



# Cement

Well Name: Wiedeman 28F-412

## Cement

### Surface Casing Cement, Casing, 10/8/2015 20:30

Type Casing	String Surface, 953.0ftKB	Start Date 10/8/2015	Cementing End Date 10/9/2015	Wellbore Original Hole	Job Drilling - original, 10/8/2015 06:00	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) 953.0	Pump Start Date 10/8/2015		Pump End Date 10/9/2015		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) 350.0		Plug Bump Pressure (psi) 800.0		Pressure Held (psi) 800.0		Pressure Release Date 10/9/2015		Full Return? No	Vol Cement Ret (bbl) 6.0		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 (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Tail	13.0	953.0	10/8/2015	10/9/2015	NEAT CEMENT	505	5.20	1.18	106.1		15.20

### Intermediate Casing Cement, Casing, 10/11/2015 11:30

Type Casing	String Intermediate, 7,666.2ftKB	Start Date 10/11/2015	Cementing End Date 10/11/2015	Wellbore Original Hole	Job Drilling - original, 10/8/2015 06:00	Cementing Company Sanjel (USA) Inc	Cement Objective	Eval Method Returns to Surface
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#### Cement Stages

Stg # 1	Description Intermediate Casing Cement				Objective			Top Depth (ftKB) 13.0	Bottom Depth (ftKB) 7,676.0	Pump Start Date 10/11/2015		Pump End Date 10/11/2015		Top Plug? No	Btm Plug? No				
Initial Pump Rate (bbl/min) 7		Final Pump Rate (bbl/min) 7		Avg Pump Rate (bbl/min) 7		Final Pump Pressure (psi) 450.0		Plug Bump Pressure (psi) 1,550.0		Pressure Held (psi) 1,550.0		Pressure Release Date 10/11/2015		Full Return? No	Vol Cement Ret (bbl) 18.0		Volume Lost (bbl)		
Recip? No	Stroke (ft)	Recip Rate (...)		Rotat... Yes	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 (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Lead	13.0	5,129.0	10/11/2015	10/11/2015	1:1:0 POZ TYPE 111	480	10.88	1.95	166.7		12.00
Tail	5,129.0	7,676.0	10/11/2015	10/11/2015	1:1:2 POZ: G: GEL	275	5.93	1.42	69.6		14.60

### Production Casing Cement, Casing, 10/14/2015 04:00

Type Casing	String Liner, 11,710.0ftKB	Start Date 10/14/2015	Cementing End Date 10/14/2015	Wellbore Original Hole	Job Drilling - original, 10/8/2015 06:00	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) 6,578.3	Bottom Depth (ftKB) 11,710.0	Pump Start Date 10/14/2015		Pump End Date 10/14/2015		Top Plug? Yes	Btm Plug? No			
Initial Pump Rate (bbl/min) 6		Final Pump Rate (bbl/min) 2		Avg Pump Rate (bbl/min) 3		Final Pump Pressure (psi) 2,200.0	Plug Bump Pressure (psi) 2,800.0	Pressure Held (psi) 2,800.0	Pressure Release Date 10/14/2015		Full Return? Yes	Vol Cement Ret (bbl) 24.0		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 (ft³/sack)	Vol Pumped (bbl)	Excess (%)	Dens (lb/gal)
Tail	6,578.3	11,710.0	10/14/2015	10/14/2015	SanTail WB	465	6.19	1.25	103.5	10.0	13.50