

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

Kunzman Fed 4N-5HZ

Ensign 132

Post Job Summary

Cement Surface Casing

Prepared for:
Date Prepared: 10/12/2013
Version: 1

Service Supervisor: BARRAS, JOSEPH

Submitted by: FINNEY, SEAN

HALLIBURTON

HALLIBURTON

Wellbore Geometry

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	922.00	44.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	929.00	0.00

HALLIBURTON

Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water Spacer	8.33	4.00	10.0 bbl	10.0 bbl
1	2	Spacer	MUD FLUSH III	8.40	4.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh water Spacer	8.33	4.00	10.0 bbl	10.0 bbl
1	4	Cement Slurry	SwiftCem B2	14.20	5.00	350.0 sacks	350.0 sacks

Fluids Pumped

Stage/Plug # 1 Fluid 1: Fresh Water Spacer
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal
Pump Rate: 4.00 bbl/min

Stage/Plug # 1 Fluid 2: MUD FLUSH III
MUD FLUSH III - SBM (528788)

Fluid Density: 8.40 lbm/gal
Fluid Volume: 12.00 bbl
Pump Rate: 4.00 bbl/min

Stage/Plug # 1 Fluid 3: Fresh water Spacer
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

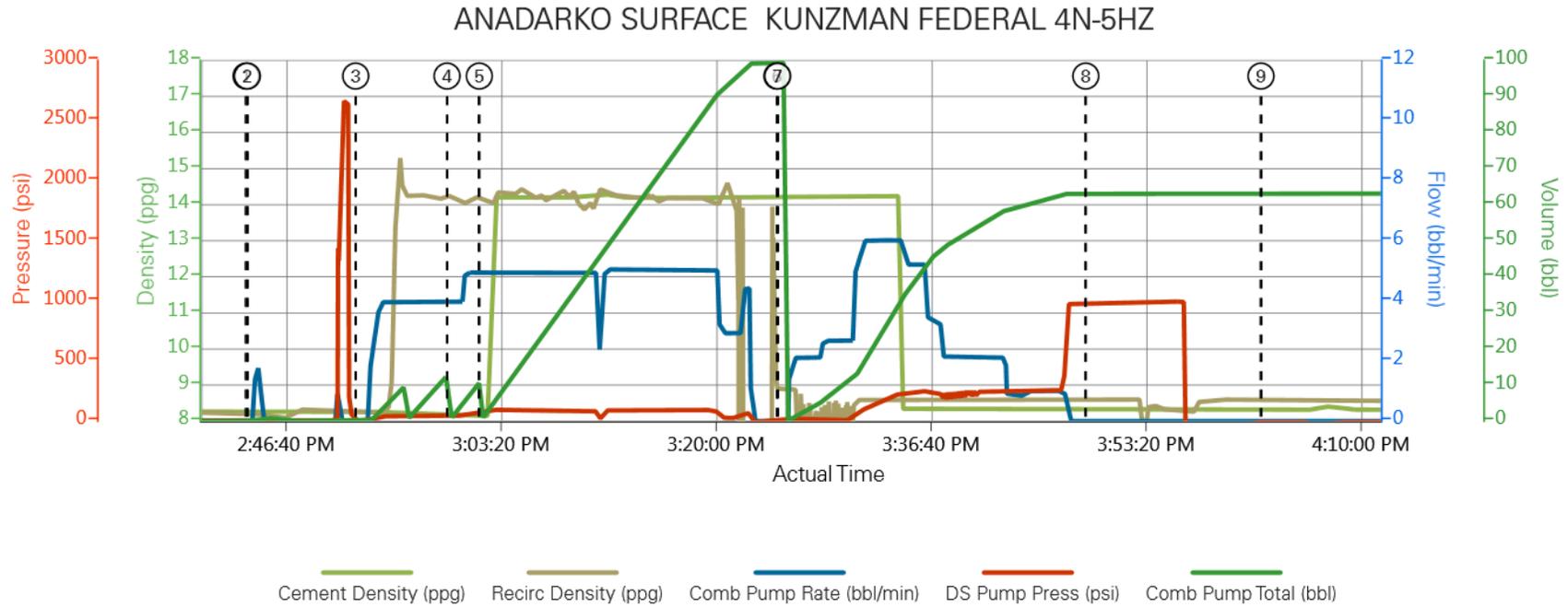
Fluid Density: 8.33 lbm/gal
Pump Rate: 4.00 bbl/min

Stage/Plug # 1 Fluid 4: SwiftCem B2
SWIFTCEM (TM) SYSTEM

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.54 ft³/sack
Total Mixing Fluid: 7.65 Gal
Surface Volume: 350.0 sacks
Sacks: 350.0 sacks
Calculated Fill: 900.00 ft
Calculated Top of Fluid: 0.00 ft

HALLIBURTON

Data Acquisition



HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
10/02/2013 07:30		Arrive at Location from Service Center					rig still running casing
10/02/2013 11:15		Rig-Up Equipment					rigging up HES trucks
10/02/2013 12:00		Rig-Up Completed					
10/02/2013 13:45		Casing on Bottom					
10/02/2013 14:20		Safety Meeting - Pre Job					with HES and rig crew
10/02/2013 14:43		Start Job					
10/02/2013 14:43		Test Lines					test lines to 2000 psi noi visible leaks
10/02/2013 14:52		Pump Spacer 1	4	10		40.0	rig water
10/02/2013 14:55		Pump Spacer 2	4	12		41.0	rig water with mud flush
10/02/2013 14:59		Pump Spacer 1	4	10		45.0	rig water
10/02/2013 15:01		Pump Cement	5	96		89.0	mixed with rig water @ 14.2 ppg /387 sks of swiftcem 1.4 YIELD/7.62 GAL PER SK
10/02/2013 15:22		Shutdown					
10/02/2013 15:23		Drop Top Plug					loaded in casing no plug container in yard/ pumped with quick-latch swedge
10/02/2013 15:24		Pump Displacement	5	66		286.0	rig water with mud flush back to surface @ start of displacement and cement to surface @ 38 BBL away
10/02/2013 15:48		Bump Plug	2			921.0	
10/02/2013 15:52		Check Floats					floats held with 1 bbl back to truck
10/02/2013 16:02		End Job					
10/02/2013 16:16		Safety Meeting - Pre Rig-Down					
10/02/2013 17:00		Return to Service Center from Job					

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3106566	Quote #:	Sales Order #: 900793738
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: Bradshaw, Terry	
Well Name: Kunzman Fed		Well #: 4N-5HZ	API/UWI #: 05-123-37028
Field: WATTENBERG	City (SAP): FORT LUPTON	County/Parish: Weld	State: Colorado
Contractor: Ensign		Rig/Platform Name/Num: Ensign 132	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: FLING, MATTHEW		Srvc Supervisor: BARRAS, JOSEPH	MBU ID Emp #: 405168

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BANUELOS, GUADALUPE	0.0	372277	BARRAS, JOSEPH Corey	0.0	405168	STIELER, KENT	0.0	554541

Equipment

HES Unit #	Distance-1 way						
10025030	14 mile	10824253C	14 mile	11645063	14 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL								
<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
					02 - Oct - 2013	03:45	MST
Form Type				On Location			
Job depth MD	895. ft		Job Depth TVD	867. ft	Job Started	02 - Oct - 2013	14:43
Water Depth			Wk Ht Above Floor	4. ft	Job Completed	02 - Oct - 2013	16:02
Perforation Depth (MD)	<i>From</i>		<i>To</i>		Departed Loc	02 - Oct - 2013	17:00

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				.	929.		
9 5/8" Surface Casing	New		9.625	8.921	36.		J-55	.	922.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	1	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	1	MI		
KIT,HALL WELD-A	2	EA		
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375	7	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	EA		
PLUG,CMTG, TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
Description	Qty	Qty uom	Depth	Supplier

COLLAR-STOP-9 5/8"-FRICTION-HINGED						2	EA		
Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.00	bbl	8.33	.0	.0	4.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	12.00	bbl	8.4	.0	.0	4.0	
3	Fresh water Spacer		10.00	bbl	8.33	.0	.0	4.0	
4	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	350.0	sacks	14.2	1.54	7.65	5.0	7.65
7.649 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		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe		Amount	44 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					

