

1.2 Cementing Job Summary

Sold To #: 345242		Ship To #: 3544144		Quote #:		Sales Order #: 0902001493				
Customer: NOBLE ENERGY INC E-BUSINESS					Customer Rep: Shane Heard					
Well Name: UPCHURCH STATE			Well #: LD02-77-1BHN			API/UWI #: 05-123-39817-00				
Field: WILDCAT		City (SAP): RAYMER		County/Parish: WELD			State: COLORADO			
Legal Description: SE SW-2-9N-58W-615FSL-1567FWL										
Contractor: H & P DRLG					Rig/Platform Name/Num: H & P 326					
Job BOM: 7525										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB21661					Srv Supervisor: Devin Birchell					
Job										
Formation Name										
Formation Depth (MD)		Top			Bottom					
Form Type					BHST		240 degF			
Job depth MD		9682ft			Job Depth TVD					
Water Depth					Wk Ht Above Floor					
Perforation Depth (MD)					To					
Well Data										
	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Drill Pipe	3	4	3.34	14	BTC	P-110	0	6535	0	6465
Casing	3	7	6.276	26	BTC	P-110	0	7035	0	6465
Casing	3	4.5	4	11.6	BTC	P-110	6535	9689	6465	6496
Open Hole Section			6.125		BTC		7035	9689	6621	6496
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	4.5	1		9689		Top Plug	4.5	1	HES	
Float Shoe	4.5	1				Bottom Plug	4.5	1	HES	
Float Collar	4.5	1				SSR plug set	4.5	1	HES	
Insert Float	4.5	1				Plug Container	4.5	1	HES	
	4.5	1				Centralizers	4.5	1	HES	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Water Based Mud-10 #/gal		0	bbl	10			6	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	60	bbl	11.5	3.86	24.8	6	
145.18 lbm/bbl		31)							
36 gal/bbl									

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Lead Cement no Super CBL	EXPANDACEM (TM) SYSTEM	100	sack	13.8	1.65		6	7.57
7.57 Gal									

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Tail with Super CBL	EXPANDACEM (TM) SYSTEM	216	sack	13.8	1.65		6	7.58
7.58 Gal									

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
---------	------------	------------	-----	---------	---------------------------	--------------------------------	---------------	-----------------	---------------------

5	Water	Water	114	bbl	8.33			6	
		Amount	42 ft						
Comment									

1.6 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Truck 1 Pr (psi)	Truck 1 Dens (ppg)	Truck 1 Slry Rt (bbl/min)	Comment
Event	1	Call Out	Call Out	1/3/2015	03:30:45	USER				called cement crew out for noble energy upchurch state Id02-771bhn
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/3/2015	06:50:12	USER				discussed route weather fallowing distance and other traffic
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	1/3/2015	07:00:42	USER				called journey and departed for location
Event	4	Arrive At Loc	Arrive At Loc	1/3/2015	09:00:52	USER				ended journey and talked to company rep and tool hand on rates pressures volumes depths
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/3/2015	09:20:14	USER				discussed spotting equipment swing path team lifting
Event	6	Rig-Up Equipment	Rig-Up Equipment	1/3/2015	09:30:21	USER				spot pump and rig up hoses and iron to red zone
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/3/2015	11:15:42	USER				discussed job procedures with rig and cement crews
Event	8	Rig-Up Completed	Rig-Up Completed	1/3/2015	13:45:25	USER	17.00	0.44	0.00	rigged up weatherfords cement head and tied in stand pipe
Event	9	Prime Pumps	Prime Pumps	1/3/2015	14:02:45	USER	25.00	8.32	1.00	primed pump and lines ready for pressure test
Event	10	Test Lines	Test Lines	1/3/2015	14:08:45	COM1	1303.00	8.36	0.00	test pump and lines to 4989 psi
Event	11	Pump Spacer 1	Pump Spacer 1	1/3/2015	14:21:03	COM1	21.00	8.33	0.00	pump 60 bbls tuned spacer III @ 11.5 ppg
Event	12	Pump Lead Cement	Pump Lead Cement	1/3/2015	14:34:53	USER	78.00	11.27	2.10	pump 29 bbls(100 sks) lead @ 13.8 ppg t:1.65 ft3/sk w: 7.57 gal/sk
Event	13	Pump Tail Cement	Pump Tail Cement	1/3/2015	14:42:55	COM1	327.00	13.85	4.50	pump 63 bbls(260 sks) lead @ 13.8 ppg t:1.65 ft3/sk w: 7.57 gal/sk

Event	14	Clean Lines	Clean Lines	1/3/2015	15:01:11	USER	22.00	12.85	0.00	clean pump and lines to haul off pit before dropping plug
Event	15	Drop Plug	Drop Plug	1/3/2015	15:05:42	USER	27.00	2.62	1.60	weatherford tool hand dropped plug
Event	16	Pump Displacement	Pump Displacement	1/3/2015	15:07:24	COM1	49.00	7.57	1.10	pump 10 bbls mmcr water and 104 bbls fresh water
Event	17	Bump Plug	Bump Plug	1/3/2015	15:36:23	COM1	1519.00	8.23	2.00	pump plug with 1468 psi and took pressure to 2415 psi
Event	18	Check Floats	Check Floats	1/3/2015	15:45:12	USER	567.00	8.23	0.00	checked floats, floats held with 1 bbl back to truck
Event	19	Set Tool	Set Tool	1/3/2015	15:45:13	USER	511.00	8.22	0.00	rig and tool hand do a push pull test and try to set liner
Event	20	Other	Other	1/3/2015	15:45:14	USER	423.00	8.23	0.00	rig and tool hand try to set liner and liner does not want to set
Event	21	Circulate Well	Circulate Well	1/3/2015	16:30:12	USER	39.00	8.25	0.00	liner would not set so rig will circulate cement off liner
Event	22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/3/2015	16:40:14	USER	71.00	8.27	0.00	discuss swing path pinch points team lifting and hand placement
Event	23	Rig-Down Equipment	Rig-Down Equipment	1/3/2015	16:45:12	USER	73.00	8.26	0.00	rig down all iron and hoses
Event	24	Rig-Down Completed	Rig-Down Completed	1/3/2015	17:40:12	USER				walk around to ensure everything is properly put away
Event	25	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/3/2015	17:50:12	USER				discussed route weather following distance and other traffic
Event	26	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	1/3/2015	18:00:12	USER				thank you for using halliburton energy services