

**ANADARKO PETROLEUM CORP - EBUS  
DO NOT MAIL - PO BOX 4995  
THE WOODLANDS, Texas**

MCKINSTRY 21N-21HZ

**Majors 29**

## **Post Job Summary**

# **Cement Surface Casing**

Prepared for:  
Date Prepared: 1/23/2014  
Version: 1

Service Supervisor: PORTER, MICHAEL

Submitted by: FINNEY, SEAN

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	9 5/8" Surface Casing	9.63	8.921	36.00	0.00	1,020.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,020.00	0.00

# HALLIBURTON

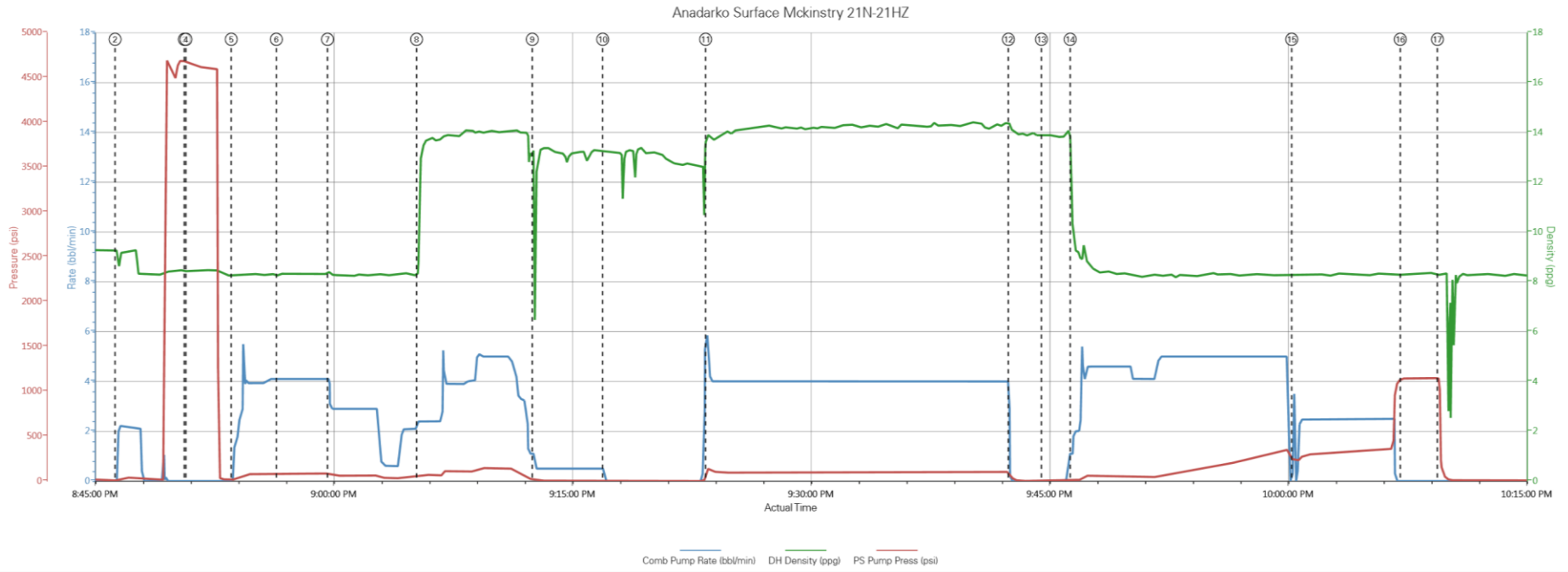
## ***Pumping Schedule***

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<b>Stage /Plug #</b>	<b>Fluid #</b>	<b>Fluid Type</b>	<b>Fluid Name</b>	<b>Surface Density lbm/gal</b>	<b>Avg Rate bbl/min</b>	<b>Surface Volume</b>	<b>Downhole Volume</b>
1	1	Spacer	Fresh Water Spacer	8.33	4.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	4.00	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	4.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	4.00	385.0 sacks	385.0 sacks

# HALLIBURTON

## Data Acquisition



- ① Start Job 0,0.76,7
- ② Pump Spacer 1 0,8.43,4673
- ③ Pump Spacer 1 1,1.8.29,16
- ④ Test Lines 0,8.43,4666
- ⑤ Pump Spacer 1 1,1.8.29,16
- ⑥ Pump Spacer 2 4,1.8.25,80
- ⑦ Pump Spacer 1 3,9.8.38,83
- ⑧ Pump Cement 2,4,9.22,51
- ⑨ Slow Rate 0,8,13.31,10
- ⑩ Shutdown 0,13.3,2
- ⑪ Pump Cement 5,4,13.91,137
- ⑫ Shutdown 0,14.25,65
- ⑬ Pump Displacement 1,1,10.33,13
- ⑭ Slow Rate 2,5,8.29,242
- ⑮ Bump Plug 0,8.29,1142
- ⑯ Check Floats 0,8.26,1120
- ⑰ End Job 0,-0.06,5

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
01/14/2014 14:30		Call Out					CALL OUT HES CREW, REQUESTED ON LOCATION AT 18:30
01/14/2014 17:15		Pre-Convoy Safety Meeting					PRE CONVOY SAFETY MEETING TO DISCUSS DIRECTIONS AND HAZARDS OF DRIVING
01/14/2014 17:30		Depart from Service Center or Other Site					CREW DEPARTS FOR LOCATION
01/14/2014 18:30		Arrive At Loc					ARRIVE AT LOCATION, CASING ON BOTTOM, RIG CIRCULATING
01/14/2014 18:45		Assessment Of Location Safety Meeting					SITE ASSESSMENT SAFETY MEETING TO DISCUSS HAZARDS ON LOCATION AND WHERE TO SPOT EQUIPMENT
01/14/2014 18:50		Pre-Rig Up Safety Meeting					PRE RIG UP SAFETY MEETING TO DISCUSS HAZARDS OF RIGGING UP
01/14/2014 19:00		Rig-Up Equipment					RIG UP EQUIPMENT
01/14/2014 20:00		Rig-Up Completed					FINISHED RIGGING UP EQUIPMENT
01/14/2014 20:15		Pre-Job Safety Meeting					PRE JOB SAFETY MEETING TO DISCUSS JOB PROCEDURE, PRESSURE TESTING PROCEDURE AND HAZARDS DURING THE JOB
01/14/2014 20:45		Other	2	3		36.0	FILL LINES WITH WATER TO PRESSURE TEST
01/14/2014 20:49		Pressure Test					PRESSURE TEST HES IRON TO 4690
01/14/2014 20:53		Pump Water	4	10		80.0	PUMP WATER AHEAD
01/14/2014 20:56		Pump Spacer	4	12		83.0	PUMP MUD FLUSH SPACER
01/14/2014 20:59		Pump Water	4	10		70.0	PUMP WATER BEHIND
01/14/2014 21:05		Pump Cement	4	25		70.0	PUMP CEMENT, 385 SACKS, 14.2#, 1.56 YIELD, 7.66 WATER
01/14/2014 21:12		Slow Rate	0.5				SLOW RATE BECAUSE OF ISSUES WITH BULK TRUCK, BULK TRUCK WOULD HOLD PRESSURE
01/14/2014 21:17		Shutdown					SHUTDOWN TO FIX BULK TRUCK AND BRING CEMENT BACK UP TO WEIGHT
01/14/2014 21:23		Pump Cement	4	82		65.0	CONTINUE PUMPING CEMENT AFTER GETTING BULK TRUCK FIXED
01/14/2014 21:42		Shutdown					SHUTDOWN TO DROP TOP PLUG
01/14/2014 21:44		Drop Plug					DROP PLUG, WITNESSED BY COMPANY MAN
01/14/2014 21:46		Pump Displacement	5	60		350.0	PUMP WATER DISPLACEMENT
01/14/2014 22:00		Slow Rate	2.5	15		360.0	SLOW RATE TO KEEP PRESSURE BELOW PRESSURE TO LIFT AND TO BUMP THE PLUG
01/14/2014 22:06		Bump Plug				1133.0	BUMP PLUG, FINAL CIRCULATING PRESSURE 360 PSI
01/14/2014 22:08		Check Floats					CHECK FLOATS, GOT .5 BBLS BACK TO THE TRUCK
01/14/2014 22:15		Pre-Rig Down Safety Meeting					PRE RIG DOWN SAFETY MEETING TO DISCUSS THE JOB AND THE HAZARDS OF RIGGING DOWN
01/14/2014 22:30		Rig-Down Equipment					RIG DOWN EQUIPMENT
01/14/2014 23:30		Rig-Down Completed					FINISHED RIGGING DOWN EQUIPMENT
01/14/2014 23:45		Pre-Convoy Safety Meeting					PRE CONVOY SAFETY MEETING TO DISCUSS DIRECTIONS AND HAZARDS OF DRIVING
01/15/2014 00:00		Depart Location for Service Center or Other Site					HES CREW DEPARTS LOCATION

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3117157		<b>Quote #:</b>		<b>Sales Order #:</b> 901020039	
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> Case, Randy			
<b>Well Name:</b> MCKINSTRY			<b>Well #:</b> 21N-21HZ		<b>API/UWI #:</b> 05-123-36513		
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> LONGMONT		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Contractor:</b> Majors			<b>Rig/Platform Name/Num:</b> Majors 29				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well				<b>Job Type:</b> Cement Surface Casing			
<b>Sales Person:</b> GREGORY, JON			<b>Srvc Supervisor:</b> PORTER, MICHAEL		<b>MBU ID Emp #:</b> 491145		

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DA COSTA, CHARLES Angelo	5.5	551308	PORTER, MICHAEL James	5.5	491145	SMITH, BRET George	5.5	529662

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10951248	29 mile	11501021	29 mile	11748359	29 mile	NA	29 mile

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>								
<i>Total is the sum of each column separately</i>								

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
				<b>On Location</b>	14 - Jan - 2014	14:30	MST
<b>Form Type</b>			<b>BHST</b>	<b>On Location</b>	14 - Jan - 2014	18:30	MST
<b>Job depth MD</b>	1020. ft		<b>Job Depth TVD</b>	1020. ft	<b>Job Started</b>	14 - Jan - 2014	20:45
<b>Water Depth</b>			<b>Wk Ht Above Floor</b>	5. ft	<b>Job Completed</b>	14 - Jan - 2014	22:08
<b>Perforation Depth (MD)</b>	<i>From</i>		<i>To</i>		<b>Departed Loc</b>	15 - Jan - 2014	00:00

**Well Data**

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
13 1/2" Open Hole Section				13.5				.	1020.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1020.		

**Tools and Accessories**

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

**Miscellaneous Materials**

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.00	bbl	8.33			4.0	
2	Mud Flush		12.00	bbl	8.4			4.0	
	3.5 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	42 gal/bbl	MUD FLUSH III - SBM (528788)							
1	Fresh Water Spacer		10.00	bbl	8.33			4.0	
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	385.0	sacks	14.2	1.54	7.66	4.0	7.66
	7.66 Gal	FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	75	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

