



Cement

Well Name: Sater 19E-323

Cement

Surface Casing Cement, Casing, 1/30/2016 05:00

Type Casing	String Surface, 1,643.0ftKB	Start Date 1/30/2016	Cementing End Date 1/30/2016	Wellbore Original Hole	Job Drilling - original, 1/29/2016 14:30	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) 1,653.0	Pump Start Date 1/30/2016	Pump End Date 1/30/2016	Top Plug? No	Btm Plug? No			
Initial Pump Rate (bbl/min) 4	Final Pump Rate (bbl/min) 5	Avg Pump Rate (bbl/min) 5	Final Pump Pressure (psi) 850.0	Plug Bump Pressure (psi) 1,050.0	Pressure Held (psi) 500.0	Pressure Release Date 1/30/2016	Full Return? No	Vol Cement Ret (bbl) 10.0	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 (ft ³ /sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	1,653.0	1/30/2016	1/30/2016	50/50 poz	760	5.00	1.36	184.0		15.00

Production Casing Cement, Casing, 2/4/2016 08:30

Type Casing	String Liner, 10,972.0ftKB	Start Date 2/4/2016	Cementing End Date 2/4/2016	Wellbore Original Hole	Job Drilling - original, 1/29/2016 14:30	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) 10,978.0	Pump Start Date 2/4/2016	Pump End Date 2/4/2016	Top Plug? No	Btm Plug? No			
Initial Pump Rate (bbl/min) 8	Final Pump Rate (bbl/min) 14	Avg Pump Rate (bbl/min) 12	Final Pump Pressure (psi) 1,000.0	Plug Bump Pressure (psi) 1,900.0	Pressure Held (psi) 1,500.0	Pressure Release Date 2/4/2016	Full Return? Yes	Vol Cement Ret (bbl) 0.5	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 (ft ³ /sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	5,600.0	2/4/2016	2/4/2016	1:1:0 POZ TYPE III	805	9.25	1.73	248.0		12.50
Tail	5,600.0	10,978.0	2/4/2016	2/4/2016	1:2:0 POZ G	730	9.21	1.87	243.1		13.50

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