

Bradenhead Remediation Procedure

Wellname: **PA 431-7**
Date: 4/15/2014
Field: Parachute

Prepared By: Jennifer Schrant
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Purpose: Remediate Bradenhead Pressure

Well Information:

API Number:	05-045-22235
Production Casing:	4-1/2" 11.6# E-80
Shoe Depth:	7802.6 ft
Float Collar Depth	7051.3 ft
Surface Casing Depth	1475 ft
Top of Mesaverde:	3911 ft
Top of Gas:	4952 ft
TOC:	3546 ft
Correlate Log:	Baker CBL - 4/17/14
Max pressure:	2,500 psi

Well History:

- This well has been completed
- This well originally had 520 psi bradenhead pressure after drilling
- The well has a TOC at 3546'

Proposed Procedure:

*Depths of perfs and plugs subject to change depending on gas analysis results

- 1 MIRU work over rig
Unland tubing and POOH

RIH and set in solid composite plug at 2722 ft below holes ft
Pressure Test Plug to 3000 psi
RIH with wireline and shoot 4 holes at 2622 ft
Use rig pump to get injection test
Pump Injection Test: 0.5, 1, & 2 bpm
Get ISIP, 5, 10, and 15 min shut in pressures and send to Jennifer

RIH and set cement retainer at 2522 ft above perf

RIH with tubing and sting into retainer

MIRU cement crew

Cement blend will change based on injection test

Pump 200 sks of 16 ppg + fluid loss + super CBL + CaCl lead cement with bradenhead open

Pump 50 sks of 17 ppg + CaCl tail cement close bradenhead when pumping last 2 bbls

Displace within 0.5 bbl EOT

Sting out of retainer and reverse clean tubing

POOH with tubing

Rig down cement crew

Allow cement to set for 24 hours

Monitor Bradenhead Pressure

If Bradenhead pressure still exists call Jennifer for additional instruction

If Bradenhead pressure has been eliminated

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 2722 ft

Pressure test squeezed perms to 3000 psi

If perms pressure test continue to drill out composite plug

POOH with bit and scraper

PU BHA and tubing, RIH and land tubing

Turn well over to production

RDMO workover rig