

REENTRY PROCEDURE

WELL NAME: Dale, Ivan 2 **DATE:** 5/26/2017
LOCATION:
Qtr/Qtr: CSW Section: 14 Township: 2N Range: 64W
COUNTY: WELD STATE: CO API #: 05-123-10404
ENGINEER: David Hughes 7 Day Notice Sent: _____
(Please notify Engineer of any major changes prior to work) Do not start operations until: _____
Notice Expires: _____
OBJECTIVE: Reenter and re-plug
WELL DATA: Surface Csg: 8 5/8" 24# @ 542' KB Elevation: 4977'
Surface Cmt: 450 SX GL Elevation: 4967'
Long St Csg: 4 1/2" 10.5 & 11.6# from 1900'-7649' MD: 7650'
Long St Cmt: 300 SX 50/50 Pozmix, 100 SX Class G PBTD: 7604'
Long St Date: 2/10/1982
Plug Info (1) _____
Plug Info (2) _____
Plug Info (3) _____
Plug Info (4) _____
Balanced Plug: 500'-750' 50 SX 1/2 in 1/2 out Surface Casing
Surface Plug: Surface-106' 30 SX
Tubing: _____ Rods: _____
Pump: _____
Misc.: _____
WELL STATUS: Well Abandoned 07/21/1988
COMMENTS: _____

PROCEDURE:

- Survey and locate abandoned well, mark with stake and take location photos
- Excavate to expose top of surface casing
- Weld 2" collar to top of 8 5/8" surface casing cap. Make up to collar, pneumatic drill with non-sparking bit. Drill out cap venting possible trapped gas.
- Once verified that no gas exists beneath top of surface casing plate, cut off surface casing below plate with torch, dress up smooth.
- Butt weld 8 5/8" casing to dressed cut, bringing threaded end of casing to ground level.
- Make up to 8 5/8" casing, one 8 5/8" collar and 8 5/8" starter well head
- NU flange adaptor and 5K BOP, test BOP.
- NU and RIH with 6 1/8" cone bit, PU 2 7/8" drill collars, 2 7/8" 6.5# tubing, and TIW valve
- Drill out first cement plug inside surface casing (TOC @ surface) tag second plug at 500', roll hole clean.
- Pressure test surface casing to 200 psi. If pressure bleeds off, set RBP and test again. ****If test fails, contact office.****
- After pressure test of surface casing, drill out second cement plug from 500' to 750' (or until top of parted casing is tagged)
- Assume pressure under surface casing shoe, roll hole with kill fluid until well dead, or blow down.
- RIH and dress top of fish for overshot
- PU and RIH with overshot, attempt to latch on to 4 1/2" casing. ****If overshot fails, contact office.****
- RU wireline, run gauge ring.
- Set a CIBP at 1200', and dump bail 2 sx of cement on top.
- RIH w/ 1' perforating gun and shoot 4-6 spf @ 1100'.
- Establish injection rate and circulate 2x hole volume.
- RU cement crew and pump 10 bbls mud flush (or similar spacer) followed by 65 sxs of 15.8ppg Class G "neat" cement (Volume factor assumes 7 7/8" hole size to prevent cementing of overshot).

| Interval Start | Interval End | Length (ft) | Vol. Factor (ft³/sk) | Yield (ft³/sk) | Cement (sxs) |
|----------------|--------------|-------------|----------------------|----------------|--------------|
| 1100 | 800 | 300 | 0.2278 | 68 | 1.15 |
| 1100 | 1000 | 100 | 0.0873 | 9 | 1.15 |
| | | | | | 8 |
| | | | | | 67 |

- Displace cement with 15.5 bbls fresh water.

| Casing ID | Depth (ft) | Disp. (bbl/ft) | Disp. (bbl) |
|-----------|------------|----------------|-------------|
| 4.000 | 1000 | 0.0155 | 15.5 |

- Unland overshot @ 750' (or top of fish).
- Pump 110 sxs of 15.8ppg Class G "neat" plug from 750' to 442'.

| Interval Start | Interval End | Length (ft) | Vol. Factor (ft³/sk) | Yield (ft³/sk) | Cement (sxs) |
|----------------|--------------|-------------|----------------------|----------------|--------------|
| 750 | 542 | 208 | 0.4418 | 92 | 1.15 |
| 542 | 442 | 100 | 0.3576 | 36 | 1.15 |
| | | | | | 31 |
| | | | | | 111 |

- POOH with 2 7/8" tubing. Wait 4 hrs, and tag TOC.

- Pump 140 sxs of 15.8ppg Class G "neat" plug from 442' to surface.

| Interval Start | Interval End | Length (ft) | Vol. Factor (ft³/sk) | Yield (ft³/sk) | Cement (sxs) |
|----------------|--------------|-------------|----------------------|----------------|--------------|
| 442 | 0 | 442 | 0.3576 | 158 | 1.15 |
| | | | | | 137 |

- POOH with 2 7/8" tubing. Wait 4 hrs, and tag TOC. If cement has fallen, top off back to surface.
- Let cement set over night, verify cement has not settled and is still at surface. RDMO.
- Excavate around wellhead to 8' below grade, cut off 8 5/8" casing, weld on cap.
- Backfill hole and reclaim surface to original conditions.