New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

Brett F. Woods, Ph.D. Acting Cabinet Secretary J. Daniel Sanchez
Acting Division Director
Oil Conservation Division



October 5, 2011

Mark Fairchild COG Operating LLC 550 West Texas Street Suite 100 Midland, TX 79701

Re: Administrative Order SWD-1195-A

SR0

6 Federal 27 Well No. 2 (API 30-015-21398)

1980 FNL, 1980 FEL, Unit letter G, Sec 16, T26S, R28E, NMPM, Eddy County Devonian formation disposal, Actual Open Hole Depths: 14543 to 15373 feet

You have submitted a request on behalf of COG Operating LLC, for an extension of the allowable 100 foot maximum packer setting depth for the reasons outlined in the attached correspondence.

The Division finds that granting this request to extend this injection permit is in the interest of conservation and will prevent waste and protect the environment.

The "within 100 feet" packer setting depth requirement of administrative permit SWD-1195-A is hereby revised to read: "within 191 feet". In any case, the disposal packer in this well shall be set no higher than the top of the Woodford Shale formation.

All other requirements of the above referenced injection permit remain in full force and effect.

JAMI BAILEY

Director

Cc: Oil Conservation Division – Artesia

File: SWD-1195-A

COG Operating LLC (MARBOB)

SRO SWD #102 Lease & Well # 3001521398 Eddy Co., NM

Sec 16 T265 R28E 1980 FNL & 1980 FEL SPUD - 12/11/2009 Elevation - 3024 GR TOC 7" 2280' _ CBL. 13 3/8" 48,54.5, 61# 2,424 1600 sx HLC, 400 sx H, w/ 650 sx C 1" to surface. 9 5/8" DV Tool @ ???? Bad csg @ 5918', cmt w/300 sx 9 5/8" 40# @ 5,927', C/w 2200 sx H/L, 250 sx P+. Tie back at re-entry. TOC 9 5/8" 6408' 7030-7076 7629-7700' Perf'd 9 5/18" 7904-08, 8 holes, cmt w/800 sx. Cut off @ 5933' when P&A. 9 5/8" 40,43.5,47#, 5,933 - 9441', cmt w/500 sx 352 jts 4 1/2" 11.6# (?) P-110 tbg 4 1/2" Incoloy perm pkr @ 14,435' Cmt 1st stage: 1150 sx H Cmt 2nd stage: 400 sxH/L, Tail in w/100 sx Prem. Cmt 3rd state: 500 sx H/L tail in w/100 sx Prem. Circ cmt. No report of DV tool depths. 7 " 26 & 23# @ 14,543' Devonion Acidized OH w/38,997 gal 20% NEFE OH TD @ 15,373'

Jones, William V., EMNRD

From:

Jeff Gasch [jgasch@concho.com]

Sent: To: Tuesday, October 04, 2011 3:39 PM Mark Fairchild; Jones, William V., EMNRD

Cc:

Kautz, Paul, EMNRD; Gray, Darold, EMNRD

Subject:

RE: SRO SWD 102.xls

Sounds good to me too.

Thanks,

Jeff Gasch Operations Engineer COG Operating LLC 432-818-2335 (office) 432-638-7433 (cell)

From: Mark Fairchild

Sent: Tuesday, October 04, 2011 4:38 PM **To:** Jones, William V., EMNRD; Jeff Gasch **Cc:** Kautz, Paul, EMNRD; Gray, Darold, EMNRD

Subject: RE: SRO SWD 102.xls

Will, I am saying yes.

M.A. Fairchild

Please note, my new email is MFairchild@concho.com

COG OPERATING LLC Office: 432-686-3021 Cell: 432-230-7170



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From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Tuesday, October 04, 2011 4:08 PM

To: Jeff Gasch; Mark Fairchild

Cc: Kautz, Paul, EMNRD; Gray, Darold, EMNRD

Subject: RE: SRO SWD 102.xls

Mark and Jeff,

Are you OK with new packer setting limit below the top of the Woodford (14352 feet)?

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Jeff Gasch [mailto:jgasch@concho.com]
Sent: Tuesday, October 04, 2011 1:53 PM
To: Jones, William V., EMNRD; Mark Fairchild
Cc: Kautz, Paul, EMNRD; Gray, Darold, EMNRD

Subject: RE: SRO SWD 102.xls

Will,

The top of the Woodford is at 14,352'. I have attached a .tif version of the original neutron/density log on the well. It was recorded down to 14,554', just below the base of the Woodford Shale. I'll have someone check the wellfile in Artesia to see if we have anything newer or better quality.

Thanks,

Jeff Gasch
Operations Engineer
COG Operating LLC
432-818-2335 (office)
432-638-7433 (cell)

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Monday, October 03, 2011 4:09 PM

To: Mark Fairchild; Jeff Gasch

Cc: Kautz, Paul, EMNRD; Gray, Darold, EMNRD

Subject: RE: SRO SWD 102.xls

Hello Mark and Jeff,

Our logs on this well are terrible – surely Marbob at least pulled another Gamma Ray when re-entering and deepening this well.

Would you check your available elogs and compare to the Division web site and send a copy of any log that does not appear on that site to Paul Kautz in Hobbs for scanning?

I also meant to ask – where is the top of the Woodford Shale?

I have a letter drafted on this – but you also did not send me an address of COG. Please send?

Regards,

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Mark Fairchild [mailto:MFairchild@concho.com]

Sent: Monday, October 03, 2011 1:17 PM

To: Jones, William V., EMNRD

Cc: Jeff Gasch

Subject: RE: SRO SWD 102.xls

Our geologist says that the T/Mississippian 13,668' and the Devonian is 14,494'.

M.A. Fairchild

Please note, my new email is MFairchild@concho.com

COG OPERATING LLC Office: 432-686-3021 Cell: 432-230-7170



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From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]

Sent: Friday, September 30, 2011 1:26 PM

To: Mark Fairchild

Cc: Warnell, Terry G, EMNRD **Subject:** RE: SRO SWD 102.xls

Mark, Got it,

Where is the top of the Devonian and top of the Mississippian?

Will Jones
New Mexico
Oil Conservation Division
Images Contacts

From: Mark Fairchild [mailto:MFairchild@concho.com]

Sent: Friday, September 30, 2011 10:07 AM

To: Jones, William V., EMNRD **Subject:** SRO SWD 102.xls

Will, this is the information that you requested. The packer is at 14,435'. We would propose to set another permanent packer within 100' of stuck one, or +/- 14, 335 or deeper, but no closer than 25' of the old packer.