

Sold To #: 345242		Ship To #: 3688578		Quote #:		Sales Order #: 0903103883	
Customer: NOBLE ENERGY INC - EBUS				Customer Rep: Seth Mulhein			
Well Name: WELLS RANCH			Well #: AF05-655		API/UWI #: 05-123-42140-00		
Field: WATTENBERG		City (SAP): KERSEY		County/Parish: WELD		State: COLORADO	
Legal Description: SW NW-5-5N-62W-2183FNL-603FWL							
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 321			
Job BOM: 7521							
Well Type: HORIZONTAL OIL							
Sales Person: HALAMERICA\HB61755				Srvc Supervisor: Vaughn Oteri			

Job

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type		BHST	
Job depth MD	1889ft	Job Depth TVD	
Water Depth		Wk Ht Above Floor	
Perforation Depth (MD)	From	To	

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.921	36			0	1889	0	1889
Open Hole Section			13.5				0	1899	0	1899

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625				Top Plug	9.625	1	HES
Float Shoe	9.625			1889	Bottom Plug	9.625		HES
Float Collar	9.625			1845	SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		HES

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water W/ Red Dye	Fresh Water W/ Red Dye	50	bbl	8.33					

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	SwiftCem	SWIFTCEM (TM) SYSTEM	560	sack	13.5	1.741			9.19	
9.19 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	SwiftCem	SWIFTCEM (TM) SYSTEM	75	sack	14.2	1.533			7.63	
7.63 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	Oil Based Mud Displacement	Oil Based Mud Displacement	142.61	bbl	9					
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint		
Comment 70bbl of cement back to surface										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Combined Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	2/3/2016	17:30:00	USER				Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	2/3/2016	22:30:00	USER				Arrived on location met with company rep to discuss job process and concerns
Event	3	Start Job	Start Job	2/4/2016	03:34:05	COM4				Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	4	Pump Spacer 1	Pump Spacer 1	2/4/2016	03:46:39	COM4	92.00	8.75	0.90	Pumped 50bbl of Fresh water with red tracer dye at 3.0bpm 82psi
Event	5	Pump Lead Cement	Pump Lead Cement	2/4/2016	04:07:58	COM4	80.00	8.32	2.90	Mixed 560sks or 173bbl of 13.5ppg Y1.74 G/SK9.19 at 5.0bpm149psi
Event	6	Pump Tail Cement	Pump Tail Cement	2/4/2016	04:42:05	COM4	117.00	13.40	5.20	Mixed 75sks or 20bbl of 14.2ppg Swiftcem at 5.0bpm 121psi
Event	7	Shutdown	Shutdown	2/4/2016	04:50:12	COM4				
Event	8	Drop Top Plug	Drop Top Plug	2/4/2016	04:53:58	COM4				Released top plug witnessed by company rep
Event	9	Pump Displacement	Pump Displacement	2/4/2016	04:56:22	COM4	250.00	10.00	6.00	Pumped 142bbl of obm to displace cement
Event	10	Bump Plug	Bump Plug	2/4/2016	05:29:23	COM4	1237.00	10.08	0.00	Bumped plug 500psi over final pump pressure
Event	11	Pressure Up Well	Pressure Up Well	2/4/2016	05:31:17	COM4	1380.00	10.03	0.00	Pressure up well to test casing
Event	12	Other	Other	2/4/2016	05:47:10	COM4	1384.00	9.84	0.00	Release pressure back to pump truck to check floats , floats held good 1 bbl back
Event	13	End Job	End Job	2/4/2016	05:54:45	COM4				70bbl of cement back to surface