



Cement

Well Name: Tarin Federal 32W-234

Cement

Surface Casing Cement, Casing, 11/1/2015 10:30

Type Casing	String Surface, 946.0ftKB	Start Date 11/1/2015	Cementing End Date 11/1/2015	Wellbore Original Hole	Job Drilling - original, 10/29/2015 09:00	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	946.0	11/1/2015	11/1/2015	No	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)	
4		5		5		350.0		700.0		700.0		11/1/2015		No		5.0			
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	946.0	11/1/2015	11/1/2015	NEAT	510	5.20	1.18	107.1		15.20

Intermediate Casing Cement, Casing, 11/7/2015 18:00

Type Casing	String Intermediate, 7,695.0ftKB	Start Date 11/7/2015	Cementing End Date 11/7/2015	Wellbore Original Hole	Job Drilling - original, 10/29/2015 09:00	Cementing Company Sanjel (USA) Inc	Cement Objective	Eval Method Cement Bond Log
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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				13.0	7,705.0	11/7/2015	11/7/2015	Yes	Yes									
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)	
6		9		8		400.0		2,600.0		2,600.0		11/7/2015		Yes		40.0			
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	5,000.0	11/7/2015	11/7/2015	POZ TYPE III	495	10.88	1.81	159.6		12.50
Tail	5,000.0	7,705.0	11/7/2015	11/7/2015	POZ G GEL	350	5.93	1.42	88.5		14.60

Liner Cement, Casing, 11/12/2015 09:00

Type Casing	String Liner, 14,279.0ftKB	Start Date 11/12/2015	Cementing End Date 11/12/2015	Wellbore Original Hole	Job Drilling - original, 10/29/2015 09:00	Cementing Company Sanjel (USA) Inc	Cement Objective	Eval Method Calculated
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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	Liner Cement				6,591.1	14,283.0	11/12/2015	11/12/2015	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		5		5		1,300.0		2,800.0		2,800.0		11/12/2015		Yes		20.0			
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)
Tail	6,591.1	14,283.0	11/12/2015	11/12/2015	B	710	6.19	1.25	158.1		13.50