



Cement

Well Name: Sater 19E-203

Cement

Surface Casing Cement, Casing, 1/23/2016 05:00

Type Casing	String Surface, 1,619.1ftKB	Start Date 1/23/2016	Cementing End Date 1/23/2016	Wellbore Original Hole	Job Drilling - original, 1/22/2016 13:30	Cementing Company Cementers Well Service Inc	Cement Objective	Eval Method Returns to Surface
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Cement Stages

Stg # 1	Description Surface Casing Cement				Objective			Top Depth (ftKB) 13.0	Bottom Depth (ftKB) 1,619.0	Pump Start Date 1/23/2016		Pump End Date 1/23/2016		Top Plug? No	Btm Plug? Yes						
Initial Pump Rate (bbl/min) 4		Final Pump Rate (bbl/min) 5		Avg Pump Rate (bbl/min) 5		Final Pump Pressure (psi) 410.0		Plug Bump Pressure (psi) 900.0		Pressure Held (psi)		Pressure Release Date		Full Return? Yes	Vol Cement Ret (bbl) 12.0		Volume Lost (bbl)				
Recip? No	Stroke (ft)	Recip Rate (...)		Rotat... No	RPM (rpm)		Pipe Movement Note			MD Tagged... 1,580.0	Tag Method BIT			Tag Wt (100... 5	Prop... No	Depth Plug... 1,636.0	Tag Cement Date 1/24/2016		Drill Out Date 1/24/2016	Drill Out Dia (...) 8 1/2	

Cement Fluids

Fluid	Est Top (ftKB)	Est Btm (ftKB)	Pump Start Date	Pump End Date	Class	Amount (sacks)	Mix H2O Ratio (gal/sack)	Yield (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	1,619.0	1/23/2016	1/23/2016	G	750	5.20	1.36	181.6		15.20

Production Casing Cement, Casing, 1/28/2016 23:30

Type Casing	String Production, 11,000.0ftKB	Start Date 1/28/2016	Cementing End Date 1/29/2016	Wellbore Original Hole	Job Drilling - original, 1/22/2016 13:30	Cementing Company Sanjel (USA) Inc	Cement Objective	Eval Method Returns to Surface
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Cement Stages

Stg # 1	Description Production Casing Cement				Objective			Top Depth (ftKB) 13.0	Bottom Depth (ftKB) 11,029.0	Pump Start Date 1/28/2016			Pump End Date 1/29/2016		Top Plug? No	Btm Plug? No			
Initial Pump Rate (bbl/min) 6		Final Pump Rate (bbl/min) 9		Avg Pump Rate (bbl/min) 7		Final Pump Pressure (psi) 1,900.0		Plug Bump Pressure (psi) 2,500.0		Pressure Held (psi) 2,800.0		Pressure Release Date 1/29/2016			Full Return? No	Vol Cement Ret (bbl) 4.0		Volume Lost (bbl)	
Recip? No	Stroke (ft)	Recip Rate (...)		Rotat... No	RPM (rpm)	Pipe Movement Note			MD Tagged...	Tag Method			Tag Wt (100...	Prop... No	Depth Plug...	Tag Cement Date		Drill Out Date	Drill Out Dia (...)

Cement Fluids

Fluid	Est Top (ftKB)	Est Btm (ftKB)	Pump Start Date	Pump End Date	Class	Amount (sacks)	Mix H2O Ratio (gal/sack)	Yield (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	5,808.0	1/28/2016	1/29/2016	1:1:0 POZ TYPE III	805	9.25	1.73	248.0		12.50
Tail	5,808.0	11,029.0	1/28/2016	1/29/2016	1:2:0 POZ G	775	9.21	1.87	258.0		13.50