



**Arena Offshore, LP**  
**South Timbalier Block 172**  
**Lease OCS-G 1256, Well No. C003 ST00 BP00**

**Proposed Plugback for Sidetrack Procedure**  
**06/26/2011**  
**Revision 0.0**

**Well Location Information:**

SL (Slot C): 5,559' FSL and 999' FWL of ST 172  
Well TD: 8,250' MD / 7,914' TVD  
Current PBTD: 8,164' MD / 7,832' TVD  
Water Depth: 106'  
RKB to THF:  $\pm 83.95'$  (62.95' ORKB w/ Penrod 90)  
RKB to WL:  $\pm 127'$  (106' ORKB w/ Penrod 90)  
RKB to ML:  $\pm 237'$  (216' ORKB w/ Penrod 90)

**Tubular Information:**

Drive Pipe: 30" x  $\frac{5}{8}$ " wall @ 367' MD / TVD  
Surface Casing: 10  $\frac{3}{4}$ ", 40.5#, K-55, BTC @ 3,500' MD / 3,379' TVD  
Production Csg: 7", 26#, P-110, XL @ 8,250' MD / 7,914' TVD  
Tubing (existing): 2  $\frac{7}{8}$ ", 6.5#, N-80, 8rd  
Tree (existing): National 3" 5M w/ 3  $\frac{1}{2}$ " 8rd Lift Thrds & 2  $\frac{7}{8}$ ", EU 8rd Suspension  
Threads  
Drillpipe: 3  $\frac{1}{2}$ ", 13.3#, S-135, IF

NOTE: See attached Current and Proposed Wellbore Sketches

**Directional Information:**

Well Geometry: Build and Hold

**Objective:**

Permanently abandon the current completion, pull production tubing and production packer. Prepare the wellbore for sidetracking.

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**Current Completion Interval:**

Sand: "C11b" Sand  
Current Perfs: 8,038' to 8,053' MD / 7,712' to 7,727' TVD  
BHP estimate (psi / ppg): 3,449 psi / 8.6 ppg  
SITP: 585 psi  
FTP: 80 psi  
Last Production Date: 3/19/2008  
Last Well Test Data:

Date	FTP	MCF/D	BOPD	BWPD	SITP
11/12/2010	80	0	0	0	585

**Pre-Job Requirements**

- Conduct & Document pre-well intervention operations and safety meeting per BOEM regulations.
- A Well Control Drill shall be performed at least once per week with each crew as per BOEM requirements, and recorded on the IADC Report.
- NPDES Discharge Data Report must be sent in weekly with the Morning Daily Reports.
- Ensure rig sign with Operator's name, OCS-G number and well are in place.
- Ensure approvals have been received before initiating any well work.
- **Test BOP's every 7 days as per BOEMRE regulations.**

**NOTE: This Revised APM is being submitted because casing damage was encountered while attempting to workover/recomplete the subject well (Arena is currently on location with the Hercules Rig No. 265). Multiple attempts have been made to maintain use of this wellbore, however the only path forward now is to plugback for sidetrack. Arena is calling this a proposed sidetrack in lieu of a proposed bypass around fish due to our proposed directional sidetrack plan will provide for drilling back to the current completion in the C11b Sand as well as the proposed completion objective in the C11a Sand. Steps in BLUE below have already been completed. Steps in BLACK are operations requested for approval.**

**Procedure:**

1. Mobilize the Hercules 265 MODU to the ST 172 "C" platform. Shut in producing wells. Jack up, rig up and prepare to intervene on Well #C003.
2. Open tree valves and record SITP (if any). Check the 2<sup>7</sup>/<sub>8</sub>" x 7" annulus for pressure and bleed off same, filling with seawater:

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3. R/U pump and lines to the 2 $\frac{7}{8}$ " tubing and attempt to establish injection. Bullhead 9.5 ppg CaCl<sub>2</sub> down the tubing for 2 tubing volumes (including the casing volume below the production packer) to kill the "C11b" Sand production zone.
  4. Monitor the 2 $\frac{7}{8}$ " x 7" annulus for pressure while injecting down the tubing.
  5. Close SCSSV and set blanking plug in Cameron hanger profile. Test the blanking plug to 1,000 psi for 5 minutes. N/D tree and confirm landing thread's size and type.

**NOTE: Have Cameron representative on location to prep hanger hold downs for backout while production tree is off. Visually inspect condition of tubing head.**

6. Install 2 $\frac{7}{8}$ " x 5" variable bore rams in both upper and lower ram bonnets if not already done. N/U 13 $\frac{5}{8}$ " 10M BOP stack. Test BOP's and related equipment to 250/5,000 psi as per BOEMRE regulations on 2 $\frac{7}{8}$ " tubing and 3  $\frac{1}{2}$ " drillpipe.
7. Remove blanking plug. Dress rig floor to pull 2 $\frac{7}{8}$ " tubing. Make up landing joints into hanger.

**NOTE: Have 8rd thread protectors (w/ closed end) sourced and at rig for pulling tubing.**

**NOTE: Test tubing for NORM on location prior to shipping to shore.**

**NOTE: Have slickline on location to jet cut tubing in the event that the production tubing seals cannot be pulled free of packer.**

8. Back out hanger hold down pins, take overpull and pull tubing out of production packer.
9. PU and pull tubing to rig floor. Close Hydril and bullhead all annular fluids into the formation, displacing the annulus and tubing with 9.5 ppg CaCl<sub>2</sub>. Monitor wellbore for losses and spot pill above the production packer if necessary. POOH and lay down 2 $\frac{7}{8}$ ", 6.5#, N-80, 8rd production tubing, control line, safety valve and all accessories.
10. Pick up Backer SC-1 packer retrieving tool and TIH picking up 3  $\frac{1}{2}$ ", 13.3#, S-135, IF drillpipe to the top of the packer at  $\pm$  7,700' MD.
11. Latch packer, pick up and pull free. POOH racking back workstring and L/D Baker SC-1 packer.
12. M/U 6 $\frac{1}{8}$ " bit and scraper for 7" 26# casing. TIH on 3  $\frac{1}{2}$ " drillpipe to the top of the second production packer at  $\pm$  7,970' MD. Circulate the wellbore clean and POOH with bit and casing scraper.

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**NOTE: While performing the above step, casing damage was encountered at +/- 7,850' MD. Multiple milling runs have been performed in attempt to open up the obstruction in the 7", 26# casing. All attempts to remove the obstruction have been unsuccessful and there is no longer full bore access the wellbore below the obstruction at 7,850' MD.**

13. M/U and RIH with 350' of 2<sup>3</sup>/<sub>8</sub>" stinger and mule shoe on 3 1/2" drillpipe to the top of the gravel pack packer at 7,970' MD.

**NOTE: Take precaution while TIH across the obstruction depth. Slowly trip past obstruction and/or rotate pipe in order to access the wellbore beneath the damaged casing.**

14. Mix and pump 11 bbls of Class H (61.8 ft<sup>3</sup>, 58 sks, 1.07 ft<sup>3</sup>/sk) Premium cement plus additives and displace for a 300' balanced P&A cement plug from 7,670' to 7,970' MD.

15. Slowly POOH to 7,670' MD and reverse out 1 1/2 drillpipe volumes.

16. POOH and L/D stinger and mule shoe.

17. Close blind rams and test the P&A cement plug to 1,000 psi for 15 minutes on chart.

18. R/U Baker Atlas E-Line unit. M/U EZSV retainer for 7", 26# casing. RIH, correlate retainer on depth and set 4' above a casing collar at +/- 7,600' MD. POOH and R/D E-Line.

19. Close blind rams and test casing to 4,000 psi for 30 minutes on chart.

20. Prepare for sidetrack operations.