



WPX Energy

Remedial Cement and Casing Patch Procedure

Wellname: **RU 21-5**
Date: 5/27/2014
Field: Rulison

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Purpose: Squeeze hole in casing with cement. Then, run a patch over squeezed hole in order to successfully complete the

Well Information:

API Number:	05-045-21777
Production Casing:	4-1/2" 11.6# P110
Shoe Depth:	10,003'
Surface Casing Depth	1,161'
Tubing:	N/A
Perforated Interval:	(Proposed) 7725'-9738'
Top of Mesaverde:	6158'
Top of Gas:	7890'
Correlate Log:	Baker CBL Log 3/29/2014
Current TOC:	2939'
Max pressure:	5000 psi

Well History:

WPX spud this well on 1/27/2014
Initial Bradenhead Pressure measurements were 0 psi
Current Bradenhead pressure measurements are 0 psi

Circulation Squeeze Procedure

Proposed Procedure:

- 1 Pump injection test at .5 bpm, 1 bpm
Get ISIP, 5, 10 and 15 min shut in pressures
Call Isac with results
Set retainer at 2,075'
- 2 MIRU HES Cement Crew. Sting into retainer and pump 20 bbl Mud Flush *(cement slurry design may change)
Pump 100 sacks 15.8 ppg cement slurry - **MAX PUMP RATE 1 BPM**
Pump 25 sks 17.0 ppg Neat G Tail w/ 0.5% CFR-3
Displace to within 0.5 bbls of EOT
- 3 Sting out of retainer, pump 0.5 bbls of cement on top of retainer.
Reverse circulate tubing.
POOH with tubing
- 6 Allow for 24 - 48 hrs cement set time.
Monitor Bradenhead Pressure - Call Denver if it reaches 150 psi.
- 7 MIRU wireline
RIH with gauge ring and tag cement top

Run CBL from top of cement to surface casing shoe at 1161'
Send .pdf of CBL to Isac for review
Send .pdf of CBL to COGCC and BLM with new TOC picked for review
Monitor Bradenhead Pressure - Call Denver if it reaches 150 psi.

- 8 RIH with bit and 2 3/8" tubing. Drill out Cement Retainer/cement at 2,248 ft
Pressure Test Squeeze Holes to 1,000 psi
If good pressure test, move forward to step 9.
If additional remediation is necessary, another procedure will be sent out
Monitor Bradenhead Pressure - Call Denver if it reaches 150 psi.