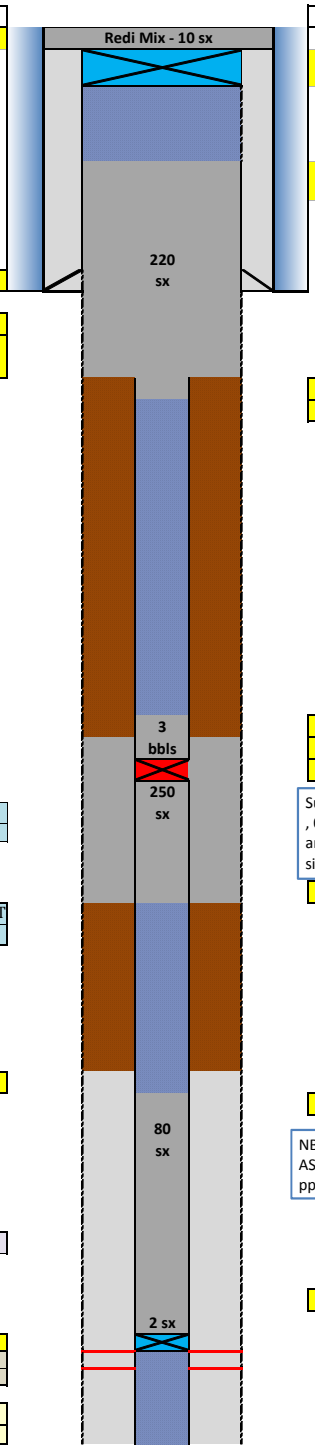
BRATTAIN L 12-16JI

Existing Features	
KB	13
Surface csg shoe at	710
Bottom of Foxhills (FHM)	895
Known Casing Leaks	991' - 1023'
Sussex Top	4416
Sussex Btm	4712
Shannon Bottom	ABSENT
No shannon production w/in 1 mile radius	
TOC Primaryt existing (CBL)	6621
Nibrara Top	7150
CIBP w/ 2 sk cmt cap	7930
J Sand Perf Top	7906
J Sand Perf Bottom	7974
PBMD	8068
4-1/2" CSG 11.6#	8092



Proposed Additions for P&A	
80	CIBP (8-5/8")
500	TOC
1150	Csg Stub
1250	Bottom of Cement
4060	TOC in csg
4200	TOC in annulus
4240	CICR
4760	BOC
6750	TOC in csg
7920	TOC in csg

Cement Blend: Type III w/ cello flake and CaCl2, mixed at 14.8 ppg and 1.33 cuft/sk. with 40%

Sussex Cement Blend: "G" w/ 0.25 pps cello flake , 0.4% CD-32, 0.4% ASA - 301, mixed at 15.8 ppg and 1.15 cuft/sk, with 20% excess and 9" hole size.

NB 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#	0512320964			
Well:	BRATTAIN L 12-16JI			
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft^3/ft
Surface Casing	8 5/8" 24#	239	0.0637	0.3576
Production Casing	4.50 (11.6#)	8092	0.0155	0.0895
Tubing Size				
Bit Size	7 7/8		0.0602	0.3382
Hole Size	9		0.0787	0.4418
Hole Size	11		0.1175	0.6600
Hole Size	12		0.1399	0.7854

Cement Calculations				
Section	Volume cu-ft	Cement Sacks	Excess	Top Plug
8-5/8" csg	75.10	56.46		
OH	204.11	153.46	40%	9"
4-1/2" csg	8.95	6.73		Caliper to 3500'
Total Top Plug	288.15	216.66	220	
	292.6	cu-ft		
top CICR	16.11	14.01		SX/ SH Plug
annulus	222.66	193.62	20%	9"
out CICR	46.54	40.47		
Total	285.31	248.10	250	Caliper
	287.5	cu-ft		
NB/CD Csg	104.72	75.88		NB/CD Plug
Total	104.72	75.88	80	
	110.4			
Cement Yield	1.33	1.15	1.71	1.38
	Top Plug	SX/SH	NB/Cd Squeeze	NB/Cd in pipe

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