

Douthit, Glen S Gas Unit #2

Existing Features		
KB	13	

Surface csg shoe at	544
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Bottom of Foxhills (FHM)	744
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Sussex	Top	4139
	Btm	4268

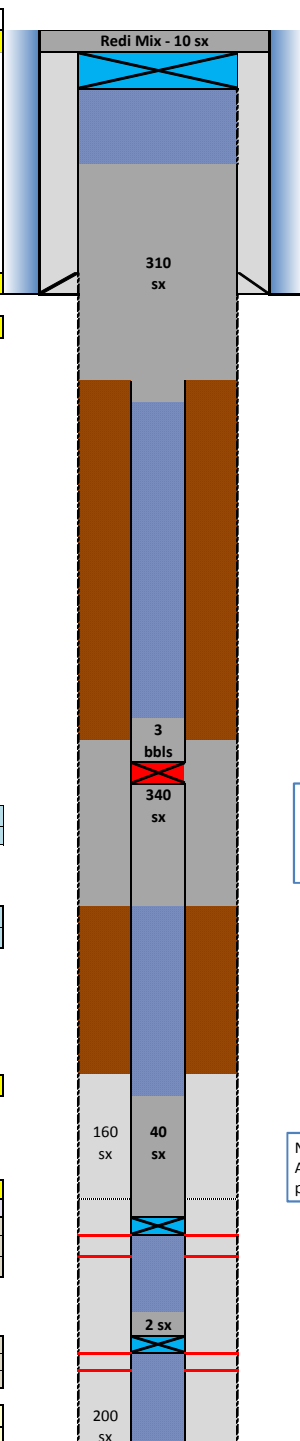
Shannon	Bottom	4657
No shannon production w/in 1 mile radius		

TOC Remedial existing (CBL)	6400
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TOC Primary existing (CBL)		6980
Niobrara Top		6992
Geologic Top		
Codell	Perf Top	7244
	Perf Bottom	7264

Geologic Top		
J Sand	Perf Top	7684
	Perf Bottom	7712

PBMD	7804
4-1/2" CSG 11.6#	7845



Proposed Additions for P&A

80	CIBP (8-5/8")
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300	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%

950	Csg Stub
1050	Bottom of Cement

3800	TOC in csg
3940	TOC in annulus
3970	CICR

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 11" hole.

4450	BOC
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6550	TOC in csg
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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

7170	CIBP
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7600	CIBP w/ 2 sk cmt cap
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API# 0512310014				
Well: Douthit, Glen S Gas Unit #2				
Equipment	Specs.	Depth	Capacity (bbl/ft)	Capacity ft ³ /ft
Surface Casina	8 5/8" 24#	544	0.0637	0.3576
Production Casina	4.50 (11.6#)	7845	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	87.25	65.60		11" Caliper to 4500'
OH	312.34	234.84	40%	
4-1/2" csg	8.95	6.73		
Total Top Plug	408.54	307.18	310	

412.3 cu-ft

top CICR	15.22	13.23		SX/ SH Plug 11" Caliper to 4500'
annulus	336.30	292.43	20%	
out CICR	42.96	37.36		
Total	394.47	343.02	340	

391 cu-ft

NB/CD Csg	55.49	40.21		NB/CD Plug
Total	55.49	40.21	40	

55.2

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