



Cement Jobs by Well

Well Name: Apache Canyon 02-11V

Surface Casing Cement

API/UWI 05071075520000	Location T34S-R68W-S02	Field Name Purgatoire River	Permit Number 2002012	State/Province Colorado	Well Configuration Type Vertical
Gr Elev (ft) 8,325.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 2/9/2002 00:00	Rig Release Date 2/11/2002 00:00

Surface Casing Cement, 2/9/2002 00:00

Type Casing	Cementing Start Date 2/9/2002	Cementing End Date 2/9/2002	Wellbore Original Hole	String Surface, 1,001.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

1, 0.0-1,001.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 1,001.0	Full Return? No	Vol Cement Ret (bbl) 0.0	Top Plug? No	Bottom Plug? No
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi)	Plug Bump Pressure (psi)
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

<typ>

Fluid Type	Fluid Description	Amount (sacks) 275	Class Midcon II	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

2, 0.0-1,001.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 1,001.0	Full Return? No	Vol Cement Ret (bbl)	Top Plug? No	Bottom Plug? No
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi)	Plug Bump Pressure (psi)
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

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Fluid Type	Fluid Description	Amount (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc

Production Casing Cement, 2/13/2002 00:00

Type Casing	Cementing Start Date 2/13/2002	Cementing End Date 2/13/2002	Wellbore Original Hole	String Production, 2,530.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment
TOC unknown.

1, 1,870.0-2,530.0ftKB

Top Depth (ftKB) 1,870.0	Bottom Depth (ftKB) 2,530.0	Full Return? No	Vol Cement Ret (bbl) 0.0	Top Plug? No	Bottom Plug? No
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi)	Plug Bump Pressure (psi)
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

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Fluid Type	Fluid Description	Amount (sacks) 295	Class Midcon II	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc



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Gr Elev (ft) 8,325.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 2/9/2002 00:00	Rig Release Date 2/11/2002 00:00

Cement Squeeze, 6/30/2002 00:00

Type Squeeze	Cementing Start Date 6/30/2002	Cementing End Date	Wellbore Original Hole	String Production, 2,530.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment
CEMENT WELL WITH 160 SKS

1, 0.0-1,190.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 1,190.0	Full Return? No	Vol Cement Ret (bbl)	Top Plug? No	Bottom Plug? No
Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi)	Plug Bump Pressure (psi)
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

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Fluid Type	Fluid Description	Amount (sacks)	Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Estimated Bottom Depth (ftKB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)
Free Water (%)	Density (lb/gal)	Plastic Viscosity (cP)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc