



Cement

Well Name: Lajco 17R-223

Cement

Surface Casing Cement, Casing, 12/31/2015 14:30

Type Casing	String Surface, 1,248.9ftKB	Start Date 12/31/2015	Cementing End Date 12/31/2015	Wellbore Original Hole	Job Drilling - original, 12/30/2015 14:00	Cementing Company Cementers Well Service Inc	Cement Objective	Eval Method Returns to Surface
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Cement Stages

Stg #	Description	Objective	Top Depth (ftKB)	Bottom Depth (ftKB)	Pump Start Date	Pump End Date	Top Plug?	Btm Plug?					
1	Surface Casing Cement		13.0	1,248.9	12/31/2015	12/31/2015	No	No					
4	Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)	Pressure Held (psi)	Pressure Release Date	Full Return?	Vol Cement Ret (bbl)	Volume Lost (bbl)			
	5	5	5	500.0	1,000.0	1,000.0	12/31/2015	No	10.0				
Recip?	Stroke (ft)	Recip Rate (...)	Rotat...	RPM (rpm)	Pipe Movement Note	MD Tagged...	Tag Method	Tag Wt (100...)	Prop...	Depth Plug...	Tag Cement Date	Drill Out Date	Drill Out Dia (...)
No			No			1,201.0	Drill Bit	5	No	1,258.0	1/1/2016	1/1/2016	8 3/4

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)
Tail	13.0	1,248.9	12/31/2015	12/31/2015	NEAT	670	6.00	1.18	142.9		15.20

Production Casing Cement, Casing, 1/6/2016 06:00

Type Casing	String Production, 11,477.0ftKB	Start Date 1/6/2016	Cementing End Date 1/6/2016	Wellbore Original Hole	Job Drilling - original, 12/30/2015 14:00	Cementing Company Sanjel (USA) Inc	Cement Objective ISOLATION	Eval Method Returns to Surface
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Cement Stages

Stg #	Description	Objective	Top Depth (ftKB)	Bottom Depth (ftKB)	Pump Start Date	Pump End Date	Top Plug?	Btm Plug?					
1	Production Casing Cement		13.0	11,477.0	1/5/2016	1/6/2016	Yes	No					
8	Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)	Pressure Held (psi)	Pressure Release Date	Full Return?	Vol Cement Ret (bbl)	Volume Lost (bbl)			
	9	9	9	1,500.0	2,500.0	2,500.0	1/2/2016	Yes	32.0	0.0			
Recip?	Stroke (ft)	Recip Rate (...)	Rotat...	RPM (rpm)	Pipe Movement Note	MD Tagged...	Tag Method	Tag Wt (100...)	Prop...	Depth Plug...	Tag Cement Date	Drill Out Date	Drill Out Dia (...)
No			No						No				

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	5,002.0	1/5/2016	1/6/2016	1:1:0 POZ: TYPE III	860	9.25	1.73	265.0		12.50
Tail	5,002.0	11,477.0	1/5/2016	1/6/2016	1:2: POZ:G	875	9.21	1.87	291.0		13.50