

Cementing Treatment



Start Date	2/10/2018	Well	North Stapleton 13-1
End Date	2/10/2018	County	Haskell
Client	MERIT ENERGY COMPANY	State/Province	KS
Client Field Rep	Rodney Gonsales	API	15-081-22173
Service Supervisor		Formation	
Field Ticket No.		Rig	
District	Liberal, KS	Type of Job	Plug & Abandon

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
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Shoe Length (ft):

HARDWARE

Bottom Plug Used?	No	Tool Type	Swege
Bottom Plug Provided By		Tool Depth (ft)	
Bottom Plug Size		Max Tubing Pressure - Rated (psi)	
Top Plug Used?	No	Max Tubing Pressure - Operated (psi)	
Top Plug Provided By		Max Casing Pressure - Rated (psi)	
Top Plug Size		Max Casing Pressure - Operated (psi)	
Centralizers Used	No	Pipe Movement	None
Centralizers Quantity		Job Pumped Through	No Manifold
Centralizers Type		Top Connection Thread	
Landing Collar Depth (ft)	0	Top Connection Size	4.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
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Circulation Prior to Job No 10 sec SGS
Circulation Time (min) 10 min SGS
Circulation Rate (bpm) 30 min SGS
Circulation Volume (bbls) Flare Prior to/during the Cement Job No
Lost Circulation Prior to Cement Job No Gas Present No
Mud Density In (ppg) Gas Units
Mud Density Out (ppg)
PV Mud In
PV Mud Out
YP Mud In
YP Mud Out

TEMPERATURE

Ambient Temperature (°F) 10.00 **Slurry Cement Temperature (°F)** 60.00
Mix Water Temperature (°F) 50.00 **Flow Line Temperature (°F)**

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Tail Slurry	Plug 2	13.8000	1.3684	6.59			40		
Tail Slurry	Plug 1	13.8000	1.3684	6.59			50		
Tail Slurry	Mouse hole Plug	13.8000	1.3684	6.59			50		
Tail Slurry	Plug 4	13.8000	1.3684	6.59			20		
Tail Slurry	Plug 3	13.8000	1.3684	6.59			40		

Fluid Type	Fluid Name	Component	Concentration	UOM
Tail Slurry	Plug 2	BJ 40/60/4 POZ BLEND - CLASS A	100.0000	PCT

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Tail Slurry	Plug 2	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	Plug 1	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	Plug 1	BJ 40/60/4 POZ BLEND - CLASS A	100.0000	PCT
Tail Slurry	Mouse hole Plug	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	Mouse hole Plug	BJ 40/60/4 POZ BLEND - CLASS A	100.0000	PCT
Tail Slurry	Plug 4	BJ 40/60/4 POZ BLEND - CLASS A	100.0000	PCT
Tail Slurry	Plug 4	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	Plug 3	IntegraSeal CELLO	0.2500	LBS/SK
Tail Slurry	Plug 3	BJ 40/60/4 POZ BLEND - CLASS A	100.0000	PCT

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
			Min		Max	Avg
			0.00		1,000.00	20.00
			3.00		6.00	4.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	
Calculated Displacement Volume (bbls)	35.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	35.00	Amount of Spacer to Surface	
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	No	Amount Bled Back After Job	0.00
Bump Plug Pressure (psi)	0.00	Total Volume Pumped (bbls)	86.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	Yes
Cement returns During Job		Lost Circulation During Cement Job	No

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CEMENT PLUG

Bottom of Cement Plug?	No	Wiper Balls Used?	No
Wiper Ball Quantity		Plug Catcher	No
Number of Plugs	0		

SQUEEZE

Injection Rate (bpm)	Fluid Density (ppg)
Injection Pressure (psi)	ISIP (psi)
Type of Squeeze	FSIP (psi)
Operators Max SQ Pressure (psi)	

COMMENTS

Treatment Report

1st plug 12.73bbbls at 1730 feet
2nd plug 10.18bbbls at 730feet
3rd plug 10.18bbbls at 500 feet
4th plug 5bbbls at 60 feet
Rat and Mouse hole 12.73bbbls

Job Summary

Drive to location, spot trucks, rig up, safety meeting over job
1st plug 12.73bbbls from 50sacks at 13.8lbs, displacement with mud 21.3bbbls
2nd plug 10.18bbbls from 40 sacks at 13.8lbs, displacement with mud 8bbbls
3rd plug 10.18bbbls from 40sacks at 13.8lbs, displacement 4.5bbbls
4th plug 5bbbls from 20sacks at 13.8lbs, cement to surface
Rat and Mouse 12.73bbbls from 50sacks at 13.8lbs, cement to surface
rig down