

Hergert 41-15

Existing Features	
KB	10

Surface csg shoe at	515
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Bottom of Foxhills (FHM)	790
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Sussex Top	4093
Not producing Sussex w/in 1 mile	
Sussex Bottom	4267

Shannon Base	4635
Not producing Shannon w/in 1 mile	

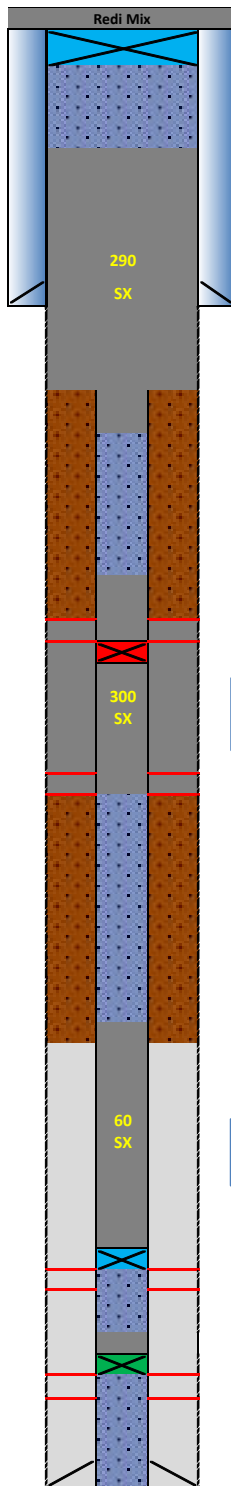
TOC (CBL)	6540
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Niobrara Top	6866
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J Sand Top	7555
Perf Top	7555
Perf Bottom	7598

CIBP 4 1/2" 11.6# w/ CMT Cap	7700
Dakota Top	7780
Perf Top	7780
Perf Bottom	7788

PBMD	7827
4 1/2" 11.6# CSG	7846



Proposed Additions for P&A

80	CIBP 8 5/8" 24#
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415	TOC
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Cement Blend: Type III w/ 0.25 pps cello flake, 0.3% CFL-3, 0.3% CFR-2, and CaCl₂ as necessary, mixed at 14.8 ppg and 1.33 cuft/sk yield.

900	Casing Stub
1000	BOC

3690	TOC
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3890	Top Squeeze Holes
3920	CICR 4 1/2" 11.6#

Cement Blend: 0:1:0 'G' w/ 0.25 pps cello flake, 0.5% CFR-2, 0.2% FMC, 0.5% LWA, mixed at 15.8 ppg and 1.15 cuft/sk yield.

4320	BOC/Bottom Squeeze Holes
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6460	TOC
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Cement Blend: Thermal 35 w/ 0.5% CFR-2 and 0.25% FMC, mixed at 15.6 ppg and 1.51 cuft/sk yield.

7490	CIBP 4 1/2" 11.6#
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API#	05-123-21232			
WINS:	88704			
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft ³ /ft
Surface Casing	8 5/8" (24#)	515	0.0637	0.3576
Production Casing	4 1/2" (11.6#)	7846	0.0155	0.0873
Production Tubing	2 3/8" (4.7#)	7517	0.0039	0.0217
Hole Size (TOP)	11	N/A	0.1175	0.6600
Hole Size (SU/SH)	11	N/A	0.1175	0.6600
OH X CSG Annulus (SU/SH)	N/A	N/A	0.0979	0.5495

Cement Calculations				
Section	Volume cu-ft	Cement Sacks	Excess	
Open Hole	304.90	229.25	20%	Foxhills Plug 11 in. hole
Surface Casing	35.76	26.89		
Production Casing	8.73	6.56		
FX Total	340.66	262.70	290	
OH X CSG Annulus	283.54	246.554	20%	Sussex Squeeze 11 in. hole
Production Casing	54.999	47.82522		
SU Total	338.54	294.3792	300	
OH X CSG Annulus				
Production Casing	89.92	59.55		
NB/CD Total	89.92	59.55	60	

Cement Yield	1.33	1.15	1.51
	FX	SX/SH	NB

Legend	
	Existing cement with CBL
	New cement
	Assumed cement w/ no CBL
	Cast Iron Cement Retainer
	New Cast Iron Bridge Plug
	Existing Cast Iron Bridge Plug w/ 2 SX Cement Cap
	Mud
	Water + Biocide