

Bison Oil and Gas II, LLC
Ingram 1
Capital - Offset Well Remediation (P&A)

Lat 40.742465

Long -103.823865

PROCEDURE

1. Survey and locate abandoned well. Mark with stake and record as-drilled GPS coordinates.
2. Excavate to expose top of surface casing. Cut plate off. Weld 8-5/8" slip collar, sufficient 8-5/8" casing to reach ground level, and 8-5/8" slip collar.
3. MIRU workover rig. NU wellhead and 5k BOP. Test BOP.
4. PU and RIH with 7-7/8" tricone bit, 10 3-1/2" drill collars, and 2-7/8", 6.5#, L80, EUE workstring. Drill out 1st surface cement plug and circulate hole clean.
5. Continue drilling or RIH to top of 2nd surface casing plug. Record depth of plug. Pressure test surface casing to 250 psi. If surface casing fails pressure test, contact engineer.
6. After pressure test of surface casing, drill out surface casing plug. If pressure is encountered below surface casing plug, circulate hole with mud or kill fluid until well is dead or blown down.
7. PU and RIH with mule shoe and 2-7/8" L80 tubing to 5500'. RU cement crew, pressure test lines to 4,500 psi, and pump a balanced plug of 98 sks 15.8 ppg Class G neat cement at 5497'. IF CIRCULATION IS NOT MAINTAINED WHILE PUMPING PLUG AND DISPLACING TO DEPTH: POOH to surface casing. Wait 4 hours and tag TOC. Record tag depth. If tag is deeper than 5297', contact engineer.
8. POOH to 1650'. RU cement crew and pump a balanced plug of 50 sks 15.8 ppg Class G neat cement at 1650'.
9. POOH to 400'. RU cement crew and pump 144 sks of 15.8 ppg Class G neat cement and bring cement to surface. POOH with 2-7/8" tubing. RDMO. Top off cement after rig has moved, if necessary.
10. Once surface plug has set, cut casing to 5' below ground level and weld on a plate to seal the well. Inscribe the well's legal location, well name and number, and API number on the plate, as shown below.

660' FNL, 660' FEL, NENE Sec 23, T9N, R58W
Ingram 1
05-123-05639

11. Photograph welded name plate and send to engineer and state inspector before proceeding.
12. Backfill hole and reclaim surface to original conditions.

CEMENT PLUG TABLE							
Plug Number	Plug Status	Formation	Plug Bottom Depth	Plug Top Depth	Cement Class	Yield (ft^3/sk)	Number of Sacks
1	Existing	J Sand	6361'	6269'	Unknown	Unknown	30
2	Existing	D Sand	5740'	5648'	Unknown	Unknown	30
3	New	Niobrara	5497'	5197'	G	1.15	98
4	New	Pierre	1650'	1500'	G	1.15	50
5	New	Fresh Water	400'	Surface	G	1.15	210
TOTAL NEW SKS OF CEMENT REQUIRED:							358