AE Order Number Banner

Application Number: pMSG2314759243

SWD-2539

Tascosa Energy Partners, L.L.C [329748]

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

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: Tascosa Energy Partners, LLC **OGRID Number:** 329748
Well Name: Le Mans SWD 1 **API:** 30-015-
Pool: SWD; Cisco **Pool Code:** 96099

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

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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.

Brian Wood
Print or Type Name

Signature

5-18-23
Date

505 466-8120
Phone Number

brian@permitswest.com
e-mail Address

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-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance XXX Disposal _____Storage
Application qualifies for administrative approval? XXX Yes _____No

II. OPERATOR: TASCOSA ENERGY PARTNERS, LLC

ADDRESS: 901 W. MISSOURI AVE., MIDLAND TX 79701

CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120

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 XXX No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including: **LE MANS SWD 1**

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: BRIAN WOOD TITLE: CONSULTANT

SIGNATURE: B. Wood DATE: MAY 15, 2023

E-MAIL ADDRESS: brian@permitswest.com

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

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;

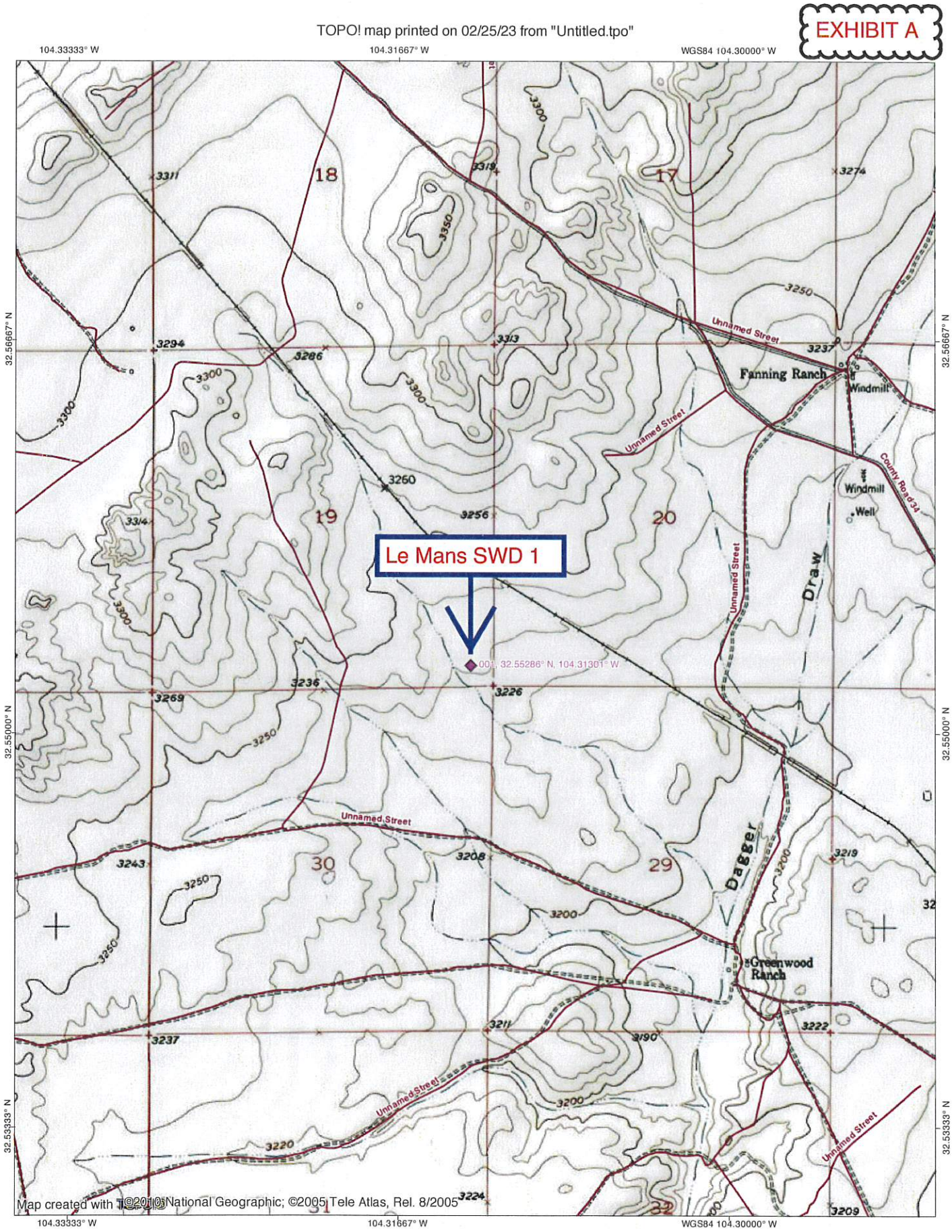
(3) The formation name and depth with expected maximum injection rates and pressures; and,

(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.

EXHIBIT A


TOPO! map printed on 02/25/23 from "Untitled.tpo"
104.33333° W
104.31667° W
WGS84 104.30000° W
32.56667° N
32.55000° N
32.53333° N
Le Mans SWD 1
001, 32.55286° N, 104.31301° W
Fanning Ranch
Windmill
Windmill
Well
Greenwood Ranch
Unnamed Street
Unnamed Street
Unnamed Street
Unnamed Street
Unnamed Street
County Road 34
Draw
Dagger
18
17
19
20
30
29
31
32
Map created with TOPO! ©2010 National Geographic; ©2005 Tele Atlas, Rel. 8/2005
NATIONAL GEOGRAPHIC
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km
TN MN
6.5°
02/25/23

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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

EXHIBIT A

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-	96099	SWD; CISCO

Property Code	Property Name	Well Number
	LE MANS SWD #1	#1

OGRID No.	Operator Name	Elevation
329748	TASCOSA ENERGY PARTNERS, LLC	3231'

Surface Location

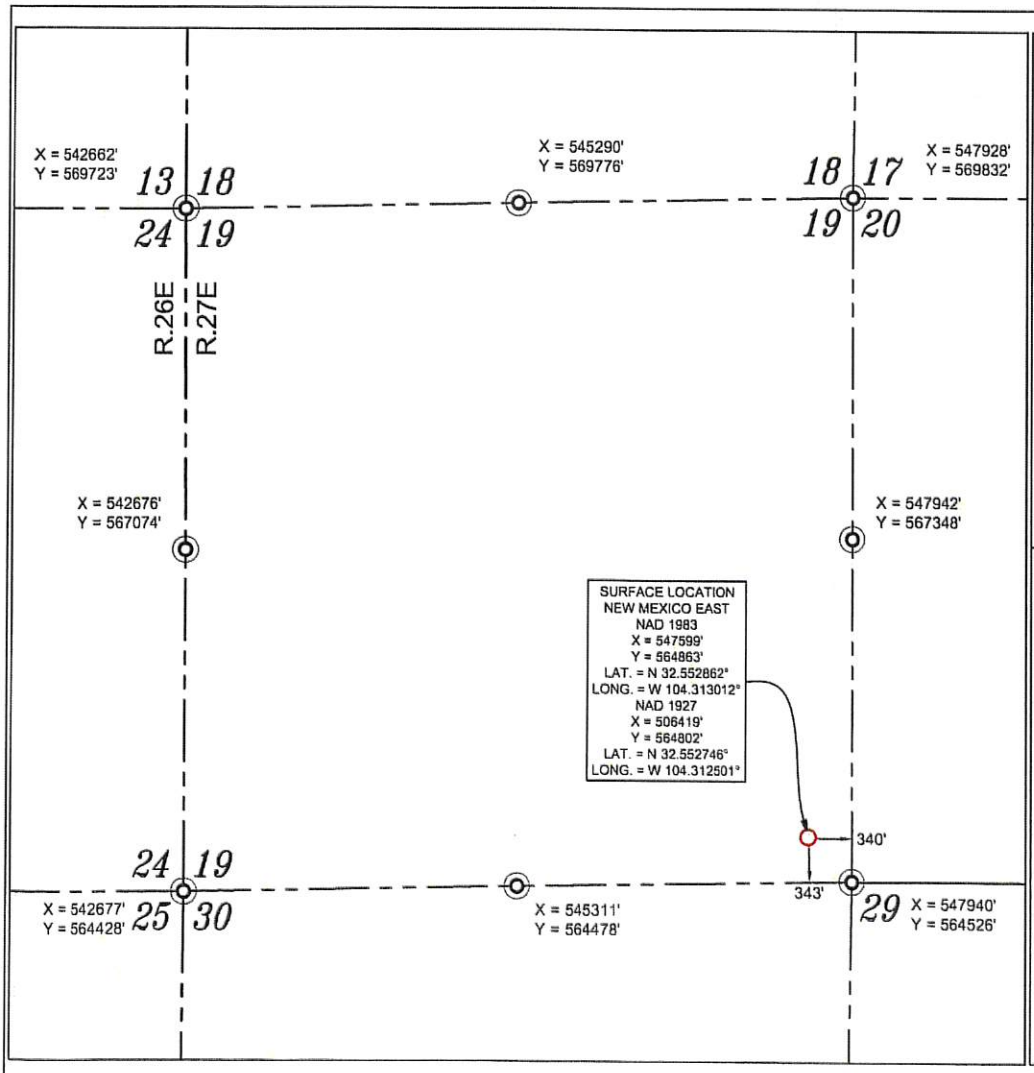
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	19	20 S	27 E		343	SOUTH	340	EAST	EDDY

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.

B. Wood

Signature

4-8-23

Date

BRIAN WOOD

Printed Name

brian@permitswest.com

E-mail Address

505 466-8120

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.

February 24, 2023

Date of Survey

Signature and Seal of Professional Surveyor:

MATTHEW B. TOMERLIN
NEW MEXICO
23203
PROFESSIONAL SURVEYOR

Job No.: 23-01-2786

MATTHEW B. TOMERLIN, N.M.P.L.S.

Certificate Number 23203

INJECTION WELL DATA SHEET

Tubing Size: 3.5" N-80 OR L-80 9.3# Lining Material: INTERNAL PLASTIC COAT

Type of Packer: ARROWSET I-XS NICKEL OR STAINLESS STEEL OR ITS EQUIVALENT

Packer Setting Depth: ≈8170'

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

Additional Data

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

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

2. Name of the Injection Formation: CISCO

3. Name of Field or Pool (if applicable): SWD; CISCO (96099)

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:

   OVER: BONE SPRING (5547') & WOLFCAMP (7943')

   UNDER: MORROW (10300')

Side 1

INJECTION WELL DATA SHEET

OPERATOR: TASCOSA ENERGY PARTNERS, LLC

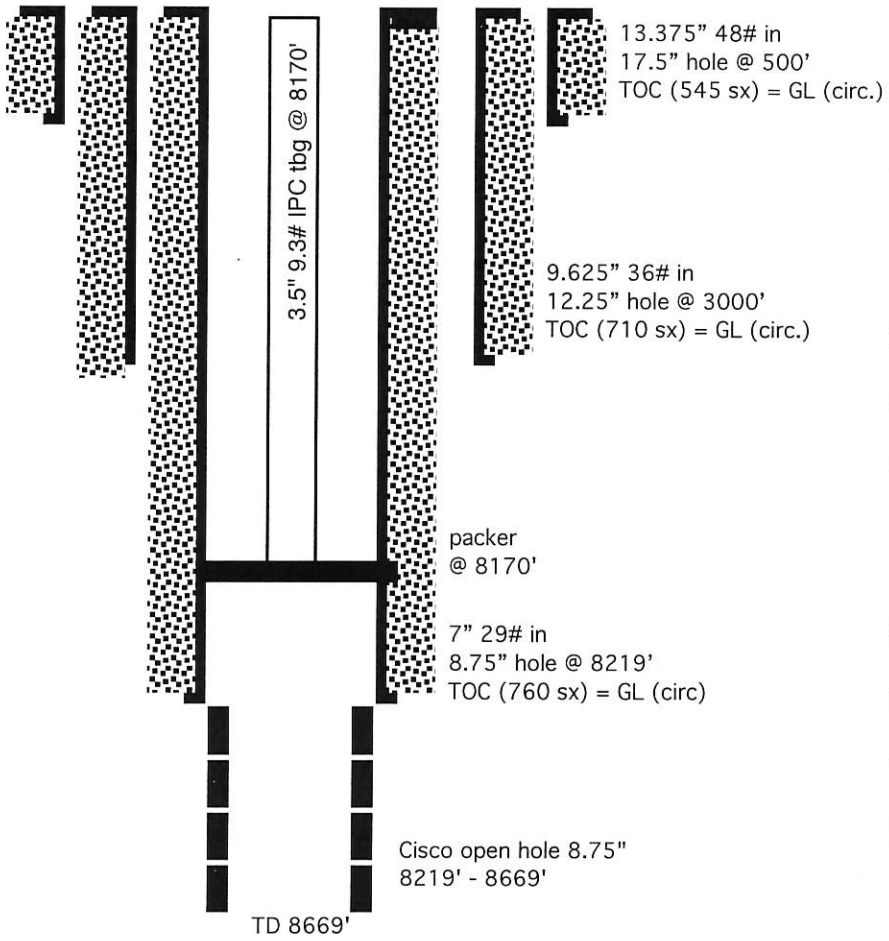
WELL NAME & NUMBER: LE MANS SWD 1

WELL LOCATION:	343' FSL & 340' FEL	P	19	20 S	27 E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

"PROPOSED"

(not to scale)



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17.5" Casing Size: 13.375"

Cemented with: 545 sx. *or* _____ ft³

Top of Cement: GL Method Determined: CIRC.

Intermediate Casing

Hole Size: 12.25" Casing Size: 9.625"

Cemented with: 710 sx. *or* _____ ft³

Top of Cement: GL Method Determined: CIRC.

Production Casing

Hole Size: 8.75" Casing Size: 7"

Cemented with: 760 sx. *or* _____ ft³

Top of Cement: GL Method Determined: CIRC.

Total Depth: CSG TD = 8219' & WELL TD = 8669'

Injection Interval

8219 feet to 8669'

(Perforated or Open Hole; indicate which)

Carlsbad Current Argus.

EXHIBIT K

Affidavit of Publication

Ad # 0005628455

This is not an invoice

PERMITS WEST INC
37 VERANO LOOP

SANTA FE, NM 87508-8351

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 in editions dated as follows:

03/15/2023

Legal Clerk

Subscribed and sworn before me this March 15, 2023:

State of WI, County of Brown
NOTARY PUBLIC

1-7-25

My commission expires

KATHLEEN ALLEN
Notary Public
State of Wisconsin

Tascosa Energy Partners, LLC will apply to drill its Le Mans SWD 1 as a saltwater disposal well. The well will dispose into the Cisco formation from 8219' to 8669'. It is 10 miles northwest of Carlsbad, NM and is staked at 343' FSL & 340' FEL Sec. 19, T. 20 S., R. 27 E., Eddy County, NM. Maximum disposal rate will be 30,000 bwpd. Maximum injection pressure will be 1,643 psi. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505, or OCD.Engineer@emnrd.nm.gov within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.
#5628455, Current Argus, March 15, 2023

Ad # 0005628455
PO #: Tascosa - LeMans SWD
# of Affidavits 1

This is not an invoice

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

EXHIBIT K

May 15, 2023

NM State Land Office
PO Box 1148
Santa Fe NM 87504

TYPICAL NOTICE

Tascosa Energy Partners, LLC is applying (see attached application) to drill the Le Mans SWD 1 as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposal. This letter is a notice only. No action is needed unless you have questions or objections.

Well: Le Mans SWD 1 TD = 8669'
Proposed Disposal Zone: Cisco (8219' - 8669')
Location: 343' FSL & 340' FEL Sec. 19, T. 20 S., R. 27 E., Eddy County, NM
Approximate Location: 10 miles northwest of Carlsbad, NM
Applicant Name: Tascosa Energy Partners, LLC (432) 695-6970
Applicant's Address: 901 W. Missouri Ave., Midland TX 79701

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

Please call me if you have any questions.

Sincerely,

Brian Wood

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 Postage and Fees
Sent To
Street and Apt. No., or PO Box No.
City, State, ZIP+4®
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions
Postmark Here
CORONADO STATION
MAY 16 2023
NEW MEXICO 87505

7022 1670 0001 2804 4833
Total Postage and Fees: Abo Empire LLC
Sent To: PO Box 900
Artesia NM 88211
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4840
Total Postage and Fees: Abo Petroleum LLC
Sent To: PO Box 900
Artesia NM 88211
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4857
Total Postage and Fees: BTA
Sent To: 620 E. Greene
Carlsbad NM 88220
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4864
Total Postage and Fees: COG
Sent To: 600 W Illinois Ave
Midland TX 79701
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4871
Total Postage and Fees: Endurance Resources
Sent To: 4900 Airport Pkwy, #2805
Addison TX 75001
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4888
Total Postage and Fees: Los Chicos
Sent To: 105 S 4th Street
Artesia NM 88210
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4895
Total Postage and Fees: Mewbourne Oil Co.
Sent To: P.O. Box 5270
Hobbs NM 88241
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4901
Total Postage and Fees: NM State Land Office
Sent To: P.O. Box 1148
Santa Fe NM 87504
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4918
Total Postage and Fees: OXY USA WTP LP
Sent To: P. O. Box 4294
Houston TX 77210
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4925
Total Postage and Fees: OXY USA Inc.
Sent To: P. O. Box 4294
Houston TX 77210
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4932
Total Postage and Fees: Tritex Energy A LP
Sent To: 15455 Dallas Pkwy, #6000
Addison TX 75001
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

7022 1670 0001 2804 4949
Total Postage and Fees: Vladin LLC
Sent To: PO Box 1000
Artesia NM 88211
Street and Apt. No., or PO Box No.: Tascosa LeMans SWD

EXHIBIT K

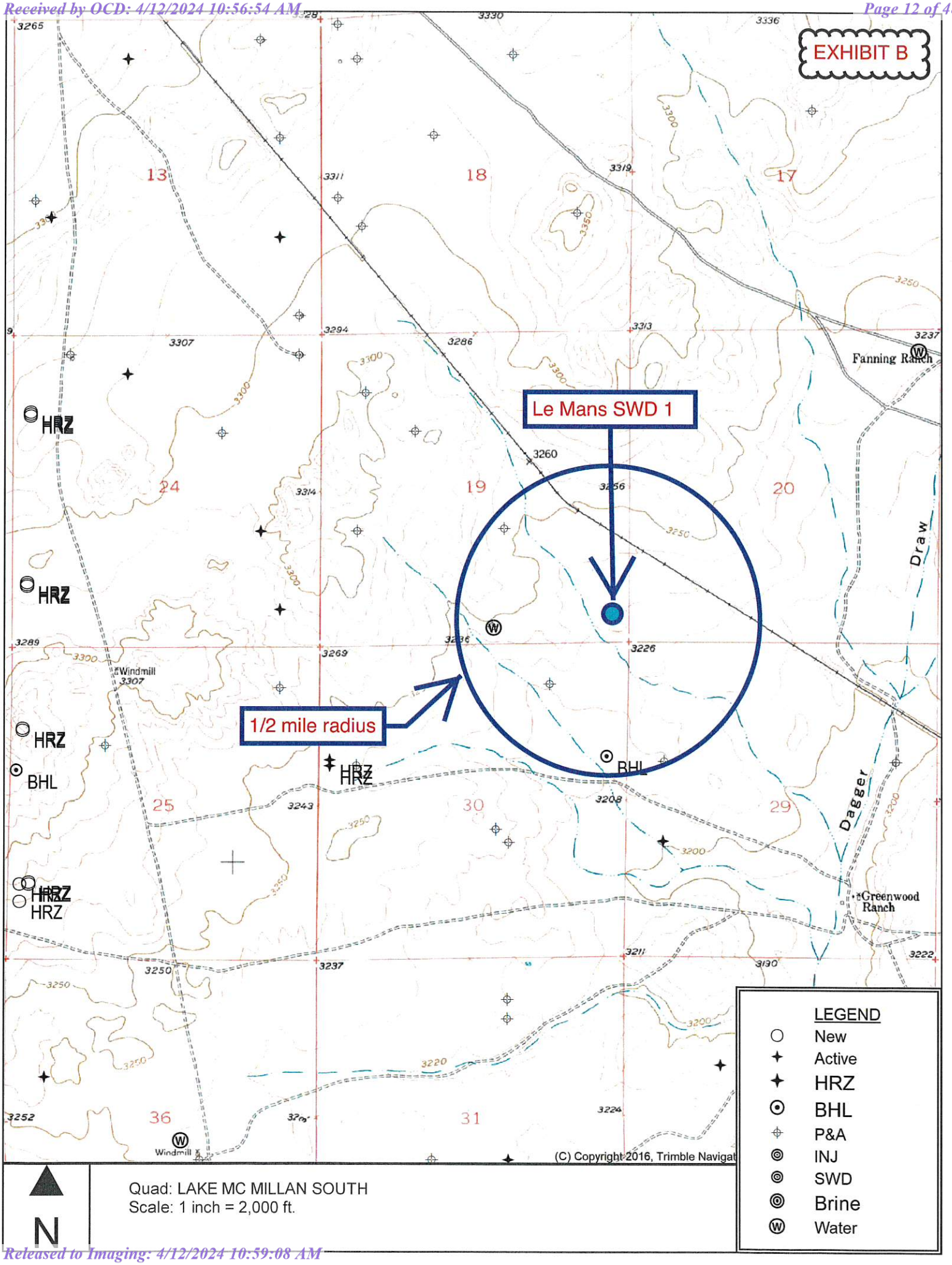


EXHIBIT B
Le Mans SWD 1
1/2 mile radius
Fanning Ranch
Windmill
Greenwood Ranch
Draw
Dagger
BHL
HRZ
LEGEND
New
Active
HRZ
BHL
P&A
INJ
SWD
Brine
Water
Quad: LAKE MC MILLAN SOUTH
Scale: 1 inch = 2,000 ft.
N
(C) Copyright 2016, Trimble Navigat

SORTED BY DISTANCE FROM LE MANS SWD 1

API	OPERATOR	WELL	TYPE	UNIT-SECTION-T20S-R27E	TVD	ZONE @ TVD	FEET FROM LE MANS SWD 1
3001549671	Tascosa	Catalina 25 30 State Com 301H	O	A-30 (BHL)	7759	Bone Spring	780
3001523010	Mewbourne	Marathon State 001	P&A	A-30	10625	Morrow	1424
3001501044	Jenkins & McQueen	State 001	O	O-19	1813	San Andres	1984
3001547641	Tascosa	Catalina 30 EH State 001H	O	H-30 (BHL)	7830	Bone Spring	2319
3001549670	Tascosa	Catalina 25 30 State Com 202H	O	H-30 (BHL)	6545	Bone Spring	2335
3001534767	Pogo	State 19 003	P&A	J-19	55	Quaternary	2395
3001520909	Coquina	Wagner Federal 001	P&A	E-29	452	Tansill	2513
3001520750	*Abo Petroleum*	*Lario Federl 1*	*O*	*F-20*	*10700*	*Barnett*	*2816*

EXHIBIT B

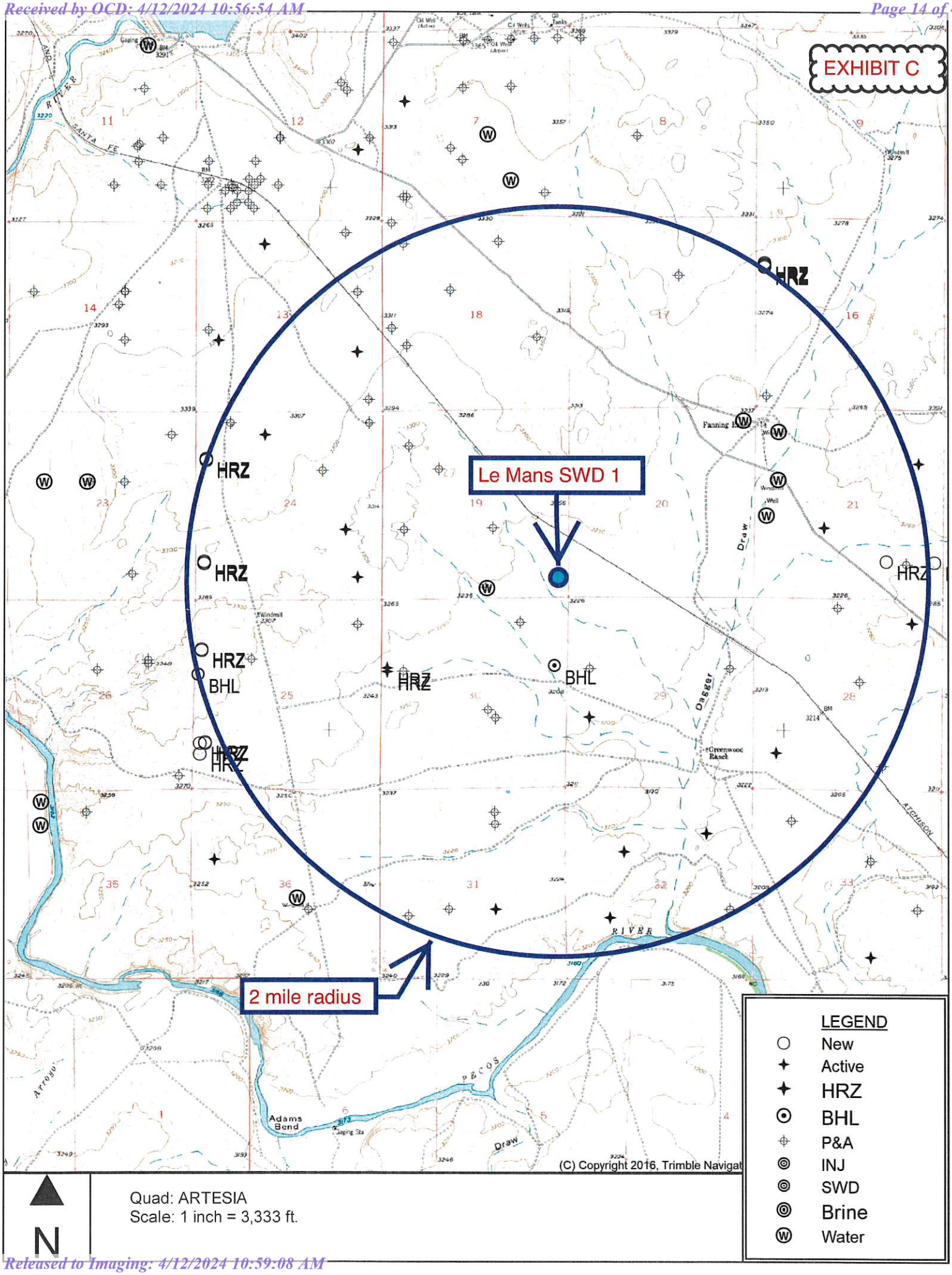
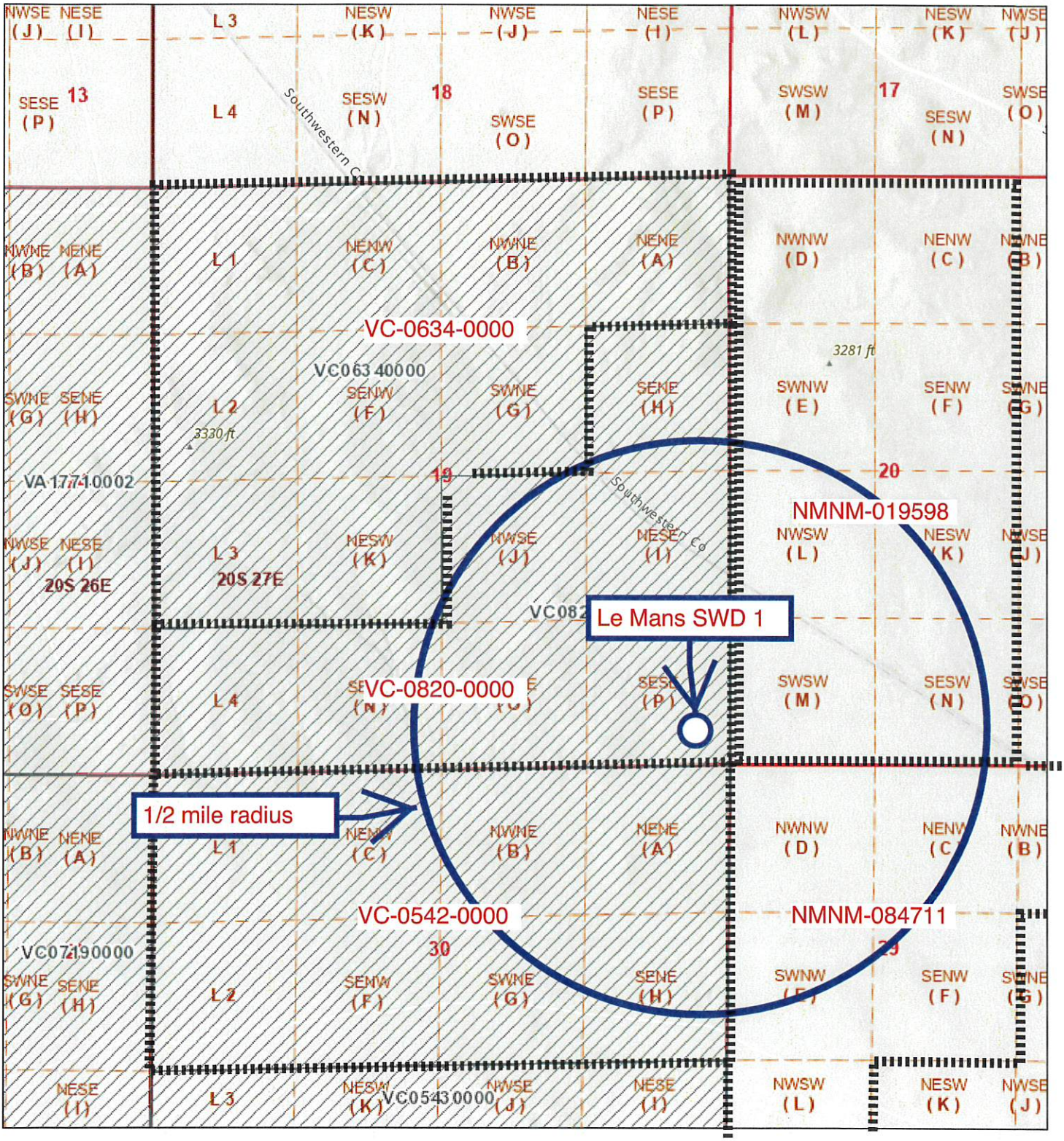


EXHIBIT C
Le Mans SWD 1
2 mile radius
HRZ
BHL
Pecos River
Draw
Dagger
Adams Bend
Greenwood Ranch
Windmill
Arroyo
Santa Fe
Atchison
(C) Copyright 2016, Trimble Navigat
LEGEND
New
Active
HRZ
BHL
P&A
INJ
SWD
Brine
Water
N
Quad: ARTESIA
Scale: 1 inch = 3,333 ft.

EXHIBIT D



4/8/2023, 3:25:15 PM

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Oil and Gas Leasing Restrictions

Oil and Gas Leases

PLSS Second Division

PLSS First Division

PLSS Townships

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, BLM

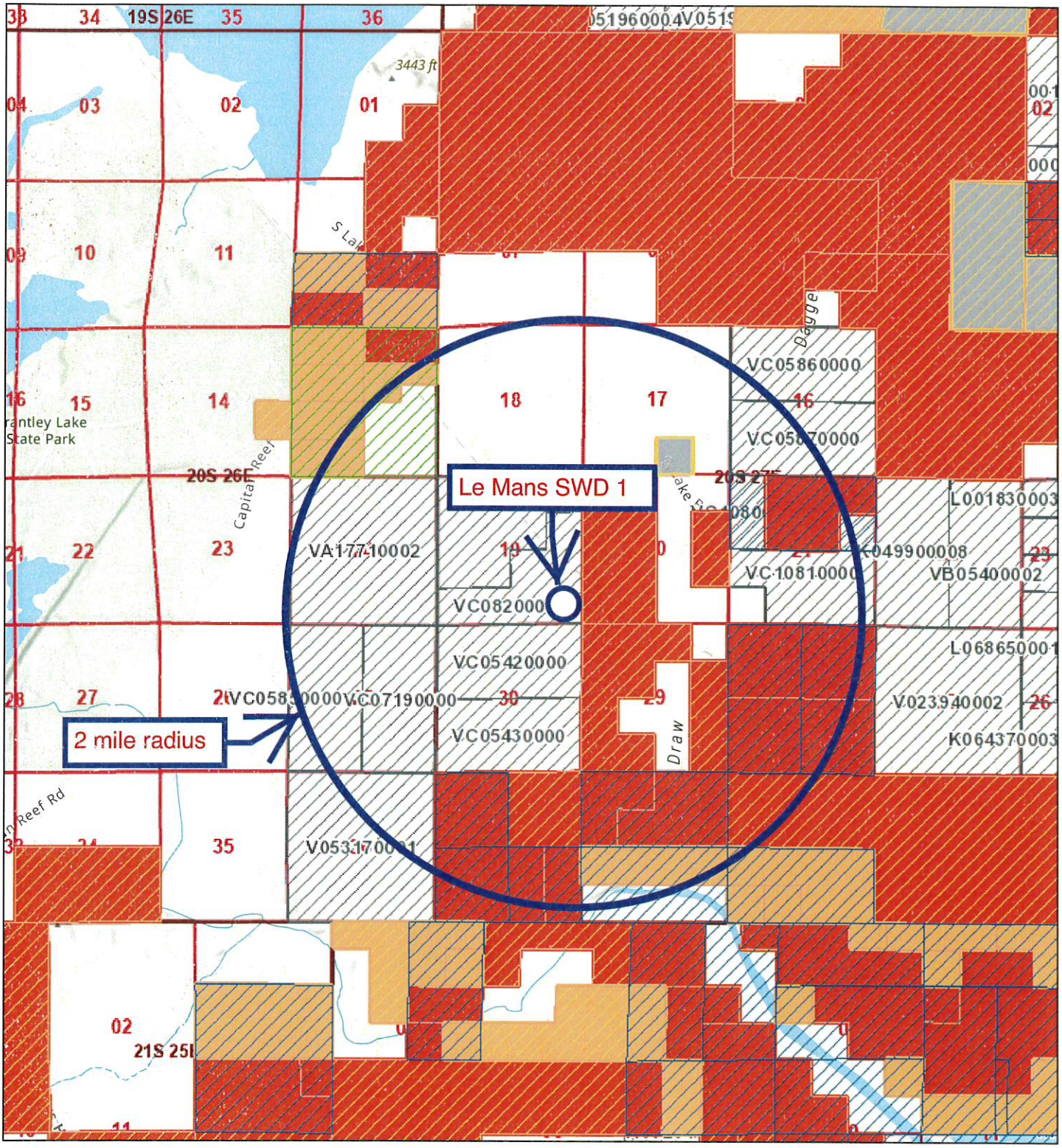
New Mexico Oil Conservation Division

LE MANS SWD 1 AREA OF REVIEW LEASES

Aliquot Parts in Area of Review (T. 20 S., R. 26 E.)	Lessor	Lease	Lessee of Record	Well Operators (none Cisco)
SWNE & NESW Sec. 19	NMSLO	VC-0634-0000	Tascosa	Tascosa
SENE, SE4, & SESW Sec. 19	NMSLO	VC-0820-0000	Tascosa	Tascosa
SWNW & SW4 Sec. 20	BLM	NMNM-019598	Abo Pet., Los Chicos, & Vladin	Abo Pet. & Mewbourne
NW4 Sec. 29	BLM	NMNM-084711	COG	COG
NE4 & NENW Sec. 30	NMSLO	VC-0542-0000	Tascosa	Tascosa

EXHIBIT D

EXHIBIT E



4/8/2023, 3:27:42 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Oil and Gas Leases – Production Status

- Held by Actual Production
- Held by Allocated Production
- Non-Producing
- Authorized
- Authorized

- Authorized
- Oil and Gas Leasing Restrictions
- Oil and Gas Leases
- PLSS First Division
- PLSS Townships

U.S. Department of Interior, Bureau of Land Management (BLM), Esri, NASA, NGA, USGS, FEMA, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, BLM

CISCO PENETRATOR CONSTRUCTION DETAILS

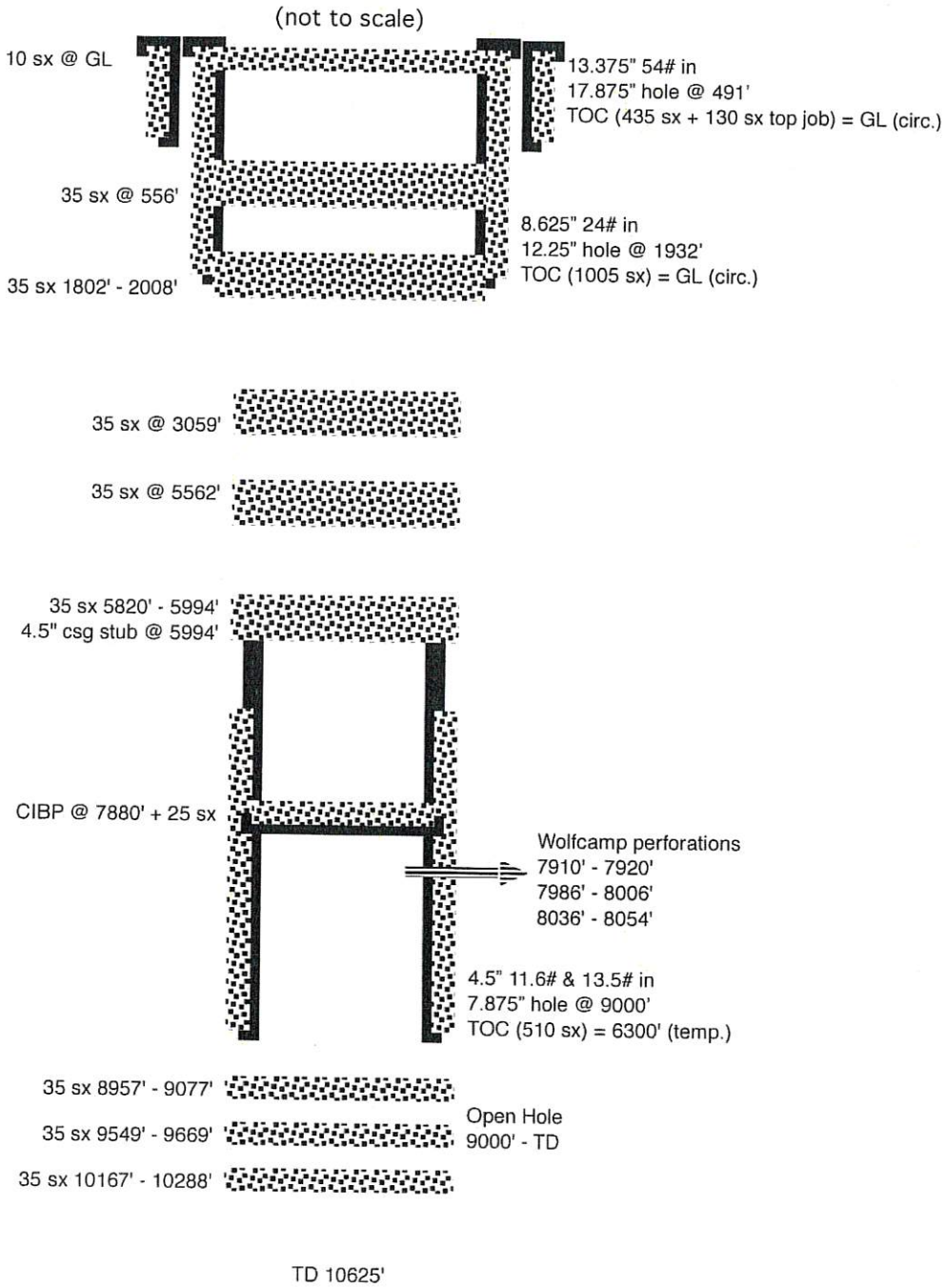
WELL	SPUD	TVD	POOL	STATUS	HOLE O.D.	CASING O.D.	SET @	CEMENT	TOC	HOW TOC DETERMINED
Marathon State 001	9/29/79	10625	Morrow	P&A	17.875	13.375	492	435 sx + 130 sx top job	Surface	Circ
3001523010					12.25	8.625	1932	1005 sx	Surface	Circ
A-30-20S-27E					7.875	4.5	9000	510 sx	6300	Temp survey

EXHIBIT F

EXHIBIT F

Marathon State 1
30-015-23010
A-30-20s-27e
Eddy County
spud 9-29-79
P&A 5-4-82

(not to scale)



TD 10625'

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

EXHIBIT G

smartchemicalsolutions

5400 North Big Spring Street
Suite A
Midland, TX 79705

Complete Water Analysis

Company	TASCOSA ENERGY PARTNERS	**Account Manager**	TRAVIS TEMPLETON
Lease	CATALINA 30 EH STATE	**Sample Date**	9/27/2022
Well	1H	**Analysis Date**	9/29/2022
Sample Point	WELLHEAD	**Sample ID**	AT12354
Batch Number	2022-09-28-005	**Report Date**	9/29/2022

Analytical Lab Data

Cations by ICP-OES

Analyte	ppm
Calcium (Ca)	5,458
Magnesium (Mg)	945.35
Barium (Ba)	1.04
Strontium (Sr)	515.20
Potassium (K)	1,386.38
Iron (Fe)	1.15
Manganese (Mn)	0.95
Boron (B)	39.99
Zinc (Zn)	6.58
Aluminum (Al)	0.32
Phosphorus (P)	0.00
Silicon (Si)	16.10
Lithium (Li)	36.71
Lead (Pb)	0.00
Chromium (Cr)	0.25
Sodium (Na) (calc.)	40,656

Anions

Analyte	ppm
Chloride (Cl)	76,700
Sulfate (SO4)	656

Specific Gravity	
1.090	g/mL

Calc. Phosphate	0.00

Sample Conditions

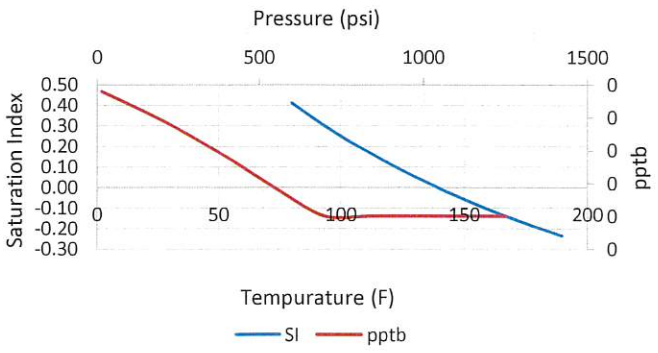
Analyte	Result
pH	6.85
Diss. H2S (ppm)	3.4
Diss. CO2 (ppm)	80
Bicarbonate (ppm HCO3)	183.0
Carbonate (ppm CO3)	0.0
Diss. O2 (ppm)	0.0
Initial Temperature (F)	190.0
Final Temperature (F)	80.0
Initial Pressure (psi)	1,250.0
Final Pressure (psi)	15.0
Calc. Resistivity (ohms/cm)	7.67
Conductivity (uS/cm)	130,400
Calc. Total Hardness (as CaCO3)	17,520
Calc. TDS (ppm)	126,565

Barite (BaSO4)

Temp. (F)	PSI	SI	pptb
80	15	0.41	0.4
92	152	0.31	0.3
104	289	0.22	0.2
117	427	0.13	0.2
129	564	0.06	0.1
141	701	-0.01	0.0
153	838	-0.08	0.0
166	976	-0.13	0.0
178	1113	-0.19	0.0
190	1250	-0.24	0.0

Calcite (CaCO3)

Temp. (F)	PSI	SI	pptb
80	15	0.93	20.6
92	152	0.96	21.6
104	289	0.99	22.4
117	427	1.02	23.2
129	564	1.05	24.1
141	701	1.08	25.0
153	838	1.11	26.0
166	976	1.15	27.0
178	1,113	1.18	28.0
190	1,250	1.22	29.0



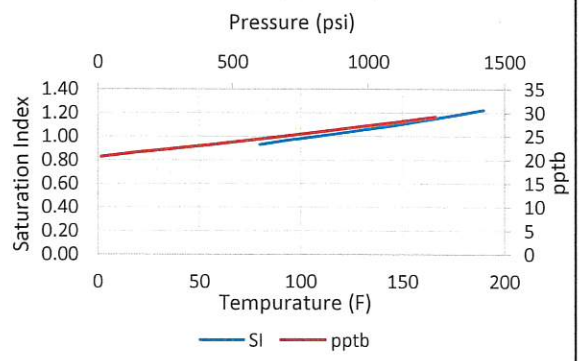
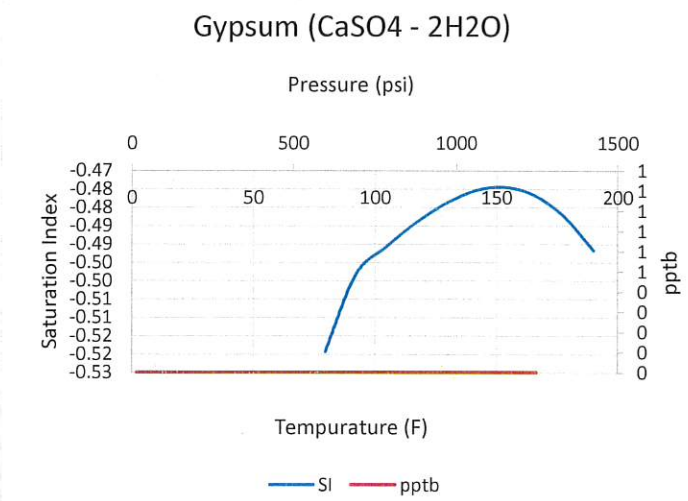
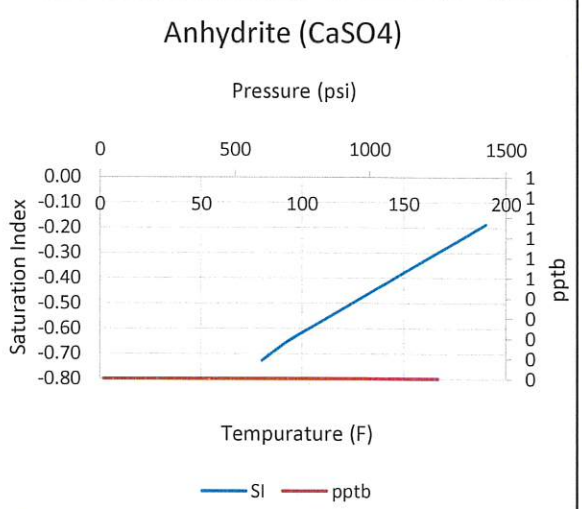


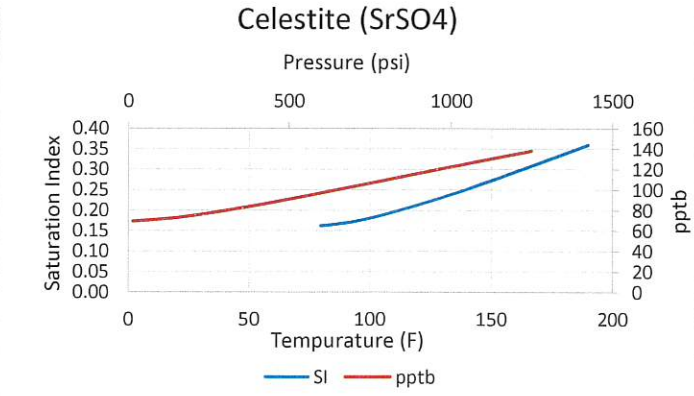
EXHIBIT G

Gypsum (CaSO4 - 2H20)				Anhydrite (CaSO4)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	-0.52	0.0	80	15	-0.73	0.0
92	152	-0.50	0.0	92	152	-0.66	0.0
104	289	-0.49	0.0	104	289	-0.60	0.0
117	427	-0.48	0.0	117	427	-0.54	0.0
129	564	-0.48	0.0	129	564	-0.48	0.0
141	701	-0.48	0.0	141	701	-0.42	0.0
153	838	-0.47	0.0	153	838	-0.36	0.0
166	976	-0.48	0.0	166	976	-0.31	0.0
178	1113	-0.48	0.0	178	1113	-0.25	0.0
190	1250	-0.49	0.0	190	1250	-0.19	0.0





Celestite (SrSO4)				Hemihydrate (CaSO4 + 1/2H20)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	0.16	68.8	80	15	-1.21	0.0
92	152	0.17	72.2	92	152	-1.17	0.0
104	289	0.19	78.4	104	289	-1.14	0.0
117	427	0.21	85.9	117	427	-1.11	0.0
129	564	0.23	94.1	129	564	-1.07	0.0
141	701	0.25	102.7	141	701	-1.02	0.0
153	838	0.28	111.5	153	838	-0.98	0.0
166	976	0.31	120.4	166	976	-0.93	0.0
178	1113	0.33	129.1	178	1113	-0.87	0.0
190	1250	0.36	137.6	190	1250	-0.82	0.0



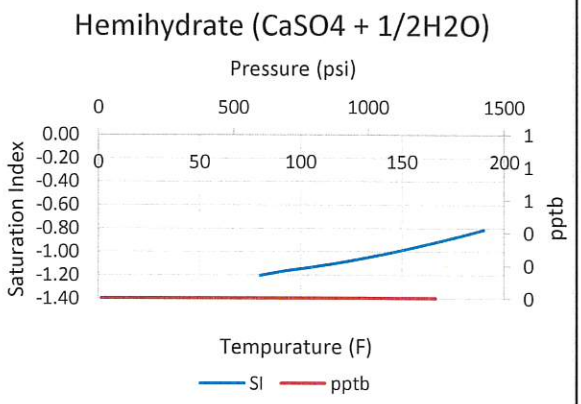
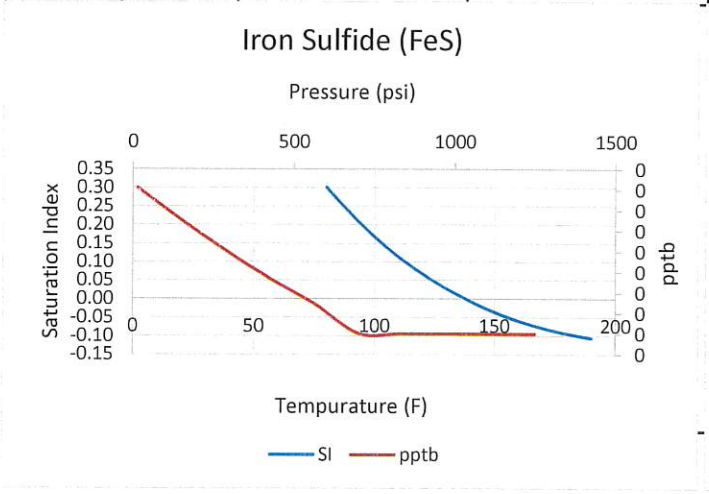
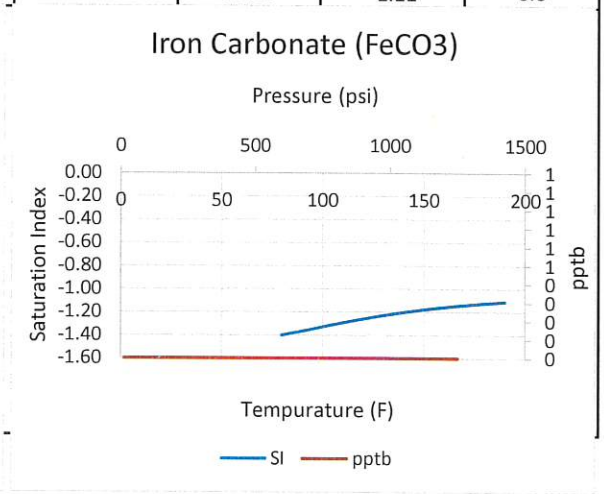


EXHIBIT G

Iron Sulfide (FeS)				Iron Carbonate (FeCO3)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	0.30	0.1	80	15	-1.40	0.0
92	152	0.21	0.1	92	152	-1.36	0.0
104	289	0.14	0.1	104	289	-1.32	0.0
117	427	0.08	0.1	117	427	-1.27	0.0
129	564	0.03	0.0	129	564	-1.24	0.0
141	701	-0.01	0.0	141	701	-1.20	0.0
153	838	-0.04	0.0	153	838	-1.17	0.0
166	976	-0.07	0.0	166	976	-1.15	0.0
178	1113	-0.09	0.0	178	1113	-1.13	0.0
190	1250	-0.11	0.0	190	1250	-1.11	0.0





Notes

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5400 North Big Spring Street
Suite A
Midland, TX 79705

EXHIBIT G

Complete Water Analysis

Company	TASCOSA ENERGY PARTNERS	**Account Manager**	MASON LONG
Lease	CATALINA 25 30 STATE COM	**Sample Date**	10/7/2022
Well	2H	**Analysis Date**	10/11/2022
Sample Point	WELLHEAD	**Sample ID**	AT12880
Batch Number	2022-10-07-005	**Report Date**	10/11/2022

Analytical Lab Data

Cations by ICP-OES

Analyte	ppm
Calcium (Ca)	6,709
Magnesium (Mg)	1,201.93
Barium (Ba)	1.42
Strontium (Sr)	689.60
Potassium (K)	1,725.52
Iron (Fe)	8.47
Manganese (Mn)	1.33
Boron (B)	42.52
Zinc (Zn)	8.72
Aluminum (Al)	0.78
Phosphorus (P)	5.49
Silicon (Si)	11.80
Lithium (Li)	46.23
Lead (Pb)	0.24
Chromium (Cr)	0.20
Sodium (Na) (calc.)	47,511

Anions

Analyte	ppm
Chloride (Cl)	90,700
Sulfate (SO4)	613
Specific Gravity	
1.105	g/mL
Calc. Phosphate	16.82

Sample Conditions

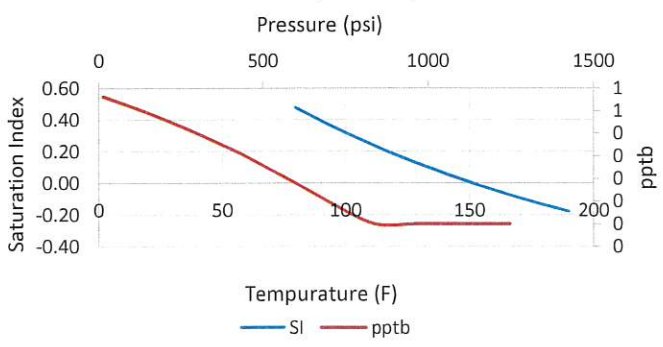
Analyte	Result
pH	6.09
Diss. H2S (ppm)	20.0
Diss. CO2 (ppm)	310
Bicarbonate (ppm HCO3)	305.0
Carbonate (ppm CO3)	0.0
Diss. O2 (ppm)	0.0
Initial Temperature (F)	190.0
Final Temperature (F)	80.0
Initial Pressure (psi)	1,250.0
Final Pressure (psi)	15.0
Calc. Resistivity (ohms/cm)	7.09
Conductivity (uS/cm)	141,100
Calc. Total Hardness (as CaCO3)	21,701
Calc. TDS (ppm)	149,528

Barite (BaSO4)

Temp. (F)	PSI	SI	pptb
80	15	0.48	0.6
92	152	0.38	0.5
104	289	0.29	0.4
117	427	0.20	0.3
129	564	0.12	0.2
141	701	0.05	0.1
153	838	-0.01	0.0
166	976	-0.07	0.0
178	1113	-0.13	0.0
190	1250	-0.18	0.0

Calcite (CaCO3)

Temp. (F)	PSI	SI	pptb
80	15	0.56	32.1
92	152	0.59	33.5
104	289	0.61	34.8
117	427	0.64	36.2
129	564	0.67	37.7
141	701	0.71	39.3
153	838	0.74	40.9
166	976	0.78	42.7
178	1,113	0.83	44.4
190	1,250	0.87	46.2



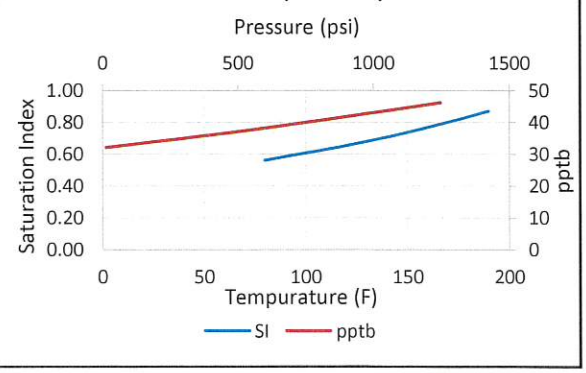
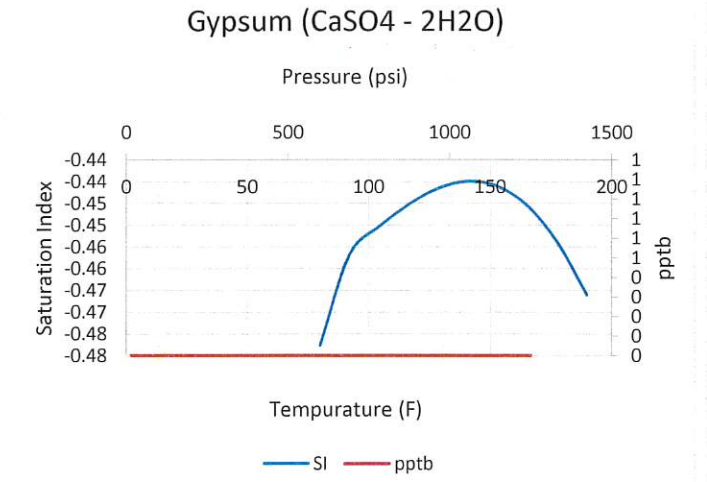
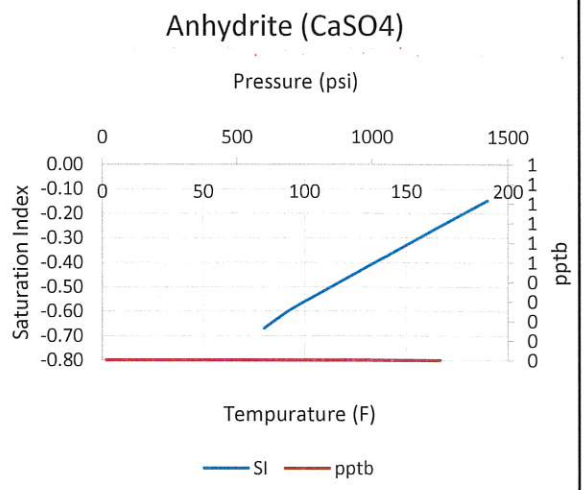


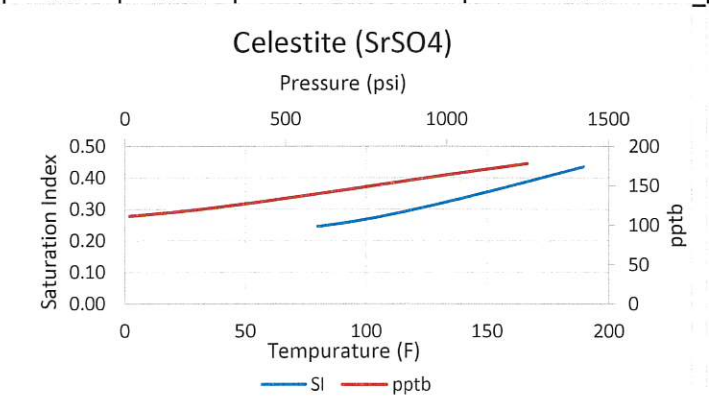
EXHIBIT G

Gypsum (CaSO4 - 2H20)				Anhydrite (CaSO4)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	-0.48	0.0	80	15	-0.67	0.0
92	152	-0.46	0.0	92	152	-0.60	0.0
104	289	-0.45	0.0	104	289	-0.54	0.0
117	427	-0.45	0.0	117	427	-0.49	0.0
129	564	-0.44	0.0	129	564	-0.43	0.0
141	701	-0.44	0.0	141	701	-0.37	0.0
153	838	-0.44	0.0	153	838	-0.32	0.0
166	976	-0.45	0.0	166	976	-0.26	0.0
178	1113	-0.45	0.0	178	1113	-0.20	0.0
190	1250	-0.47	0.0	190	1250	-0.15	0.0





Celestite (SrSO4)				Hemihydrate (CaSO4 + 1/2H20)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	0.24	111.1	80	15	-1.15	0.0
92	152	0.26	116.0	92	152	-1.11	0.0
104	289	0.27	122.3	104	289	-1.09	0.0
117	427	0.29	129.5	117	427	-1.05	0.0
129	564	0.31	137.3	129	564	-1.02	0.0
141	701	0.34	145.4	141	701	-0.98	0.0
153	838	0.36	153.7	153	838	-0.93	0.0
166	976	0.38	162.0	166	976	-0.88	0.0
178	1113	0.41	170.1	178	1113	-0.83	0.0
190	1250	0.43	177.9	190	1250	-0.78	0.0



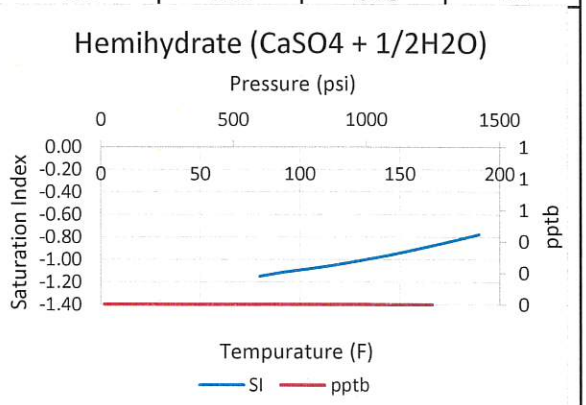
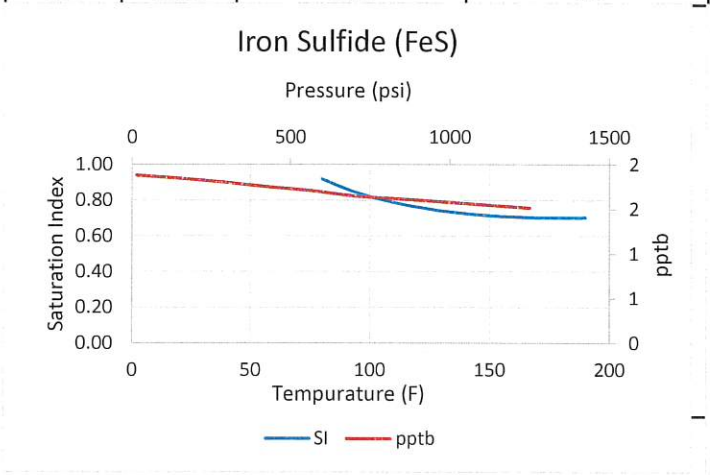
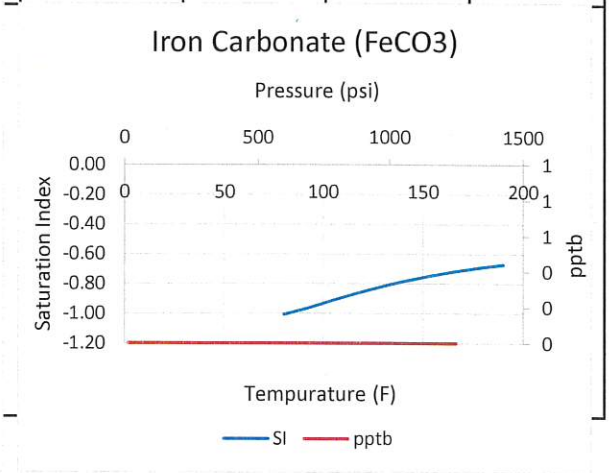


EXHIBIT G

Iron Sulfide (FeS)				Iron Carbonate (FeCO			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	0.92	1.9	80	15	-1.01	0.0
92	152	0.85	1.8	92	152	-0.97	0.0
104	289	0.80	1.8	104	289	-0.92	0.0
117	427	0.77	1.7	117	427	-0.87	0.0
129	564	0.74	1.7	129	564	-0.82	0.0
141	701	0.72	1.6	141	701	-0.78	0.0
153	838	0.71	1.6	153	838	-0.75	0.0
166	976	0.70	1.6	166	976	-0.72	0.0
178	1113	0.70	1.5	178	1113	-0.69	0.0
190	1250	0.70	1.5	190	1250	-0.67	0.0





Notes

smartchemicalsolutions

5400 North Big Spring Street
Suite A
Midland, TX 79705

EXHIBIT G

Complete Water Analysis

Company	TASCOSA ENERGY PARTNERS	**Account Manager**	MASON LONG
Lease	CATALINA 25 30 STATE COM	**Sample Date**	10/7/2022
Well	3H	**Analysis Date**	10/11/2022
Sample Point	WELLHEAD	**Sample ID**	AT12881
Batch Number	2022-10-07-005	**Report Date**	10/11/2022

Analytical Lab Data

Cations by ICP-OES

Analyte	ppm
Calcium (Ca)	7,033
Magnesium (Mg)	1,215.49
Barium (Ba)	1.54
Strontium (Sr)	718.89
Potassium (K)	1,760.14
Iron (Fe)	33.41
Manganese (Mn)	1.40
Boron (B)	41.03
Zinc (Zn)	8.79
Aluminum (Al)	1.10
Phosphorus (P)	0.00
Silicon (Si)	11.36
Lithium (Li)	46.72
Lead (Pb)	0.00
Chromium (Cr)	0.27
Sodium (Na) (calc.)	45,953

Anions

Analyte	ppm
Chloride (Cl)	89,000
Sulfate (SO4)	620

Specific Gravity	
1.104	g/mL

Calc. Phosphate	0.00

Sample Conditions

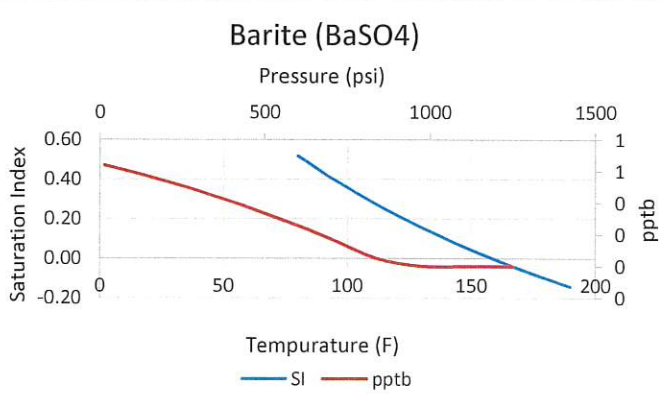
Analyte	Result
pH	6.28
Diss. H2S (ppm)	14.0
Diss. CO2 (ppm)	280
Bicarbonate (ppm HCO3)	268.0
Carbonate (ppm CO3)	0.0
Diss. O2 (ppm)	0.0
Initial Temperature (F)	190.0
Final Temperature (F)	80.0
Initial Pressure (psi)	1,250.0
Final Pressure (psi)	15.0
Calc. Resistivity (ohms/cm)	6.58
Conductivity (uS/cm)	152,000
Calc. Total Hardness (as CaCO3)	22,566
Calc. TDS (ppm)	146,664

Barite (BaSO4)

Temp. (F)	PSI	SI	pptb
80	15	0.52	0.6
92	152	0.42	0.6
104	289	0.32	0.5
117	427	0.24	0.4
129	564	0.16	0.3
141	701	0.09	0.2
153	838	0.02	0.1
166	976	-0.04	0.0
178	1113	-0.09	0.0
190	1250	-0.14	0.0

Calcite (CaCO3)

Temp. (F)	PSI	SI	pptb
80	15	0.71	31.5
92	152	0.74	32.6
104	289	0.77	33.6
117	427	0.80	34.8
129	564	0.84	36.0
141	701	0.88	37.3
153	838	0.92	38.6
166	976	0.96	40.0
178	1,113	1.00	41.4
190	1,250	1.05	42.9



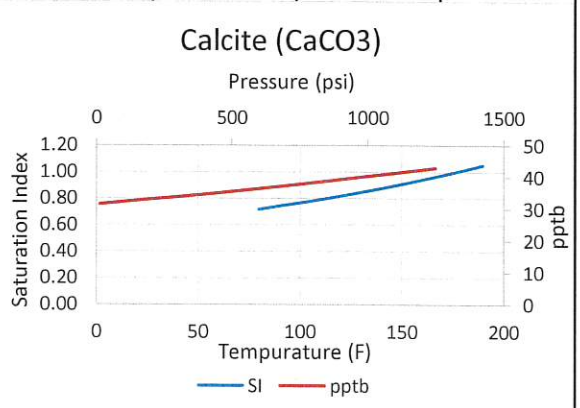
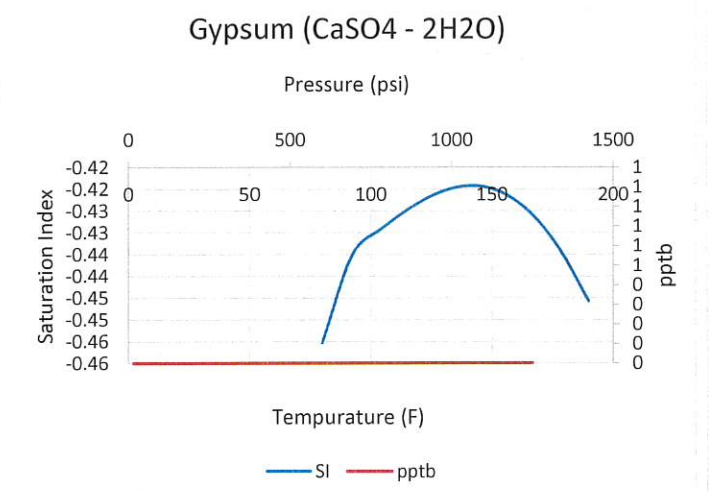
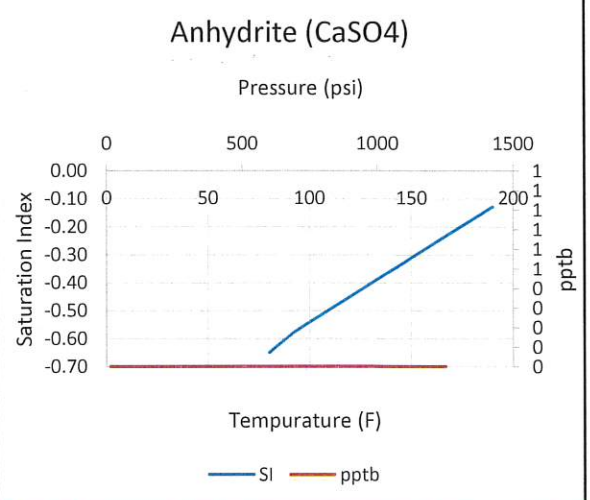


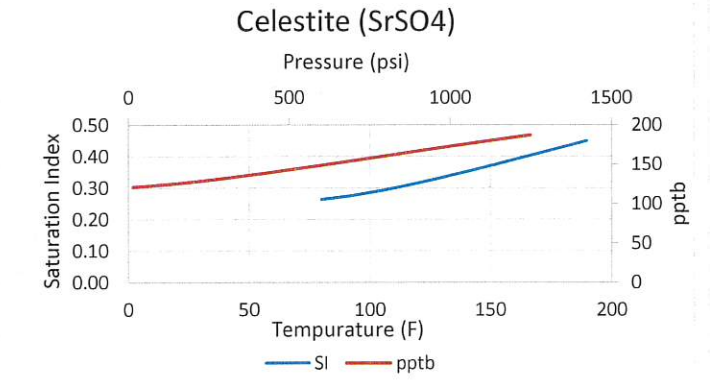
EXHIBIT G

Gypsum (CaSO4 - 2H20)				Anhydrite (CaSO4)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	-0.46	0.0	80	15	-0.65	0.0
92	152	-0.44	0.0	92	152	-0.58	0.0
104	289	-0.43	0.0	104	289	-0.52	0.0
117	427	-0.42	0.0	117	427	-0.47	0.0
129	564	-0.42	0.0	129	564	-0.41	0.0
141	701	-0.42	0.0	141	701	-0.35	0.0
153	838	-0.42	0.0	153	838	-0.30	0.0
166	976	-0.43	0.0	166	976	-0.24	0.0
178	1113	-0.43	0.0	178	1113	-0.18	0.0
190	1250	-0.45	0.0	190	1250	-0.13	0.0





Celestite (SrSO4)				Hemihydrate (CaSO4 + 1/2H20)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	0.26	121.1	80	15	-1.13	0.0
92	152	0.27	125.6	92	152	-1.09	0.0
104	289	0.29	131.6	104	289	-1.07	0.0
117	427	0.31	138.7	117	427	-1.04	0.0
129	564	0.33	146.4	129	564	-1.00	0.0
141	701	0.35	154.5	141	701	-0.96	0.0
153	838	0.38	162.7	153	838	-0.91	0.0
166	976	0.40	170.9	166	976	-0.86	0.0
178	1113	0.42	178.9	178	1113	-0.81	0.0
190	1250	0.45	186.7	190	1250	-0.76	0.0



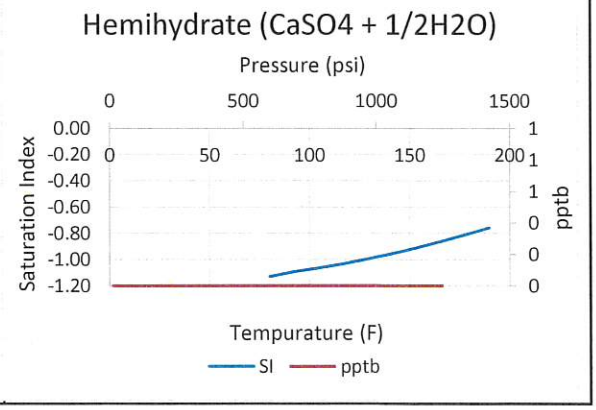
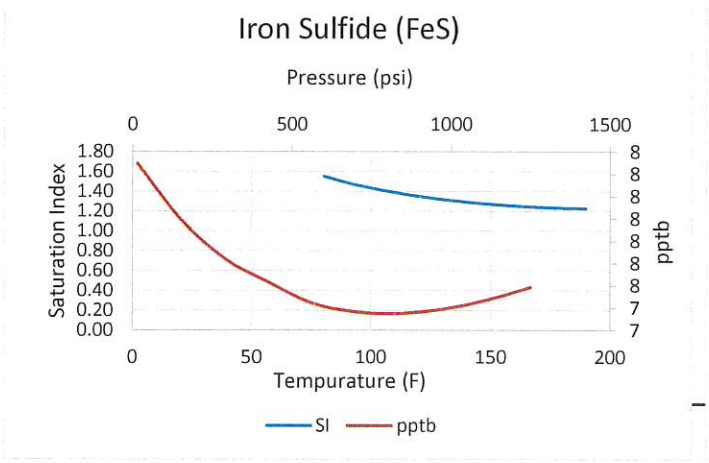
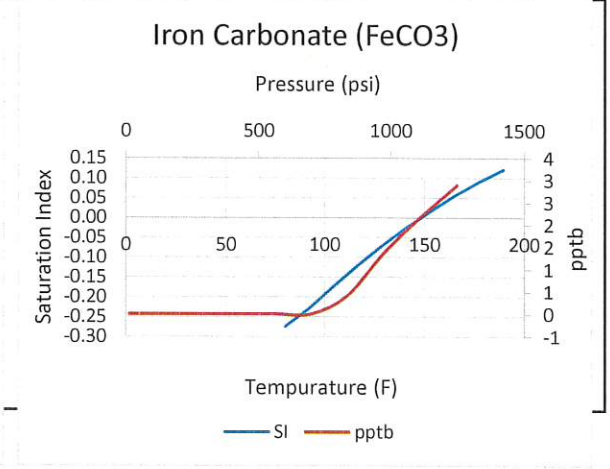


EXHIBIT G

Iron Sulfide (FeS)				Iron Carbonate (FeCO3)			
Temp. (F)	PSI	SI	pptb	Temp. (F)	PSI	SI	pptb
80	15	1.55	7.8	80	15	-0.28	0.0
92	152	1.47	7.6	92	152	-0.23	0.0
104	289	1.41	7.6	104	289	-0.18	0.0
117	427	1.36	7.5	117	427	-0.12	0.0
129	564	1.32	7.5	129	564	-0.07	0.0
141	701	1.28	7.4	141	701	-0.03	0.0
153	838	1.26	7.4	153	838	0.02	0.4
166	976	1.24	7.4	166	976	0.06	1.4
178	1113	1.23	7.5	178	1113	0.09	2.2
190	1250	1.23	7.5	190	1250	0.12	2.9





Notes

NYMEX LS Crude	80.46
Henry Hub	2.04
Updated :	4/7/2023

EXHIBIT G

PRODUCED WATER QUALITY DATA SEARCH

Data in the New Mexico Produced Water Quality Database v.2 was updated in 2016 for the first time in many years. Data should be used for general informational purposes only. The uncertainties in data collection procedures, analysis quality and specific sample sources make it unsuitable as basis for any significant business or policy decisions. Data was gathered from many sources and about 5400 distinct wells in NM are represented. **More data exists for most samples than is provided by the results screen; the downloadable spreadsheet contains more information including field, formation, sample source (where available), and latitude/longitude.**

Funding for the database was provided by the U.S. DOE, various New Mexico State agencies, NMT, and WRRI.

SEARCH PANEL

API NUMBER Example: 3004511439

WELL NAME TOWNSHIP 20S RANGE 27E

SECTION

Submit Export to Excel

Too many or not enough results? Change your search criteria and press the **Submit** button to improve results.
There may be more information for these samples. For all available data including lat/long location, press **EXPORT to EXCEL** to create a downloadable file.

RESULT PANEL

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L)	Chlorides(mg/L)	Sample Year	Field	Formation
PECOS 32L FEE GAS COM #002	3001530855	20S	27E	32	37949.1	22910	2004		
PECOS 32L FEE GAS COM #002	3001530855	20S	27E	32	73824.5	44082	2007		
HANSON FED A #001	3001510001	20S	27E	33	3456	423			ARTESIA

EXHIBIT H

NYMEX LS Crude	88.86
Henry Hub	5.9
Updated	11/11/2022

State Land Office Data Access

OCD well:log image files

PRRC NM-TECH NM-BGMR

PRODUCED WATER QUALITY DATA SEARCH

Data in the New Mexico Produced Water Quality Database v.2 was updated in 2016 for the first time in many years. Data should be used for general informational purposes only. The uncertainties in data collection procedures, analysis quality and specific sample sources make it unsuitable as basis for any significant business or policy decisions. Data was gathered from many sources and about 5400 distinct wells in NM are represented. **More data exists for most samples than is provided by the results screen; the downloadable spreadsheet contains more information including field, formation, sample source (where available), and latitude/longitude.**

Funding for the database was provided by the U.S. DOE, various New Mexico State agencies, NMT, and WRRI.

SEARCH PANEL

API NUMBER 3001526468 Example: 3004511439

WELL NAME TOWNSHIP RANGE

SECTION

Submit Export to Excel

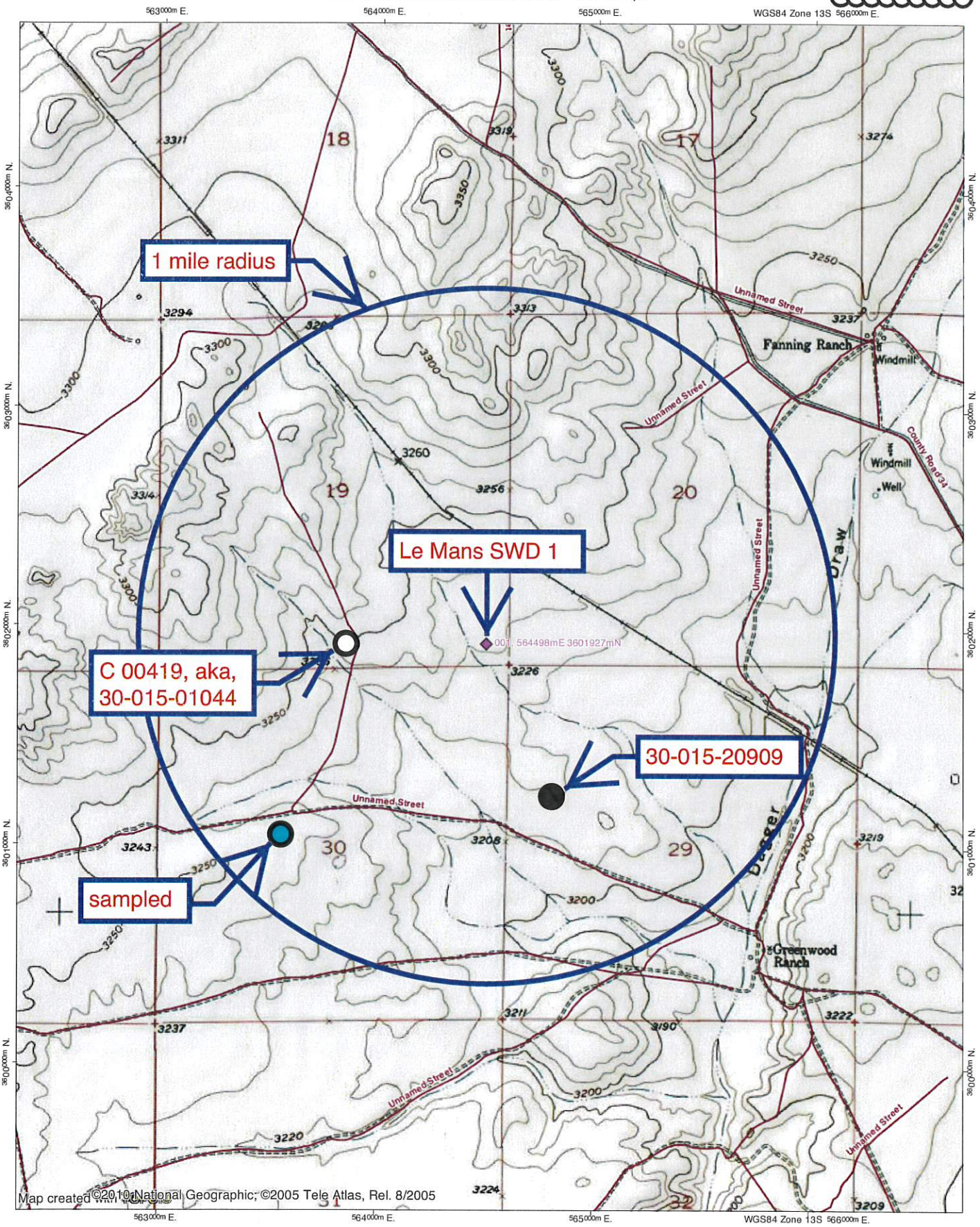
Too many or not enough results? Change your search criteria and press the **Submit** button to improve results.
There may be more information for these samples. For all available data including lat/long location, press **EXPORT to EXCEL** to create a downloadable file.

RESULT PANEL

WELLNAME	API	TOWNSHIP	RANGE	SECTION	TDS(mg/L)	Chlorides(mg/L)	Sample Year	Field	Formation
JOHN AGU #002	3001526468	20S	24E	14	216236	53321	2000	DAGGER DRAW	CISCO

EXHIBIT I

TOPO! map printed on 02/25/23 from "Untitled.tpo"



Map created ©2010 National Geographic; ©2005 Tele Atlas, Rel. 8/2005

NATIONAL GEOGRAPHIC

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 miles
0.0 0.5 1.0 km

TN ★ MN
6.5°
02/25/23

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 00419	C	CUB	ED	3	3	4	19	20S	27E	563904	3601904*	594	1813		
RA 03979		RA	ED	1	1	3	21	20S	27E	566306	3602539*	1908	190		
RA 04764		RA	ED		3	1	21	20S	27E	566407	3602845*	2118	171	150	21
RA 05857		RA	ED	2	2	2	20	20S	27E	566104	3603346*	2143			
RA 10049		RA	ED	4	3	1	21	20S	27E	566506	3602744*	2167	200		
RA 07841		RA	ED		1	1	21	20S	27E	566408	3603251*	2324	200	140	60

Average Depth to Water: **145 feet**
Minimum Depth: **140 feet**
Maximum Depth: **150 feet**

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 564498 **Northing (Y):** 3601927 **Radius:** 3220

***UTM location was derived from PLSS - see Help**

2/25/23 10:59 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

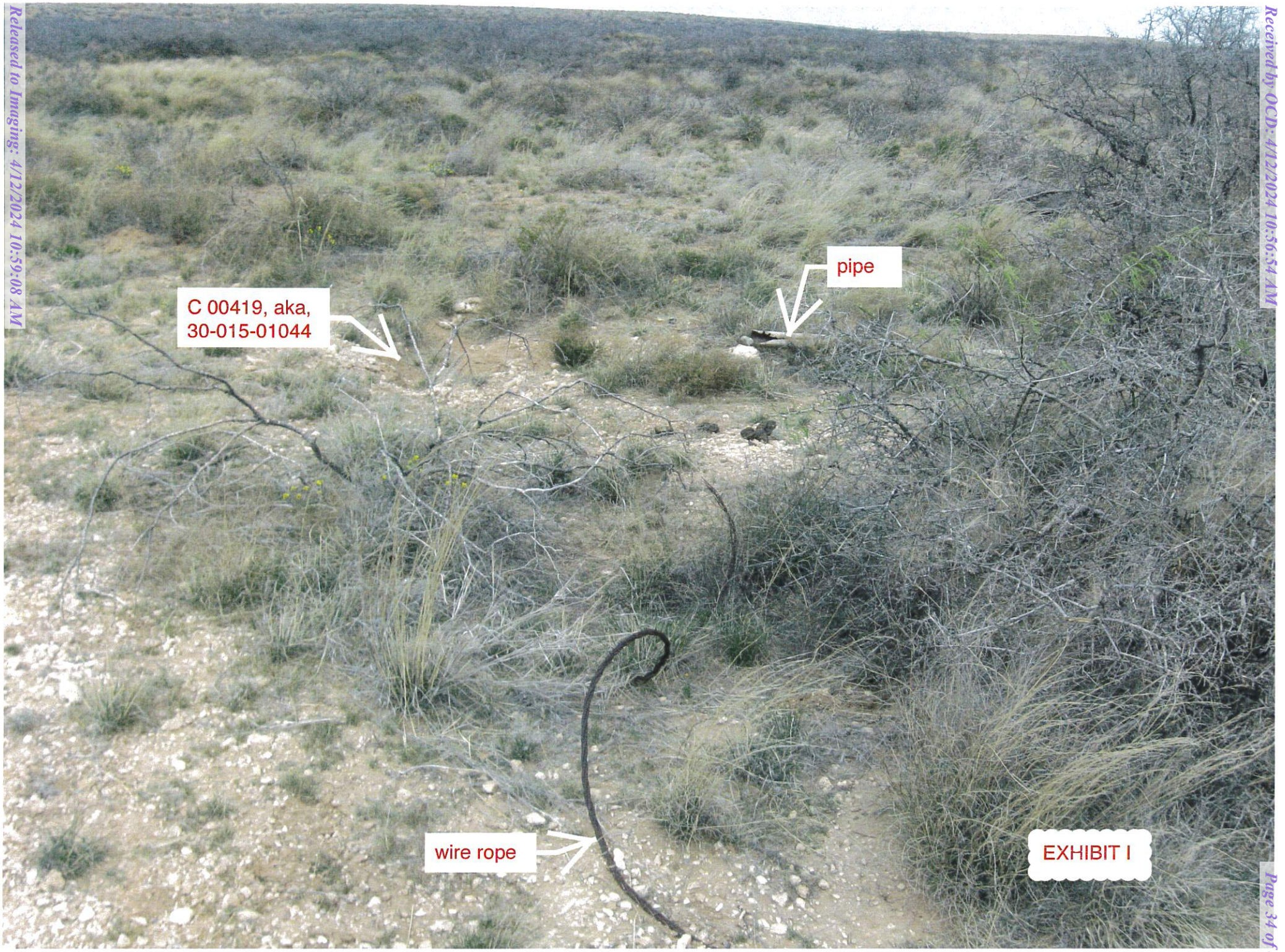


EXHIBIT J

PERMITS WEST
PROVIDING PERMITS for LAND USERS
37 Verano Loop, Santa Fe, New Mexico 87508 505-466-8120

NM Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: Geology Statement
Tascosa Energy Partners, LLC
Le Mans SWD #1
Section 19, T. 20S, R. 27E
Eddy County, New Mexico

To whom it may concern:

Publicly available geologic and engineering data related to the proposed well have been thoroughly reviewed, and no evidence for open faults or any other hydrologic connection between the proposed Cisco formation disposal zone and any underground sources of drinking water has been found. Please see the attached seismic risk assessment for additional information.

Sincerely,

Cory Walk

Cory Walk
Geologist

EXHIBIT J

Seismic Risk Assessment

Tascosa Energy Partners, LLC

Le Mans SWD #1

Section 19, Township 20 South, Range 27 East

Eddy County, New Mexico

Cory Walk, M.S.

Cory Walk

Geologist

Permits West Inc.

March 17, 2023

EXHIBIT J

GENERAL INFORMATION

Le Mans SWD #1 is located in the SE ¼, section 19, T20S, R27E, about 10 miles northwest of Carlsbad, NM in the Delaware Basin of the greater Permian Basin. Tascosa Energy Partners, LLC proposes to dispose produced water within the Cisco Formation through an open hole from 8,219'-8,669' below ground surface. The Cisco is primarily a carbonate and shale system. This report assesses any potential concerns relating to induced seismicity along deep penetrating Precambrian faults or the connection between the injection zone and known underground potable water sources.

SEISMIC RISK ASSESSMENT

Historical Seismicity

Searching the USGS earthquake catalog resulted in no (0) earthquakes above a magnitude 2.5 within 6 miles (9.7 km) of the proposed injection site since 1970 (Fig 1). According to this dataset, the nearest historical earthquake occurred March 25, 2022 about 6.6 miles (~10.7 km) west and had a magnitude of 2.6.

Basement Faults and Subsurface Conditions

A structure contour map (Fig. 1) of the Precambrian basement shows the Le Mans SWD #1 is approximately 10.5 miles from the nearest basement-penetrating fault inferred by Ewing et al (1990) and about 17.6 miles from the nearest surface fault.

Snee and Zoback (2018) state, "In the western part of Eddy County, New Mexico, S_{Hmax} is ~north–south (consistent with the state of stress in the Rio Grande Rift; Zoback and Zoback, 1980) but rotates to ~east-northeast–west-southwest in southern Lea County, New Mexico, and the northernmost parts of Culberson and Reeves counties, Texas." Around the Le Mans SWD #1 site, Snee and Zoback indicate a **S_{Hmax} direction of N010°E and an A_φ of 0.57, indicating a normal faulting stress regime**.

Induced seismicity is a growing concern of deep injection wells. Snee and Zoback (2018) show that the nearest Precambrian fault has a fault slip potential of 20-30% (Fig. 2). However, the proposed injection zone is shallower in the Cisco Formation and therefore would be unlikely to affect the deep Precambrian faults. The vertical (approx. 4000') and horizontal (10.5 miles) separation between the proposed SWD injection zone and any deep Precambrian faults is large enough to infer that induced seismicity as a result from this injection well is unlikely.

GROUNDWATER SOURCES

Quaternary Alluvium acts as the principal aquifer used for potable ground water near the Le Mans SWD #1 location (Hendrickson and Jones, 1952). Nicholson and Clebsch (1961) state, "Potable ground water is not available below the Permian and Triassic unconformity but, because this boundary is not easily defined, the top of the Rustler anhydrite formation is regarded as the effective lower limit of 'potable' ground water." Around the Le Mans SWD #1 well, the Rustler Formation is not present. NM OCD records of a nearby well shows the presence of water up until the top of the Yates formation at 350 feet bgs. This depth is the interpreted maximum depth of potable groundwater in this area.

PERMITS WEST

EXHIBIT J

STRATIGRAPHY

Several thick permeability barriers (primarily dolomite, shale and anhydrite) exist above the targeted Cisco injection zone. Well data indicates ~7,870 ft of rock separating the top of the injection zone from the previously stated lower limit of potable water at the top of the Yates formation.

CONCLUDING STATEMENT

All available geologic and engineering data evaluated around the Le Mans SWD #1 well show no potential structural or stratigraphic connection between the Cisco injection zone and any subsurface potable water sources.

Tascosa Energy Partners, LLC
Le Mans SWD #1

SEISMIC RISK ASSESSMENT PAGE 3

EXHIBIT J

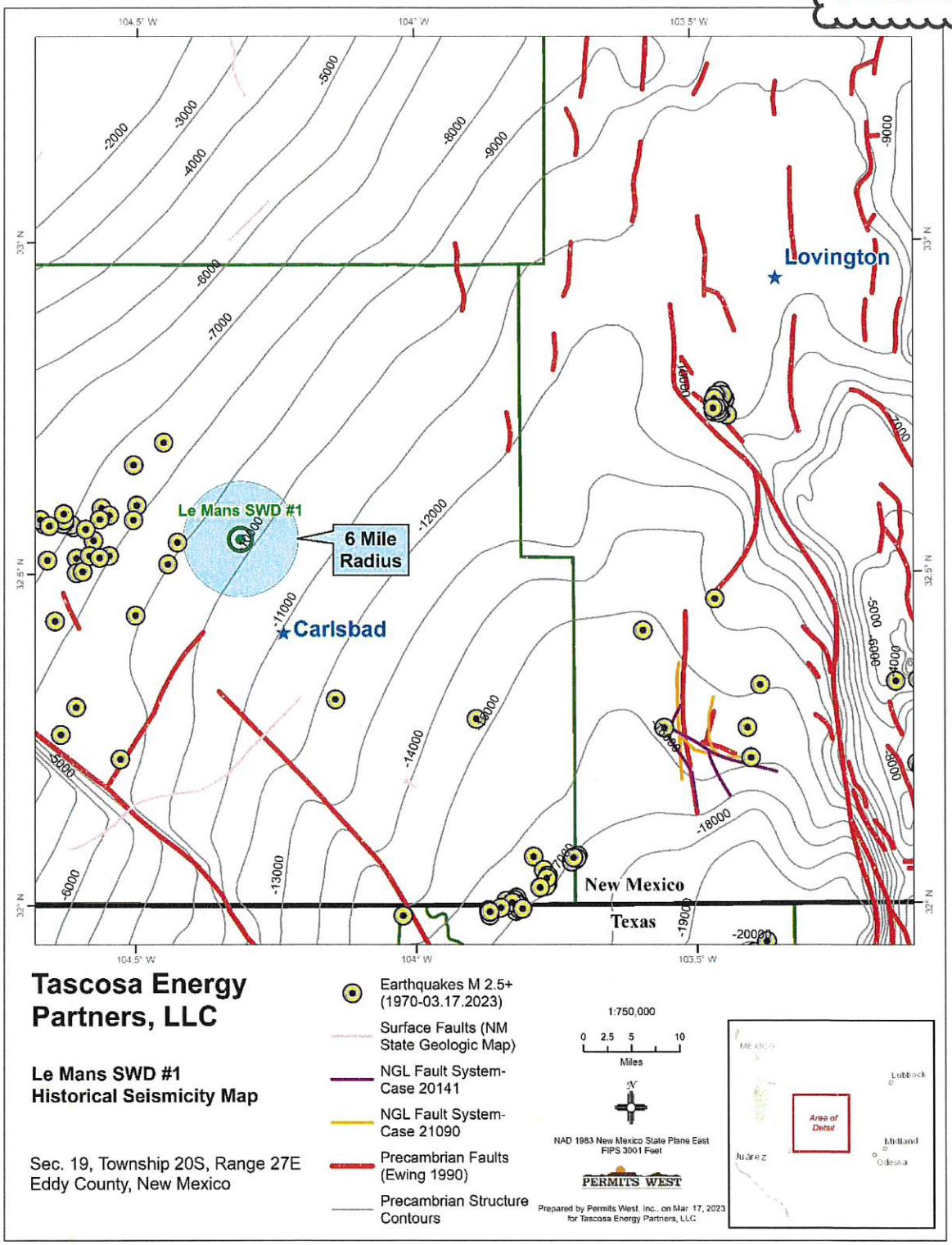


Figure 1. Structural contour map of the Precambrian basement in feet below sea level. Red lines represent the locations of Precambrian basement-penetrating faults (Ewing et al., 1990). The Le Mans SWD #1 well lies ~10.5 miles northeast of the closest deeply penetrating fault, ~17.6 miles from the nearest surface fault and ~6.6 miles from the closest historic earthquake.

PERMITS WEST

Tascosa Energy Partners, LLC
Le Mans SWD #1

SEISMIC RISK ASSESSMENT PAGE 4

EXHIBIT J

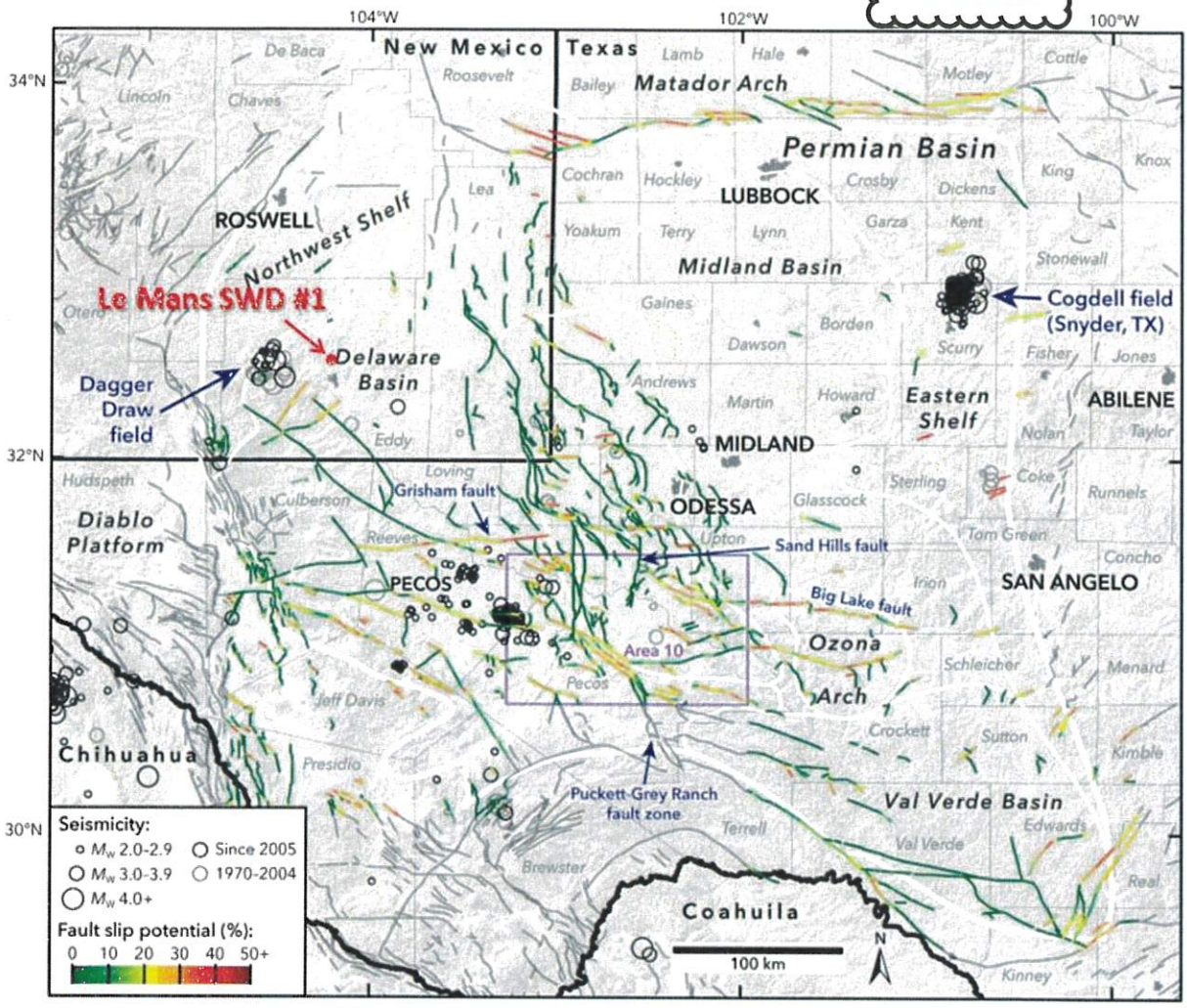


Figure 2. Modified from Snee and Zoback (2018). The nearest deep Precambrian fault lies ~10.5 miles southwest of the proposed SWD well. Also, the proposed injection zone is shallower in the Cisco and therefore reduces the possibility of inducing seismicity on any known fault.

PERMITS WEST

EXHIBIT J

References Cited

Ewing, T. E., 1990, The tectonic map of Texas: Austin, Bureau of Economic Geology, The University of Texas at Austin.

Geologic Map of New Mexico, New Mexico Bureau of Geology and Mineral Resources, 2003, Scale 1:500,000.

Hendrickson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 3, 179 pp., 6 plates.

Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and ground-water conditions in southern Lea County, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Ground-Water Report 6, 123 pp., 2 plates.

Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.

Zoback, M. L., and M. D. Zoback, 1980, State of stress in the conterminous United States: Journal of Geophysical Research, 85, no. B11, 6113–6156, https://doi.org/10.1029/JB085iB11p06113.

TASCOSA ENEGY PARTNERS, LLC PAGE 1
LE MANS SWD 1
343' FSL & 340' FEL
SEC. 19, T. 20 S., R. 27 E., EDDY COUNTY, NM

I. Plan is to drill an 8669' deep saltwater disposal well on NMSLO surface and minerals and dispose into the Cisco from 8219' to 8669'.

II. Operator: Tascosa Energy Partners, LLC (OGRID 329748)
Operator phone number: (432) 695-6970
Operator address: 901 W. Missouri Ave., Midland TX 79701
Contact for Application: Brian Wood (Permits West, Inc.)
Phone: (505) 466-8120

III. A. (1) Lease: NMSLO VC-0820-0000
Lease Size: 280.13 acres
Closest Lease Line: 340'
Lease: Lot 4, SESW, SE4, & SENE Section 19, T. 20 S., R. 27 E.

A. (2) Surface casing (13.375", 48#, H-40, ST&C) will be set at 500' in a 17.5" hole and cemented to GL with 545 sacks Class C (>100% excess).

Intermediate casing (9.625", 36#, J-55, LT&C) will be set at 3000' in a 12.25" hole and cemented to GL (>40% excess). Lead with 510 sacks 35/65 Poz C. Tail with 200 sacks Class C.

Production casing (7", 29#, N-80, LT&C) will be set at 8219' in an 8.75" hole and cemented to GL (>20% excess). Lead with 355 sacks 50/50 Poz C. Tail with 405 sacks Class H. Well will be 8.75" open hole from 8219' to 8669'.

A. (3) IPC tubing (3.5", 9.3#, N-80 or L-80) will be set @ ≈8170'. (Disposal interval will be 8219' - 8669'.)

A. (4) A 7" X 3.5" Arrowset I-XS mechanical nickel or stainless-steel injection packer or its equivalent will be set @ ≈8170' (or in any event, ≤100' above the top of the open hole (8219').

PERMITS WEST, INC.
PROVIDING PERMITS for LAND USERS

B. (1) Disposal zone will be carbonates in the SWD; Cisco (96099).

B. (2) Disposal interval (8219' - 8669') will be open hole.

B. (3) This will be new well drilled and completed as a disposal well.

B. (4) There are no perforations to date.

B. (5) Next higher oil or gas zone in the area of review is the Wolfcamp, directly above the Cisco. Morrow is the only producing oil or gas zone in the area of review below the Cisco. No Cisco producer is within 2-miles. Cisco produced from July 1998 to September 1998 in a well (30-015-28257) 2.21 miles southwest. The well was P&A in March 1999. Cisco was tested in a well (30-015-10300) 1.65 miles northwest by Hondo in 1964 and by Pogo in 2000. Hondo DST report states "non-productive" and "no show of oil". Pogo reported no production. The well is now P&A.

IV. This is not an expansion of an existing injection project. It is disposal only.

V. Exhibit B shows and tabulates 7 wells (4 producers + 3 P&A) within a half-mile (2640') radius. One of the wells within a half-mile penetrated the Cisco and it is P&A. Exhibit C shows 60 existing wells (21 oil or gas + 33 P&A + 6 water wells) within a 2-mile radius.

Exhibit D maps and tabulates all well operators (regardless of depth), leases, and lessors (only BLM & NMSLO) within a half-mile radius. Exhibit E shows all leases (NMSLO, fee, & BLM) within a 2-mile radius.

VI. One (Exhibit F) of the seven wells within a half-mile (2640') radius penetrated the Cisco. Construction of the penetrator is detailed in Exhibit F, along with a diagram of the plugged well.

VII. 1. Average injection rate will be ≈25,000 bwpd.
Maximum injection rate will be 30,000 bwpd.
2. System will be closed and open.
3. Average injection pressure will be ≈1500 psi. Maximum injection pressure will be 1643 psi (= 0.2 psi/ft x 8219' (top of open hole)).
4. Water source will be produced water from Permian Basin wells. Tascosa expects an increase of Bone Spring produced water. Tascosa has 2 active and 20 new Bone Spring wells. Tascosa Bone Spring analyses are in Exhibit G. Tascosa also has Atoka, Delaware, Morrow, Strawn, Upper Penn, and Wolfcamp wells. Exhibit G has T. 20 S., R. 27 E. produced water analyses from New Mexico Produced Water Quality Database v.2. No compatibility problems have been reported from the closest (9.28 miles NW in F-9-19s-26e) SWD; Cisco well (30-015-40718). Over 9 million barrels have been disposed in that well since 2015.
5. The Cisco has not been found productive of oil and gas within a mile. WAIDS analysis (Exhibit H) shows Cisco TDS at 216,236 mg/l.

VIII. The Cisco (710' thick) is comprised of limestone, dolomite, shale, and sandstone. Closest possible underground source of drinking water above the proposed disposal interval is the limestone, sandstone, and gravels in the top ≈500'.

Deepest water well within 2-miles is 1813' deep, though water sands were reported only to 527' in the converted, but dry, oil well (30-015-01044). That well, 0.36 mile west, is now dry and abandoned (Exhibit I). The >7,000' interval between the bottom of the water sands and the Cisco top includes multiple confining layers of anhydrite and shale.

No underground source of drinking water is below the proposed disposal interval.

Le Mans SWD 1 is a mile northwest of the Capitan Reef.

Formation tops are:

Tansill = 0'
Queen = 741'
Grayburg = 997'
San Andres = 1869'
First Bone Spring Sand = 5547'
Second Bone Spring Sand = 6222'
Third Bone Spring Sand = 7424'
Wolfcamp = 7943'
Cisco = 8212'
Disposal Zone = 8219' - 8669'
Total Depth = 8669'
Canyon = 8922'

IX. The well will be stimulated with acid to clean out scale or fill.

X. Plans are to run Spectral Gamma, Density/Neutron, DLL/MSFL, and cross-dipole sonic logs.

XI. State Engineer records (Exhibit I) show one water well is within a mile. It is a P&A dry San Andres oil well (30-015-01044) that was reportedly converted to a water well (C 00419) in 1953. Fish were left in the bottom of the well, multiple plugs were set, and multiple strings of casing were cut and pulled. No sign of water was seen during an April 4, 2023, inspection (Exhibit I).

A second dry oil well (30-015-20909) was converted, but it is not in the State Engineer records. This 452' deep dry Yates well was drilled and plugged in 1973. It was re-entered in 1974 and used as a water supply well. It was found capped (Exhibit I) during an April 11, 2023, inspection with no sign of water.

A third water well (Exhibit I), not in State Engineer or OCD records, was found and sampled April 11, 2023.

XII. Tascosa Energy Partners, LLC is not aware of any geologic or engineering data (Exhibit J) that may indicate the Cisco is in hydrologic connection with any underground source of water. Nineteen SWD; Cisco wells and ten SWD; Cisco-Canyon wells are active in New Mexico.

XIII. Legal ad (Exhibit K) was published in the Artesia newspaper on March 15, 2023. Notice (this application) is being sent (Exhibit L) to the surface owner (NMSLO), lessors, lessees of record, operating right holders, and well operators within a half-mile.

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 332939

CONDITIONS

Operator: Tascosa Energy Partners, L.L.C 901 W. Missouri Ave Midland, TX 79701	OGRID: 329748
	Action Number: 332939
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	4/12/2024