



# Cement

**Well Name: Harvesters Resources 15R-323**

**Cement**

**Surface Casing Cement, Casing, 4/14/2014 07:00**

Type Casing	String Surface, 930.0ftKB	Start Date 4/14/2014	Cementing End Date 4/14/2014	Wellbore Original Hole	Job Drilling - original, 4/13/2014 07:00	Cementing Company Cementers	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					15.0	930.0	4/14/2014	4/14/2014	Yes	No								
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		3		4		900.0		1,050.0		0.0				Yes		7.0			
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 <sup>3</sup> /sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Tail	15.0	930.0			G	830		1.18	174.4		15.20

**Intermediate Casing Cement, Casing, 4/19/2014 09:00**

Type Casing	String Intermediate, 7,540.0ftKB	Start Date 4/19/2014	Cementing End Date 4/19/2014	Wellbore Original Hole	Job Drilling - original, 4/13/2014 07:00	Cementing Company Sanjel (USA) 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	Intermediate Casing Cement					15.0	7,540.0	4/19/2014	4/19/2014	Yes	No								
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		7				900.0		1,450.0		0.0				Yes		42.0			
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 <sup>3</sup> /sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	15.0	5,000.0			1:1:0 POZ III	365		2.73	177.5		11.50
Tail	5,000.0	7,540.0			1:1:2 G	295		1.42	74.6		14.60

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