

Well Name: FABRIZIUS 1161-34-22

API 05-123-30303	Quarter Quarter NWNW	Regulatory Field UNNAMED	County/Parish WELD	State/Province COLORADO	Well Configuration Type VERTICAL
Ground Elevation (ft) 5,106.00	Casing Flange Elevation (ft)	KB - GL / MSL (ftKB) 12	KB-Casing Flange Distance (ft)	Spud Date 4/7/2010 12:45:00 PM	Rig Release Date 4/11/2010 6:00:00 PM

Cement Details

Description Surface Casing Cement	Cementing Start Date 4/8/2010 04:15	Cementing End Date 4/8/2010 05:30	Wellbore Name ORIGINAL HOLE
Technical Result			
Comment			

Cement Stages

Stage # 1									
Description SURFACE CASING CEMENT		Objective	Top (ftKB) 12.0	Bottom (ftKB) 1,080.0	Full Return? Yes	Cmnt Rtrn (bbl) 16.0	Top Plug? No	Bottom Plug? Yes	
Q (start) (bbl/min) 3	Q (end) (bbl/min) 3	Q (avg) (bbl/min) 3	P (final) (psi) 295.0	P (bump) (psi) 775.0	Recip? No	Stroke (ft)		Rotated? No	Mix/Pump Cmt VI (...)
Depth tagged (ftKB)		Tag Method		Depth Plug Drilled Out To (ftKB)			Drill Out Diameter (in)		
Comment GOOD RETURNS WITH 16 BBLS CEMENT RETURNED TO SURFACE.									

Cement Fluids & Additives

Fluid						
Fluid Type Spacer	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl) 10.0
Yield (ft³/sack)	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 8.40	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives			
Additive	Type	Concentration	Conc Unit label
Additive	Type	Concentration	Conc Unit label

Fluid						
Fluid Type Lead	Fluid Description	Estimated Top (ftKB) 12.0	Estimated Bottom (ftKB)	Amount (sacks) 265	Class LIGHT	Volume Pumped (bbl) 80.0
Yield (ft³/sack) 1.69	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 13.10	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives			
Additive HALCO LIGHT	Type	Concentration	Conc Unit label
Additive POLYFLAKE	Type	Concentration	Conc Unit label
Additive CaCl	Type Accelerator	Concentration	Conc Unit label %

Fluid						
Fluid Type Tail	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB) 1,080.0	Amount (sacks) 100	Class TYPE II	Volume Pumped (bbl) 21.0
Yield (ft³/sack) 1.18	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 15.80	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives			
Additive POLYFLAKE	Type	Concentration	Conc Unit label
Additive TYPE 11 CEMENT	Type	Concentration	Conc Unit label
Additive CaCl	Type Accelerator	Concentration 2.0	Conc Unit label %

Fluid						
Fluid Type Displacement	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl) 65.0
Yield (ft³/sack)	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 8.40	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives			
Additive	Type	Concentration	Conc Unit label