

PLUG AND ABANDONMENT PROCEDURE

DECHANT 41-19

Step	Description of Work
1	Provide 48 hr notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.). Call foreman or lead operator at least 24 hr prior to rig move. Request they catch and remove plunger, isolate production equipment and remove any automation prior to rig MIRU.
2	MIRU slickline services. Pull bumper spring and tag bottom. RDMO slickline services.
3	Notify IOC when rig mobilizes to location to generate workorder for flowline removal & one call for line locates.
4	Prepare location for base beam equipped rig. Install perimeter fence as needed.
5	MIRU, kill as necessary using clean fresh water with biocide and circulate. ND WH. NU BOP. Unseat landing jt, LD.
6	TOOH 2 3/8" production tubing. Stand back ~ 4330' of tbg.
7	MIRU WL. RIH gauge ring for 4 1/2" 11.6#/ft casing to 7793'. RIH CIBP w/ WL. Set at 7713'. PT Casing to 1000 psi. PU dump bailer, dump bail 2 sx class 'G' cement on CIBP.
8	PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 4700' and 4300'. RDWL.
9	PU CICR on 2 3/8" tbg. RIH to 4330' while hydro-testing tbg to 3000 psi. Set CICR at 4330'.
10	RU Cementers. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding cement.
11	Pump SX Suicide: 230 sx class "G", w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sx (258 cuft of slurry) to place suicide squeeze between perfs. Underdisplace and sting out of CICR to leave 3 bbls on top of retainer. Cement volume based on 10" hole with 20% excess. Caliper log on file.
12	POH 10 stands. Circulate 60 bbls water containing biocide to clear tubing. POH standing back ~1680' of tbg.
13	ND BOP and wellhead. Install BOP on surface casing head with 4 1/2" pipe rams. Install 3000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.
14	RU WL. Crack coupling or shoot off casing at or below 1580'. RDMO WL. Circulate bottoms up and continue circulating to remove any gas from wellbore.
15	TOOH and LD 4 1/2" casing.
16	RIH with 2 3/8" tubing to 1680' (100' inside 4 1/2" stub).

- 17 RU Cementers. Spot Stub Plug: 550 sx Type III w/0 .25#/sk cello flake and CaCl₂ as deemed necessary mixed at 14.8 ppg and 1.33 cf/sx (732 cuft of slurry). Cement volume based on 100' in 4 1/2" csg, 202' in 8 5/8" csg, and 698' in 11" OH + 40% excess.
- 18 TOOH. WOC 4 hrs. Tag Cement. Cement top should be above 782'. If not, consult Evans Engineering.
- 19 MIRU WL. RIH 8 5/8" CIBP to 80'. Set and PT to 1000 psi for 15 min. If tests, RDMO WL and WO rig.
- 20 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@anadarko.com within 24 hrs of completion of the job.
- 21 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.
- 22 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
- 23 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
- 24 Welder cut 8 5/8" casing minimum 5' below ground level.
- 25 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).
- 26 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
- 27 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
- 28 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.
- 29 Back fill hole with fill. Clean location, level.
- 30 Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.

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