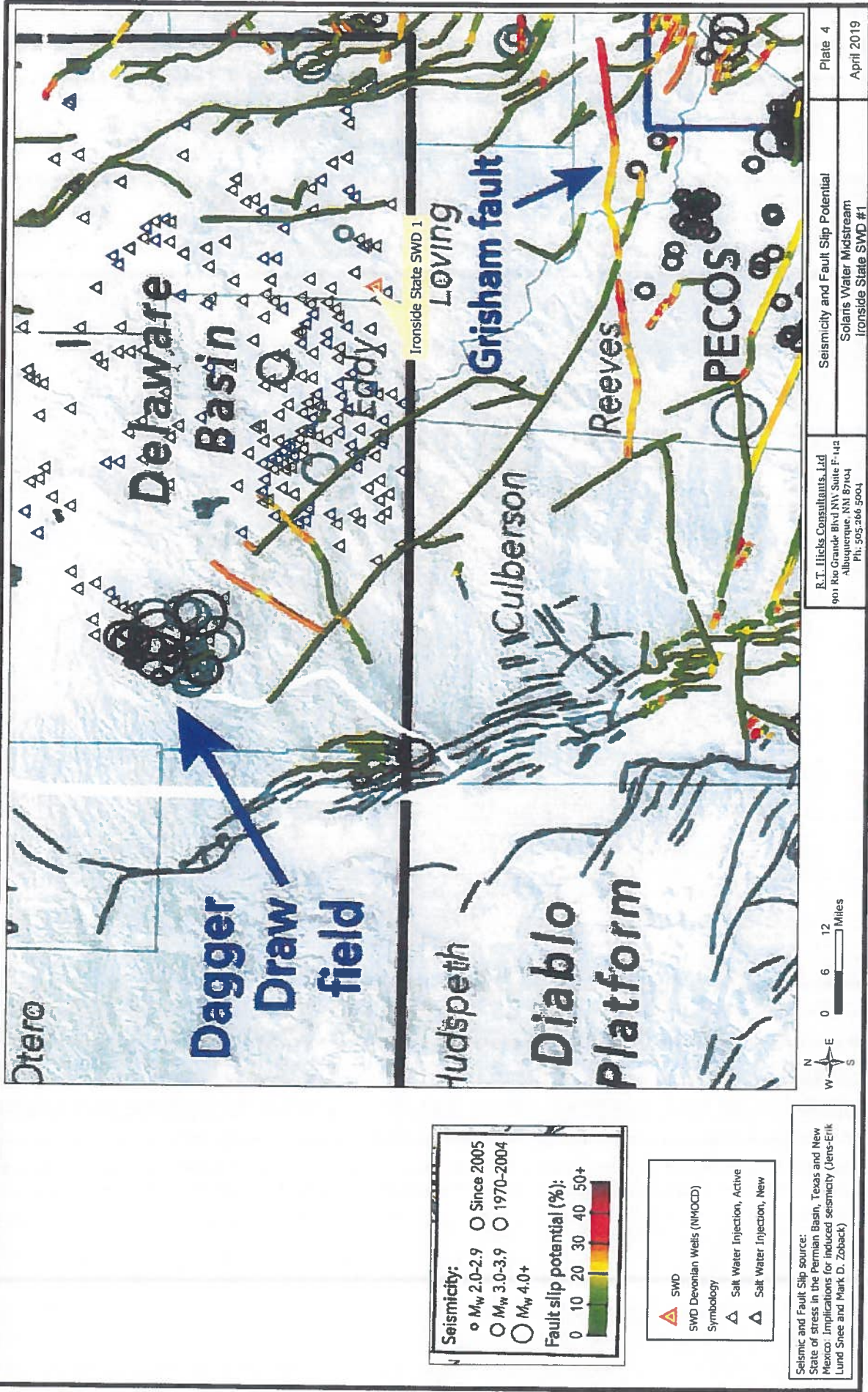
FILE NO.	C-4209	POD NO.	1	TRN NO.	621334
LOCATION	26S.32E.6.3.3.2	EXPL	WELL TAG ID NO.	NIA	PAGE 1 OF 2

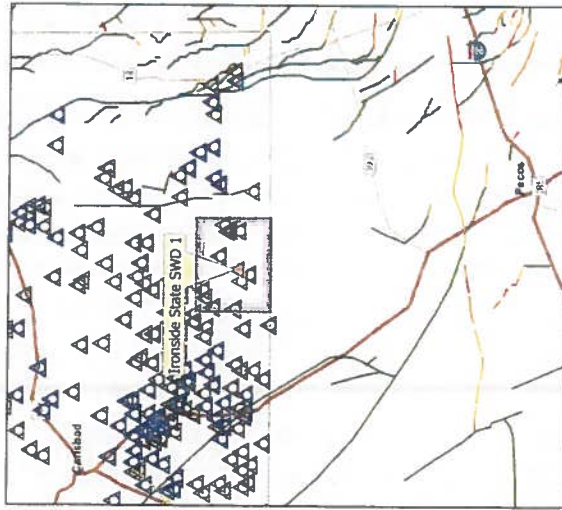
WR-20 WELL RECORD & LOG (Version 06/30/17)

ST. JAMES' CATHOLIC CHURCH
FORD, GUYANA
1984

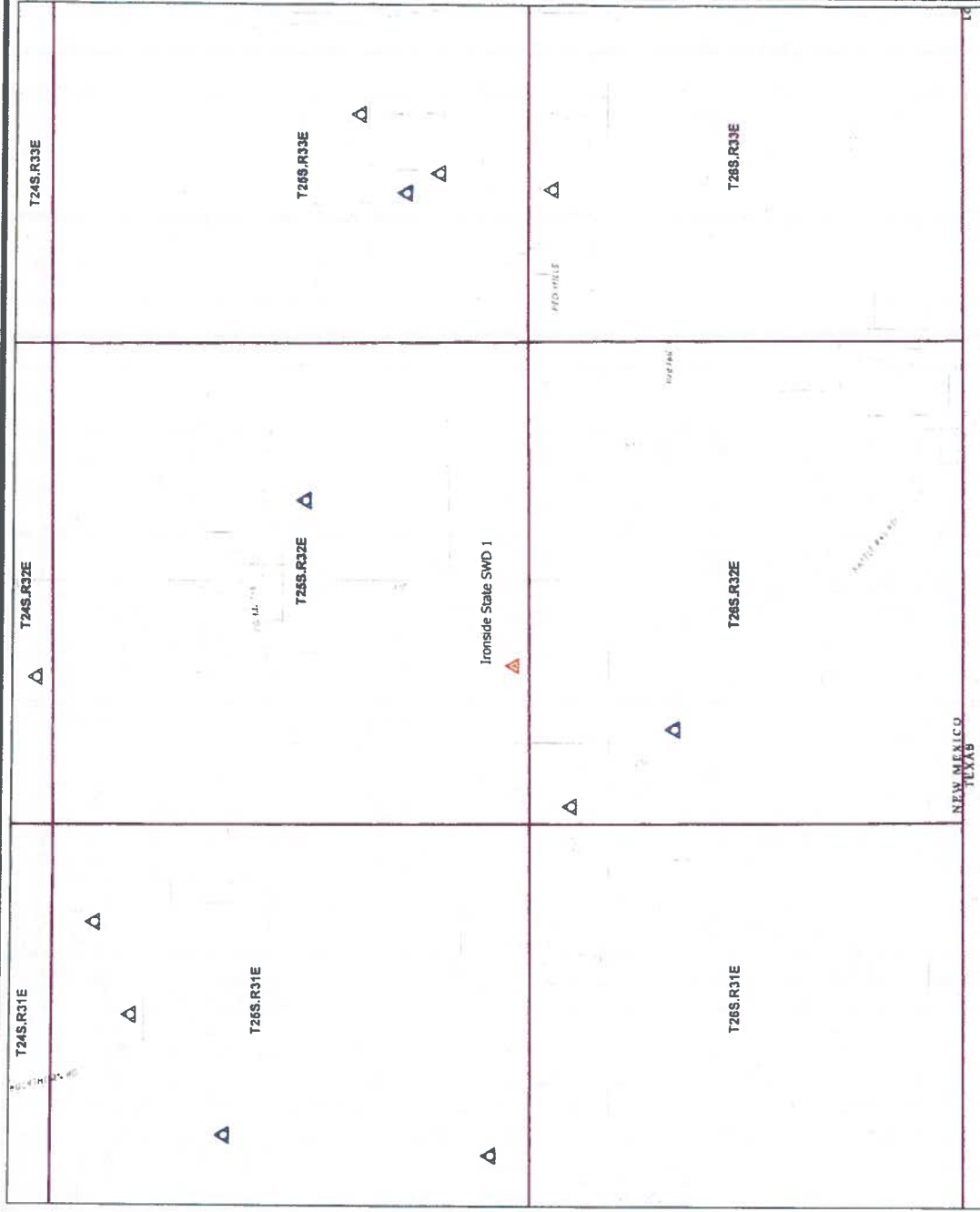
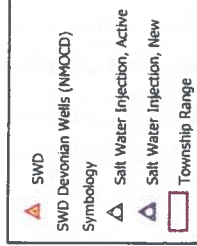
FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO.	C-4209	POD NO.	1
LOCATION	26S 32E.10.3.3.2	TRN NO.	621334
	EXPL	WELL TAG ID NO.	N/A
			PAGE 2 OF 2

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.





Source: State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity (Jens-Erik Lund Snee and Mark D. Zoback)



R.T. Hicks Consultants, Ltd. 901 Rio Grande Blvd NW, Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5904	Fault Slip Potential	Plate 5
	Solaris Water Midstream Ironside SWD	April 2019

LEGAL NOTICE
April 23, 2019

Solaris Water Midstream
LLC, 907 Tradewinds Blvd
Suite B, Midland, TX 79706
is filing Form C-108
(Application for Authorization
to Inject) with the New
Mexico Oil Conservation
Division seeking
administrative approval for a
salt water disposal well. The
proposed well, the Ironside
SWD No. 1, will be located
1,270 feet from the South
line and 175 feet from the
East line, Section 32,
Township 25 South, Range
32 East, Lea County, New
Mexico. Produced water
from area production will be
commercially disposed into
the Devonian, Silurian and
Fuselman formations at a
depth of 17,125 feet to
18,150 feet at a maximum
surface pressure of 4,081
psi and an average injection
rate of 30,000 barrels per
day. The proposed SWD
well is located approximately
27 miles southeast of
Loving, New Mexico.

Interested parties wishing to
object to the proposed
application must file with the
New Mexico Oil
Conservation Division, 1220
S. St. Francis Dr., Santa Fe,
NM 87505 (505) 476-3460
within 15 days of the date of
this notice.

Additional information can
be obtained by contacting
Mr. Randall Hicks, agent for
Solaris Water Midstream, at
505-238-9515.

#34044

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