



BASICSM
ENERGY SERVICES

Merit Energy
PPCU Revision 2
102W

County/State Haskell, Kansas

Legal Loc. 22-27S-34W

**Liner:Pump 10bbl Water; 10 bbl Flow Seal 21; 10
bbl Water; Pump 100 sks Lead & 40 sks Tail down
4 1/2;Drop Plug; Displace ; Hook up to annulas**

Terms:

Prepared for Matt Stark

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Terms:

Liner:Pump 10bbl Water; 10 bbl Flow Seal 21; 10 bbl Water; Pump 100 sks Lead & 40 sks Tail down 4 1/2;Drop Plug; Displace ; Hook up to annulus pump 10C

Well Data and Calculations

	Lead 1 Cement	Tail 1 Cement	Lead 2 Cement	Tail 2 Cement	Top Out Cement	Plug Cement
Well Type:						
Job Type:	Liner	Liner	Liner	Liner	Liner	
Cement Weight PPG :	12.30	13.80				
Hole Size:	4.950	4.950	4.950	4.950		
Casing Size:	4.500	4.500	4.500	4.500		
Bottom of Cement:	4000	5100				
Top of Cement:		4000				
Percent Excess:	100%	100%				
Annulus Cal: (bbl/ft)	0.0041	0.0041	0.0041	0.0041		
Annulus Cal: (cft/ft)	0.0232	0.0232	0.0232	0.0232		
Annulus Vol: (ft/cft)	43.1158	43.1158	43.1158	43.1158		
Annulus Vol: cft	185.53	51.02				
Annulus Vol: ft	7999.43	2199.84				
Fluid Yield: cft/sk	2.03	1.35		1.37		1.55
Annular Vol.bbls	16.52	21.07				
Slurry Volume: bbls	33.04	9.09				
Fluid Water Ratio: gal/sk	11.34	6.38		5.53		7.80
Shoe Length: Ft.						
Shoe Calculation: bbl/ft		0.0155				
Pipe ID:Inches		4.0000				
Shoe Volume: bbls						
Shoe Volume: cft						
Cement Plus shoe: cft	185.53	51.02				
Cement Plus shoe: bbls	33.04	9.09				
Total mixing Water: bbls	24.68	5.74	#DIV/0!			
Displacement: bbls		79.27				
Calculated cement: Sks	91.40	37.79	#DIV/0!			
Total water required: bbls	24.68	85.01	#DIV/0!			

Cement Recommendations

Lead 1 Cement	400	A Serv Lite	400 sks
Tail 1 Cement	80	Class C 50/50	80 sks
Lead 2 Cement			
Tail 2 Cement			
Top Out Cement			
Plug Cement			

Total: 480

Float Equipment

Top Rubber Cement Plug, 4 1/2"	1 ea
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Misc. Chemicals

Flow-Seal 21 (Sodium Silicate), 50% Solution

