noble energy

Dos Rios 11-34
P&A Procedure
Engineer: Ben Zapp, PE (303.241.1273)
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API:	05-123-16457	KB Elevation:	4688'
Qtr/Qtr:	NESW	GL Elevation:	4676'
Section:	34	TD:	7330' KB
Township:	5N	PBTD:	7266' KB
Range:	66W		
Footages:	1475 FSL & 2171 FWL	Water Well (ft):	260
County:	Weld	Fox Hills (ft):	301
State:	CO	Sfc Casing (ft):	338
		Shoe Plug (ft):	**538**

WELL DATA:

Surface Csg:	8.625" 24# J-55 @ 338' KB
Surface Cmt:	295 sx
Long St Csg:	4.5" 11.6# N-80 @ 7329' KB
Long St Cmt:	205 sx
Long St Date:	3/12/1993
PDTD (Sand or CIBP):	FILL
Perforation Interval (1):	Niobrara Perforations: 6886-7007' KB
Perforation Interval (2):	Codell Perforations: 7177-7187' KB
Perforation Interval (3):	
Tubing:	2.375" 4.7# J-55 @ 7159' KB
Rods:	
Pump:	
Misc.:	

STATUS:

COMMENTS:

Procedure:

1) MIRU workover rig, pump, and tank.

2) Blow down well and roll hole with fresh water, if possible.

3) ND WH, NU BOP.

4) POOH and LD tbg.

5) RIH w/ CIBP on wireline and set @ 6836'

6) Dump bail 2 sx G Neat cement on top of CIBP

7) Load hole with fluid and pressure test CIBP to 1000 psi with rig pumps. Hold for 15 minutes.

   Test considered successful if <100 psi drop observed. If test is unsuccessful, contact engineer.

8) RIH w/ 1' perforating gun and shoot 4-6 spf @ 2500'.

9) RIH w/ CICR on workstring and set @ 2400' (100' above perforations).

10) Load annulus between production casing and workstring. Test to 500 psi for 15 minutes. Test considered successful if <50 psi drop observed. If pressure test fails, contact engineer.

11) Establish injection rate.

12) Pump 10 bbls Mud Flush (or similar spacer) followed by 200 sx of cement (15.8ppg Enhanced PlugCem)

Length (ft)	OD (in)	ID (in)	ft^3/ft	Volume (ft^3)	Yield (ft^3/sk)	Cement (sk)	Nearest 5sk
500	10.000	4.500	0.435	217	1.209	180	180
100	4.000	0.000	0.087	9	1.209	7	10
2 bbl on top of CICR				11	1.209	9	10
						TOTAL:	**200**

13) Displace cement with 7 bbls fresh water.

Tubing ID	Length (ft)	Disp. Factor (BBL/ft)	Disp (BBL)	Disp -2BBL
1.995	2400	0.00387	9	**7**

14) Unsting from CICR.

15) Place remaining 2 bbls of cement on top of CICR. Allow to fall on CICR as pulling out.

16) POOH w/ workstring.

17) RIH w/ WL and cut production casing at 538'.

18) Circulate a MINIMUM of 2 bottoms up volumes from surface casing cut (61 bbls) or until well is free of oil, gas, or any large cuttings.

Length (ft)	OD (in)	ID (in)	BBL/ft	Disp (BBL)	2x Disp (BBL)
338	8.097	4.500	0.0440	15	30
200	10.000	4.500	0.0775	15	31
				TOTAL:	**61**

19) Perform flow check for 5 min to ensure well is static. Record current fluid weight in WellView.

20) Unland production casing.

21) POOH and LD production casing filling pipe every 6 joints.

22) RIH w/ workstring to 588' (50' inside top of cut casing)

23) Establish circulation.

24) Pump 10 bbls Mud Flush (or similar spacer) followed by 160 sx of 15.8 ppg Enhanced PlugCem cement as a balanced plug. TOC @ 288'.

Length (ft)	OD (in)	ID (in)	ft^3/ft	Volume (ft^3)	Yield (ft^3/sk)	Cement (sk)	Nearest 5sk
50	8.097	0.000	0.358	18	1.209	15	15
200	12.250	0.000	0.818	164	1.209	135	140
50	4.000	0.000	0.087	4	1.209	4	5
						TOTAL:	**160**

25) SDFN and ensure well has no pressure prior to pumping second plug to surface. If pressure is present, please contact engineer.

26) RIH w/ workstring to 288' tag TOC.

27) Roll hole followed by 90sx of 15.8 G Neat to surface.

Length (ft)	OD (in)	ID (in)	ft^3/ft	Volume (ft^3)	Yield (ft^3/sk)	Cement (sk)	Nearest 5sk
288	8.097	0.000	0.358	103	1.150	90	90
						TOTAL:	**90**

28) POOH w/ workstring. Top off cement if needed. Cement needs to be ~10' from surface.

29) ND BOP. Top off cement as needed.

30) RDMO

TOC @ Surface
Pump 90sx @ 288' (15.8 G Neat)

TOC @ 288'
Cut Casing @ 538'
Pump 160sx @ 588' (15.8 Enhanced PlugCem)

Perf @ 2500'
CICR @ 2400'
Pump 200sx (15.8 Enhanced PlugCem)

Existing TOC 6570'

Set CIBP @ 6836' w/ 2sx cement on top

Niobrara Perforations: 6886' – 7007' KB

Codell Perforations: 7177' – 7187' KB

TD: 7330' KB