



Cement

Well Name: Tateyama 15U-434

Surface Casing Cement

API 05123371300000	Surface Legal Location NENE 15 7N 65W	Field Name Wattenberg	State CO	Well Configuration Type Horizontal		
Ground Elevation (ft) 4,857.00	Original KB Elevation (ft) 4,872.00	KB-Ground Distance (ft) 15.00	Spud Date 8/27/2013 14:45	Rig Release Date 9/8/2013 04:00	On Production Date 11/19/2013	Abandon Date

Surface Casing Cement, Casing, 8/28/2013 17:30

Type Casing	Cementing Start Date 8/28/2013	Cementing End Date 8/28/2013	Wellbore Original Hole	String Surface, 933.0ftKB
Cementing Company Cementers Energy	Evaluation Method Returns to Surface	Cement Evaluation Results		

Comment

1, 15.0-933.0ftKB

Top Depth (ftKB) 15.0	Bottom Depth (ftKB) 933.0	Full Return? Yes	Vol Cement Ret (bbl) 6.0	Top Plug? Yes	Bottom Plug? No
Initial Pump Rate (bbl/min) 4	Final Pump Rate (bbl/min) 5	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi) 300.0	Plug Bump Pressure (psi) 800.0
Pipe Reciprocated? No	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? No	Pipe RPM (rpm)
Tagged Depth (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

Tail

Fluid Type Tail	Fluid Description 3% CaCl2 + 1/4# celloflake	Amount (sacks) 840	Class G	Volume Pumped (bbl) 176.5
Estimated Top (ftKB) 15.0	Estimated Bottom Depth (ftKB) 933.0	Percent Excess Pumped (%) 100.0	Yield (ft ³ /sack) 1.18	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 15.20	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

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Cement

Well Name: Tateyama 15U-434

Intermediate Casing Cement

API 05123371300000	Surface Legal Location NENE 15 7N 65W	Field Name Wattenberg	State CO	Well Configuration Type Horizontal		
Ground Elevation (ft) 4,857.00	Original KB Elevation (ft) 4,872.00	KB-Ground Distance (ft) 15.00	Spud Date 8/27/2013 14:45	Rig Release Date 9/8/2013 04:00	On Production Date 11/19/2013	Abandon Date

Intermediate Casing Cement, Casing, 9/2/2013 16:45

Type Casing	Cementing Start Date 9/2/2013	Cementing End Date 9/3/2013	Wellbore Original Hole	String Intermediate, 7,629.0ftKB
Cementing Company BJ Services Company	Evaluation Method Returns to Surface	Cement Evaluation Results		

Comment

1, 15.0-7,629.0ftKB

Top Depth (ftKB) 15.0	Bottom Depth (ftKB) 7,629.0	Full Return? Yes	Vol Cement Ret (bbl) 4.0	Top Plug? No	Bottom Plug? No
Initial Pump Rate (bbl/min) 5	Final Pump Rate (bbl/min) 7	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi) 2,090.0	Plug Bump Pressure (psi) 2,430.0
Pipe Reciprocated? No	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)		Pipe Rotated? No	Pipe RPM (rpm)
Tagged Depth (ftKB)	Tag Method	Depth Plug Drilled Out To (ftKB)		Drill Out Diameter (in)	Drill Out Date

Lead

Fluid Type Lead	Fluid Description	Amount (sacks) 300	Class Prem Lite	Volume Pumped (bbl)
Estimated Top (ftKB) 15.0	Estimated Bottom Depth (ftKB) 5,000.0	Percent Excess Pumped (%)	Yield (ft ³ /sack) 2.99	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 11.20	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Tail

Fluid Type Tail	Fluid Description	Amount (sacks) 340	Class 50/50 Poz	Volume Pumped (bbl)
Estimated Top (ftKB) 5,000.0	Estimated Bottom Depth (ftKB) 7,852.0	Percent Excess Pumped (%)	Yield (ft ³ /sack) 1.38	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal) 14.60	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc