

OCCIDENTAL PETROLEUM CORPORATION

Please contact your area engineer with any questions concerning this procedure.

6/19/2025

RE-ENTRY PLUG and ABANDONMENT PROCEDURE

OLSON #1

05-123-11172

Step Description

1	PREP
2	Well is being re-entered to P&A well to current standards due to it being offset to upcoming fracs.
3	Provide 48 hour notice to Colorado ECMC prior to rig up per request on approved Form 6 (i.e. submit Form 42, etc.)
4	Perform pre-job safety meeting and review JSA. Ensure all parties know their roles and responsibilities and can identify hazards.
5	Follow all Rockies Well Servicing guidelines.
6	Stop and complete new JSA prior to all barrier changes.
7	Locate and expose 8-5/8" casing stub.
8	Tie into and weld on 8-5/8" casing stub above GL.
9	Install 8-5/8" 3K Q92 well head with ball valves on both outlets.
10	Check and record surface casing pressure.
11	START RIG ACTIVITIES
12	MIRU rig/ equipment/tanks/pumps.
13	Perform negative test and ensure well is dead. Wait 15-30 minutes to verify (cement is at surface).
14	Pressure test BOPE, annular and 2" 1509 iron to API standards. Chart and record pressure tests. Please refer to Testing Procedures and Testing Table listed in the APPENDIX tab. All tests are performed on stump. Note: ensure BOPE accumulator controls are properly placed and pressurized.
15	NU and torque BOPE to casing head. The BOP consists of the following components: 7-1/16" double gate BOP with blur rams and pipe rams (for 4.5" DP), annular bag, 2 TIW valves accessible with change overs if applicable (i.e. drill collars Communicate with foreman on correct BOP.
16	Test TIW valves. Chart tests and document accordingly.
17	DRILLING
18	PU 7-7/8" drilling BHA on drill pipe.
19	Drill 10 sx cement plug from surface through estimated BOC at 40'. Continue washing down to cement plug at shoe an tag. TOC estimated at 236'. Drill through shoe plug, estimated BOC is at 296'. Keep an eye out for cuttings that soft water indicating we are drilling foramtion. Contact engineer if still drilling cement at 310'.
20	If cement drilling continues below the shoe, consider LD BHA and pick up packed-hole BHA with UBHO. (7-7/8" tri-co 7/8" near bit stabilizer, 6-11/16" OD straight motor, 7-7/8" stabilizer, monels with at least one stabilizer, UBHO, 7-7/8" stabilizer, 6 x 4.5" HW) Need at least 4 stabilizers total.
21	Pick Up directional UBHO if you don't already have one in the BHA.
22	Continue drilling out shoe plug then wash down to the cut top at 6000'.
23	Circulate with biocide treated fresh water to clean the hole. Pump until returns are clean.
24	TOOH, LD BHA.
25	6000' PLUG
26	RIH w/ DP open-ended to 6000'. Establish circulation to surface with biocide treated fresh water and pump at least tw hole-volumes to clean up wellbore.

27	MIRU cementers: Pump 200 sx (1.52 yld - 54 bbl or 304cf) of the Niobrara Cement blend: Class G with 0.4% B547 Gas Block (Latex) and 0.4% D255 FLA (Fluid Loss) and 35% D066 Silica Flour and 0.2% D800 (Retardant) and 0.3% D065 (Dispersant). Volume based on 600' in 7.875" bit size open hole with 50% excess factor. Cement planned for 5400'-6 Collect wet and dry samples of cement to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
28	Pull out of cement. TOOH to 5000'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
29	SUSSEX PLUG
30	RIH w/ DP open-ended to tag previous plug to confirm coverage. Move up to 4600'. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.
31	MIRU cementers. Pump Sussex Plug: Pump 280 sx (1.19 yld - 59 bbl or 333 cf) of the Sussex AGM: Class G with 0.4% E Gas Block (Latex) and 2% D053 Expansion (Gyp) and 0.25% D255 FLA (Fluid Loss) 0.3% D065 (Dispersant). Volume based on 500' in 7.875" bit size open hole with 100% excess factor. Cement planned for 4600'-4100'. Collect wet and dry samples of cement to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
32	Pull out of cement. TOOH to 2800'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
33	2600' PLUG
34	RIH w/ DP open-ended to tag previous plug to confirm coverage. Move up to 2600'. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.
35	MIRU cementers. Pump 2600' Plug: Pump 200 sx (1.21 yld - 43 bbl or 242 cf) of the Lower AGM blend: Class G with 0.4 B547 Gas Block (Latex) and 1% S001 CC (Calcium Chloride) and 4% D053 Expansion (Gyp). Volume based on 500' in 7.875" bit size open hole with 40% excess factor. Cement planned for 2600'-2100'. Collect wet and dry samples of ce to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
36	Pull out of cement. TOOH to 1700'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
37	1200' PLUG
38	RIH w/ DP open-ended to tag previous plug to confirm coverage. Move up to 1200'. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.
39	MIRU cementers. Pump 1200' Plug: Pump 330 sx (1.21 yld - 71 bbl or 400 cf) of the Lower AGM blend: Class G with 0.4 B547 Gas Block (Latex) and 2.0% S001 CC (Calcium Chloride) and 4% D053 Expansion (Gyp). Volume based on 600' in 7.875" bit size open hole with 100% excess factor. Cement planned for 1200'-600'. Collect wet and dry samples of ce to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
40	Pull out of cement. TOOH to 350'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
41	SHOE/SURFACE PLUG
42	RIH w/ DP open-ended to tag previous plug to confirm coverage. Move up to 450' or stay just above tag if shallower than 450'. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.
43	MIRU cementers. Pump the Shoe Plug: Pump 200sx (1.21 yld -43 bbl or 242 cf) of the Surface AGM blend: Class G with 0.4% B547 Gas Block (Latex) and 2.0% S001 CC (Calcium Chloride) and 4% D053 Expansion (Gyp). Volume based on in 7.875" bit size open hole with 170% excess factor and 285' in 8-5/8" 24# with 0% excess factor. Cement planned for 450'-Surf'. Collect wet and dry samples of cement to be left on rig. Notify engineering if circulation is ever lost during j
44	Pull out of cement. TOOH, LD all but one joint of pipe. Circulate clean with water to ensure TOC is low enough for C&C team. TOOH and LD final joint. RDMO cementers. ND BOP. Install night cap. RDMO all.
45	Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@oxy.com within 24 hours of completion of the job.
46	Supervisor submit paper copies of all invoices, logs, and reports to Well Services Engineering Specialist.
47	Excavation crew to notify One Call to clear excavation area around wellhead and for flow lines.
48	Excavate hole around surface casing enough to allow welder to cut casing a minimum 5' below ground level.

49	Welder cut casing minimum 5' below ground level.
50	Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
51	Obtain GPS location data and provide to GPS Teams page and OXY GIS database.
52	Back fill hole with fill. Clean location, and level.
53	Submit Form 6 Subsequent Report to Colorado ECMC ensuring to provide 'As performed' WBD identifying operations completed.
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