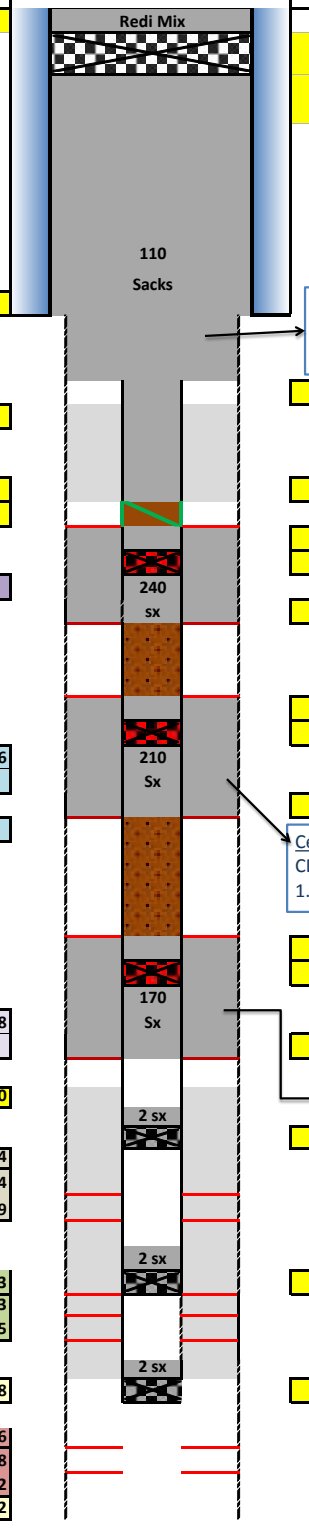
Artese Philip 1 (74210)

Anadarko Petroleum Corporation

Existing Features	
KB	10
Surface csg shoe at	214
TOC Existing	346
BOC Existing	1034
Cement Stage Tool	1034
Bottom of Foxhills	1516
Sussex Top	4516
Sussex No Perfs	
Shannon Bottom	N/A
TOC Cement existing	7240
Geologic Top	7394
Codell Perf Top	7394
Codell Perf Bottom	7409
Geologic Top	7833
J SAND Perf Top	7833
J SAND Perf Bottom	7865
4-1/2" 11.6# CSG	7978
Geologic Top	8026
DAKOTA Perf Top	7978
DAKOTA Perf Bottom	8092
PBMD	8092



Proposed Additions for P&A	
100	CIBP w/ redi mix
100	TOC
300	Casing Stub
1034	Bottom of cement
1100	Top Squeeze Perf
1130	CICR (4-1/2")
1716	Bottom Squeeze Perf
4310	Top Squeeze Perf
4340	CICR (4-1/2")
4710	Bottom Squeeze Perf
6660	Top Squeeze Perf
6690	CICR (4-1/2")
7150	Bottom Squeeze Perf
7330	CIBP (4-1/2")
7770	CIBP (4-1/2")
7910	CIBP (4-1/2")

Cement Blend: Type III w/ celloflake and $CaCl_2$ mixed at 14.0 ppg and 1.53 cuft/sk with 40% excess

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 40% excess

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 cement.

API#	05123107245			
Well:	Artese Philip 1			
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft^3/ft
Surface Casing	8 5/8" 24#	214	0.0637	0.3576
Production Casing	4-1/2" 11.6 #	7978	0.0155	0.0873
Tubing String	2-3/8"	7792	N/A	N/A
Hole Size	9"		0.0787	0.4418

Cement Calculations				
Section	Volume	Cement Sacks	approximate	Top Plug 1
S/C hole	40.77	26.64		
P/C annular hole	53.19	34.77	40% excess	
P/C hole	64.08	41.88		
Total Top Plug	158.04	103.29	110	
In Hole	305.72	199.82	40% excess	Fox Hills Plug
In pipe	53.78	35.15		
Total		234.97	240	
In Hole	198.52	172.63	40% excess	SX/ SH Plug
In pipe	34.92	30.37		
Total		202.99	210	
NB/CD Annular	243.19	142.21	40% excess	NB/CD Plug
NB/CD Csg.	42.78	25.02		
Total		167.23	170	
Cement Yield	1.53	1.15	1.71	1.38
	Top Plug	SX/SH	NB/Cd Squeeze	NB/Cd in pipe

Legend
cement with CBL
new proposed cement
assumed cement w/ no CBL
cast iron cement retainer
cast iron bridge plug
mud