



**GOM SHELF, ASSET DEVELOPMENT AREA - WEST**  
**Completion Engineering**

**RIG PROCEDURE**

**Vermilion 214 B-3 ST01 Completion**

**Objective: Complete 11,700 Ft Sand as a Single Gravel Pack with Future Thru-Tubing Completions**

**WELL:** B-3 ST01  
**DATE:** 12/9/11

**FIELD:** Vermilion 214  
**WBS:** UWGWP-D1108-COM

**OCS:** 2076  
**API:** 17-705-40199-00-S01

<b>DRILLING SUPT:</b>	Ken LeBlanc	PH: 989-3453
<b>COMPLETION ENGR:</b>	Tim Landry	PH: 989-3204
<b>PRODUCTION ENGR:</b>	Mike Hebert/Adam Ray	PH: 989-3160/3316
<b>OPERATIONS SUPV:</b>	Todd Barton	PH: 989-3830

**WELL DATA**

**CURRENT WELLBORE FLUID:**

10.7 ppg WBM

<b>CASING</b>	<b>Setting Depth (MD)</b>	<b>Burst / Collapse (psi)</b>
26", 0.50" Wall Drive Pipe	461'	N/A
10 3/4", 40.5/45.5#, K-55, 8rd	4073'	3,130&3,580/1,580&2,090
7", 26#, N-80 LTC 8rd	6,560'(Top of Window)	7240/5410
5" 18#, P-110, HYD513	6,416' – 12,715 MD'	13,940 /13,470

**Deviation:** Max angle: 46 deg @ 12,168' MD Angle thru perfs: 45 deg

**Elevations:**

RKB-ML	255'	RKB-MSL	125'
RKB-THF	62'	Water Depth	130'

**ZONE INFORMATION**

**Proposed Perfs:**

<b><u>Sand Name</u></b>	<b><u>MD</u></b>	<b><u>TVD</u></b>	<b><u>BHP psi</u></b>	<b><u>EMW ppg</u></b>	<b><u>SITP psi</u></b>
11,700' Sand	12,496' – 12,510'	11,776' – 11,786'	4519-5456	7.38-8.91	3341-4260

**It is the On Site Representative's responsibility to contact the BSEE 24 hrs before entering the wellbore. Lake Charles District, David Moore @ 337-480-4604.**

**Discuss Chevron Protecting People and the Environment, Policy 530, with all personnel on location**

## **GENERAL RIG PROCEDURE**

1. Hold Safety meeting with Crew & production operations staff. Discuss safe lifting procedures, equipment placement, pollution prevention, PPE, emergency procedures, smoking policy, E/L safety, and SIMOP. Discuss Stop Work Authority – **Hold specific meeting with all parties on the importance of the proper personal protective equipment when working with Calcium Chloride, also discuss the procedures required if exposure occurs. Supplement the rig with more eye and body wash stations if required (do not drain wash stations to completion fluid pits).** Discuss Stop Work Authority – **EVERYONE HAS THE AUTHORITY TO STOP THE JOB IF SOMETHING IS UNSAFE OR HARMFUL TO THE ENVIRONMENT.**

### **NOTE:**

#### **Steps 2-6 as per approved drilling permit**

2. Run & cement 5" production liner. Test Liner Top Packer to 1,500 psi initial test.
3. Change out BOP Rams from 2 7/8" x 5" to 2 3/8" x 3 1/2".
4. Test BOPs to 250/3,500 psi on annular and 250/5,000 psi on rams.
5. Run bit and scraper cleanout assembly. Perform casing test on 7" x 5" liner to 4,550 psi with 10.7 ppg fluid.
  - Adjust surface test pressure for actual fluid weight to maintain planned BHP for casing test.
6. Displace drilling mud to 9.4 ppg CaCl<sub>2</sub> completion fluid.
  - Anticipated BHP of the 11,700' Sand is 8.9 ppg.
  - 5" internal barrier is a double valve float shoe.
  - 5" external barrier is a liner top packer.
  - See attached Chevron well control procedures provided as an attachment with APD. PVT monitors are calibrated to mud pump stroke rates on rig and will be used to monitor fluids entering wellbore. Flo-Sho equipment will be used to monitor fluid leaving the wellbore.
7. R/U E-Line. If no problems with B&S run, GIH w/ Sump Pkr. Set same @ 12,516.00' IES, POOH w/E-Line, RD EL.

### **NOTE:**

- **As per 30 CFR 250.619, no communication between the completed hydrocarbon-bearing zone and the wellbore exists so no wireline lubricator is required.**

8. R/U and RIH w/ Halliburton TCP assembly with drop bar firing device, Snap in and out of sump packer to get on depth. Perforate the 11,700' Sand from 12,496' – 12,510' MD overbalanced (Overbalance = 300 – 1,237 psi with 9.4 ppg completion fluid hydrostatic and the anticipated pore pressure range) POOH, L/D TCP.
9. RIH w/ screens, blank, and Baker GP packer. Gravel pack the 11,700' Sand as per Baker pumping procedure. POOH with workstring and lay down service tools.
10. R/U E-Line. Test lubricator to 4,260 psi. GIH w/ Production Packer and set same @ 11,350' IES, EOT at +/-11,400'MD. POOH w/E-Line, RD EL.
11. Make up seal assembly on 2 3/8" 4.7# L-80 BTS-8 PR production tbg. RIH picking up production tubing installing gas lift mandrels with live valves and dummies as per design, X profiles, SCSSV as per schematic. Circ. Packer fluid into annulus. Sting back into seal bore, land tubing hanger and run in hold down pins. Test SCSSV and control line. Pressure up tubing to 600 psi and annulus to 400 psi for 15 minutes to confirm tubing/hanger integrity. Bleed all pressures to 0.
12. Close SCSSV and bleed tubing pressure to 0 psi above SCSSV. Set BPV and N/D BOP's. N/U tree. Pull BPV, set two way check valve and pressure test tree and void to 5,000 psi. Pull two way check.
13. R/U slickline on top of tree. Test Lubricator to 4,260 psi. **Make gauge ring run without flat bottom** to end of tubing. DO NOT BREAK FLAPPER. POOH. RD SL.
14. Rig down.

December 11<sup>th</sup>, 2011

Chevron  
Vermion 214 B-3  
EnSCO Rig 82  
BOP Schematic  
OCS-G-2076  
WELL B-3 ST01

