

RECEIVED: 4/30/19	REVIEWER:	TYPE: SWD	APP NO: PLEL 1912738358
-------------------	-----------	-----------	-------------------------

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: Brantley 22 SWD No. 1 **API:** 30-015-Pending
Pool: SWD; Devonian- Silurian **Pool Code:** 97869

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

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL

☐ NSP (PROJECT AREA)

☐ NSP (PRORATION UNIT)

☐ SD

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

☐ DHC

☐ CTB

☐ PLC

☐ PC

☐ OLS

☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX

☐ PMX

☒ SWD

☐ IPI

☐ EOR

☐ PPR

2) NOTIFICATION REQUIRED TO: Check those which apply.

A. ☒ Offset operators or lease holders

B. ☐ Royalty, overriding royalty owners, revenue owners

C. ☒ Application requires published notice

D. ☐ Notification and/or concurrent approval by SLO

E. ☐ Notification and/or concurrent approval by BLM

F. ☒ Surface owner

G. ☒ For all of the above, proof of notification or publication is attached, and/or,

H. ☐ No notice required

FOR OCD ONLY

☐ Notice Complete

☐ Application
Content
Complete

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

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

April 25, 2019

Ramona Hovey - Agent of Solaris Water Midstream

Print or Type Name

Signature

Date

(512) 600-1777

Phone Number

ramona@lonquist.com

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Solaris Water Midstream, LLC
ADDRESS: 907 Tradewinds Blvd., Suite B, Midland, TX 79706
CONTACT PARTY: Whitney McKee PHONE: 432-203-9020
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Ramona Hovey

TITLE: Consulting Engineer – Agent for Solaris Water Midstream

SIGNATURE: Ramona K. Hovey

DATE: 4/25/2019

E-MAIL ADDRESS: ramona@lonquist.com

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: _____

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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Solaris Water Midstream, LLC

WELL NAME & NUMBER: Brantley 22 SWD No. 1

WELL LOCATION: 1750' FNL 275' FEL
FOOTAGE LOCATION

H
UNIT LETTER

22
SECTION

26S
TOWNSHIP

27E
RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 18.125"

Cemented with: 555 sx

Top of Cement: surface

Casing Size: 16.00"

or _____ ft³

Method Determined: circulation

Intermediate Casing

Hole Size: 14.750"

Cemented with: 415 sx

Top of Cement: surface

Casing Size: 13.375"

or _____ ft³

Method Determined: circulation

Production Casing

Hole Size: 12.250"

Cemented with: 1850 sx

Top of Cement: surface

Casing Size: 9.625"

or _____ ft³

Method Determined: circulation

Liner

Hole Size: 8.500"

Cemented with: 510 sx

Top of Cement: 8,950'

Total Depth: 14,725'

Casing Size: 7.625"

or _____ ft³

Method Determined: calculation

Injection Interval

13,725 feet to 14,725 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.5", 20 lb/ft, HCL-80, BTC from 0' – 8,750' and 5", 18 lb/ft, HCL-80, LTC from 8,750'-13,675'
Lining Material: Duoline

Type of Packer: Nickel Plated Double Grip Retrievable Packer or Equivalent

Packer Setting Depth: 13,675'

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

Additional Data

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

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

2. Name of the Injection Formation: Devonian, Fusselman

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

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.

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

Bell Canyon: 2,150'
Cherry Canyon: 3,075'
Brushy Canyon: 4,200'
Bone Spring: 5,875'
Wolfcamp: 8,950'
Strawn: 11,400'
Atoka: 11,675'

Morrow Clastics: 12,500'
Lower Morrow: 12,900'



Solaris Water Midstream, LLC

Brantley 22 SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Brantley 22 SWD
Well No.	1
Location	S-22 T-26S R-27E
Footage Location	1,750' FNL & 275' FEL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	16"	13.375"	9.625"	7.625"
WT	0.495"	0.48"	0.545"	0.500"
ID	15.010"	12.415"	8.535"	6.625"
Drift ID	14.822"	12.259"	8.379"	6.500"
COD	17.000"	13.375"	10.625"	7.625"
Weight	84 lb/ft	68 lb/ft	53.5 lb/ft	39 lb/ft
Grade	J-55 BTC	L-80, EZ-GO FJ3	HCP-110 BTC	Q-125 EZ-GO FJ3
Hole Size	18.125"	14.75"	12.25"	8.5"
Depth Set	535'	2,130'	9,150'	8,950'-13,725'

b. Cementing Program

Cement Information					
Casing String	Conductor	Surface	Intermediate	Production	Liner
Lead Cement	EXTENDACEM™	HALCEM™	HALCEM™	Stage 1: NeoCem™	-
Lead Cement Volume (sacks)	250	-	280	Stage 1: 1040 Stage 2: 195	-
Lead Cement Yield (ft3/sack)	1.694	-	1.664	Stage 1: 2.731 Stage 2: 2.732	-
Tail Cement	-	HALCEM™	HALCEM™	Stage 1: NeoCem™	VERSACEM™
Tail Cement Volume (sacks)	-	555	135	Stage 1: 475 Stage 2: 140	510
Tail Cement Yield (ft3/sack)	-	1.332	1.332	Stage 1: 1.056 Stage 2: 1.336	1.223
Cement Excess	0%	50%	30%	50%, 50%	50%
Total Sacks	250	555	415	1850	510
TOC	Surface	Surface	Surface	Surface	8,625'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information	
OD	5.5" 5.0"
WT	0.361" 0.362"
ID	4.778" 4.276"
Drift ID	4.653" 4.151"
COD	6.050" 5.563"
Weight	20 lb/ft 18 lb/ft
Grade	HCL-80 BTC HCL-80 LTC
Depth Set	0 - 8,750' 8,750' - 13,675'

Tubing will be lined with Duoline.

4. Packer Description

Nickel Plated Double Grip Retrievable Packer or Equivalent

B. Completion Information

1. Injection Formation: Devonian, Fusselman
2. Gross Injection Interval: 13,725' - 14,725'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Bell Canyon	2,150'
Cherry Canyon	3,075'
Brushy Canyon	4,200'
Bone Spring	5,875'
Wolfcamp	8,950'
Strawn	11,400'
Atoka	11,675'
Morrow Clastics	12,500'
Lower Morrow	12,900'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injected:

Average Volume: 30,000 BPD
Maximum Volume: 40,000 BPD

2. Closed System
3. Anticipated Injection Pressure:

Average Injection Pressure: 2,059 PSI (surface pressure)

Maximum Injection Pressure: 2,745 PSI (surface pressure)

4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Avalon, Bone Spring, Delaware, Morrow, Pennsylvanian, and Wolfcamp formations.
5. The disposal interval is non-productive. No water samples are available within a 1-mile radius.

VIII. Geological Data

Devonian Formation Lithology:

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

Fusselman Formation Lithology:

The Silurian or Fusselman Formation is stratigraphically below the Wristen Group and is above and separated from the Montoya Formation by the Sylvan Shale. The Sylvan Shale is the lower confining layer for the proposed Brantley 22 SWD No. 1 well. Fusselman facies include a laminated skeletal wackestone in the upper part and a buildup complex in the lower part composed of ooid and bryozoan grainstones. These grainstones can also be potentially prolific zones for disposal.

A. Injection Zone: Devonian-Silurian Formation

Formation	Depth
Rustler	450'
Salado (Top of Salt)	560'
Salado (Bottom of Salt)	1,925'
Bell Canyon	2,150'
Cherry Canyon	3,075'
Brushy Canyon	4,200'
Bone Spring	5,875'
Bone Spring 1 st Sand	6,700'
Bone Spring 2 nd Sand	7,075'
Bone Spring 3 rd Sand	8,280'
Wolfcamp	8,950'
Strawn	11,400'
Atoka	11,675'
Morrow	12,300'
Morrow Clastics	12,500'
Lower Morrow	12,900'
Barnett	13,025'
Mississippian Lime	13,375'
Woodford	13,600'
Devonian	13,725'
Fusselman	14,125'

B. Underground Sources of Drinking Water

Two (2) water wells exists within a one-mile radius of the proposed well. Water wells outside a one-mile radius in the surrounding area have an average depth of 102 feet and an average water depth of 27 feet generally producing from the Carlsbad Basin. The upper Rustler may also be another USDW and will be protected.

IX. Proposed Stimulation Program

50,000 gallon acid job

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

Attached is a map of the two (2) water wells that exists within one-mile of the well location. Samples from the well have been obtained and analysis results will be provided as soon as possible. A Water Right Summary from the New Mexico Office of the State Engineer is attached for the C-02930 and the C-03975-POD1 water wells.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

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

State of New Mexico**Energy Minerals and Natural Resources****Oil Conservation Division****1220 South St. Francis Dr.****Santa Fe, NM 87505**

Form C-101
Revised July 18, 2013

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

¹ Operator Name and Address SOLARIS WATER MIDSTREAM, LLC 907 TRADEWINDS BLVD., SUITE B MIDLAND, TX 79706		² OGRID Number 371643
		³ API Number TBD
⁴ Property Code	⁵ Property Name BRANTLEY 22 SWD	⁶ Well No. 1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	22	26S	27E		1,750	N	275	E	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
-	-	-	-	-	-	-	-	-	-

9. Pool Information

Pool Name SWD; Devonian-Silurian	Pool Code 97869
-------------------------------------	--------------------

Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,116'
¹⁶ Multiple N	¹⁷ Proposed Depth 14,725'	¹⁸ Formation Silurian-Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 50'	Distance from nearest fresh water well 2,884 feet	Distance to nearest surface water >1 mile		

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

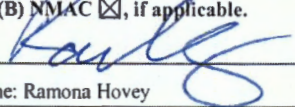
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	18.125"	16"	84 lb/ft	535'	555	Surface
Intermediate	14.75"	13.375"	68 lb/ft	2,130'	415	Surface
Production	12.25"	9.625"	53.5 lb/ft	9,150'	1,850	Surface
Liner	8.5"	7.625"	39 lb/ft	8,950'-13,725'	510	8,950'
Tubing		5.5" & 5"	20 lb/ft & 18 lb/ft	0' - 8,750' & 8,750' - 13,675'	N/A	

Casing/Cement Program: Additional Comments

See attached schematic.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic/Blinds, Pipe	8,000 psi	10,000 psi	TBD - Schaffer/Cameron

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒ , if applicable. Signature: 		OIL CONSERVATION DIVISION	
Printed name: Ramona Hovey		Approved By:	
Title: Consulting Engineer		Title:	
E-mail Address: ramona@lonquist.com		Approved Date:	
Date: April 25, 2019		Expiration Date:	
Phone: 512-600-1777		Conditions of Approval Attached	

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (505) 392-8181 Fax: (505) 392-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (505) 748-1203 Fax: (505) 748-9720

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) 476-3463

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name BRANTLEY 22 SWD	Well Number 1
OGRID No.	Operator Name SOLARIS WATER MIDSTREAM	Elevation 3116'

Surface Location

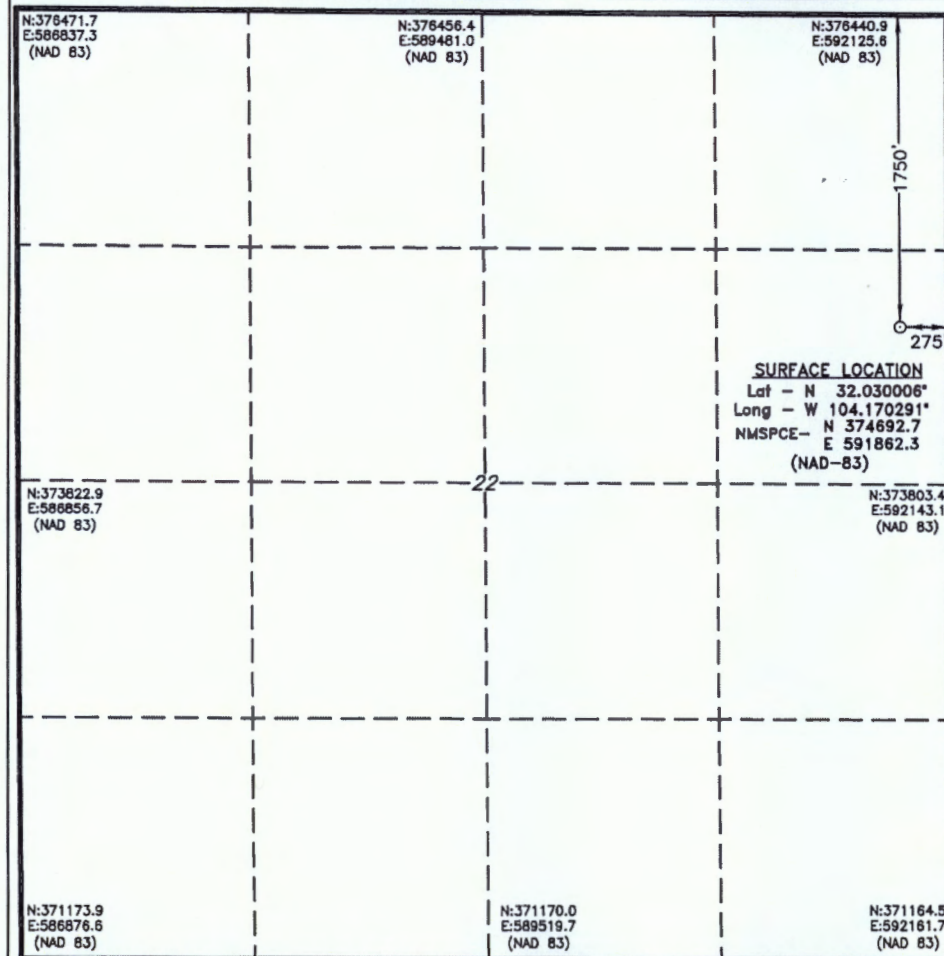
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	22	26 S	27 E		1750	NORTH	275	EAST	EDDY

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



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.

Ramona K Hovey 4/25/19
Signature Date

RAMONA HOVEY
Printed Name

ramona@longquist.com
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.

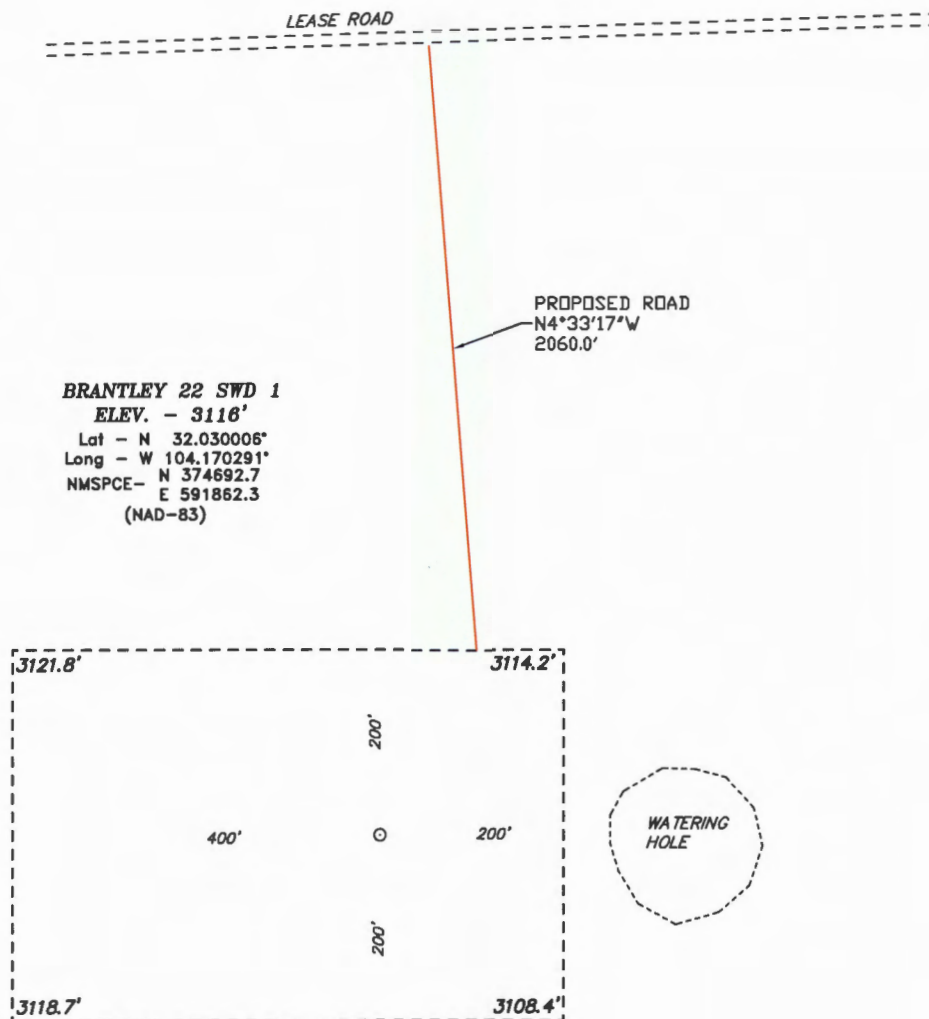
MARCH 11, 2019
Date Surveyed

[Signature]
Signature of Professional Surveyor

7977
Certificate No. 7977

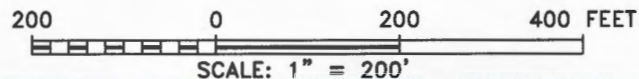
0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 34419

**SECTION 22 TOWNSHIP 26 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



BRANTLEY 22 SWD 1
ELEV. - 3116'
 Lat - N 32.030006°
 Long - W 104.170291°
 NMSPCE- N 374692.7
 E 591862.3
 (NAD-83)

MALAGA, NM IS ±14 MILES TO THE NORTHEAST OF LOCATION.



SOLARIS WATER MIDSTREAM

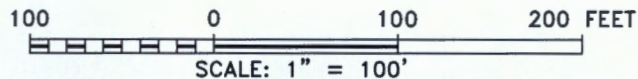
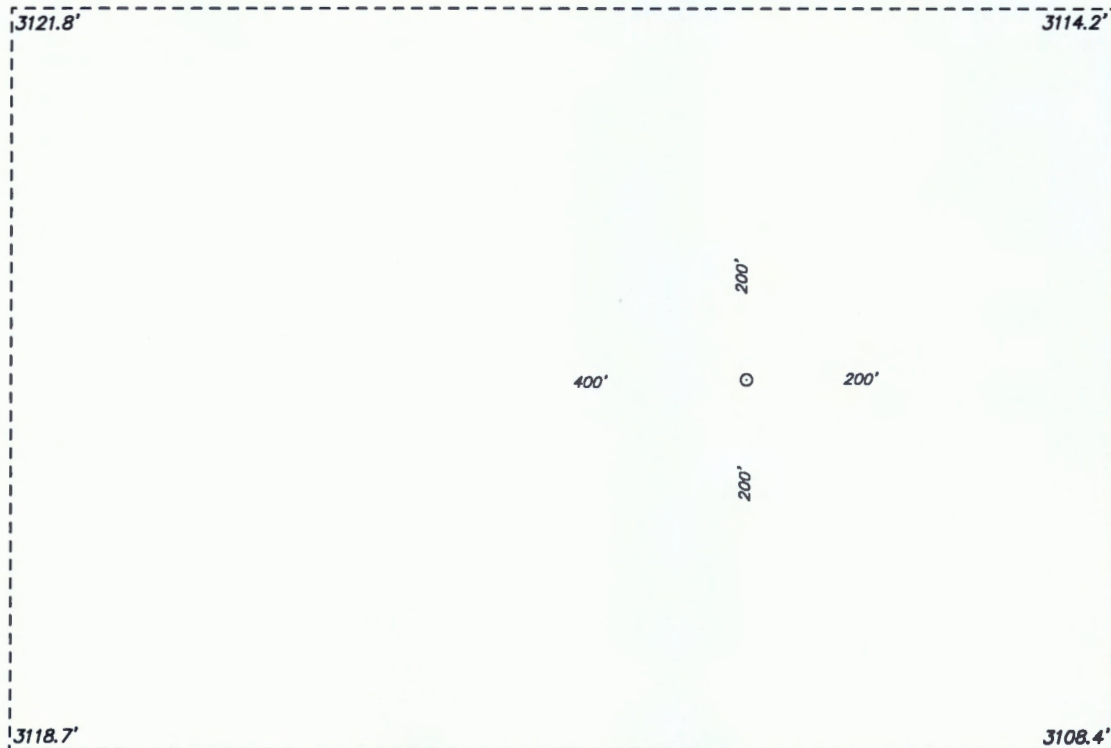
REF: BRANTLEY 22 SWD 1 / WELL PAD TOPO

**THE BRANTLEY 22 SWD 1 LOCATED 1750' FROM
 THE NORTH LINE AND 275' FROM THE EAST LINE OF
 SECTION 22, TOWNSHIP 26 SOUTH, RANGE 27 EAST,
 N.M.P.M., EDDY 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

SECTION 22 TOWNSHIP 26 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



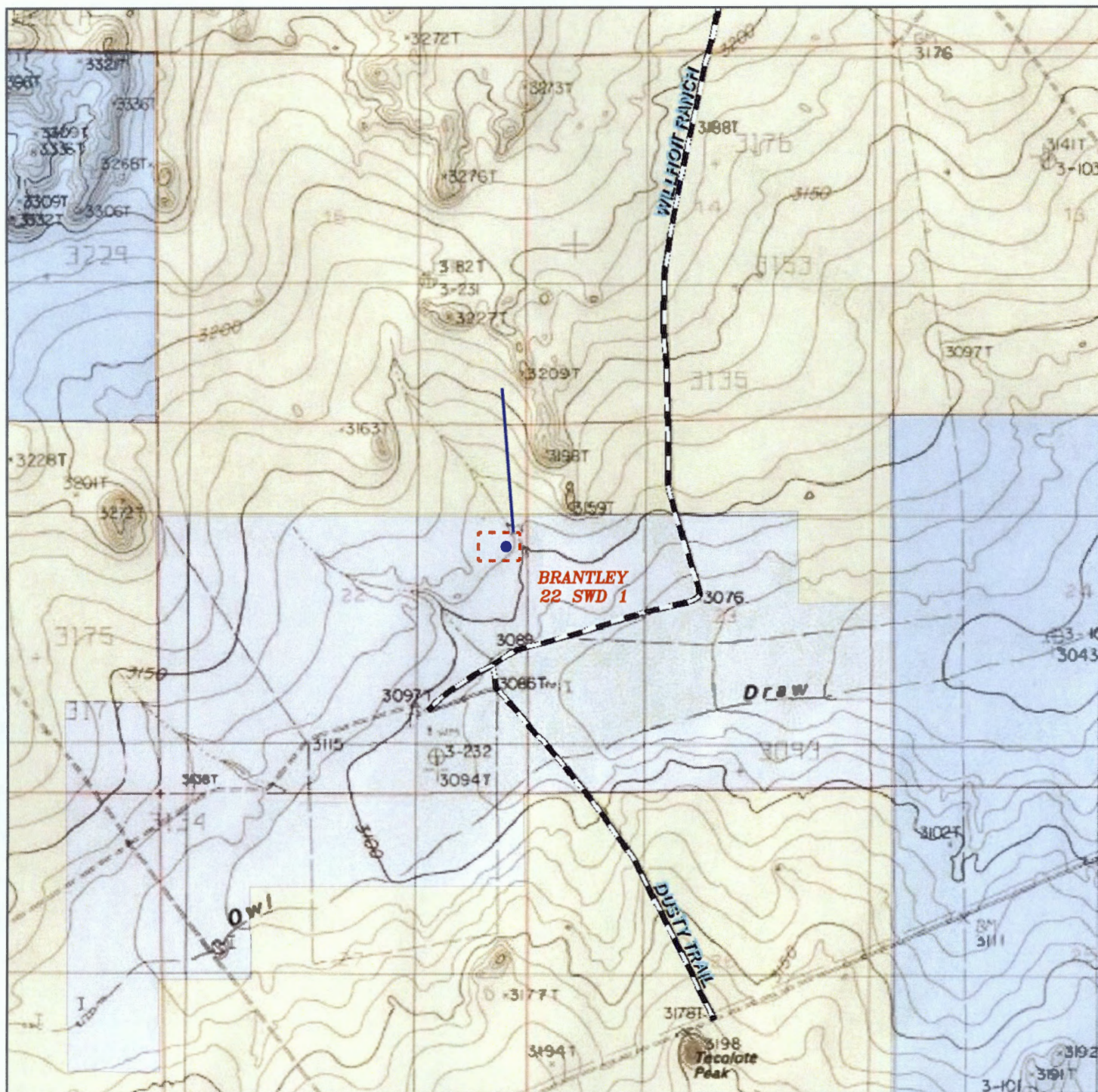
SOLARIS WATER MIDSTREAM

REF: BRANTLEY 22 SWD 1 / WELL PAD TOPO

THE BRANTLEY 22 SWD 1 LOCATED 1750' FROM
THE NORTH LINE AND 275' FROM THE EAST LINE OF
SECTION 22, TOWNSHIP 26 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.



focused on excellence
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



BRANTLEY 22 SWD 1

Located 1750' FNL & 275' FEL
 Section 22, Township 26 South, Range 27 East,
 N.M.P.M., Eddy 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

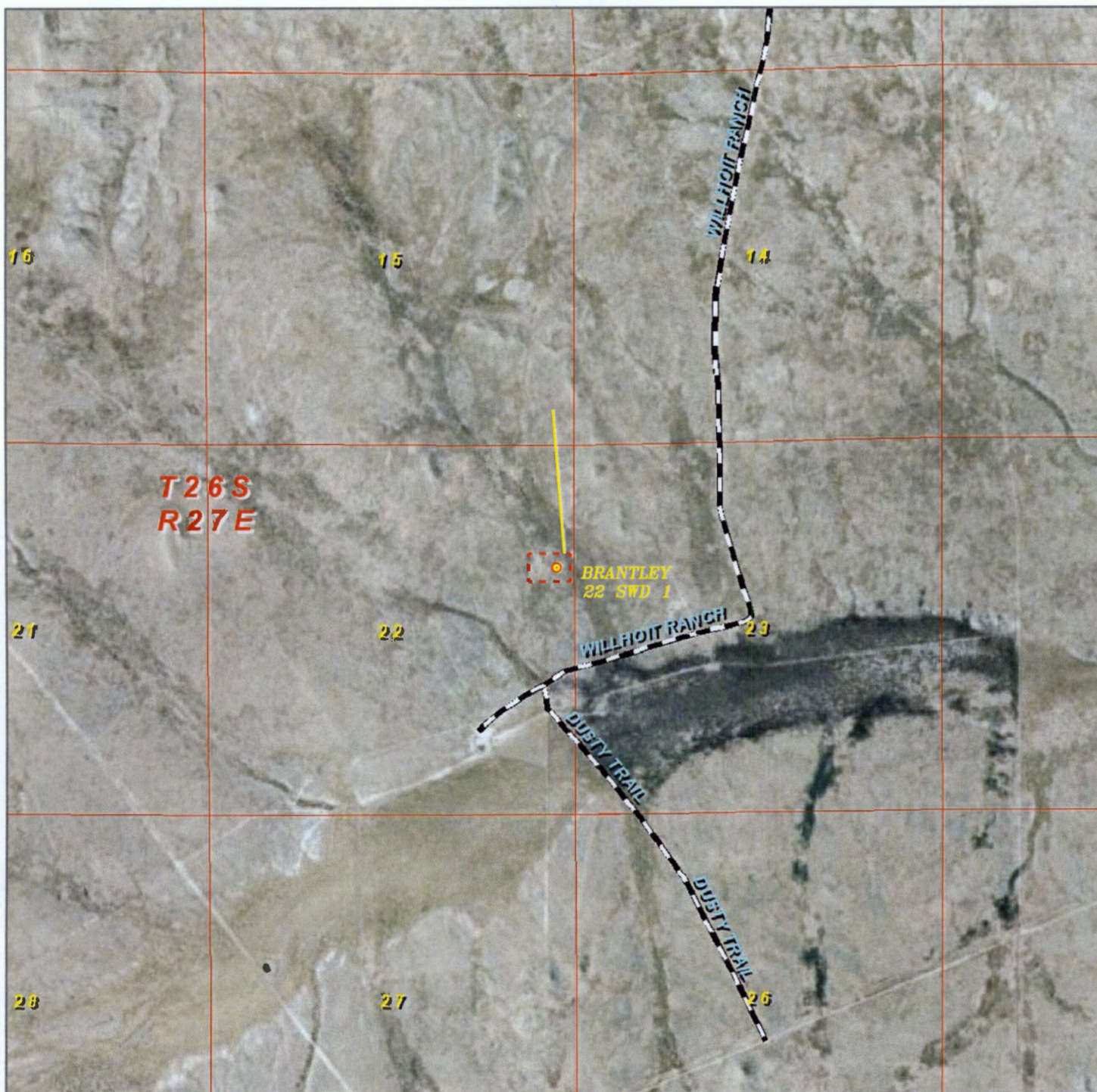
0' 1000' 2000' 3000' 4000'
 SCALE: 1" = 2000'

W.O. Number: JG - 34419

Survey Date: 3-11-2019

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





BRANTLEY 22 SWD 1

Located 1750' FNL & 275' FEL
 Section 22, Township 26 South, Range 27 East,
 N.M.P.M., Eddy 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 - 34419

Survey Date: 3-11-2019

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





BRANTLEY 22 SWD 1

Located 1750' FNL & 275' FEL
Section 22, Township 26 South, Range 27 East,
N.M.P.M., Eddy 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 1 MI 2 MI 3 MI 4 MI
SCALE: 1" = 2 MILES

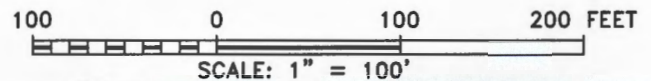
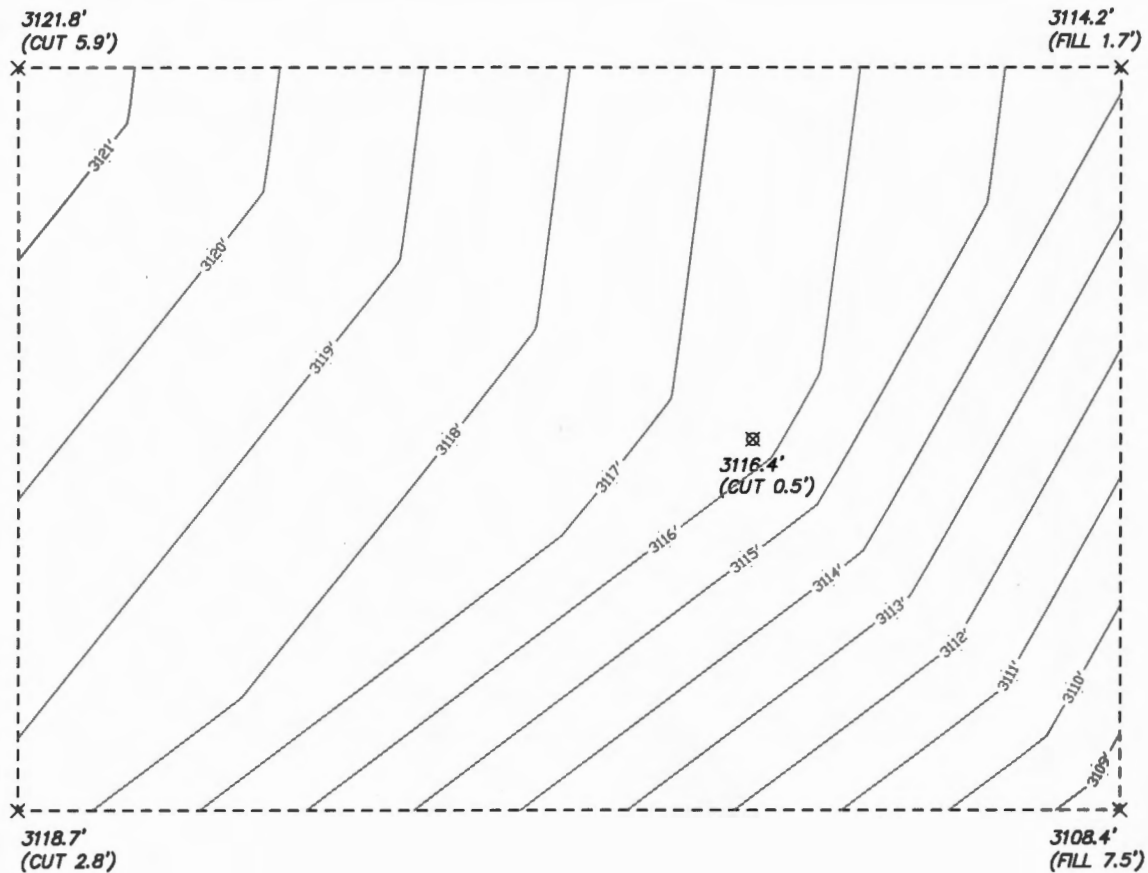
W.O. Number: JG - 34419

Survey Date: 3-11-2019

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



**SECTION 22 TOWNSHIP 26 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



SOLARIS WATER MIDSTREAM

REF: BRANTLEY 22 SWD 1 / CUT & FILL

THE BRANTLEY 22 SWD 1 LOCATED 1750' FROM
THE NORTH LINE AND 275' FROM THE EAST LINE OF
SECTION 22, TOWNSHIP 26 SOUTH, RANGE 27 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.



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

SOLARIS WATER MIDSTREAM, LLC
PROPOSED BRANTLEY 22 SWD #1
Section 22-T26S-R27E
1,750' FNL & 275' FEL
Eddy County, New Mexico
4/23/2019
Jim Brannigan, C.P.G., R.G.

GL: 3,116' (est.)
KB: 3,138' (+22' est.)

<u>Tops</u>	<u>Depths (est.)</u>	<u>Subsea (est.)</u>
T/Rustler – Water	450'	+2,688
T/Salt	560'	+2,578
B/Salt	1,925'	+1,213
T/Bell Canyon – Oil	2,150'	+988
T/Cherry Canyon – Oil	3,075'	+63
T/Brushy Canyon – Oil	4,200'	-1,062
T/Bone Spring – Oil	5,875'	-2,737
T/1 st BS Sand – Oil	6,700'	-3,562
T/2 nd BS Sand – Oil	7,075'	-3,937
T/3 rd BS Sand – Oil	8,280'	-5,142
T/Wolfcamp – Oil	8,950'	-5,812
T/Strawn – Gas	11,400'	-8,262
T/Atoka – Gas	11,675'	-8,537
T/Morrow LS	12,300'	-9,162
T/Morrow Clastics – Gas	12,500'	-9,362
T/Lower Morrow -Gas	12,900'	-9,762
T/Barnett	13,025'	-9,887
T/Miss LS	13,375'	-10,237
T/Woodford	13,600'	-10,462
T/Devonian	13,725'	-10,587
T/Fusselman	14,125'	-10,987

Tops were picked using surrounding e-logs and Geo-Maps.

Overlying Oil and Gas Zones:

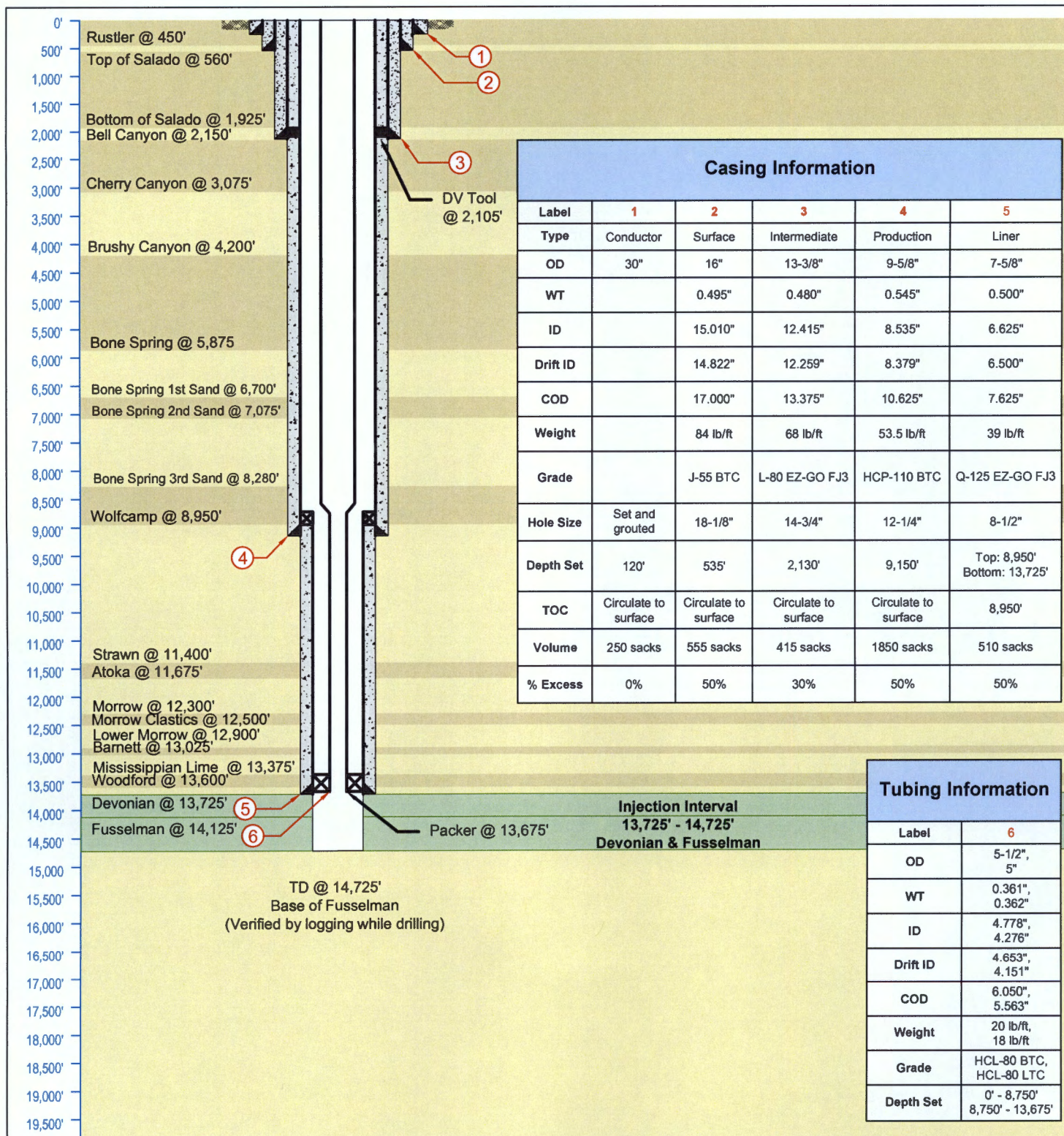
Bell Canyon (2,150')
Cherry Canyon (3,075')
Brushy Canyon (4,200')
Bone Spring (5,875')

1st BS Sand (6,700')
2nd BS Sand (7,075')
3rd BS Sand (8,280')
Wolfcamp (8,950')
Strawn (11,400')
Atoka (11,675')
Morrow Clastics (12,500')
Lower Morrow (12,900')

Underlying Oil and Gas Zones:

None exist

The proposed injection intervals in the Pre-Mississippian Carbonates are well cemented and will provide open hole integrity while allowing salt water to be injected. Because of the nature of the rock, the open hole section has very little chance of collapsing.



LONQUIST & CO. LLC PETROLEUM ENGINEERS ENERGY ADVISORS HOUSTON CALGARY AUSTIN WICHITA DENVER Texas License F-9147 12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Solaris Water Midstream, LLC		Brantley 22 SWD No. 1	
	Country: USA		State/Province: New Mexico	County/Parish: Eddy
	Location:		Site: 1750' FNL & 275' FEL	Survey: S22-T26S-R27E
	API No: NA		Field: Devonian-Silurian (Code: 97869)	Well Type/Status: SWD
	NMOCD District No: 2		Project No: 1946	Date: 4/22/2019
	Drawn: TFM		Approved:	
	Rev No: 1		Notes:	

Brantley 22 SWD No. 1
2 Mile Area of Review
Solaris Water Midstream
Eddy County, NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US F4)

Drawn by: SJL Date: 4/16/2019 Approved by: TFM

LONGQUIST & CO. LLC

**PETROLEUM
ENGINEERS
ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

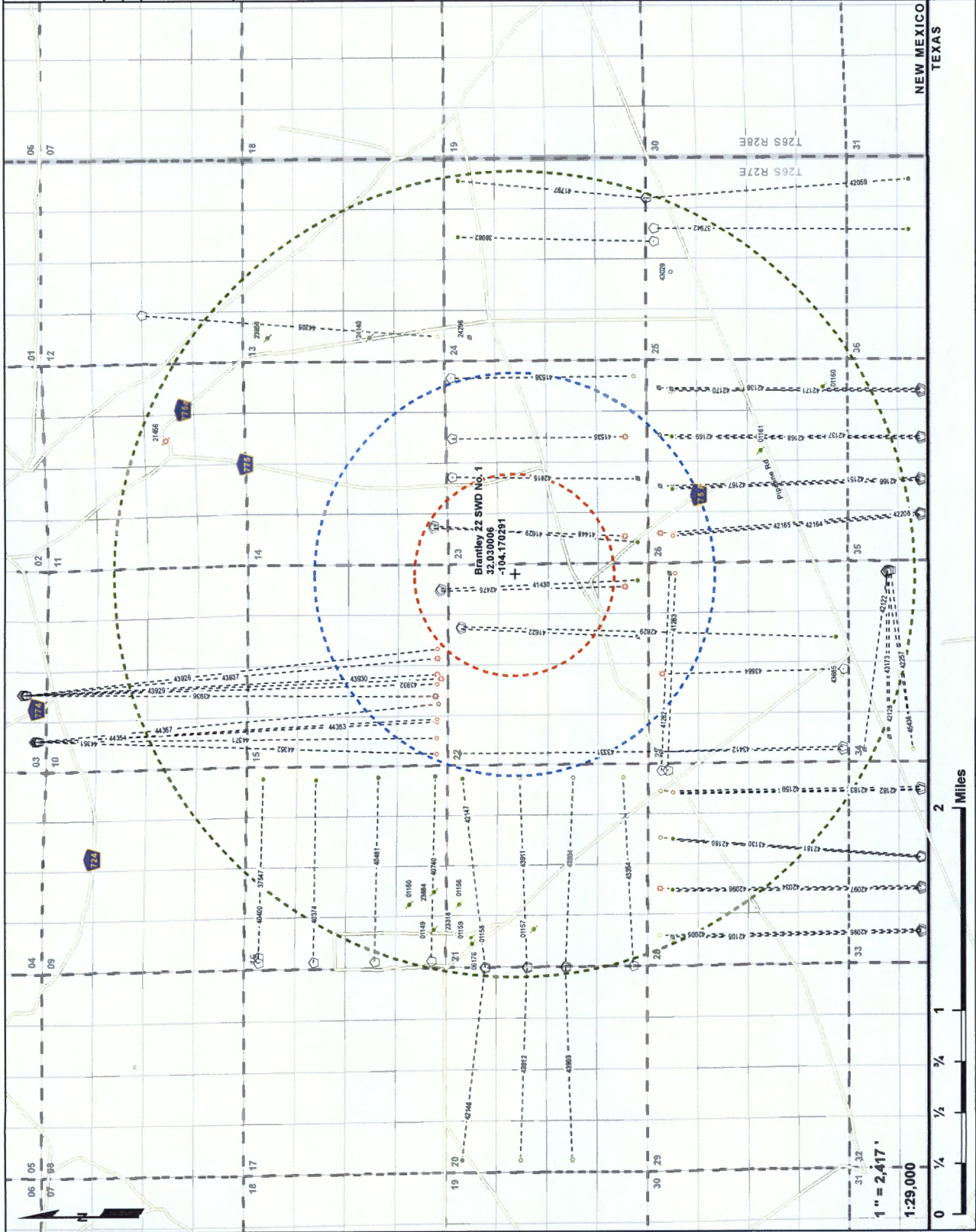
Brantley 22 SWD No. 1

- 1/2 Mile Radius
- 1 Mile Radius
- 2 Mile Radius
- OO-Section (NM-PLSS 2nd Div.)
- Section (NM-PLSS 1st Div.)
- Township/Range (NM-PLSS)
- States
- Laterals

- API (30-015-...) SHL Status - Type (Count)**
- Horizontal Surface Location (72)
 - Permitted - Oil (1)
 - Permitted - Salt Water Disposal (1)
 - Plugged (Site Released) - Oil (13)
 - Plugged (Site Released) - Gas (1)
 - Canceled Location (1)

- API (30-015-...) BHL Status - Type (Count)**
- Active - Oil (22)
 - Active - Gas (13)
 - Permitted - Oil (12)
 - Permitted - Gas (12)
 - Canceled Location (13)

*Well Data Source: NM-OCED, Drillingfile (2019)



1" = 2,417'

1:29,000



Brantley 22 SWD No. 1
1 Mile Offset Operators
 Solaris Water Midstream
 Eddy County, NM

PCS: NAD 1983 SPCS NM-E FIPS 3001 (US Ft.)
 Drawn by: SJL Date: 4/17/2019 Approved by: TFM

LONQUIST & CO. LLC

PETROLEUM
 ENGINEERS
 ADVISORS

AUSTIN HOUSTON WICINITA DENVER CALGARY

+ Brantley 22 SWD No. 1

1 Mile Radius

QC-Section (NM-PLSS 2nd Div.)

Section (NM-PLSS 1st Div.)

Township/Range (726S R27E)

Surface Owner (STELL, PHILLIP & KENDRA)

Laterals

API (30-015-...) SHL Status - Type (Count)
 Horizontal Surface Location (31)

API (30-015-...) BHL Status - Type (Count)
 Active - Oil (5)

Active - Gas (10)

Permitted - Oil (1)

Permitted - Gas (10)

Canceled Location (5)

Operators

-CHEVRON USA INC

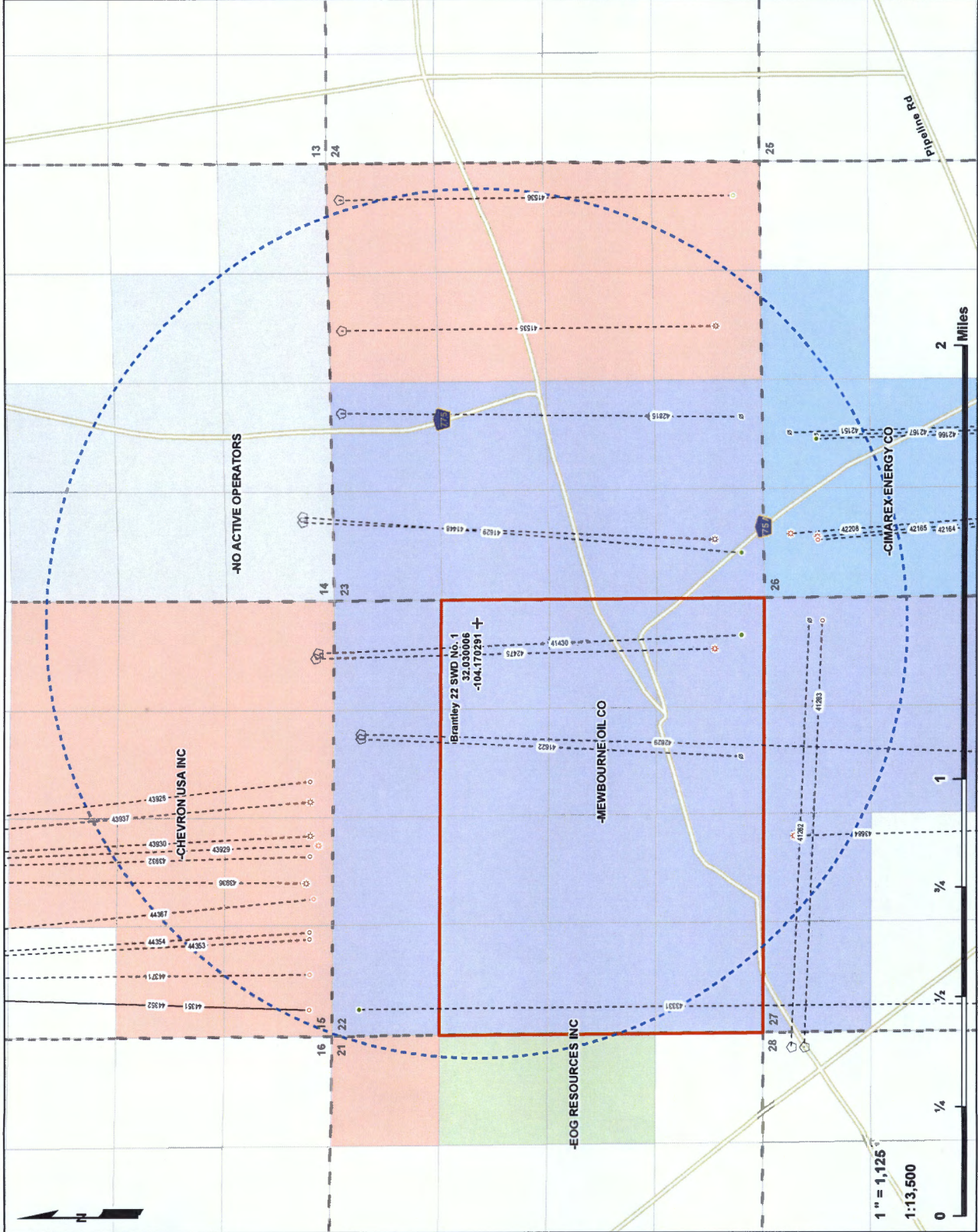
-CIMAREX ENERGY CO

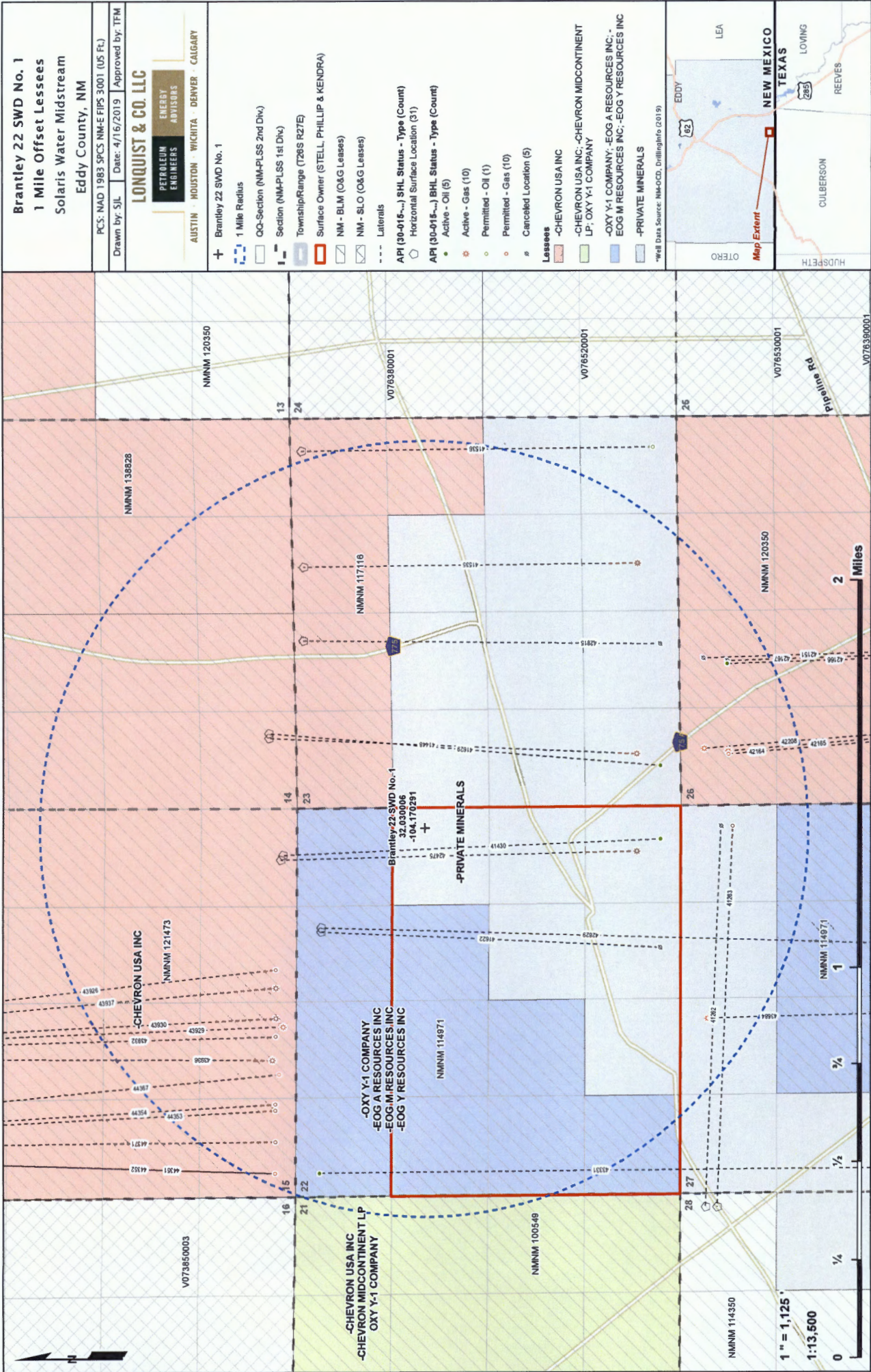
-EOG RESOURCES INC

-MEWBOURNE OIL CO

-NO ACTIVE OPERATORS

*Well Data Source: NM-CCD, DrillingInfo (2019)



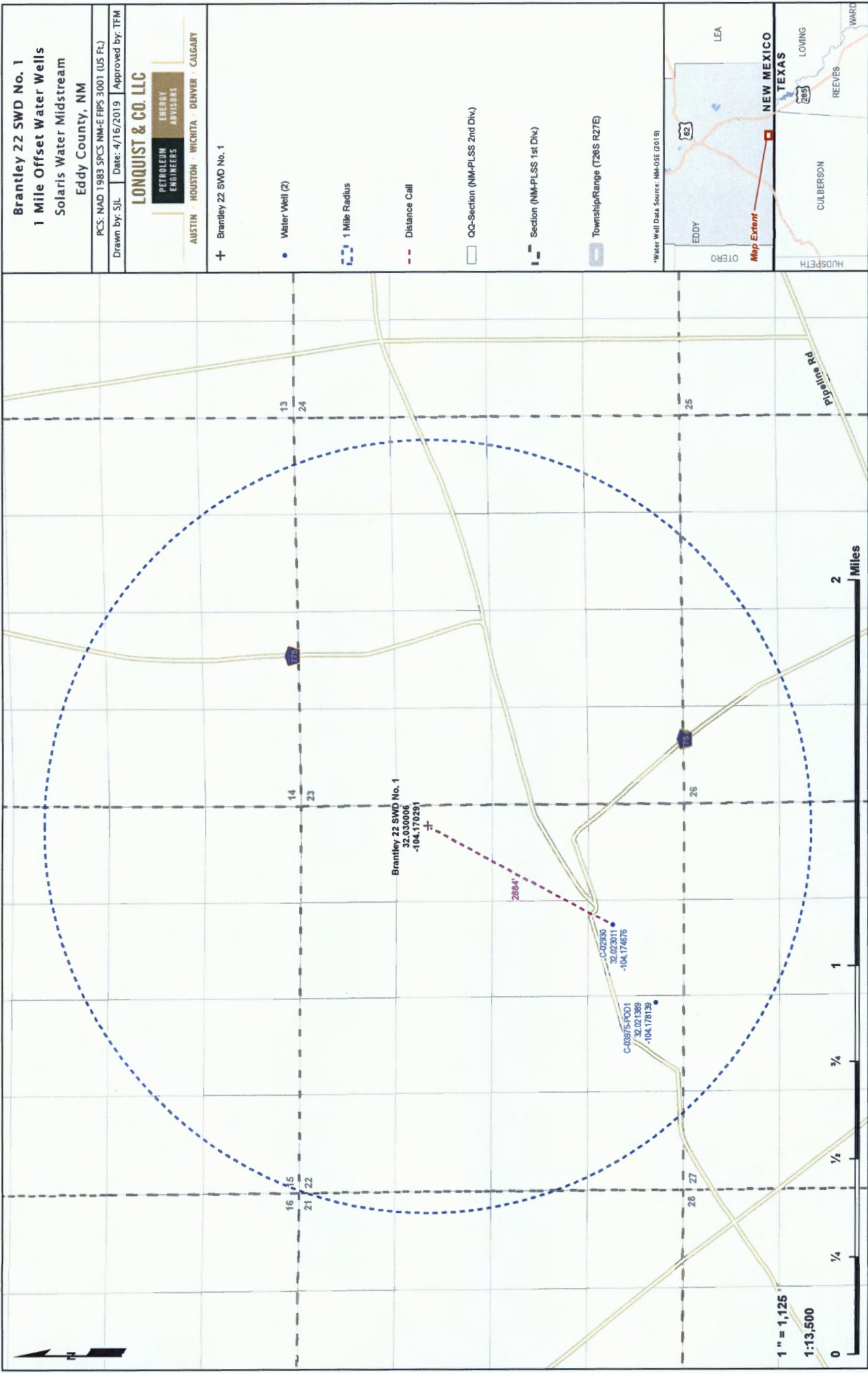


Brantley 22 SWD No 1
1 Mile Area of Review List

API (30-015-...)	WELL NAME	WELL TYPE	STATUS	OPERATOR	TVD (FT)	LATITUDE (NAD83 DD)	LONGITUDE (NAD83 DD)	SPUD DATE	FIELD
41262	OWL DRAW 27 DA FEE #001H	G	C	MEWBOURNE OIL CO	0	32.0139359000	-104.186927800	-	[98018] WC-015 G-04 5262558, BONE SPRING
41263	OWL DRAW 27 DA FEE #002H	G	N	MEWBOURNE OIL CO	0	32.0139359000	-104.186920200	-	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
41430	OWL DRAW 22 B2AP FEDERAL COM #001H	O	A	MEWBOURNE OIL CO	7599	32.0355840000	-104.171432500	6/17/2014	[30215] HAY HOLLOW, BONE SPRING
41448	OWL DRAW 23 DMI FEDERAL COM #001H	G	A	MEWBOURNE OIL CO	10091	32.0355840000	-104.171432500	8/26/2014	[98140] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98140] WILDCAT, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
41535	COTTON HILLS 23 26 27 FEDERAL COM #003H	G	A	CHEVRON U.S.A INC	9367	32.0345573000	-104.15877530	8/7/2013	[98794] WILDCAT, WOLF CAMP OIL (ABOLISHED); [97489] WILDCAT, WOLF CAMP GAS (ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
41536	COTTON HILLS 23 26 27 FEDERAL COM #003H	O	N	CHEVRON U.S.A INC	9367	32.0345573000	-104.15877530	-	[30215] HAY HOLLOW, BONE SPRING
41622	OWL DRAW 23 B2C FEDERAL COM #002H	G	C	MEWBOURNE OIL CO	0	32.0345573000	-104.15877530	-	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO)
41629	OWL DRAW 23 DMI FEDERAL COM #002H	O	A	MEWBOURNE OIL CO	7569	32.0358696000	-104.16609190	-	[30215] HAY HOLLOW, BONE SPRING
42151	HORNISBY 35 FEDERAL COM #001H	O	C	CHIMAREX ENERGY CO.	0	32.0005684000	-104.162185700	12/1/2013	[30215] HAY HOLLOW, BONE SPRING
42164	HORNISBY 35 FEDERAL COM #001H	G	N	CHIMAREX ENERGY CO.	0	32.0005684000	-104.162185700	-	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
42165	HORNISBY 35 FEDERAL COM #002H	G	A	CHIMAREX ENERGY CO.	7699	32.0005684000	-104.162185700	8/16/2014	[30215] HAY HOLLOW, BONE SPRING; [98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98018] WC-015 G-04 5262558, BONE SPRING
42166	HORNISBY 35 FEDERAL COM #004H	O	A	CHIMAREX ENERGY CO.	7737	32.0002870000	-104.162185700	4/12/2017	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
42167	HORNISBY 35 FEDERAL COM #005H	G	C	CHIMAREX ENERGY CO.	0	32.0005684000	-104.162185700	-	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
42208	HORNISBY 35 FEDERAL COM #003H	G	A	CHIMAREX ENERGY CO.	10160	32.0005684000	-104.162185700	6/5/2014	[30215] HAY HOLLOW, BONE SPRING
42475	OWL DRAW 22 W2AP FEDERAL COM #001H	G	A	MEWBOURNE OIL CO	9132	32.0354424000	-104.171432500	7/28/2014	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
42815	OWL DRAW 23 B2CN FEDERAL COM #001H	O	C	MEWBOURNE OIL CO	0	32.0345572950	-104.162018577	-	[30215] HAY HOLLOW, BONE SPRING
42829	OWL DRAW 22 B2BD FEDERAL COM #002H	O	A	MEWBOURNE OIL CO	7606	32.0399239450	-104.174635631	2/12/2015	[30215] HAY HOLLOW, BONE SPRING
43331	OWL DRAW 22 B2MD FEDERAL COM #001H	O	A	MEWBOURNE OIL CO	7515	32.0062555200	-104.185193300	9/25/2015	[98017] WELCH, WOLF CAMP (GAS)(ABOLISHED); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43884	OWL DRAW 27 W2NC FEDERAL COM #002H	G	A	MEWBOURNE OIL CO	10057	32.0061382600	-104.178316080	5/4/2016	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43926	HH SO 10 P3 #024H	G	N	CHEVRON U.S.A INC	0	32.0654750000	-104.180276900	3/7/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43929	HH SO 10 P3 #024H	G	A	CHEVRON U.S.A INC	10120	32.0657500000	-104.180268000	3/17/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43930	HH SO 10 P3 #015H	G	A	CHEVRON U.S.A INC	10133	32.0658810000	-104.180268000	3/19/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43932	HH SO 10 P3 #023H	G	N	CHEVRON U.S.A INC	0	32.0654070000	-104.180275000	3/25/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43936	HH SO 10 P3 #023H	G	A	CHEVRON U.S.A INC	9870	32.0654440000	-104.180275000	3/22/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
43937	HH SO 10 P3 #008H	G	A	CHEVRON U.S.A INC	9851	32.0654440000	-104.180275000	3/22/2017	[98140] WC-015 5262714M, WOLF CAMP (GAS) (ABO); [98220] PURPLE SAGE, WOLF CAMP (GAS)
44351	HH SO 10 15 FEDERAL 002 #003H	G	N	CHEVRON U.S.A INC	0	32.0646640000	-104.184266000	2/25/2018	[98220] PURPLE SAGE, WOLF CAMP (GAS)
44352	HH SO 10 15 FEDERAL 002 #003H	G	N	CHEVRON U.S.A INC	0	32.0646640000	-104.184266000	2/25/2018	[98220] PURPLE SAGE, WOLF CAMP (GAS)
44353	HH SO 10 15 FEDERAL 002 #004H	G	N	CHEVRON U.S.A INC	0	32.0647320000	-104.184266000	2/25/2018	[98220] PURPLE SAGE, WOLF CAMP (GAS)
44354	HH SO 10 15 FEDERAL 002 #004H	G	N	CHEVRON U.S.A INC	0	32.0649550000	-104.184266000	2/24/2018	[98220] PURPLE SAGE, WOLF CAMP (GAS)
44367	HH SO 10 15 FEDERAL 002 #006H	G	N	CHEVRON U.S.A INC	0	32.0648700000	-104.184266000	-	[98220] PURPLE SAGE, WOLF CAMP (GAS)
44371	HH SO 10 15 FEDERAL 002 #005H	G	N	CHEVRON U.S.A INC	0	32.0648010000	-104.184266000	-	[98220] PURPLE SAGE, WOLF CAMP (GAS)

Brantley 22 SWD No. 1
1 Mile Offset Operators and Lessees List

S/T/R	QQ UNIT LETTER(S)	OPERATOR	MINERAL LESSEE	MINERAL OWNER	SURFACE OWNER	ADDRESS 1	ADDRESS 2
15/26S/27E	E.G.H.I.J.K.L.M.N.O.P	CHEVRON USA INC	-	-	-	6301 DEANVILLE BLVD	MIDLAND, TX 79706
14/26S/27E	E.F.J.K.L.M.N.O.P	-	-	-	-	6301 DEANVILLE BLVD	MIDLAND, TX 79706
23/26S/27E	A.B.G.H.I.J.O.P	CHEVRON USA INC	-	-	-	6301 DEANVILLE BLVD	MIDLAND, TX 79706
	C.D.E.F.K.L.M.N	MEWBOURNE OIL CO	-	-	-	PO BOX 5270	HOBBES, NM 88241
22/26S/27E	Entire Section	MEWBOURNE OIL CO	-	-	-	PO BOX 5270	HOBBES, NM 88241
21/26S/27E	A	CHEVRON USA INC	-	-	-	6301 DEANVILLE BLVD	MIDLAND, TX 79706
	H.I	EOG RESOURCES INC	-	-	-	PO BOX 2287	MIDLAND, TX 79702
27/26S/27E	A.B.C.D.G.H	MEWBOURNE OIL CO	-	-	-	PO BOX 5270	HOBBES, NM 88241
26/26S/27E	B.C.D.E.F	CHIMAREX ENERGY CO	-	-	-	600 N MARIENFELD STREET SUITE 600 1305 JANWAY	MIDLAND, TX 79701
Surface Location	-	-	-	-	STELL, PHILIP & KENDRA	-	CARLSBAD, NM 88220



Brantley 22 SWD No. 1 - Offset Produced Water Analysis

Well Name	API	Section	Township	Range	County	Formation	ph	tds_mgl	sodium_mgl	calcium_mgl	iron_mgl	barium_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl
COTTON DRAW UNIT #115H	3001537898	34 24S	31E	EDDY	AVALLON LOWER	6.2	2427252.5	65970	15480	31	57		2650	0.9	160100	122	0	350
COTTON DRAW UNIT #115H	3001537898	34 24S	31E	EDDY	AVALLON LOWER	6.9	118579.6	44633.2	514	127			86	0.9	67021	343	2278	430
H B 11 FEDERAL #008H	3001537900	11 24S	29E	EDDY	AVALLON UPPER	6.8	190214.1	69189.7	3114	20			501	2.5	114114	1000.4	643	110
H B 11 FEDERAL #008H	3001537900	11 24S	29E	EDDY	AVALLON UPPER	7	174708.9	64668.1	2184	0			358	0.4	104800	878.4	575	50
KNOLL AOK FEDERAL #001	3001528127	3 24S	29E	EDDY	BONE SPRING	6.15			2162	0			775		84981	381	600	
CORRAL DRAW ACH FEDERAL #001	3001529996	13 24S	29E	EDDY	BONE SPRING	5.59			25552	175			4471		164963	73	190	
COTTON DRAW UNIT #117H	3001538434	34 24S	31E	EDDY	BONE SPRING 2ND SAND	6.4	159044.1	53448.4	9151.3	15.8			1112.3	1.65	92748	183	0	25
COTTON DRAW UNIT #127H	3001538453	35 24S	31E	EDDY	BONE SPRING 2ND SAND	6.3	158456.6	51198.9	8177.8	28.5			1001.2	1.14	95601	122	0	200
COTTON DRAW UNIT #211H	3001541941	34 24S	31E	EDDY	BONE SPRING 2ND SAND	6.7	137889.5	32364.9	5546.6	77.3			698.8	1.52	97298.2	122	0	300
COTTON DRAW UNIT #204H	3001541818	26 24S	31E	EDDY	BONE SPRING 2ND SAND	6.5	136887.2	41804.2	7433.7	31.1			1017.4	1.16	84467	122	0	200
COTTON DRAW UNIT #203H	3001541847	26 24S	31E	EDDY	BONE SPRING 2ND SAND	6.5	151978.8	47598.6	8167.1	43.5			1041.7	1.1	92926.8	122	0	300
COTTON DRAW UNIT #244H	3001542331	36 24S	31E	EDDY	BONE SPRING 3RD SAND	6.2	113124.8	34288.2	4803.6	24.8			608.1		71446.6		527	100
COTTON DRAW UNIT #244H	3001542331	36 24S	31E	EDDY	BONE SPRING 3RD SAND	6.6	110826.1	35072.6	4891.4	30			619.4		68329.9		520.1	200
COTTON DRAW UNIT #244H	3001542331	36 24S	31E	EDDY	BONE SPRING 3RD SAND	6.7	104968.4	31519.4	4562.1	30.8			567.4		66479.3		517.4	240
COTTON DRAW UNIT #244H	3001542331	36 24S	31E	EDDY	BONE SPRING 3RD SAND	6.7	108465	33597.8	4943.2	26.4			648.5	1.01	67351.3	122	0	200
FED J #001	3001522471	6 26S	27E	EDDY	DELAWARE	5.7	255599								100000	24	330	
FED J #001	3001522471	6 26S	27E	EDDY	DELAWARE	7.4	263727								158000	37	3600	
FED J #001	3001522471	6 26S	27E	EDDY	DELAWARE	7.6	253336								156000	76	790	
FED J #001	3001522471	6 26S	27E	EDDY	DELAWARE	8.5	263830								157000	78	3700	
CHAWFORD #001	3001501121	9 24S	27E	EDDY	DELAWARE	95055									58570	95	187	
COTTON DRAW UNIT #113H	3001539517	36 24S	31E	EDDY	DELAWARE-BRUSHY CANYON	6.4	228183	69638	13190	26			2376	3.5	140293	122	0	300
COTTON DRAW UNIT #167H	3001541385	25 24S	31E	EDDY	DELAWARE-BRUSHY CANYON	6	153791.7	46159.3	7627.1	36.3			974	1.04	96665.6	244	0	200
COTTON DRAW UNIT #167H	3001541385	25 24S	31E	EDDY	DELAWARE-BRUSHY CANYON	6	153975	46159.3	7627.1	36.3			974	1	96665.6	244	956.8	200
HEFLIN FED #001	3001505853	24 24S	31E	EDDY	DELAWARE-BRUSHY CANYON		47726											
HEFLIN FED #001	3001505853	24 24S	31E	EDDY	DELAWARE-BRUSHY CANYON		256580											
MONA LISA #002	3001523094	7 25S	27E	EDDY	MORROW	6.17	92834.7	37968.1	2979.66	621.16	6.89		387.96		158000	690	200	
MONA LISA #002	3001523094	7 25S	27E	EDDY	MORROW			0	0	0	0		0		59225.4	204.58	293.62	
R.S. STATE #001	3001501132	27 24S	27E	EDDY	PENNSYLVANIA		48387						0		0	0	0	
HABANERO 17 FEDERAL COM #001H	3001536108	17 24S	27E	EDDY	WOLF CAMP	6.5	108205	35110.8	4480.2	28.5			627.9	0.61	65927.2	1505	2263	0
SERRANO 29 FEDERAL #001H	3001537763	29 24S	27E	EDDY	WOLF CAMP	6.9	102136.2	30415.1	5311.5	40.2			643.7	1.47	62812.7	183	0	350
SERRANO 29 FEDERAL #001H	3001537763	29 24S	27E	EDDY	WOLF CAMP	6.5	100994.9	28702.1	5341.9	46.2			619.5	1.46	63450.1	268	0	350



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: C 02930 Subbasin: C Cross Reference: -
Primary Purpose: DOL 72-12-1 DOMESTIC AND LIVESTOCK WATERING
Primary Status: PMT PERMIT
Total Acres: Subfile: - Header: -
Total Diversion: 3 Cause/Case: -
Owner: PHIL STELL

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
	472361	72121	2002-10-02	PMT	LOG C 02930	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	Q	Q	64	16	4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02930		Shallow	2	3	4	22	26	S	27	E		577938	3543284*	

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



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: C 03975

Subbasin: CUB

Cross Reference: -

Primary Purpose: EXP EXPLORATION

Primary Status: PMT PERMIT

Total Acres:

Subfile: -

Header: -

Total Diversion: 0

Cause/Case: -

Agent: GREGORY ROCKHOUSE RANCH INC

Contact: M STAPLETON LLC

Owner: PHIL STELL

Contact: M STAPLETON LLC

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
591558	EXPL	2016-08-15	PMT	APR	C 03975 POD1	T	0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q Q Q			X	Y	Other Location Desc
			64	16	4			
C 03975 POD1			4	4	3	22	26S	27E 577612 3543101

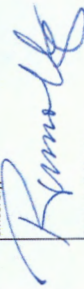
Notice of Affected Parties - Brantley 22 SWD No. 1

Solaris Water Midstream, LLC

TRACT ID	COUNTY CLERK	MAILING ADDRESS	PHONE	TRACKING #	DATE SHIPPED	DATE RECEIVED
	OIL CONSERVATION DIVISION DISTRICT II	811 S. FIRST ST., ARTESIA, NM 88210		USPS - 7018 1130 0001 5497 2265		
	OIL CONSERVATION DIVISION DISTRICT IV	1220 S ST FRANCIS DR, SANTA FE, NM 87505				
	SURFACE LANDOWNER					
	PHILLIP & KENDRA STELL	1305 JANWAY, CARLSBAD, NM 88220		USPS - 7018 1130 0001 5497 2272		
	GOVERNMENT AGENCY					
	Bureau of Land Management					
	AFFECTED PARTIES					
	Chevron USA, Inc.	620 E Greene Street Carlsbad, NM 88220		USPS - 7018 1130 0001 5497 2289		
	Cimarex Energy Company	6301 Deauville Blvd, Midland, TX 79706-2964		USPS - 7018 1130 0001 5497 2296		
	EOG Resources Inc.	600 N. Marnefield Street Suite 600, Midland, TX 79701		USPS - 7018 1130 0001 5497 2302		
	Newbourne Oil Co.	P.O. Box 2267, Midland, TX 79702		USPS - 7018 1130 0001 5497 2319		
		P.O. Box 5270, Hobbs, NM 88241		USPS - 7018 1130 0001 5497 2326		

Notices were sent for the Brantley 22 SWD No. 1 application by mailing them a copy of the Form C-108 on 4/25/2019

Sincerely,



Ramona K. Hovey
Sr. Petroleum Engineer / Longquist & Co., LLC
Agent for Solaris Water Midstream

CARLSBAD
CURRENT-ARGUS

AFFIDAVIT OF PUBLICATION

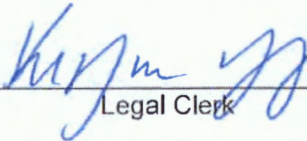
Ad No.
0001282374

LONQUIST FIELD SERVICE
1001 MCKINNEY ST., SUITE 1650

HOUSTON TX 77002

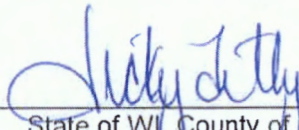
I, a legal clerk of the **Carlsbad Current-Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements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

04/05/19



Legal Clerk

Subscribed and sworn before me this
5th of April 2019.



State of WI, County of Brown
NOTARY PUBLIC

9-19-21

My Commission Expires

Legal Notice

Solaris Water Midstream, LLC, 907 Tradewinds Blvd., Suite B, Midland, TX 79706, is filling Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division for administrative approval for its salt water disposal well Brantley 22 SWD No. 1. The proposed well will be located 1,750' FNL & 275' FEL in Section 22, Township 26S, Range 27E in Eddy County, New Mexico. Disposal water will be sourced from area production, and will be injected into the Devonian-Silurian formation (determined by offset log analysis) through an open hole completion between a maximum applied for top of 13,620 feet to a maximum depth of 15,420 feet. The maximum surface injection pressure will not exceed 2,724 psi with a maximum rate of 40,000 BWPD. Interested parties opposing the action must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. Additional information can be obtained from the applicant's agent, Lonquist & Co., LLC, at (512) 600-1774.

April 5, 2019

Ad#:0001282374
P O : Brantley 22 SWD #2
of Affidavits :0.00



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**OIL CONSERVATION DIVISION
DISTRICT II
811 S FIRST STREET
ARTESIA NM 88210
1946-BRANTLEY 22 SWD #1**



9590 9402 4694 8323 0112 83

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2265

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature

☐ Adult Signature Restricted Delivery

☒ Certified Mail®

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Insured Mail

☐ Insured Mail Restricted Delivery

(over \$500)

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

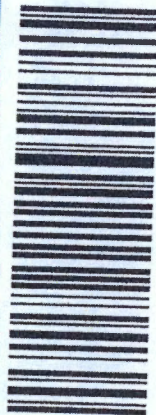
☐ Signature Confirmation

Restricted Delivery

Domestic Return Receipt

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

CERTIFIED MAIL®



**7018 1130 0001 5497 2265
7018 1130 0001 5497 2265**

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only**

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage

\$

Total

\$

Sent

Street

City

**OIL CONSERVATION DIVISION
DISTRICT II
811 S FIRST STREET
ARTESIA NM 88210
1946-BRANTLEY 22 SWD #1**

Postmark
Here

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
■ Complete Items 1, 2, and 3. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits.		A. Signature X ☐ Agent ☐ Addressee	
1. Article Addressed to: PHILLIP & KENDRA STELL 1305 JANWAY CARLSBAD NM 88220 1946-BRANTLEY 22 SWD #1		B. Received by (Printed Name) C. Date of Delivery	
2. Article Number (Transfer from service label) 7018 1130 0001 5497 2272		D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No	
3. Service Type ☒ Adult Signature ☐ Priority Mail Express® ☐ Adult Signature Restricted Delivery ☐ Registered Mail™ ☒ Certified Mail® ☐ Registered Mail Restricted Delivery ☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Collect on Delivery ☐ Signature Confirmation™ ☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery ☐ Insured Mail ☐ Signature Confirmation Restricted Delivery (over \$500) ☐ Insured Mail Restricted Delivery (over \$500)			
PS Form 3811, July 2015 PSN 7530-02-000-9053		Domestic Return Receipt	

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com®	
OFFICIAL USE	
Certified Mail Fee \$	
Extra Services & Fees (check box, add fee as appropriate) ☐ Return Receipt (hardcopy) \$ ☐ Return Receipt (electronic) \$ ☐ Certified Mail Restricted Delivery \$ ☐ Adult Signature Required \$ ☐ Adult Signature Restricted Delivery \$	
Postage \$	
Total \$	
Sent to	
Street	
City, State, ZIP+4®	
PHILLIP & KENDRA STELL 1305 JANWAY CARLSBAD NM 88220 1946-BRANTLEY 22 SWD #1	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

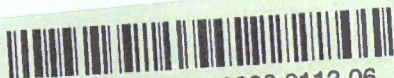
SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**BUREAU OF LAND MGMT
620 E GREENE STREET
CARLSBAD NM 88220**

1946-BRANTLEY 22 SWD #1



9590 9402 4694 8323 0113 06

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2289

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

☐ Agent

☐ Addressee

X

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature

☐ Adult Signature Restricted Delivery

☒ Certified Mail®

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Insured Mail

☐ Insured Mail Restricted Delivery (over \$500)

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

U.S. Postal Service™

CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$

☐ Return Receipt (electronic) \$

☐ Certified Mail Restricted Delivery \$

☐ Adult Signature Required \$

☐ Adult Signature Restricted Delivery \$

Postage

\$

Total P

\$

Sent To

Street

City, St

BUREAU OF LAND MGMT

620 E GREENE STREET

CARLSBAD NM 88220

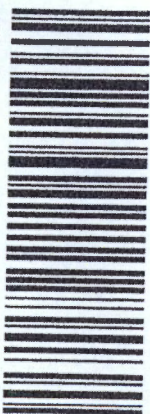
1946-BRANTLEY 22 SWD #1

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

CERTIFIED MAIL®



7018 1130 0001 5497 2289

7018 1130 0001 5497 2289

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**CHEVRON USA INC
6301 DEAUVILLE BLVD
MIDLAND TX 79706-2964**

1946-BRANTLEY 22 SWD #1



9590 9402 4694 8323 0113 13

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2296

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature

☐ Adult Signature Restricted Delivery

☒ Certified Mail®

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Insured Mail

☐ Insured Mail Restricted Delivery (over \$500)

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only**

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$ _____

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)

☐ Return Receipt (electronic)

☐ Certified Mail Restricted Delivery

☐ Adult Signature Required

☐ Adult Signature Restricted Delivery

Postage

\$ _____

Total

\$ _____

Sent

Street

City, State

Zip

Postmark
Here

**CHEVRON USA INC
6301 DEAUVILLE BLVD
MIDLAND TX 79706-2964**

1946-BRANTLEY 22 SWD #1

PS Form 3800, April 2015 PSN 7530-02-000-0047

See Reverse for Instructions

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL®



7018 1130 0001 5497 2296
7018 1130 0001 5497 2296

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**CIMAREX ENERGY COMPANY
600 N MARIENFELD ST STE 600
MIDLAND TX 79701**

1946-BRANTLEY 22 SWD #1



9590 9402 4694 8323 0113 20

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2302

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature

☐ Adult Signature Restricted Delivery

☒ Certified Mail®

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Insured Mail

☐ Insured Mail Restricted Delivery (over \$500)

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only**

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)

☐ Return Receipt (electronic)

☐ Certified Mail Restricted Delivery

☐ Adult Signature Required

☐ Adult Signature Restricted Delivery

Postage

\$

Total P

\$

Sent To

Street a

City, St

**CIMAREX ENERGY COMPANY
600 N MARIENFELD ST STE 600
MIDLAND TX 79701**

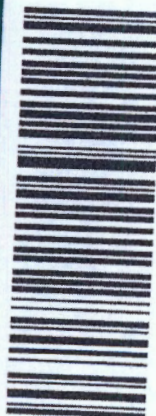
1946-BRANTLEY 22 SWD #1

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

CERTIFIED MAIL®



7018 1130 0001 5497 2302
7018 1130 0001 5497 2302

Postmark
Here

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**EOG RESOURCES INC
PO BOX 2267
MIDLAND TX 79702**

1946-BRANTLEY 22 SWD #1



9590 9402 4694 8323 0113 37

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2319

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- ☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

- | | |
|--|---|
| ☒ Adult Signature | ☐ Priority Mail Express® |
| ☐ Adult Signature Restricted Delivery | ☐ Registered Mail™ |
| ☒ Certified Mail® | ☐ Registered Mail Restricted Delivery |
| ☐ Certified Mail Restricted Delivery | ☐ Return Receipt for Merchandise |
| ☐ Collect on Delivery | ☐ Signature Confirmation™ |
| ☐ Collect on Delivery Restricted Delivery | ☐ Signature Confirmation Restricted Delivery |
| ☐ Insured Mail | |
| ☐ Insured Mail Restricted Delivery (over \$500) | |

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only**

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$ _____
☐ Return Receipt (electronic)	\$ _____
☐ Certified Mail Restricted Delivery	\$ _____
☐ Adult Signature Required	\$ _____
☐ Adult Signature Restricted Delivery	\$ _____

Postage

\$ _____
To
\$ _____
Se
\$ _____
St
\$ _____
Ci

Postmark
Here

**EOG RESOURCES INC
PO BOX 2267
MIDLAND TX 79702**

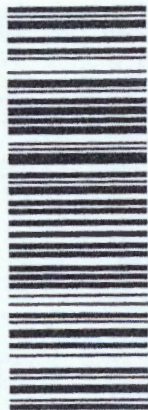
1946-BRANTLEY 22 SWD #1

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL®



**7018 1130 0001 5497 2319
7018 1130 0001 5497 2319**

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**MEWBOURNE OIL CO
PO BOX 5270
HOBBS NM 88241**

1946-BRANTLEY 22 SWD #1



9590 9402 4694 8323 0113 44

2. Article Number (Transfer from service label)

7018 1130 0001 5497 2326

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

☐ Agent

☐ Addressee

X

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Adult Signature

☐ Adult Signature Restricted Delivery

☐ Certified Mail®

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Insured Mail

☐ Insured Mail Restricted Delivery (over \$500)

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only**

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)

☐ Return Receipt (electronic)

☐ Certified Mail Restricted Delivery

☐ Adult Signature Required

☐ Adult Signature Restricted Delivery

Postage

\$ Total Pk

\$ Sent To

Street &

City, St.

Postmark
Here

**MEWBOURNE OIL CO
PO BOX 5270
HOBBS NM 88241**

1946-BRANTLEY 22 SWD #1

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL



7018 1130 0001 5497 2326
7018 1130 0001 5497 2326
7018 1130 0001 5497 2326

LONQUIST & CO. LLC

AUSTIN
HOUSTON

PETROLEUM
ENGINEERS

ENERGY
ADVISORS

WICHITA
CALGARY

www.lonquist.com

April 25, 2019

Phillip & Kendra Stell
1305 Janway
Carlsbad, NM 88220

Subject: Brantley 22 SWD No. 1 Authorization to Inject

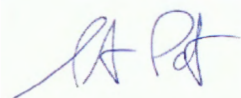
To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for Solaris Water Midstream LLC's Brantley 22 SWD No. 1 well. Section XIV of Form C-108 requires that the surface land owner on which the well is located and each leasehold operator within a one-half mile radius of the proposed well location be furnished with the application. The notice of application has been extended to a one-mile radius.

According to the New Mexico Oil Conservation Division, surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date in which this application was mailed to them.

Any questions should be directed towards Solaris Water Midstream LLC's agent, Lonquist & Co., LLC.

Regards,



Stephen L. Pattee, P.G.
Regulatory Manager
Lonquist & Co., LLC

(512) 600-1774
steve@lonquist.com

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Solaris Water Midstream, LLC
ADDRESS: 907 Tradewinds Blvd., Suite B, Midland, TX 79706
CONTACT PARTY: Whitney McKee PHONE: 432-203-9020
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Ramona Hovey TITLE: Consulting Engineer – Agent for Solaris Water Midstream
SIGNATURE: Ramona K Hovey DATE: 4/25/2019
E-MAIL ADDRESS: ramona@lonquist.com
- * If the information required under Sections VII, 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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Solaris Water Midstream, LLC

WELL NAME & NUMBER: Brantley 22 SWD No. 1

WELL LOCATION: 1750' FNL 275' FEL
FOOTAGE LOCATION

H
UNIT LETTER

22
SECTION

26S
TOWNSHIP

27E
RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 18.125"

Cemented with: 555 sx.

Top of Cement: surface

Casing Size: 16.00"

or _____ ft³

Method Determined: circulation

Intermediate Casing

Hole Size: 14.750"

Cemented with: 415 sx.

Top of Cement: surface

Casing Size: 13.375"

or _____ ft³

Method Determined: circulation

Production Casing

Hole Size: 12.250"

Cemented with: 1850 sx.

Top of Cement: surface

Casing Size: 9.625"

or _____ ft³

Method Determined: circulation

Liner

Hole Size: 8.500"

Cemented with: 510 sx.

Top of Cement: 8,950'

Total Depth: 14,725'

Casing Size: 7.625"

or _____ ft³

Method Determined: calculation

Injection Interval

13,725 feet to 14,725 feet

(Open Hole)

INJECTION WELL DATA SHEET

Tubing Size: 5.5", 20 lb/ft, HCL-80, BTC from 0' - 8,750' and 5", 18 lb/ft, HCL-80, LTC from 8,750'-13,675'
Lining Material: Duoline

Type of Packer: Nickel Plated Double Grip Retrievable Packer or Equivalent

Packer Setting Depth: 13,675'

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

Additional Data

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

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

2. Name of the Injection Formation: Devonian, Fusselman

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

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

No, new drill.

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

Bell Canyon: 2,150'

Cherry Canyon: 3,075'

Brushy Canyon: 4,200'

Bone Spring: 5,875'

Wolfcamp: 8,950'

Strawn: 11,400'

Atoka: 11,675'

Morrow (Clastics): 12,500'

Lower Morrow: 12,900'

District I

1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

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

State of New Mexico**Energy Minerals and Natural Resources****Oil Conservation Division****1220 South St. Francis Dr.****Santa Fe, NM 87505**

Form C-101
Revised July 18, 2013

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

¹ Operator Name and Address SOLARIS WATER MIDSTREAM, LLC 907 TRADEWINDS BLVD., SUITE B MIDLAND, TX 79706		² OGRID Number 371643 ³ API Number TBD
⁴ Property Code	⁵ Property Name BRANTLEY 22 SWD	⁶ Well No. 1

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	22	26S	27E		1,750	N	275	E	EDDY

⁸ Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
-	-	-	-	-	-	-	-	-	-

⁹ Pool Information

Pool Name SWD; Devonian-Silurian	Pool Code 97869
-------------------------------------	--------------------

Additional Well Information

¹¹ Work Type N	¹² Well Type SWD	¹³ Cable/Rotary R	¹⁴ Lease Type Private	¹⁵ Ground Level Elevation 3,116'
¹⁶ Multiple N	¹⁷ Proposed Depth 14,725'	¹⁸ Formation Silurian-Devonian	¹⁹ Contractor TBD	²⁰ Spud Date ASAP
Depth to Ground water 50'		Distance from nearest fresh water well 2,884 feet		Distance to nearest surface water >1 mile

☒ We will be using a closed-loop system in lieu of lined pits**²¹ Proposed Casing and Cement Program**

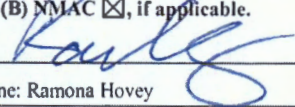
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	18.125"	16"	84 lb/ft	535'	555	Surface
Intermediate	14.75"	13.375"	68 lb/ft	2,130'	415	Surface
Production	12.25"	9.625"	53.5 lb/ft	9,150'	1,850	Surface
Liner	8.5"	7.625"	39 lb/ft	8,950'-13,725'	510	8,950'
Tubing		5.5" & 5"	20 lb/ft & 18 lb/ft	0' - 8,750' & 8,750' - 13,675'	N/A	

Casing/Cement Program: Additional Comments

See attached schematic.

²² Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Hydraulic Blinds, Pipe	8,000 psi	10,000 psi	TBD - Schaffer/Cameron

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.
Signature: 

Printed name: Ramona Hovey

Title: Consulting Engineer

E-mail Address: ramona@lonquist.com

Date: April 25, 2019

Phone: 512-600-1777

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
Phone (575) 393-8181 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1253 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 834-8178 Fax: (505) 834-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3468

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name BRANTLEY 22 SWD	Well Number 1
GRID No.	Operator Name SOLARIS WATER MIDSTREAM	Elevation 3116'

Surface Location

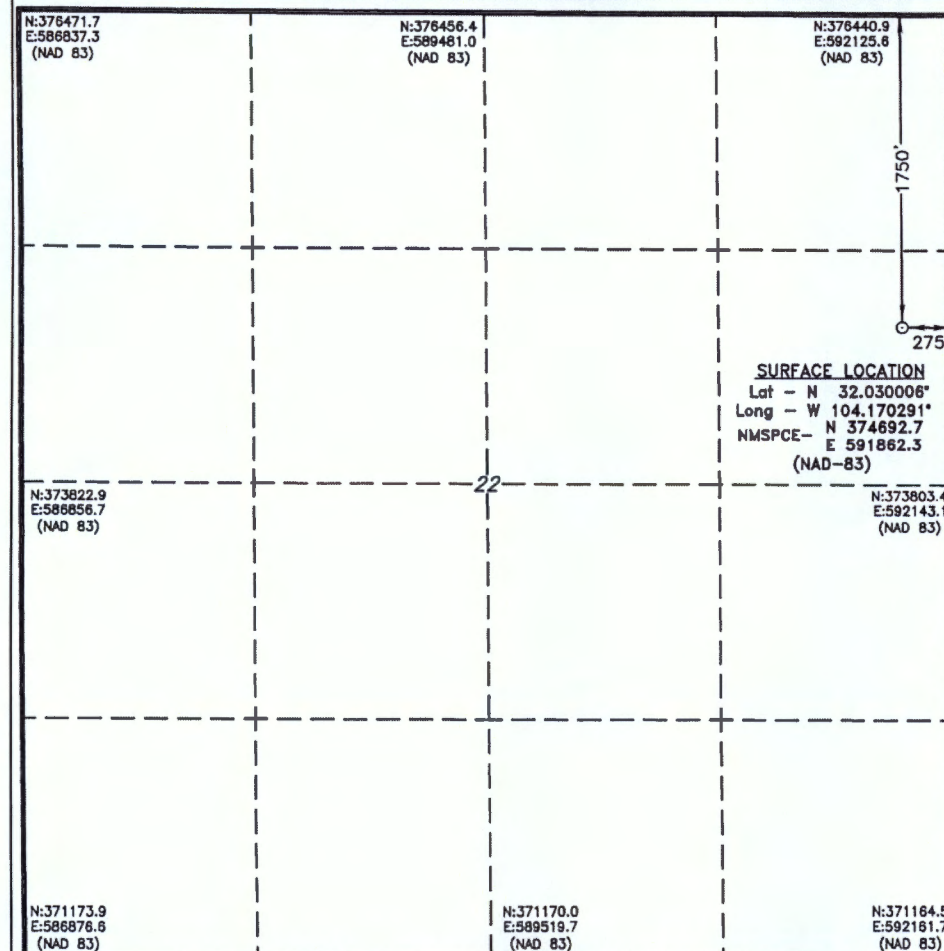
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	22	26 S	27 E		1750	NORTH	275	EAST	EDDY

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



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.

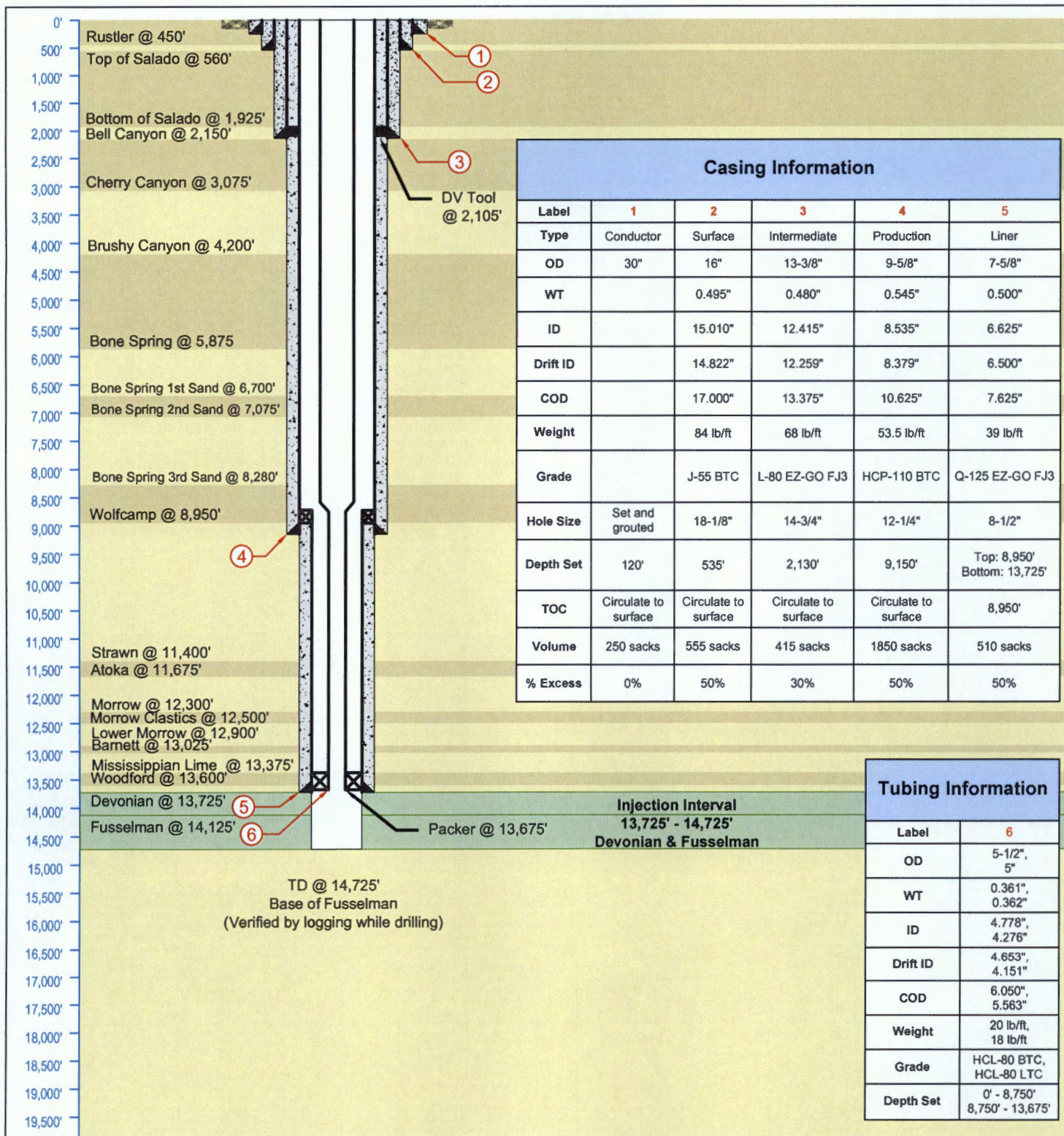
Ramona Hovey 4/25/19
Signature Date
RAMONA HOVEY
Printed Name
ramona@longquist.com
Email Address

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.

MARCH 11, 2019
Date Surveyed
[Signature]
Signature of Professional Surveyor
7977
Certificate No. 7977
Base: NAD 83

0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 34419



LONQUIST & CO. LLC PETROLEUM ENGINEERS ENERGY ADVISORS HOUSTON CALGARY AUSTIN WICHITA DENVER Texas License F-9147 12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Solaris Water Midstream, LLC		Brantley 22 SWD No. 1	
	Country: USA		State/Province: New Mexico	County/Parish: Eddy
	Location:		Site: 1750' FNL & 275' FEL	Survey: S22-T26S-R27E
	API No: NA		Field: Devonian-Silurian (Code: 97869)	Well Type/Status: SWD
	NMOCD District No: 2		Project No: 1946	Date: 4/22/2019
	Drawn: TFM		Reviewed:	Approved:
	Rev No: 1		Notes:	



Solaris Water Midstream, LLC

Brantley 22 SWD No. 1

FORM C-108 Supplemental Information

III. Well Data

A. Wellbore Information

1.

Well information	
Lease Name	Brantley 22 SWD
Well No.	1
Location	S-22 T-26S R-27E
Footage Location	1,750' FNL & 275' FEL

2.

a. Wellbore Description

Casing Information				
Type	Surface	Intermediate	Production	Liner
OD	16"	13.375"	9.625"	7.625"
WT	0.495"	0.48"	0.545"	0.500"
ID	15.010"	12.415"	8.535"	6.625"
Drift ID	14.822"	12.259"	8.379"	6.500"
COD	17.000"	13.375"	10.625"	7.625"
Weight	84 lb/ft	68 lb/ft	53.5 lb/ft	39 lb/ft
Grade	J-55 BTC	L-80, EZ-GO FJ3	HCP-110 BTC	Q-125 EZ-GO FJ3
Hole Size	18.125"	14.75"	12.25"	8.5"
Depth Set	535'	2,130'	9,150'	8,950'-13,725'

b. Cementing Program

Cement Information					
Casing String	Conductor	Surface	Intermediate	Production	Liner
Lead Cement	EXTENDACEM™	HALCEM™	HALCEM™	Stage 1: NeoCem™	-
Lead Cement Volume (sacks)	250	-	280	Stage 1: 1040 Stage 2: 195	-
Lead Cement Yield (ft3/sack)	1.694	-	1.664	Stage 1: 2.731 Stage 2: 2.732	-
Tail Cement	-	HALCEM™	HALCEM™	Stage 1: NeoCem™	VERSACEM™
Tail Cement Volume (sacks)	-	555	135	Stage 1: 475 Stage 2: 140	510
Tail Cement Yield (ft3/sack)	-	1.332	1.332	Stage 1: 1.056 Stage 2: 1.336	1.223
Cement Excess	0%	50%	30%	50%, 50%	50%
Total Sacks	250	555	415	1850	510
TOC	Surface	Surface	Surface	Surface	8,625'
Method	Circulate to Surface	Circulate to Surface	Circulate to Surface	Circulate to Surface	Logged

3. Tubing Description

Tubing Information	
OD	5.5" 5.0"
WT	0.361" 0.362"
ID	4.778" 4.276"
Drift ID	4.653" 4.151"
COD	6.050" 5.563"
Weight	20 lb/ft 18 lb/ft
Grade	HCL-80 BTC HCL-80 LTC
Depth Set	0 - 8,750' 8,750' - 13,675'

Tubing will be lined with Duoline.

4. Packer Description

Nickel Plated Double Grip Retrievable Packer or Equivalent

B. Completion Information

1. Injection Formation: Devonian, Fusselman
2. Gross Injection Interval: 13,725' - 14,725'

Completion Type: Open Hole

3. Drilled for injection.
4. See the attached wellbore schematic.
5. Oil and Gas Bearing Zones within area of well:

Formation	Depth
Bell Canyon	2,150'
Cherry Canyon	3,075'
Brushy Canyon	4,200'
Bone Spring	5,875'
Wolfcamp	8,950'
Strawn	11,400'
Atoka	11,675'
Morrow Clastics	12,500'
Lower Morrow	12,900'

VI. Area of Review

No wells within the area of review penetrate the proposed injection zone.

VII. Proposed Operation Data

1. Proposed Daily Rate of Fluids to be Injected:

Average Volume: 30,000 BPD
Maximum Volume: 40,000 BPD

2. Closed System
3. Anticipated Injection Pressure:

Average Injection Pressure: 2,059 PSI (surface pressure)

Maximum Injection Pressure: 2,745 PSI (surface pressure)

4. The injection fluid is to be locally produced water. It is expected that the source water will predominantly be from the Bone Spring and Wolfcamp formations. Attached are produced water sample analyses taken from the closest wells that feature samples from the Avalon, Bone Spring, Delaware, Morrow, Pennsylvanian, and Wolfcamp formations.
5. The disposal interval is non-productive. No water samples are available within a 1-mile radius.

VIII. Geological Data

Devonian Formation Lithology:

The Devonian formation is a dolomitic ramp carbonate that occurs below the Woodford shale and above the Fusselman formation. Strata found in the Devonian formation include two major groups, the Wristen Buildups and the Thirtyone Deepwater Chert, with the Wristen being more abundant. The Wristen Groups is composed of mixed limestone and dolomites with mudstone to grainstone and boundstone textures. Porosity in the Wristen group is a result of both primary and secondary development. Present are moldic, vugular, karstic (including collapse breccia) features that allow for higher porosities and permeabilities. The Thirtyone Formation contains two end-member reservoir facies, skeletal packstones/grainstones and spiculitic chert, with most of the porosity and permeability found in the coarsely crystalline cherty dolomite. These particular characteristics allow for this formation to be a tremendous Salt Water Disposal horizon.

Fusselman Formation Lithology:

The Silurian or Fusselman Formation is stratigraphically below the Wristen Group and is above and separated from the Montoya Formation by the Sylvan Shale. The Sylvan Shale is the lower confining layer for the proposed Brantley 22 SWD No. 1 well. Fusselman facies include a laminated skeletal wackestone in the upper part and a buildup complex in the lower part composed of ooid and bryozoan grainstones. These grainstones can also be potentially prolific zones for disposal.

A. Injection Zone: Devonian-Silurian Formation

Formation	Depth
Rustler	450'
Salado (Top of Salt)	560'
Salado (Bottom of Salt)	1,925'
Bell Canyon	2,150'
Cherry Canyon	3,075'
Brushy Canyon	4,200'
Bone Spring	5,875'
Bone Spring 1 st Sand	6,700'
Bone Spring 2 nd Sand	7,075'
Bone Spring 3 rd Sand	8,280'
Wolfcamp	8,950'
Strawn	11,400'
Atoka	11,675'
Morrow	12,300'
Morrow Clastics	12,500'
Lower Morrow	12,900'
Barnett	13,025'
Mississippian Lime	13,375'
Woodford	13,600'
Devonian	13,725'
Fusselman	14,125'

B. Underground Sources of Drinking Water

Two (2) water wells exists within a one-mile radius of the proposed well. Water wells outside a one-mile radius in the surrounding area have an average depth of 102 feet and an average water depth of 27 feet generally producing from the Carlsbad Basin. The upper Rustler may also be another USDW and will be protected.

IX. Proposed Stimulation Program

50,000 gallon acid job

X. Logging and Test Data on the Well

There are no logs or test data on the well. During the process of drilling and completion resistivity, gamma ray, and density logs will be run.

XI. Chemical Analysis of Fresh Water Wells

Attached is a map of the two (2) water wells that exists within one-mile of the well location. Samples from the well have been obtained and analysis results will be provided as soon as possible. A Water Right Summary from the New Mexico Office of the State Engineer is attached for the C-02930 and the C-03975-POD1 water wells.

LONQUIST & CO. LLC**PETROLEUM
ENGINEERS****ENERGY
ADVISORS**

AUSTIN · HOUSTON · WICHITA · DENVER · CALGARY

April 25, 2019

New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division District IV
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
(505) 476-3440

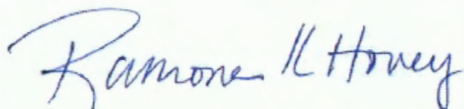
RE: BRANTLEY 22 SWD NO. 1 AUTHORIZATION TO INJECT

To Whom It May Concern:

Attached for your review is Form C-108, Application for Authorization to Inject, and its supplemental documents prepared for Solaris Water Midstream, LLC's (Solaris") Brantley 22 SWD No. 1. In addition, Forms C-101 and C-102 have also been included with this package. Notices have been sent to offset, operators, leaseholders and the surface owner. Proof of notice will be sent to the OCD upon receipt.

Any questions should be directed towards Solaris Water Midstream, LLC's agent Lonquist & Co., LLC.

Regards,



Ramona K. Hovey
Sr. Petroleum Engineer
Lonquist & Co., LLC

(512) 600-1777
ramona@lonquist.com