

# WPX Energy

## Low TOC Remediation Procedure

Wellname: **PA 524-12**  
Date: 9/17/2013  
Field: Parachute

Prepared By: Jennifer Schrant  
Cell phone: (303) 885-7752

Purpose: Increase the height of the cement to 200 feet above the mesa verde formation

### Well Information:

API Number:	05-045-20662
Production Casing:	4-1/2" 11.6# E-80
Shoe Depth:	8,620.1 ft
Float Collar Depth	8,618.2 ft
Surface Casing Depth	983.6 ft
Top of Mesaverde:	4,688 ft
Top of Gas:	5,948 ft
Correlate Log:	Baker CBL - 9/15/2013
Max pressure:	2,500 psi

### Well History:

- This well was is expected to be completed 9/28/2013
- The well has a TOC at 6622', which is approximately 2,000 ft below MVRD top

### Proposed Procedure:

Squeeze to be performed after the first stages of hydraulic fracturing has taken place

- 1 RIH and set in solid composite plug at 6,550 ft  
RIH with wireline and shoot 3 holes at 6490 ft  
Use rig pump to get injection test  
Pump Injection Test: 2, 3, & 4 bpm  
Get ISIP, 5, 10, and 15 min shut in pressures  
  
RIH and set cement retainer at 6,300 ft  
  
RIH with tubing and sting into retainer  
MIRU cement crew  
Pump 600 sacks of 16 ppg cement and 50 sacks of 17 ppg tail cement  
Sting out of retainer and reverse clean tubing  
POOH with tubing  
Allow cement to set for 24 hours  
  
Run a CBL log to confirm new TOC

Send copy of bond log to Jennifer Schrant  
RIH with bit and tubing and drill out cement retainer and cement to solid plug at 6550 ft  
Pressure test squeezed perms to 3000 psi

If new TOC is acceptable continue with completion procedure  
If new TOC is not acceptable another squeeze procedure will follow