

OCCIDENTAL PETROLEUM CORPORATION

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

12/16/2025

RE-ENTRY PLUG and ABANDONMENT PROCEDURE

OLSON #1-X

05-123-06144

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 9-1/2" drilling BHA on drill pipe. If you can't find a 9-1/2" bit try a 9-7/8" or a 9".
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 500'. Switch out for a 7-7/8" bit and UBHO at around 515'. Drill through shoe plug, estimated B is at 535'. Keep an eye out for cuttings that soften in water indicating we are drilling foramtion. Contact engineer if st drilling cement at 550'.
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	Continue drilling out shoe plug then wash down to 7500'.
22	Circulate with biocide treated fresh water to clean the hole. Pump until returns are clean.
23	TOOH, LD BHA.
24	7500' PLUG
25	RIH w/ DP open-ended to 7500'. Establish circulation to surface with biocide treated fresh water and pump at least tw hole-volumes to clean up wellbore.

26	MIRU cementers: Pump 100 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 200' in 7.875" bit size open hole with 125% excess factor. Cement planned for 7300'-7500'. Collect wet and dry samples of cement to be left on rig. RDMO Cementers. Notify engineering if circulation is lost during job.
27	Pull out of cement. TOOH to 6500'. Circulate tbg clean for a minimum of 2 bottoms up, keep rates/pressures low to avoid displacing that last plug down. TOOH. WOC.
28	7200' PLUG
29	RIH w/ DP open-ended and tag that last plug. If the J-Sand is plugged over then we can proceed with the next plug up. Otherwise talk with the foreman and engineer about next steps. Move up to 7200' or stay at tag if shallower. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.
30	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 6600'-7. Collect wet and dry samples of cement to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
31	Pull out of cement. TOOH to 6000'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
32	SUSSEX PLUG
33	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.
34	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.
35	Pull out of cement. TOOH to 2800'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
36	2600' PLUG
37	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.
38	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 cement to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
39	Pull out of cement. TOOH to 1700'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
40	1200' PLUG
41	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.
42	MIRU cementers. Pump 1200' Plug: Pump 310 sx (1.21 yld) 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 hole with 100% excess factor. Cement planned for 1200'-650'. Collect wet and dry samples of cement to be left on rig. RDMO Cementers. Notify engineering if circulation is ever lost during job.
43	Pull out of cement. TOOH to 350'. Circulate tbg clean for a minimum of 2 bottoms up. TOOH. WOC.
44	SHOE/SURFACE PLUG
45	RIH w/ DP open-ended to tag previous plug to confirm coverage. Move up to 650' or stay just above tag if shallower than 650'. Establish circulation to surface with biocide treated fresh water and pump at least two hole-volumes to clean up wellbore.

46	MIRU cementers. Pump the Shoe Plug: Pump 330sx (1.21 yld, 200% OH ex)) of the Surface AGM blend: Class G with 0. B547 Gas Block (Latex) and 2.0% S001 CC (Calcium Chloride) and 4% D053 Expansion (Gyp). Cement planned for 65' Surf'. Collect wet and dry samples of cement to be left on rig. Notify engineering if circulation is ever lost during job.
47	Pull out of cement. TOO, LD all but one joint of pipe. Circulate clean with water to ensure TOC is low enough for C&C team. TOO and LD final joint . RDMO cementers. ND BOP. Install night cap. RDMO all.
48	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.
49	Supervisor submit paper copies of all invoices, logs, and reports to Well Services Engineering Specialist.
50	Excavation crew to notify One Call to clear excavation area around wellhead and for flow lines.
51	Excavate hole around surface casing enough to allow welder to cut casing a minimum 5' below ground level.
52	Welder cut casing minimum 5' below ground level.
53	Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
54	Obtain GPS location data and provide to GPS Teams page and OXY GIS database.
55	Back fill hole with fill. Clean location, and level.
56	Submit Form 6 Subsequent Report to Colorado ECMC ensuring to provide 'As performed' WBD identifying operations completed.
57	Welder cut casing minimum 5' below ground level.
58	Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
59	Obtain GPS location data and provide to GPS Teams page and OXY GIS database.
60	Back fill hole with fill. Clean location, and level.
61	Submit Form 6 Subsequent Report to Colorado ECMC ensuring to provide 'As performed' WBD identifying operations completed.