

From: Ryan Davis
To: Gebremichael_Millon_EMNRD; Chavez_Carl_EMNRD
Cc: Goetze_Phillip_EMNRD; Philana_Thompson; Shacie_Murray; Jeff_Davis
Subject: Re: [EXTERNAL] Re: OCD SRT Guidance Questions Communication Meeting
Dates: Tuesday, August 8, 2023 10:23:09 PM
Attachments: image001.png
 image003.png
 image004.png
 Outlook-ocdt3bv.png
 2023-07-06.Pretty.Lady.Current.Wellbore.MV.SWD.pdf

Million,

- the acid job report you mentioned in your email (if you have the report, it would give OCD more detailed information on the extent of the acid job performed).
 The acid breakdown was performed as part of the original perforating of the MV Interval. Below is the verbiage from the well history as we do not have a separate report.

Pump 500 gals acid (15% HCl) down tubing and displaced with 21 bbls water in balanced pill (174' height with tubing in hole). POOH with tubing. Install blind rams in BOP and R/U W/L. RIH and perforate 3762' – 3830' KB top down in three runs 20'/20'/28" (4 spf, 90 deg. phasing, 1/2" EHD, 272 holes total). No pressure seen at surface. POOH and RDWL. P/U Weatherford 9^{5/8}" X 2^{7/8}" tension packer, unloader, and 2.28" PSN. Change out to 2^{7/8}" pipe rams and RIH 30 stands. Well making fluid out tubing and running out of daylight. Set packer (EOT = 1876' KB) and squeeze acid away. Formation broke at 1750 psi w/ 2.2 bbl pumped. Pump 40 bbl total @ 3.7 BPM w/ 1630 psi pump press. Shut down and pressure fell to 1330 psi and 1170 psi in 5 min. Flow back 5 bbls @ 0.5 BPM and shut in. Pressure on tbg @ 700 psi climbing. Shut in and rig down

- Updated wellbore diagram (and any historical changes in wellbore construction)

The updated wellbore diagram is attached and is also included in the SRT procedure.

- The recent WO in 2023 was performed to address the mechanical integrity of the wellbore in the 9-5/8". We ran a 7" liner tied back into the original permanent packer and cemented it back to the surface.
- pressure rating specifications of the wellhead and Christmas tree.
 The Pretty Lady has a 3K bowl on the 9-5/8 with an adaptor spool and has a 5K stack on the 7" all the up to the injection line.

Thanks,

Ryan Davis

Operations Manager



(W) 505-215-3292

From: Gebremichael, Million, EMNRD <Million.Gebremichael@emnr.dnm.gov>
Sent: Tuesday, August 8, 2023 4:13 PM
To: Ryan Davis <rdavis@merrion.bz>; Chavez, Carl, EMNRD <Carl.Chavez@emnr.dnm.gov>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnr.dnm.gov>; Philana Thompson <pthompson@merrion.bz>; Shacie Murray <shacie@merrion.bz>; Jeff Davis <jdaguoass@hotmail.com>
Subject: RE: [EXTERNAL] Re: OCD SRT Guidance Questions Communication Meeting

Ryan, Thank you for your email.
 Could you please email OCD information listed below?

- the acid job report you mentioned in your email (if you have the report, it would give OCD more detailed information on the extent of the acid job performed).
- Updated wellbore diagram (and any historical changes in wellbore construction)
- pressure rating specifications of the wellhead and Christmas tree.

Thanks,

Million Gebremichael

Petroleum Specialist- A
 Oil Conservation Division
 1220 South St. Francis Drive
 Santa Fe, New Mexico 87505
 Cell : 505-4791137



From: Ryan Davis <rdavis@merrion.bz>
Sent: Tuesday, August 8, 2023 3:03 PM
To: Gebremichael, Million, EMNRD <Million.Gebremichael@emnr.dnm.gov>; Chavez, Carl, EMNRD <Carl.Chavez@emnr.dnm.gov>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnr.dnm.gov>; Philana Thompson <pthompson@merrion.bz>; Shacie Murray <shacie@merrion.bz>; Jeff Davis <jdaguoass@hotmail.com>
Subject: Re: [EXTERNAL] Re: OCD SRT Guidance Questions Communication Meeting

Million,

Sorry for the delayed response. I have looked back through our records, and we have limited information on the initial reservoir pressure. During the completion of the well it was noted that after breakdown with acid, the wellbore pressure was 700 psi and climbing, but I do not have a record of a stabilized pressure (09/19/2006).

Sep. 19, 2006:
 Set packer (EOT = 1876' KB) and squeeze acid away. Formation broke at 1750 psi w/ 2.2 bbl pumped. Pump 40 bbl total @ 3.7 BPM w/ 1630 psi pump press. Shut down and pressure fell to 1330 psi and 1170 psi in 5 min. Flow back 5 bbls @ 0.5 BPM and shut in. Pressure on tbg @ 700 psi climbing. Shut in and rig down.

The well has been on continuous injection since we began commercial operations in 2007. We have had two extended periods of downtime since then and have stabilized shut in pressures.

2021 Workover: 950 psi shut in pressure (no injection 02/06/2021-04/02/2023)
 2023 Workover: 900 psi shut in pressure (no injection 04/20/2023-07/06/2023)

Please let me know if you have any questions.

Thanks,

Ryan Davis

Operations Manager



(W) 505-215-3292

From: Gebremichael, Million, EMNRD <Million.Gebremichael@emnrd.nm.gov>
Sent: Friday, August 4, 2023 2:49 PM
To: Ryan Davis <rdavis@merrion.bz>; Chavez, Carl, EMNRD <Carl.Chavez@emnrd.nm.gov>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnrd.nm.gov>; Philana Thompson <pthompson@merrion.bz>; Shacie Murray <shacie@merrion.bz>; Jeff Davis <jdaguamoss@hotmail.com>
Subject: RE: [EXTERNAL] Re: OCD SRT Guidance Questions Communication Meeting

Thank you for the details. OCD will review your NOI and will respond next week.
 In the meantime, could you please email OCD, the initial or "virgin" pressure of the reservoir ?

Thanks,

Million Gebremichael

Petroleum Specialist- A
 Oil Conservation Division
 1220 South St. Francis Drive
 Santa Fe, New Mexico 87505
 Cell : 505-4791137



From: Ryan Davis <rdavis@merrion.bz>
Sent: Friday, August 4, 2023 2:05 PM
To: Chavez, Carl, EMNRD <Carl.Chavez@emnrd.nm.gov>; Gebremichael, Million, EMNRD <Million.Gebremichael@emnrd.nm.gov>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnrd.nm.gov>; Philana Thompson <pthompson@merrion.bz>; Shacie Murray <shacie@merrion.bz>; Jeff Davis <jdaguamoss@hotmail.com>
Subject: [EXTERNAL] Re: OCD SRT Guidance Questions Communication Meeting

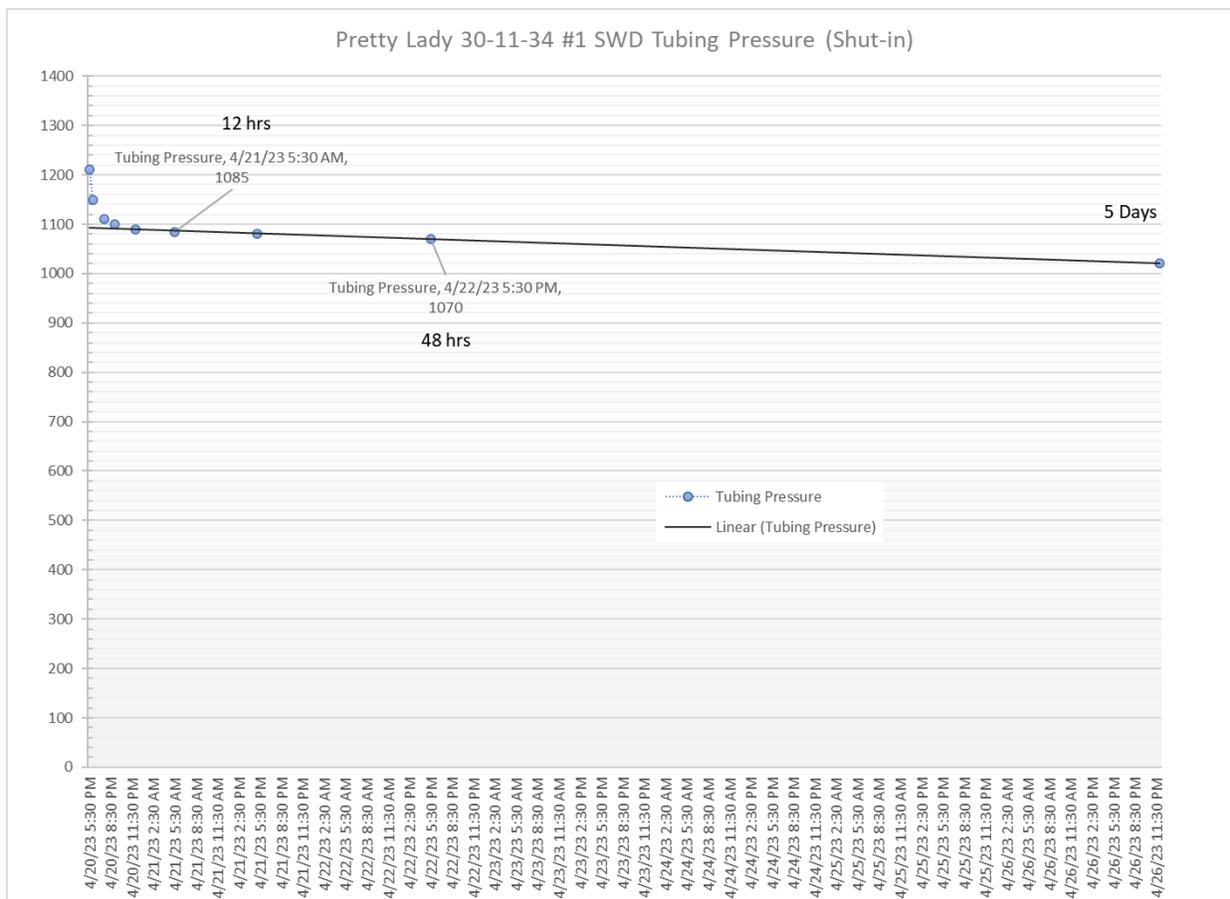
CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Carl, et al.,

Good afternoon!

I am attaching the procedure for the proposed SRT on the Pretty Lady 30-11-34 #1 Class II SWD. We have submitted a NOI through the e-Permitting system with the Submission ID: 248408.

We have modified the procedure to align with the NMOCD guidance. We understand the need for consistency from the NMOCD and have extended our step interval to 30 min as this is consistent with the EPA Region 8 guidance. We are, however, proposing a 12-hour shut-in period instead of the required 48 hours. The MV interval that we are injecting into is very permeable. We believe that shutting in 12 hrs is a reasonable period for the bottom hole pressure to approximate shut-in formation pressure. The rate of pressure change that we have observed between 12 and 48 hours is less than 0.5 psi/hour and similar out to 5 days. The MV interval is continuous throughout the basin and therefore behaves as an infinite reservoir. The pressure will continue to leak off within the reservoir over time. We believe 12 hours is a suitable time frame for the bottom hole pressure to approximate a shut-in formation condition. Below is a chart illustrating the pressure fall-off during our most recent shut-in period. The 12 hour pressure was 1085 psi, 48 hour 1070 psi and 5 day 1030 psi. Referring back to the EPA Region 8 guidance it states that the well should be shut in long enough prior to testing such that the bottom hole pressures approximate shut-in formation pressures.



Please let me know if you have any questions or concerns. We appreciate your time and consideration.

Thanks,



(W) 505-215-3292

From: Chavez, Carl, EMNRD
Sent: Monday, July 31, 2023 4:07 PM
To: Chavez, Carl, EMNRD <Carl.Chavez@emnrn.nm.gov>; Gebremichael, Million, EMNRD <Million.Gebremichael@emnrn.nm.gov>; Philana Thompson <pthompson@merrion.bz>; Ryan Davis <rdavis@merrion.bz>
Cc: Goetze, Phillip, EMNRD <phillip.goetze@emnrn.nm.gov>
Subject: OCD SRT Guidance Questions Communication Meeting
When: Tuesday, August 1, 2023 1:30 PM-2:30 PM.
Where: Microsoft Teams Meeting

Microsoft Teams meeting

Join on your computer, mobile app or room device
[Click here to join the meeting](#)

Meeting ID: 262 664 106 019
 Passcode: PUZcWf
[Download Teams](#) | [Join on the web](#)
[Learn More](#) | [Meeting options](#)

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

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 274669

CONDITIONS

| | |
|---|--|
| Operator: NEW MEXICO ENERGY MINERALS & NATURAL RESOURCE 1220 S St Francis Dr Santa Fe , NM 87504 | OGRID: 264235 |
| | Action Number: 274669 |
| | Action Type: [IM-SD] Well File Support Doc (ENG) (IM-AWF) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| pgoetze | None | 10/11/2023 |