

PLUG AND ABANDONMENT PROCEDURE

Paul Schmidt 13-33

Description of Work

Note: Production Casing = 2 7/8" OD, 6.4#/ft, J-55; Production Hole Drilled @ 7 7/8";

- 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 the plunger, isolate production equipment and remove any automation prior to rig showing up. Install perimeter fence as needed.
- 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. MI ~7000' 1 1/4 " prod tbg jts (No tbg in hole).
- 5 MIRU, kill as necessary using clean fresh water with biocide and circulate. ND WH. NU BOP. Unseat landing jt, LD.
- 6 Notify cementers to be on call. Provide volumes listed below:
 - 6.1 Sussex Casing Plug: 20 sx class "G", 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx (3.5 bbls) (inside 2 7/8" casing)
 - 6.2 Stub Plug: 470 sx Type III CaCl₂ cement w/0.25 pps cello flake mixed at 14.0 ppg and 1.53 cf/sx (126.6 bbls) (100' in 2 7/8" prod casing, 646' in 12 1/4" OH + 20% excess, and 204' in 8 5/8" surface casing)
- 7 RIH 1 1/4 " tubing to 4770' while hydrotesting to 3000 psi.
- 8 RU Cementers. Pump Sussex Casing Plug: 20 sx class "G", 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx (3.5 bbls) (inside 2 7/8" casing) to place balanced plug from 4770' to 4170'.
- 9 PUH 12 stands. Circulate 20 bbls water containing biocide to clear tubing. TOOH & WOC 4 hrs. Tag Cement. If Cement is below 4170', call production engineer. Otherwise, P&LD tbg to 1450'. SB Remainder.
- 10 RU WL. Shoot off casing at or below 1350'. RDMO WL. Circulate a full circulation with water containing biocide to remove any gas.
- 11 NDBOP, NDTH.
- 12 Install BOP on casing head with 2 7/8" pipe rams.
- 13 TOOH with 2 7/8" casing, LD.
- 14 RIH with 1 1/4 " tubing to 1450'.

- 15 RU Cementers. Spot Stub Plug: 470 sx Type III CaCl₂ cement w/0.25 pps cello flake mixed at 14.0 ppg and 1.53 cf/sx (126.6 bbls) (100' in 2 7/8" prod casing, 646' in 12 1/4" OH + 20% excess, and 204' in 8 5/8" surface casing).
- 16 Circulate 5 bbls water containing biocide to clear tubing.
- 17 TOOH. WOC 4 hrs. Tag Cement. Cement top needs to be above 604'; Proceed assuming TOC is above 604'. Otherwise, call production engineer.
- 18 MIRU WL. RIH 8 5/8" CIBP to 100'. Set, PT to 1000 psi for 15 min. If tests, RDMO WL and WO rig.
- 19 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to rscDJVendors@anadarko.com within 24 hrs of the completion of the job.
- 20 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.
- 21 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
- 22 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
- 23 Welder cut 8 5/8" casing minimum 5' below ground level.
- 24 MIRU ready cement mixer. Use 4500 psi compressive strength cement, (NO gravel) fill stubout.
- 25 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
- 26 Properly abandon flowlines per Rule 1103.
- 27 Back fill hole with fill. Clean location, level.
- 28 Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed. File electronic Form 42 once abandonment complete.

Engineer: Mark Hinaman

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