

API/UWI 05071080490000	Location T34S-R68W-S01	Field Name Purgatoire River	Permit Number 20040884	State/Province Colorado	Well Configuration Type Vertical
Gr Elev (ft) 8,266.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 7/9/2004 00:00	Rig Release Date 7/10/2004 00:00

Conductor Casing Cement, 7/10/2004 00:00

Type Casing	Cementing Start Date 7/10/2004	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

Surface Casing Cement, 7/11/2004 00:00

Type Casing	Cementing Start Date 7/11/2004	Cementing End Date	Wellbore Original Hole	String Surface, 568.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Cmtd csg w/254 sx Midcon II w/Trinidad surf blend (14.0 ppg, 1.66 cuft/sk). Circ 41 bbls to surf.

1, 0.0-568.0ftKB

Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 568.0	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) 254	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, 7/12/2004 00:00

Type Casing	Cementing Start Date 7/12/2004	Cementing End Date	Wellbore Original Hole	String Production, 2,371.0ftKB
Cementing Company	Evaluation Method	Cement Evaluation Results		

Comment

Cmtd 1st stage w/140 sx Midcon II Trinidad prod blend (mixed @ 13.0 ppg, 2.04 cuft/sx). Dropped bomb & op stage collar. Gas cut soapy wtr w/no cmt to surf. Float held ok. Cmt'd 2nd stage w/250 sx Midcon II w/Trinidad prod blend (mixed @ 13.0 ppg & 2.04 cuft/sx). Closed stage collar. Circ 15 bbls cmt to surf.

1, 1,625.0-2,371.0ftKB

Top Depth (ftKB) 1,625.0	Bottom Depth (ftKB) 2,371.0	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

Well Name: Apache Canyon 01-11

API/UWI 05071080490000	Location T34S-R68W-S01	Field Name Purgatoire River	Permit Number 20040884	State/Province Colorado	Well Configuration Type Vertical
Gr Elev (ft) 8,266.00	Casing Flange Elevation (ft)	KB-Ground Distance (ft) 0.00	KB-Casing Flange Distance (ft)	Spud Date 7/9/2004 00:00	Rig Release Date 7/10/2004 00:00

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Fluid Type	Fluid Description	Amount (sacks) 140	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, 0.0-1,625.0ftKB					
Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 1,625.0	Full Return? No	Vol Cement Ret (bbl) 15.0	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) 250	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