

UPRR 41 PAN AM E 1

Existing Features	
KB	12

8-5/8" Surface csg shoe at	619
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Bottom of Foxhills (FHM)	695
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Primary TOC	2796
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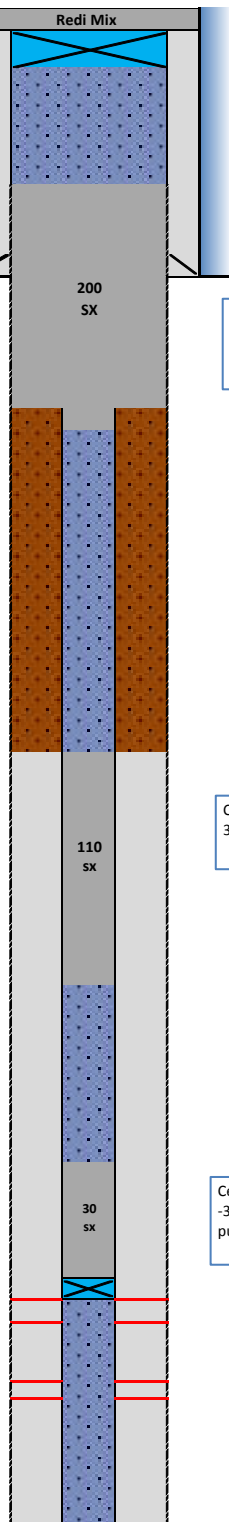
Sussex	Top	4029
NOT productive in 1-mile		4276

Shannon	Top	4691
productive in 1-mile		

Niobrara Geologic Top	6946
Perf Top	6949
Perf Bottom	7121

Geologic Top		
Codell	Perf Top	7233
	Perf Bottom	7251

PBMD	7758
5-1/2" 15.5# casing	7848



Proposed Additions for P&A

80	CIBP (8-5/8")
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510	TOC
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Cement Blend: Type III w/ cello flake and CaCl₂, mixed at 14.8 ppg and 1.33 cuft/sk. with 40% excess and 8.5" hole size.

800	Casing Stub
900	Bottom of cement

3820	TOC
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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

4750	BOC
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6550	TOC
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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

6855	4-1/2" CIBP
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API#	0512312712			
Well:	UPRR 41 Pan Am E 1			
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft ³ /ft
Surface Casing	8-5/8" 24#	619	0.0636	0.3575
Production Casing	5.5" (15.5#)	7848	0.0238	0.1336
Tubing Size				
Bit Size	7 7/8		0.0602	0.3382
Hole Size	8.5		0.0702	0.3941
Hole Size	12		0.1399	0.7854
	13		0.1642	0.9218

Cement Calculations				
Section	Volume cu-ft	Cement Sacks	Excess	Top Plug
S/C hole	38.97	29.30		9.5" Caliper
Open Hole	170.59	128.26	20%	
P/C	13.36	10.05		
Total Top Plug	222.92	167.61	200	
266		cu-ft		

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

in pipe	124.25	108.04		SX/ SH Plug
Total	124.25	108.04	110	
126.5 cu-ft				

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