

# James H Mathisen "B" 1

Existing Features	
KB	10
Stage Tool TOC	10

Surface csg shoe at	209
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DV TOOL	778
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Bottom of Foxhills (FHM)	1308
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TOC Cement existing (CBL)	4030
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Sussex	Top	4487
Sussex	Base	4733
Sussex is productive w/in 1 mile		

BOC Cement existing (CBL)	4990
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Shannon	Bottom	Absent
Shannon is not productive		

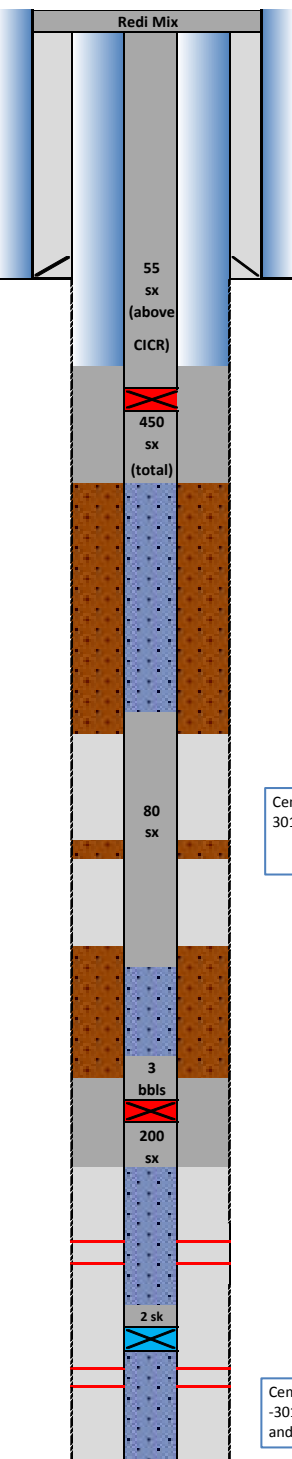
Niobrara Geologic Top	7149
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TOC Annulus existing (CBL)	7240
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CODELL	Perf Top	7494
	Perf Bottom	7510

J Sand	Perf Top	7931
	Perf Bottom	7962

PBMD	8050
4-1/2" 10.5# CSG	8053



Proposed Additions for P&A	
10	TOC

Cement Blend: Type III w/ cello flake and CaCl<sub>2</sub>, mixed at 14.8 ppg and 1.33 cuft/sk. with 40% excess and 11" hole size.

800	Top SQZ Holes
830	CICR

1410	Bottom SQZ Holes
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4090	Top of cement (tag)
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Cement Blend: "G" w/ 0.4% CD-32, 0.4% ASA - 301, mixed at 15.8 ppg and 1.15 cuft/sk

5100	Bottom of cement
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6600	TOC IN CSG
6750	TOC IN ANNULUS
6780	CICR

7220	BOC
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7860	CIBP w/ 2 sk cmt cap
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Cement Blend: "G" w/ 20% silica flour, 0.4% CD -32, 0.4% ASA -301 and R-3 to achieve 2:30 pump time mixed at 15.8 ppg and 1.38 cuft/sk

API#	0512307760			
Well:	James H Mathisen B 1			
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft <sup>3</sup> /ft
Surface Casing	8 5/8" 24#	209	0.0637	0.3576
Production Casing	4.50 10.5#	8053	0.0159	0.0895
Tubing Size				
Bit Size	7 7/8		0.0602	0.3382
Hole Size	9.5		0.0877	0.4922
Hole Size	10		0.0971	0.5454
Hole Size	11		0.1175	0.6600

Cement Calculations				
Section	Volume cu-ft	Cement Sacks	Excess	Top Plug
out CICR csg	51.91	39.03		11" hole Caliper @ 700'
out CICR annulus	469.28	352.84	40%	
top CICR csg	73.39	55.18		
Half-in/Half-out				
Total Top Plug	594.58	447.05	450	

598.5 cu-ft

In Hole				SX/ SH Plug
In pipe	90.40	78.60		
Total	90.40	78.60	80	

Cement Yield	1.33	1.15	1.71	1.38
	Top Plug	SX/SH	NB/Cd Squeeze	NB/Cd in pipe

Legend	
	Existing cement with CBL
	NEW CEMENT
	assumed cement w/ no CBL
	cast iron cement retainer
	cast iron bridge plug
	mud
	2% KCL Water

NB OUT CICR	39.38	23.03		NB/CD Plug
NB ANNULUS	286.21	167.37	40%	10" hole Caliper @ 6900'
NB TOP CICR	16.11	9.42		
Total	341.70	199.82	200	

342 cu-ft

NB Cement Blend: 50/50 Poz "G" w/ 20% silica flour, 3% gel, 0.1% sodium metasilicate and 0.4% FL-52. Mixed at 13.5 ppg and 1.71 cuft/ sk yield with 40% excess and 10" hole size.