



# Cement

Well Name: Bernhardt 6K-243

## Cement

### Surface Casing Cement, Casing, 4/2/2015 10:00

Type Casing	String Surface, 936.0ftKB	Start Date 4/2/2015	Cementing End Date 4/2/2015	Wellbore Original Hole	Job Drilling - original, 4/1/2015 10:00	Cementing Company Cementers Well Service Inc	Cement Objective ISOLATION	Eval Method Returns to Surface
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### Cement Stages

Stg # 1	Description Surface Casing Cement				Objective ISOLATE WELLBORE FROM FORMATIONS			Top Depth (ftKB) 13.0	Bottom Depth (ftKB) 936.0	Pump Start Date 4/2/2015		Pump End Date 4/2/2015		Top Plug? No	Btm Plug? Yes				
Initial Pump Rate (bbl/min) 4		Final Pump Rate (bbl/min) 2		Avg Pump Rate (bbl/min) 4		Final Pump Pressure (psi) 500.0		Plug Bump Pressure (psi) 800.0		Pressure Held (psi) 4/2/2015		Pressure Release Date 4/2/2015		Full Return? Yes	Vol Cement Ret (bbl) 6.0		Volume Lost (bbl) 0.0		
Recip? No	Stroke (ft)	Recip Rate (...)		Rotat... No	RPM (rpm)	Pipe Movement Note			MD Tagged...	Tag Method Drill Bit		Tag Wt (100... 10,000	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)
Preflush	13.0	13.0	4/2/2015						30.0		8.30
Tail	13.0	936.0			Neat	780	5.30	1.18	163.9		15.20
Displacement	0.0	891.0		4/2/2015					68.5		8.30

### Intermediate Casing Cement, Casing, 4/5/2015 12:30

Type Casing	String Intermediate, 7,462.0ftKB	Start Date 4/5/2015	Cementing End Date 4/5/2015	Wellbore Original Hole	Job Drilling - original, 4/1/2015 10:00	Cementing Company Sanjel (USA) Inc	Cement Objective ISOLATION	Eval Method Returns to Surface
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### Cement Stages

Stg # 1	Description Intermediate Casing Cement				Objective ISOLATION		Top Depth (ftKB) 13.0	Bottom Depth (ftKB) 7,462.0	Pump Start Date 4/5/2015		Pump End Date 4/5/2015	Top Plug? No	Btm Plug? Yes		
Initial Pump Rate (bbl/min) 5		Final Pump Rate (bbl/min) 2		Avg Pump Rate (bbl/min) 7	Final Pump Pressure (psi) 900.0	Plug Bump Pressure (psi) 2,100.0	Pressure Held (psi) 1,500.0	Pressure Release Date 4/5/2015		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 Drill Bit		Tag Wt (100...) 5,000	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	5,512.0	4/5/2015		TYPE III	455	13.41	2.19	158.0	15.0	11.60
Tail	5,512.0	7,712.0		4/5/2015	G	325	5.93	1.42	82.0	15.0	14.60