

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3790633		Quote #: 0022392455		Sales Order #: 0904564566					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Levi Rodgers							
Well Name: NEWBY STATE			Well #: 30N-34HZ		API/UWI #: 05-123-44563-00						
Field: WATTENBERG		City (SAP): LONGMONT		County/Parish: WELD		State: COLORADO					
Legal Description: SE SE-33-3N-68W-588FSL-1275FEL											
Contractor: NABORS DRLG				Rig/Platform Name/Num: NABORS X22							
Job BOM: 7525 7525											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Steven Markovich							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		12838ft		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	
Drill Pipe		4	3.34	14			0	5914	0	0	
Casing		7	6.276	26	LTC	HCP110	0	6109	0	0	
Casing		4.5	4	11.6	LTC	HCP110	5914	12838	0	0	
Open Hole Section			6.125				6109	12843	0	0	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	4.5			12838		Top Plug	4.5		HES		
Float Shoe	4.5					Bottom Plug	4.5		HES		
Float Collar	4.5					SSR plug set	4.5		HES		
Insert Float	4.5					Plug Container	4.5		HES		
Stage Tool	4.5					Centralizers	4.5		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 Spacer III	Tuned Spacer III			60	bbl	10.5	6.25			
37.58 gal/bbl		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	
2	EconoCem	ECONOCEM (TM) SYSTEM	420	sack	13.5	1.68		6	7.98	
7.98 Gal		FRESH WATER								
0.45 %		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	
3	Displacement Fluid	Displacement Fluid	161	bbl	8.34					
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint		
Mix Water:		pH 7	Mix Water Chloride:			0 ppm		Mix Water Temperature:		70 °F °C
Comment Bumped plug at 161bbls away, final lifting pressure was 2081psi. After 3mins pressure was 2869psi, checked floats and after 2 bbls back floats held. Rolled hole clean, spacer to surface at 73bbls away cement to surface at 123bbls away bringing 15bbls of cement to surface.										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	DS Pump Press (psi)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	1/13/2018	06:00:00	USER					Job called out with an on location time of 11:00
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/13/2018	10:00:00	USER					JSA with HES crew on driving safety and route to rig.
Event	3	Arrive At Loc	Arrive At Loc	1/13/2018	10:45:00	USER					Arrived on location, rig was seating the ball.
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	1/13/2018	10:50:00	USER					JSA and Hazard hunt with HES crew.
Event	5	Rig-Up Equipment	Rig-Up Equipment	1/13/2018	10:55:00	USER					Rigged up HES lines and equipment.
Event	6	Start Job	Start Job	1/13/2018	13:08:01	COM4	8.62	3.00	0.00	0.0	TD 12843' TP 12838' HWPDP (2.56ID) 1422.74', 4" 14# DP 4498.78', Liner Top @ 5914.39', &" 26# casing @ 6109', 4 1/2" 11.6# production casing 6874.54', 6 1/8" open hole, TVD 7040'
Event	7	Test Lines	Test Lines	1/13/2018	13:16:37	COM4	8.55	3.00	0.70	0.1	Set kick outs to 500psi and check kick outs, then bring pressure up to 5000psi and hold.
Event	8	Pump Spacer 1	Pump Spacer 1	1/13/2018	13:23:27	COM4	8.59	15.00	0.00	0.0	Pump 60bbls of 10.5ppg 6.25yield Tuned Spacer. Added 42 gallons of Musol A and Dual Spacer B on the fly. Pumped at 3bbl/min 1215psi.
Event	9	Pump Cement	Pump Cement	1/13/2018	13:39:46	COM4	9.84	6.00	0.00	0.0	Pump 125bbls of 13.5ppg

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(v. 4.2.393)

											1.68yield Cement. Pumped at 5bbl/min 1526psi.
Event	10	Check Weight	Check weight	1/13/2018	13:44:19	COM4	13.65	1635.00	4.60	17.3	Weight verified by pressurized scales.
Event	11	Check Weight	Check weight	1/13/2018	13:50:23	COM4	13.62	1706.00	5.50	50.9	Weight verified by pressurized scales.
Event	12	Shutdown	Shutdown	1/13/2018	14:03:22	COM4	13.31	61.00	0.00	115.9	Shutdown
Event	13	Pump Tail Cement	Clean Pumps And Lines	1/13/2018	14:13:18	COM4	12.97	8.00	0.00	0.0	Clean pumps and lines.
Event	14	Drop Top Plug	Drop Top Plug	1/13/2018	14:13:48	COM4	13.22	2.00	0.00	0.0	Plug loaded into drill string by tool rep in front of company man.
Event	15	Pump Displacement	Pump Displacement	1/13/2018	14:21:42	COM4	8.27	4.00	0.00	0.0	Pump 161bbls of H2O. First 20bbls with MMCR. Pumped at 5bbl/min. Slowed to 3bbl/min at 50bbls away to anticipate the dart going through the tool. After the dart went through the tool picked the rate back up to 5bbl/min.
Event	16	Other	Other	1/13/2018	14:33:02	COM4	8.38	1639.00	2.50	53.4	Dart passed through the tool at 54.5bbls away. Pressured up to 1791psi.
Event	17	Bump Plug	Bump Plug	1/13/2018	14:56:25	COM4	8.32	2086.00	4.00	158.6	Bumped plug at 161bbls away, final lifting pressure was 2081psi. Took pressure 500psi over and held. After 3 mins pressure was 2869psi. Opened release line to check floats, after 2bbls back floats held.
Event	18	Test Lines	Test Lines	1/13/2018	15:36:58	COM4	8.24	10.00	0.00	159.1	Put 700psi on the line to set tool.
Event	19	Pump Displacement	Pump Displacement	1/13/2018	15:38:41	COM4	8.29	668.00	0.00	0.0	Rolled the hole clean. Spacer to surface at 73bbls

away, Cement to surface at
123bbls away and hole was
clean at 138bbbs. Which
gave us 15bbbs of cement
above liner.

Event	20	Shutdown	Shutdown	1/13/2018	16:05:00	COM4	8.26	150.00	0.00	129.3	Shutdown
Event	21	End Job	End Job	1/13/2018	16:08:17	COM4	8.24	10.00	0.00	129.3	Thank you Steve Markovich and crew.

3.0 Attachments

3.1 Newby 30N-34HZ Liner -Custom Results.png

