



Plug & Abandon Procedure

Well: Vega 9-431

Prepared by Jason Petermen

WELL INFORMATION:

Well Name: Vega 9-431
API #: 05-077-09124-00

Pad: Vega 11
County: Mesa
Field: Vega #85930

Surface Location: 2234' FSL & 1071' FEL SENE SEC 9 T10S R93W
Latitude 39.281611 Longitude -107.853777

Bottom Hole Location: 2234' FSL & 1071' FEL SENE SEC 9 T10S R93W

Elevations: KB Elevation: 8,169'
KB Height: 21'
GL Elevation: 8,148'

TD: 7,920' MD / 7,814' TVD
PBTD: 7,875' MD / 7,769' TVD

Casing: Surface: 8 5/8" 32 # J-55 ST&C @ 1,539', TOC @ surface
Production: 4 1/2" 11.6 # I-80 @ 7,912', TOC @ 2,780' per CBL
Open Hole: 7 7/8"

Tubing: 2 3/8" 4.7# I-80 EUE @ 7,008' (217 jts/ F-nipple 1 jnt up)

Perforations: 6,716'-7,731'

Bridge plug: NA

Well Status: Shut in

Contacts:

Health & Safety Coordinator	Greg Anoa	970 216 1387
Production Coordinator	Kenny Sackett	970 773 4298
Engineering Manager	Jason Petermen	970 456 6334
Production Manager	Rory Mortensen	970 778 5161
Senior Regulatory Manager	Wayne Bankert	970 985 5383
VP Filed - Operations	Chris Clark	970 462 8375

PROCEDURE:

1. Hold pre-job safety meeting with all personnel involved in each operation.
2. MIRU service rig. Haul fresh water to 400 bbl upright for cement jobs.
3. Kill tubing with fresh water. ND production tree and NU and test 5K BOP to 500 psi and 2500 psi for 10 minutes.
4. Kill well and un-land tubing hanger. POOH w/ 217 Joints (7,008') 2 3/8" 4.7 # N-80 tubing laying down on Tbg Float.

Isolate WMFK:

5. RU wireline-RIH w/ 3.75" gauge ring to 6,716'. MU CIBP for 4 ½ 11.6# RIH to set 50' above top perf (6,665'). Mix 2 sks (26' of cement) G-neat cement to RIH to dump bail on CIBP at 6,665' RD wireline service. (TOC Plug 6,640')

MIT Casing

Mix 30 gal of corrosion inhibitor with 100 bbls fresh water in rig tank. Fill wellbore

6. w/ 102 bbls. Pressure test casing to 500 psi for 15 minutes. (Report if a pressure loss is greater than 50 psi in 15 minutes/ PU packer to go isolate casing leak). No leak off during pressure test, proceed to step #7.

Ohio Creek Balanced Plug (Ohio Creek 4,759')

7. RIH w Tubing to 4,809' (Ohio Creek Top 4,759')
8. RU cement service company to wellhead and pump down 4 ½" casing.
9. Spot 19 sacks (250') Class G cement with 2% CaCl (15.8 ppg, 1.15 cu.ft./sk, 4.97 gal/sk) 250' cement balanced plug inside 4-1/2" casing
10. PU hole to 4,015' and circulate fresh water to clean tubing.

L. Wasatch Balanced Plug (L.Wasatch 3,965')

11. RU cement service company to wellhead and pump down 4 ½" casing.
12. Spot 19 sacks (250') Class G cement with 2% CaCl (15.8 ppg, 1.15 cu.ft./sk, 4.97 gal/sk) 250' cement balanced plug inside 4-1/2" casing
13. PU 3,000' and circulate fresh water to clean tubing.
14. POOH laying down 2 3/8 tubing.

Isolate Surface Shoe: (150' Balanced Plug)

15. RU wireline service
16. RIH to perf at 1,589' (50' below surface shoe) w/ 4 SPF on 90-degree phasing/.35 Dia/ 22.7-gram JS.
17. Try to establish circulation with rig pump down casing & circulate out Braiden head until returns are clean. (DO NOT EXCEED 920 psi) If not able to break circulation due to cement at 2,780' inside of 8 5/8" casing. Report to Engineer PU 2 3/8 tbg RIH to 1,639' mix and pump 10 sks Class G cement (15.8 ppg, 1.15 cu.ft./sk, 4.97 gal/sk) Pump 4.5 bbl Fresh water Displacement (130' Balanced Plug 1,509'–1,639') **If able to break circulation proce** mix and pump 42 sks Class G cement (15.8 ppg, 1.15 cu.ft./sk, 4.97 gal/sk)
18. Pump 22 bbls Fresh water Displacement. (150' plug inside 4 1/2" -100' plug outside 4 1/2" inside 8 5/8" and 50' 4 1/2' X 7 7/8" OH Plug depth 1,451'-1,601'. RD cementers.

Surface Cement Plug: (100' Top out Plug).

19. RU wireline service. RIH and perforate 4 SPF on 90-degree phasing 22.7-gram JS @ 100'. RDMO wireline service and service rig.
20. Establish circulation down 4 1/2" casing and up bradenhead.
21. RU cement service company to wellhead and pump down 4 1/2" casing.
22. Pump 28 sacks (100') Class G cement with 2% CaCl (15.8 ppg, 1.15 cu.ft./sk, 4.97 gal/sk) 100' cement plug inside 4-1/2" casing and 100' inside 8 5/8" casing.
23. Wait 5 days to verify cement to surface.
24. Cut off casing 3-4 feet below GL.
25. Install abandonment marker over SHL as per COGCC regulations. The following minimum information shall be permanently placed on the marker with a plate beaded on by welding:
 - a. Operator name
 - b. Lease number
 - c. Well name and number
 - d. API number
 - e. Location by 1/4 1/4 Section, Township and Range.

POST-JOB:

26. Send tubing to Petros for inspection or Debeque pipe yard for storage.