

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - 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

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A] - SWD
 [A] Location - Spacing Unit - Simultaneous Dedication - Mewbourne Oil Company
 NSL NSP SD 14744
 Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement Well
 DHC CTB PLC PC OLS OLM - Flow in Draw
2 SWD #1
 [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery 30-015-23615
 WFX PMX SWD IPI EOR PPR
 [D] Other: Specify Pod
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply - SWD, Devonian
 [A] Working, Royalty or Overriding Royalty Interest Owners Montoya
 [B] Offset Operators, Leaseholders or Surface Owner 97803
 [C] Application is One Which Requires Published Legal Notice Devonian
Silurian
97869
 [D] Notification and/or Concurrent Approval by BLM or SLO I
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] For all of the above, Proof of Notification or Publication is Attached, and/or, Approved
 [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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.

Timothy R. Harrington Timothy R. Harrington Reservoir Engineer 5/27/16
 Print or Type Name Signature Title Date
tharrington@meubourne.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance Disposal _____ Storage
Application qualifies for administrative approval? Yes _____ No
- II. OPERATOR: **Mewbourne Oil Company**
ADDRESS: **3620 Old Bullard Road**
Tyler, TX 79701
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 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:
- Proposed average and maximum daily rate and volume of fluids to be injected;
 - Whether the system is open or closed;
 - Proposed average and maximum injection pressure;
 - Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 - If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: **Tim Harrington** TITLE: **Reservoir Engineer**
SIGNATURE: *Timothy R. Harrington* DATE: *5/27/2016*
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: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: **Mewbourne Oil Company**WELL NAME & NUMBER: **Flower Draw 2 State SWD #1**

WELL LOCATION:	1980' FNL & 1980' FEL	G	02	26S	28E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC (See Attached)WELL CONSTRUCTION DATASurface CasingHole Size: **26"**Casing Size: **20" @ 530'**Cement with: **1150 sx**Top of Cement: **Surface (calc)**Intermediate CasingHole Size: **17 1/2"**Casing Size: **13 3/8" @ 2751'**Cement with: **3550 sx**Top of Cement: **Surface**
(Circulated to Surface per C-103)Intermediate 2 CasingHole Size: **12 1/4"**Casing Size: **9 5/8" @ 9,550'**Stage 1: Cement with: **2065 sx**Top of Cement: **Surface**Stage 2: Cement with: **2645 sx****(Surface per C-103)**Stage 3: Cement down backside w/
1850sxIntermediate 3 Liner (Cut window in 9 5/8" casing @ 9,100')Hole Size: **8 3/4"**Casing Size: **7" Top @ Surface**
Bottom @ 14,700'Cement with : **1,790 sx**Top of Cement: **Surface****DVT @ 9,300' & 14,640'****(Proposed: circulated)****External Csg Packer @ 14,680'**Stage 1: Cement **50 sx**Stage 2: Cement **840 sx**Stage 3: Cement **900 sx****TD @ 16100'**Injection Interval

Open Hole Completion from 14700'-16100'

INJECTION WELL DATA SHEET

Tubing Size: **4 1/2"12.75# 13CR-HP1-110**

Lining Material: **None**

Type of Packer: **Model R (nickel plated)**

Packer Setting Depth: **+/- 14,630'**

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? **Production**

2. Name of the Injection Formation: **Devonian, Fusselman & Montoya - Open Hole Completion**

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

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. **(Please consult attached well schematics for current and proposed wellbores)**

Yes: Delaware (3092-3106', CIBP @3033'), Brushy Canyon (5764-5776', squeezed w/35 sx), Bone Spring (6333-7669', CIBP @6303'), Wolfcamp (10892-10930, CIBP @ 10810'), Strawn (12152-12766, CIBP @11885'), Morrow (12968-13396', CIBP 12880')

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

Overlying producing zone(s) – **Delaware (2,636-6,329')**, **Bone Spring (7,297- 9487')**, **Wolfcamp (9,487 -12,002')**, **Strawn (12,002 -12,266')**, **Atoka (12,266-12,448')** and **Morrow (12,448-14,378')**.

Underlying producing zone – **N/A**

Mewbourne Oil Company

CURRENT WELLBORE

Last Updated by: A. Taylor on 4/18/2016

Well Name: Flower Draw Unit #1
Spud: 2/20/1981

20" 94# R-3 BTC
Set @ 530'
Cmt w/ 1150 sx

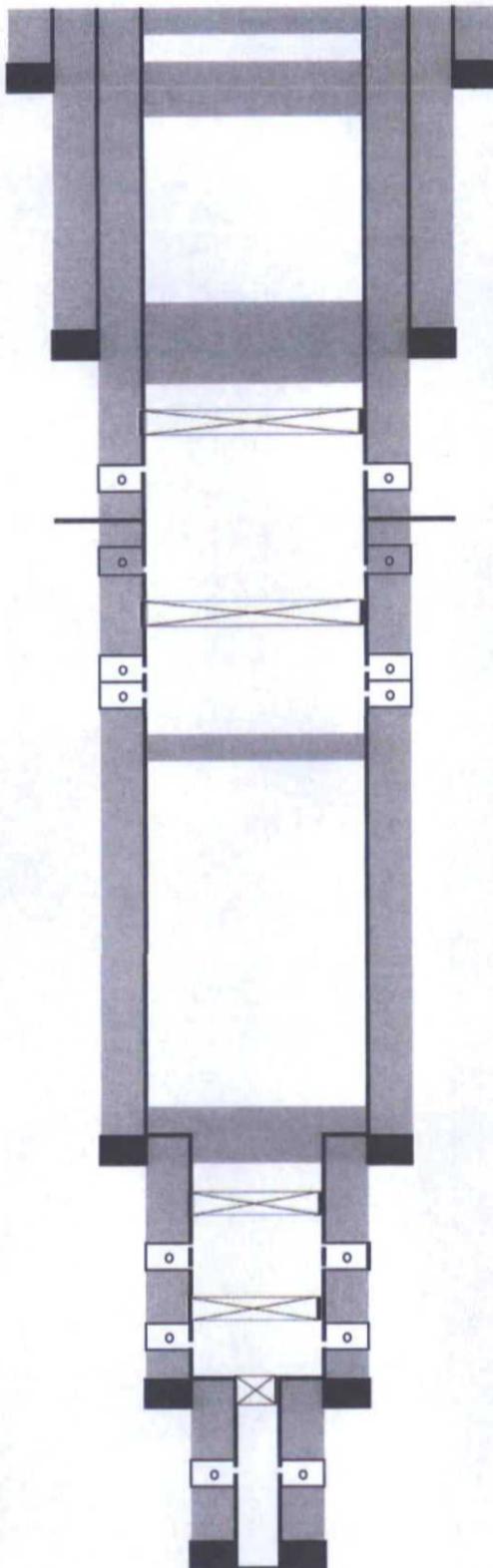
13 3/8" 61# K-55 STC
Set @ 2751'
Cmt w/ 3550 sx, circ 300 sx

DV Tool @ 5345'
Cmt 2nd stg w/ 2645 sx, no returns
Cmt down backside w/ 1850 sx

9 5/8" 43.5 & 47# N-80 & S-95 LTC
Set @ 9550'
Cmt 1st stg w/ 2065 sx, no returns

7" 26# S-95 LTC Liner
Set from 9241'-12949'
Cmt w/ 900 sx

4 1/2" 13.5# N-80 LTC Liner
Set from 12630'-13449'
Cmt w/ 100 sx



Cmt Plug (15 sx) @ surface

Cmt Plug (65 sx) 360'-565'

Cmt Plug (15 sx) 2680'-2728'
Cmt Plug (50 sx) 2728'-2814'

CIBP @ 3033' w/ 15 sx cmt

Delaware Perfs
3092'-3106'

Brusy Canyon Perfs (Sgz)
5764'-5776'
CIBP @ 6303' w/ 35 sx cmt

Bone Springs Perfs
6333'-7124' & 7509'-7669'

Cmt Plug (36 sx) 7786'-7886'

Cmt Plug (25 sx) 9119'-9319'

CIBP @ 10,810' w/ 62' cmt

Wolfcamp Perfs
10892'-10930'
CIBP @ 11885' w/ 35' cmt
Strawn Perfs
12152'-12766'
CIBP @ 12880' w/ 35' cmt

Morrow Perfs
12968'-13396'

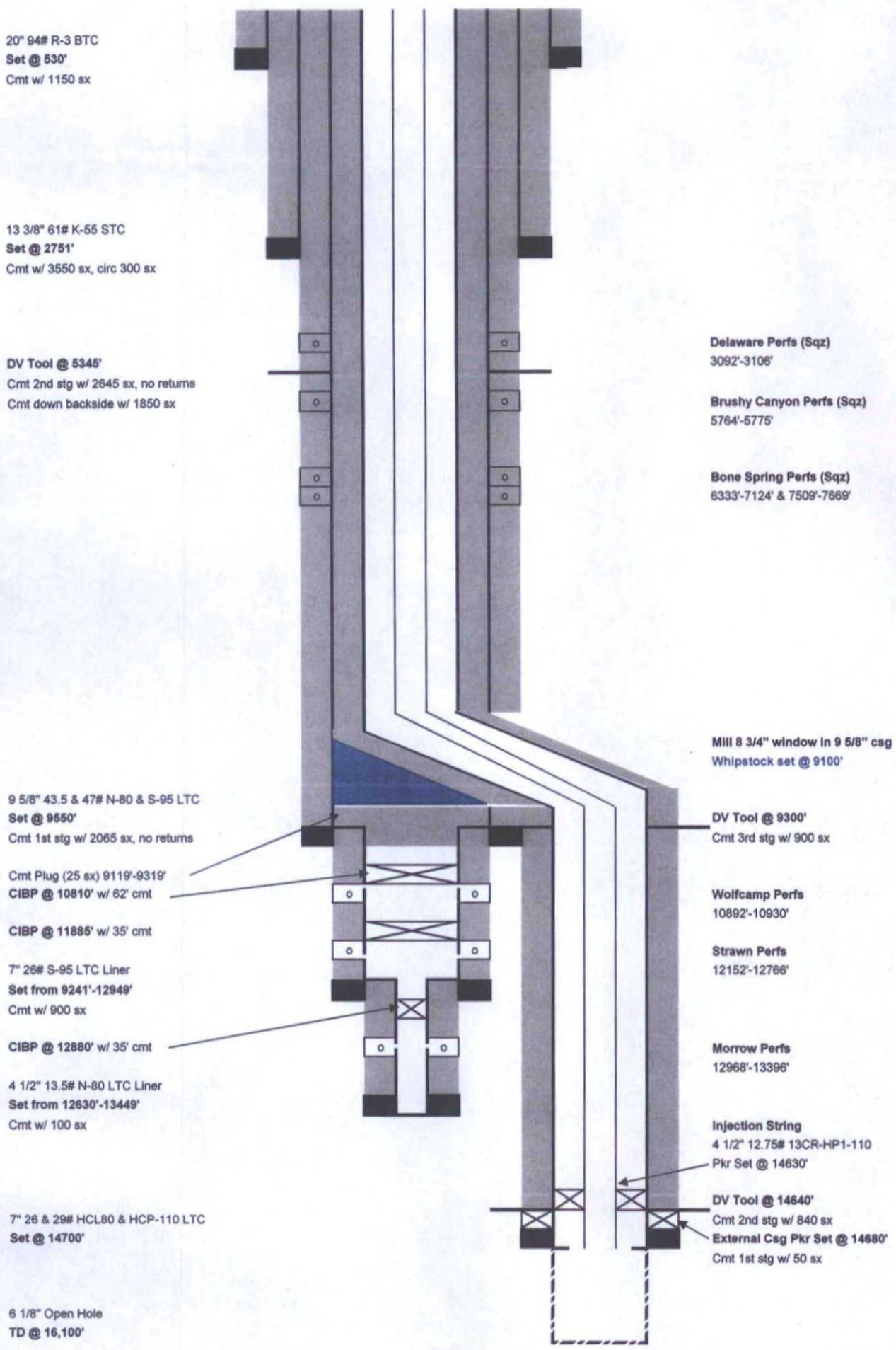
TD @ 13450'

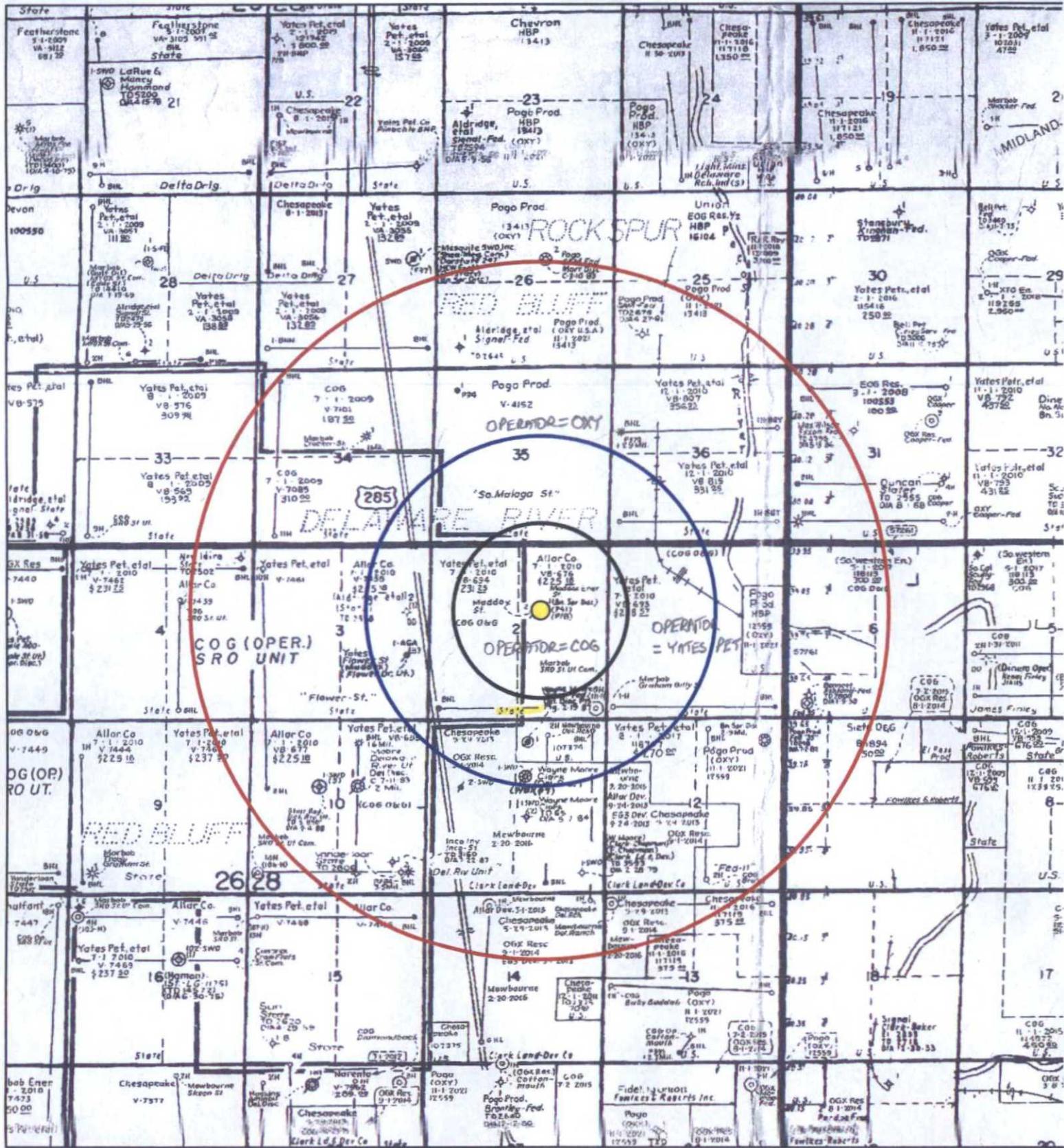
Mewbourne Oil Company

PROPOSED WELLBORE

Well Name: Flower Draw 2 St SWD #1
Spud: 2/20/1981

Last Updated by: A. Taylor on 4/29/2016





1 inch = 4,000 feet

- 1/2 MILE AREA OF REVIEW
- 1 MILE AREA OF REVIEW
- 2 MILE AREA OF REVIEW

MOC Mewbourne Oil Company	
FLOWER DRAW 2 STATE SWD #1 APPLICATION	
2-26S - 28E	
EDDY, NEW MEXICO	
Author: ed	Date: 21 May, 2016

Mewbourne Oil Company
 Flower Draw 2 State SWD #1
 Tabulation of Wells Within 1/2 Mile
 5/23/2016

PROPOSED TOP OF DISPOSAL INTERVAL 14,700 FT

Direction	API	Lease Name	Well Num	Operator Name	Current Operator	Location	Footage	Field Name	County	Current Status	Final Status	Prod Form	DTD	TVD	Form @ TD	Perm Depth	Proj Form	Permit Date	Spud Date	Comp Date
V	30015236150000	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 1980 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A	ABD-OW	BONE SPRING	13450	13450	MORROW	14000	MORROW	1981-01-17	1981-01-27	1982-01-02
V	30015236150001	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 1980 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	13450	13450	MORROW	5677	DELAWARE	1985-01-22	1985-02-01	1985-02-16
V	30015242070000	FLOWER DRAW UNIT	2	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 2110 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	3500	3500	DELAWARE	3500	DELAWARE	1982-07-29	1982-08-08	1982-09-01
HZ	30015375480000	SRO STATE UNIT COM	8H	MARBOB ENERGY CORP	COG OPERATING LLC	265 28E 2	380 FSL 330 FEL CONGRESS SECTION	RED BLUFF	EDDY	Active	OIL	BONE SPRING	11275	6866	BONE SPRING	11300	BONE SPRING	2010-02-03	2010-04-15	2010-07-29
HZ	30015419300000	SRO STATE COM	58H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1935 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL	BONE SPRING	12802	8294	BONE SPRING	12818	BONE SPRING	2014-01-06	2014-05-08	2014-08-11
HZ	30015419310000	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY		I&A		8379	8377	BONE SPRING 2 /SD/	9715	BONE SPRING	2014-01-06	2014-03-30	2014-04-12
HZ	30015419310100	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A - lost tools	I&AW		11315		BONE SPRING	12735	BONE SPRING	2014-01-06	2014-04-10	2014-04-30
HZ	30015419310200	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL-WO	BONE SPRING	12662	8274	BONE SPRING		BONE SPRING	2014-01-06	2014-04-29	2014-08-10
HZ	30015422820000	GRAHAM CRACKER 2 STATE	1H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	600 FSL 580 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT					12407	BONE SPRING	2014-04-08		
HZ	30015422830000	GRAHAM CRACKER 2 STATE	2H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1700 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT					12811	BONE SPRING	2014-04-08		

NO WELLS PENETRATE THE PROPOSED SWD INTERVAL

C-108 Application for Authorization to Inject
 FLOWER DRAW 2 STATE SWD #1
 Unit G, Sec 2, T26S R 28E
 Eddy County, NM

- V. Maps are attached
- VI. There are no wells with ½ mile radius area of review that penetrate the proposed disposal zone. A tabulation of wells within the radius of review has been attached.
- VII.
 - 1. Proposed average daily injection rate = 10,000 Bwpd
 Proposed maximum daily injection rate = 25,000 Bwpd
 - 2. Closed system
 - 3. Proposed maximum injection pressure = 2,940 psi (0.2 psi/ft x 14,700 ft = 2,940 psi)
 - 4. Source of injected water will be produced water from MOC operated wells completed in the Avalon, Bone Spring and Wolfcamp. Analysis of Avalon, Bone Spring and Wolfcamp waters from analogous source wells are attached.
 - 5. We will be injecting into the Devonian, Fusselman and Montoya formations. Devonian formation water is known to be compatible with the formation water of the Avalon, Bone Spring and Wolfcamp; however, a water analysis for the Devonian was not available in the area.
- VIII.
 - 1. The proposed injection interval is comprised of the Devonian, Fusselman and Montoya formations from 14700 – 16100'. The proposed well will not penetrate the Simpson Group and it is estimated that the base of the injection interval should be approximately 150' above the top of the Ellenburger.

Other Projected Formation Tops:	
Mississippian	14,378'
Woodford	14,556'
Devonian	14,700'
Simpson	16,183'
Ellenburger	16,258'
 - 2. The underground fresh water aquifers (unnamed) are present at shallow depths <300'. There are no known fresh water intervals underlying the injection formation.
- IX. The injection interval will be acidized with approximately 30,000 gallons of 15% HCl acid.
- X. A gamma-ray neutron logs will be run from TD to surface and filed with the Division.
- XI. There are two fresh water wells of record, at the NM State Engineers Office, within one mile of the proposed SWD well but we unable to find the wells to secure a water samples. The location of these wells is shown on the attached well plat.
- XII. 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 has been attached.
- XIII. Proof of Notice is attached.

**TABULATION OF NEARBY WATER WELLS
MEWBOURNE OIL COMPANY
FLOWER DRAW 2 STATE SWD #1 APPLICATION**

POD Number	Driller Name	Drill Date	County	q64	q16	q4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column	Comments		
C 02160 S9	HELMER	6/1/1961	EDDY	SW	SW	NE	02	26S	28E	589020	3548868	32.072564	-104.056819	300	120	180	unable to locate
C 02924	NA	10/4/2002	EDDY	NW	SW	NE	11	26S	28E	589032	3547451	32.059781	-104.056823				unable to locate

Endura Products Corp.

P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021540**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation Lease **Delaware Ranch 11 Fed Com** Well **#2H**

Avalon Shale Producer

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	79,120	3,440
Total Hardness as Ca++	15,550	0
Calcium Ca++	2,931	147
Magnesium, Mg++	7,695	641
Barium, Ba++	0	0
Iron (Total) Fe+++*	32	2

ANIONS

Chlorides, Cl-	149,350	4,207
Sulfate, SO4-	150	3
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	1,220	20
Sulfide, S-*	0	0
Total Dissolved Solid	240,498	

OTHER PROPERTIES

pH*	6.630
Specific Gravity, 60/60 F.	1.149
Turbidity	357

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	1.5142	-1.3407	-1.6650	-29.4407
120	1.9995	-1.3588	-1.5026	-29.5974
160	2.7369	-1.3912	-1.3623	-29.8134

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021537**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation **Lease Delaware Ranch EH Fed. Com** Well **#1H**

BONE Spring PRODUCER

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	52,877	2,299
Total Hardness as Ca++	11,250	0
Calcium Ca++	5,998	300
Magnesium, Mg++	3,202	267
Barium, Ba++	0	0
Iron (Total) Fe+++*	19	1

ANIONS

Chlorides, Cl-	101,250	2,852
Sulfate, SO4-	450	9
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	366	6
Sulfide, S-*	0	0
Total Dissolved Solid	164,162	

OTHER PROPERTIES

pH*	6.700
Specific Gravity, 60/60 F.	1.110
Turbidity	249

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.6687	-0.6227	-0.8751	-29.3170
120	1.0476	-0.6347	-0.7067	-29.5122
160	1.6314	-0.6586	-0.5579	-29.7405

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date	5/9/2016	Endura Rep	Michael McNeil	Code	105021536
Sampling Point/Date	well head 5/5/2016			State	New Mexico
Company	Mewbourne Oil			County	Eddy
Formation		Lease	Delaware Ranch 14 CN Fee	Well	#1H
			Com		
			<i>Wolfcamp</i>		

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	32,315	1,405
Total Hardness as Ca++	6,125	0
Calcium Ca++	1,993	100
Magnesium, Mg++	2,520	210
Barium, Ba++	0	0
Iron (Total) Fe+++*	18	1

ANIONS

Chlorides, Cl-	60,400	1,701
Sulfate, SO4-	375	8
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	439	7
Sulfide, S-*	0	0
Total Dissolved Solid	98,060	

OTHER PROPERTIES

pH*	7.000
Specific Gravity, 60/60 F.	1.065
Turbidity	223

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.1941	-1.1261	-1.3271	-29.1576
120	0.5161	-1.1366	-1.1572	-29.3798
160	1.0140	-1.1436	-0.9915	-29.6080

PERFORATIONS

May 27, 2016

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

Re: Flower Draw 2 State SWD #1

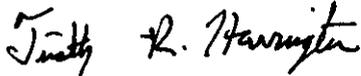
Mr. Goetze,

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

Listing of Notified Persons

Flower Draw 2 State SWD #1 Application

1980 FEL & 1980 FNL

Section 2, T26S, R28E, Eddy County, NM

Surface Owner

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, NM 87504

Offsetting Operators

COG Operating LLC

One Concho Center

600 W. Illinois Ave

Midland, TX 79701

Yates Petroleum Corporation

105 S. 4th Street

Artesia, NM 88210

OXY USA Inc.

5 Greenway Plaza

Houston, TX 77046

A

A'

COO OPERATING LIMITED LIABILITY COMPANY
MIDCO 28 STATE OSM 1
C 28-100
TWP 28 S - Range 28 E - Sec. 28
Subsequent to
Date: 08/27/08

PRINER & PRINER DEVELOPMENT COMPANY
FLOWER DRAW UNIT #1
1980 FNL & 1980 FEL
TWP 28 S - Range 28 E - Sec. 2
Subsequent to
Date: 08/27/08

WATER FERTILIZER CORPORATION
5/2012 DVNN SWD
Inject Open Hole 15200 - 15610
TWP 28 S - Range 28 E - Sec. 28
Subsequent to
Date: 08/27/08

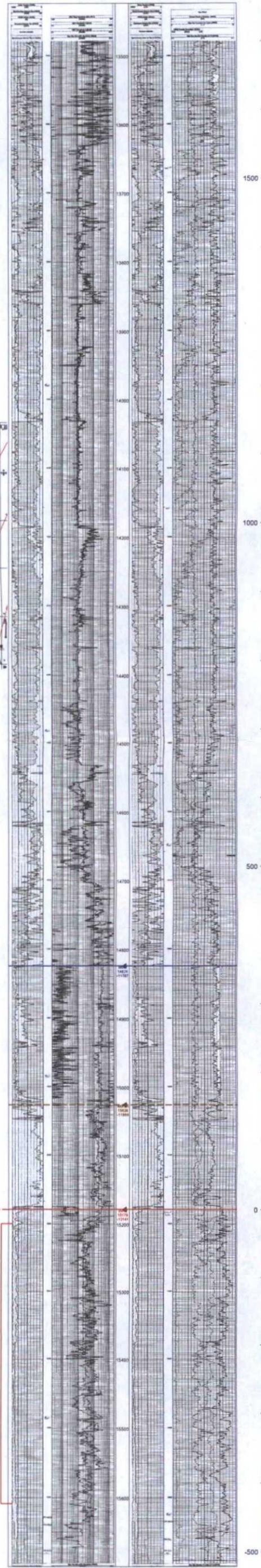
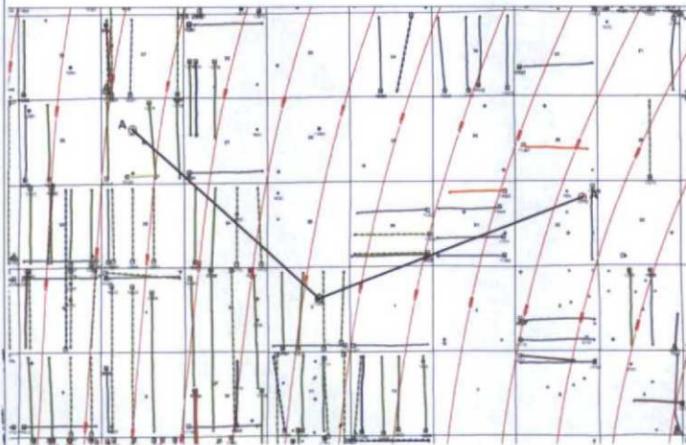
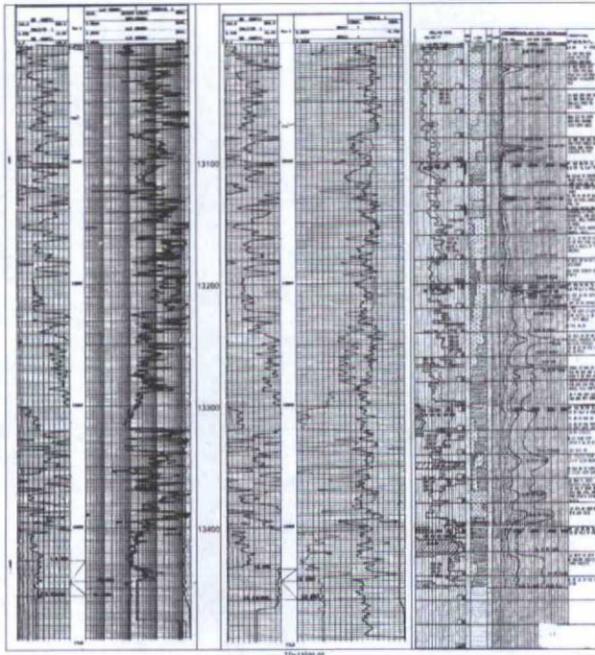
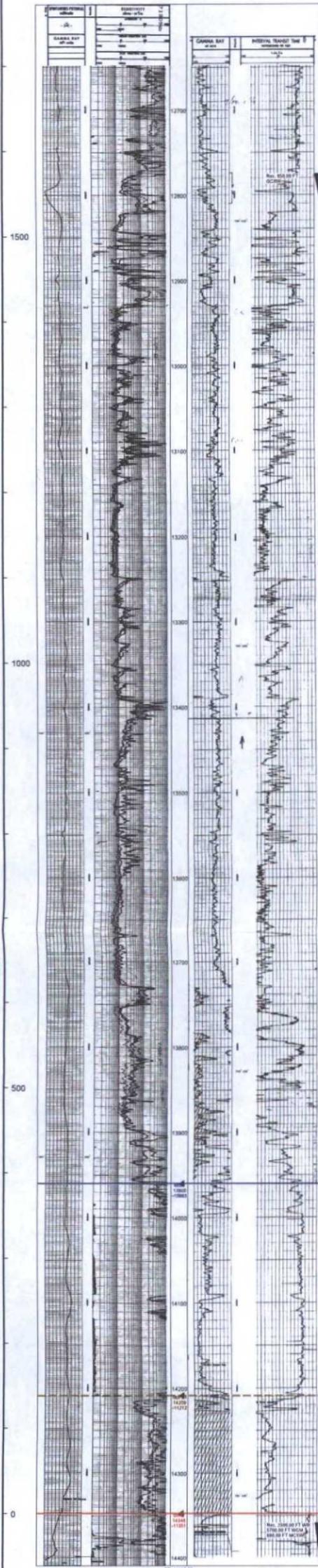
28F

2G

32A

Flower Draw Unit SWD #1
1980 FNL & 1980 FEL; T26S - R28E, Sec. 2

5/2012 DVNN SWD
Inject Open Hole 15200 - 15610



Projected Top DVNN
14703 TVD (-11729 SS)

Open Hole
Injection

X-sec Flower Draw SWD #1 A-A'

Mewbourne Oil Company

PROPOSED WELLBORE

Well Name: Flower Draw 2 St SWD #1
Spud: 2/20/1981

Last Updated by: A. Taylor on 4/29/2016

20" 94# R-3 BTC
Set @ 530'
Cmt w/ 1150 sx

13 3/8" 61# K-55 STC
Set @ 2751'
Cmt w/ 3550 sx, circ 300 sx

DV Tool @ 5345'
Cmt 2nd stg w/ 2645 sx, no returns
Cmt down backside w/ 1850 sx

9 5/8" 43.5 & 47# N-80 & S-95 LTC
Set @ 9550'
Cmt 1st stg w/ 2065 sx, no returns

Cmt Plug (25 sx) 9119'-9319'
CIBP @ 10810' w/ 62' cmt

CIBP @ 11885' w/ 35' cmt

7" 26# S-95 LTC Liner
Set from 9241'-12949'
Cmt w/ 900 sx

CIBP @ 12880' w/ 35' cmt

4 1/2" 13.5# N-80 LTC Liner
Set from 12630'-13449'
Cmt w/ 100 sx

7" 26 & 29# HCL80 & HCP-110 LTC
Set @ 14700'

6 1/8" Open Hole
TD @ 16,100'

Delaware Perfs (Sqz)
3092'-3106'

Brushy Canyon Perfs (Sqz)
5764'-5775'

Bone Spring Perfs (Sqz)
6333'-7124' & 7509'-7669'

Mill 8 3/4" window in 9 5/8" csg
Whipstock set @ 9100'

DV Tool @ 9300'
Cmt 3rd stg w/ 900 sx

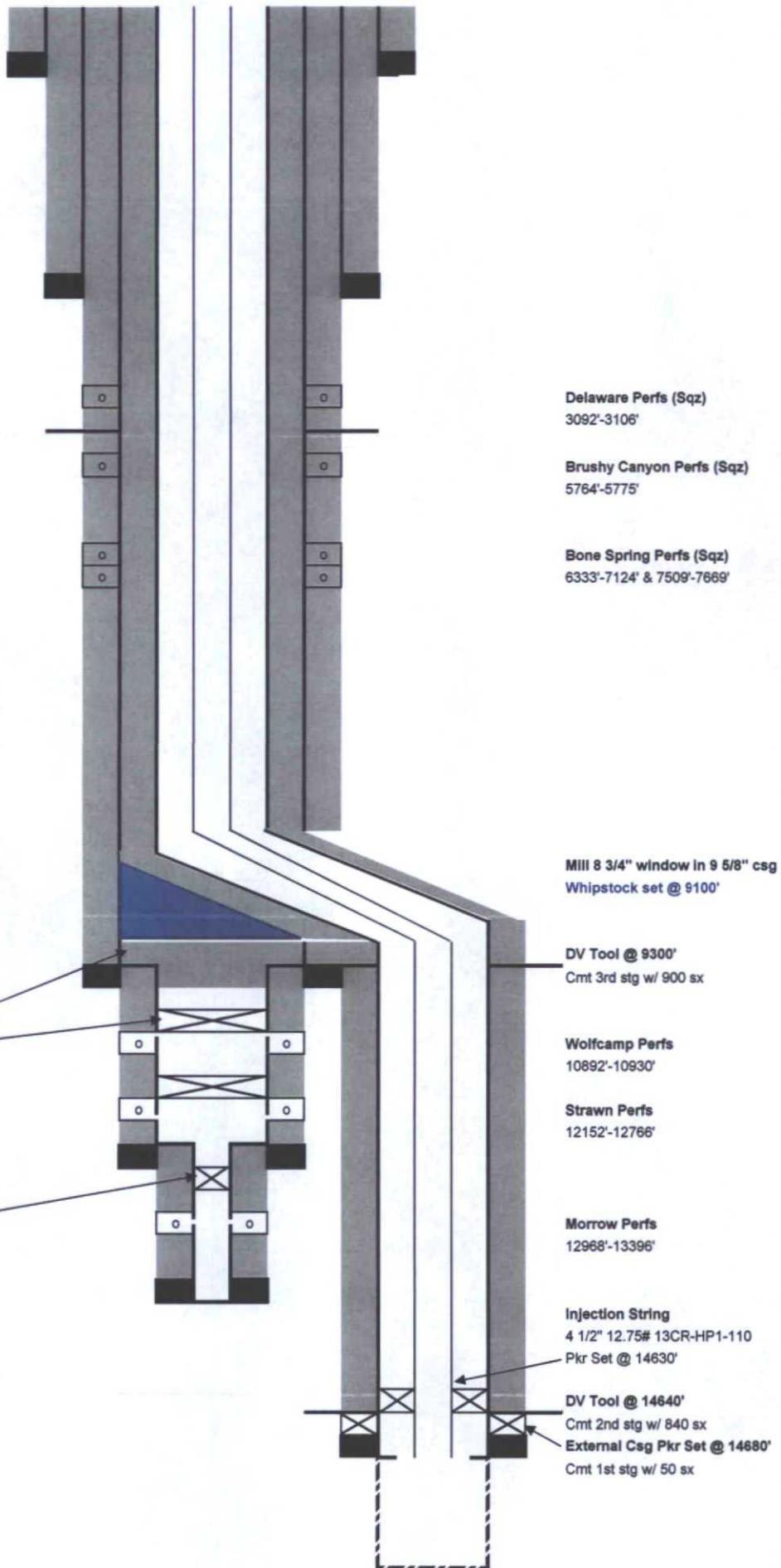
Wolfcamp Perfs
10892'-10930'

Strawn Perfs
12152'-12766'

Morrow Perfs
12968'-13396'

Injection String
4 1/2" 12.75# 13CR-HP1-110
Pkr Set @ 14630'

DV Tool @ 14640'
Cmt 2nd stg w/ 840 sx
External Csg Pkr Set @ 14680'
Cmt 1st stg w/ 50 sx



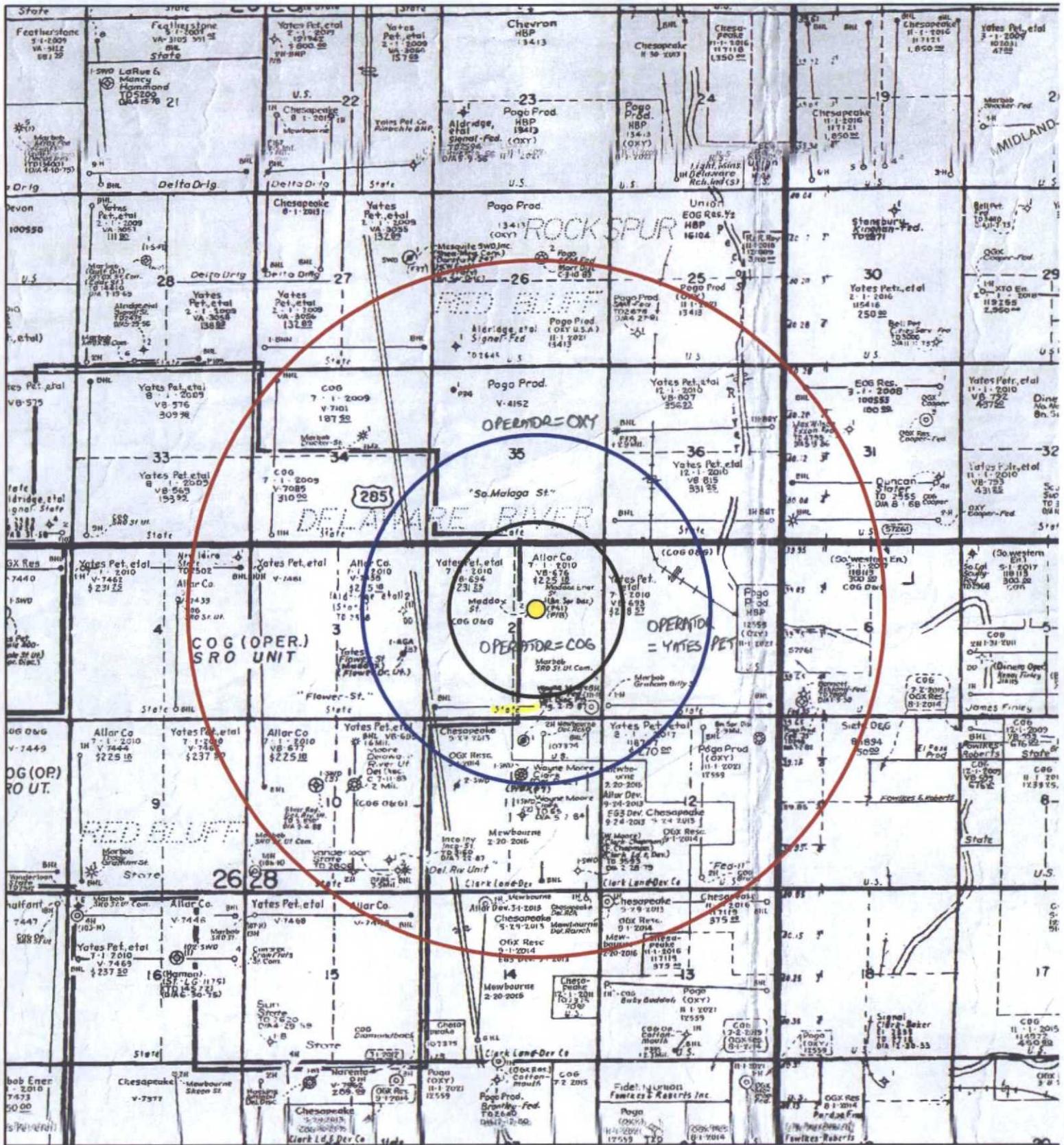
Mewbourne Oil Company
 Flower Draw 2 State SWD #1
 Tabulation of Wells Within 1/2 Mile
 5/23/2016

PROPOSED TOP OF DISPOSAL INTERVAL

14,700 FT

Direction	API	Lease Name	Well Num	Operator Name	Current Operator	Location	Footage	Field Name	County	Current Status	Final Status	Prod Form	DTD	TVD	Form @ TD	Perm Depth	Proj Form	Permit Date	Spud Date	Comp Date
V	30015236150000	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 1980 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A	ABD-OW	BONE SPRING	13450	13450	MORROW	14000	MORROW	1981-01-17	1981-01-27	1982-01-02
V	30015236150001	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 1980 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	13450	13450	MORROW	5677	DELAWARE	1985-01-22	1985-02-01	1985-02-16
V	30015242070000	FLOWER DRAW UNIT	2	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FNL 2110 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	3500	3500	DELAWARE	3500	DELAWARE	1982-07-29	1982-08-08	1982-09-01
HZ	30015375480000	SRO STATE UNIT COM	8H	MARBOB ENERGY CORP	COG OPERATING LLC	265 28E 2	380 FSL 330 FEL CONGRESS SECTION	RED BLUFF	EDDY	Active	OIL	BONE SPRING	11275	6866	BONE SPRING	11300	BONE SPRING	2010-02-03	2010-04-15	2010-07-29
HZ	30015419300000	SRO STATE COM	58H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1935 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL	BONE SPRING	12802	8294	BONE SPRING	12818	BONE SPRING	2014-01-06	2014-05-08	2014-08-11
HZ	30015419310000	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY		J&A		8379	8377	BONE SPRING 2 /SD/	9715	BONE SPRING	2014-01-06	2014-03-30	2014-04-12
HZ	30015419310100	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A - lost tools	J&AW		11315		BONE SPRING	12735	BONE SPRING	2014-01-06	2014-04-10	2014-04-30
HZ	30015419310200	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL-WO	BONE SPRING	12662	8274	BONE SPRING		BONE SPRING	2014-01-06	2014-04-29	2014-08-10
HZ	30015422820000	GRAHAM CRACKER 2 STATE	1H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	600 FSL 580 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT					12407	BONE SPRING	2014-04-08		
HZ	30015422830000	GRAHAM CRACKER 2 STATE	2H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1700 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT					12811	BONE SPRING	2014-04-08		

NO WELLS PENETRATE THE PROPOSED SWD INTERVAL



1 inch = 4,000 feet

- 1/2 MILE AREA OF REVIEW
- 1 MILE AREA OF REVIEW
- 2 MILE AREA OF REVIEW

MOC Mewbourne Oil Company

FLOWER DRAW 2 STATE SWD #1 APPLICATION
2-26S - 28E
EDDY, NEW MEXICO

Author: ad	Date: 24 Mar, 2016
---------------	-----------------------

May 27, 2016

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

Re: C-108 Application for SWD Well
Flower Draw 2 State SWD #1
Township 26 South, Range 28 East
Section 2, 1980' FNL & 1980' FEL
Eddy County, New Mexico

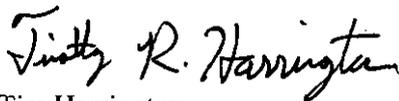
Enclosed are an original and one copy of Mewbourne Oil Company's C-108 Application for administrative approval of its proposed Flower Draw 2 State SWD #1. Mewbourne plans to re-enter a plugged and abandoned wellbore and sidetrack for the purpose of completing as a salt water disposal well located in Sec 2, Twp 26S, Rge 28E, N.M.P.M., Eddy County, New Mexico.

Similar application exhibits were sent to offset operators and the surface owner (distribution list attached) and confirmations of receipt will be e-mailed to you next week. The public notice should be published in the Carlsbad Current Argus next week and an official "Proof of Notice" will be forwarded to you upon receipt.

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

Sincerely yours,

MEWBOURNE OIL COMPANY



Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

RECEIVED CCD
2016 JUN -2 A 8:07

Mewbourne Oil Company
Tim Harrington
P O Box 7698
TYLER TX 75711-7698

US POSTAGE AND FEES PAID
FIRST-CLASS
May 27 2016
Mailed from ZIP 75711
8 oz First-Class Mail Flats Rate

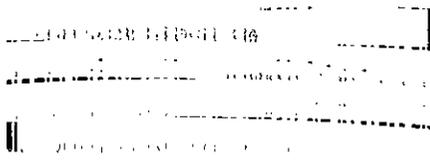


endicia.com

071S00534813

CID: 22827

USPS CERTIFIED MAIL



9414 8106 9994 5015 6696 04

New Mexico Oil Conservation Division
New Mexico Oil Conservation Division
Engineering Bureau
1220 South St. Francis Dr.
SANTA FE NM 87505-4225



Listing of Notified Persons

Flower Draw 2 State SWD #1 Application

1980 FEL & 1980 FNL

Section 2, T26S, R28E, Eddy County, NM

Surface Owner

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, NM 87504

Offsetting Operators

COG Operating LLC

One Concho Center

600 W. Illinois Ave

Midland, TX 79701

Yates Petroleum Corporation

105 S. 4th Street

Artesia, NM 88210

OXY USA Inc.

5 Greenway Plaza

Houston, TX 77046



Date: June 1, 2016

Simple Certified:

The following is in response to your June 1, 2016 request for delivery information on your Certified Mail™/RRE item number 9414810699945015670211. The delivery record shows that this item was delivered on May 31, 2016 at 10:39 am in SANTA FE, NM 87501. The scanned image of the recipient information is provided below.

Signature of Recipient :

Address of Recipient:

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

New Mexico State Land Office
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87504

Tracking Number

Tim Harrington

9414 8106 9994 5015 6702 11



Shipment Confirmation
Acceptance Notice

A. Mailer Action

Note To Mailer: The labels and volume associated to this form online, must match the labeled packages being presented to the USPS® employee with this form.

Shipment Date: 5/27/2016

Shipped From: SimpleCertifiedMail.com

Name: Charles Crutchfield

Address: P O Box 7698

City: Tyler

State: TX ZIP+4® 75711

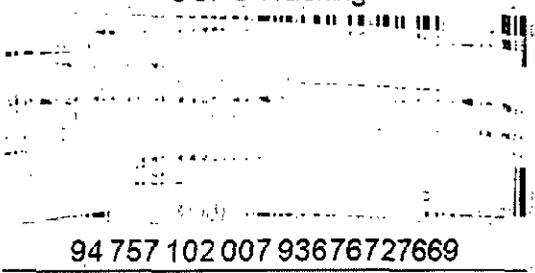
Type of Mail	Volume
Priority Mail Service®	0
Priority Mail Express Service®	0
International Mail®	0
Other	1
Total Volume	1

*Start time for products with service guarantees will begin when mail arrives at the local Post Office™ and items receive individual processing and acceptance scans.

B. USPS Action

USPS EMPLOYEE: Please scan upon pickup or receipt of mail. Leave form with customer or in customer's mail receptacle.

USPS Tracking





Date: June 2, 2016

Tim Harrington:

The following is in response to your May 31, 2016 request for delivery information on your Certified Mail™/RRE item number 9414810699945015669857. The delivery record shows that this item was delivered on June 2, 2016 at 2:36 pm in MIDLAND, TX 79701. There is no delivery signature on file for this item.

Thank you for selecting the Postal Service for your mailing needs. If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service



**Proof of Acceptance
(Electronic)**

Date: 6/1/2016

Client Name: Mewbourne Oil Company

Certified with RR(E) item number 9414810699945015669857,
addressed to COG Operating LLC
Accepted at USPS Origin Facility-May 27, 2016, 10:25 pm, TYLER, TX,
75711

The item number, time, date, city, state, and zip code is a true extract of
information provided by the United States Postal Service to
SimpleCertifiedMail.com.

COG Operating LLC
One Concho Center
600 W Illinois Ave
Midland, Tx 79701
Group Name: ACCOUNTING

The above information is for the sole use of SimpleCertifiedMail.com
clients and represents information provided by the United States Postal
Service.



Date: June 1, 2016

Simple Certified:

The following is in response to your June 1, 2016 request for delivery information on your Certified Mail™/RRE item number 9414810699945015670600. The delivery record shows that this item was delivered on May 31, 2016 at 8:16 am in ARTESIA, NM 88210. The scanned image of the recipient information is provided below.

Signature of Recipient :

Delivery Section	
Signature	X <i>Nancy Anderson</i>
Printed Name	NANCY Anderson

Address of Recipient :

Delivery Address	105 S 4th St
------------------	--------------

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

Yates Petroleum Corporation
Yates Petroleum Corporation
105 4th Street
Artesia, NM 88210



**Proof of Acceptance
(Electronic)**

Date: 6/1/2016

Client Name: Mewbourne Oil Company

Certified with RR(E) item number 9414810699945015670600,
addressed to Yates Petroleum Corporation
Accepted at USPS Origin Facility-May 27, 2016, 10:25 pm, TYLER, TX
75711

The item number, time, date, city, state, and zip code is a true extract of
information provided by the United States Postal Service to
SimpleCertifiedMail.com.

Yates Petroleum Corporation
Yates Petroleum Corporation
105 4th Street
Artesia, NM 88210
Group Name: ACCOUNTING

The above information is for the sole use of SimpleCertifiedMail.com
clients and represents information provided by the United States Postal
Service.

Tim Harrington

From: webmaster@simplecertifiedmail.com
Sent: Thursday, June 02, 2016 9:35 AM
To: Tim Harrington
Subject: Document Delivered

A document with a tracking code of 9414810699945015671065 and reference number of was successfully delivered to OXY USA Inc at OXY USA Inc.



**Proof of Acceptance
(Electronic)**

Date: 6/1/2016

Client Name: Mewbourne Oil Company

Certified with RR(E) item number 9414810699945015671065,
addressed to OXY USA Inc

Accepted at USPS Origin Facility-May 27, 2016, 10:25 pm, TYLER, TX
75711

The item number, time, date, city, state, and zip code is a true extract of
information provided by the United States Postal Service to
SimpleCertifiedMail.com.

OXY USA Inc
OXY USA Inc
5 Greenway Plaza
Houston, TX 77046
Group Name: ACCOUNTING

The above information is for the sole use of SimpleCertifiedMail.com
clients and represents information provided by the United States Postal
Service.

May 27, 2016

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

Re: C-108 Application for SWD Well
Flower Draw 2 State SWD #1
Township 26 South, Range 28 East
Section 2, 1980' FNL & 1980' FEL
Eddy County, New Mexico

Enclosed are an original and one copy of Mewbourne Oil Company's C-108 Application for administrative approval of its proposed Flower Draw 2 State SWD #1. Mewbourne plans to re-enter a plugged and abandoned wellbore and sidetrack for the purpose of completing as a salt water disposal well located in Sec 2, Twp 26S, Rge 28E, N.M.P.M., Eddy County, New Mexico.

Similar application exhibits were sent to offset operators and the surface owner (distribution list attached) and confirmations of receipt will be e-mailed to you next week. The public notice should be published in the Carlsbad Current Argus next week and an official "Proof of Notice" will be forwarded to you upon receipt.

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

Sincerely yours,

MEWBOURNE OIL COMPANY



Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

June 13, 2016

HAND-DELIVERY

Mr. David Catanach, Director
Oil Conservation Division
New Mexico Department of Energy, Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

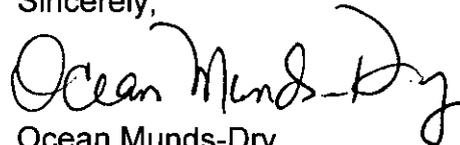
Re: Application of Mewbourne Oil Company for salt water disposal in Section 2,
Township 26 South, Range 28 East, NMPM, Eddy County, New Mexico.

Dear Mr. Catanach:

In a letter dated May 27, 2016 and received on June 6, 2016, Mewbourne Oil Company ("Mewbourne") notified COG Operating LLC ("Concho") of its Application for Authorization to Inject in the Flower Draw 2 State Well No. 1, Section 2, Township 26 South, Range 28 East, NMPM, Eddy County, New Mexico. A copy of the notice is attached.

As an offset operator, Concho objects to Mewbourne's application. Concho requests this application be set for hearing.

Sincerely,



Ocean Munds-Dry
Senior Attorney
COG Operating LLC

cc: Tim Harrington (via email: tharrington@mewbourne.com)

May 27, 2016

COG Operating LLC
One Concho Center
600 W. Illinois Ave
Midland, TX 79701

Re: Application to Inject
Flower Draw 2 State SWD #1
Township 26 South, Range 28 East
Section 2, 1980' FNL & 1980' FEL
Eddy County, New Mexico

REC'D JUN 06 2016
efd legal

To Whom It May Concern,

Enclosed for your review is a copy of Mewbourne Oil Company's C-108 Application to Inject for the captioned well. As required by the New Mexico Oil Conservation Division, you are being noticed because you have been identified as the surface owner or a leasehold operator within a one-half mile radius of the proposed well location. If you object to the application, you must file a written objection and/or request for hearing with the Division within 15 days of receipt of this notice. The Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505.

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

Sincerely yours,

MEWBOURNE OIL COMPANY



Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

DATE IN	SUBPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
---------	----------	----------	-----------	------	---------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - 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

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**
 [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**
 [A] Working, Royalty or Overriding Royalty Interest Owners
 [B] Offset Operators, Leaseholders or Surface Owner
 [C] Application is One Which Requires Published Legal Notice
 [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
 [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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.

Timothy R. Harrington Timothy R. Harrington Reservoir Engineer 5/27/16
 Print or Type Name Signature Title Date

Harrington@mpwbourne.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance X Disposal _____ Storage
Application qualifies for administrative approval? X Yes _____ No
- II. OPERATOR: **Mewbourne Oil Company**
ADDRESS: **3620 Old Bullard Road**
Tyler, TX 79701
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.).
- *VII. 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: **Reservoir Engineer**

SIGNATURE: Timothy R. Harrington

DATE: 5/27/2016

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: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: Mewbourne Oil Company

WELL NAME & NUMBER: Flower Draw 2 State SWD #1

WELL LOCATION: 1980' FNL & 1980' FEL

FOOTAGE LOCATION

G

UNIT LETTER

02

SECTION

26S

TOWNSHIP

28E

RANGE

WELLBORE SCHEMATIC (See Attached)WELL CONSTRUCTION DATASurface Casing

Hole Size: 26"

Casing Size: 20" @ 530'

Cement with: 1150 sx

Top of Cement: Surface (calc)

Intermediate Casing

Hole Size: 17 1/2"

Casing Size: 13 3/8" @ 2751'

Cement with: 3550 sx

Top of Cement: Surface
(Circulated to Surface per C-103)Intermediate 2 Casing

Hole Size: 12 1/4"

Casing Size: 9 5/8" @ 9,550'

Stage 1: Cement with: 2065 sx

Top of Cement: Surface

Stage 2: Cement with: 2645 sx

(Surface per C-103)

Stage 3: Cement down backside w/
1850sxIntermediate 3 Liner (Cut window in 9 5/8" casing @ 9,100')

Hole Size: 8 3/4"

Casing Size: 7" Top @ Surface
Bottom @ 14,700'

Cement with : 1,790 sx

Top of Cement: Surface

DVT @ 9,300' & 14,640'

(Proposed: circulated)

External Csg Packer @ 14,680'

Stage 1: Cement 50 sx

Stage 2: Cement 840 sx

Stage 3: Cement 900 sx

TD @ 16100'

Injection Interval

Open Hole Completion from 14700'-16100'

INJECTION WELL DATA SHEET

Tubing Size: 4 1/2"12.75# 13CR-HP1-110

Lining Material: None

Type of Packer: Model R (nickel plated)

Packer Setting Depth: +/- 14,630'

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? Production

2. Name of the Injection Formation: Devonian, Fusselman & Montoya - Open Hole Completion

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

**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. (Please consult attached well schematics for current and proposed wellbores)
Yes: Delaware (3092-3106', CIBP @3033'), Brushy Canyon (5764-5776', squeezed w/35 sx), Bone Spring (6333-7669', CIBP @6303'), Wolfcamp (10892-10930, CIBP @ 10810'), Strawn (12152-12766, CIBP @11885'), Morrow (12968-13396', CIBP 12880')**

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

Overlying producing zone(s) – Delaware (2,636-6,329'), Bone Spring (7,297- 9487'), Wolfcamp (9,487 -12,002'), Strawn (12,002 -12,266'), Atoka (12,266-12,448') and Morrow (12,448-14,378').

Underlying producing zone – N/A

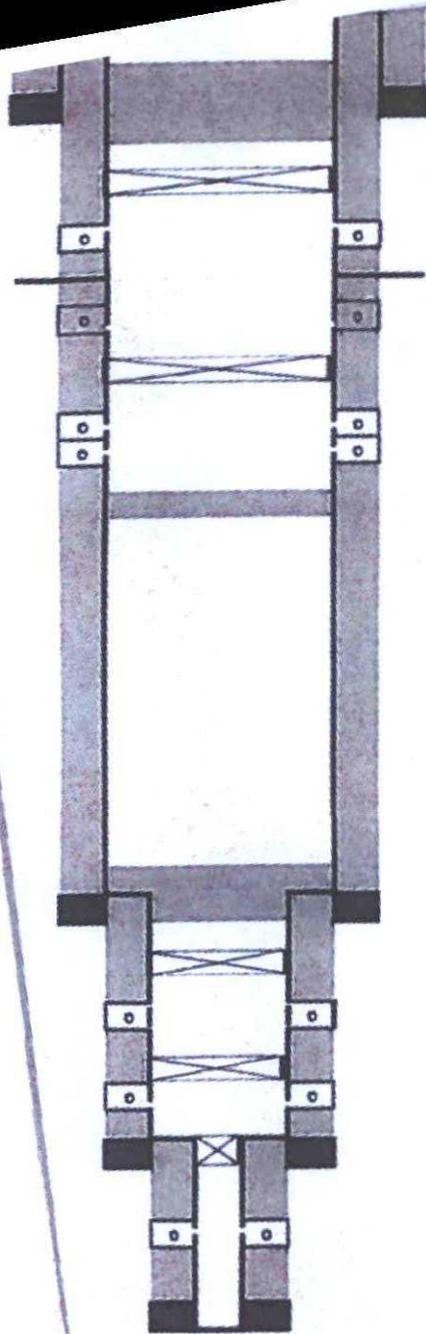
Set @ 2751'
Cmt w/ 3550 ax, circ 300 ax

DV Tool @ 6346'
Cmt 2nd stg w/ 2645 ax, no returns
Cmt down backside w/ 1850 ax

9 5/8" 43.5 & 47# N-80 & S-95 LTC
Set @ 9660'
Cmt 1st stg w/ 2065 ax, no returns

7" 26# S-95 LTC Liner
Set from 9241'-12949'
Cmt w/ 900 ax

4 1/2" 13.5# N-80 LTC Liner
Set from 12630'-13449'
Cmt w/ 100 ax



Cmt Plug (15 ax) 2680'-2728'
Cmt Plug (50 ax) 2728'-2814'

CIBP @ 3033' w/ 15 ax cmt

Delaware Perfs
3092'-3106'

Brusy Canyon Perfs (Sgz)
5764'-5776'
CIBP @ 6363' w/ 35 ax cmt

Bone Springs Perfs
6333'-7124' & 7509'-7669'

Cmt Plug (36 ax) 7786'-7886'

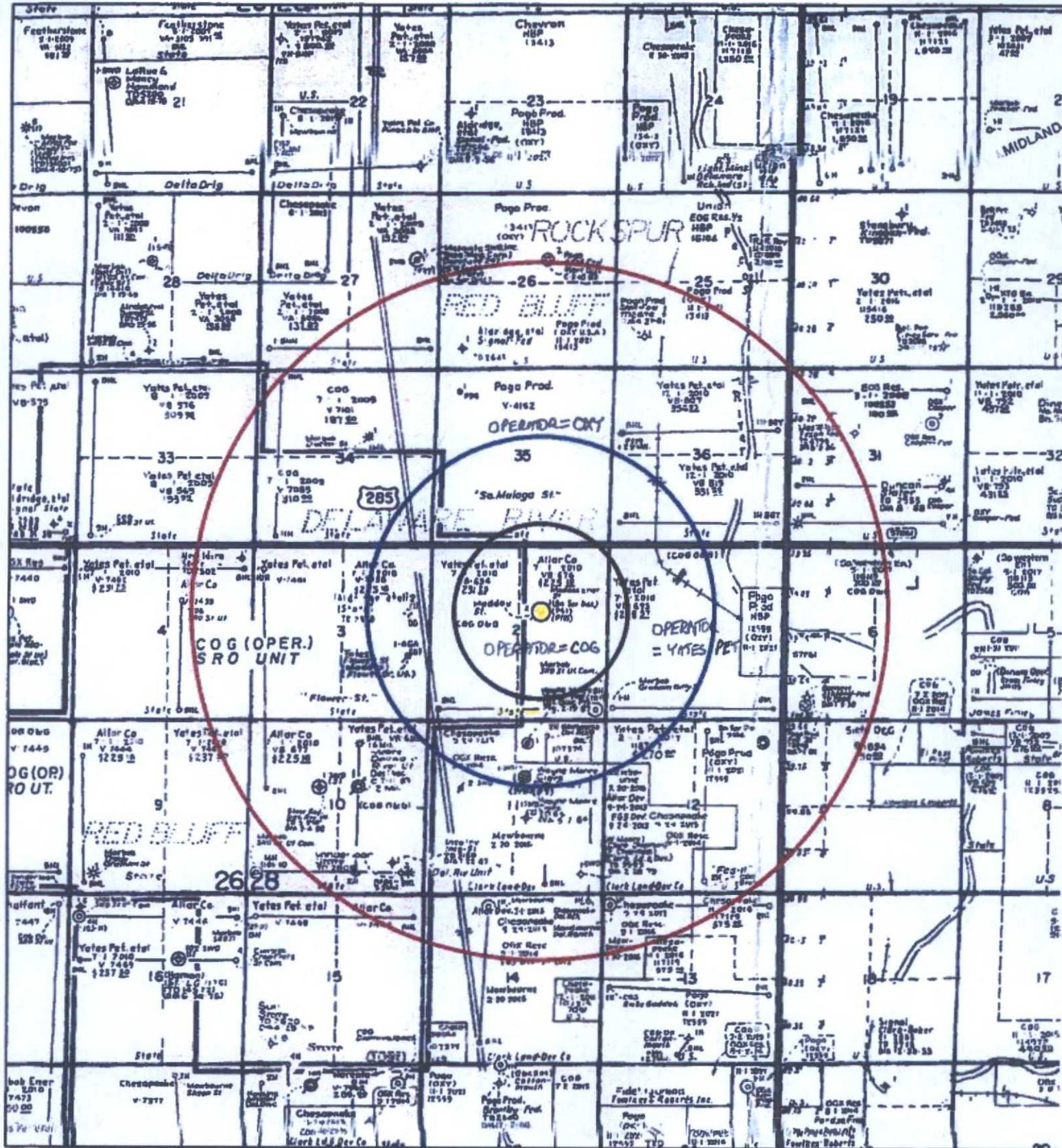
Cmt Plug (25 ax) 9119'-9319'

CIBP @ 10,810' w/ 62' cmt

Wolfcamp Perfs
10892'-10930'
CIBP @ 11885' w/ 35' cmt
Strawn Perfs
12152'-12766'
CIBP @ 12680' w/ 35' cmt

Morrow Perfs
12968'-13396'

TD @ 13450'



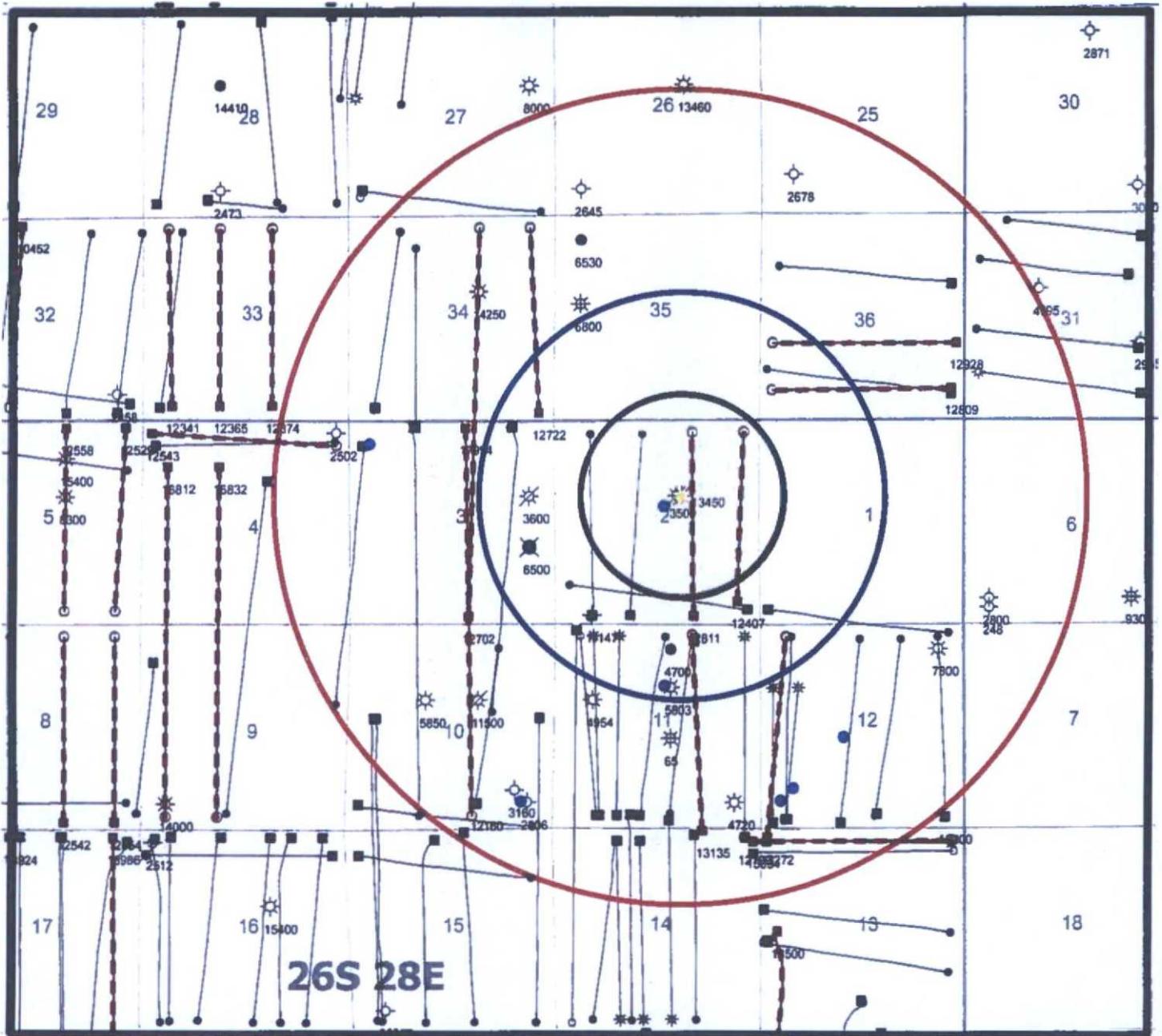
1 inch = 4,000 feet

- 1/2 MILE AREA OF REVIEW
- 1 MILE AREA OF REVIEW
- 2 MILE AREA OF REVIEW

MOC Mewbourne Oil Company

FLOWER DRAW 2 STATE SWD #1 APPLICATION
 2-248 - 282
 EDDY, NEW MEXICO

Author of	Date 21 Mar. 2016
-----------	----------------------



1" = 4000'



- 1/2 MILE AREA OF REVIEW
- 1 MILE AREA OF REVIEW
- 2 MILE AREA OF REVIEW

DOCUMENTED FRESH WATER WELLS FROM NEW MEXICO OFFICE OF STATE ENGINEER

MOC Mewbourne Oil Company		
FLOWER DRAW 2 STATE SWD #1 APPLICATION 2-16S-28E EDDY NEW MEXICO		
		Date: 24 May, 2016
Tech: Steve Daughtry	Scale: 1"=4000'	

Meghowne Oil Company
 Flower Draw 2 State SWD #1
 Tubulation of Wells Within 1/2 Mile
 5/23/2016

PROPOSED TOP OF DISPOSAL INTERVAL

14,700 FT

Direction	API	Lease Name	Well Name	Operator Name	Current Operator	Location	Footage	Field Name	County	Current Status	Final Status	Prod Form	QTD	TVD	Form @ TD
V	30015236150000	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FHL 1980 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A	ABD-GW	BONE SPRING	13450	13450	MORROW
V	30015236150001	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FHL 1980 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	13450	13450	MORROW
V	30015242070000	FLOWER DRAW UNIT	2	MADDOX ENERGY CORP	PARKER&PARSLEY DEV	265 28E 2	1980 FHL 2110 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	3500	3500	DELAWARE
NZ	30015375480000	SRO STATE UNIT COM	2H	MAARBOE ENRGY CORP	COG OPERATING LLC	265 28E 2	380 FSL 330 FEL CONGRESS SECTION	RED BLUFF	EDDY	Active	OH	BONE SPRING	11275	6865	BONE SPRING
NZ	30015419300000	SRO STATE CDM	58H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1935 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OH	BONE SPRING	12802	8294	BONE SPRING
NZ	30015419310000	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY		J&A		8379	8377	BONE SPRING 2 /SD/
NZ	30015419310100	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A - lost tools	J&AW		11315		BONE SPRING
NZ	30015419310200	SRO STATE	59H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OH-WO	BONE SPRING	12662	8274	BONE SPRING
NZ	30015422820000	GRAMAM CRACKER 2 STATE	1H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	600 FSL 580 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT				
NZ	30015422830000	GRAMAM CRACKER 2 STATE	2H	COG OPERATING LLC	COG OPERATING LLC	265 28E 2	210 FSL 1700 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT				

NO WELLS PENETRATE THE PROPOSED SWD INTERVAL

**C-108 Application for Authorization to Inject
FLOWER DRAW 2 STATE SWD #1
Unit G, Sec 2, T26S R 28E
Eddy County, NM**

- V. Maps are attached
- VI. There are no wells with 1/4 mile radius area of review that penetrate the proposed disposal zone. A tabulation of wells within the radius of review has been attached.
- VII. 1. Proposed average daily injection rate = 10,000 Bwpd
Proposed maximum daily injection rate = 25,000 Bwpd
2. Closed system
3. Proposed maximum injection pressure = 2,940 psi (0.2 psi/ft x 14,700 ft = 2,940 psi)
4. Source of injected water will be produced water from MOC operated wells completed in the Avalon, Bone Spring and Wolfcamp. Analysis of Avalon, Bone Spring and Wolfcamp waters from analogous source wells are attached.
5. We will be injecting into the Devonian, Fusselman and Montoya formations. Devonian formation water is known to be compatible with the formation water of the Avalon, Bone Spring and Wolfcamp; however, a water analysis for the Devonian was not available in the area.
- VIII. 1. The proposed injection interval is comprised of the Devonian, Fusselman and Montoya formations from 14700 – 16100'. The proposed well will not penetrate the Simpson Group and it is estimated that the base of the injection interval should be approximately 150' above the top of the Ellenburger.
- Other Projected Formation Tops:
- | | |
|---------------|---------|
| Mississippian | 14,378' |
| Woodford | 14,556' |
| Devonian | 14,700' |
| Simpson | 16,183' |
| Ellenburger | 16,258' |
2. The underground fresh water aquifers (unnamed) are present at shallow depths <300'. There are no known fresh water intervals underlying the injection formation.
- IX. The injection interval will be acidized with approximately 30,000 gallons of 15% HCl acid.
- X. A gamma-ray neutron logs will be run from TD to surface and filed with the Division.
- XI. There are two fresh water wells of record, at the NM State Engineers Office, within one mile of the proposed SWD well but we unable to find the wells to secure a water samples. The location of these wells is shown on the attached well plat.
- XII. 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 has been attached.
- XIII. Proof of Notice is attached.

**TABULATION OF NEARBY WATER WELLS
 MEWBOURNE OIL COMPANY
 FLOWER DRAW 2 STATE SWD #1 APPLICATION**

POD Number	Driller Name	Drill Date	County	q04	q16	q4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column	Comments		
C 02160 S9	HELMER	6/1/1981	EDDY	SW	SW	NE	02	26S	26E	589020	3548868	32.072584	-104.058819	300	120	180	unable to locate
C 02924	NA	10/4/2002	EDDY	NW	SW	NE	11	26S	28E	589032	3547451	32.056781	-104.058823				unable to locate

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021540**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation Lease **Delaware Ranch 11 Fed Com** Well **#2H**

Avalon Shale Producer

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	79,120	3,440
Total Hardness as Ca++	15,550	0
Calcium Ca++	2,931	147
Magnesium, Mg++	7,695	641
Barium, Ba++	0	0
Iron (Total) Fe+++*	32	2

ANIONS

Chlorides, Cl-	149,350	4,207
Sulfate, SO4-	150	3
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	1,220	20
Sulfide, S-*	0	0
Total Dissolved Solid	240,498	

OTHER PROPERTIES

pH*	6.630
Specific Gravity, 60/60 F.	1.149
Turbidity	357

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	1.5142	-1.3407	-1.6650	-29.4407
120	1.9995	-1.3588	-1.5026	-29.5974
160	2.7369	-1.3912	-1.3623	-29.8134

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021537**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation **Lease Delaware Ranch EH Fed. Com** Well **#1H**

BOVE Spring PRODUCER

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	52,877	2,299
Total Hardness as Ca++	11,250	0
Calcium Ca++	5,998	300
Magnesium, Mg++	3,202	267
Barium, Ba++	0	0
Iron (Total) Fe+++*	19	1

ANIONS

Chlorides, Cl-	101,250	2,852
Sulfate, SO4-	450	9
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	366	6
Sulfide, S-*	0	0
Total Dissolved Solid	164,162	

OTHER PROPERTIES

pH*	6.700
Specific Gravity, 60/60 F.	1.110
Turbidity	249

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.6687	-0.6227	-0.8751	-29.3170
120	1.0476	-0.6347	-0.7067	-29.5122
160	1.6314	-0.6586	-0.5579	-29.7405

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021536**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation **Lease Delaware Ranch 14 CN Fee** Well **#1H**
Com

Wolfcamp

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	32,315	1,405
Total Hardness as Ca++	6,125	0
Calcium Ca++	1,993	100
Magnesium, Mg++	2,520	210
Barium, Ba++	0	0
Iron (Total) Fe+++*	18	1

ANIONS

Chlorides, Cl-	60,400	1,701
Sulfate, SO4-	375	8
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	439	7
Sulfide, S-*	0	0
Total Dissolved Solid	98,060	

OTHER PROPERTIES

pH*	7.000
Specific Gravity, 60/60 F.	1.065
Turbidity	223

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.1941	-1.1261	-1.3271	-29.1576
120	0.5161	-1.1366	-1.1572	-29.3798
160	1.0140	-1.1436	-0.9915	-29.6080

PERFORATIONS

May 27, 2016

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

Re: Flower Draw 2 State SWD #1

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

Listing of Notified Persons

Flower Draw 2 State SWD #1 Application

1980 FEL & 1980 FNL

Section 2, T26S, R28E, Eddy County, NM

Surface Owner

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, NM 87504

Offsetting Operators

COG Operating LLC

One Concho Center

600 W. Illinois Ave

Midland, TX 79701

Yates Petroleum Corporation

105 S. 4th Street

Artesia, NM 88210

OXY USA Inc.

5 Greenway Plaza

Houston, TX 77046

RECEIVED OCD

June 13, 2016 JUN 13 P 1:40

HAND-DELIVERY

Mr. David Catanach, Director
Oil Conservation Division
New Mexico Department of Energy, Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

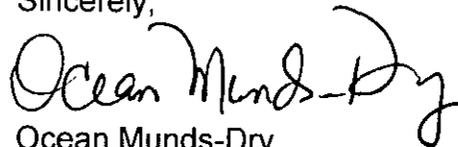
Re: Application of Mewbourne Oil Company for salt water disposal in Section 2,
Township 26 South, Range 28 East, NMPM, Eddy County, New Mexico.

Dear Mr. Catanach:

In a letter dated May 27, 2016 and received on June 6, 2016, Mewbourne Oil Company ("Mewbourne") notified COG Operating LLC ("Concho") of its Application for Authorization to Inject in the Flower Draw 2 State Well No. 1, Section 2, Township 26 South, Range 28 East, NMPM, Eddy County, New Mexico. A copy of the notice is attached.

As an offset operator, Concho objects to Mewbourne's application. Concho requests this application be set for hearing.

Sincerely,



Ocean Munds-Dry
Senior Attorney
COG Operating LLC

cc: Tim Harrington (via email: tharrington@mewbourne.com)

CORPORATE ADDRESS

ONE CONCHO CENTER | 600 WEST ILLINOIS AVENUE | MIDLAND, TEXAS 79701
P 432.683.7443 | F 432.683.7441

SANTA FE OFFICE

1048 PASEO DE PERALTA | SANTA FE, NEW MEXICO 87501
P 505.780.8000 | F 505.428.0485

May 27, 2016

COG Operating LLC
One Concho Center
600 W. Illinois Ave
Midland, TX 79701

Re: Application to Inject
Flower Draw 2 State SWD #1
Township 26 South, Range 28 East
Section 2, 1980' FNL & 1980' FEL
Eddy County, New Mexico

REC'D JUN 06 2016
efd legal

To Whom It May Concern,

Enclosed for your review is a copy of Mewbourne Oil Company's C-108 Application to Inject for the captioned well. As required by the New Mexico Oil Conservation Division, you are being noticed because you have been identified as the surface owner or a leasehold operator within a one-half mile radius of the proposed well location. If you object to the application, you must file a written objection and/or request for hearing with the Division within 15 days of receipt of this notice. The Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505.

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

Sincerely yours,

MEWBOURNE OIL COMPANY



Tim Harrington
Reservoir Engineer
tharrington@mewbourne.com

DATE IN	SUBPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
---------	----------	----------	-----------	------	---------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - 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

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**
 [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**
 [A] Working, Royalty or Overriding Royalty Interest Owners
 [B] Offset Operators, Leaseholders or Surface Owner
 [C] Application is One Which Requires Published Legal Notice
 [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
 [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
 [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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.

Timothy R. Harrington
 Print or Type Name

Timothy R. Harrington
 Signature

Reservoir Engineer
 Title

5/27/16
 Date

tharrington@newbourn.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: Mewbourne Oil Company

ADDRESS: 3620 Old Bullard Road
Tyler, TX 79701

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 _____ 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: Reservoir Engineer

SIGNATURE: Tim R. Harrington

DATE: 5/27/2016

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: _____

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: Mewbourne Oil Company

WELL NAME & NUMBER: Flower Draw 2 State SWD #1

WELL LOCATION: 1980' FNL & 1980' FEL

FOOTAGE LOCATION

G

UNIT LETTER

02

SECTION

26S

TOWNSHIP

28E

RANGE

WELLBORE SCHEMATIC (See Attached)WELL CONSTRUCTION DATASurface Casing

Hole Size: 26"

Casing Size: 20" @ 530'

Cement with: 1150 sx

Top of Cement: Surface (calc)

Intermediate Casing

Hole Size: 17 1/2"

Casing Size: 13 3/8" @ 2751'

Cement with: 3550 sx

Top of Cement: Surface
(Circulated to Surface per C-103)Intermediate 2 Casing

Hole Size: 12 1/4"

Casing Size: 9 5/8" @ 9,550'

Stage 1: Cement with: 2065 sx

Top of Cement: Surface

Stage 2: Cement with: 2645 sx

(Surface per C-103)

Stage 3: Cement down backside w/
1850sxIntermediate 3 Liner (Cut window in 9 5/8" casing @ 9,100')

Hole Size: 8 3/4"

Casing Size: 7" Top @ Surface
Bottom @ 14,700'

Cement with : 1,790 sx

Top of Cement: Surface

DVT @ 9,300' & 14,640'

(Proposed: circulated)

External Csg Packer @ 14,680'

Stage 1: Cement 50 sx

Stage 2: Cement 840 sx

Stage 3: Cement 900 sx

TD @ 16100'

Injection Interval

Open Hole Completion from 14700'-16100'

INJECTION WELL DATA SHEET

Tubing Size: 4 1/2" 12.75# 13CR-HP1-110

Lining Material: None

Type of Packer: Model R (nickel plated)

Packer Setting Depth: +/- 14,630'

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? Production

2. Name of the Injection Formation: Devonian, Fusselman & Montoya - Open Hole Completion

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

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. (Please consult attached well schematics for current and proposed wellbores)
Yes: Delaware (3092-3106', CIBP @3033'), Brushy Canyon (5764-5776', squeezed w/35 sx), Bone Spring (6333-7669', CIBP @6303'), Wolfcamp (10892-10930, CIBP @ 10810'), Strawn (12152-12766, CIBP @11885'), Morrow (12968-13396', CIBP 12880')

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

Overlying producing zone(s) – Delaware (2,636-6,329'), Bone Spring (7,297- 9487'), Wolfcamp (9,487 -12,002'), Strawn (12,002 -12,266'), Atoka (12,266-12,448') and Morrow (12,448-14,378').

Underlying producing zone – N/A

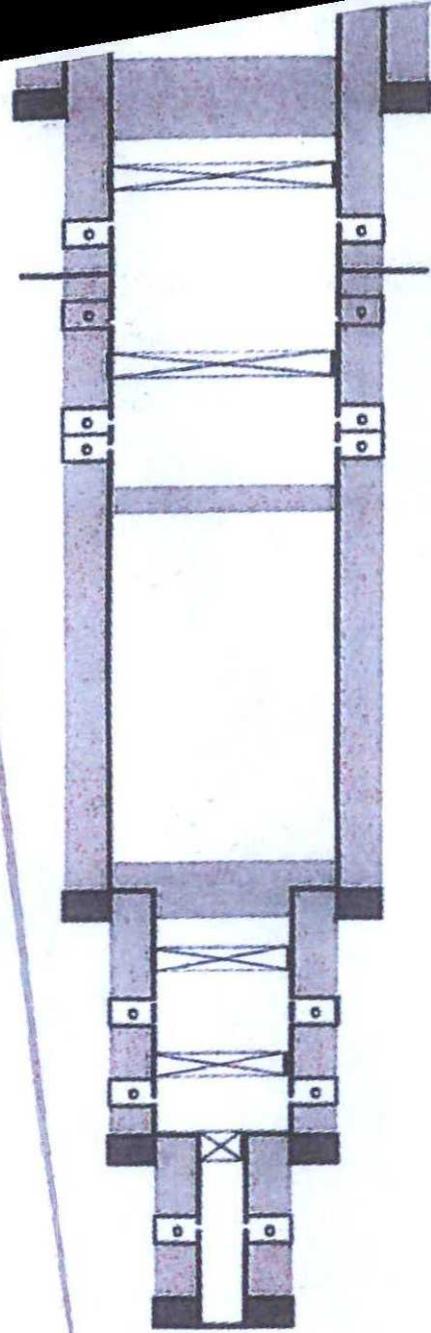
2751'
Cmt w/ 3550 sx, circ 300 sx

DV Tool @ 5345'
Cmt 2nd stg w/ 2045 sx, no returns
Cmt down backside w/ 1850 sx

9 5/8" 43.5 & 47# N-80 & S-95 LTC
Set @ 9550'
Cmt 1st stg w/ 2065 sx, no returns

7" 26# S-95 LTC Liner
Set from 9241'-12948'
Cmt w/ 900 sx

4 1/2" 13.5# N-80 LTC Liner
Set from 12830'-13448'
Cmt w/ 100 sx



Cmt Plug (15 sx) 2880'-2728'
Cmt Plug (50 sx) 2728'-2814'

CIBP @ 3033' w/ 15 sx cmt

Delaware Perfs
3092'-3106'

Brusy Canyon Perfs (Bqz)
5764'-5776'
CIBP @ 6303' w/ 35 sx cmt

Bone Springs Perfs
6333'-7124' & 7509'-7669'

Cmt Plug (36 sx) 7785'-7885'

Cmt Plug (25 sx) 9110'-9319'

CIBP @ 10,810' w/ 62' cmt

Wolfcamp Perfs
10892'-10930'
CIBP @ 11888' w/ 35' cmt
Strawn Perfs
12152'-12766'
CIBP @ 12880' w/ 35' cmt

Norow Perfs
12968'-13398'

TD @ 13488'

Newhouse Oil Company
 Flower Draw 2 State SWD #1
 Tabulation of Wells Within 1/2 Mile
 8/23/2018

PROPOSED TOP OF DISPOSAL INTERVAL

14,700 FT

Direction	API	Lease Name	Well Name	Operator Name	Current Operator	Location	Footage	Field Name	County	Current Status	Fluid Status	Prod Form	STD	TVD	Feet @ TD
V	30015236150000	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKERSPAKLEY DEV	26S 28E 2	1980 FHL 1980 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A	ABD-GW	BONE SPRING	13450	13450	MORROW
V	30015236150001	FLOWER DRAW UNIT	1	MADDOX ENERGY CORP	PARKERSPAKLEY DEV	26S 28E 2	1980 FHL 1980 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	13450	13450	MORROW
V	30015242070000	FLOWER DRAW UNIT	2	MADDOX ENERGY CORP	PARKERSPAKLEY DEV	26S 28E 2	1980 FHL 2180 FEL CONGRESS SECTION	RED BLUFF	EDDY	P&A	ABD-GW	DELAWARE	3500	3500	DELAWARE
H2	30015375480000	SRD STATE UNIT CDAM	8H	MAKROS ENERGY CORP	COG OPERATING LLC	26S 28E 2	280 FSL 330 FEL CONGRESS SECTION	RED BLUFF	EDDY	Active	OIL	BONE SPRING	11275	6884	BONE SPRING
H2	30015419360000	SRD STATE CDAM	5CH	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 1935 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL	BONE SPRING	12892	8294	BONE SPRING
H2	300154193710000	SRD STATE	5RH	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL	BONE SPRING	12892	8294	BONE SPRING
H2	30015419310100	SRD STATE	5RH	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	P&A - lost tools	IBAW		8379	8377	BONE SPRING 2 /SD/
H2	30015419310200	SRD STATE	5RH	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL-WO	BONE SPRING	11315		BONE SPRING
H2	30015419310300	SRD STATE	5RH	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 940 FWL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Active	OIL-WO	BONE SPRING	12662	8274	BONE SPRING
H2	30015422830000	GRAHAM CRACKER 1 STATE	1H	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	600 FSL 580 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT				
H2	30015422830000	GRAHAM CRACKER 2 STATE	2H	COG OPERATING LLC	COG OPERATING LLC	26S 28E 2	210 FSL 1700 FEL CONGRESS SECTION	RED BLUFF SOUTH	EDDY	Permit	PERMIT				

NO WELLS PENETRATE THE PROPOSED SWD INTERVAL

**C-108 Application for Authorization to Inject
FLOWER DRAW 2 STATE SWD #1
Unit G, Sec 2, T26S R 28E
Eddy County, NM**

- V. **Maps are attached**
- VI. **There are no wells with ½ mile radius area of review that penetrate the proposed disposal zone. A tabulation of wells within the radius of review has been attached.**
- VII. **1. Proposed average daily injection rate = 10,000 Bwpd
Proposed maximum daily injection rate = 25,000 Bwpd**
- 2. Closed system**
- 3. Proposed maximum injection pressure = 2,940 psi (0.2 psi/ft x 14,700 ft = 2,940 psi)**
- 4. Source of injected water will be produced water from MOC operated wells completed in the Avalon, Bone Spring and Wolfcamp. Analysis of Avalon, Bone Spring and Wolfcamp waters from analogous source wells are attached.**
- 5. We will be injecting into the Devonian, Fusselman and Montoya formations. Devonian formation water is known to be compatible with the formation water of the Avalon, Bone Spring and Wolfcamp; however, a water analysis for the Devonian was not available in the area.**
- VIII. **1. The proposed injection interval is comprised of the Devonian, Fusselman and Montoya formations from 14700 – 16100'. The proposed well will not penetrate the Simpson Group and it is estimated that the base of the injection interval should be approximately 150' above the top of the Ellenburger.**
- Other Projected Formation Tops:**
- | | |
|---------------|---------|
| Mississippian | 14,378' |
| Woodford | 14,556' |
| Devonian | 14,700' |
| Simpson | 16,183' |
| Ellenburger | 16,258' |
- 2. The underground fresh water aquifers (unnamed) are present at shallow depths <300'. There are no known fresh water intervals underlying the injection formation.**
- IX. **The injection interval will be acidized with approximately 30,000 gallons of 15% HCl acid.**
- X. **A gamma-ray neutron logs will be run from TD to surface and filed with the Division.**
- XI. **There are two fresh water wells of record, at the NM State Engineers Office, within one mile of the proposed SWD well but we unable to find the wells to secure a water samples. The location of these wells is shown on the attached well plat.**
- XII. **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 has been attached.**
- XIII. **Proof of Notice is attached.**

**TABULATION OF NEARBY WATER WELLS
 MEWBOURNE OIL COMPANY
 FLOWER DRAW 2 STATE SWD #1 APPLICATION**

POD Number	Driller Name	Drill Date	County	q64	q16	q4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column	Comments		
C 02160 S9	HELMER	6/1/1961	EDDY	SW	SW	NE	02	26S	28E	589020	3546868	32.072564	-104.056819	300	120	180	unable to locate
C 02924	NA	10/4/2002	EDDY	NW	SW	NE	11	26S	28E	589032	3547451	32.056781	-104.056823				unable to locate

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021540**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation **Lease Delaware Ranch 11 Fed Com** Well **#2H**

Avalon Shale Producer

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	79,120	3,440
Total Hardness as Ca++	15,550	0
Calcium Ca++	2,931	147
Magnesium, Mg++	7,695	641
Barium, Ba++	0	0
Iron (Total) Fe+++*	32	2

ANIONS

Chlorides, Cl-	149,350	4,207
Sulfate, SO4-	150	3
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	1,220	20
Sulfide, S-*	0	0
Total Dissolved Solid	240,498	

OTHER PROPERTIES

pH*	6.630
Specific Gravity, 60/60 F.	1.149
Turbidity	357

SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	1.5142	-1.3407	-1.6650	-29.4407
120	1.9995	-1.3588	-1.5026	-29.5974
160	2.7369	-1.3912	-1.3623	-29.8134

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date **5/9/2016** Endura Rep **Michael McNeil** Code **105021537**
Sampling Point/Date **well head 5/5/2016** State **New Mexico**
Company **Mewbourne Oil** County **Eddy**
Formation **Lease Delaware Ranch EH Fed. Com** Well **#1H**

BONE Spring PRODUCER

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	52,877	2,299
Total Hardness as Ca++	11,250	0
Calcium Ca++	5,998	300
Magnesium, Mg++	3,202	267
Barium, Ba++	0	0
Iron (Total) Fe+++*	19	1

ANIONS

Chlorides, Cl-	101,250	2,852
Sulfate, SO4-	450	9
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	366	6
Sulfide, S-*	0	0
Total Dissolved Solid	164,162	

OTHER PROPERTIES

pH*	6.700
Specific Gravity, 60/60 F.	1.110
Turbidity	249

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.6687	-0.6227	-0.8751	-29.3170
120	1.0476	-0.6347	-0.7067	-29.5122
160	1.6314	-0.6586	-0.5579	-29.7405

PERFORATIONS

Endura Products Corp.
P.O. Box 3394, Midland, Texas 79702
Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date	5/9/2016	Endura Rep Michael McNeil	Code 105021536
Sampling Point/Date	well head 5/5/2016		State New Mexico
Company	Mewbourne Oil		County Eddy
Formation	Lease Delaware Ranch 14 CN Fee Com Wolfcamp		Well #1H

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	32,315	1,405
Total Hardness as Ca++	6,125	0
Calcium Ca++	1,993	100
Magnesium, Mg++	2,520	210
Barium, Ba++	0	0
Iron (Total) Fe+++*	18	1

ANIONS

Chlorides, Cl-	60,400	1,701
Sulfate, SO4-	375	8
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	439	7
Sulfide, S-*	0	0
Total Dissolved Solid	98,060	

OTHER PROPERTIES

pH*	7.000
Specific Gravity, 60/60 F.	1.065
Turbidity	223

SCALING INDICIES

<u>TEMP. F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.1941	-1.1261	-1.3271	-29.1576
120	0.5161	-1.1366	-1.1572	-29.3798
160	1.0140	-1.1436	-0.9915	-29.6080

PERFORATIONS

May 27, 2016

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

Re: Flower Draw 2 State SWD #1

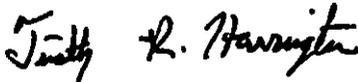
Mr. Goetze,

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

Listing of Notified Persons

Flower Draw 2 State SWD #1 Application

1980 FEL & 1980 FNL

Section 2, T26S, R28E, Eddy County, NM

Surface Owner

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, NM 87504

Offsetting Operators

COG Operating LLC

One Concho Center

600 W. Illinois Ave

Midland, TX 79701

Yates Petroleum Corporation

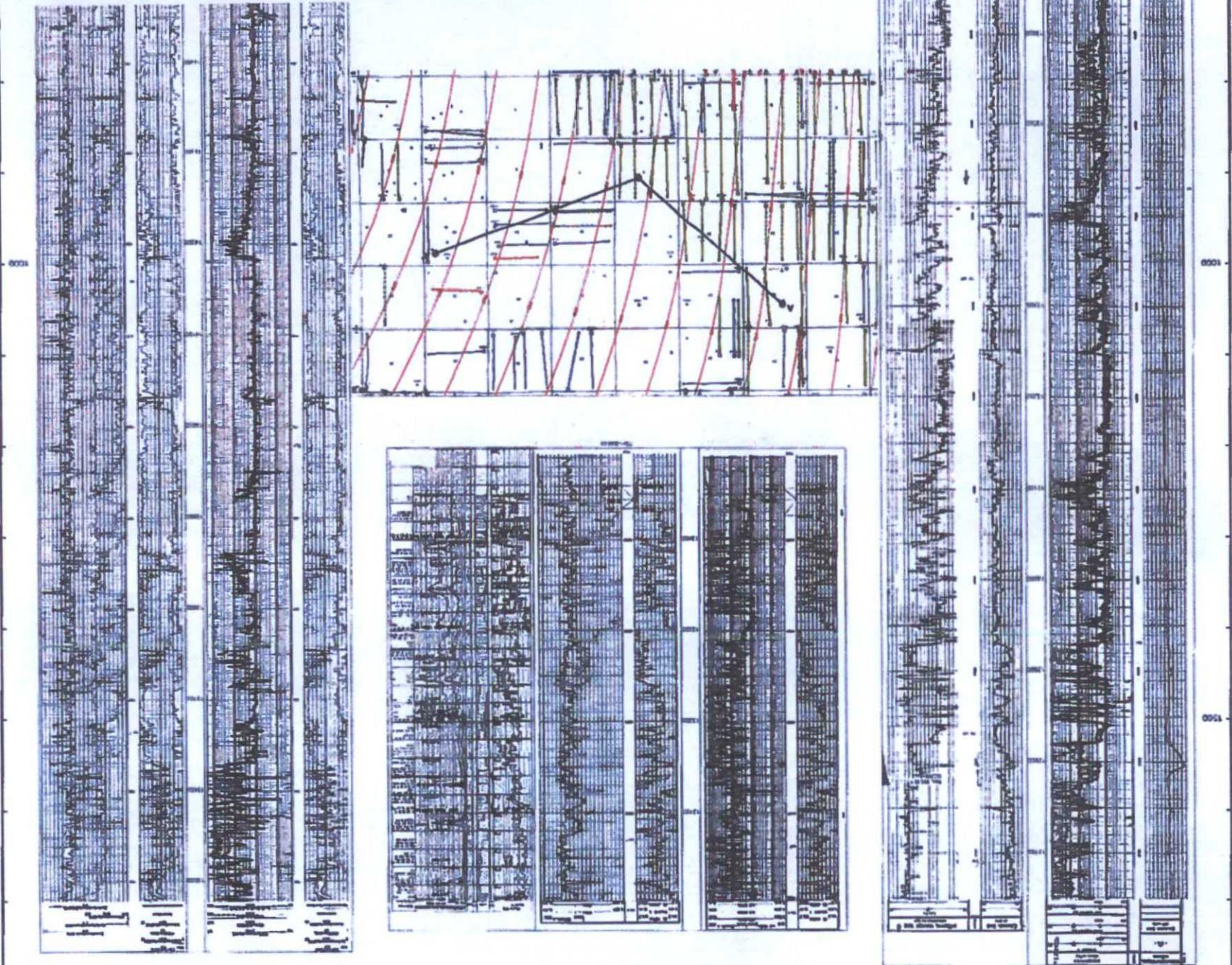
105 S. 4th Street

Artesia, NM 88210

OXY USA Inc.

5 Greenway Plaza

Houston, TX 77046



32A

82012 DRAIN SWD

Inset Open Hole 15200 - 15810

2G

FLOW DRAIN LINE SWD #1

1000 PUL & 1000 PUL, 1205 - 1325, Sec. 2

28F

FLOW DRAIN LINE SWD #1

1000 PUL & 1000 PUL, 1205 - 1325, Sec. 2

WELL LOCATION

FLOW LINE

WELL LOCATION

Goetze, Phillip, EMNRD

From: Ocean Munds-Dry <OMundsDry@concho.com>
Sent: Tuesday, June 21, 2016 10:36 AM
To: Goetze, Phillip, EMNRD; Tim Harrington
Cc: Jones, William V, EMNRD; McMillan, Michael, EMNRD; Lowe, Leonard, EMNRD
Subject: RE: Protest of Application to Inject - Flower Draw 2 State SWD No. 1

Phillip:

Concho withdraws its objection to Mewbourne's application.

Thank you for your time and attention to this matter.

Sincerely,
Ocean

Ocean Munds-Dry
Senior Attorney
COG OPERATING LLC
1048 Paseo de Peralta
Santa Fe NM 87501
Office 505.780.8000
Cell 505.920.5201
omundsdry@concho.com


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From: Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]
Sent: Wednesday, June 15, 2016 2:53 PM
To: Tim Harrington
Cc: Ocean Munds-Dry; Jones, William V, EMNRD; McMillan, Michael, EMNRD; Lowe, Leonard, EMNRD
Subject: [External] Protest of Application to Inject - Flower Draw 2 State SWD No. 1

**** External email. Use caution. ****

RE: Flower Draw 2 State SWD No. 1 (API 30-015-23615; Appl. No. pMAM1615857077) – Sec 2, T. 26 S., R. 28 E., NMPM, Eddy County.

Mr. Harrington:

OCD was notified by COG Operating, LLC is protesting this application for approval of a salt water disposal well. Chevron is identified as an "affected person" for this application. Therefore, you are being notified that if Mewbourne Oil Company wishes for this application to be considered, it must either go to hearing or may be reviewed administratively if the protests are withdrawn as a result of a negotiated resolution with these parties. The application will be retained by OCD, but suspended from further administrative review. Please contact OCD once you have made a decision regarding the application within the next 30 days. If the protest remains after 30 days, OCD will initiate the process for the application to be reviewed at hearing. Please contact me with any questions regarding this matter. PRG

Counsel for Concho

Ocean Munds-Dry, Attorney
COG Operating, LLC
1048 Paseo de Peralta
Santa Fe, NM 87501
Phone: 505.780.8000
E-mail: Ocean Munds-Dry (omundsdry@concho.com)

Phillip R. Goetze, PG

Engineering Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Direct: 505.476.3466
E-mail: phillip.goetze@state.nm.us



Goetze, Phillip, EMNRD

From: Goetze, Phillip, EMNRD
Sent: Wednesday, June 15, 2016 3:02 PM
To: 'Tim Harrington'
Cc: McMillan, Michael, EMNRD; Jones, William V, EMNRD; Lowe, Leonard, EMNRD
Subject: Protest of Application to Inject - Flower Draw 2 State SWD No. 1

RE: Flower Draw 2 State SWD No. 1 (API 30-015-23615; Appl. No. pMAM1615857077) – Sec 2, T. 26 S., R. 28 E., NMPM, Eddy County.

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Counsel for Concho

Ocean Munds-Dry, Attorney
COG Operating, LLC
1048 Paseo de Peralta
Santa Fe, NM 87501
Phone: 505.780.8000
E-mail: [Ocean Munds-Dry \(omundsdry@concho.com\)](mailto:omundsdry@concho.com)

Phillip R. Goetze, PG
Engineering Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Direct: 505.476.3466
E-mail: phillip.goetze@state.nm.us



Goetze, Phillip, EMNRD

From: postmaster@mewbourneoil.onmicrosoft.com
To: Tim Harrington
Sent: Wednesday, June 15, 2016 2:53 PM
Subject: Undeliverable: Protest of Application to Inject - Flower Draw 2 State SWD No. 1

Delivery has failed to these recipients or groups:

Tim Harrington

This message was rejected by the recipient email system. Please check the recipient's email address and try resending this message, or contact the recipient directly.

Diagnostic information for administrators:

Generating server: BY2PR02MB1976.namprd02.prod.outlook.com

harrington@mewbourne.com

Remote Server returned '< #5.1.10 smtp;550 5.1.10 RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup>'

Original message headers:

Received: from BN1PR02CA0019.namprd02.prod.outlook.com (10.141.56.19) by BY2PR02MB1976.namprd02.prod.outlook.com (10.166.109.150) with Microsoft SMTP Server (TLS) id 15.1.517.8; Wed, 15 Jun 2016 20:52:36 +0000
Received: from BN1AFFO11FD009.protection.gbl (2a01:111:f400:7c10::157) by BN1PR02CA0019.outlook.office365.com (2a01:111:e400:2a::19) with Microsoft SMTP Server (TLS) id 15.1.517.8 via Frontend Transport; Wed, 15 Jun 2016 20:52:36 +0000
Authentication-Results: spf=none (sender IP is 216.82.243.200) smtp.mailfrom=state.nm.us; mewbourne.com; dkim=none (message not signed) header.d=none;mewbourne.com; dmarc=none action=none header.from=state.nm.us;
Received-SPF: None (protection.outlook.com: state.nm.us does not designate permitted sender hosts)
Received: from mail1.bemta8.message-labs.com (216.82.243.200) by BN1AFFO11FD009.mail.protection.outlook.com (10.58.52.69) with Microsoft SMTP Server (TLS) id 15.1.511.7 via Frontend Transport; Wed, 15 Jun 2016 20:52:36 +0000
Return-Path: Phillip.Goetze@state.nm.us
Received: from [216.82.241.195] by server-8.bemta-8.message-labs.com id 2C/3F-03397-310C1675; Wed, 15 Jun 2016 20:52:35 +0000
X-Brightmail-Tracker: H4sIAAAAAAAAAA+NgFnRHKsWRWlGSWpSXmKPEXsWyXIElWVfoQGK4wYVOE4u3MxpYLTqa7jm6MHm0P7rI6DHzzgfGAKY0lsy8pPyKBNAMWQvmsBYs2cBUSfzbnrYgxs51TF2MXBxCAosZJd63r2WfcJYwsjy7dBYqs5VRYsO5VWxdjJwcbALWEo13mphBbBEBXym/Px6xgXqxC7xh1Gi5vJYdJCES4CWx9eR7Jogif4kFLZ0sXYwcQLaexPa7LCBhFgFVif6Gp4wgNq+Ao8SyK91g8xkFxCs+nloDlsosIC5x6818MFtCQETi4cXTbBC2qMTLx/9YIWWDia1L97FA2EoSXf3zWSDuaWku2DFnFjPEAKGJkzOfgn0gJKAu8X2uyQRGkVlIVsxCljILSQtEUbrE8pP3WCFsHYkFuz+xQdjaEssWvmaGsc8ceMyEKa4j8ftbF1S9osTtq1NZIZYBQ/j8ohVwQ3smvGOGKZrS/

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X-Env-Sender: Phillip.Goetze@state.nm.us
X-Msg-Ref: server-16.tower-119.message-labs.com!1466023953!44152425!1
X-Originating-IP: [164.64.4.99]
X-StarScan-Received:
X-StarScan-Version: 8.46; banners=-,-,-
X-VirusChecked: Checked

Received: (qmail 12836 invoked from network); 15 Jun 2016 20:52:34 -0000
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server-16.tower-119.message-labs.com with AES256-SHA encrypted SMTP; 15 Jun
2016 20:52:34 -0000
Received: from MBXCAS002.nmes.lcl (10.6.0.153) by CEXHUB002.nmes.lcl
(10.6.0.172) with Microsoft SMTP Server (TLS) id 14.3.279.2; Wed, 15 Jun 2016
14:52:33 -0600
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(10.6.0.153) with Microsoft SMTP Server (TLS) id 15.0.1156.6; Wed, 15 Jun
2016 14:52:32 -0600
Received: from MBXCAS006.nmes.lcl ([fe80::b4a2:bb7f:2b8b:5c76]) by
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15.00.1156.000; Wed, 15 Jun 2016 14:52:32 -0600
From: "Goetze, Phillip, EMNRD" <Phillip.Goetze@state.nm.us>
To: Tim Harrington <harrington@mewbourne.com>
CC: "Ocean Munds-Dry (omundsdry@concho.com)" <omundsdry@concho.com>, "Jones,
William V, EMNRD" <WilliamV.Jones@state.nm.us>, "McMillan, Michael, EMNRD"
<Michael.McMillan@state.nm.us>, "Lowe, Leonard, EMNRD"
<Leonard.Lowe@state.nm.us>

Subject: Protest of Application to Inject - Flower Draw 2 State SWD No. 1
Thread-Topic: Protest of Application to Inject - Flower Draw 2 State SWD No. 1
Thread-Index: AdHHR0RiPa48yCIETCWIqvRLk5cYNA==
Date: Wed, 15 Jun 2016 20:52:32 +0000
Message-ID: <84b93d444845410990e1a471503bc73e@MBXCAS006.nmes.lcl>
Accept-Language: en-US
Content-Language: en-US
X-MS-Has-Attach: yes
X-MS-TNEF-Correlator:
x-ms-exchange-transport-fromentityheader: Hosted
x-originating-ip: [164.64.106.203]
Content-Type: multipart/related;
boundary="_004_84b93d444845410990e1a471503bc73eMBXCAS006nmeslcl_";
type="multipart/alternative"

MIME-Version: 1.0
X-EOPAttributedMessage: 0
X-EOPTenantAttributedMessage: 2e24d8dd-8722-40b8-a616-9df9a1ddfe55:0
X-Forefront-Antispam-Report: CIP:216.82.243.200;IPV:NLI;CTRY:US;EFV:NLI;
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C-108 Review Checklist: Received 6/10/2016 Add. Request: _____ Reply Date: _____ Suspended: _____ (Ver 15)

ORDER TYPE: WFX / PMX / BWD Number: _____ Order Date: _____ Legacy Permits/Orders: _____

Well No. _____ Well Name(s): FLOWER DRAW 2 SLD
 API: 30-0 15-23615 Spud Date: 1/27/1981-2 New or Old: 2 -> 1001/27/1981 @ Sidermark-new
 Footages 1580 FNL Lot _____ or Unit 6 Sec 2 Tsp 26S Rge 28E County Eddy
 General Location: 2 1/2 miles south of MAMA Pool: SLD, DEVONIAN - north Pool No.: 97803
 BLM 100K Map: CANLSBAD Operator: McIntourne Oil Company OGRID: 14744 Contact: Tim Harrington
 COMPLIANCE RULE 5.9: Total Wells: 962 Inactive: 2 Fincl Assur: Y Compl. Order? N/A IS 5.9 OK? Y Date: 6-21-2016

WELL FILE REVIEWED Current Status: P&A

WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging: Y

Planned Rehab Work to Well: _____

Well Construction Details	Sizes (in)		Setting		Cement St or Cf	Cement Top and Determination Method
	Borehole / Pipe		Depths (ft)	Stage Tool		
Planned ___ or Existing ___ Surface	<u>26/20</u>		<u>530</u>		<u>1150</u>	<u>SURFACE/CCLL</u>
Planned ___ or Existing ___ Interm/Prod	<u>17 1/2 / 13 7/8</u>		<u>2751</u>		<u>3550</u>	<u>SURFACE/VISUAL</u>
Planned ___ or Existing ___ Interm/Prod	<u>12 1/4 / 9 5/8</u>		<u>9550</u>		<u>3550</u>	<u>SURFACE/VISUAL</u>
Planned ___ or Existing ___ Prod Liner	<u>8 3/4 / 7</u>		<u>14700</u>		<u>1760</u>	<u>SURFACE/VISUAL</u>
Planned ___ or Existing ___ Liner						
Planned ___ or Existing ___ <input checked="" type="checkbox"/> OH PERF	<u>14700/16100</u>			Inj Length <u>1400</u>		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:	
Adjacent Unit: Litho. Struc. Por.	<u>uv</u>	<u>uv</u>	<u>14556</u>	Drilled TD <u>13450</u>	PBTD <u>13450</u>
Confining Unit: Litho. Struc. Por.	<u>uv</u>	<u>uv</u>	<u>14700</u>	NEW TD <u>16100</u>	NEW PBTD _____
Proposed Inj Interval TOP:				NEW Open Hole <input type="checkbox"/> or NEW Perfs <input type="checkbox"/>	
Proposed Inj Interval BOTTOM:				Tubing Size <u>4 1/2</u> in. Inter Coated? <u>Y</u>	
Confining Unit: Litho. Struc. Por.				Proposed Packer Depth <u>14600</u> ft	
Adjacent Unit: Litho. Struc. Por.				Min. Packer Depth <u>14600</u> (100-ft limit)	
				Proposed Max. Surface Press. <u>2940</u> psi	
				Admin. Inj. Press. <u>2940</u> (0.2 psi per ft)	

AOR: Hydrologic and Geologic Information
 POTASH: R-111-P N/A Noticed? _____ BLM Sec Ord WIPP Noticed? _____ Salt/Salado T: 1200 B: 2635 NW: Cliff House fm _____
 FRESH WATER: Aquifer Quaternary Max Depth 120 HYDRO AFFIRM STATEMENT By Qualified Person
 NMOSE Basin: CANLSBAD CAPITAN REEF: thru adj NA No. Wells within 1-Mile Radius? _____ FW Analysis _____
 Disposal Fluid: Formation Source(s) Bonespring mc Analysis? _____ On Lease Operator Only or Commercial
 Disposal Int: Inject Rate (Avg/Max BWPD): 10K/25K Protectable Waters? N/A Source: _____ System: Closed or Open
 HC Potential: Producing Interval? N/A Formerly Producing? _____ Method: Logs/DST/P&A/Other _____ 2-Mile Radius Pool Map
 AOR Wells: 1/2-M Radius Map? Y Well List? Y Total No. Wells Penetrating Interval: 0 Horizontals? _____
 Penetrating Wells: No. Active Wells 0 Num Repairs? _____ on which well(s)? _____ Diagrams? _____
 Penetrating Wells: No. P&A Wells 0 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

NOTICE: Newspaper Date MAY 28, 2016 Mineral Owner NMSLW Surface Owner NMSLW N. Date 6-1-2016
 RULE 26.7(A): Identified Tracts? Y Affected Persons: COG, YATES, OXY N. Date 5-27, 6-01, 6-01

Order Conditions: Issues: _____
 Add Order Cond: RUN C-BL 7" Liner -> SURFACE
*DEVONIAN & SILURIAN ONLY -> POOL CHANGE FROM REQUEST.



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	POD Sub-Code	basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02160 S9			ED	3	3	2	02	26S	28E	589020	3548868*	300	120	180
C 02477		CUB	ED	1	1	03	26S	28E	586687	3549347*		150		

Average Depth to Water: 120 feet

Minimum Depth: 120 feet

Maximum Depth: 120 feet

Record Count: 2

PLSS Search:

Section(s): 1-3

Township: 26S

Range: 28E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.