

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 3746095	Quote #:	Sales Order #: 0903544558
Customer: NOBLE ENERGY INC - EBUS		Customer Rep: Gary Stapleton	
Well Name: ELLIE	Well #: LD26-615	API/UWI #: 05-123-43321-00	
Field: WILDCAT	City (SAP): RAYMER	County/Parish: WELD	State: COLORADO
Legal Description: SE SE-28-9N-58W-1208FSL-330FEL			
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 517	
Job BOM: 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB61755		Srvc Supervisor: Vaughn Oteri	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type		BHST	230 degF
Job depth MD	16103ft	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	1908	0	1908
Casing		5.5	4.778	20			0	16089	0	5718
Open Hole Section			8.5				1908	16103	1908	5718

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5				Top Plug	5.5	1	HES
Float Shoe	5.5			16089	Bottom Plug	5.5	2	HES
Float Collar	5.5			16043	SSR plug set	5.5		
Insert Float	5.5				Plug Container	5.5		
Stage Tool	5.5				Centralizers	5.5		

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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbl	11.5	3.78		5	

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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbbl	11.5	3.79		5		
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	Elasticem Lead w/o CBL	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		5	7.53	
7.53 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	ElastiCem Lead W/ CBL	ELASTICEM (TM) SYSTEM	472	sack	13.2	1.6		5	7.69	
7.69 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	
5	EconoCem Tail	ECONOCEM (TM) SYSTEM	1435	sack	13.5	1.68		5	7.98	
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	
6	Displacement	Displacement	354.5	bbbl	8.33					
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint		
Comment Trace of spacer 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)	PS Pump Rate (bbl/min)	DS Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	9/22/2016	19:00:00	USER					Call out from Arc hub
Event	2	Arrive At Loc	Arrive At Loc	9/22/2016	23:00:00	USER					Arrived on location at 2300 met with company rep to discuss job process and concerns
Event	3	Other	Other	9/22/2016	23:10:00	USER					TD-16103 TP16089 FC-16043 Surf-1908 TVD-5718 MUD-9.8 Casing 5.5 20#
Event	4	Start Job	Start Job	9/23/2016	01:16:08	COM4	-3.00	8.44	0.00	0.00	Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	5	Test Lines	Test Lines	9/23/2016	01:26:29	COM4	3544.00	8.40	0.00	0.00	Pressure tested to IBOP 3499psi, pressure held good and no leaks
Event	6	Test Lines	Test Lines	9/23/2016	01:29:17	COM4	4887.00	8.42	0.00	0.00	Pressure tested HES pumps and lines with fresh water 4785psi
Event	7	Drop Bottom Plug	Drop Bottom Plug	9/23/2016	01:31:28	COM4	38.00	8.29	0.00	0.00	Released plug witnessed by company rep
Event	8	Pump Spacer 1	Pump Spacer 1	9/23/2016	01:31:29	COM4	38.00	8.29	0.00	0.00	Mixed 9bbl of 11.5ppg Tuned spacer III at 4.0bpm
Event	9	Shutdown	Shutdown	9/23/2016	01:34:53	COM4	140.00	11.61	0.00	0.00	Shut down due to improper plug being released, Advised company rep, calls were made, and was advised to pull casing to retrieve plug. Found plug 22 joints of casing. first 6 pulled dry 10after pull with spacer- 4 with water - 2 with obm. Decision was made to clean treads and put casing back in. At 0950 was advised that casing was back down to bottom and were ready for safety meeting
Event	10	Start Job	Start Job	9/23/2016	09:50:55	COM4	0.00	8.10	0.00	0.00	Held pre-job safety meeting with all hands on location to discuss job process and hazards
Event	11	Drop Bottom Plug	Drop Bottom Plug	9/23/2016	09:52:10	COM4	0.00	8.09	0.00	0.00	Released plug witnessed company rep

Event	12	Pump Spacer 1	Pump Spacer 1	9/23/2016	09:52:11	COM4	0.00	8.09	0.00	0.00	Mixed 70bbl of 11.5ppg Tuned spacer III at 3.5bpm 150psi
Event	13	Pump Lead Cement	Pump Lead Cement	9/23/2016	10:08:43	COM4	167.00	12.71	1.90	2.10	Mixed 622sks or 176bbl of 13.2ppg y-1.57 g/sk-7.53 ElastiCem at 8.0bpm 541psi
Event	14	Pump Tail Cement	Pump Tail Cement	9/23/2016	10:33:05	COM4	316.00	13.32	0.80	4.00	Mixed 1435sks or 429bbl of y-1.68 G/sk 7.98 EconoCem at 8.0bpm 750psi
Event	15	Check Weight	Check weight	9/23/2016	10:34:39	COM4	503.00	13.40	2.00	4.00	Confirm weight on scales
Event	16	Check Weight	Check weight	9/23/2016	10:47:14	COM4	838.00	13.43	4.00	4.00	Confirm weight on scales
Event	17	Shutdown	Shutdown	9/23/2016	11:27:21	COM4	77.00	12.34	0.00	0.00	Shut down so that rig could blow lines clear with air
Event	18	Clean Lines	Clean Lines	9/23/2016	11:27:55	COM4	68.00	12.35	0.00	0.00	Washed pumps and lines with fresh water
Event	19	Drop Top Plug	Drop Top Plug	9/23/2016	11:28:02	COM4	68.00	12.35	0.00	0.00	Released top plug witnessed by company rep
Event	20	Pump Displacement	Pump Displacement	9/23/2016	11:38:51	COM4					Pumped 354.5bbl of fresh water treated with biocide
Event	21	Bump Plug	Bump Plug	9/23/2016	12:19:18	COM4	2082.00	8.34	0.00	0.00	Bumped plug 500 psi over final pump pressure 1706/2236 psi
Event	22	Other	Other	9/23/2016	12:24:53	COM4					Released pressure back to pump truck to check floats , floats held good 4.0bbl back
Event	23	End Job	End Job	9/23/2016	13:01:02	USER					Trace of spacer back to surface