



Date: 11/21/2013

Operator: HTX

Well Location: Offshore GoM

Industry: Drilling

Category/Loss Type: Sealing Perforations

Job Type: Ultra Set® RAS

Mud Type: CaCl<sub>2</sub>

Mud Weight: 10.0 ppg

BHST: 220 F

Mix Time: 30 min

Comments:Scenario: The operator was with in the well bore with wash pipe attempting to wash over a fish and appeared to milling on something well above the perforations. After milling past the perforations losses occurred and an Ultra Set® RAS pill was to be mixed to seal off perforations. A 20 bbl Ultra Set® RAS pill was mixed and blended to 10 ppg. The dill pipe was place 100' above the perforations and the pill was squeezed into place. The pill was waited on for 6 hours and circulation was established and operations continued with not further losses.



Date: 8/14/2013

Operator: Confidential

Well Location:

Industry: Production

Category/Loss Type: Sealing Perforations

Job Type: Ultra Set® RAS

Mud Type: Sea Water

Mud Weight: 8.6 ppg

BHST: 246° F

Mix Time: 1 hours

**Comments:** The Operator wanted to permanently seal perforations @ 13758-13778'nd (11952'tvd), then perforate a lower sand @ 13808-13820'nd. The BHP of the zone to be sealed was 5520 psi, (8.8 ppg EMW). M&D Industries of Louisiana, Inc. utilized a 20 bbl Ultra Set® RAS pill to seal and test the perforations. Circulation Tools supplied the surface mixing equipment for this application.



**Final Analysis:** Upon arriving on location all necessary equipment was off loaded and rigged to specifications. Pumps and lines were flushed with filtered sea water and tested to 5000 psi. The tubing was filled with filtered sea water by bullheading down the tubing, then injection rates were established @ ½ bpm @ 400 psi, 1 bpm @ 400 psi, and 2 bpm @ 600 psi. A 20 bbl Ultra Set® RAS pill was blended and spotted into the 2 7/8" tubing. The 20 bbl pill was then displaced (bullheaded) with 90 bbls of filtered sea water @ 2 bpm which put 17 bbls of the pill into the perforations. At this point the pumps were shut down, and the tubing was pulled above the pill. Two drill pipe volumes were circulated through the tubing to ensure that the drill pipe was free of residue. After 8 hours the well was opened and the pressure was bled to 300 psi with no fluid returns. The well was then pressure tested to 800 psi for 30 minutes with no bleed off. At this point the Operator continued as per program, drilling through the 3 bbl plug in the casing and perforated the lower sand. The 20 bbl Ultra Set® RAS pill was noted as a very successful application and achieved the goals of the Operator.