



# Cement

Well Name: Rieder 18Q-421

## Cement

### Surface Casing Cement, Casing, 5/9/2015 09:00

Type Casing	String Surface, 938.6ftKB	Start Date 5/9/2015	Cementing End Date 5/9/2015	Wellbore Original Hole	Job Drilling - original, 5/5/2015 09:30	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) 938.0	Pump Start Date 5/9/2015		Pump End Date 5/9/2015		Top Plug? Yes	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) 400.0		Plug Bump Pressure (psi) 700.0		Pressure Held (psi) 700.0		Pressure Release Date 5/9/2015		Full Return? Yes	Vol Cement Ret (bbl) 8.0		Volume Lost (bbl)	
Recip? No	Stroke (ft)	Recip Rate (...)		Rotat... No	RPM (rpm)		Pipe Movement Note			MD Tagged... 890.0	Tag Method Drill Bit		Tag Wt (100... 2,000	Prop... No	Depth Plug... 948.0	Tag Cement Date 5/10/2015	Drill Out Date 5/10/2015	Drill Out Dia (...) 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 (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	938.0	5/9/2015	5/9/2015	G	780	5.30	1.18	163.9		15.20

### Intermediate Casing Cement, Casing, 5/14/2015 07:45

Type Casing	String Intermediate, 7,601.0ftKB	Start Date 5/14/2015	Cementing End Date 5/14/2015	Wellbore Original Hole	Job Drilling - original, 5/5/2015 09:30	Cementing Company Sanjel (USA) Inc	Cement Objective	Eval Method Calculated
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### Cement Stages

Stg # 1	Description Intermediate Casing Cement				Objective			Top Depth (ftKB) 336.0	Bottom Depth (ftKB) 7,601.0	Pump Start Date 5/14/2015		Pump End Date 5/14/2015		Top Plug? No	Btm Plug? No	
Initial Pump Rate (bbl/min) 3		Final Pump Rate (bbl/min) 6		Avg Pump Rate (bbl/min) 6		Final Pump Pressure (psi) 830.0		Plug Bump Pressure (psi) 1,550.0		Pressure Held (psi) 1,550.0		Pressure Release Date 5/14/2015		Full Return? No	Vol Cement Ret (bbl) 0.0	Volume Lost (bbl)
Recip? No	Stroke (ft)	Recip Rate (...)	Rotat... No	RPM (rpm)	Pipe Movement Note			MD Tagged... 7,583.0	Tag Method Drill Bit		Tag Wt (100... 5	Prop... No	Depth Plug... 7,612.0	Tag Cement Date 5/15/2015	Drill Out Date 5/15/2015	Drill Out Dia (...) 6 1/8

### 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	336.0	5,401.0	5/14/2015	5/14/2015	TYPE 111 POZ	470	10.88	1.92	164.0		12.00
Tail	5,401.0	7,601.0	5/14/2015	5/14/2015	POZ G	285	5.93	1.42	73.0		14.60