REENTRY PROCEDURE

WELL NAME: Badger Federal # 1 **DATE:** 10/21/2013

LOCATION:

Qtr/Qtr: SESE Section: 4 Township: 8N Range: 60W

COUNTY: WELD STATE: CO API #: 05-123-14372

ENGINEER: Ryan Olson 7 Day Notice Sent:

(Please notify Engineer of any major changes prior to work) Do not start operations until:

Notice Expires:

OBJECTIVE: Re-enter and re-plug

WELL DATA:

Surface Csg:	8 5/8" 24# set @ 624'	KB Elevation:	4916'
Surface Cmt:	350 sks	GL Elevation:	4905'
Long St Csg:	NO PROD CSG	TD:	7045'
Long St Cmt:		PBTD:	7045'
Long St Date:			

Plug Info (1)	50 sk cmt plug set @ 6900'
Plug Info (2)	40 sk cmt plug set @ 3950'
Plug Info (3)	30 sk cmt plug set @ 675'
Plug Info (4)	15 sk cmt plug set @ 50'

Tubing: Rods:

Pump:

Misc.: ***Base Fox Hills @ 710', Deepest water well @ 360'***

WELL STATUS: Well Abandoned 9/3/89

COMMENTS:

Remainder of hole filled w/ 10# mud. Sur csg cut off 4' below GL and plated welded on

PROCEDURE:

1) Survey and locate abandoned well, mark with stake
2) Excavate to expose top of surface casing
3) 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.
4) Once verified that no gas exists beneath top of surface casing plate, cut off surface casing below plate with torch, dress up smooth.
5) Butt weld 8 5/8" casing to dressed cut, bringing threaded end of casing to ground level.
6) Make up to 8 5/8" casing, one 8 5/8" collar and 8 5/8" starter well head
7) NU flange adaptor and 5k BOP, test BOP.
8) NU and RIH with 6 7/8" cone bit, PU 2 7/8" drill collar, 2 7/8" 8.7# tubing, and TIW valve
9) Drill out first cement plug inside surface casing, roll hole clean. Verify top of next cement plug inside of surface casing by tagging.
10) If unable to verify isolation of surface casing with tag of cement plug, set RBP inside surface casing
11) Once isolation of surface casing is established, either with tagging of surface plug or setting of RBP, pressure test surface casing to 200psi
12) After pressure test of surface casing, retrieve RBP or continue drill out of cement plug under surface casing shoe.
13) Assume pressure under surface casing shoe, roll hole with kill fluid until well dead, or blow down.
14) Continue RIH, cleaning out with drilling mud or water to 6100'
15) TOOH with cone bit, drill collars, and 2 7/8" tubing.
16) PU and RIH with mule shoe and 2 7/8" tubing to 6050'.
17) RU cement crew and pump a balanced plug of 50 sks 15.8 ppg Class G "neat" cement @ 6050'
18) POOH to 3000', RU cement crew and pump a balanced plug of 100 sks 15.8 ppg Class G "neat" cement @ 3000'
19) POOH to 860' (150' below Fox Hills Base @ 710')
20) RU cement crew and pump 356 sxs of 15.8ppg Class G "neat" cement bring cement to surface
21) POOH with 2 7/8" tubing. Wait 4 hrs, and tag TOC. If cement has fallen, top off back to surface
22) Let cement set over night, verify cement has not settled and is still at surface. RDMO
23) Excavate around wellhead to 8' below grade, cut off 8 5/8" casing, weld on cap
24) Backfill hole and reclaim surface to original conditions