

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 _____

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- [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.

Steven J. Smith

Senior landman

7-2-12

Print or Type Name

Signature

Title

Date

ssmith@mewbourne.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: **500 W. Texas Suite 1020
Midland, TX 79701**
CONTACT PARTY: **Drew Robison** PHONE: **432-682-3715**
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? _____ Yes _____ X _____ No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Drew Robison**

TITLE: **Reservoir Engineer**

SIGNATURE: _____

DATE: 6/25/12

E-MAIL ADDRESS: **drobison@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.

MEWBOURNE OIL COMPANY

500 W. TEXAS, SUITE 1020
MIDLAND, TEXAS 79701

(432) 682-3715
FAX (432) 685-4170

RECEIVED OOD

2012 JUL -5 P 12:47

July 2, 2012

Certified Mail-Return Receipt No. 1334

New Mexico Oil Conservation Division
Attn: Mrs. Jami Bailey, Director
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: C-108 Application for SWD Well
San Lorenzo SWD #1
NW/4SW/4 Section 15, T-25-S, R-28-E
Eddy County, New Mexico

Dear Mrs. Bailey:

Enclosed are an original and one copy of Mewbourne Oil Company's C-108 application for administrative approval of its proposed San Lorenzo SWD #1. This will be a re-entry salt water disposal well in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 25 South, Range 28 East, N.M.P.M., Eddy County, New Mexico. Please feel free to contact me at (432) 682-3715 or via email at ssmith@mewbourne.com if there are any questions.

Sincerely,

MEWBOURNE OIL COMPANY



Steven J. Smith
Senior Landman

Enclosure

INJECTION WELL DATA SHEET

Tubing Size: 4 1/2" 11.6#

Lining Material: TK99 IPC

Type of Packer: Arrowset 1X (nickel plated)

Packer Setting Depth: +/-2500'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

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

If no, for what purpose was the well originally drilled? Morrow / Atoka Test

2. Name of the Injection Formation: Delaware

3. Name of Field or Pool (if applicable): Willow Lake Southwest Delaware

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.

11864-916 (Atoka). 8912-20, 7692-8012, 7148-64, 6361-83 (Bone Spring). 3056-3123, 2741-2850 (Delaware, sqzd). Plugs @ 12675 (35 sx), 12195 (CIBP+35' cmt), 11790 (CIBP+35' cmt), 9200 (CIBP+35' cmt), 8850 (CIBP+35' cmt), 7500 (CIBP+35' cmt), 6300 (CIBP+35' cmt), 5000 (CIBP+35' cmt), 2480 (CIBP+35' cmt), 2095 (50 sx), 458 (85 sx), 30' to surface (20 sx)

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 – N/A

Underlying producing zone – Bone Spring (6243')

Mewbourne Oil Company
Well Name: San Lorenzo SWD #1 - Current
Updated by: J. Bryand
6/21/2012

Spud Date: 12/10/79

Surface

20" 94#
 Set @ 408'
 750 sks "C" (110 sks to pit)

Intermediate

13 3/8" 61# K-55
 Set @ 2,530'
 2000 sks Lite + 300 sks "C"
 (115 sks to pit)

CIBP Set @ 2480' (capped w/35' cmt)

Production

9 5/8" 53 1/2# N-80
 Set @ 9730' (Cut & Pulled from 2044')
 1st stage 460 sks TLW + 250 sks "H"
 (circ 54 sks above DV tool)
 2nd stage 1800 sks HLC + 150 sks "H"
TOC @ 2280' (CBL)
DV Tool @ 7699'
CIBP Set @ 5000' (capped w/35' cmt)

CIBP Set @ 6300' (capped w/35' cmt)

CIBP Set @ 7500' (capped w/35' cmt)

CIBP Set @ 8850' (capped w/35' cmt)

CIBP Set @ 9200' (capped w/35' cmt)

Liner

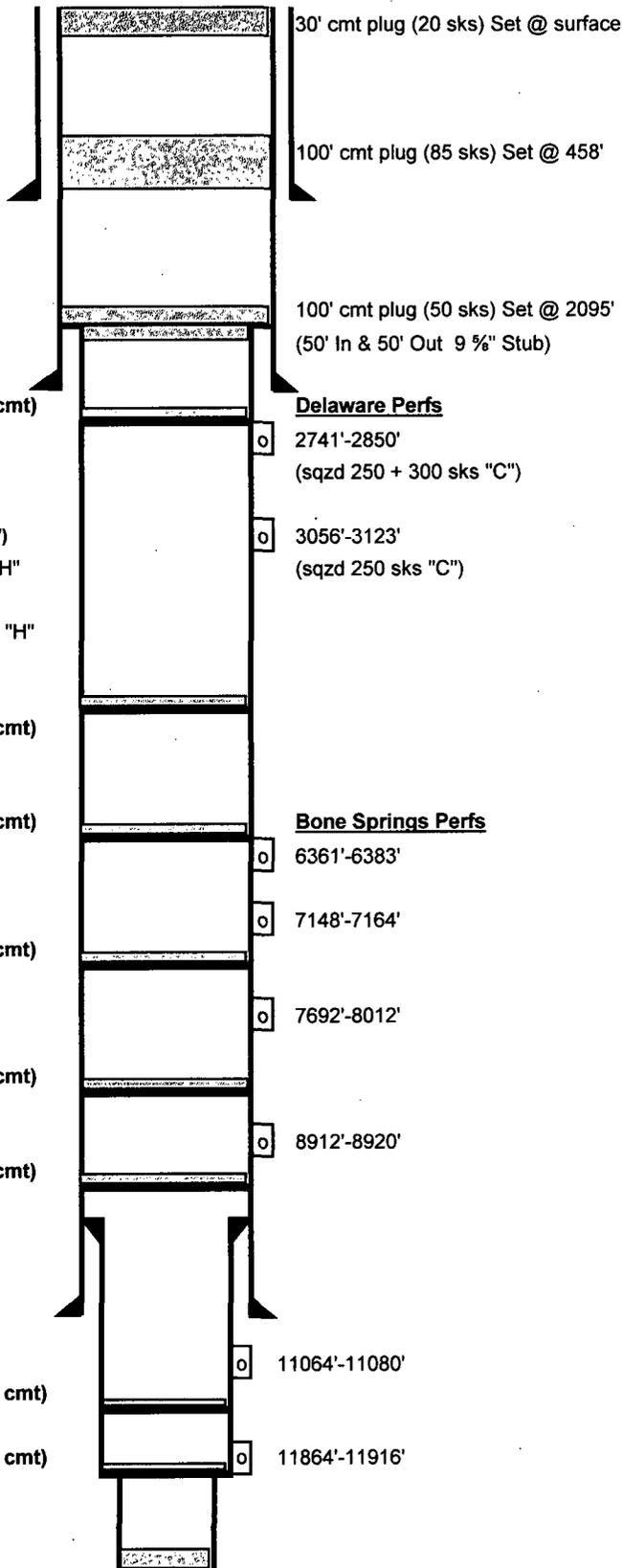
7 7/8" Liner
 Set @ 12195'
 TOL @ 9245'
 (circ 820 sks Gas Check cmt)

CIBP Set @ 11790' (capped w/35' cmt)

CIBP Set @ 12195' (capped w/35' cmt)

Open Hole

6 1/2" Hole
 TD @ 12775'
 Spotted 100' Class "H" from
 12675' - 12775'



Mewbourne Oil Company
Well Name: San Lorenzo SWD #1 - Proposed
 Updated by: J. Bryand
 6/21/2012

Spud Date: 12/10/79

Surface

20" 94#
 Set @ 408'
 750 sks "C" (110 sks to pit)

Intermediate

13 5/8" 61# K-55
 Set @ 2,530'
 2000 sks Lite + 300 sks "C"
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Production

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CIBP Set @ 7500' (capped w/35' cmt)

CIBP Set @ 8850' (capped w/35' cmt)

CIBP Set @ 9200' (capped w/35' cmt)

Liner

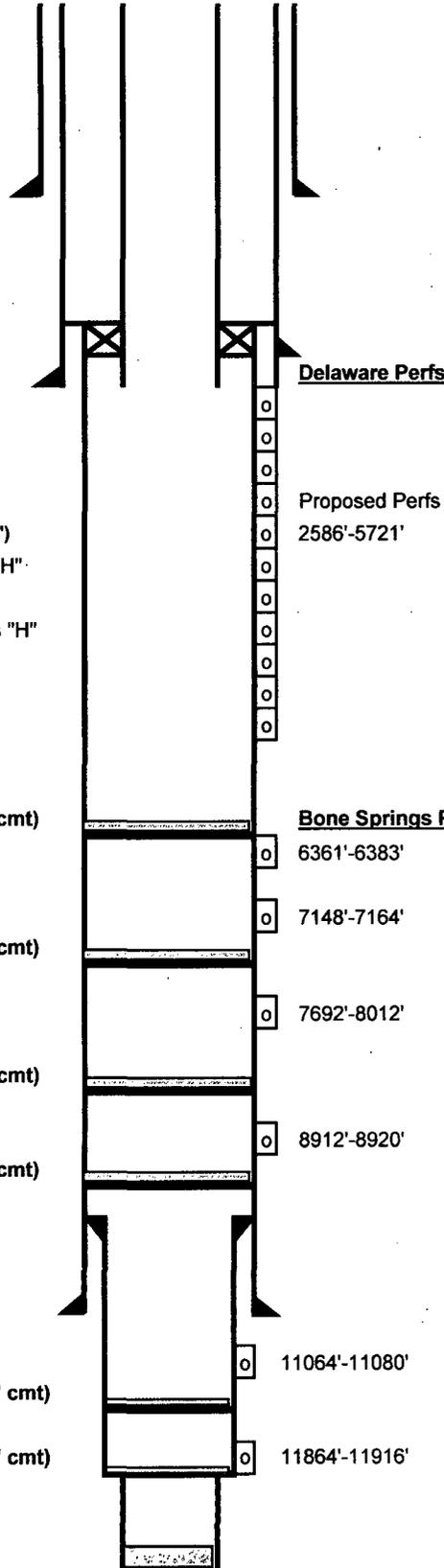
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CIBP Set @ 12195' (capped w/35' cmt)

Open Hole

6 1/2" Hole
 TD @ 12775'
 Spotted 100' Class "H" from
 12675' - 12775'



Proposed Tubing Detail:

1	4 1/2" Collar	0.5
1	9 5/8" x 4 1/2" Arrowset 1X nickel plated pkr	7.31'
1	T2 O/O tool (nickel plated)	1.83'
65	4 1/2" J-55 11.6# IPC	2470
	Total Tubing	2479.64
	KB Correction	18.00'
	Tubing Set @	2497.64

San Lorenzo SWD #1 C-108
Additional Details

- VI.** Please see attached table and wellbore schematic for the one well within the area of review.
- VII.**
1. Proposed average rate of 5000 bwpd and maximum rate of 10,000 bwpd.
 2. Closed system.
 3. Proposed average injection pressure is unknown and the maximum injection pressure is 517 psig (0.2 psi/ft x 2586 ft).
 4. Injection fluid will be formation water from the Mewbourne Oil Company operated Bone Spring producing wells in the area. See attached water analysis for the Bone Spring formation from the Mewbourne Delaware Ranch 11 Fed Com #2H (11-26S-28E) which is the nearest current Mewbourne operated producer.
 5. We will be injecting into the Delaware. See attached water analysis for the Delaware formation in the area.
- VIII.**
1. The proposed injection interval is within the Delaware formation which is a porous sandstone from 2586' – 6243'. However, the well will only be perforated between 2586-5721.
 2. The underground fresh water aquifers (unnamed) are present at shallow depths down to about 300'. There are no known fresh water intervals underlying the injecting formation.
- IX.** The proposed stimulation is a cased-hole acid treatment of 10000 gallons of 7.5% HCL. If necessary, the well will be fracture stimulated.
- X.** Well logs have been filed with the Division.
- XI.** There is one freshwater well within 1 mile of the proposed SWD. It is located in the SW NE of section 15 at approximately 1980 FNL & 2050 FEL. Please see attached water analysis.
- 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.
- XIII.** See attached Proof of Notice

Application for Authorization to Inject (C108)

Mewbourne Oil Company

San Lorenzo SWD #1

Tabulation of Wells Within the Area of Review Penetrating the Injection zone

As of September 2012

Well Name	Surface Location				Drill Type	Spud Date	Total Depth (feet)	Csg Size	Depth (ft)	Cmt (sx)	Comp Date	Perfs (feet)	Formation	Status
	Footage	Sec	TWN	RGE										
Gulf 16 State #1 HCW Exploration 3001523952	1980 FSL & 660 FEL	16	25S	28E	V	11/3/81	7500	13-3/8	435	425	5/5/82	6350-6654	Bone Spring	P&A
								8-5/8"	2589	1400		*no sales		
								4-1/2"	7500	2290				



HCW Gulf 16 St. No. 1

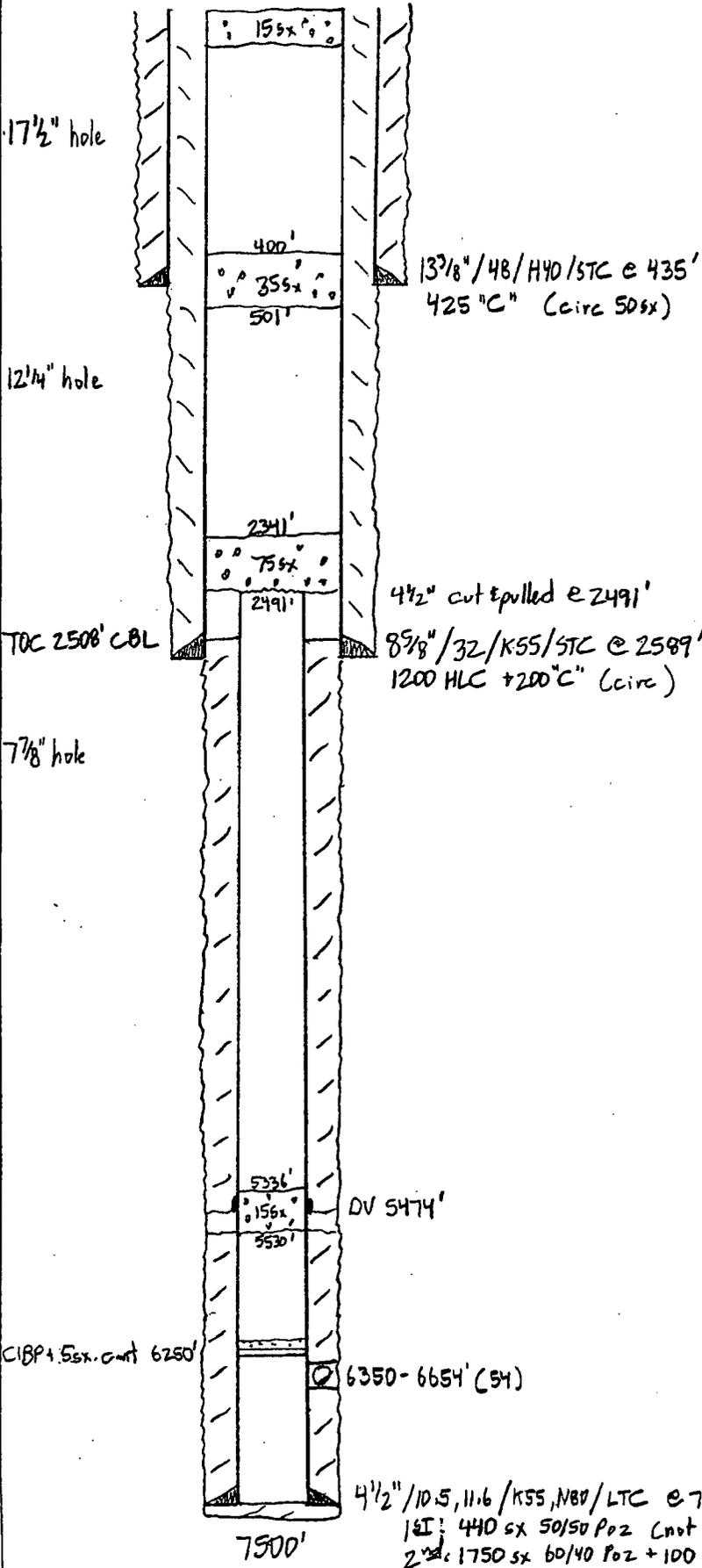
1980' FSL, 660' FEL

I-16-25s-28e

Eddy, NM

P&A: 5/82

100% RECYCLED PAPER
 100% RECYCLED INK
 100% RECYCLED WHITE
 5 SQUARE
 42-389 200 RECYCLED WHITE
 5 SQUARE
 Made in U.S.A.



Within Area of Review



Elev: 2981' GL

KPC-11111/10. Sect 03



Water Analysis

Date: 23-Jun-12

2708 West County Road, Hobbs NM 88240
 Phone (575) 392-5556 Fax (575) 392-7307

Bore Springs

Analyzed For

Company	Well Name	County	State
Mewbourne	Delaware Ranch 11 Fed 2	Lea	New Mexico

Sample Source Swab Sample **Sample #** 1

Formation	Depth
-----------	-------

Specific Gravity	1.175	SG @ 60 °F	1.177
pH	6.71	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	85,706	in PPM	72,817
Calcium	in Mg/L	1,600	in PPM	1,359
Magnesium	in Mg/L	720	in PPM	612
Soluable Iron (FE2)	in Mg/L	10.0	in PPM	8

Anions

Chlorides	in Mg/L	136,000	in PPM	115,548
Sulfates	in Mg/L	250	in PPM	212
Bicarbonates	in Mg/L	537	in PPM	456
Total Hardness (as CaCO3)	in Mg/L	7,000	in PPM	5,947
Total Dissolved Solids (Calc)	in Mg/L	224,823	in PPM	191,013
Equivalent NaCl Concentration	in Mg/L	191,109	in PPM	162,370

Scaling Tendencies

*Calcium Carbonate Index **858,880**

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index **400,000**

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

**This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.*

Remarks RW=.047@70F

Report # 3235

HALLIBURTON DIVISION LABORATORY

HALLIBURTON SERVICES

ARTESIA DISTRICT

LABORATORY REPORT

Delaware
Injection Zone

No. W45-93

TO Hanagan Petroleum
P. O. Box 1737
Roswell, NM 88201

Date February 7, 1993

This report is the property of Halliburton Services and neither it nor any part thereof, nor a copy thereof, is to be published or disclosed without first securing the express written approval of laboratory management. It may, however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Services.

Submitted by _____ Date Rec. _____

Well No. Gehrig #2 Depth 5050' Formation Delaware

Field Brushy Draw 9-26s-29e County Eddy Source Produced Water

Resistivity	<u>.052</u>		
Specific Gravity ..	<u>1.1856</u>		
pH	<u>7.0</u>		
Calcium	<u>24,250</u>		
Magnesium	<u>9,000</u>		
Chlorides	<u>170,000</u>		
Sulfates	<u>250</u>		
Bicarbonates	<u>350</u>		
Soluble Iron	<u>+ 500</u>		

Remarks:

Art Carrasco
Respectfully submitted

Analyst: Art Carrasco - Technical Advisor

HALLIBURTON SERVICES

NOTICE: This report is for information only and the content is limited to the sample described. Halliburton makes no warranties, express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable

freshwater well



Water Analysis

Date: 26-Jun-12

2708 West County Road, Hobbs NM 88240
Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Company	Well Name	County	State
Mewbourne	San Lorenzo	Lea	New Mexico

Sample Source	windmill	Sample #	1
Formation		Depth	

Specific Gravity	1.000	SG @ 60 °F	1.002
pH	7.83	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	633	in PPM	632
Calcium	in Mg/L	400	in PPM	399
Magnesium	in Mg/L	55	in PPM	55
Soluable Iron (FE2)	in Mg/L	0.0	in PPM	0

Anions

Chlorides	in Mg/L	400	in PPM	399
Sulfates	in Mg/L	1,850	in PPM	1,846
Bicarbonates	in Mg/L	137	in PPM	136
Total Hardness (as CaCO3)	in Mg/L	1,230	in PPM	1,228
Total Dissolved Solids (Calc)	in Mg/L	3,475	in PPM	3,468
Equivalent NaCl Concentration	in Mg/L	2,480	in PPM	2,475

Scaling Tendencies

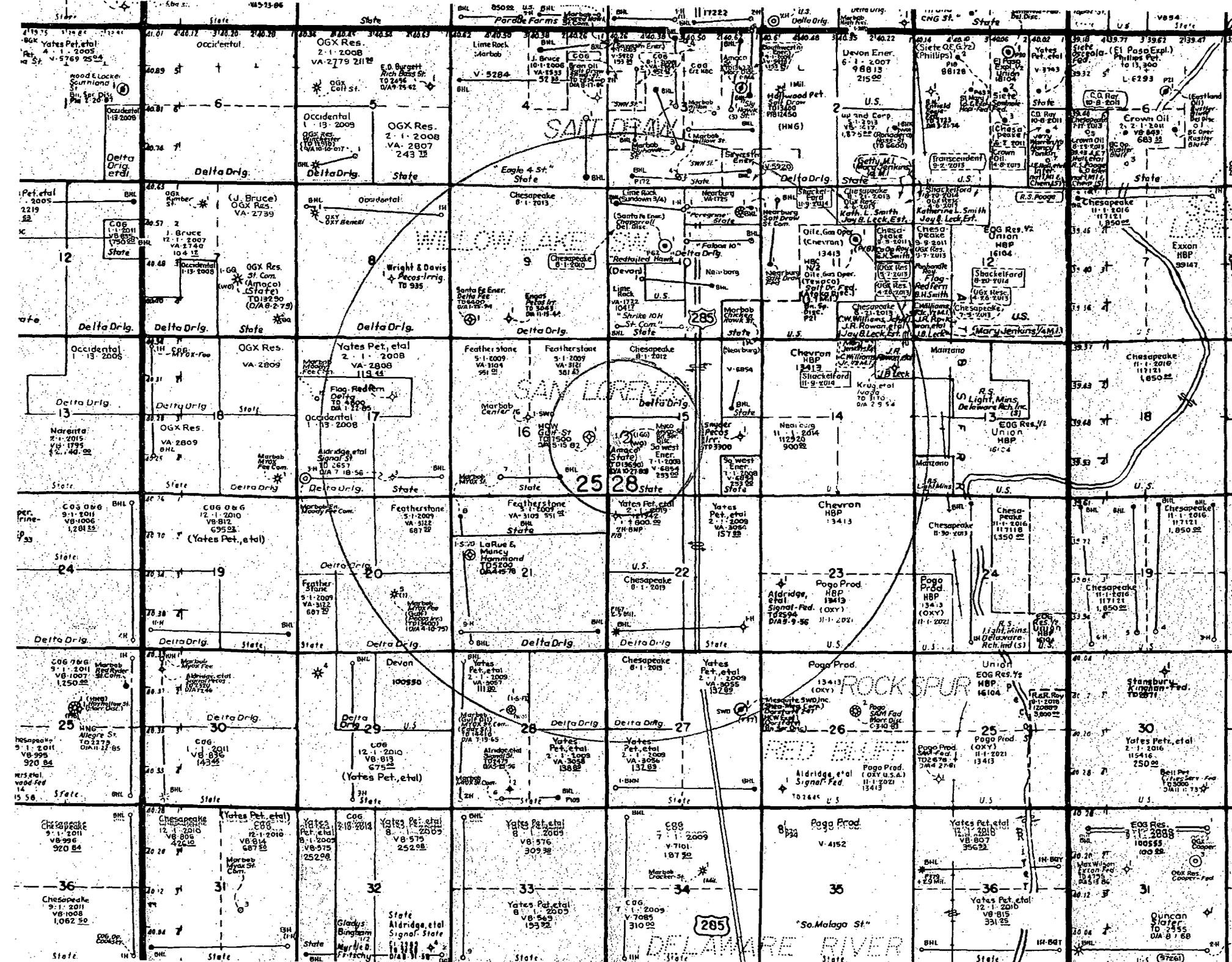
*Calcium Carbonate Index **54,656**
Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index **740,000**
Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

**This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.*

Remarks RW=5.0@70F

Report # 3239



445-73-06

State

Yates Pet., et al.
Ret. A 1-2005
VA 5769 2525

wood & Locke
Surrender
Bul. Spr. Dis.
P# 1-20-01

Occidental
1-13-2009

Delta Orig.
end

Pet. et al.
2005
2219
KC

COG
12-2011
VB 6528
1790-00
State

Delta Orig.

Occidental
1-13-2005

Delta Orig.

Nareita
2-1-2015
VA 1795
12-140-02

per. rine-
1933

State

COG 986
3-1-2011
VB 1007
1250-00

Delta Orig.

Chesapeake
9-1-2011
VB 995
920-04

Delta Orig.

Chesapeake
9-1-2011
VB 996
1062-50

State

State

OGX Res.
2-1-2008
VA-2779 2119

Occidental
1-13-2009

Delta Orig.

(J. Bruce)
OGX Res.
VA-2739

OGX Res.
31 Com.
(Antico)
State
TD13230
(D/A 8-2-79)

Delta Orig.

OGX Res.
VA-2809

Delta Orig.

OGX Res.
VA-2809

COG 066
9-1-2011
VB 1006
1281-55

State

Delta Orig.

COG 986
3-1-2011
VB 1007
1250-00

Delta Orig.

COG
12-2011
VB 836
1434-00

State

Chesapeake
9-1-2011
VB 996
1062-50

State

State

OGX Res.
2-1-2008
VA-2779 2119

Occidental
1-13-2009

Delta Orig.

OGX Res.
31 Com.
(Antico)
State
TD13230
(D/A 8-2-79)

Delta Orig.

OGX Res.
VA-2809

Delta Orig.

OGX Res.
VA-2809

Delta Orig.

Featherstone
5-1-2009
VA-3104
991-00

Delta Orig.

Featherstone
5-1-2009
VA-3122
687-50

Delta Orig.

COG
12-2011
VB 814
687-50

State

Yates Pet., et al.
8-1-2009
VA-575
252-08

State

Yates Pet., et al.
8-1-2009
VA-576
309-38

State

State

Lime Rock
Marbab
V-5284

Delta Orig.

Chesapeake
8-1-2013

Delta Orig.

Chesapeake
8-1-2010

Delta Orig.

Featherstone
5-1-2009
VA-3104
991-00

Delta Orig.

Featherstone
5-1-2009
VA-3122
687-50

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3057
111-02

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
132-82

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3058
138-82

Delta Orig.

COG
7-1-2009
V-7101
167-50

State

Yates Pet., et al.
8-1-2009
VA-576
309-38

State

Devon Ener.
6-1-2007
98815
215-00

Delta Orig.

Chesapeake
8-1-2013

Delta Orig.

Chesapeake
8-1-2010

Delta Orig.

Chesapeake
8-1-2012

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
157-88

Delta Orig.

Chesapeake
8-1-2019

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
132-82

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3058
138-82

Delta Orig.

COG
7-1-2009
V-7101
167-50

State

Yates Pet., et al.
8-1-2009
VA-576
309-38

State

Devon Ener.
6-1-2007
98815
215-00

Delta Orig.

Chesapeake
8-1-2013

Delta Orig.

Chesapeake
8-1-2010

Delta Orig.

Chesapeake
8-1-2012

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
157-88

Delta Orig.

Chesapeake
8-1-2019

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
132-82

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3058
138-82

Delta Orig.

COG
7-1-2009
V-7101
167-50

State

Yates Pet., et al.
8-1-2009
VA-576
309-38

State

Devon Ener.
6-1-2007
98815
215-00

Delta Orig.

Chesapeake
8-1-2013

Delta Orig.

Chesapeake
8-1-2010

Delta Orig.

Chesapeake
8-1-2012

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
157-88

Delta Orig.

Chesapeake
8-1-2019

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3055
132-82

Delta Orig.

Yates Pet., et al.
2-1-2009
VA-3058
138-82

Delta Orig.

COG
7-1-2009
V-7101
167-50

State

Yates Pet., et al.
8-1-2009
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COG
7-1-2009
V-7101
167-50

State

Yates Pet., et al.
8-1-2009
VA-576
309-38

San Lorenzo SWD Proposal

Geologic Summary

Introduction:

Mewbourne Oil Company proposes to re-enter the Myco State 15 #1 well in section 15, T25S/R28E in Eddy County, New Mexico in order to complete it as a SWD well. The Delaware formation is the targeted disposal interval. The proposed perfs for injection are at 2586-5721'. Please find X-section "San Lorenzo SWD W-W" and the Geologic map "San Lorenzo Production & Structure Map" as exhibits useful while reviewing this summary.

Production:

Please note that on the geologic map, there is no Delaware production within ½ mile of the proposed SWD. The closest Delaware producer is nearly 1 mile away in the NE/4 of section 15. That well made 32,000 BO and 202,000 BW and last produced in March of 2011. Also note that there are two wells approved for SWD to the west of the proposed SWD. The wells at 16F and 21E are approved for SWD and actively inject into the Delaware formation.

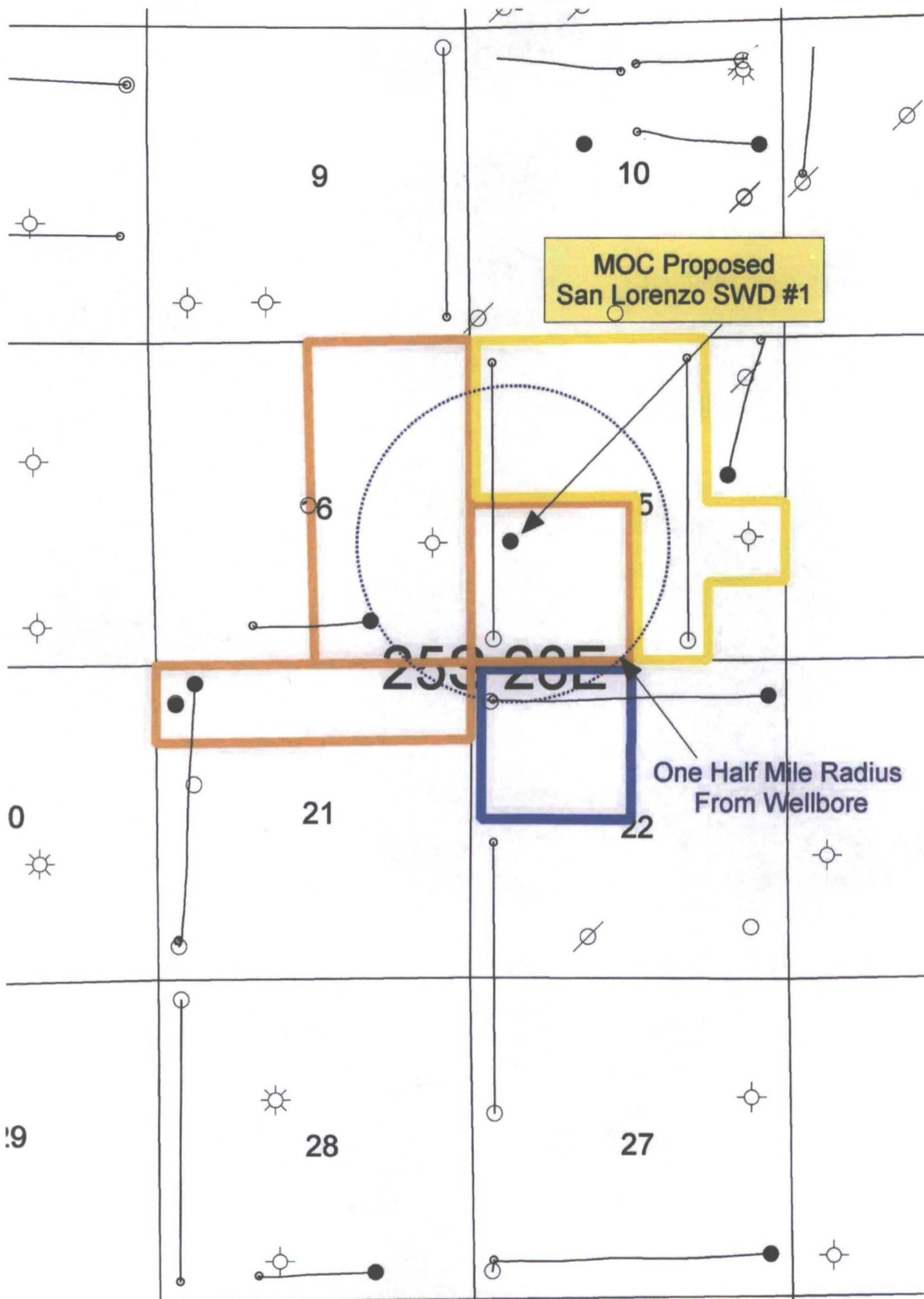
Geology:

The proposed interval for SWD includes the Bell Canyon, Cherry Canyon and Brushy Canyon sands. Each interval contains numerous porous and permeable sands that are excellent for disposal. The proposed SWD well and the two closest offsetting penetrations are on X-section W-W'. The formation tops are marked and the proposed SWD interval is noted with an aqua colored box along with a blue box noting the proposed perfs for SWD. Also note that the well at 16 I ran a DST in the Delaware. Even though there is no DST information published, the fact that a completion was not attempted indicates that the zone was believed to be non-productive. The well at 15 L attempted a completion in the Delaware and the zone proved to be non-productive. The well at 22 D is a new well that is completed in the Bone Spring and did not attempt any test in the Delaware. ✓

Conclusion:

The failed attempts to establish Delaware production within the ½ mile radius of the proposed SWD along with the proven capability of the Delaware to serve as a SWD interval in offset wells indicates that there is every reason to believe that the Delaware interval at the proposed location is non-productive and an excellent candidate for SWD. ✓

Roger Townsend
Mewbourne Geologist



1 inch = 2000 feet



- Mewbourne Oil Company
- COG Operating LLC
- Yates Petroleum Corporation



MOC Mewbourne Oil Company		
San Lorenzo Prospect		
SWD Proposal Land Information Eddy County, NM		
Author: R. Townsend	Scale: 1" = 2000'	Date: 22 June, 2012
Geo Tech: V. Ramirez		8.5 x 14

MEWBOURNE OIL COMPANY

500 W. TEXAS, SUITE 1020
MIDLAND, TEXAS 79701

(432) 682-3715
FAX (432) 685-4170

June 26, 2012

Certified Mail-Return Receipt No. 1440

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501-2708
Attn: Mrs. Anna Villa

Re: C-108 Application for SWD Well
San Lorenzo SWD #1
NW/4SW/4 Section 15, T-25-S, R-28-E
Eddy County, New Mexico

Gentlemen:

Mewbourne Oil Company has filed an application with the New Mexico Oil Conservation Division seeking approval for a salt water disposal well in the NW/4SW¼ of Section 15, Township 25 South, Range 28 East, N.M.P.M., Eddy County, New Mexico. A copy of the application is enclosed. As the owner of the surface estate, if you object to the application, you must notify the Division in writing no later than 15 days from the date of this letter (the Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505). Failure to object will preclude you from contesting this matter later.

Sincerely,

MEWBOURNE OIL COMPANY



Steven J. Smith
Senior Landman

Enclosure

MEWBOURNE OIL COMPANY

500 W. TEXAS, SUITE 1020
MIDLAND, TEXAS 79701

(432) 682-3715
FAX (432) 685-4170

June 26, 2012

Certified Mail-Return Receipt No. 1457

Yates Petroleum Corporation
105 South 4th Street
Artesia, NM 88210-2122
Attn: Mr. Chuck Moran

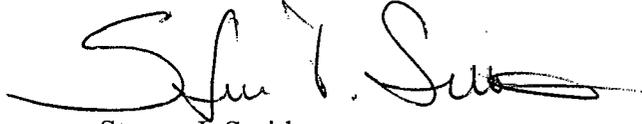
Re: C-108 Application for SWD Well
San Lorenzo SWD #1
NW/4SW/4 Section 15, T-25-S, R-28-E
Eddy County, New Mexico

Gentlemen:

Mewbourne Oil Company has filed an application with the New Mexico Oil Conservation Division seeking approval for a salt water disposal well in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 25 South, Range 28 East, N.M.P.M., Eddy County, New Mexico. A copy of the application is enclosed. If you object to the application, you must notify the Division in writing no later than 15 days from the date of this letter (the Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505). Failure to object will preclude you from contesting this matter later.

Sincerely,

MEWBOURNE OIL COMPANY



Steven J. Smith
Senior Landman

Enclosure

San Lorenzo SWD

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee <i>Clunderwood</i></p> <p>B. Received by (Printed Name) <i>Clunderwood</i></p> <p>C. Date of Delivery <i>6-28-12</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
Article Addressed to: Yates Petroleum Corporation 105 South 4 th Street Artesia, NM 88210-2122 Attn: Mr. Chuck Moran	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
Article Number (Transfer from service label)	7010 1870 0001 6457 1457

MEWBOURNE OIL COMPANY

500 W. TEXAS, SUITE 1020
MIDLAND, TEXAS 79701

(432) 682-3715
FAX (432) 685-4170

June 26, 2012

Certified Mail-Return Receipt No. 1433

COG Operating, LLC &
COG Oil & Gas LLC
550 W. Texas, Suite 100
Midland, Texas 79701
Attn: Mr. William Fricker

Re: C-108 Application for SWD Well
San Lorenzo SWD #1
NW/4SW/4 Section 15, T-25-S, R-28-E
Eddy County, New Mexico

Ladies and Gentlemen:

Mewbourne Oil Company has filed an application with the New Mexico Oil Conservation Division seeking approval for a salt water disposal well in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 15, Township 25 South, Range 28 East, N.M.P.M., Eddy County, New Mexico. A copy of the application is enclosed. If you object to the application, you must notify the Division in writing no later than 15 days from the date of this letter (the Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505). Failure to object will preclude you from contesting this matter later.

Sincerely,

MEWBOURNE OIL COMPANY



Steven J. Smith
Senior Landman

Enclosure

San Lorenzo SWD

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none">Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.Print your name and address on the reverse so that we can return the card to you.Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature <i>Michelle [unclear]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
	B. Received by (Printed Name) <i>Michelle [unclear]</i> C. Date of Delivery <i>6/28</i>
1. Article Addressed to: COG Operating, LLC & COG Oil & Gas LLC 550 W. Texas, Suite 100 Midland, Texas 79701 Attn: Mr. William Fricker	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes

Article Number:
(Transfer from service label)

7010 1870 0001 6457 1433

June 26, 2012

NOTICE

Mewbourne Oil Company has filed an application with the New Mexico Oil Conservation Division seeking approval to re-enter the MYCO 15 State Well No. 1, located 1980 feet from the south line and 660 feet from the west line (the NW/4SW/4) of Section 15, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico, to dispose of produced water into the Delaware formation. Expected maximum injection rates are 10000 BWPD, and maximum injection pressures are 517 psi. The completed disposal well would be called the San Lorenzo SWD #1. If you object to the application you must file a written request for hearing with the Division within 15 days of the date this notice is published. The Division's address is 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. Failure to object will preclude you from contesting this matter at a later date. The name and address of the contact party for applicant is Drew Robison, Mewbourne Oil Company, Suite 1020, 500 West Texas, Midland, Texas 79701. (432)-682-3715. The well is located approximately 5 miles south of Malaga, New Mexico.

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

Kathy McCarroll, being first duly sworn,
on oath says:

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

June 26 2012

That the cost of publication is **\$59.41** and that payment thereof has been made and will be assessed as court costs.

Kathy McCarroll

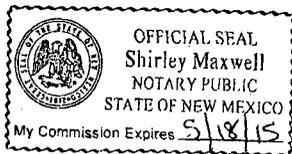
Subscribed and sworn to before me this

27th day of June, 2012

Shirley Maxwell

My commission Expires on May 18, 2015

Notary Public



Injection Permit Checklist (11/15/2012)

WFX _____ PMX _____ SWD ~~8/9/12~~ Permit Date 8/9/12 UIC Qtr (J A/S)

Wells 1 Well Name(s): SAN LORENZO SWD #1 (Formerly MICO STATE 15 #1)

API Num: 30-0 15-23067 Spud Date: 12/10/11 New/Old: 0 (UIC primacy March 7, 1982)

Footages 1980FSL/660FWL Unit L Sec 15 Tsp 255 Rge 28E County EDDY

General Location: 12mi SOUTH of LOVING

Operator: MEUBOURNE OIL COMPANY Contact: Draw ROBSON Steven J. SMITH

OGRID: 19794 RULE 5.9 Compliance (Wells) 2/652 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed Current Status: P&A

Planned Work to Well: _____

Diagrams: Before Conversion After Conversion Elogs in Imaging File:

Well Details:	Sizes		Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
	Hole.....	Pipe				
New ___ Existing <input checked="" type="checkbox"/> Surface	<u>26</u>	<u>20</u>	<u>408</u>	<u>-</u>	<u>750 SX</u>	<u>CIRC</u>
New ___ Existing <input checked="" type="checkbox"/> Interim	<u>17 1/2</u>	<u>13 3/8</u>	<u>2530'</u>	<u>-</u>	<u>2300 SX</u>	<u>CIRC</u>
New ___ Existing <input checked="" type="checkbox"/> LongSt	<u>12 1/4</u>	<u>9 5/8</u>	<u>2000-9730'</u> <small>PULLED</small>	<u>7899'</u>	<u>2660 SX</u>	<u>2280' CBL</u>
New ___ Existing <input checked="" type="checkbox"/> Liner	<u>8 1/2</u>	<u>7 5/8</u>	<u>9245'-12200'</u>		<u>830 SX</u>	<u>Liner Top</u>
New ___ Existing <input checked="" type="checkbox"/> Open Hole	<u>6 1/8 - 6 1/8</u>		<u>13690' TD</u>			

Depths/Formations: _____
 Formation(s) Above _____
 Formation(s) Below _____

Injection TOP:	<u>2586'</u>	Entry <u>Del</u>	Max. PSI <u>517</u>	Open Hole <input checked="" type="checkbox"/>	Perfs <input checked="" type="checkbox"/>
Injection BOTTOM:	<u>5721'</u>	Entry <u>Delaine</u>	Tubing Size <u>4 1/2</u>	Packer Depth <u>2500'</u>	

Capitan Reef? (Potash? Noticed?) [WUPP? Noticed?] Salado Top/Bot _____ Salt House? _____

Fresh Water: Depths: <300' Formation T Wells? yes Analysis? Affirmative Statement

Disposal Fluid Analysis? Sources: Meubourne BS wells

Disposal Interval: Analysis? Production Potential/Testing: Del was squeezed off + 2 other Del swd's

Notice: Newspaper Date 6/26/12 Surface Owner SLC (6/28/12) Mineral Owner(s) _____

RULE 26.7(A) Affected Persons: COG/YPC (6/28/12) (What about SW Energy? They no longer operate in DM)

AOR: Maps? Well List? Producing in Interval? no Wellbore Diagrams?

.....Active Wells Repairs? Which Wells? _____

.....P&A Wells 1 Repairs? Which Wells? _____

Issues: Final Job! / how long survey work 1 year Request Sent _____ Reply: _____