

HALLIBURTON

iCem[®] Service

BP AMERICA PROD CO-SORAC/NAG EBIZ

For: MIKE STARNES

Date: Friday, February 26, 2016

FORD H3

FORD H3 PRODUCTION

BP

Job Date: Wednesday, January 13, 2016

Sincerely,

LEMONT JOJOLA

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The Road to Excellence Starts with Safety

Sold To #: 358135	Ship To #: 3699380	Quote #: 0022146983	Sales Order #: 0903048754
Customer: BP AMERICA PROD CO-SORAC/NAG EBIZ		Customer Rep:	
Well Name: FORD H		Well #: 3	API/UWI #: 05-067-09958-00
Field: IGNACIO-BLANCO	City (SAP): IGNACIO	County/Parish: LA PLATA	State: COLORADO
Legal Description: SE NW-10-33N-8W-1708FNL-1705FWL			
Contractor: AZTEC WELL SERVICING CO		Rig/Platform Name/Num: AZTEC 507	
Job BOM: 7523			
Well Type: COAL DE-GAS			
Sales Person: HALAMERICA\HB41307		Srvc Supervisor: Lemont Jojola	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	3472ft		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		8.625	8.097	24	STC	J-55	0	402		
Casing		5.5	4.95	15.5	LTC	J-55	0	3472		
Open Hole Section			7.875				402	3472		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5			3472	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	10.5 lb/gal Tuned Spacer III	Tuned Spacer III	20	bbl	10.5	6.11			
0.10 lbm/bbl		D-AIR 5000, 50 LB SACK (102068797)							
37.50 gal/bbl		FRESH WATER							
91.90 lbm/bbl		BAROID 41 - 50 LB BAG(478095)							

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	Lead Cement	VARICEM (TM) CEMENT	205	sack	12.3	2.42		5	13.59	
0.40 %		FE-2 (100001615)								
0.1250 lbm		POLY-E-FLAKE (101216940)								
13.59 Gal		FRESH WATER								
5 lbm		KOL-SEAL, BULK (100064233)								
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	Lead Cement (with Super CBL)	VARICEM (TM) CEMENT	40	sack	12.3	2.43		5	13.62	
13.62 Gal		FRESH WATER								
0.1250 lbm		POLY-E-FLAKE (101216940)								
0.30 %		SUPER CBL, 50 LB PAIL (100003668)								
0.40 %		FE-2 (100001615)								
5 lbm		KOL-SEAL, BULK (100064233)								
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	Tail Cement	VARICEM (TM) CEMENT	130	sack	13.5	1.87		5	9.39	
0.40 %		FE-2 (100001615)								
0.1250 lbm		POLY-E-FLAKE (101216940)								
9.39 Gal		FRESH WATER								
5 lbm		KOL-SEAL, BULK (100064233)								
0.30 %		SUPER CBL, 50 LB PAIL (100003668)								
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	Displacement	Displacement	82	bbl	8.33					
Cement Left In Pipe		Amount	ft	Reason				Shoe Joint		
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		40 °F	
Cement Temperature:		## °F °C		Plug Displaced by:		8.33lb/gal		Disp. Temperature:		## °F °C
Plug Bumped?		Yes		Bump Pressure:		#### psi MPa		Floats Held?		Yes
Cement Returns:		## bbl m3		Returns Density:		## lb/gal kg/m3		Returns Temperature:		## °F °C
Comment										

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Pass-Side Pump Rate (bbl/min)	PS Pmp Stg Tot (bbl)	Comments
Event	1	Arrive At Loc	Arrive At Loc	1/12/2016	21:00:00	USER					1- PICKUP 11583927, 1- RED TIGER 11528220, 1- BODYLOAD 10793626, 2- BULK TRUCKS 10822043 / 10025040 10995025 / 10025118
Event	2	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/13/2016	00:00:00	USER					SAFETY MEETING HELD WITH CEMENT CREW
Event	3	Rig-Up Equipment	Rig-Up Equipment	1/13/2016	00:10:00	USER					CEMENT CREW RIGGED UP EQUIPMENT
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/13/2016	01:30:57	USER	-77.00	0.07	0.00	0.3	SAFETY MEETING HELD WITH EVERYONE ON LOCATION
Event	5	Start Job	Start Job	1/13/2016	01:46:15	COM5	-15.00	8.74	0.00	1.2	
Event	6	Pressure Test	Pressure Test	1/13/2016	01:46:48	USER	2967.00	8.76	0.00	1.2	PRESSURE TEST GOOD TO 3500 PSI
Event	7	Pump Spacer	Pump Spacer	1/13/2016	01:51:10	USER	44.00	8.68	1.50	0.7	PUMPED 10 BBLS H2O
Event	8	Pump Spacer 2	Pump Spacer 2	1/13/2016	01:56:44	USER	290.00	10.35	6.10	1.6	PUMPED 20 BBLS TUNED SPACER @10.5#
Event	9	Pump Lead Cement	Pump 1ST Lead Cement	1/13/2016	02:00:18	USER	198.00	12.65	6.10	5.0	205 SKS 2.42 CUFT/SK 13.59 GAL/SK = 88.4 BBLS @ 12.3# 66.3 BBLS H2O REQ
Event	10	Pump Lead Cement	Pump 2ND Lead Cement	1/13/2016	02:14:20	USER	118.00	12.58	6.10	2.3	40 SKS 2,43 CUFT/SK 13.62 GAL/SK = 17.3BBLS @ 12.3# 13 BBLS H2O REQ
Event	11	Pump Tail Cement	Pump Tail Cement	1/13/2016	02:17:30	USER	114.00	13.31	6.10	3.0	130 SKS 1.87 CUFT/SK 9.39

GAL/SK = 43.3 BBLS @
13.5# 29.1 BBLS H2O REQ

Event	12	Shutdown	Shutdown	1/13/2016	02:25:59	USER	83.00	0.77	0.00	53.3	SHUTDOWN DROP PLUG
Event	13	Pump Displacement	Pump Displacement	1/13/2016	02:28:04	USER	67.00	8.28	4.90	1.8	CALCULATED 81.6 BBLS TO DISPLACE PLUG, ACTUALLY PUMPED 82 BBLS TANK TO TANK MARK TO MARK
Event	14	Cement Returns to Surface	Cement Returns to Surface	1/13/2016	02:40:03	USER	599.00	8.30	3.90	56.9	CALCULATED 40 BBLS OF CEMENT BACK TO SURFACE, ACTUALLY CIRCULATED 30 BBLS OF CEMENT BACK TO SURFACE
Event	15	Bump Plug	Bump Plug	1/13/2016	02:47:59	USER	1319.00	8.29	0.00	80.5	CALCULATED 811 PSI TO LAND PLUG, PLUG BUMPED @ 869 PSI PRESSURED UP TO 1400 PSI
Event	16	Check Floats	Check Floats	1/13/2016	02:52:49	USER	314.00	8.21	0.00	80.5	CHECK FLOATS FLOATS HELD, .25 BBLS BACK
Event	17	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/13/2016	03:00:33	USER	2262.00	8.24	0.00	0.0	SAFETY MEETING HELD WITH CEMENT CREW
Event	18	Rig-Down Equipment	Rig-Down Equipment	1/13/2016	03:09:59	USER					CEMENT CREW RIGGS DOWN EQUIPMENT
Event	19	End Job	End Job	1/13/2016	03:25:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, LEMONT JOJOLA AND CREW
Event	20	Depart Location Safety Meeting	Depart Location Safety Meeting	1/13/2016	03:40:41	USER					SAFETY MEETING HELD WITH CEMENT CREW
Event	21	Depart Location	Depart Location	1/13/2016	03:52:35	USER					CEMENT CREW DEPARTS LOCATION

2.0 Custom Graphs

2.1 Custom Graph

