

Well Name: DF RANCH PC GK17-99HZ

Surface Casing Cement

API 05-123-31976	Quarter Quarter NWNW	Regulatory Field GROVER	County/Parish WELD	State/Province COLORADO	Well Configuration Type HORIZONTAL
Ground Elevation (ft) 5,312.00	Casing Flange Elevation (ft)	KB - GL / MSL (ftKB) 24	KB-Casing Flange Distance (ft)	Spud Date 8/29/2010 9:00:00 AM	Rig Release Date 9/14/2010 6:00:00 AM

Cement Details

Description Surface Casing Cement	Cementing Start Date 8/30/2010 08:00	Cementing End Date 8/30/2010 09:00	Wellbore Name ORIGINAL HOLE
Technical Result			

Comment

15 BBLS TO SURFACE

Cement Stages

Stage # 1

Description SURFACE CASING CEMENT		Objective		Top (ftKB) 24.0		Bottom (ftKB) 1,448.0		Full Return? Yes		Cmnt Rtrn (bbl) 15.0		Top Plug? No		Bottom Plug? Yes			
Q (start) (bbl/min) 8		Q (end) (bbl/min) 3		Q (avg) (bbl/min)		P (final) (psi) 350.0		P (bump) (psi) 450.0		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

ALL ADDITIVES PUMPED

Cement Fluids & Additives

Fluid						
Fluid Type Spacer	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl) 50.0
Yield (ft³/sack)	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal)	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives

Additive	Type	Concentration	Conc Unit label
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Fluid

Fluid Type Lead	Fluid Description	Estimated Top (ftKB) 0.0	Estimated Bottom (ftKB)	Amount (sacks) 300	Class SWIFTCM	Volume Pumped (bbl) 113.0
Yield (ft³/sack) 2.11	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 12.60	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives

Additive SWIFTCM	Type	Concentration	Conc Unit label
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Fluid

Fluid Type Tail	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB) 1,448.0	Amount (sacks) 200	Class SWIFTCM	Volume Pumped (bbl) 54.0
Yield (ft³/sack) 1.51	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 14.20	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives

Additive SWIFTCM	Type	Concentration	Conc Unit label
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Fluid

Fluid Type Displacement	Fluid Description	Estimated Top (ftKB)	Estimated Bottom (ftKB)	Amount (sacks) 109	Class	Volume Pumped (bbl)
Yield (ft³/sack) 109.00	Mix H2O Ratio (gal/sack)	Free Water (%)	Density (lb/gal) 8.33	Plastic Viscosity (cp)	Thickening Time (hrs)	12 hr comp strg (psi)

Additives

Additive	Type	Concentration	Conc Unit label
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HALLIBURTON

Halliburton Energy Services, Inc.

Sales Order Number: 7602690

Sales Order Date: August 31, 2010

Material	Description	QTY	UOM	Base Amount	Unit Amount	Gross Amount	Discount	Net Amount
8	IRON SAFETY INSPECTION SURCHARGE /JOB ZI 000-151	1.000	JOB		83.00	83.00		83.00
372867	Cmt PSL - DOT Vehicle Charge, CMT Cmt PSL - DOT Vehicle Charge, CMT	3.000	EA		241.00	723.00		723.00
114	R/A DENSOMETER W/CHART 019-500 NUMBER OF UNITS	1.000 1	JOB each		1,285.00	1,285.00	873.80	411.20
139	ADC (AUTO DENSITY CTRL) SYS, 046-050 NUMBER OF UNITS	1.000 1	JOB each		2,275.00	2,275.00	1,547.00	728.00
132	PORT. DAS W/CEMWIN;ACQUIRE 046-050 NUMBER OF DAYS	1.000 1	JOB Days		1,649.00	1,649.00	1,121.32	527.68
74038	ZI PLUG CONTAINER RENTAL-1ST DAYS OR FRACTION (MIN1)	1.000 1	EA Days	322.00		1,322.00	898.96	423.04
90	ZI QUICK LATCH ATTACHMENT 019-251 SIZE IN INCHES/MILLIMETER INCHES/MILLIMETERS (IN/MM)	1.000 1.000 IN	JOB in		491.00	491.00	313.88	177.12
452990	SWIFTCHEM (TM) SYSTEM	300.00	SK		65.36	19,609.16	13,334.23	6,274.93
100008028	SUGAR, GRANULATED, IMPERIAL	100.000	LB		6.44	644.00	437.92	206.08
452990	SWIFTCHEM (TM) SYSTEM	200.00	SK		65.27	13,053.63	8,876.47	4,177.16
45	RED DYEI 019-000	1.000	EA		250.00	250.00	170.00	80.00
SALES ORDER AMOUNT						30,244.35	20,244.35	10,000.00
SALES ORDER TOTAL						30,244.35	20,244.35	10,000.00
Sales Tax - State								119.28
Total Weight: 50,863.72 LB								10,290.81
								US Dollars

INVOICE INSTRUCTIONS:

Operator Name:
Customer Agent:

Halliburton Approval: X
Customer Signature: X

Thomas Kolcher