

The Road to Excellence Starts with Safety

Sold To #: 360766	Ship To #: 3111088	Quote #:	Sales Order #: 900814368
Customer: FOUNDATION ENERGY MGMT		Customer Rep: Bentley, Lance	
Well Name: Howland	Well #: 2	API/UWI #: 05-001-07984	
Field: WATTENBERG	City (SAP): BENNETT	County/Parish: Adams	State: Colorado
Lat: N 39.849 deg. OR N 39 deg. 50 min. 57.678 secs.		Long: W 104.045 deg. OR W -105 deg. 57 min. 17.158 secs.	
Contractor: WORKOVER		Rig/Platform Name/Num: Workover	
Job Purpose: Recement Service			
Well Type: Development Well		Job Type: Recement Service	
Sales Person: MASON, KYLE		Srvc Supervisor: BIRCHELL, DEVIN	MBU ID Emp #: 466993

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BIRCHELL, DEVIN Ray	5.5	466993	LANGE, TIMOTHY Paul	5.5	520811	SIMS, DENNIS A	8	158880
WILEY, JAMES A	5.5	440080						

Equipment

HES Unit #	Distance-1 way						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10-11-13	5.5	2.5						

TOTAL Total is the sum of each column separately

Job				Job Times			
Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type	2000. ft			On Location	11 - Oct - 2013	14:00	MST
Job depth MD			1996. ft	Job Started	11 - Oct - 2013	17:35	MST
Water Depth			5. ft	Job Completed	11 - Oct - 2013	18:40	GMT
Perforation Depth (MD)	From		To	Departed Loc	11 - Oct - 2013	19:20	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
7 7/8" Open Hole				7.875				207.	2000.		
Multiple Stage Cementer									1650.		
4 1/2" Production Casing	Unknow n		4.5	4.	11.6		J-55		2000.		
8 5/8" Surface Casing	Unknow n		8.625	8.097	24.				207.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	4.5	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	4.5	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc %
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	

1	Fresh Water		10	bbl	8.33	.0	.0	4.0	
2	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	250	sacks	12.	2.47	14.59	4.0	14.59
	14.59 Gal	FRESH WATER							
3	Class G W/ 2% CC	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	50	sacks	15.8	1.17	5.02	4.0	5.02
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	5.019 Gal	FRESH WATER							
4	Fresh Water Displacement		31	bbl	8.33	.0	.0	4.0	
Calculated Values		Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

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Legal Description:			
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Contractor: WORKOVER		Rig/Platform Name/Num: Workover	
Job Purpose: Recement Service			Ticket Amount:
Well Type: Development Well		Job Type: Recement Service	
Sales Person: MASON, KYLE		Srv Supervisor: BIRCHELL, DEVIN	MBU ID Emp #: 466993

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/11/2013 09:30							Called out for Foundation Energy Howland 2 Recement
Pre-Convoy Safety Meeting	10/11/2013 11:40							Discuss road and weather conditions, fatigue and following distance
Depart from Service Center or Other Site	10/11/2013 12:00							Depart for location
Arrive At Loc	10/11/2013 14:00							Talked with company rep on volumes, rates, and depth
Pre-Rig Up Safety Meeting	10/11/2013 14:30							Discussed rig up, line of fire, slips, and pinch points
Rig-Up Equipment	10/11/2013 14:40							Rig up all HES Equipment
Pre-Job Safety Meeting	10/11/2013 17:23							Discuss pump schedule, procedure, high pressure iron, and emergency plan
Other	10/11/2013 17:30							Fill Lines
Pressure Test	10/11/2013 17:35							Pressure test to 3405PSI
Pump Spacer	10/11/2013 17:39		2	10	10		375.0	Pumped 10 bbls Fresh Water, 3 bbls away established circulation
Pump Lead Cement	10/11/2013 17:44		4.5	109	119		18.0	Pump Lead Cement at 12PPG Y:2.47ft ³ /sk W: 14.59gal/sk 250sks
Pump Tail Cement	10/11/2013 18:13		5	10	129		185.0	Pump Tail Cement at 15.8PPG Y:1.17ft ³ /sk W: 5.07gal/sk 50sks
Shutdown	10/11/2013 18:19							Shutdown to drop top plug

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Drop Top Plug	10/11/2013 18:20							Drop Top Plug, washed up on top of plug.
Pump Displacement - Start	10/11/2013 18:21		3					Pump Displacement 31 bbls Fresh Water
Bump Plug	10/11/2013 18:33		3	31	160		485.0	Bumped Plug with BBLs
Pressure Up	10/11/2013 18:34						1685.0	Pressure up casing from 485 psi to 1685 psi
Check Floats	10/11/2013 18:36							Checked Floats, Floats Held with .5 bbls back to truck
Release Casing Pressure	10/11/2013 18:36							Released pressure ready for rig down
Pre-Rig Down Safety Meeting	10/11/2013 18:40							Discuss pressure on the head, slips, trips, falls, and overhead loads
Rig-Down Equipment	10/11/2013 18:45							Begin rigging down everything but the head
Pre-Convoy Safety Meeting	10/11/2013 19:10							Discuss Fatigue, wildlife, weather, and journey management
Depart Location for Service Center or Other Site	10/11/2013 19:20							Depart for the yard