

HALLIBURTON

**Cementing Job Summary***The Road to Excellence Starts with Safety*

Sold To #: 345242		Ship To #: 3697128		Quote #:		Sales Order #: 0903212247				
Customer: NOBLE ENERGY INC - EBUS				Customer Rep: DEREK						
Well Name: WELLS RANCH		Well #: AA22-631		API/UWI #: 05-123-42270-00						
Field: WATTENBERG		City (SAP): GILL		County/Parish: WELD		State: COLORADO				
Legal Description: SW SW-22-6N-63W-1045FSL-81FWL										
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 321						
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB61755				Srvc Supervisor: Joseph Scileppi						
Job										
Formation Name										
Formation Depth (MD)		Top 0		Bottom		1890				
Form Type				BHST						
Job depth MD		1881ft		Job Depth TVD		1881				
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	1881	0	1881
Open Hole Section			13.5				0	1890	0	1890
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			1881		Top Plug	9.625	1	HES	
Float Shoe	9.625					Bottom Plug	9.625			
Float Collar	9.625					SSR plug set	9.625			
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625			
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /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 ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	SwiftCem	SWIFTCM (TM) SYSTEM	560	sack	13.5	1.74			9.2	
9.20 Gal		FRESH WATER								

last updated on 3/26/2016 7:03:28 AM

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iCem® Service

(v. 4.2.393)

Created: Wednesday, April 13, 2016

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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	SWIFTCM (TM) SYSTEM	75	sack	14.2	1.53			7.65
7.65 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	141.9	bbl	9				
Cement Left in Pipe		Amount	45 ft			Reason			Shoe Joint
Mix Water: pH ##		Mix Water: ## ppm Chloride:			Mix Water Temperature: ## °F °C				
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m3 XXXX			Disp. Temperature: ## °F °C				
Plug Bumped? Yes/No		Bump Pressure: ##### psi MPa			Floats Held? Yes/No				
Cement Returns: ## bbl m3		Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C				
Comment GOT 36 BBLs OF CMT BACK TO SURFACE									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	3/27/2016	19:30:00	USER	CALLOUT FOR ON LOCATION AT 12:00 AM
Event	2	Crew Leave Yard	Crew Leave Yard	3/27/2016	22:30:00	USER	PRE JOURNEY JSA W/ CREW
Event	3	Arrive At Loc	Arrive At Loc	3/27/2016	23:50:00	USER	UPON ARRIVAL RIG JUST STARTED RUNNING CASING, MET W/ COMPANY REP TO DISCUSS JOB PROCEDURE
Event	4	Rig-Up Equipment	Rig-Up Equipment	3/28/2016	03:00:00	USER	PRE RIG UP HAZARD HUNT JSA W/ CREW
Event	5	Other	Other	3/28/2016	03:15:00	USER	FIELD MIX WATER ANALYSIS: TEMP 67, PH-7, CHLORIDES-0, IRON-0
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/28/2016	04:00:00	USER	JSA W/ ALL INVOLVED PERSONNEL
Event	7	Start Job	Start Job	3/28/2016	04:15:18	COM5	
Event	8	Test Lines	Test Lines	3/28/2016	04:19:55	COM5	TESTED LINES TO 3000 PSI FOR 3 MIN, NO VISIBLE LEAKS
Event	9	Pump Spacer 1	Pump Spacer 1	3/28/2016	04:22:41	COM5	PUMPED 50 BBLS OF H2O W/ DYE AFTER FIRST 10 AT 4 BPM AND 84 PSI
Event	10	Pump Lead Cement	Pump Lead Cement	3/28/2016	04:35:28	COM5	PUMPED 560 SKS OR 173.5 BBLS OF 13.5 LEAD CMT AT 8 BPM AND 296 PSI
Event	11	Check Weight	Check weight	3/28/2016	04:38:02	COM5	WEIGHT VERIFIED BY MUD SCALES
Event	12	Pump Tail Cement	Pump Tail Cement	3/28/2016	05:00:49	COM5	PUMPED 75 SKS OR 20.4

							BBLS OF 14.2 CMT AT 8 BPM AND 276 PSI
Event	13	Shutdown	Shutdown	3/28/2016	05:10:37	COM5	SHUTDOWN AND WASHED PUMPS AND LINES
Event	14	Pump Displacement	Pump Displacement	3/28/2016	05:19:51	COM5	PUMPED 142 BBLS OF OIL BASED MUD AT 8 BPM AND 550 PSI, GOT 36 BBLS OF CMT BACK TO SURFACE
Event	15	Drop Top Plug	Drop Top Plug	3/28/2016	05:20:13	COM5	PLUG PRE LOADED AND WITNESSED BY COMPANY REP
Event	16	Bump Plug	Bump Plug	3/28/2016	05:47:08	COM5	FINAL CIRCULATING PRESSURE WAS 420 PSI AND PLUG BUMPED AT 820 PSI
Event	17	Pressure Up Well	Pressure Up Well	3/28/2016	05:48:00	USER	1000 PSI CASING TEST FOR 15 MIN
Event	18	Other	Other	3/28/2016	06:03:16	COM5	CHECKED FLOATS THEY HELD AND GOT 3/4 BBL BACK TO TRUCK
Event	19	End Job	End Job	3/28/2016	06:40:35	COM5	