

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3811852	Quote #: 0022402466	Sales Order #: 0904613790
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: James Adkins	
Well Name: NEWBY STATE		Well #: 15N-4HZ	API/UWI #: 05-123-45089-00
Field: WATTENBERG	City (SAP): LONGMONT	County/Parish: WELD	State: COLORADO
Legal Description: SW SE-33-3N-68W-589FSL-1440FEL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS X22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA/HX41066		Srvc Supervisor: Steven Markovich	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	13751ft		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		J-55	0	2249	0	0
Casing		5.5	4.892	17	LTC	HCP110	0	13751	0	0
Open Hole Section			7.875				2249	13762	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5			13751	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 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	ElastiCem	ELASTICEM (TM) SYSTEM	560	sack	13.2	1.57		6	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
3	EconoCem	ECONOCEM (TM) SYSTEM	840	sack	13.5	1.68		6	7.99
7.99 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	Biocide Water and MMCR	Biocide Water and MMCR	20	bbbl	8.34				
0.50 gal/bbbl		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
5	Biocide Water	Biocide Water	298.8	bbbl	8.34				

Comment Bumped plug at 318.8bbbls away, final lift pressure was 2664psi. Spacer to surface at 314bbbls away brining 4.5bbbls to surface. After 15min casing test pressure went from 3000psi to 3420psi. Kicked in pumps to sheer wet shoe sub. WSS sheered at 4938psi, then pumped a 3bbbl wet shoe. Estimated Top of Tail Cement 5617' Estimated Top of Lead Cement 1152'

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	DS Pump Press <i>(psi)</i>	Comb Pump Rate <i>(bbl/min)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	2/4/2018	10:00:00	USER					Job called out with an on location time of 15:30
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/4/2018	13:00:00	USER					JSA with HES crew on driving safety and route to rig.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	2/4/2018	14:20:00	USER					Arrived on location, rig still running casing. 4000' to run.
Event	4	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	2/4/2018	14:30:00	USER					JSA and Haard hunt with HES crew.
Event	5	Rig-Up Equipment	Rig-Up Equipment	2/4/2018	14:40:00	USER					Rigged up HES lines and equipment.
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/4/2018	18:15:00	USER	0.00	24.00	0.00	0.0	JSA with HES and rig crews on job safety and procedure.
Event	7	Start Job	Start Job	2/4/2018	18:39:33	COM4	8.53	26.00	0.00	13.4	TD 13762' TP 13751" FC 13742.7' 5 1/2"17# production casing, 7 7/8" open hole, 9 5/8" 36# surface casing at 2249' TVD 7297' Estimated top of Tail Cement 5617' Estimated top of Lead Cement 1152'
Event	8	Test Lines	Test Lines	2/4/2018	18:43:32	COM4	8.56	132.00	0.00	3.6	Set kick outs to 500psi and check kick outs, then bring pressure up to 5500psi and hold.
Event	9	Pump Spacer 1	Pump Spacer 1	2/4/2018	18:49:00	COM4	8.51	96.00	0.00	0.0	Pump 60bbls of 10.5ppg 6.25yield Tuned Spacer.

											Added 55 gallons of Musol A and Dual Spacer B on the fly. Pumped at 3bbl/min 497psi.
Event	10	Drop Bottom Plug	Drop Bottom Plug	2/4/2018	19:06:53	USER	10.67	56.00	0.00	51.9	Plug pre loaded into HES head. Plug loaded and dropped in front of company rep.
Event	11	Pump Lead Cement	Pump Lead Cement	2/4/2018	19:08:50	COM4	11.27	397.00	4.10	0.0	Pump 156.59bbbls (560sks) of 13.2ppg 1.57yield Lead Cement. Pumped at 8bbl/min 631psi.
Event	12	Check Weight	Check weight	2/4/2018	19:24:13	COM4	13.23	633.00	8.10	67.3	Weight verified by pressurized scales.
Event	13	Pump Tail Cement	Pump Tail Cement	2/4/2018	19:37:20	COM4	13.12	500.00	5.90	158.6	Pump 251.33bbbls (840sks) of 13.5ppg 1.68yield Tail Cement. Pumped at 8bbl/min 646psi.
Event	14	Check Weight	Check weight	2/4/2018	19:38:04	COM4	13.49	532.00	6.00	4.3	Weight verified by pressurized scales.
Event	15	Check Weight	Check weight	2/4/2018	19:57:54	COM4	13.52	863.00	8.10	156.3	Weight verified by pressurized scales.
Event	16	Shutdown	Shutdown	2/4/2018	20:14:27	COM4	13.66	114.00	0.00	246.9	Shutdown and clean pumps and lines.
Event	17	Drop Top Plug	Drop Top Plug	2/4/2018	20:22:58	COM4	8.05	37.00	0.00	262.8	Plug pre loaded into HES head. Plug loaded and dropped in front of company rep.
Event	18	Pump Displacement	Pump Displacement	2/4/2018	20:23:39	COM4	8.01	29.00	0.00	0.0	Pump 318.8 of H2O. First 20bbbls with MMCR. Pumped at 8bbl/min and slowed rate with pressure increase. Spacer to surface at 314bbbls away.
Event	19	Bump Plug	Bump Plug	2/4/2018	21:12:05	COM4	8.32	2669.00	2.90	326.0	Bumped plug at 318.8bbs

												away, final lift pressure was 2664psi.
Event	20	Test Lines	Test Lines	2/4/2018	21:13:17	COM4	8.33	3004.00	0.70	326.4		Brought pressure up to 3000psi for 15 min casing test. After 15 mins pressure was 3420psi
Event	21	Other	Other	2/4/2018	21:29:13	USER	8.30	3420.00	0.30	326.5		Kicked in pumps to burst WSS. WSS sheered at 4938psi then pumped a 3bbl wet shoe.
Event	22	End Job	End Job	2/4/2018	21:34:46	COM4	8.27	63.00	0.00	333.6		Thank you Steve Markovich and cew.

3.0 Attachments

3.1 Anadarko Newby State 15N-4HZ Production Job Chart

