

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466	<b>Ship To #:</b> 3776989	<b>Quote #:</b> 0022334783	<b>Sales Order #:</b> 0904194993
<b>Customer:</b> ANADARKO PETROLEUM CORP-EBUS		<b>Customer Rep:</b> Ruben Hernandez	
<b>Well Name:</b> GABEL		<b>Well #:</b> 2C-5HZ	<b>API/UWI #:</b> 05-123-44081-00
<b>Field:</b> WATTENBERG	<b>City (SAP):</b> IONE	<b>County/Parish:</b> WELD	<b>State:</b> COLORADO
<b>Legal Description:</b> NW NE-8-1N-66W-1026FNL-1536FEL			
<b>Contractor:</b> NABORS DRLG		<b>Rig/Platform Name/Num:</b> NABORS X22	
<b>Job BOM:</b> 7523 7523			
<b>Well Type:</b> HORIZONTAL GAS			
<b>Sales Person:</b> HALAMERICA\HX41066		<b>Srvc Supervisor:</b> Nicholas Roles	

**Job**

<b>Formation Name</b>			
<b>Formation Depth (MD)</b>	<b>Top</b>		<b>Bottom</b>
<b>Form Type</b>	BHST		
<b>Job depth MD</b>	13068ft	<b>Job Depth TVD</b>	
<b>Water Depth</b>	<b>Wk Ht Above Floor</b>		
<b>Perforation Depth (MD)</b>	<b>From</b>		<b>To</b>

**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	1852	0	1852
Casing		5.5	4.778	20	LTC	HCP110	0	13068	0	7522
Open Hole Section			7.875				1852	13078	1852	7522

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5				Top Plug	5.5		HES
Float Shoe	5.5			13068	Bottom Plug	5.5		HES
Float Collar	5.5				SSR plug set	5.5		HES
Insert Float	5.5				Plug Container	5.5	1	HES
Stage Tool	5.5				Centralizers	5.5		HES

**Fluid Data**

<b>Stage/Plug #: 1</b>										
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		4		
0.70 gal/bbl		<b>MUSOL A, 330 GAL TOTE - (790828)</b>								
88.91 lbm/bbl		<b>BARITE, BULK (100003681)</b>								

37.58 gal/bbl		<b>FRESH WATER</b>								
0.70 gal/bbl		<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>								
0.50 gal/bbl		<b>D-AIR 3000L, 5 GAL PAIL (101007444)</b>								
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	540	sack	13.2	1.57		8	7.53	
0.40 %		<b>SCR-100 (100003749)</b>								
7.54 Gal		<b>FRESH WATER</b>								
0.10 %		<b>SUPER CBL, 50 LB PAIL (100003668)</b>								
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	760	sack	13.5	1.68		8	7.99	
8 Gal		<b>FRESH WATER</b>								
0.30 %		<b>HR-5, 50 LB SK (100005050)</b>								
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	bbl	8.34			8		
0.50 gal/bbl		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</b>								
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	268	bbl	8.34			8		
Cement Left In Pipe		Amount	84 ft		Reason			Shoe Joint		
<b>Comment</b> Got 2bbls spacer back to pits. Estimated TOT-5767', TOL-1225'										

## 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>	Comb Pump Rate <i>(bbl/min)</i>	DS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	7/30/2017	00:00:01	USER					Called out by Service Coordinator for O/L at 0400
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/30/2017	03:00:00	USER					Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	7/30/2017	03:15:00	USER					Journey Management prior to departure
Event	4	Arrive at Location from Service Center	Arrive at Location	7/30/2017	03:30:00	USER					Upon arrival met with company man to discuss job details and calculations, performed hazard hunt and site assessment.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/30/2017	03:45:00	USER					Discussed rigging up hazards and procedure according to HMS.
Event	6	Other	Other	7/30/2017	05:00:00	USER					Water test- PH-6, Chlor-0, Temp-65. Cement temp-70.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/30/2017	07:59:40	USER	8.55	0.00	59.00	14.70	Held safety meeting with all job associated personnel to discuss job procedure, hazards and stop work authority.
Event	8	Start Job	Start Job	7/30/2017	08:31:53	COM4	8.55	0.00	29.00	14.70	TD-13078', TP-13068' 5.5" 20#, FC-12984', TVD-7522', OH-7.875", SURF-1852' 9.625" 36#, MUD-9.3#
Event	9	Test Lines	Test Lines	7/30/2017	08:41:27	COM4	8.54	0.00	173.00	17.60	Pumped 5bbls fresh water

												to fill lines, shutdown, closed manifold, performed 500psi k/o function test, continued with 5th gear stall at 1672psi, proceeded to bring pressure to 4500psi. Held for 5min well, no leaks.
Event	10	Pump Spacer 1	Pump Spacer 1	7/30/2017	08:49:17	COM4	8.55	0.00	3.00	17.60		Pumped 60bbls of 10.5# 6.43Y 41.3g/s Tuned Spacer III with 40g Musol A, 40g Dual Spacer B, 15g D-Air at 4bpm 450psi.
Event	11	Drop Bottom Plug	Drop Bottom Plug	7/30/2017	09:13:00	COM4	10.92	0.00	24.00	57.00		Dropped by HES supervisor, witnessed by company man.
Event	12	Pump Lead Cement	Pump Lead Cement	7/30/2017	09:13:46	COM4	10.92	0.00	24.00	57.00		Pumped 540sks or 151bbls of 13.2# 1.57y 7.53g/s Elasticem at 8bpm 590psi.
Event	13	Check Weight	Check weight	7/30/2017	09:15:48	COM4	13.47	6.10	830.00	8.00		Weight verified with pressurized mud scales.
Event	14	Pump Tail Cement	Pump Tail Cement	7/30/2017	09:42:18	COM4	12.85	4.80	228.00	16.80		Pumped 760sks or 227.4bbls of 13.5# 1.68Y 7.99G/S Econocem at 8bpm 590psi.
Event	15	Check Weight	Check weight	7/30/2017	09:53:14	COM4	13.48	8.00	665.00	84.70		Weight verified with pressurized mud scales.
Event	16	Shutdown	Shutdown	7/30/2017	10:16:17	COM4	13.68	0.00	7.00	222.20		Shutdown, rig blew down iron with air, followed with 5bbls fresh water through pumps and lines.
Event	17	Drop Top Plug	Drop Top Plug	7/30/2017	10:27:59	COM4	8.67	0.00	-4.00	245.60		Dropped by HES supervisor, witnessed by company man.
Event	18	Pump Displacement	Pump Displacement	7/30/2017	10:28:06	COM4	8.67	0.00	-3.00	245.60		Pumped 288bbls fresh water with 10g MMCR in first 20bbls, followed with 5g biocide throughout at

Event	ID	Description	Category	Date	Time	User	Rate	Volume	Cost	Revenue	Notes
											8bpm.
Event	19	Bump Plug	Bump Plug	7/30/2017	11:11:15	COM4	8.68	0.00	2842.00	295.10	Slowed down at 270bbbls away to 3bpm, Final Circulating Pressure- 2300psi, Bump Pressure- 2750psi.
Event	20	Pressure Up Well	Pressure Up Well	7/30/2017	11:12:34	COM4	8.69	0.00	2970.00	295.20	Pumped fresh water to pressure up too 3000psi. For 15min Casing test.
Event	21	Check Floats	Check Floats	7/30/2017	11:28:23	USER	8.74	0.00	3258.00	295.20	Released pressure and got 3bbls back to truck.
Event	22	End Job	End Job	7/30/2017	11:42:45	COM4					Got 2bbls spacer back to pits. Estimated TOT-5767', TOL-1225'
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/30/2017	11:45:00	USER	8.19	1.70	13.00	308.60	Discussed rigging down hazards and procedure according to HMS.
Event	24	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/30/2017	12:45:00	USER					Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	7/30/2017	13:00:00	USER					Pre journey management prior to departure.

3.0 Job Chart

3.1 Job Chart

