



Grenemeyer Wagner 21-34

MIT/Logging
December 30, 2015

| | |
|------------------------|-----------------|
| Engineer: | Tyler Barela |
| Workover Coordinator: | Mark Balderston |
| Production Group Lead: | Andrew Berhost |
| DJ Team Lead: | Jessica Cavens |

Attachments:

Attachment 1 – Directional Survey

Grenemeyer Wagner 21-34 MIT & Logging 12.30.2015.docx1

Safety

Safety meetings are to be held with all service company personnel prior to each job. Wellsite supervisor must notify contractors as to known hazards of which the contractors may be unaware. Well site supervisor must ensure that all workers are aware of their responsibilities and duties under the EH&S guidelines. All safety meetings will be recorded on the Encana daily completion reports in Wellview. Follow best practices for well control and proper handling of gas, oil, and well fluids.

Regulations

All verbal notifications and approval from government regulatory agencies will be recorded on the Encana daily report. The name of the individual contacted and the subject matter of approval or notification will be recorded.

Reason for Work

COGCC requires MIT (NOAV DOC# 400955107).

Additional COGCC COAs

N/A

COGCC Rule 326.g:

Mechanical integrity test pressure loss or gain must not exceed 10% of the initial stabilized surface pressure over a test period of 15 minutes. The test may be repeated if the pressure loss or gain is determined to be the result of compression related to gas dissolution from the fluid column or temperature effects related to the fluid used to load the column. Wells that do not satisfy this test requirement are considered to lack mechanical integrity and are subject to the requirements of Rule 326.d.

Objective:

Pull tubing, set CIBP and load hole. Perform MIT.

Procedure:

1. Hold a pre-job safety meeting. Discuss all aspects of the procedure with any involved personnel. Identify and address any safety concerns before the job begins.
2. MIRU pulling unit. Kill well with produced water.
3. ND wellhead, NU BOP.
4. POOH with tubing. Visually inspect all tubing for scale, corrosion, and wear. Replace joints as needed. Report results of inspection in Wellview Report.
5. RIH with CIBP and set at @ ~8180' (48' above top J-Sand perms). Pressure test plug to 500 psi.
6. Load hole with water. Roll hole. Perform pre-test. Call Production Engineer @ 719.859.4942 to discuss pre-test results and receive path forward.
7. POOH with tubing. LD tubing and fill casing with water.
8. ND BOP, NU wellhead.
9. RDMO Workover rig.
10. Allow one full day before MIT to allow fluid to reach pressure and temperature equilibrium.
11. Perform MIT with test truck. Perform Form 17 Bradenhead Test simultaneously. MIT will be two-step pressure test.
 - a. Ensure that pressure test is charted on 1000 psi chart.
 - b. Pressure test to 500 psi.
 - c. Monitor for 15 minutes. Ensure that pressure has been sustained for at least last 5 minutes of test. If not, continue to hold pressure until sustained pressure is observed.
 - d. No more than 50 psi (10%) can be gained or lost during test (COGCC Rule 326.g)
 - i. If pressure is not held, call Production engineer @ 719.859.4942.
 - ii. Contact COCCG to receive path forward.
 - e. Ensure pressure test is charted on 5000 psi chart.
 - f. Pressure test to 1500 psi.
 - g. Monitor for 30 minutes. Ensure that pressure has been sustained for at least last 5 minutes of test. If not, continue to hold pressure until sustained pressure is observed.
 - h. No more than 150 psi (10%) can be gained or lost during test (COGCC Rule 326.g)
 - i. If pressure is not held, call Production engineer @ 719.859.4942.
 - ii. Contact COCCG to receive path forward.
12. RU logging equipment and noise/temperature tool string.
13. RIH with noise/temp tool string and log temperature down at 60ft/min maximum to CIBP.
14. Ensure location is as quiet as possible. PUH and log 30 second station stops every 20 ft from CIBP to surface.
15. RD tool string. RU Radial CBL/PDN tool string.
16. RIH with RCBL/PDN tool string to CIBP.
17. PUH from CIBP to surface while logging at 18ft/min maximum.
18. RD logging equipment and upload data to logging analysis center for processing.
19. MIRU pulling unit.

20. ND wellhead, NU BOP.
21. RIH with production tubing and pump-off bit sub and hang off above CIBP.
22. ND BOP, NU wellhead.
23. RDMO Workover rig.

Attachment #1 – Wellbore Diagram

