AE Order Number Banner

Application Number: pMSG2319951738

SWD-2543

MEWBOURNE OIL CO [14744]

MEWBOURNE
OIL COMPANY

May 30, 2023

New Mexico Oil Conservation Division
Engineering Bureau
Attn: Mr. Phillip Goetze
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: C-108 Application for SWD Well
Wine Mixer 21 State SWD #1 (Former OXY Uncle Ben State #1, 30-015-31551)
1980' FSL & 1980' FWL, Unit K
Section 21, Township 20 South, Range 27 East
Eddy County, New Mexico

Dear Mr. Goetze:

Attached is a C-108 Application for administrative approval of Mewbourne Oil's proposed Wine Mixer 21 State SWD #1 that will be in Sec 21 Twp 20S, Rge 27E, N.M.P.M., Eddy County, New Mexico. This well will be a perforated completion the Cisco formation and will be operated as a private saltwater disposal well.

A copy of the C-108 application with exhibits have been mailed to the surface owner, offset operators and offsetting lessees, and confirmations of receipt will be e-mailed to you later this week. An Affidavit of Publication is also attached.

Should you have any questions, please contact us at (903) 534-7647.

Sincerely yours,

MEWBOURNE OIL COMPANY

Timothy R. Harrington

Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

MEWBOURNE OIL COMPANY
WINE MIXER 21 STATE SWD #1
SWD PERMIT APPLICATION

LIST OF ATTACHMENTS:

Administrative Checklist

Form C-108

Wine Mixer 21 State SWD #1 Current Well Schematic

Wine Mixer 21 State SWD #1 Proposed Well Schematic

Wine Mixer 21 State SWD #1 (Oxy Uncle Ben) Survey Plat

OXY Uncle Ben Completion Report (C-105)

Approved Change of Operator Form (C-145)

Well Plat

Lease Map

Tabulation of Wells Within 1 Mile Radius

Fresh Water Well Map

Tabulation of Nearby Fresh Water Wells – (Source: NM Office of the State Engineer)

Fresh Water Well Water Analysis

Producing Well Water Analysis – Wolfcamp, & Bone Spring

Surface Ownership Map (Federal, State or Private)

Offset Operator Map

Listing of Notified Persons

Affidavit of Publication – Artesia-Daily Press

Hydrologic Affirmation

Seismicity Statement

Seismicity Map – Distance to Closet Earthquake

Dagger Draw Seismicity Response Area Map – Category 2 SRA (M>3.5)

Dagger Draw Seismicity Response Area Map – Category 1 SRA

McKittrick Seismicity Response Area Map – Category 2 (M<3.5)

Cisco Geological Cross Section

Cisco Reef Isopach Map

Cisco Formation – Evidence to Support That Formation if Non-productive of Oil & Gas

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: Mewboure Oil Company **OGRID Number:** 14744
Well Name: Wine Mixer 21 State SWD #1 **API:** 30-015-31551
Pool: SWD; UPPER PENN **Pool Code:** 96137

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.

May 30, 2023
Date

Tim Harrington
Print or Type Name

903-534-7647
Phone Number

Timothy R. Harrington
Signature

tharrington@mewbourne.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 ____X____Disposal _____Storage
Application qualifies for administrative approval? ____X_____Yes _____No

II. OPERATOR: **Mewbourne Oil Company**

ADDRESS: **3620 Old Bullard Road**
Tyler, TX 75701
CONTACT PARTY: **Tim Harrington** PHONE: **903-534-7647**

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: **Tim Harrington** TITLE: **Engineer**

SIGNATURE: Tim R. Harrington DATE: 5/30/2023

E-MAIL ADDRESS: **tharrington@mewbourne.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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: **Mewbourne Oil Company**

WELL NAME & NUMBER: **Wine Mixer 21 State SWD #1 (Re-complete the OXY Uncle Ben State #1) 30-015-31551**

WELL LOCATION:	**1980' FSL & 1980' FWL**	**K**	**21**	**20S**	**27E**
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC ***(See Attached)***

WELL CONSTRUCTION DATA

Surface Casing (Existing)

Hole Size: **17 1/2"**

Casing Size: **13 3/8" (48 #) @ 545'**

Cement with: **697 sx**

Top of Cement: **Surface (cement did not circulate – ran 1" and cemented to surface**

Intermediate Casing (Existing)

Hole Size: **12 1/4"**

Casing Size: **9 5/8" (36#) @ 2,425'**

Stage 1: **970 sx**

Top of Cement: **Surface (Circulated)**

Production Casing (New)

Hole Size: **8 ¾"**

Casing Size: **5 1/2" (17#) @ 10,870'**

Stage 1: **770 sx**

Top of Cement: **6,958' (CBL)**

TD @ 10,870'
PBTD @ 10,860'
Permitted Injection Interval 8,880'-9,025'

Side 2

INJECTION WELL DATA SHEET

Tubing Size: **3 ½" 9.3#** Lining Material: **Duoline**

Type of Packer: Model R

Packer Setting Depth: **+/- 8,800'**

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

Additional Data

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

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

2. Name of the Injection Formation: **Cisco**

3. Name of Field or Pool (if applicable): 96134 SWD:UPPER PENN

4. Has the well ever been perforated in any other zone(s)? **Yes. Morrow and Strawn.**

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

   Overlying potentially productive zone tops – **Delaware (2,240'), 1st Bone Spring (5,703'), 2nd Bone Spring (6,255'), 3rd Bone Spring (7,690') & Wolfcamp (8,108')**

   Underlying producing zone – **Strawn (9,342'), Atoka (9,868') & Morrow (10,262')**

WINE MIXER 21 STATE SWD #1
Additional Details

VI. TheWine Mixer 21 State SWD #1, former OXY Uncle Ben State #1, is only one well penetrating the disposal formation within the ½ mile area of review.

VII. 1. Proposed average rate of 7,500 bwpd and maximum rate of 16,000 bwpd.

2. Non-commercial SWD (closed system).

3. Proposed average injection pressure is unknown and the maximum injection pressure is approximately 1,776 psi (0.2 psi/ft x 8,880 ft).

4. This well is being permitted as a private SWD, therefore all the injected fluid will be formation water from Mewbourne Oil Company operated wells currently producing or planned in the area. Representative water samples from the Wolfcamp and Bone Spring formations are attached.

5. We will be injecting into the Cisco formation in the Upper Penn Field. Mewbourne operates a Cisco SWD (approx. 10 miles to the southwest) and has not encountered any water compatibility issues. The following data is the closest produced water analysis that is available on the USGS or NMT databases. The Spring SWD is a Cisco SWD in the SWD: UPPER PENN Field.

wellname	api	section	township	range	unit	ftgns	ftgew	formation	sampleso	tds_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL
SPRING SWD #001	3001500129	4	21S	25E	A	660N	830E	CISCO	SWAB	31485	17000	635	2500
SPRING SWD #001	3001500129	4	21S	25E	A	660N	830E	CISCO	SWAB	31580	17370	502	2310

VIII. 1. The proposed injection interval (8,880' – 9,025') is within the Upper Penn formation which is a porous dolomite from 8,755' to 9,025'.

Other Formation Tops:

Top Bone Spring	3,788'
Top Wolfcamp	8,108'
Top Strawn	9,342'
Top Atoka	9,868'
Top Morrow	10,262'
Devonian	11,626'

2. The underground fresh water aquifers are present at shallow depths (per revue of well records, within Twp 20S, Rge 27E, on the NM Office of the State Engineers website) with the deepest water being encountered at a depth of 198', the shallowest water at a depth of 13' and the average water depth at 107'. There are no known fresh water intervals underlying the injecting formation.

IX. The proposed stimulation is an acid treatment of 10,000 gallons of 15% HCL.

IX. Open hole logs exist on this gas well. A gamma ray correlation / CCL log will be run for perforating purposes. Mewbourne intends to obtain a Cisco static bottom hole shut-in pressure prior to commencing injection.

X. Six different fresh water sample were are attached to this application. The location of these wells is highlighted on the attached Fresh Water Well Map and Listing of Nearby Fresh Water Wells.

XI. Mewbourne Oil Company has examined geologic and engineering data and has found that there is no evidence of faulting between the proposed disposal zone and any underground sources of drinking water. A signed affidavit is attached.

XII. See attached Proof of Notice

Mewbourne Oil Company

Current Wellbore Schematic

Well Name: Wine Mixer 21 State SWD #1
Formerly: OXY Uncle Ben State #1
1980' FSL, 1980' FWL
Sec 21, Twp 20S, Rge 27E
API: 30-015-31551
Spud 3/07/2001

Last Updated by T. Harrington 5/24/2023

13 3/8" (48#) H-40
Set @ 545'
Cmt w/ 697 sx
Did not circulate
Run 1" and cement to surface

17 1/2" hole

545'

12 1/4" hole

9 5/8" (36#)
Set @ 2425'
Cmt w/ 970 sx
Circulate to Surface

2425'

TOC (CBL) 6958'

8 3/4" hole

2 7/8" tubing w/ packer
Set @ 9273'
EOT @ 9279'

9368' - 9384'
Strawn Perforations
9420' - 9430'

PBTD 10380'
3 Sx Cement
CIBP 10400'

10423'
Morrow Perforations
10628'

5 1/2" (17#) N-80 & P-110
Set @ 10,870'
Cmt w/770 sks

PBTD 10,860'

10870'

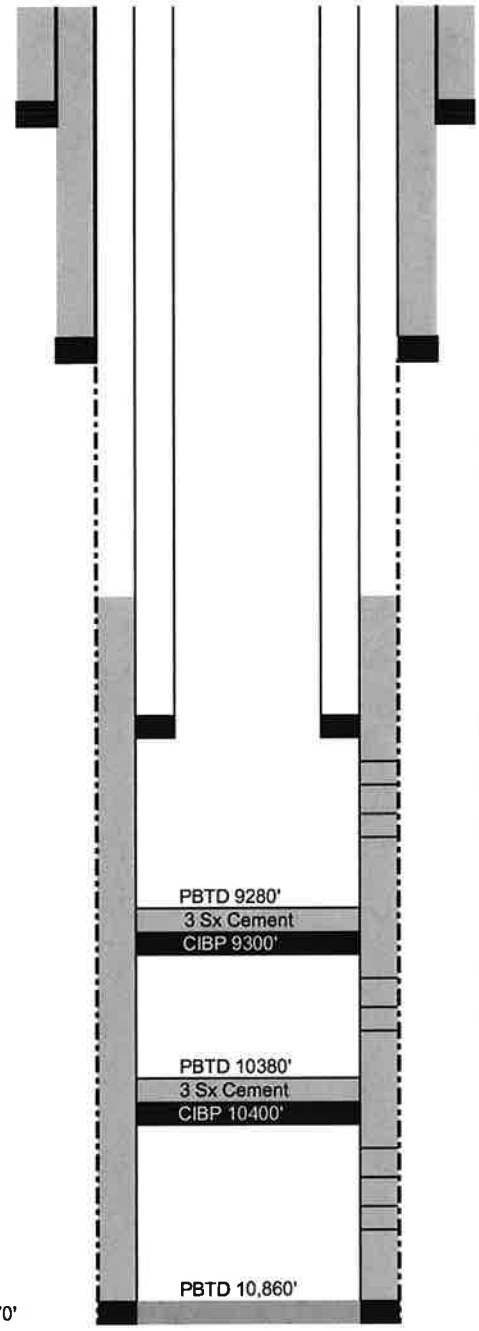
Total Depth 10870'

Mewbourne Oil Company

Proposed Wellbore Schematic

Well Name: Wine Mixer 21 State SWD #1
Formerly: OXY Uncle Ben State #1
1980' FSL, 1980' FWL
Sec 21, Twp 20S, Rge 27E
API: 30-015-31551
Spud 3/07/2001

Last Updated by T. Harrington 5/24/2023



13 3/8" (48#) H-40
Set @ 545'
Cmt w/ 697 sx
Did not circulate
Run 1" and cement to surface

17 1/2" hole

545'

12 1/4" hole

9 5/8" (36#)
Set @ 2425'
Cmt w/ 970 sx
Circulate to Surface

2425'

3 1/2" (9.3#)
Duolined

TOC (CBL) 6958'

8 3/4" hole

PKR @ ± 8800'

8880'

Proposed Cisco Perforations

9025'

9368' - 9384'

Strawn Perforations

9420' - 9430'

10423'

Morrow Perforations

10628'

5 1/2" (17#) N-80 & P-110
Set @ 10,870'
Cmt w/770 sks

10870'

Total Depth 10870'

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-	70920	Undesignated Avalon Morrow

Property Code	Property Name	Well Number
	OXY UNCLE BEN STATE	1

OGRID No.	Operator Name	Elevation
16696	OXY USA INC.	3232'

Surface Location

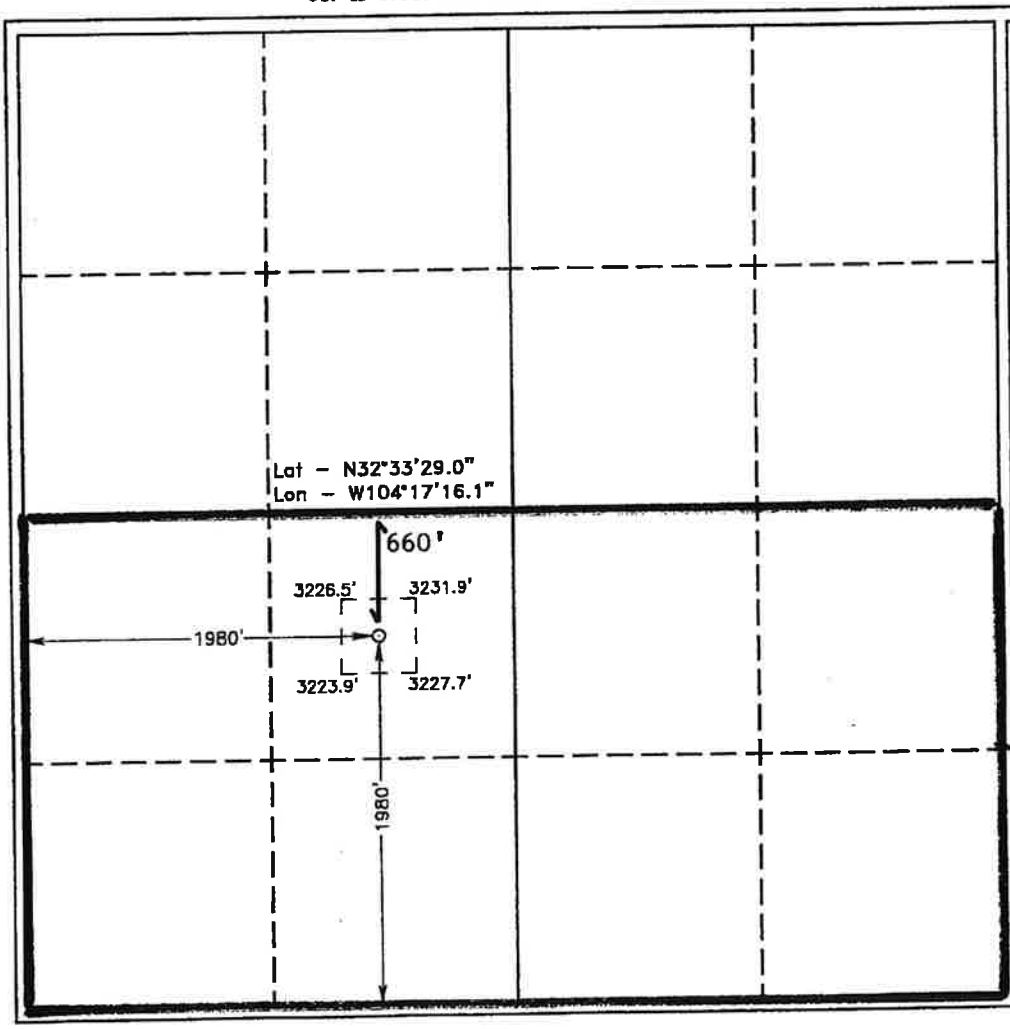
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	21	20 S	27 E		1980	SOUTH	1980	WEST	EDDY

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.
320	N		

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 the the information contained herein is true and complete to the best of my knowledge and belief.

Signature
David Stewart
Printed Name
Regulatory Analyst
Title
1/15/01
Date

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 supervison, and that the same is true and correct to the best of my belief.

January 10, 2001
Date Surveyed
Signature & Seal of Professional Surveyor
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR
W.O. No. 10014
Certificate No. Gary L. Jones 7977
BASIN SURVEYS

015 r
Blny
Bof m
St bd

Submit to Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

Form C-105
Revised 1-1-89

RECEIVED OCD - ARTESIA
123456789101112131415161718192021222324252627282930 31 192463

WELL API NO. 30-015-31551

5. Indicate Type Of Lease: STATE [X] FEE [ ]

6. State Oil & Gas Lease No. V-4808

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL [ ] GAS WELL [X] DRY [ ] OTHER

b. Type of Completion: NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF RESVR [ ] OTHER ______

7. Lease Name or Unit Agreement Name: OXY Uncle Ben State

2. Name of Operator: OXY USA WTP Limited Partnership

8. Well No. 1

3. Address of Operator: P.O. Box 50250 Midland, TX 79710-0250

9. Pool name or Wildcat: ~~[illegible]~~ Avalon Strawn

4. Well Location
Unit Letter K : 1980 Feet From The south Line and 1980 Feet From The west Line
Section 21 Township 20S Range 27E NMPM Eddy County

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF & RKB, RT, GR, etc.)	14. Elev. Casinghead
3/7/01	4/7/01	6/25/01	3232'	

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
10870'	10380'			R	

19. Producing Interval(s), of this completion - Top, Bottom, Name: 9368-9430' Strawn

20. Was Directional Survey Made: No

21. Type Electric and Other Logs Run: DLL/MLL/CZDL/CNL/GRL

22. Was Well Cored: No

23. **CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	545'	17-1/2"	697sx-surface	N/A
9-5/8"	36#	2425'	12-1/4"	970sx-circulate	N/A
5-1/2"	17#	10870'	8-3/4"	770sx-CBL-6958'	N/A

24. **LINER RECORD**

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. **TUBING RECORD**

SIZE	DEPTH SET	PACKER SET
2-7/8"	9279'	9273'

26. Perforation record (interval, size, and number)
4SPF @ 9368-9384, 9420-9430' Total 88 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
10423-10628'	3500g 7-1/2% HCl acid
9368-9430'	3500g 7-1/2% HCl acid
9368-9430'	5250g 20% gelled+6300g x-lnkd acid

28. **PRODUCTION**

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
6/25/01	Flwg	Prod

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
8/5/01	24	Open		5	214	0	

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API -(Corr.)
408			5	214	0	

29. Disposition of Gas (Sold, used for fuel, vented, etc.): Sold

Test Witnessed By: G. Henrich

30. List Attachments: C-103, C-104, C-122, Dev Svy, Logs(1set)

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature [signature] Printed Name David Stewart Title Sr. Reg Analyst Date 10/31/01

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northeastern New Mexico			
T. Anhy		T. Canyon	8754'	T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	9644'	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	9868'	T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Otzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Delaware Sand		T. Todilto		T.	
T. Drinkard		T. Bone Springs		T. Entrada		T.	
T. Abo		T.	Morrow-10262'	T. Wingate		T.	
T. Wolfcamp	8202'	T.		T. Chinle		T.	
T. Penn	8504'	T.		T. Permain		T.	
T. Cisco (Bough C)	8578'	T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ---------- to ---------- No. 3, from ---------- to ----------

No. 2, from ---------- to ---------- No. 4, from ---------- to ----------

IMPORTANT WATER SANDS

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

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

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

No. 3. from ---------- to ---------- feet ----------

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
0	60	60	Surface Rock				
60	628	568	halite, anhyd				
628	1610	982	shale, sand, anhyd, dolom				
1610	2446	836	dolom, sndst, shale				
2446	3882	1436	sndst, shale, dolom				
3882	8202	4320	lmest, shale, sndst				
8202	8504	302	lmest, shale, chert				
8504	9644	1140	lmest, shale				
9644	9868	224	lmest, chert, shale				
9868	10262	394	lmest, sndst, shale				
10262	10763	501	sndst, lmest, shale				
10763	10826	60	shale				

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

Form C-145
Revised May 19, 2017

Permit 340974

Change of Operator

Previous Operator Information		New Operator Information	
		Effective Date:	Effective on the date of approval by the OCD
OGRID:	192463	OGRID:	14744
Name:	OXY USA WTP LIMITED PARTNERSHIP	Name:	MEWBOURNE OIL CO
Address:	P.O. Box 4294	Address:	P.O. Box 5270
City, State, Zip:	Houston, TX 772104294	City, State, Zip:	Hobbs, NM 88241

I hereby certify that the rules of the Oil Conservation Division ("OCD") have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Additionally, by signing below, MEWBOURNE OIL CO certifies that it has read and understands the following synopsis of applicable rules.

PREVIOUS OPERATOR certifies that all below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells being transferred are either (1) in compliance with 19.15.17 NMAC, (2) have been closed pursuant to 19.15.17.13 NMAC or (3) have been retrofitted to comply with Paragraphs 1 through 4 of 19.15.17.11(I) NMAC.

MEWBOURNE OIL CO understands that the OCD's approval of this operator change:

1. constitutes approval of the transfer of the permit for any permitted pit, below-grade tank or closed-loop system associated with the selected wells; and
2. constitutes approval of the transfer of any below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells, regardless of whether the transferor has disclosed the existence of those below-grade tanks to the transferee or to the OCD, and regardless of whether the below-grade tanks are in compliance with 19.15.17 NMAC.

As the operator of record of wells in New Mexico, MEWBOURNE OIL CO agrees to the following statements:

1. Initials ___ I am responsible for ensuring that the wells and related facilities comply with applicable statutes and rules, and am responsible for all regulatory filings with the OCD. I am responsible for knowing all applicable statutes and rules, not just the rules referenced in this list. I understand that the OCD's rules are available on the OCD website under "Rules," and that the Water Quality Control Commission rules are available on the OCD website on the "Publications" page.
2. Initials ___ I understand that if I acquire wells from another operator, the OCD must approve the operator change before I begin operating those wells. See Subsection B of 19.15.9.9 NMAC. I understand that if I acquire wells or facilities subject to a compliance order addressing inactive wells or environmental cleanup, before the OCD will approve the operator change it may require me to enter into an enforceable agreement to return those wells to compliance. See Paragraph (2) of Subsection C of 19.15.9.9 NMAC.
3. Initials ___ I must file a monthly C-115 report showing production for each non-plugged well completion for which the OCD has approved an allowable and authorization to transport, and injection for each injection well. See 19.15.7.24 NMAC. I understand that the OCD may cancel my authority to transport from or inject into all the wells I operate if I fail to file C-115 reports. See Subsection C of 19.15.7.24 NMAC.
4. Initials ___ I understand that New Mexico requires wells that have been inactive for certain time periods to be plugged or placed in approved temporary abandonment. See 19.15.25.8 NMAC. I understand the requirements for plugging and approved temporary abandonment in 19.15.25 NMAC. I understand that I can check my compliance with the basic requirements of 19.15.25.8 NMAC by using the "Inactive Well List" on OCD's website.
5. Initials ___ I must keep current with financial assurances for well plugging. I understand that New Mexico requires each state or fee well that has been inactive for more than two years and has not been plugged and released to be covered by a single-well financial assurance or a "blanket plugging financial assurance for wells in temporarily abandoned statues", even if the well is also covered by a blanket financial assurance and even if the well is on approved temporary abandonment status. See Subsection C of 19.15.8.9 NMAC. I understand that I can check my compliance with the financial assurance requirement by using the "Inactive Well Additional Financial Assurance Report" on the OCD's website.
6. Initials ___ I am responsible for reporting and remediating releases pursuant to 19.15.29 NMAC. I understand the OCD will look to me as the operator of record to take corrective action for releases at my wells and related facilities, including releases that occurred before I became operator of record. I am responsible for conducting my own due diligence for any releases that have occurred prior to becoming operator of my wells and related facilities and am responsible for any open releases or unreported releases.
7. Initials ___ I have read 19.15.5.9 NMAC, commonly known as "Part 5.9," and understand that to be in compliance with its requirements I must have the appropriate financial assurances in place, comply with orders requiring corrective action, pay penalties assessed by the courts or agreed to by me in a settlement agreement, and not have too many wells out of compliance with the inactive well rule (19.15.25.8 NMAC). If I am in violation of Part 5.9, I may not be allowed to drill, acquire or produce any additional wells, and will not be able to obtain any new injection permits. See 19.15.16.19 NMAC, 19.15.26.8 NMAC, 19.15.9.9 NMAC and 19.15.14.10 NMAC. If I am in violation of Part 5.9 the OCD may, after notice and hearing, revoke my existing injection permits and seek other relief. See 19.15.26.8 NMAC and 19.15.5.10 NMAC.
8. Initials ___ For injection wells, I understand that I must report injection on my monthly C-115 report and must operate my wells in compliance with 19.15.26 NMAC and the terms of my injection permit. I understand that I must conduct mechanical integrity tests on my injection wells at least once every five years. See 19.15.26.11 NMAC. I understand that when there is a continuous one-year period of non-injection into all wells in an injection or storage project or into a saltwater disposal well or special purpose injection well, authority for that injection automatically terminates. See 19.15.26.12 NMAC. I understand that if I transfer operation of an injection well to another operator, the OCD must approve the transfer of authority to inject, and the OCD may require me to demonstrate the well's mechanical integrity prior to approving that transfer. See 19.15.26.15 NMAC.
9. Initials ___ I am responsible for providing the OCD with my current address of record and emergency contact information, and I am responsible for updating that information when it changes. See Subsection C of 19.15.9.8 NMAC. I understand that I can update that information on the OCD's website under "Electronic Permitting."
10. Initials ___ If I transfer well operations to another operator, the OCD must approve the change before the new operator can begin operations. See Subsection B of 19.15.9.9 NMAC. I remain responsible for the wells and related facilities and all related regulatory filings until the OCD approves the operator change. I understand that the transfer will not relieve me of responsibility or liability for any act or omission which occurred while I operated the wells and related facilities.
11. Initials ___ No person with an interest exceeding 25% in the undersigned company is, or was within the last 5 years, an officer, director, partner or person with a 25% or greater interest in another entity that is not currently in compliance with Subsection A of 19.15.5.9 NMAC.
12. Initials ___ NMOCD Rule Subsection E and F of 19.15.16.8 NMAC: An operator shall have 90 days from the effective date of an operator name change to change the operator name on the well sign unless the division grants an extension time, for good cause shown, along with a schedule for making the changes. Each sign shall show the (1) well number, (2) property name, (3) operator's name, (4) location by footage, quarter-quarter section, township and range (or unit letter can be substituted for the quarter-quarter section), and (5) API number.

I hereby certify I understand the above. The statements I have made are true and correct and a condition precedent to the Oil Conservation Division accepting this Change of Operator.

Previous Operator		New Operator	
Signature:	Leslie T. Reeves	Signature:	
Printed Name:	LESLIE REEVES	Printed Name:	Drew Robison
Title:	REGULATORY MANAGER	Title:	VP of Corporate Affairs
Date:	5/23/2023 Phone: 713-497-2492	Date:	5/24/2023 Phone: 903-561-2900

Permit 340974

NMOCD Approval

Electronic Signature(s): Rob Jackson, District 2
Date: May 24, 2023

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

Wells Selected for Transfer

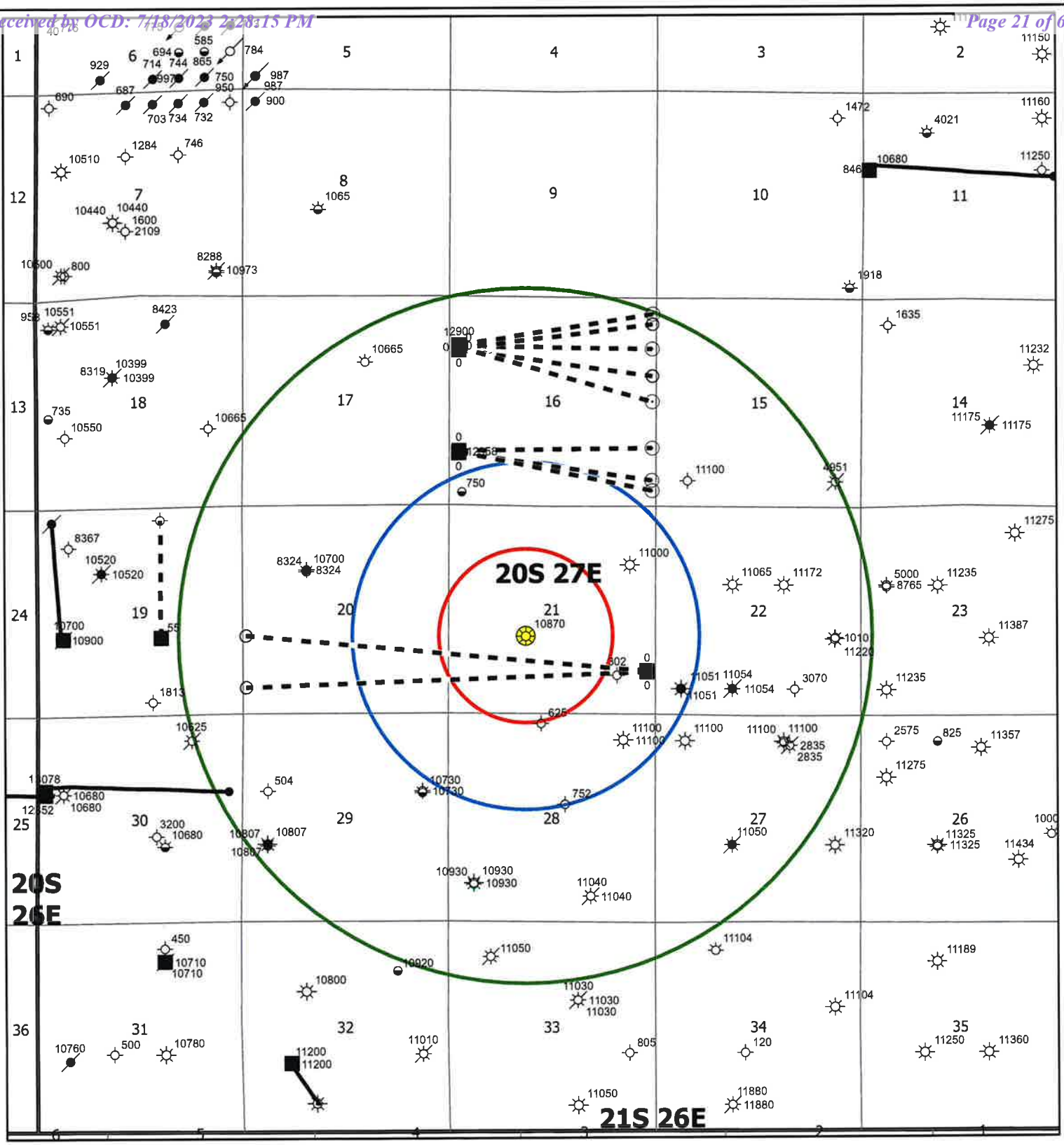
Permit 340974

1 Well Selected for Transfer

From: OXY USA WTP LIMITED PARTNERSHIP	OGRID: 192463
To: MEWBOURNE OIL CO	OGRID: 14744

OCD District: Artesia (1 Well selected.)

Property	Well	Lease Type	ULSTR	OCD Unit	API	Pool ID	Pool Name	Well Type
334066	OXY UNCLE BEN STATE #001	S	K-21-20S-27E	K	30-015-31551			G



MEWBOURNE OIL COMPANY

Mewbourne Oil Company

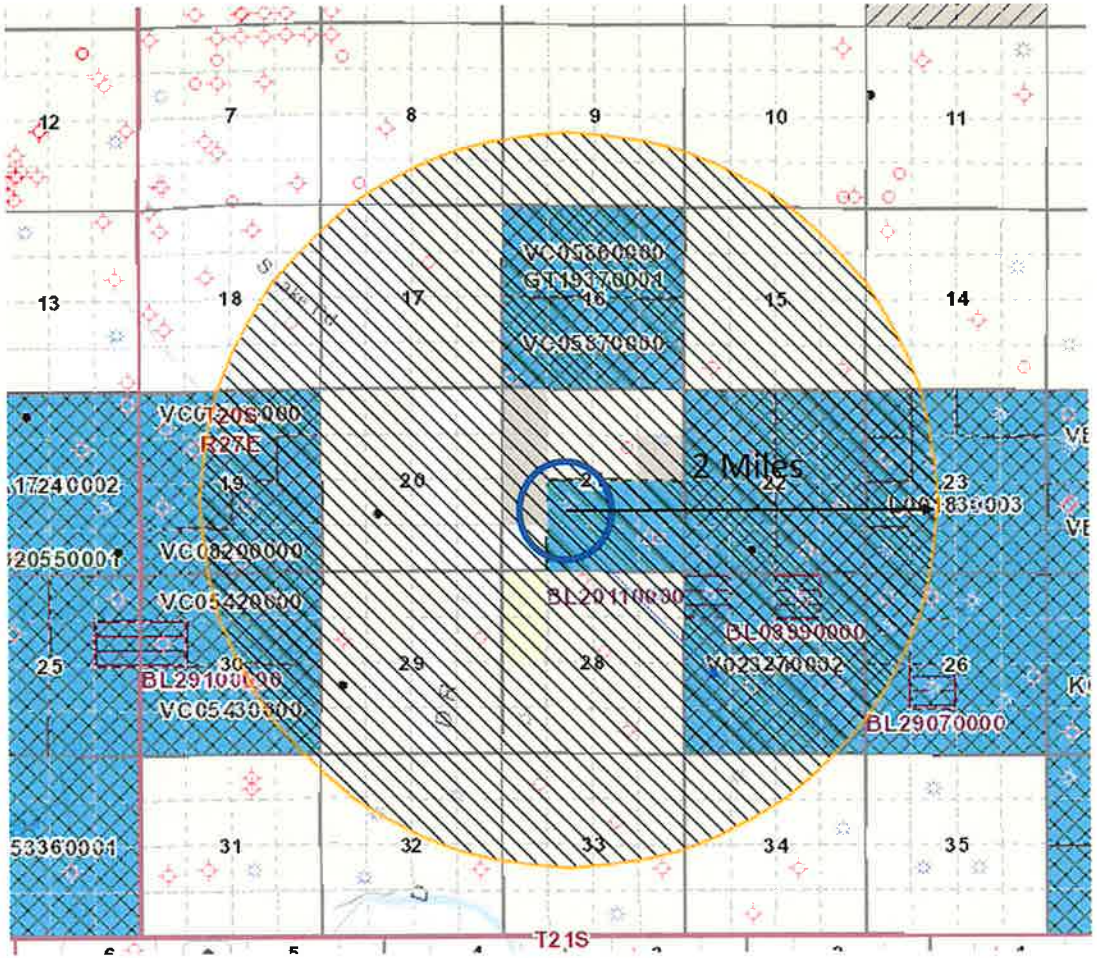
WINE MIXER 21 STATE SWD # 1 APPLICATION
ALL WELLS MAP
EDDY, NEW MEXICO

Author: ek | Date: 24 May, 2023

WINE MIXER 21 STATE SWD #1 LEASE MAP (20S, 27E Eddy County, NM)

Key

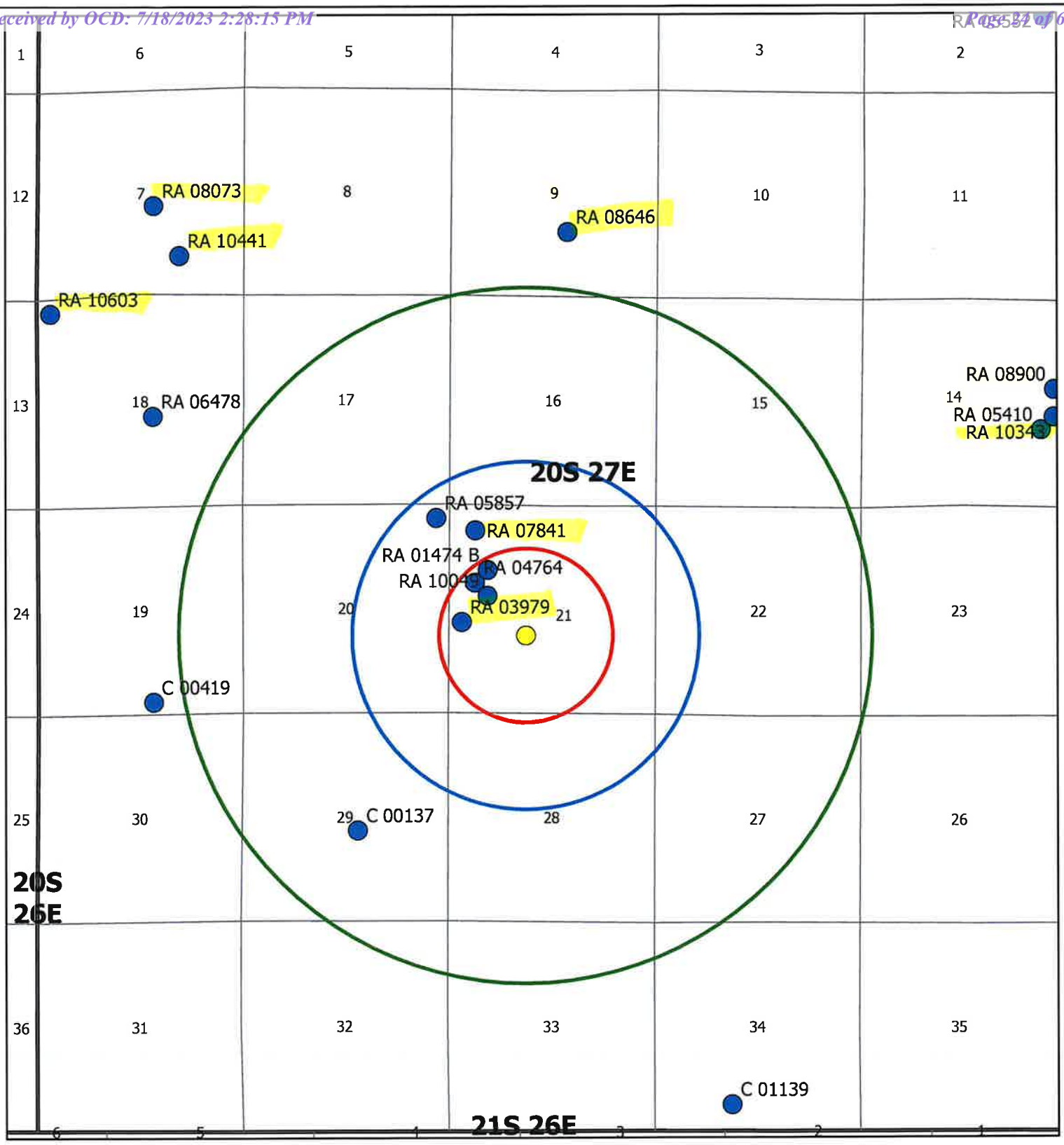
- Federal (all minerals)
- Federal (Oil & Gas only)
- State (Surf & Subsurface)
- State (Subsurface)
- Private



MEWBOURNE OIL COMPANY
WINE MIXER 21 STATE SWD #1 APPLICATION
LISTING OF WELLS WITHIN THE 1/2 MILE AREA OF REVIEW
5/30/2023

Dir	API	Lease Name	Well Num	Original Operator Name	Current Operator	Sec	Twp	Rge	Footage	Final Status	Current Status	Proposed Driller Td	Proposed TVD (ft)	Proposed Prod Formation	Spud Date	Comp Date	Final Drill Date	Plug Date
V	30015259570000	DOROTHY `A` STATE	1	SURE ENERGY	SURE ENERGY	21	20S	27E	990 FSL 990 FEL	DRYHOLE (P&A)	PLUGGED	302	302		1988-07-30	1991-05-24	1988-09-15	9/9/1994
V	30015315510000	OXY UNCLE BEN STATE	1	OXY USA INC	MEWBOURNE OIL CO	21	20S	27E	1980 FSL 1980 FWL	GAS	PRODUCING	10,870	10,870	Strawn	2001-03-07	2001-08-05	2001-04-07	
V	30015010490000	STEWART	1	COMPTON R D	COMPTON R D	28	20S	27E	250 FNL 2390 FWL	DRYHOLE (P&A)	PLUGGED	625	625		1929-03-26	1929-12-05		NA
H	30015499470000	WINE MIXER 21 20 B3PM FED COM	001H	MEWBOURNE OIL CO	MEWBOURNE OIL CO	21	20S	27E	1080 FSL 205 FEL	WAIT ON COMP	WAIT ON COMP	18,475	7,756	Bone Spring	2022-10-18			
H	30015499480000	WINE MIXER 21 20 B3IL FED COM	001H	MEWBOURNE OIL CO	MEWBOURNE OIL CO	21	20S	27E	1100 FSL 205 FEL	WAIT ON COMP	WAIT ON COMP	18,465	7,784	Bone Spring	2023-03-08			

THERE ARE NO WELLS, OTHER THAN THE SUBJECT WELL, THAT PENETRATE THE PROPOSED DISPOSAL ZONE WITHIN THE 1/2 MILE AREA OF REVIEW



MEWBOURNE
OIL COMPANY

SWD Wells
1/2 Mile
1 Mile
2 Miles
Fresh Water Locations

NEWBOURNE OIL COMPANY
WINE MIXER 21 STATE SWD #1 PERMIT APPLICATION
LISTING OF NEARBY FRESH WATER WELLS
Dec-23

POD Number	Source	q64	q16	q4	Sec	Tws	Rng	X	Y	Lat	Long	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller
RA 05552	Shallow		NE	SE	02	20S	27E	570844	3607265	32.600624	-104.24502	06/04/1968	04/15/1968	10/21/1968	145		
RA 08073	Shallow	NW	NW	SE	07	20S	27E	563883	3605760	32.587472	-104.319301	08/12/1992	08/30/1992	08/23/1993	200	198	MIKE CAMPBELL
RA 10441	Shallow	NE	SW	SE	07	20S	27E	564085	3605372	32.583961	-104.317175	08/08/2003	09/06/2003	09/10/2003	130	13	VLOSICH, JOSEPH M., JR.
RA 08646		SW	NW	SE	09	20S	27E	567117	3605568	32.585549	-104.284857						
RA 05410	Shallow		NE	SE	14	20S	27E	570842	3604049	32.571615	-104.245284	05/09/1972	05/13/1972	08/10/1972	81	66	
RA 10343	Shallow	NE	NE	SE	14	20S	27E	570941	3604148	32.572502	-104.244222	12/16/2002	12/17/2002	01/06/2003	128	74	
RA 08900		SE	SE	NE	14	20S	27E	570943	3604344	32.574427	-104.244186						
RA 06478		NW	NW	SE	18	20S	27E	563886	3604124	32.572715	-104.31938						
RA 10603	Shallow	NW	NW	NW	18	20S	27E	563076	3604910	32.579851	-104.3280						
C 00419		SW	SW	SE	19	20S	27E	563904	3601904	32.552689	-104.31934	11/07/1952	01/18/1953	07/08/1958	1813		JENKINS & MCQUEEN
RA 05857		NE	NE	NE	20	20S	27E	566104	3603346	32.565567	-104.295807		06/18/1973	07/01/1973			
RA 03979	Shallow	NW	NW	SW	21	20S	27E	566306	3602539	32.558276	-104.293712		08/01/1944	01/06/1959	190		W.P. BLACK
RA 04764	Shallow		SW	NW	21	20S	27E	566407	3602845	32.56103	-104.292615	02/01/1963	02/02/1963	02/21/1963	171	150	SMITH, A.F.
RA 07841	Shallow		NW	NW	21	20S	27E	566408	3603251	32.564692	-104.292575	12/07/1990	12/20/1990	01/02/1991	200	140	JOHN B HAMMOND
RA 01474 B	Shallow	NE	SW	NW	21	20S	27E	566506	3602944	32.561917	-104.291553						
RA 10049		SE	SW	NW	21	20S	27E	566506	3602744	32.560113	-104.291567						
C 00137		NW	NW	SE	29	20S	27E	565502	3600917	32.543692	-104.302389						
C 01139			SE	SW	34	20S	27E	568442	3598796	32.524438	-104.271234						
C 01923	Shallow		NE	SE	36	20S	27E	572469	3599224	32.527988	-104.228325	09/02/1980	09/03/1980	09/08/1980	400		FELKINS, CLIFTON L.
														AVG	**346**	**107**	

water analysis attached

RA 07841

Water Lens

Powered by: Water Lens™

Sample Information

Date of Sample Analysis:	2022-11-10	Technician Name:	Jjasek
Date Sample was Taken:	11/10/2022	Sample Name:	Wine Mixer House
Analysis Performed by:	EPDI	API Well Number:	
Client:	Oxy	Well Name:	
Reader Number:		Test Number:	
Water Lens Batch Number:	CS1		

Metals

	Dilution Factor	mg/L	meq/L
Barium	1	Less than 2	-
Calcium	Calc	572	29
Iron II (Fe^{2+})	1	Less than 0.03	-
Iron III (Fe^{3+})	Calc	Less than 0.03	-
Total Dissolved Iron	1	Less than 0.03	-
Magnesium	100	157.7	12.98
Sodium	Calc	Less than 56.3	-
Strontium	Calc	-	-
Manganese	n/a	*Test Not Run*	-
Boron	n/a	*Test Not Run*	-
Potassium	1	Less than 3	-

Anions

	Dilution Factor	mg/L	meq/L
Chloride	1	162	5
Sulfate	100	300	6
Nitrate	n/a	*Test Not Run*	-
Phosphate	10	4.20	0
Unfiltered Phosphate	n/a	*Test Not Run*	-
Filtered Phosphate	n/a	*Test Not Run*	-
Delta Phosphate		*Test Not Run*	-
Carbonate (as CO_3^{2-})	Calc	0	0
Bicarbonate (as HCO_3^-)	Calc	133	7
Acetates/Formates (as Acetate)	Calc	14	0
Hydroxide (as OH^-)	Calc	-	-
Sulfide (Total)	n/a	3.0	-

Other

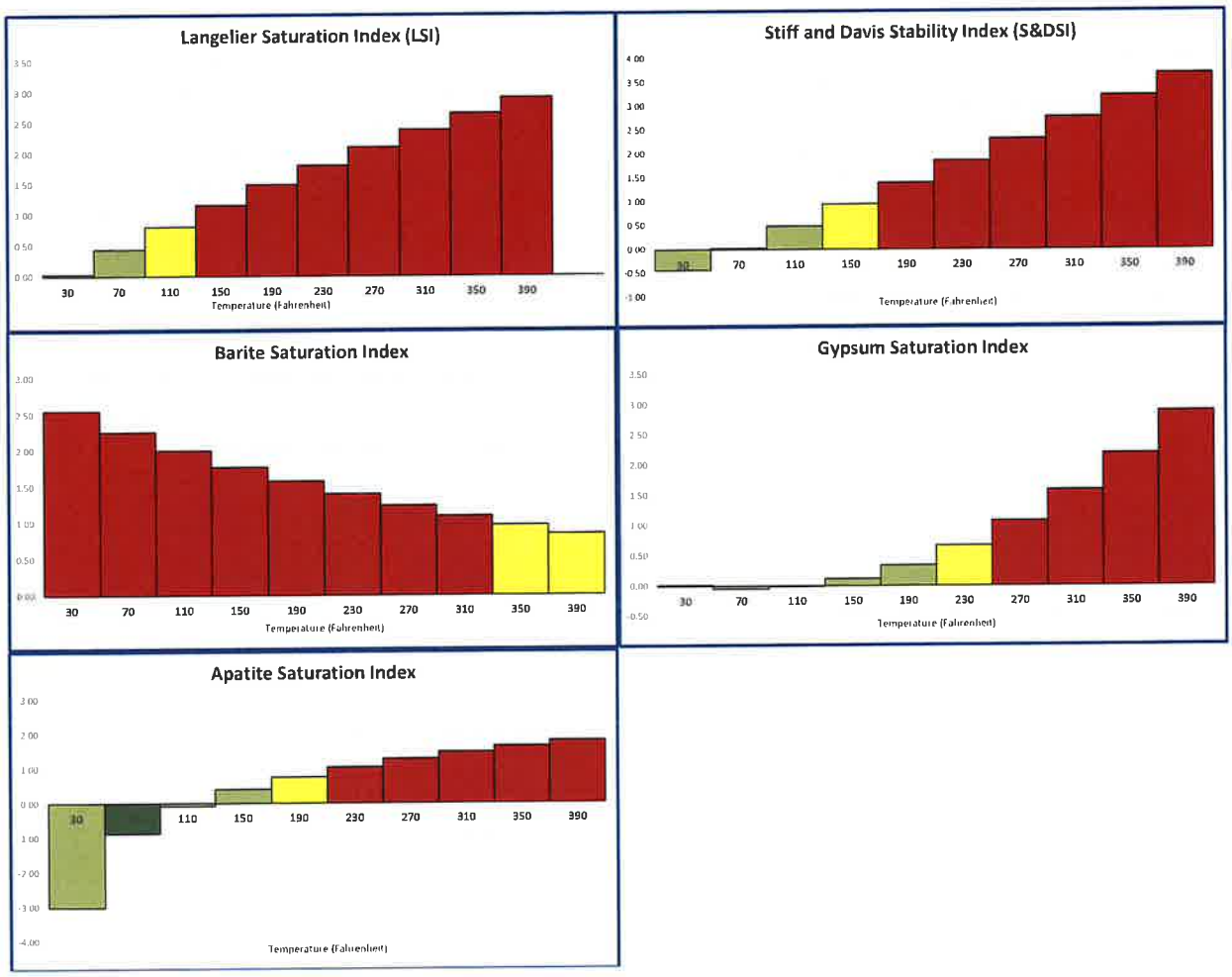
	Dilution Factor		
Hydrogen Sulfide (H_2S)	Calc	1.5	mg/L
Turbidity	1	25	NTU's
Total Hardness	100.0	2,079.00	mg/L $CaCO_3$
Oxidation/Reduction Potential (ORP)		445	millivolts
Temperature		77	Fahrenheit
Stiff & Davis Scaling Index (S&DSI)		0.11	
Langelier Scaling Index (LSI)		0.54	
Larson-Skold Index		2.0	
Skillman Index		0.44	
Barite Saturation Index		2.19	
Gypsum Saturation Index		-0.05	

	Dilution Factor		
ATP (picograms/mL)	Calc	608	
Dissolved CO_2 (ppm)	Calc	10	
pH	n/a	7.09	
Total Alkalinity	1	243	mg/L $CaCO_3$
Total Dissolved Solids (TDS)	Calc	563	mg/L
Electrical Conductivity	Calc	2,879	uS/cm
Electrical Resistivity	Calc	347.3	Ohm*cm
Manganese/Iron Ratio		*Test Not Run*	
Specific Gravity		1.0004	

Comments

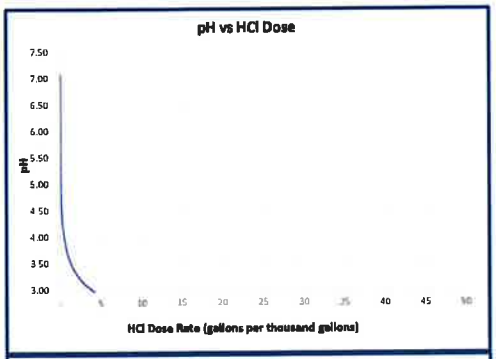
Client: Oxy

Scaling Index Graphs

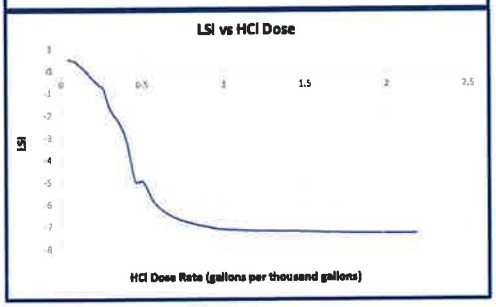


Client: Oxy

Scale Control Graphs



Target pH:	6.5
HCl Concentration (%):	37.0
Req'd HCl dose rate (gpt)	0.00



Target LSI:	0.5
Req'd 15% HCl dose rate: (gpt)	0.057

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: DAGGER DRAW SWD Project Number: NOT GIVEN Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 13-May-22 09:07

RA - 08073

H221744-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**415**		5.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Chloride*	**184**		4.00	mg/L	1	2042824	AC	28-Apr-22	4500-Cl-B	
Conductivity*	**3630**		1.00	umhos/cm @ 25°C	1	2042828	GM	29-Apr-22	120.1	
pH*	**7.06**		0.100	pH Units	1	2042828	GM	29-Apr-22	150.1	
Temperature °C	**20.0**			pH Units	1	2042828	GM	29-Apr-22	150.1	
Resistivity	**2.75**			Ohms/m	1	2042828	GM	29-Apr-22	120.1	
Specific Gravity @ 60° F	**1.004**		0.000	[blank]	1	2042831	GM	02-May-22	SM 2710F	
Sulfate*	**1850**		500	mg/L	50	2042816	AC	28-Apr-22	375.4	
TDS*	**3480**		5.00	mg/L	1	2042907	AC	03-May-22	160.1	
Alkalinity, Total*	**340**		4.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
TSS*	<2.00		2.00	mg/L	1	2050209	AC	03-May-22	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Calcium*	**620**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Hardness as CaCO3	**1990**		3.31	mg/L	5	[CALC]	AES	10-May-22	2340 B	
Iron*	<0.250		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Magnesium*	**106**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Potassium*	**18.9**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Sodium*	**219**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Strontium*	**10.5**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: DAGGER DRAW SWD Project Number: NOT GIVEN Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 13-May-22 09:07

RA - 10441

H221744-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**205**		5.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Chloride*	**470**		4.00	mg/L	1	2042824	AC	28-Apr-22	4500-Cl-B	
Conductivity*	**4310**		1.00	umhos/cm @ 25°C	1	2042828	GM	29-Apr-22	120.1	
pH*	**7.33**		0.100	pH Units	1	2042828	GM	29-Apr-22	150.1	
Temperature °C	**19.7**			pH Units	1	2042828	GM	29-Apr-22	150.1	
Resistivity	**2.32**			Ohms/m	1	2042828	GM	29-Apr-22	120.1	
Specific Gravity @ 60° F	**1.003**		0.000	[blank]	1	2042831	GM	02-May-22	SM 2710F	
Sulfate*	**1970**		500	mg/L	50	2042816	AC	28-Apr-22	375.4	
TDS*	**3750**		5.00	mg/L	1	2042907	AC	03-May-22	160.1	
Alkalinity, Total*	**168**		4.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
TSS*	<2.00		2.00	mg/L	1	2050209	AC	03-May-22	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Calcium*	**732**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Hardness as CaCO3	**2590**		3.31	mg/L	5	[CALC]	AES	10-May-22	2340 B	
Iron*	**0.289**		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Magnesium*	**186**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Potassium*	**5.94**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Sodium*	**296**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Strontium*	**10.4**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Water Lens

Powered by: Water Lens™

Sample Information

Date of Sample Analysis:	2022/04/14	Technician Name:	vfuentes
Date Sample was Taken:	04/12/2022	Sample Name:	Fresh Water
Analysis Performed by:	Enviroklean Product Development	API Well Number:	
Client:	Mewbourne Oil Company	Well Name:	RA08546
Reader Number:		Test Number:	
Water Lens Batch Number:	897		

Metals

	Dilution Factor	mg/L	meq/L
Barium	1	Less than 2	Less than 0.029
Calcium	Calc	750	37.4
Iron II (Fe^{2+})	1	Less than 0.03	Less than 0.0016
Iron III (Fe^{3+})	Calc	Less than 0.03	Less than 0.0016
Total Dissolved Iron	1	Less than 0.03	Less than 0.0016
Magnesium	1,000	202.00	16.60
Sodium	Calc	Less than 230	Less than 0.01
Strontium	n/a	*Test Not Run*	-
Manganese	n/a	*Test Not Run*	-
Boron		*Test Not Run*	-
Potassium	10	19	0.5

Anions

	Dilution Factor	mg/L	meq/L
Chloride	1	208	6
Sulfate	10	1,010	21
Nitrate	n/a	*Test Not Run*	-
Phosphate	1	0.58	0.02
Unfiltered Phosphate	n/a	*Test not run*	*Test not run*
Filtered Phosphate	n/a	*Test not run*	*Test not run*
Delta Phosphate		*Test Not Run*	-
Carbonate (as CO_3^{2-})	Calc	-	-
Bicarbonate (as HCO_3^-)	Calc	66	1.1
Acetates/Formates (as Acetate)	Calc	68	1.2
Hydroxide (as OH^-)	Calc	0	0
Sulfide (Total)	n/a	*Test not run*	*Test not run*

Other

	Dilution Factor			Dilution Factor	
Hydrogen Sulfide (H_2S)	Calc	1.0 mg/L	ATP (picograms/mL)	Calc	1006
Turbidity	1	Less than 7 NTU's	Dissolved CO_2 (ppm)	Calc	5
Total Hardness	100.0	2,710.00 mg/L $CaCO_3$	pH	n/a	7.89
Oxidation/Reduction Potential (ORP)		110 millivolts	Total Alkalinity	1	112 mg/L $CaCO_3$
Temperature		77 Fahrenheit			
Stiff & Davis Scaling Index (S&DSI)		0.38	Total Dissolved Solids (TDS)	Calc	2,300 mg/L
Langelier Scaling Index (LSI)		0.87	Electrical Conductivity	Calc	4,900 uS/cm
Larson-Skold Index		30.31	Electrical Resistivity	Calc	205.9 Ohm*cm
Skillman Index		1.251	Manganese/Iron Ratio		*Test Not Run*
Barite Saturation Index		NA	Specific Gravity		1.0020
Gypsum Saturation Index		0.48			

Comments

Water Lens

Powered by: Water Lens™

Sample Information

Date of Sample Analysis:	2022/04/14	Technician Name:	vfuentes
Date Sample was Taken:	04/12/2022	Sample Name:	Fresh Water
Analysis Performed by:	Enviroklean Product Development	API Well Number:	
Client:	Mewbourne Oil Company	Well Name:	RA10343
Reader Number:		Test Number:	
Water Lens Batch Number:	997		

Metals

	Dilution Factor	mg/L	meq/L
Barium	1	Less than 2	Less than 0.029
Calcium	Calc	85.1	4.246
Iron II (Fe^{2+})	1	Less than 0.03	Less than 0.0016
Iron III (Fe^{2+})	Calc	Less than 0.03	Less than 0.0016
Total Dissolved Iron	1	Less than 0.03	Less than 0.0016
Magnesium	10	14.44	1.19
Sodium	Calc	Less than 37.1	Less than 0
Strontium	n/a	*Test Not Run*	-
Manganese	n/a	*Test Not Run*	-
Boron		*Test Not Run*	-
Potassium	10	19	0.5

Anions

	Dilution Factor	mg/L	meq/L
Chloride	1	Less than 14	Less than 0.39
Sulfate	1	8	0
Nitrate	n/a	*Test Not Run*	-
Phosphate	1	0.46	0.01
Unfiltered Phosphate	n/a	*Test not run*	*Test not run*
Filtered Phosphate	n/a	*Test not run*	*Test not run*
Delta Phosphate		*Test Not Run*	-
Carbonate (as CO_3^{2-})	Calc	-	-
Bicarbonate (as HCO_3^-)	Calc	144	2.4
Acetates/Formates (as Acetate)	Calc	137	2.3
Hydroxide (as OH^-)	Calc	0	0
Sulfide (Total)	n/a	*Test not run*	Test not run

Other

	Dilution Factor			Dilution Factor	
Hydrogen Sulfide (H_2S)	Calc	1.0 mg/L	ATP (picograms/mL)	Calc	148
Turbidity	1	Less than 7 NTU's	Dissolved CO_2 (ppm)	Calc	5
Total Hardness	10.0	272.50 mg/L $CaCO_3$	pH	n/a	7.86
Oxidation/Reduction Potential (ORP)		115 millivolts	Total Alkalinity	1	234 mg/L $CaCO_3$
Temperature		77 Fahrenheit			
Stiff & Davis Scaling Index (S&DSI)		0.12	Total Dissolved Solids (TDS)	Calc	371 mg/L
Langelier Scaling Index (LSI)		0.31	Electrical Conductivity	Calc	550 uS/cm
Larson-Skold Index		0.22	Electrical Resistivity	Calc	1,819.5 Ohm*cm
Skillman Index		1.251	Manganese/Iron Ratio		*Test Not Run*
Barite Saturation Index		0.43	Specific Gravity		1.0003
Gypsum Saturation Index		-2.07			

Comments

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: DAGGER DRAW SWD Project Number: NOT GIVEN Project Manager: OLIVER SEEKINS Fax To: NA	Reported: 13-May-22 09:07

RA - 10603

H221744-03 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**20.0**		5.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
Chloride*	**140**		4.00	mg/L	1	2042824	AC	28-Apr-22	4500-Cl-B	
Conductivity*	**2980**		1.00	umhos/cm @ 25°C	1	2042828	GM	29-Apr-22	120.1	
pH*	**5.64**		0.100	pH Units	1	2042828	GM	29-Apr-22	150.1	
Temperature °C	**19.7**			pH Units	1	2042828	GM	29-Apr-22	150.1	
Resistivity	**3.36**			Ohms/m	1	2042828	GM	29-Apr-22	120.1	
Specific Gravity @ 60° F	**1.004**		0.000	[blank]	1	2042831	GM	02-May-22	SM 2710F	
Sulfate*	**1660**		500	mg/L	50	2042816	AC	28-Apr-22	375.4	
TDS*	**2730**		5.00	mg/L	1	2042907	GM	02-May-22	160.1	
Alkalinity, Total*	**16.0**		4.00	mg/L	1	2040415	AC	29-Apr-22	310.1	
TSS*	**10.0**		2.00	mg/L	1	2050209	AC	03-May-22	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Calcium*	**379**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Hardness as CaCO3	**1490**		3.31	mg/L	5	[CALC]	AES	10-May-22	2340 B	
Iron*	**21.9**		0.250	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Magnesium*	**131**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Potassium*	**14.0**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Sodium*	**161**		5.00	mg/L	5	B221186	AES	10-May-22	EPA200.7	
Strontium*	**6.38**		0.500	mg/L	5	B221186	AES	10-May-22	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Water Lens

Powered by: Water Lens™

Sample Information

Date of Sample Analysis:	2021/07/06	Technician Name:	vfuentes
Date Sample was Taken:	07/01/2021	Sample Name:	Double Barrel 31 Fed
Analysis Performed by:	EPD	API Well Number:	
Client:	Mewbourne Oil Company	Well Name:	Produced Water
Reader Number:		Test Number:	Ruger 31 B3EH Fed #2H
Water Lens Batch Number:	841		

Metals

	Dilution Factor	mg/L	meq/L
Barium	10	Less than 20	Less than 0.29
Calcium	Calc	6260	312.4
Iron II (Fe^{2+})	100	23.03	0.82
Iron III (Fe^{3+})	Calc	Less than 3	Less than 0.16
Total Dissolved Iron	100	24.10	1.29
Magnesium	1,000	1,032.00	85.00
Sodium	Calc	49000	2130
Strontium	n/a	*Test Not Run*	-
Manganese	n/a	*Test Not Run*	-
Boron		*Test Not Run*	-
Potassium	100	931	23.8

Anions

	Dilution Factor	mg/L	meq/L
Chloride	100	90,090	2,541
Sulfate	10	670	14
Nitrate	n/a	*Test Not Run*	-
Phosphate	100	48.57	1.53
Unfiltered Phosphate	n/a	*Test not run*	*Test not run*
Filtered Phosphate	n/a	*Test not run*	*Test not run*
Delta Phosphate		*Test Not Run*	-
Carbonate (as CO_3^{2-})	Calc	-	-
Bicarbonate (as HCO_3^-)	Calc	86	1.4
Acetates/Formates (as Acetate)	Calc	91	1.5
Hydroxide (as OH^-)	Calc	0	0
Sulfide (Total)	n/a	*Test not run*	Test not run

Other

	Dilution Factor		
Hydrogen Sulfide (H_2S)	Calc	0.5	mg/L
Turbidity	1	38	NTU's
Total Hardness	1,000.0	19,890.00	mg/L $CaCO_3$
Oxidation/Reduction Potential (ORP)		-18	millivolts
Temperature		77	Fahrenheit
Stiff & Davis Scaling Index (S&DSI)		-1.38	
Langelier Scaling Index (LSI)		-0.23	
Larson-Skold Index		2210.31	
Skillman Index		1.251	
Barite Saturation Index		1.65	
Gypsum Saturation Index		0.13	

	Dilution Factor		
ATP (picograms/mL)	Calc	*Test not run*	
Dissolved CO_2 (ppm)	Calc	210	
pH	n/a	5.93	
Total Alkalinity	1	148	mg/L $CaCO_3$
Total Dissolved Solids (TDS)	Calc	148,200	mg/L
Electrical Conductivity	Calc	193,400	uS/cm
Electrical Resistivity	Calc	5.2	Ohm*cm
Manganese/Iron Ratio		*Test Not Run*	
Specific Gravity		1.1030	

Comments

Bone Spring

Water Lens

Powered by: Water Lens™

Sample Information

Date of Sample Analysis:	2021/07/06	Technician Name:	vfuentes
Date Sample was Taken:	07/01/2021	Sample Name:	Chicharran 12 Fed SWD#1
Analysis Performed by:	EPD	API Well Number:	
Client:	Mewbourne Oil Company	Well Name:	Produced Water
Reader Number:		Test Number:	Normandy 31/32 W0LI Fed Com #1H
Water Lens Batch Number:	841		

Metals

	Dilution Factor	mg/L	meq/L
Barium	1	11	0
Calcium	Calc	5440	271.4
Iron II (Fe^{2+})	100	53.10	1.90
Iron III (Fe^{3+})	Calc	Less than 3	Less than 0.16
Total Dissolved Iron	100	53.10	2.85
Magnesium	1,000	861.00	70.80
Sodium	Calc	47000	2040
Strontium	n/a	*Test Not Run*	-
Manganese	n/a	*Test Not Run*	-
Boron		*Test Not Run*	-
Potassium	100	909	23.2

Anions

	Dilution Factor	mg/L	meq/L
Chloride	100	84,530	2,384
Sulfate	10	810	17
Nitrate	n/a	*Test Not Run*	-
Phosphate	100	36.97	1.17
Unfiltered Phosphate	n/a	*Test not run*	*Test not run*
Filtered Phosphate	n/a	*Test not run*	*Test not run*
Delta Phosphate		*Test Not Run*	-
Carbonate (as CO_3^{2-})	Calc	-	-
Bicarbonate (as HCO_3^-)	Calc	39	0.6
Acetates/Formates (as Acetate)	Calc	32	0.5
Hydroxide (as OH^-)	Calc	0	0
Sulfide (Total)	n/a	*Test not run*	Test not run

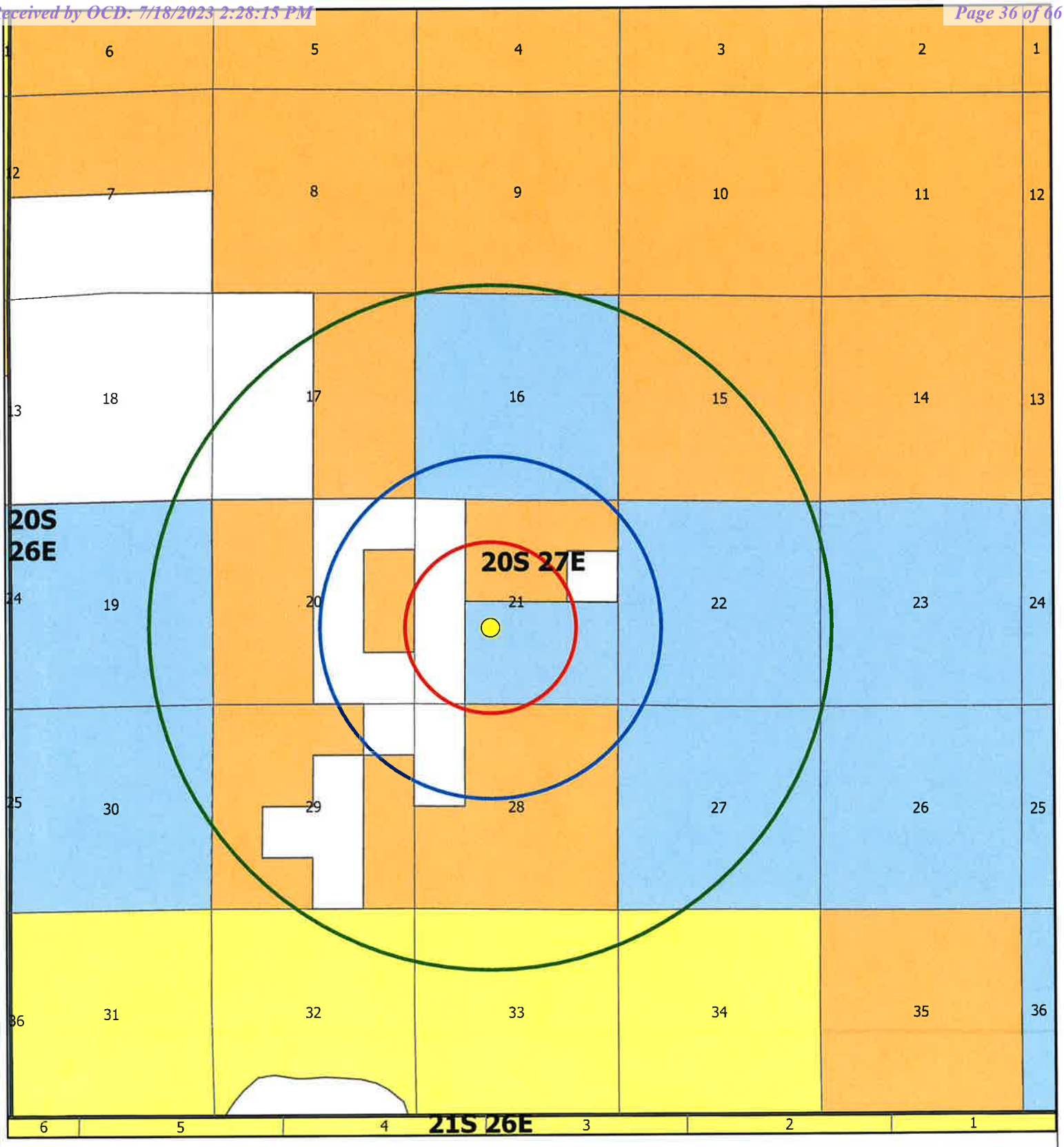
Other

	Dilution Factor		
Hydrogen Sulfide (H_2S)	Calc	0.5	mg/L
Turbidity	1	104	NTU's
Total Hardness	1,000.0	17,140.00	mg/L $CaCO_3$
Oxidation/Reduction Potential (ORP)		-8	millivolts
Temperature		77	Fahrenheit
Stiff & Davis Scaling Index (S&DSI)		-1.72	
Langelier Scaling Index (LSI)		-0.54	
Larson-Skold Index		4579.95	
Skillman Index		1.251	
Barite Saturation Index		1.80	
Gypsum Saturation Index		0.18	

	Dilution Factor		
ATP (picograms/mL)	Calc	*Test not run*	
Dissolved CO_2 (ppm)	Calc	160	
pH	n/a	6.02	
Total Alkalinity	1	59	mg/L $CaCO_3$
Total Dissolved Solids (TDS)	Calc	139,700	mg/L
Electrical Conductivity	Calc	182,800	uS/cm
Electrical Resistivity	Calc	5.5	Ohm*cm
Manganese/Iron Ratio		*Test Not Run*	
Specific Gravity		1.0970	

Comments

Wolfcamp



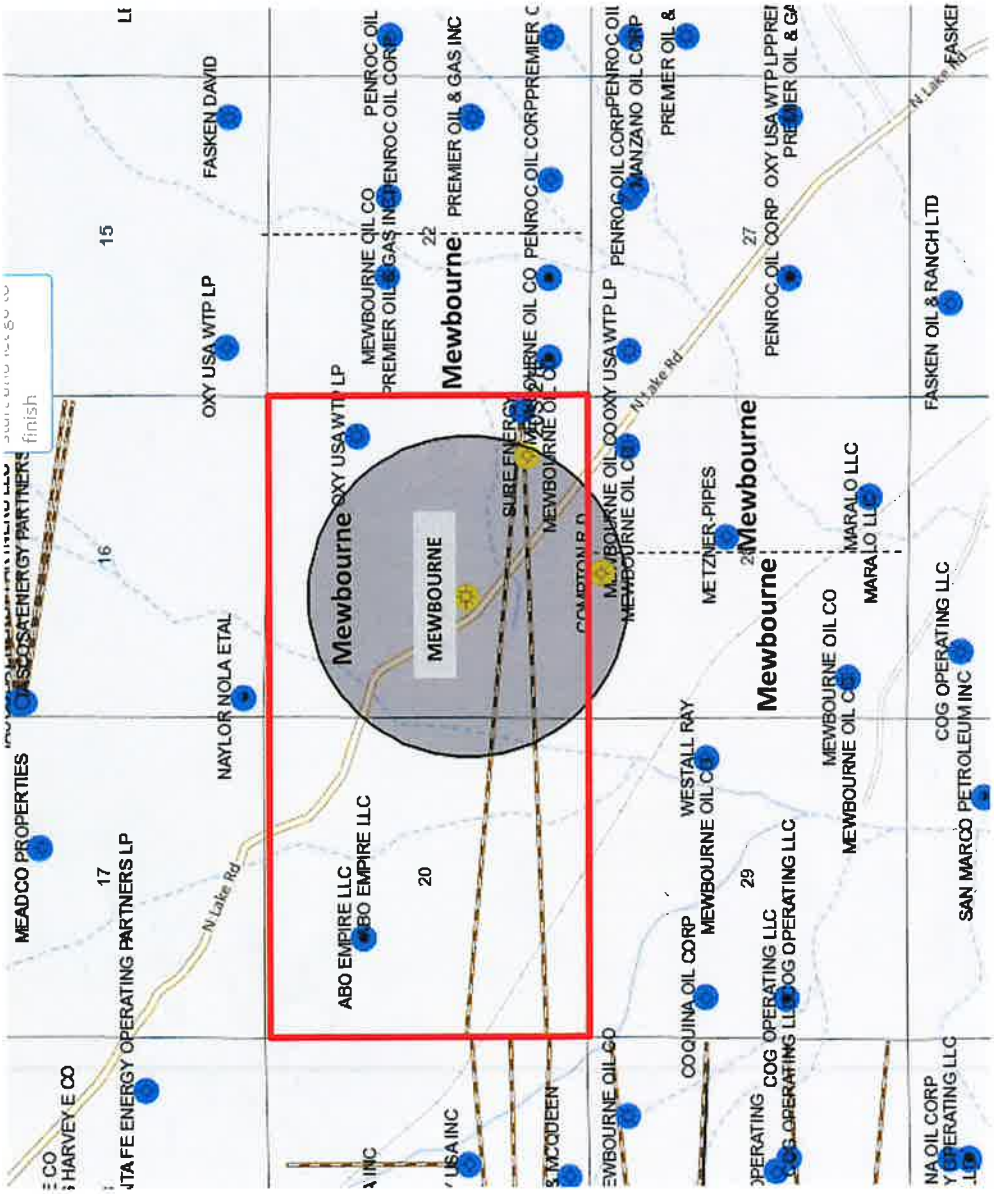
MEWBOURNE OIL COMPANY

Mewbourne Oil Company

WINE MIXER 21 STATE SWD #1
SURFACE OWNERSHIP
SEC. 21, 20S-27E
EDDY, NEW MEXICO

Author:		Date:
sd		27 October, 2022

WINE MIXER 21 STATE SWD #1 - OFFSET OPERATOR MAP (1/2 Mile AOR)



Outline of Sec 20-21 JOA (all depths) (Mewbourne Operator)

Listing of Notified Persons

Wine Mixer 21 State SWD #1 Application
1980' FSL & 1980' FWL
Section 21, T20S, R27E, Eddy County, NM

Surface Owner

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM

Other State or Federal Surface Owners within 1-Mile

Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

Offsetting Operators Or Leasehold Owners Within 1/2 Mile

Sections 20-21 Joint Operating Agreement

Mewbourne Oil Company (Operator)
P.O. 7698
Tyler, TX 75711

Pride Energy Company
4641 E 91st St
Tulsa, OK 74137

Section 28, 20S, 27E

Mewbourne Oil Company (Operator)
P.O. 7698
Tyler, TX 75711

Affidavit of Publication

No. 26545

State of New Mexico

County of Eddy:

Danny Scott

being duly sworn sayes that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	May 25, 2023
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	

Subscribed and sworn before me this

25th day of May 2023

LATISHA ROMINE
Notary Public, State of New Mexico
Commission No. 1076338
My Commission Expires
05-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

Legal Notice

Mewbourne Oil Company has filed a form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to complete the Wine Mixer 21 State SWD #1 as a salt water disposal well.

The Wine Mixer 21 State SWD #1 is located 1980' FSL and 1980' FWL, Unit Letter K, Section 21, Township 20 South, Range 27 East, NMPM, Eddy County, New Mexico. The well will dispose of water produced from nearby operated oil and gas wells into the Cisco formation through a perforated interval from a depth of 8,880 feet to 9,025 feet. Expected maximum injection rates are 16,000 BWPD at a maximum injection pressure of 1,776 psi.

Interested parties 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. The name and address of the contact party for the applicant is Tim Harrington, Mewbourne Oil Company, 3620 Old Bullard Road, Tyler, Texas 75701, (903)-534-7647. The well is located approximately 10 miles Northwest of Carlsbad, New Mexico.

Published in the Artesia Daily Press, Artesia, N.M., May 25, 2023 Legal No. 26545.

MEWBOURNE
OIL COMPANY

May 30, 2023

Engineering and Geological Services Bureau, Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
Attn: Mr. Phillip Goetze

Re: Wine Mixer 21 State SWD #1
API: 30-015-31551
Sec 21, Twp 20S, Rge 27E
Eddy County, NM

Mr. Goetze,

In accordance with item XII on Mewbourne Oil Company's C-108 filed for the captioned salt water disposal well, Mewbourne Oil Company has examined geologic and engineering data and has found that there is no evidence of faulting or any other hydrologic connection between the proposed disposal zone and any underground sources of drinking water.

Should you have any questions, please email me at tharrington@mewbourne.com or call me at (903) 534-7647.

Sincerely yours,

MEWBOURNE OIL COMPANY

Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023

STATEMENT REGARDING SEISMICITY

The proposed Wine Mixer 21 State SWD is located within the 6–10-mile radius envelope of the Dagger Draw Category 1 Seismicity Response Area (2 earthquakes of M 2.0 -3.0 within 10 miles of each other) and approximately 1 mile outside the Dagger Draw Category 2 (M> 3.0 < 3.5) Seismicity Response Area. This Category 1 SRA requires that all operators of all SWD wells, within the 10 mile SRA, to submit weekly injection volumes and pressures, and there are no associated required rate reduction requirements.

Mewbourne is a subscriber to the Nanometrics WTX Array and the table below compares the depth and magnitude of the earthquakes compared to USGS and New Mexico Tech interpretations. The USGS depth interpretation of the 4/2/22 earthquake appears to be an outlier as the average of the NMT and Nanometrics interpretations is around 15,392', which would place the epicenter in the Basement.

WINE MIXER 21 STATE #1 SWD APPLICATION
TABULATION OF NEARBY EARTHQUAKES
4/17/2023

USGS

EQ DATE	MAGNITUDE	DEPTH (km)	DEPTH (mi)	DEPTH (ft)
3/25/2022	2.60	5.00	3.11	16,421
4/2/2022	2.80	1.80	1.12	5,914
5/15/2022	3.20	2.30	1.43	7,550

NANOMETRICS

EQ DATE	MAGNITUDE	DEPTH (km)	DEPTH (mi)	DEPTH ft)
3/25/2022	2.71	4.51	2.80	14,784
4/2/2022	2.85	4.38	2.72	14,362
5/15/2022	3.20	4.10	2.55	13,464

NMT

EQ DATE	MAGNITUDE	DEPTH (km)	DEPTH (mi)	DEPTH ft)
3/25/2022	2.69	5.00	3.11	16,421
4/2/2022	2.90	5.00	3.11	16,421
5/15/2022	2.48	5.00	3.11	16,421

NOTE: the estimated depth of the top of the Devonian is 11,626' in the Wine Mixer 21 SWD

Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023

Our proposed SWD is located approximately 7.25 miles outside the boundary of the newly designated McKittrick Seismicity Response Area, and around 15 miles northeast of the triggering earthquake, a M 3.4 earthquake on 4/18/23. The depth of the three recent earthquakes within this SRA also appears to be in the basement.

MCKITTRICK SEISMICITY RESPONSE AREA

DATE	USGS MAG	USGS DEPTH (KM)	USGS DEPTH (MI)	USGS DEPTH (FT)
4/18/2023	3.4	5	3.11	16,405
4/18/2023	2.6	5	3.11	16,405
4/24/2023	2.5	11	6.96	36,747

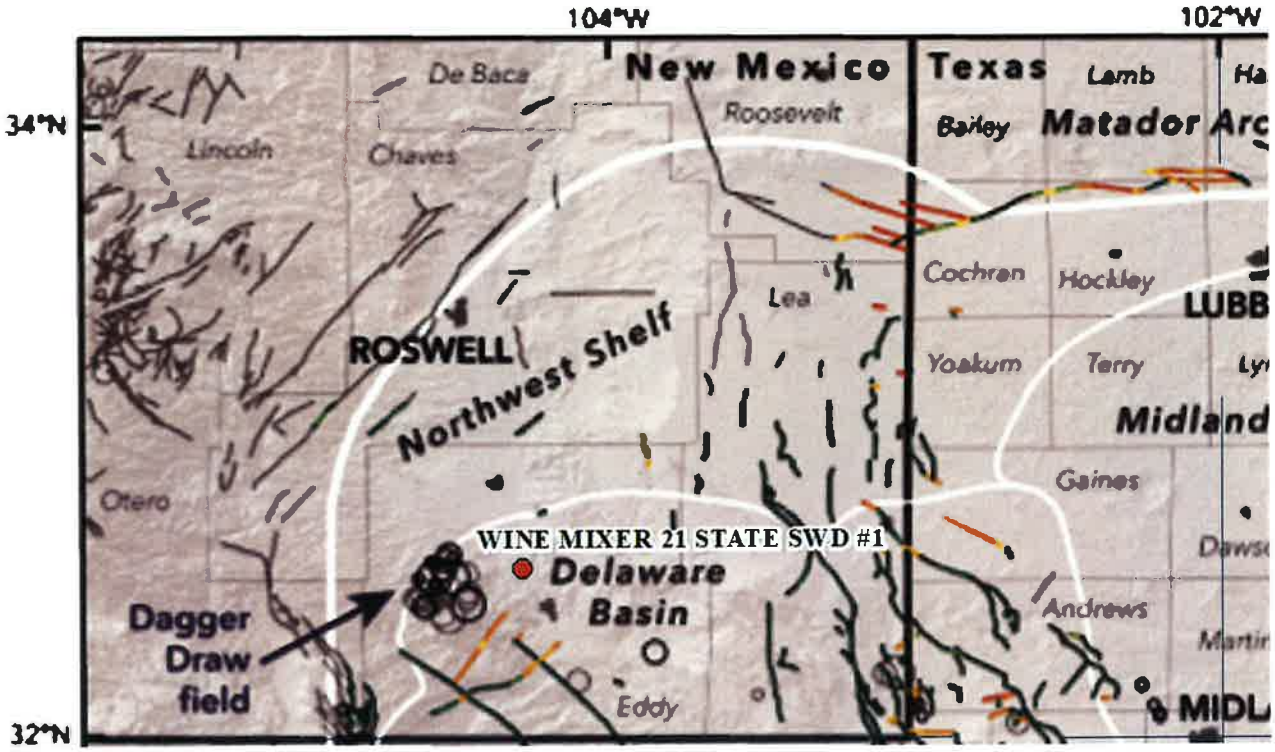
Mewbourne Oil Company does not believe that the injection of produced water into the Cisco Formation, at the proposed location, will have any impact on seismicity in the area. The depth of our injection zone is significantly shallower (8,944' vs > 14,000') than the depths of the recent earthquakes and there are no known faults that would connect the Cisco to the Basement. The closest known mapped "deep" fault, which is documented in public data, is approximately nine and one-half miles southwest of our proposed SWD.

Mewbourne Oil Company operates the Zebra FF SWD (SWD-869, S 7, Twp 21S, Rge 25E – approx. 9.7 miles to SW) that is completed in the Cisco formation, and also lies on the east side of the Reef. A static bottom-hole pressure was captured in this well in June 2022 (2246 Psig @ 8279',0.271 Psi/ft gradient) and the reservoir exhibited significant pressure depletion that is due to the significant amounts of oil, gas and water produced from this reservoir to the south and the northwest. A Cisco Reef isopach map has been attached to this application and it will take a significant amount of injection to re-fill this reservoir due to the areal extent and thickness. Mewbourne intends to obtain a static bottom-hole pressure in the Wine Mixer 21 SWD.

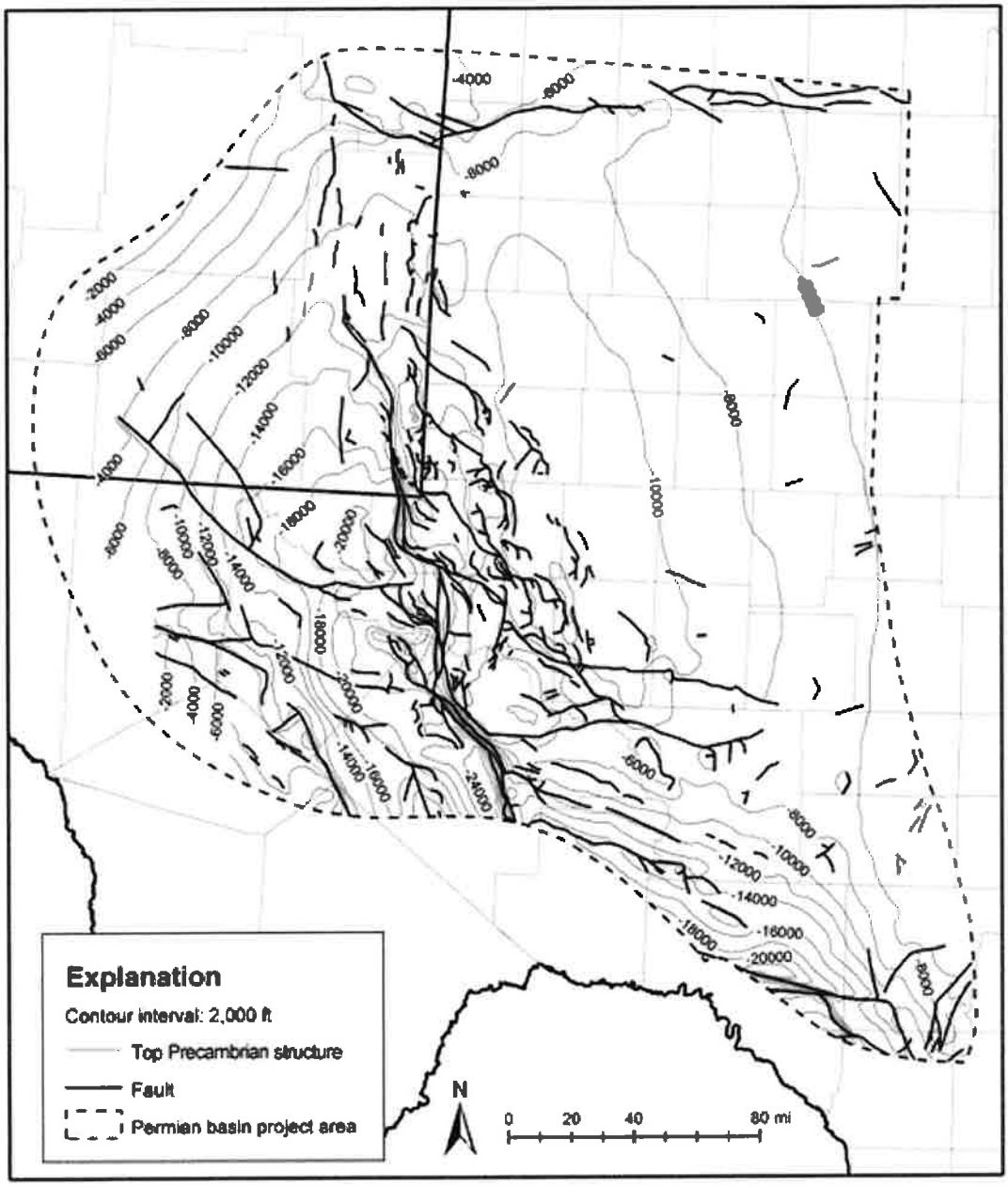
Timothy R. Harrington

Reservoir Engineer
tharrington@mewbourne.com
903-534-7647

Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023



Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023



Precambrian Structure Map In the Permian Basin (Ruppel etal.)

Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023

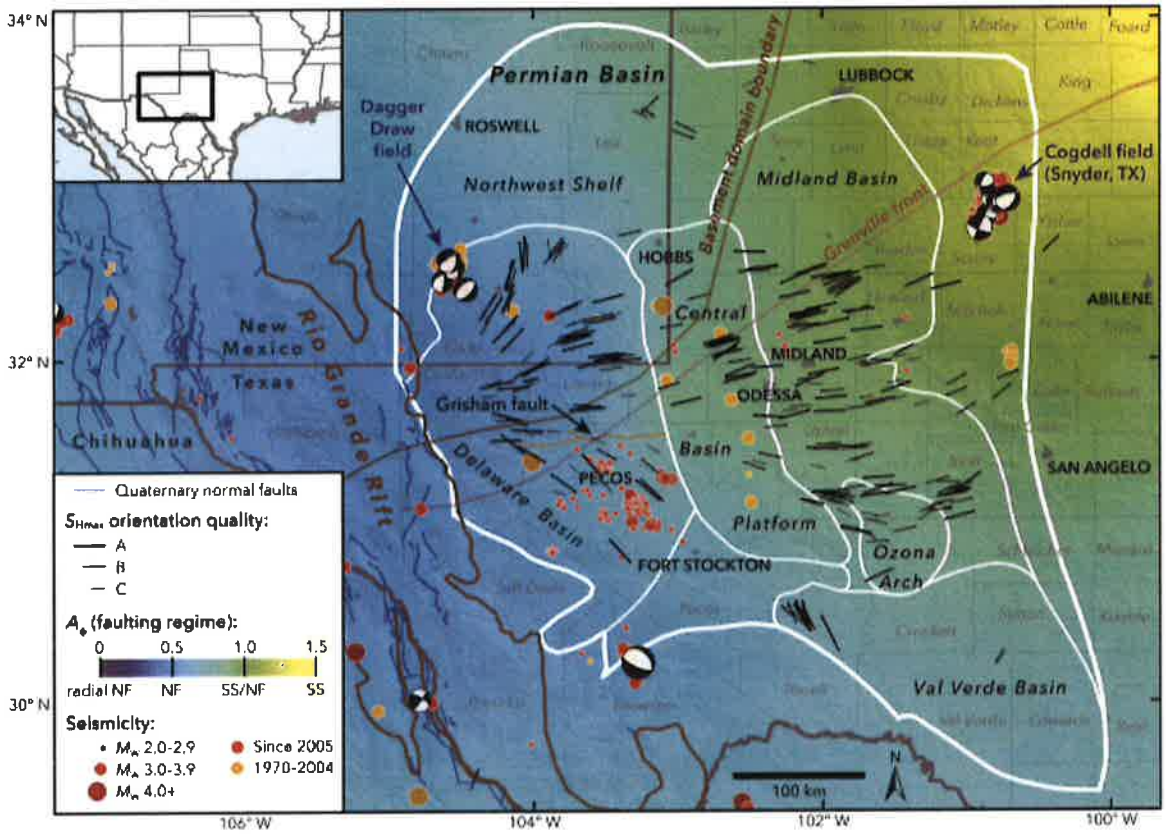


Figure 1. State of stress in the Permian Basin, Texas and New Mexico. Black lines are the measured orientations of S_{Hmax} with line length scaled by data quality. The colored background is an interpolation of measured relative principal stress magnitudes (faulting regime) expressed using the A_ϕ parameter (see text for details) of Simpson (1997). Blue lines are fault traces known to have experienced normal-sense offset within the past 1.6 Ma, from the USGS Quaternary Faults and Folds Database (Crone and Wheeler, 2000). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015), and the Precambrian Grenville Front is from Thomas (2006). The Permian Basin boundary is from the U.S. Energy Information Administration, and the subbasin boundaries are from the Texas Bureau of Economic Geology Permian Basin Geological Synthesis Project. Earthquakes are from the USGS National Earthquake Information Center, the TexNet Seismic Monitoring Program, and Gan and Frohlich (2013). Focal mechanisms are from Saint Louis University (Herrmann et al., 2011).

Mewbourne Oil Company
Wine Mixer 21 State SWD #1
C-108 Attachment
May 30, 2023

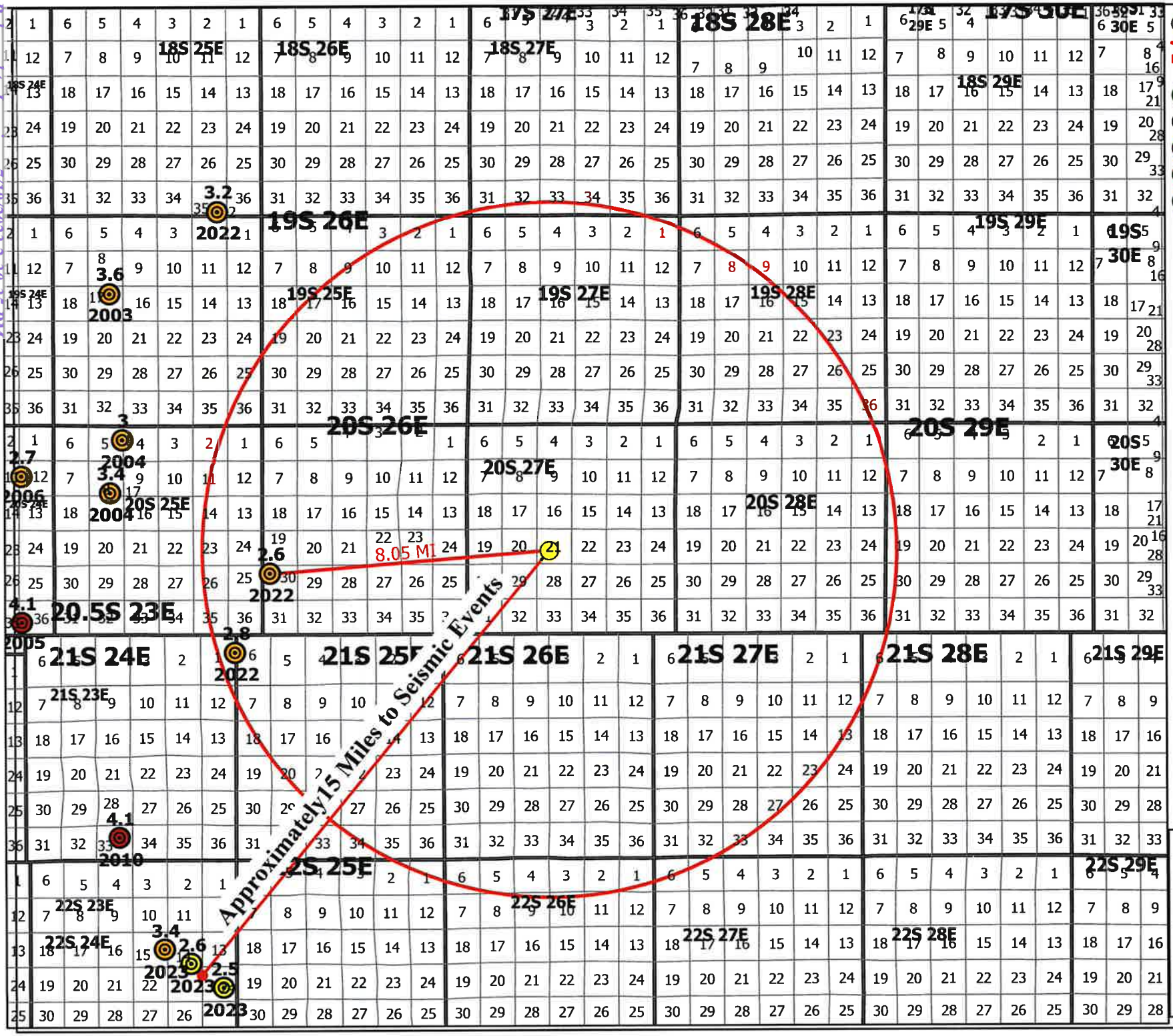
References

Ewing, T.E., R.T. Budnik, J.T. Ames, and D.M. Ridner, 1990, Tectonic Map of Texas: Bureau of Economic Geology, University of Texas at Austin.

Green, G.N., and G.E. Jones, 1997, The digital geologic map of New Mexico in ARC/INFO format: U.S. Geological Survey Open-File Report.

Jens-Erik Lund Snee and Mark D. Zoback, 2018, State of stress in the Permian Basin, Texas, and New Mexico: Implications for induced seismicity: The Leading Edge, February 2018.

Ruppel, S.C., R.H. Jones, C.L. Breton, and J.A. Kane, 2005 Preparation of maps depicting geothermal gradient and Precambrian structure in the Permian Basin: Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, Austin, TX.



WINE MIXER 21 SWD #1
Wine Mixer 21 SWD Distance
Wine Mixer 21 SWD 10 Mile Buffer
Magclass
1.0 - 1.9
2.0 - 2.9
3.0 - 3.9
4.0 - 4.9
5.0 - 5.9

MAG

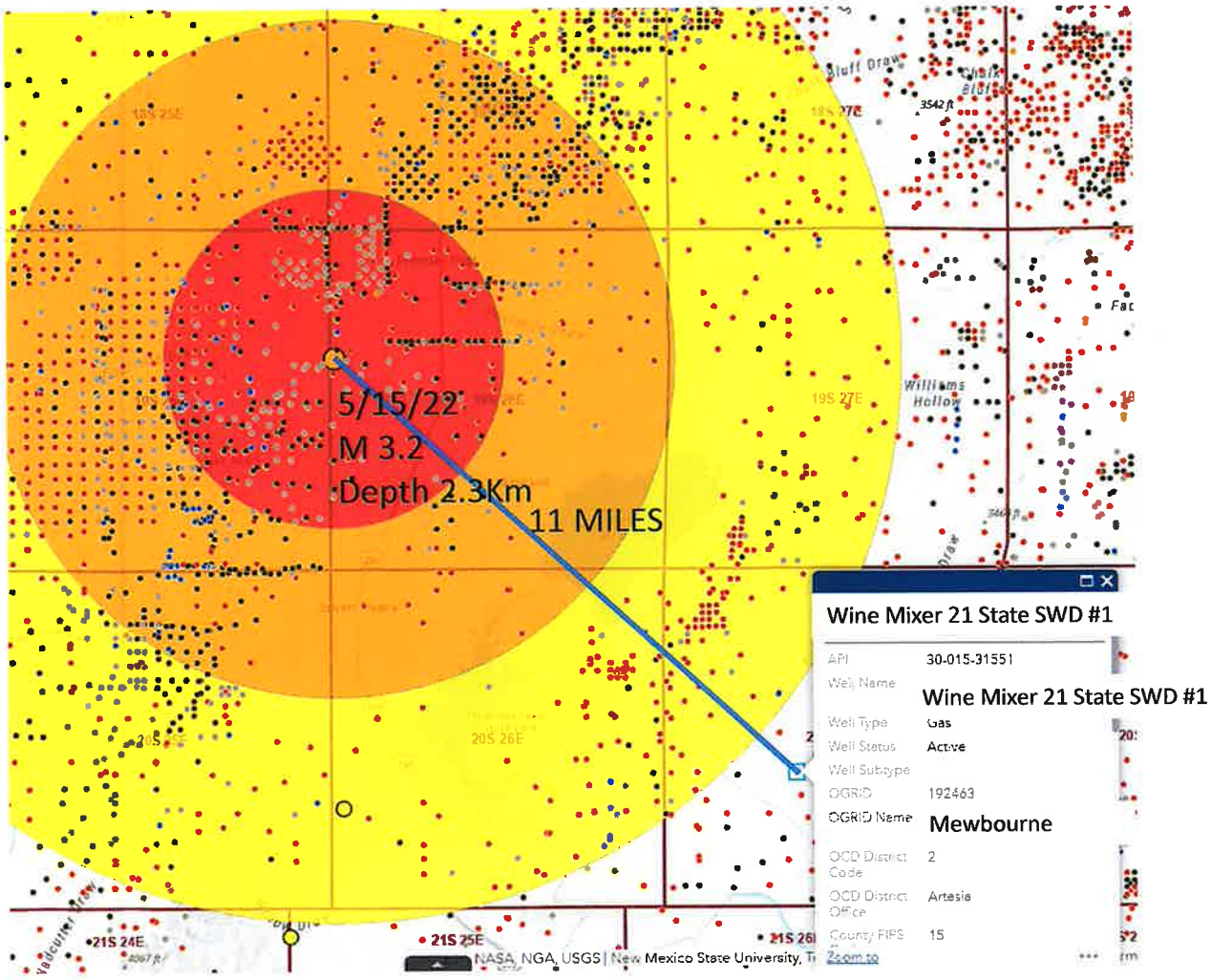
YEAR

MEWBOURNE OIL COMPANY

Wine Mixer 21 SWD Application USGS Map

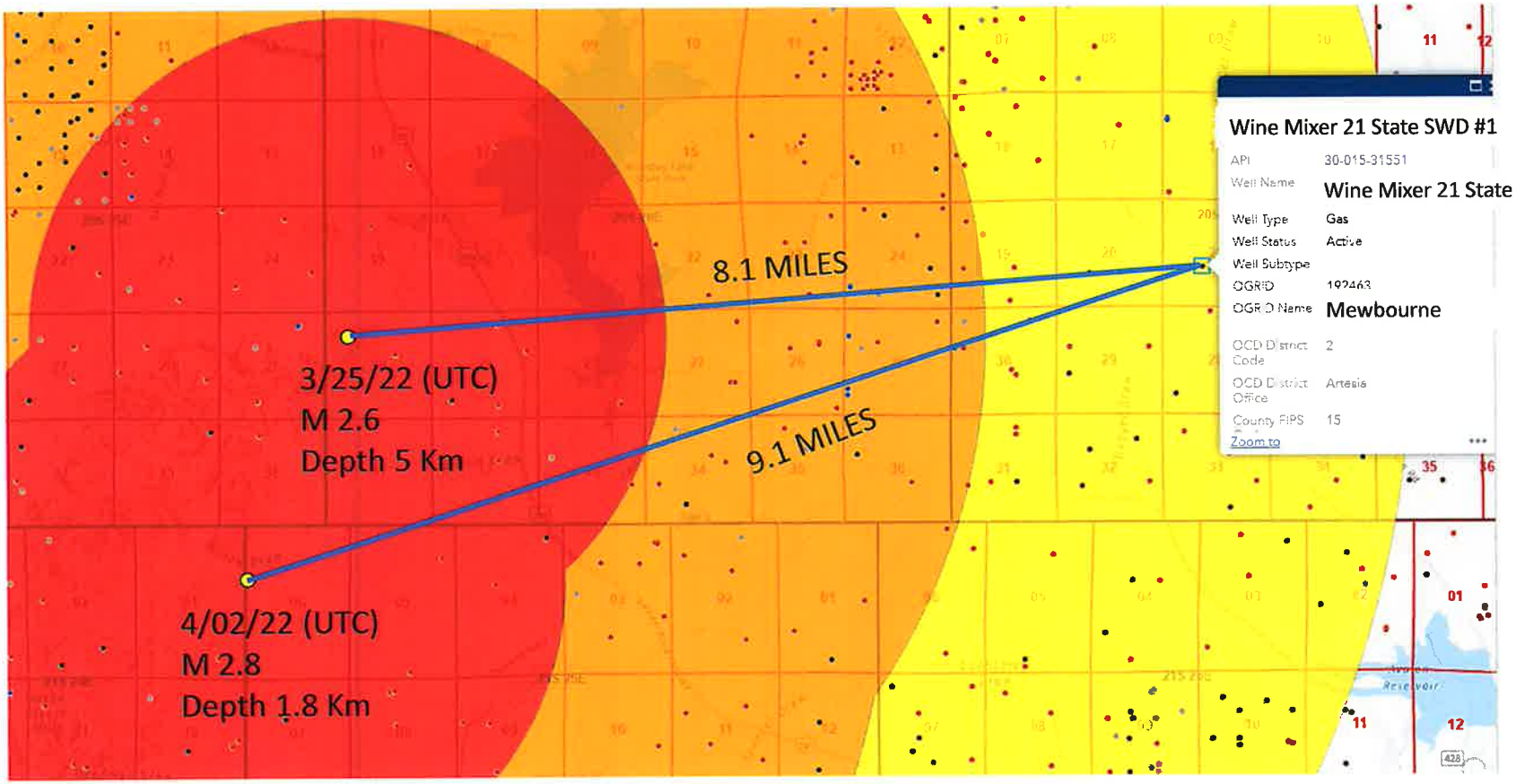
Scale: 1:278,266

WINE MIXER 21 STATE SWD #1 – DAGGER DRAW CATEGORY 2 SRA (M3.0+ Event)



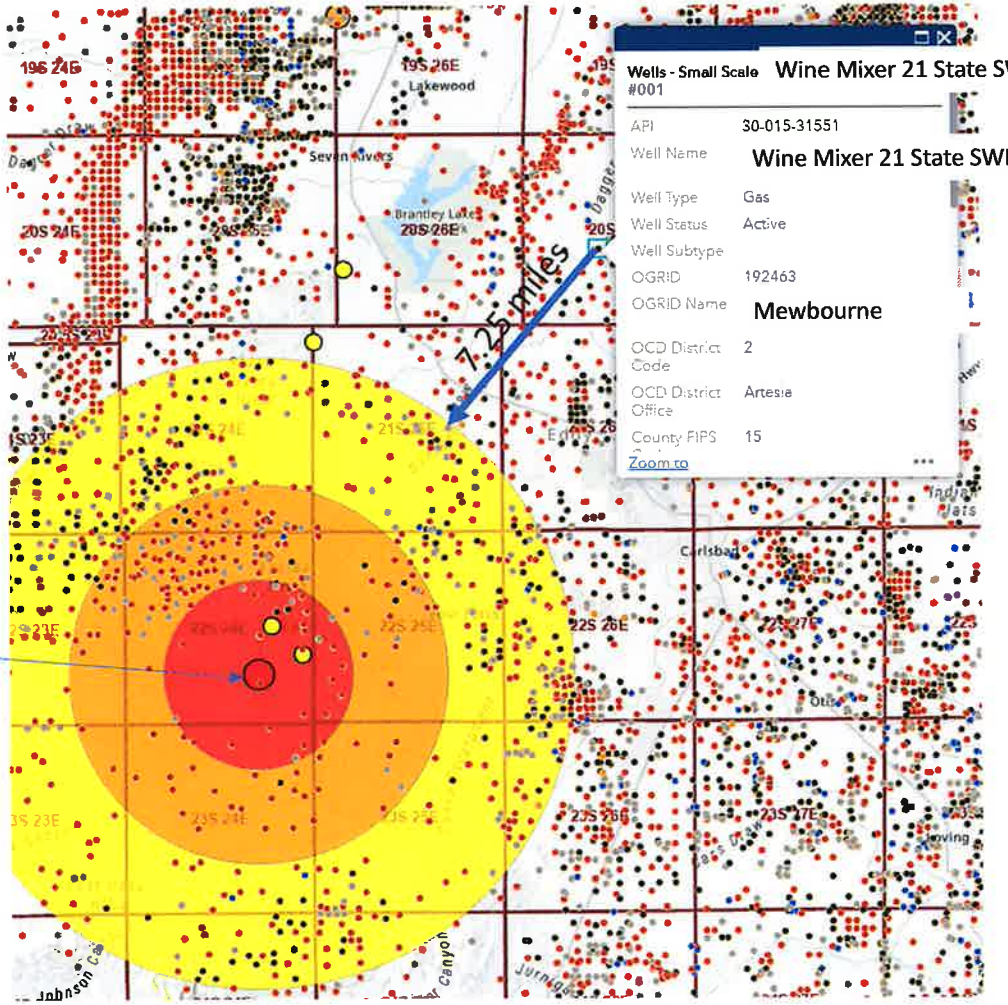
Note: Source of map NMOCD Oil and Gas Map

WINE MIXER 21 STATE SWD #1 – DAGGER DRAW CATEGORY 1 SRA



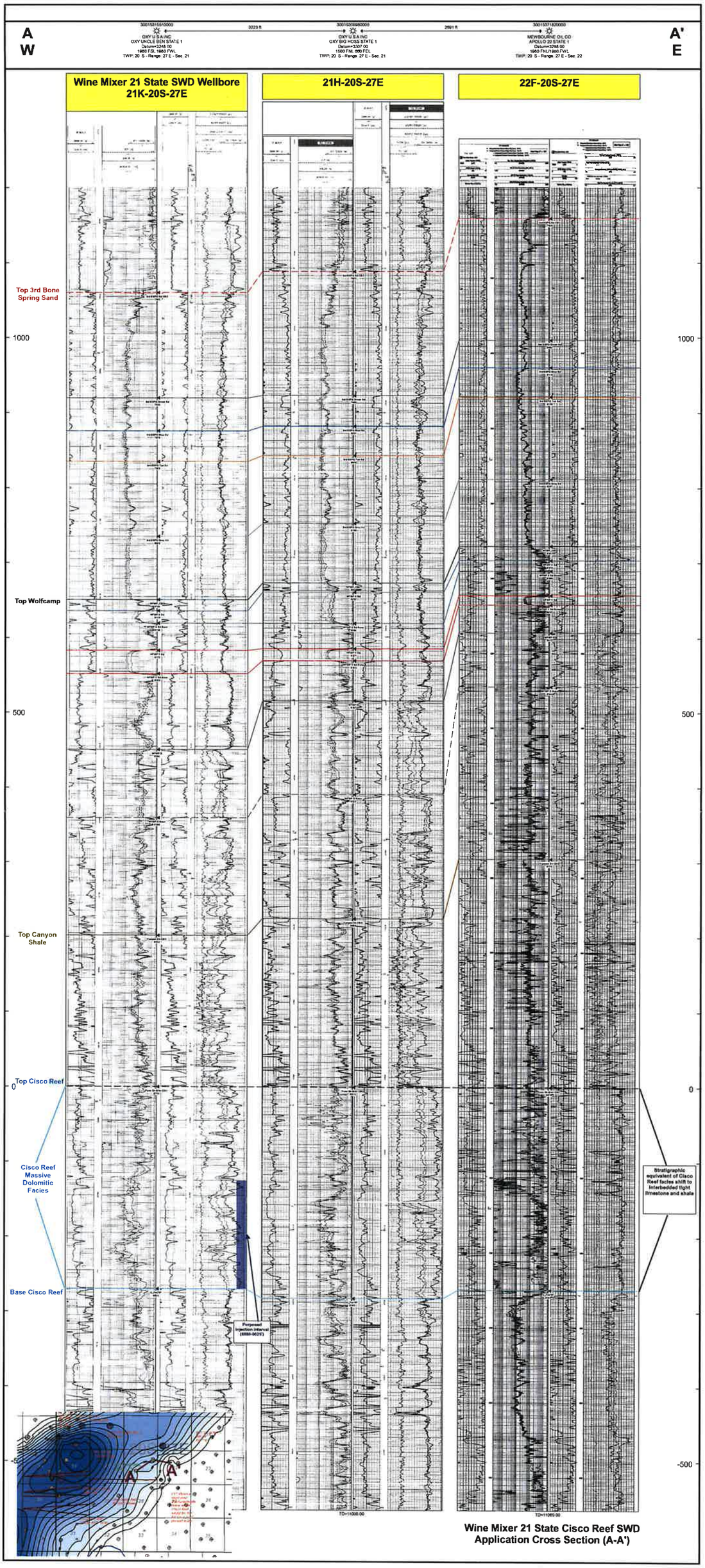
Note: Source of Map New Mexico Oil Conservation Division

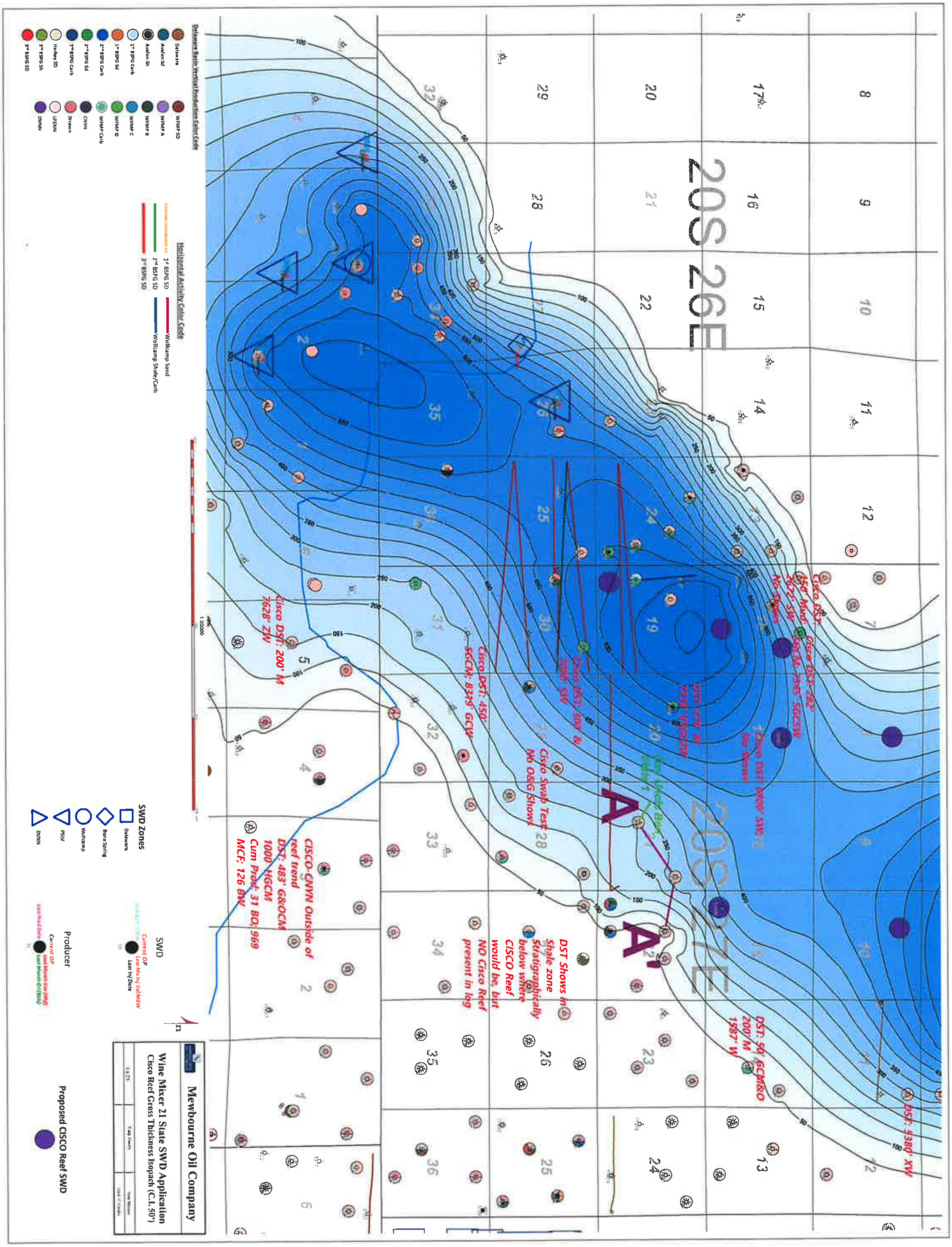
WINE MIXER 21 STATE SWD #1 – MCKITTRICK CATEGORY 2 SRA (M < 3.5 Event)



4/18/2023
M 3.4
Depth 5 Km
Per USGS Website

Note: Source of map NMOCD Oil and Gas Map



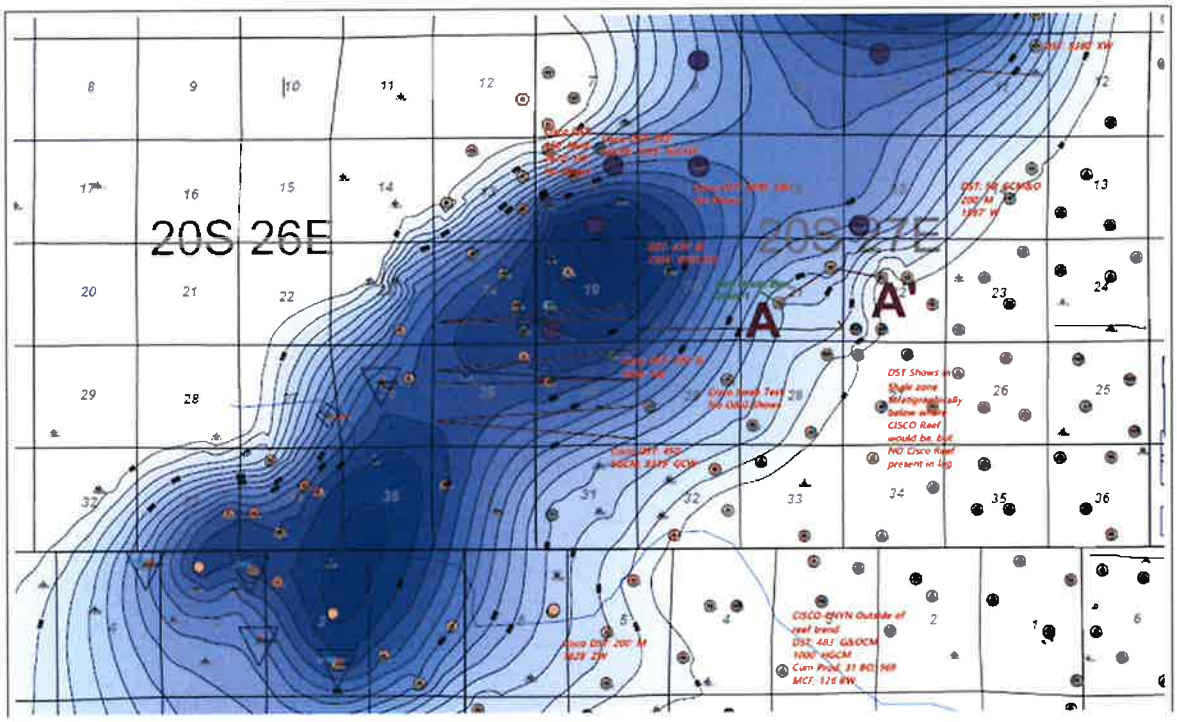

Mewbourne Oil Company
Wine Mixer 21 State SWD Application
Cisco Reef Gross Thickness Isopach (C.I. 50')
20S 26E
20S 27E
A
A'
Cisco DST: 150' Mud; 2672' SW No Shows
Cisco DST: 282' SGCM; 7545' SGCSW
Cisco DST: 6900' SW; No Shows
DST: 50' GCM&O 200' M 1587' W
DST: 5380' XW
DST: 470' M 7238' VSGCZW
Cisco DST: 300' & 2000' SW
Cisco Swab Test No O&G Shows
DST Shows in Shale zone Stratigraphically below where CISCO Reef would be, but NO Cisco Reef present in log
Cisco DST: 450' SGCM; 8319' GCW
Cisco DST: 200' M 7628' ZW
CISCO-CNYN Outside of reef trend
DST: 483' G&OCM
1000' HGCM
Cum Prod: 31 BO; 969 MCF; 126 BW
Delaware Basin Vertical Production Color Code
Horizontal Activity Color Code
Wolfcamp Sand
Wolfcamp Shale/Carb
SWD Zones
Delaware
Bone Spring
Wolfcamp
PSLV
DVNN
SWD
Producer
Proposed CISCO Reef SWD

Wine Mixer 21 State SWD #1
Exhibits Attached to C-108 Application

Cisco Formation – Evidence to Support That Formation is Non-productive of Oil and Gas

The proposed Cisco injection interval is a thick and extensive Dolomitized Reef (**Figure #1**) that is non-productive at the location of our Wine Mixer 21 State SWD #1 (green lettering on map).

Figure #1:



Cisco Reef Isopach Map: CI = 50'

There is limited Cisco Reef production in the area (**Exhibit #2**) and the oil and gas trapping mechanism appears to a combination of stratigraphic / structural (**Exhibit #3**).

The DS 26 Federal #1 is the closest (4 miles West) Cisco producer to our proposed SWD. This well produced a cumulative of 39,853 Mscf and 335,740 bbls of water during 1997-98. This well was clearly a non-commercial gas well as the peak gas rate was around 220 Mscfd with around 2700 bwpd. **Exhibit #5** is a rate vs time production graph for this well. The top of the Cisco Reef in our proposed SWD is 625' structurally lower than this producer.

Please note the location of current and former Cisco Reef SWD wells in the area (**Exhibit 3**).

See **Exhibit #4** for production statistics details for the other Cisco Reef producers in the area. Please note the significant amount of water produced from some of these wells. Most of the wells were completed in the very top of the Reef to reduce water production.

Exhibit #2:

Cisco / Penn Producers

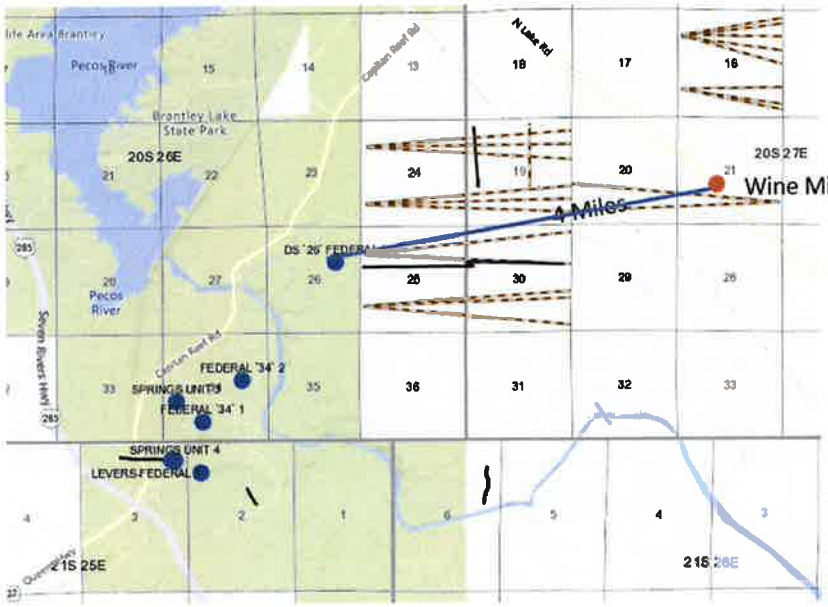
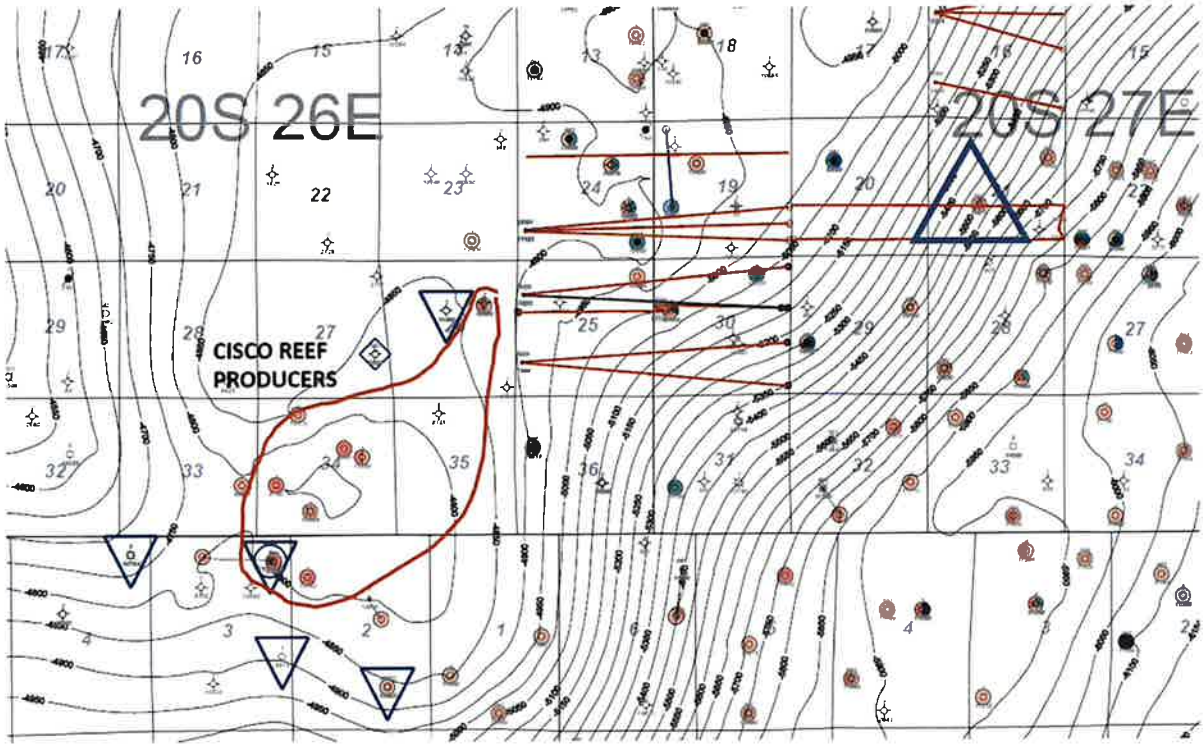


Exhibit #3:



Cisco / Penn SWD wells

Wine Mixer 21 State SWD #1

Mewbourne Oil Company		
NW Carlsbad CISCO Reef Trend Top CISCO Reef Structure (C.I. 50') SWD Activity Base Map		
5/23/23	Eddy County	New Mexico
		Geol. C. Crosby

Exhibit #4:

API	Lease Name	Well Num	Current Operator	Cum Oil	Cum Gas	Cum Wtr	Sec	Twp	Rge	Footage	Status	IP Prod Form Name	Comp Date
30015282570001	DS '26' FEDERAL	1	MARALO LLC		39,853	335,740	26	20S	26E	1783 FNL 1259 FEL	PLUG 1999	CISCO	1997-06-13
30015108790000	SPRINGS UNIT	1	GULF OIL CORP	202,612	6,757,470		34	20S	26E	1980 FNL 1980 FEL	PLUG 1974	PENNSYLVANIAN	1966-12-10
30015200450000	SPRINGS UNIT	3	GULF OIL CORP	158,459	4,249,307	-	34	20S	26E	1980 FSL 660 FWL	PLUG 1974	PENNSYLVANIAN UPPER	1967-07-06
30015227380001	FEDERAL '34'	1	ARRINGTON DAVID	48,320	5,751,464	28,260,780	34	20S	26E	560 FSL 1980 FWL	SI	PENNSYLVANIAN VIRGILIAN	1981-08-11
30015233630000	FEDERAL '34'	2	CONOCO INC	15,447	724,780	2,658,381	34	20S	26E	2310 FNL 1290 FEL	PLUG 1988	PENNSYLVANIAN VIRGILIAN	1982-08-13
30015201740000	LEVERS-FEDERAL	1	DEVON ENERGY	243,856	10,435,826	22,110,619	2	21S	25E	1594 FNL 660 FWL	PLUG 2011	CISCO / CANYON	1968-12-19
30015202940000	SPRINGS UNIT	4	SHENANDOAH OIL CORP	44,783	1,448,851	-	3	21S	25E	1000 FNL 660 FEL	PLUG 1974	PENNSYLVANIAN UPPER	1970-06-08
30015328150000	DRY LAND SHINER FED	001	COG OPERATING LLC	431	926,870	9,620,352	3	21S	25E	940 FNL 660 FEL	PLUG 2022	CISCO	2004-04-07
30015339310001	DOUBLE TROUBLE FED COM	001	COG OPERATING LLC	322	569,956	1,924,071	3	21S	25E	940 FNL 791 FEL	PLUG 2019	CISCO	2005-08-03

Exhibit #5:

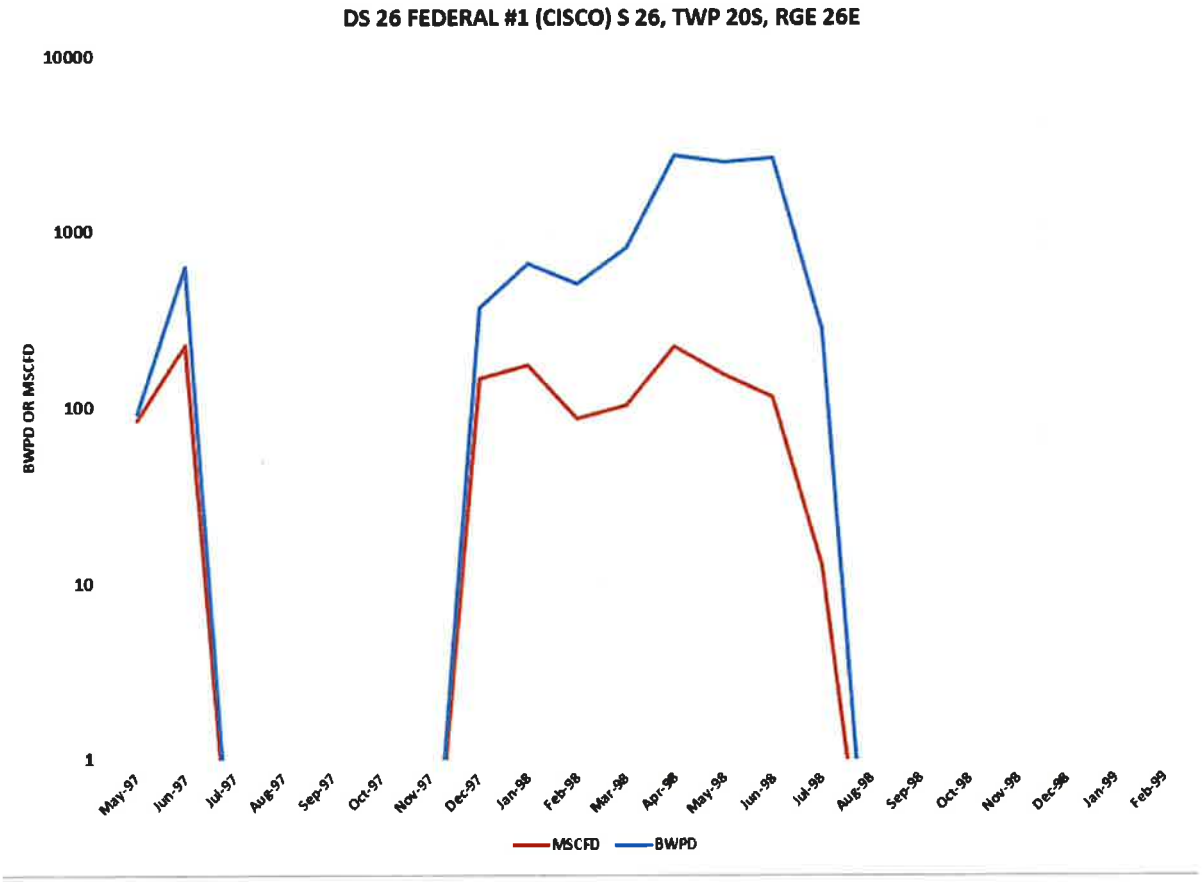
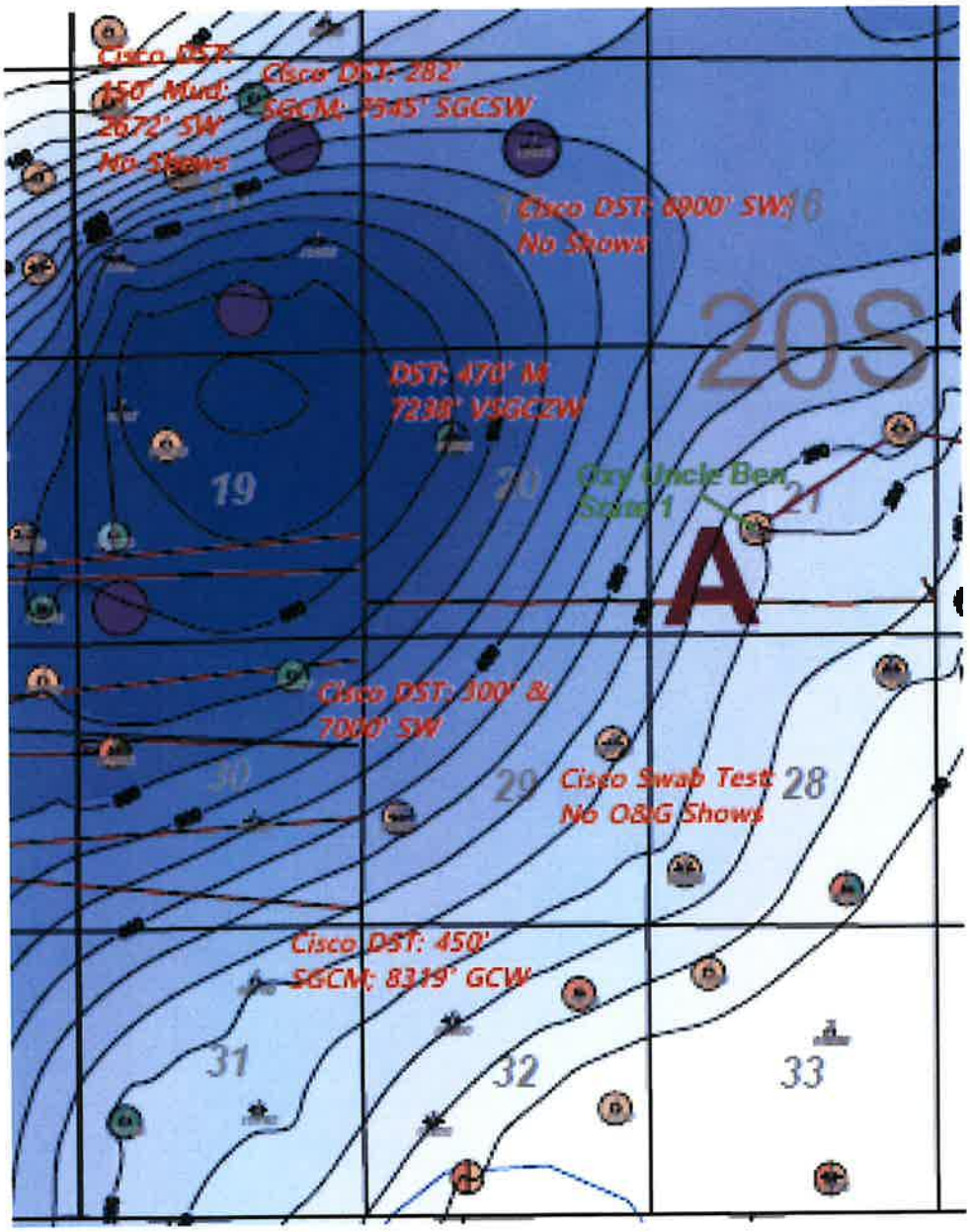


Exhibit #6 is a map that highlights several DST or perforation tests that confirm that the Cisco is non-productive near our proposed Wine Mixer 21 State SWD and the details of these DST's or perf tests are listed below:

- NE/4 Section 17: DST 8250- 8354', recovery 6,900' salt water. No shows.
- NW/4 Section 20: DST 8685-8750', recovery 470' mud & 7238' very slightly gas cut salt water.
- NE/4 Section 29: Perforate 8765-8804'. Test non-productive. Set CIBP
- NE/4 Section 30: DST 8265-8338', recovery 300' fluid, 7000' salt water

Exhibit #6:



Shipment Receipt May 30, 2023 1ZF698E80298127745

Where

Ship From
Mewbourne Oil Company, Kimberly Ripka
3901 South Broadway, Tyler, TX 75701
rmcdaniel@mewbourne.com, 903-561-2900

Ship To
Bureau of Land Management
620 East Greene Street, CARLSBAD, NM 88220

What

Package 1 - 1ZF698E80298127745

Weight
0.5 lbs

Dimensions
UPS Letter

Service Details - UPS 2nd Day Air

Estimated Delivery Thursday June 1, 2023 , End of Day

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1	
UPS 2nd Day Air	$24.66
Delivery Area Surcharge	$3.70
Fuel Surcharge	$3.97

Subtotals

Shipping Fees	$32.33
Combined Charges	$32.33
Contract Rate	$23.62

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.
Your invoice may vary from the displayed reference rates

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Note: This document is not an invoice.

All shipments are subject to the UPS Tariff/Terms and Conditions of Service ("UPS terms") in effect on the date of shipment, which are available at www.ups.com/terms. Pursuant to the UPS Terms, UPS's maximum liability for loss or damage to each domestic package or international shipment is limited to $100, unless the shipper declares a greater value in the declared value field of the UPS shipping system used and pays the applicable charge (in which case UPS's maximum liability is the declared value). Special terms apply to some services and articles. Please review the UPS Terms for liability limits, exclusions from liability, maximum declared values, prohibited items, and other important terms of service. The shipper agrees that in the absence of a greater declared value, $100 value is a reasonable limitation under the circumstances of the transportation. Claims not timely made (generally noticed within sixty days and filed within nine months, but filed within sixty days for international shipments) are deemed waived and will not be paid. See the UPS Terms for details. Under no circumstances will UPS be liable for any special, incidental, or consequential damages.

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80298127745

Weight

0.50 LBS

Service

UPS 2nd Day Air®

Shipped / Billed On

05/30/2023

Delivered On

06/01/2023 11:38 A.M.

Delivered To

620 E GREENE ST
CARLSBAD, NM, 88220, US

Received By

WILLIAMS

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 06/01/2023 3:31 P.M. EST

Shipment Receipt May 30, 2023 1ZF698E80198689739

Where

Ship From
Mewbourne Oil Company, Kimberly Ripka
3901 South Broadway, Tyler, TX 75701
rmcdaniel@mewbourne.com, 903-561-2900

Ship To
Pride Energy Company
4641 East 91st Street, TULSA, OK 74137

What

Package 1 - 1ZF698E80198689739

Weight
0.5 lbs

Dimensions
UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Wednesday May 31, 2023 , 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1	
UPS Next Day Air	$37.11
Fuel Surcharge	$5.20

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees	$42.31
Combined Charges	$42.31
Contract Rate	$28.77

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.
Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

All shipments are subject to the UPS Tariff/Terms and Conditions of Service ("UPS terms") in effect on the date of shipment, which are available at www.ups.com/terms. Pursuant to the UPS Terms, UPS's maximum liability for loss or damage to each domestic package or international shipment is limited to $100, unless the shipper declares a greater value in the declared value field of the UPS shipping system used and pays the applicable charge (in which case UPS's maximum liability is the declared value). Special terms apply to some services and articles. Please review the UPS Terms for liability limits, exclusions from liability, maximum declared values, prohibited items, and other important terms of service. The shipper agrees that in the absence of a greater declared value, $100 value is a reasonable limitation under the circumstances of the transportation. Claims not timely made (generally noticed within sixty days and filed within nine months, but filed within sixty days for international shipments) are deemed waived and will not be paid. See the UPS Terms for details. Under no circumstances will UPS be liable for any special, incidental, or consequential damages.

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number
1ZF698E80198689739

Weight
0.50 LBS

Service
UPS Next Day Air®

Shipped / Billed On
05/30/2023

Delivered On
05/31/2023 9:43 A.M.

Delivered To
4641 E 91ST ST
TULSA, OK, 74137, US

Received By
KANOLD

Left At
Front Desk

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 06/01/2023 11:07 A.M. EST

Shipment Receipt May 30, 2023 1ZF698E80799539950

Where

Ship From
Mewbourne Oil Company, Kimberly Ripka
3901 South Broadway, Tyler, TX 75701
rmcdaniel@mewbourne.com, 903-561-2900

Ship To
New Mexico State Land Office, Melissa Armijo
310 Old Santa Fe Trail, SANTA FE, NM 87501
505-827-5760

What

Package 1 - 1ZF698E80799539950

Weight
0.5 lbs

Dimensions
UPS Letter

Service Details - UPS 2nd Day Air Early

Estimated Delivery Thursday June 1, 2023 , End of Day

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1	
UPS 2nd Day Air Early	$30.28
Fuel Surcharge	$4.24

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees	$34.52
Combined Charges	$34.52
Contract Rate	$23.82

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.
Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

All shipments are subject to the UPS Tariff/Terms and Conditions of Service ("UPS terms") in effect on the date of shipment, which are available at www.ups.com/terms. Pursuant to the UPS Terms, UPS's maximum liability for loss or damage to each domestic package or international shipment is limited to $100, unless the shipper declares a greater value in the declared value field of the UPS shipping system used and pays the applicable charge (in which case UPS's maximum liability is the declared value). Special terms apply to some services and articles. Please review the UPS Terms for liability limits, exclusions from liability, maximum declared values, prohibited items, and other important terms of service. The shipper agrees that in the absence of a greater declared value, $100 value is a reasonable limitation under the circumstances of the transportation. Claims not timely made (generally noticed within sixty days and filed within nine months, but filed within sixty days for international shipments) are deemed waived and will not be paid. See the UPS Terms for details. Under no circumstances will UPS be liable for any special, incidental, or consequential damages.

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80799539950

Weight

0.50 LBS

Service

UPS 2nd Day Air A.M.®

Shipped / Billed On

05/30/2023

Delivered On

06/01/2023 10:10 A.M.

Delivered To

310 OLD SANTA FE TRL
SANTA FE, NM, 87501, US

Received By

SANCHEZ

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 06/01/2023 3:32 P.M. EST

From: Tim Harrington
To: Engineer, OCD, EMNRD; Goetze, Phillip, EMNRD
Subject: RE: [EXT] RE: [EXTERNAL] WINE MIXER 21 STATE SWD APPLICATION - RETURN RECEIPTS
Date: Monday, June 5, 2023 9:27:55 AM

221832

Thanks.

Tim Harrington
Reservoir Engineer
Mewbourne Oil Company
3620 Old Bullard Road
PO Box 7698
Tyler, TX 75701

W -903-534-7647
C - 832-217-6852
tharrington@mewbourne.com

From: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov> **On Behalf Of** Engineer, OCD, EMNRD
Sent: Monday, June 5, 2023 9:36 AM
To: Tim Harrington <tharrington@mewbourne.com>; Goetze, Phillip, EMNRD <phillip.goetze@emnrd.nm.gov>; Engineer, OCD, EMNRD <OCD.Engineer@emnrd.nm.gov>
Subject: [EXT] RE: [EXTERNAL] WINE MIXER 21 STATE SWD APPLICATION - RETURN RECEIPTS

Tim Harrington,

What is the Action ID associated with the referenced application?

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

From: Tim Harrington <tharrington@mewbourne.com>
Sent: Thursday, June 1, 2023 1:41 PM
To: Goetze, Phillip, EMNRD <phillip.goetze@emnrd.nm.gov>; Engineer, OCD, EMNRD <OCD.Engineer@emnrd.nm.gov>
Subject: [EXTERNAL] WINE MIXER 21 STATE SWD APPLICATION - RETURN RECEIPTS

Attached are return receipts for our recently submitted Wine Mixer 21 State SWD application.

Thank you.

Tim Harrington
Reservoir Engineer
Mewbourne Oil Company
3620 Old Bullard Road
PO Box 7698
Tyler, TX 75701

W -903-534-7647
C - 832-217-6852
tharrington@mewbourne.com

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 241639

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 241639
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	7/18/2023