



Cement Jobs by Well

Well Name: Apache Canyon 14-04

Surface Casing Cement

API/UWI 05071079910000	Location T34S-R68W-S14	Field Name Purgatoire River	Permit Number 2004019	State/Province Colorado	Well Configuration Type Vertical
Gr Elev (ft) 8,598.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 3/27/2004 00:00	Rig Release Date 3/27/2004 00:00

Surface Casing Cement, 3/26/2004 00:00

Type Casing	Cementing Start Date 3/26/2004	Cementing End Date	Wellbore Original Hole	String Surface, 548.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Cmtd csg w/216 sx Midcon II cmt w/Trinidad surf blend (14.0 ppg, 1.66 cuft/sk). Circ 32 bbls cmt to surf.

1, 0.0-548.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 548.0	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) 216	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

Conductor Casing Cement, 3/26/2004 00:00

Type Casing	Cementing Start Date 3/26/2004	Cementing End Date	Wellbore Original Hole	String Conductor, 22.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

<stagenum>, 0.0-22.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 22.0	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, 3/28/2004 00:00

Type Casing	Cementing Start Date 3/28/2004	Cementing End Date	Wellbore Original Hole	String Production, 2,439.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Cmt'd csg w/400 sx Midcon II w/Trinidad Production Blend (mixed @ 13.0 ppg, 2.04 cuft/sx). Did not circ cmt to surf.

1, 1,482.0-2,439.0ftKB

Top Depth (ftKB) 1,482.0	Bottom Depth (ftKB) 2,439.0	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

Well Name: Apache Canyon 14-04

Surface Casing Cement

API/UWI 05071079910000	Location T34S-R68W-S14	Field Name Purgatoire River	Permit Number 2004019	State/Province Colorado	Well Configuration Type Vertical
Gr Elev (ft) 8,598.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 3/27/2004 00:00	Rig Release Date 3/27/2004 00:00

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Fluid Type	Fluid Description	Amount (sacks) 400	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

Cement Squeeze, 2/10/2005 00:00

Type Squeeze	Cementing Start Date 2/10/2005	Cementing End Date	Wellbore Original Hole	String Production, 2,439.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Pmpd 50 bbls of baracarb preflush and 300 sx Trinidad Cmt blend @ an avg rate of 3.8 BPM, & an avg pressure of 450 psig. Max pressure 600 psig. Displace cmt fr/tbg w/PW. Left 1 BBL cmt in tbg.

<stagenum>, 540.0-1,455.0ftKB

Top Depth (ftKB) 540.0	Bottom Depth (ftKB) 1,455.0	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) 300	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

Cement Squeeze, 2/24/2005 00:00

Type Squeeze	Cementing Start Date 2/24/2005	Cementing End Date	Wellbore Original Hole	String Production, 2,439.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Pmp 40 bbls Baracarb preflush and 125 sx Trinidad surface blend Cmt, mixed 13#/gal @ 3 BPM, & 450 psig. Max press 600 psig. Break circ at 16 BW ppd. Circ 28 sx cmt to surface.

<stagenum>, 0.0-805.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 805.0	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) 125	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