

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 3894486	Quote #:	Sales Order #: 0905907396
Customer: NOBLE ENERGY INC-EBUS		Customer Rep: NOBLE REP	
Well Name: SLW RANCH STATE		Well #: BB07-621	API/UWI #: 05-123-47406-00
Field: WATTENBERG	City (SAP): GILL	County/Parish: WELD	State: COLORADO
Legal Description: 7-5N-63W-1689FSL-60FWL			
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 517	
Job BOM: 7523 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB31357		Srvc Supervisor: Kyle Bath	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST 230 degF
Job depth MD	16945ft		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	1926	0	0
Casing		5.5	4.892	17			0	16945	0	0
Open Hole Section			8.5				1926	16945	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	5.5			16945		Top Plug	5.5		HES
Float Shoe	5.5					Bottom Plug	5.5		HES
Float Collar	5.5					SSR plug set	5.5		HES
Insert Float	5.5					Plug Container	5.5		HES
Stage Tool	5.5					Centralizers	5.5		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	Tuned Prime Cement Spacer Base - RKS/SE	TUNED PRIME CEMENT SPACER SYS	120	bbl	11.5	3.87			
	1 lbm/bbl	FE-2 (100001615)							
	145.09 lbm/bbl	BARITE, BULK (100003681)							
	3.50 lbm/bbl	SEM-94P, 35 LB SACK - (1023987)							
	42 gal/bbl	FRESH WATER							

Cementing Job Summary

3.50 lbm/bbl		SEM-93P, 35 LB SACK - (1023977)							
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	ElastiCem CAP	ELASTICEM (TM) SYSTEM	140	sack	13.2	1.71		8	8.31
8.31 Gal		FRESH WATER							
0.90 %		SCR-100 (100003749)							
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 w/ CBL	ELASTICEM (TM) SYSTEM	451	sack	13.2	1.71		8	8.32
0.60 %		SCR-100 (100003749)							
8.32 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	NeoCem NT1	NeoCem TM	1109	sack	13.2	2.08		8	10.18
0.13 %		FE-2 (100001615)							
10.13 Gal		FRESH WATER							
0.13 %		SCR-100 (100003749)							
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	Displacement Fluid	Displacement Fluid	20	bbl	8.33				
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
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	372	bbl	8.33				
Cement Left In Pipe	Amount	42 ft			Reason			Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	0 ppm		Mix Water Temperature:	80 °F			
Cement Temperature:	## °F °C	Plug Displaced by:	8.4 lb/gal		Disp. Temperature:	80 °F			
Plug Bumped?	Yes	Bump Pressure:	2000 psi		Floats Held?	Yes			
Cement Returns:	0 bbl	Returns Density:	## lb/gal kg/m3		Returns Temperature:	## °F °C			
Comment									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Comments
Event	1	Other	8/17/2019	12:30:00	CREW CALLED OUT, REQUESTED ON LOCATION AT 18:30
Event	2	Depart Yard Safety Meeting	8/17/2019	16:30:00	DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	8/17/2019	16:45:00	CREW DEPART YARD
Event	4	Arrive at Location from Service Center	8/17/2019	17:50:00	ARRIVE ON LOCATION, RIG RUNNING CASING UPON HES ARRIVAL, RECIEVED NUMBERS FROM CO REP, TD 16955, TP 16945.6, FC 16898, CSG 4.5" 17#, PREV CSG 9 5/8 @ 1926.5, HOLE 8.5, MUD 9.4 VIS 44. TVD 6520
Event	5	Assessment Of Location Safety Meeting	8/17/2019	18:05:00	DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST TEMP 80, PH 7, CHLORIDES 0
Event	6	Safety Meeting - Pre Rig-Up	8/17/2019	18:15:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	8/17/2019	20:30:00	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP, RIG CIRCULATE 8500 STKS 10 BPM 740 PSI
Event	8	Start Job	8/17/2019	20:57:18	
Event	9	Test Lines	8/17/2019	20:57:26	TEST LINES TO 4800 PSI

Event	10	Drop Bottom Plug	8/17/2019	20:58:01	
Event	11	Other	8/17/2019	21:06:39	SWAP VALVES ON GROUND AND FLOOR TO HOLD PRESSURE TEST
Event	12	Pump Spacer 1	8/17/2019	21:27:50	MIX AND PUMP 120 BBLS TUNED SPACER 11.5 PPG WITH SURFACTANTS, 6 BPM 430 PSI, CALCULATED TOS SURFACE
Event	13	Check Weight	8/17/2019	21:29:47	VERIFY WEIGHT ON PRESSURIZED MUD SCALES
Event	14	Drop Bottom Plug	8/17/2019	21:48:50	
Event	15	Pump Lead Cement	8/17/2019	21:56:20	MIX AND PUMP 140 SKS 42.6 BBLS LEAD CEMENT W/OUT SUPER CBL 13.2 PPG, 1.71 FT3/SK, 8.31 GAL/SK 6 BPM 550 PSI, CALCULATED TOLC 2465
Event	16	Pump Cement	8/17/2019	22:09:30	MIX AND PUMP 451 SKS 137.4 BBLS LEAD W/SUPER CBL 13.2 PPG, 1.71 FT3/SK, 8.32 GAL/SK 5 BPM 500 PSI, CALCULATED TOLC 3509
Event	17	Pump Tail Cement	8/17/2019	22:31:18	MIX AND PUMP 1109 SKS 410.8 BBLS TAIL CEMENT 13.2 PPG, 2.08 FT3/SK, 10.18 GAL/SK 8 BPM 900 PSI, CALCULATED TOTC 6877
Event	18	Check Weight	8/17/2019	22:34:38	VERIFY WEIGHT ON PRESSURIZED MUD SCALES
Event	19	Drop Top Plug	8/17/2019	23:39:32	LAUNCH TOP PLUG
Event	20	Pump Displacement	8/17/2019	23:39:56	PUMP 392 BBLS FRESH WATER DISPLACEMENT, FIRST 20 BBLS W/MMCR, 300 BBLS WITH BIOCIDES, 10 BPM 2550 PSI

Event	21	Bump Plug	8/18/2019	00:26:55	BUMPED PLUG AT 2500 PSI TOOK TO 2500 PSI
Event	22	Check Floats	8/18/2019	00:37:02	CHECK FLOATS, FLOATS HELD TOOK 5 BBLS BACK TO TRUCK
Event	23	End Job	8/18/2019	00:40:41	
Event	24	Safety Meeting - Pre Rig-Down	8/18/2019	00:50:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	25	Depart Location Safety Meeting	8/18/2019	02:00:00	DISCUSS HAZARDS AND ROUTE
Event	26	Crew Leave Location	8/18/2019	02:30:00	THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 Job Chart

