



DUCKWORTH 6-0-16

SE SE Section 16, T2N, R68W (Surface)

API: 05-123-25893-0000

Weld County, Colorado

Plug and Abandon Procedure

APRIL 1, 2015

Production Engineer:	Nicholas Ronan
Manager, Production:	Andrew Berhost
Completions Superintendent:	Mark Balderston
Production Superintendent:	John Schmidt

Attachments:

Attachment 1 – Current Wellbore Diagram

Attachment 2 – Proposed Wellbore Diagram

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.

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.

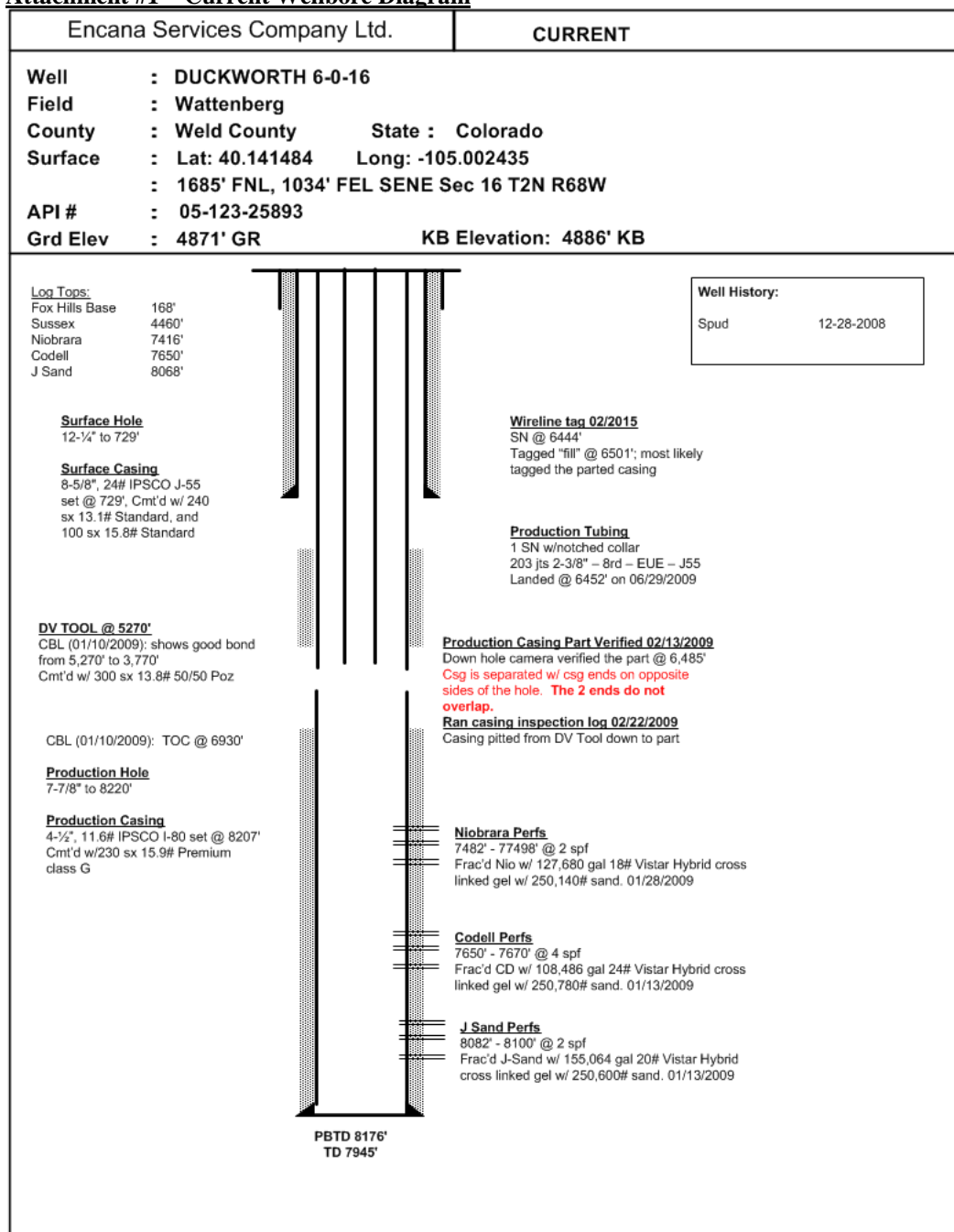
Objective:

Run gyro survey. Pull tubing. Set CICR above csg part and fill entire wellbore below the CICR w/ cement, set CIBP below surface shoe and shoot squeeze holes, cement the casing and annulus to surface.

Procedure:

1. Submit COGCC Form 42, 48 hours prior to MIRU.
2. 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.
3. Kill well with produced water.
4. RU wireline and pull production tools. Gyro well down to the seat nipple (set @ 6,444'). RD wireline.
5. MIRU pulling unit.
6. ND wellhead, NU BOP.
7. RU wireline.
8. RIH and set CICR @ 6400' (~ 85' above the csg part). Ensure that CICR is set in the middle of the joint of casing.
9. RD wireline. RU pulling unit.
10. TIH with workstring. Sting into CICR. Squeeze/fill 4-1/2" casing AND 7-7/8" hole by 4-1/2" csg annulus with 510 sx of Class G Neat cement (assumes 1.15 yield and includes 10% excess).
11. Sting out. Fill prod csg with produced water. POOH with workstring. RD pulling unit. RU wireline.
12. RIH and set CIBP @ 780'. Ensure that CIBP is set in the middle of the joint of casing.
13. RIH and shoot four squeeze holes at 770'. POOH and ensure all shots were fired.
14. Establish injection through squeeze holes.
15. Pump 246 sx of Class G Neat cement in 4-1/2" casing to surface AND into 8-5/8" csg by 4-1/2" csg annulus to surface (assumes 1.15 yield and includes 10% excess).
16. WOC for at least 4 hours and top off casing and annulus with cement as necessary.
17. ND BOP, RDMO pulling unit.
18. Cut off casing 4' below ground level.
19. Weld on metal plate and dry hole marker.
20. Restore surface location.
21. Ensure all cement tickets are mailed or emailed to the Denver office for subsequent reporting.

Attachment #1 – Current Wellbore Diagram



Attachment #2 – Proposed Wellbore Diagram

