

DATE: 3/25/13	SUSPENSE:	ENGINEER:	LOGGED IN:	TYPE: SWD	APP NO: 1308456291
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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.

MARK FAIRCHILD

Print or Type Name

Signature

CONCHO
ENGINEER

Title

Date

e-mail Address

INJECTION WELL DATA SHEET

OPERATOR: **COG Operating, LLC.**WELL NAME & NUMBER: **Lakewood SWD #4 (Re Entry of API 30-015-26270)**

WELL LOCATION:	1980 FSL; 660 FWL	L	6	T19S	R26E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICLakewood SWD #4 (former Howe 6L #1)
API: 30-015-26270

13 3/8"s @ 350', cmt to surface

8 5/8"s @ 1350', cmt to surface

Canyon Disposal Zone
Perforations, 7860 to 7967Existing 7 7/8" hole
run 5 1/2" casing to 8,200'
cmt to surface, DV tool at 7,000'*Cement volumes will increase of those shown on this
application to account for hole conditions unknown at this time.**WELL CONSTRUCTION DATA****Surface Casing****This casing string exists.**

Hole Size: 17 1/2"	Casing Size: 13 3/8" @ 350'
Cemented with: 520 sx.	or _____ ft ³
Top of Cement: Surface	Method Determined: Circulate

Intermediate Casing**This casing string exists.**

Hole Size: 12 1/4"	Casing Size: 8 5/8" @ 1,350'
Cemented with: 865 + 1" sx.	or _____ ft ³
Top of Cement: Surface	Method Determined: Circulated

Production Casing**This string to be run.**

Hole Size: 7 7/8"	Casing Size: 5 1/2"
Cemented with: 1,375 sx.	or _____ ft ³
Top of Cement: Surface	Method Determined: Circulate
Total Depth: 8,200'	

Injection Interval

feet to

This interval to be perforated.

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8" EUE Lining Material: Internally plastic coated

Type of Packer: Double grip type, set in neutral

Packer Setting Depth: no more than 100' above top perf

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

Additional Data

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

If no, for what purpose was the well originally drilled? This well was drilled
as a potential Morrow Gas producer.

2. Name of the Injection Formation: Canyon

3. Name of Field or Pool (if applicable): None

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

No, none, plugged upon drilling, plugged per NMOCD upon TD of well.

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

Yeso formation at approx. 2,630'

Well: Lakewood SWD #4 (formerly Howe 6L)

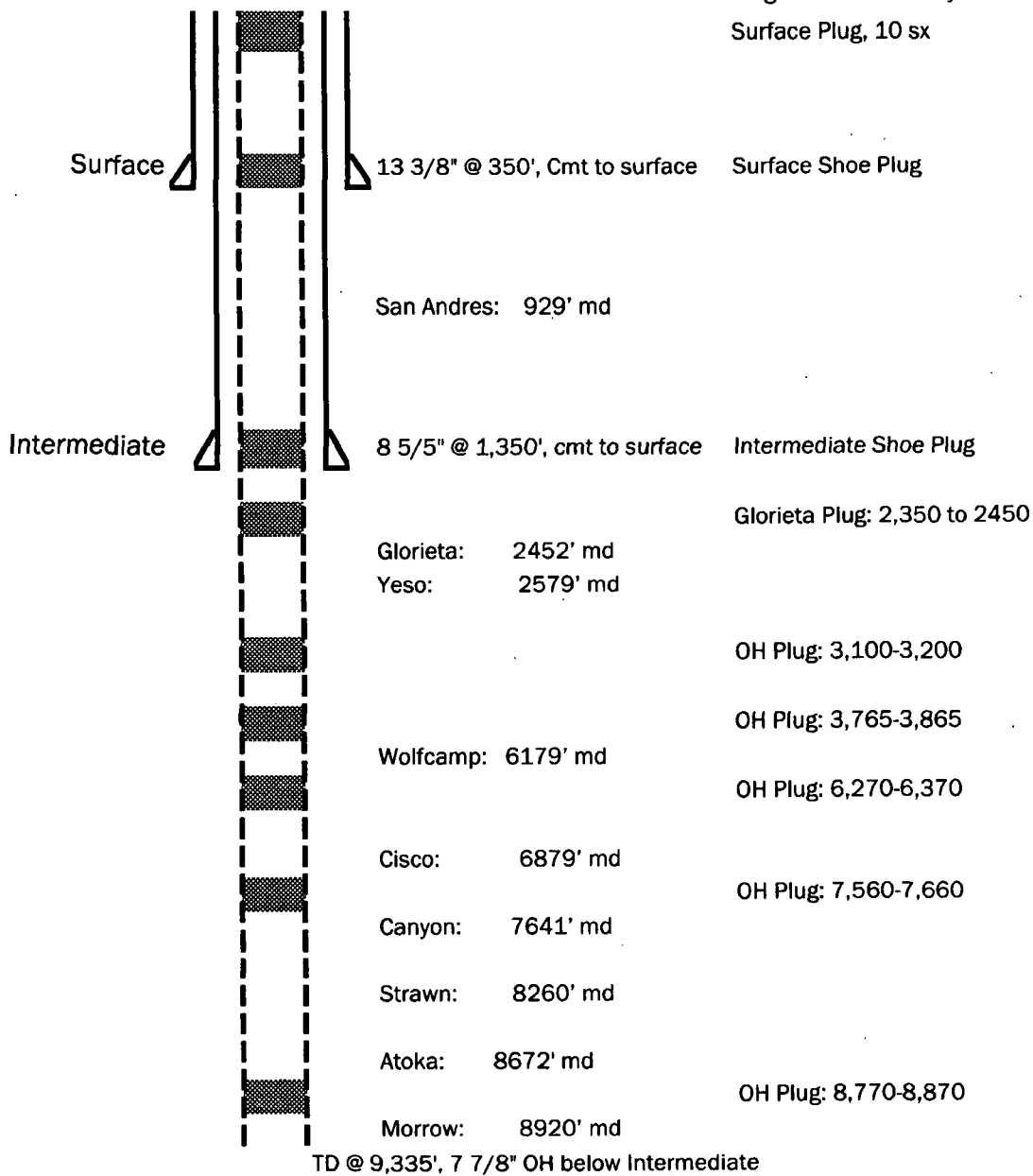
API: 30-015-26270

Elev: 3393' GL

Location: 1980' FSL; 660' FWL, Sec 6, T19S, R26E, Eddy Co. NM

Plugs are indicated by crosshatched fill

Surface Plug, 10 sx



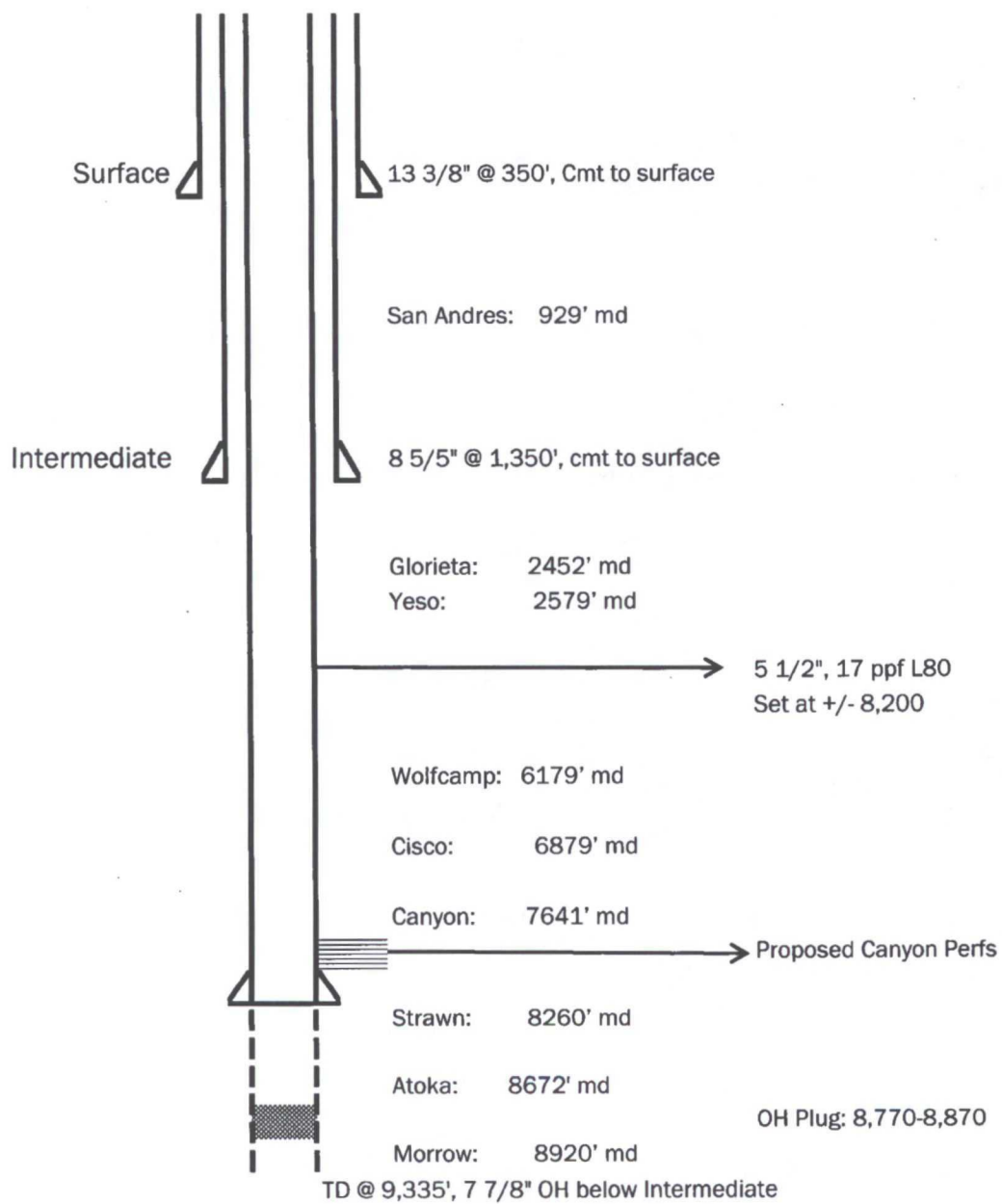
BEFORE

Well: Lakewood SWD #4 (formerly Howe 6L)

API: 30-015-26270

Elev: 3393' GL

Location: 1980' FSL; 660' FWL, Sec 6, T19S, R26E, Eddy Co. NM



AFTER

Office: 432-686-3021

Cell: 432-230-7170



From: Mark Fairchild

Sent: Wednesday, March 20, 2013 2:15 PM

To: 'Jones, William V., EMNRD'

Subject: COG Lakewood SWD #4

Will, per our conversation:

Well: Lakewood SWD #4 (re entry of Howe 6L), API 30-015-26270, SWD 1406

Attached are two spreadsheets that show the original perfs from our geologist as: 7,860 to 7,967 as shown on my C-108; a second one with new perfs 7,846 to 7,984. Please let me know how you want this handled. Thanks

M.A. Fairchild

COG OPERATING LLC

Office: 432-686-3021

Cell: 432-230-7170



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Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Monday, March 25, 2013 1:10 PM
To: 'Mark Fairchild'
Subject: RE: COG Lakewood SWD #4

Haha,
OK I will do the amendment.

From: Mark Fairchild [<mailto:MFairchild@concho.com>]
Sent: Monday, March 25, 2013 12:59 PM
To: Jones, William V., EMNRD
Subject: RE: COG Lakewood SWD #4

Lordie, I hope not.

M.A. Fairchild
COG OPERATING LLC
Office: 432-686-3021
Cell: 432-230-7170



From: Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]
Sent: Monday, March 25, 2013 1:59 PM
To: Mark Fairchild
Subject: RE: COG Lakewood SWD #4

Mark,
Is there a chance anything else will change after you re-enter and complete?

Will

From: Mark Fairchild [<mailto:MFairchild@concho.com>]
Sent: Monday, March 25, 2013 10:10 AM
To: Jones, William V., EMNRD
Subject: FW: COG Lakewood SWD #4

Will, what was your decision on this matter? Thanks!

M.A. Fairchild
COG OPERATING LLC

PERF TOP DEPTH	PERF BOTTOM DEPTH	SPF=4	
7964	7967	3	12
7936	7950	14	56
7914	7922	8	32
7898	7906	8	32
7882	7894	12	48
7867	7878	11	44
7846	7860	14	56
	121	70	100

I do not agree with their tops, please use the ones below:

San Andres: 929' md
 Glorieta: 2452' md
 Yeso: 2579' md
 Wolfcamp: 6179' md
 Cisco: 6879' md
 Canyon: 7641' md
 Strawn: 8260' md

Wednesday, March 20, 2013

Re: COG Operating LLC

Lakewood SWD #4

API: 30-015-26270

SWD-1406

Pursuant to NMOCD form C-108 Item XII.

I, Greg Clark, do hereby certify that I have examined the geology of the proposed well and find no hydraulic connection between the disposal interval and any underground sources of drinking water.

Greg Clark
COG Operating LLC
Senior Geologist

Signed: _____

Date: 3/25/2013