

Sold To #: 345242		Ship To #: 3753160		Quote #:		Sales Order #: 0903628142					
Customer: NOBLE ENERGY INC - EBUS				Customer Rep:							
Well Name: BENNETT		Well #: LD19-758		API/UWI #: 05-123-43493-00							
Field: WILDCAT		City (SAP): RAYMER		County/Parish: WELD		State: COLORADO					
Legal Description: SE SW-19-9N-58W-380FSL-1435FWL											
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 517							
Job BOM: 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HB61755				Srv Supervisor: Andrew Brennecke							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST		230 degF					
Job depth MD		10916ft		Job Depth TVD		5360					
Water Depth				Wk Ht Above Floor		4					
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	1927	0	0	
Casing		5.5	4.778	20		P-110	0	10916	0	0	
Open Hole Section			8.5				1927	10963	1927	5360	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe						Top Plug	5.5	1			
Float Shoe	5.5		1	10916		Bottom Plug	5.5	1			
Float Collar	5.5		1	10864		SSR plug set					
Insert Float						Plug Container					
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/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		4	
35.10 gal/bbl		FRESH WATER							
0.40 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							
147.42 lbm/bbl		BARITE, BULK (100003681)							
0.40 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)							
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	bbl	11.5	3.79		4	
35.90 gal/bbl		FRESH WATER							
147.42 lbm/bbl		BARITE, BULK (100003681)							
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		6	7.54
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	494	sack	13.2	1.6		7.5	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	677	sack	13.5	1.68		6.4	7.99
8 Gal		FRESH WATER							
0.35 %		HR-5, 50 LB SK (100005050)							
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	240	bbl	8.33			10	
Cement Left In Pipe		Amount	52 ft		Reason		Shoe Joint		
Comment									

2.0 Real-Time Job Summary

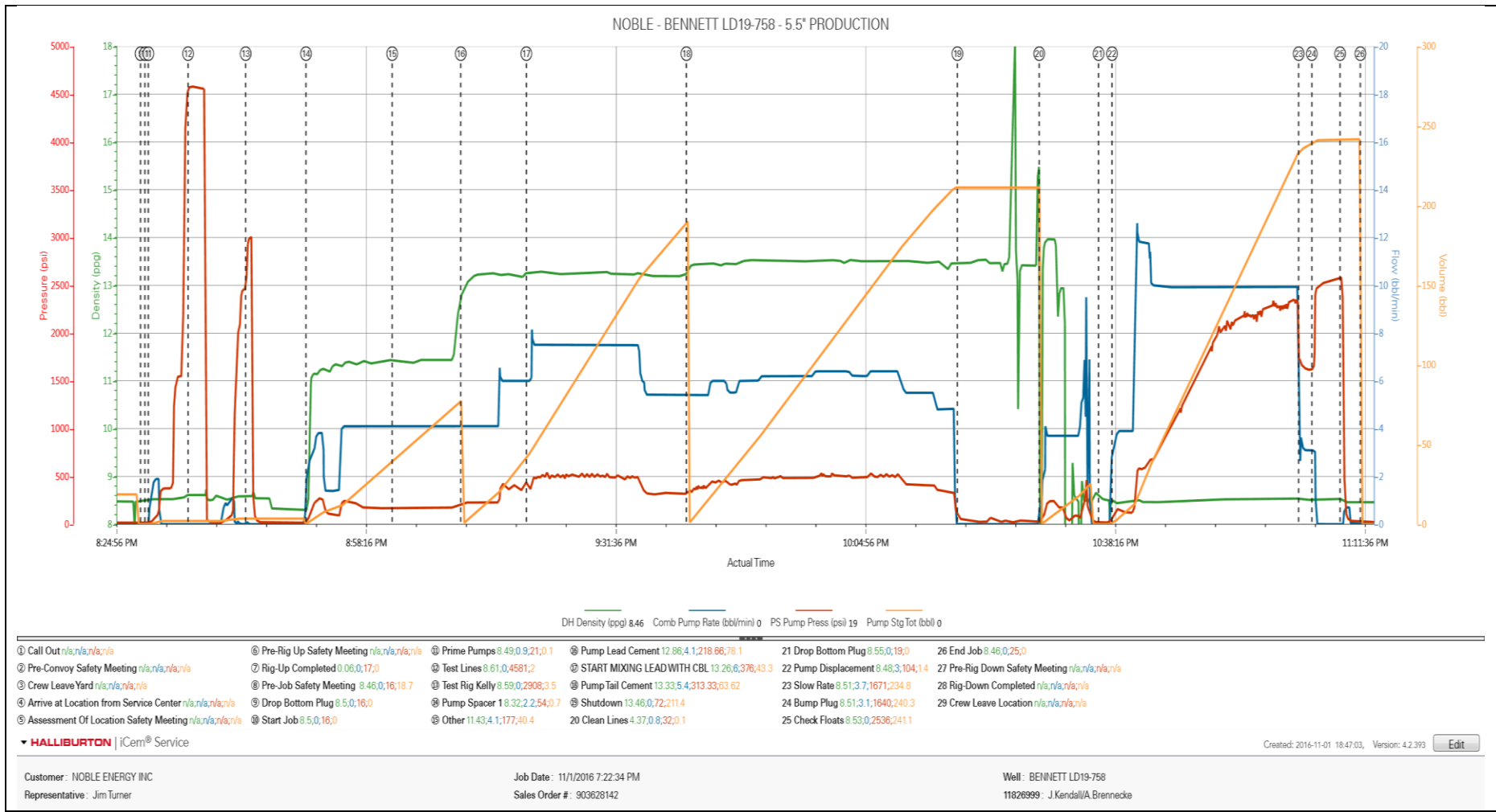
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	11/1/2016	12:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	11/1/2016	14:15:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	Crew Leave Yard	11/1/2016	14:30:00	USER					PUMP TRUCK BLEW A TIRE ON THE WAY TO LOCATION, REQUESTED ON LOCATION 16:00
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	11/1/2016	18:00:00	USER					RIG CIRCULATING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	11/1/2016	18:15:00	USER					
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	11/1/2016	18:20:00	USER					ALL HES PRESENT
Event	7	Rig-Up Completed	Rig-Up Completed	11/1/2016	19:45:00	USER					1-ELITE, 2-660 BULK TRAILERS, 2-SILOS, 2" LO TORQ, 2" PUMP IRON, 4" SUCTION HOSE
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/1/2016	20:00:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Drop Bottom Plug	Drop Bottom Plug	11/1/2016	20:28:22	USER					PLUG LOADED INTO CASING AND WITNESSED BY BOTH HES AND RIG
Event	10	Start Job	Start Job	11/1/2016	20:28:57	COM5	8.30	0.00	16.00	0.0	TD-10963', TVD-5360', TP-10916', FC-10864', CSG- 5.5" 20# P110, SCSG-9.625" 36# 0-1927', OH-8.5", MUD-9.1 PPG, RIG CIRCULATED @ 341 GPM
Event	11	Prime Pumps	Prime Pumps	11/1/2016	20:29:24	USER	8.39	2.00	320.00	2.1	FRESH WATER
Event	12	Test Lines	Test Lines	11/1/2016	20:34:43	COM5	8.41	0.00	4581.00	2.2	ALL PRESSURE ON LINES HELD
Event	13	Other	Test Rig Kelly	11/1/2016	20:42:24	USER	8.42	0.00	2990.00	3.5	PRESSURED KELLY LINE TO 2990 PRESSURE

HELD											
Event	14	Pump Spacer 1	Pump Spacer 1	11/1/2016	20:50:27	COM5	11.50	4.00	254.00	40.0	TSIII 40 BBLS, 11.5PPG, 3.78CF/SK, 23.8GAL/SK WITH 16 GAL MUSAL A, 16 GAL DUAL SPACER B, 5 GAL D-AIR
Event	15	Other	Other	11/1/2016	21:01:57	COM5	11.50	4.10	177.00	40.0	TSIII 40 BBLS, 11.5PPG, 3.78CF/SK, 24.4GAL/SK
Event	16	Pump Lead Cement	Pump Lead Cement	11/1/2016	21:11:06	COM5	13.20	6.00	439.00	41.9	ELASTICEM W/O CBL 150SKS, 13.2PPG, 1.57CF/SK, 7.54GAL/SK
Event	17	Other	START MIXING LEAD WITH CBL	11/1/2016	21:19:52	COM5	13.26	7.50	506.00	140.8	ELASTICEM W/CBL 494SKS, 13.2PPG, 1.6CF/SK, 7.69GAL/SK
Event	18	Pump Tail Cement	Pump Tail Cement	11/1/2016	21:41:13	COM5	13.50	6.4	536.00	202.6	ECONOCEM 677SKS, 13.5PPG, 1.68CF/SK, 7.99GAL/SK
Event	19	Shutdown	Shutdown	11/1/2016	22:17:24	USER					
Event	20	Clean Lines	Clean Lines	11/1/2016	22:28:20	COM5					BLEW LINES DOWN AND CLEANED PUMPS TO WASH UP TANK
Event	21	Drop Bottom Plug	Drop Bottom Plug	11/1/2016	22:36:14	USER					PLUG LOADED INTO CASING
Event	22	Pump Displacement	Pump Displacement	11/1/2016	22:38:02	COM5	8.40	10.00	2337.00	230.0	FRESH WATER WITH 10 GAL MMCR AND 15 GAL ALDACIDE G FROM NOBLE
Event	23	Slow Rate	Slow Rate	11/1/2016	23:02:57	USER	8.41	3.00	1671.00	230.8	SLOW RATE LAST 10 BBLS
Event	24	Bump Plug	Bump Plug	11/1/2016	23:04:43	COM5	8.41	3.00	1640.00	240.3	PLUG BUMPED
Event	25	Check Floats	Check Floats	11/1/2016	23:08:29	USER	8.43	0.00	2536.00	241.1	3.5 BBLS BACK TO DISPLACEMENT TANK FLOATS HELD
Event	26	End Job	End Job	11/1/2016	23:11:11	COM5					GOOD RETURNS THROUGH OUT JOB, 2 BBLS TSIII TO SURFACE. TOP OF LEAD CEMENT 1625', TOP OF TAIL CEMENT 6040'
Event	27	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	11/1/2016	23:15:00	USER					ALL HES PRESENT
Event	28	Rig-Down Completed	Rig-Down Completed	11/2/2016	00:15:00	USER					
Event	29	Crew Leave Location	Crew Leave Location	11/2/2016	00:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

3.0 Attachments

3.1 Case 1-Custom Results.png



3.2 Case 1-Custom Results (2).png

