

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 0003973839		Quote #: 0022643769		Sales Order #: 0906064251					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Steve Martinez							
Well Name: FARLEY			Well #: 23-1HZ			API/UWI #: 05-123-50195-00					
Field: WATTENBERG		City (SAP): PLATTEVILLE		County/Parish: WELD		State: COLORADO					
Legal Description: SW SW-23-3N-66W-646FSL-448FWL											
Contractor: AKITA DRLG				Rig/Platform Name/Num: AKITA 522							
Job BOM: 7523 7523											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Michael Loughran							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		13453ft		Job Depth TVD							
Water Depth				Wk Ht Above Floor	5						
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	1869	0	1869	
Casing		5.5	4.892	17	LTC	HCP110	0	13453	0	7375	
Open Hole Section			7.875				1869	13457	1869	7375	
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			13453		Bottom Plug	5.5		HES		
Wet Sub	5.5			13449		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 Prime	TUNED PRIME CEMENT SPACER SYS			60	bbl	10.5	6.17		6	
1 lbm/bbl		FE-2, 2000 LB BAG - (1005549)									
90.94 lbm/bbl		BARITE, BULK (100003681)									

0.75 gal/bbl		MUSOL(R) A, 5 GAL PAIL (100064220)							
0.75 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							
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	Tuned Prime (No Surfactants)	TUNED PRIME CEMENT SPACER SYS	55	bbl	10.5	6.19		6	
1 lbm/bbl		FE-2, 2000 LB BAG - (1005549)							
90.63 lbm/bbl		BARITE, BULK (100003681)							
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	Gasstop B1	GASSTOP (TM) SYSTEM	657	sack	13.2	1.56		8	7.61
0.35 %		SCR-100, 2000 LB BAG - (1005967)							
5.11 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	EconoCem	ECONOCEM (TM) SYSTEM	590	sack	13.5	1.69		8	8.08
0.10 %		SA-1015, 50 LB SACK (102077046)							
8.08 Gal		FRESH WATER							
0.30 %		HR-5, 50 LB SK (100005050)							
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 and MMCR	Biocide Water and MMCR	20	bbl	8.34			8	
0.50 gal/bbl		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
6	Biocide Water	Biocide Water	292	bbl	8.34			8	
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe Joint	

Mix Water:	pH 7	Mix Water Chloride:	Less 200 ppm	Mix Water Temperature:	68 °F
Cement Temperature:		Plug Displaced by:	8.33 lb/gal	Disp. Temperature:	
Plug Bumped?	Yes	Bump Pressure:	2900 psi	Floats Held?	Yes
Cement Returns:		Returns Density:		Returns Temperature:	
Comment Plug bumped, 27 bbl spacer to surface, 3 bbl wet shoe Floats hold, 2 bbl back, TOLC 1823, TOTC 7706					

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	10/28/2019	07:30:00	USER					Crew called out for on location time of 1300 hrs. 10/28/2019
Event	2	Crew Leave Yard	Crew Leave Yard	10/28/2019	12:15:00	USER					Crew leaves yard
Event	3	Arrive At Loc	Arrive At Loc	10/28/2019	13:00:00	USER					Arrive at location, Rig running casing, Meet with customer, TP 13453.5 17# P-110, TD 13465, 7.875 Hole, WSS13449.5, TVD 7375, PC 1869' 9.625 J-55 36#, WF 9.5 OBM, Top and Bottom plug provided by customer, Water 68 Deg., PH 7, Chlorides and sulfates less than 200 ppm
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/28/2019	13:10:00	USER					Pre rig up safety meeting
Event	5	Rig-Up Equipment	Rig-Up Equipment	10/28/2019	13:15:00	USER					Rig up all service lines and iron to buffer zone
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/28/2019	18:20:56	USER	8.47	0.00	-6.00	0.00	Discuss job procedures, Discuss job hazards and hazards of Halliburton Equipment. Rig circ 7 bpm/970 to 1170 psi
Event	7	Start Job	Start Job	10/28/2019	18:33:06	COM4	6.46	0.00	-5.00	0.00	Begin recording data

Event	8	Test Lines	Test Lines	10/28/2019	18:34:35	COM4	8.52	0.00	312.00	2.70	6500 psi test
Event	9	Pump Spacer 1	Pump Spacer 1	10/28/2019	18:40:36	COM4	8.38	0.00	50.00	2.70	60 bbl. Tuned Prime Spacer 10.5 ppg, 6.17 Yield, 39.60 gal/sack with surfactants, 45 gal Musol, 45 gal Dual spacer B, D-Air, .8 gallon Biocide
Event	10	Pump Spacer 2	Pump Spacer 2	10/28/2019	18:51:13	COM4	10.53	5.80	986.00	59.50	55 bbl. Tuned Prime Spacer 10.5 ppg, 6.19 yield, 41.40 gal/sack, No surfactants
Event	11	Drop Bottom Plug	Drop Bottom Plug	10/28/2019	18:59:23	COM4	10.48	2.80	507.00	50.50	Verified by Josh
Event	12	Pump Lead Cement	Pump Lead Cement	10/28/2019	19:00:45	COM4	10.83	5.70	1094.00	57.20	182.54 bbl. GasStop Lead Cement, 657 sacks, 13.2 ppg, 1.69 yield, 8.08 gal/sack 1600 gal Latex
Event	13	Pump Tail Cement	Pump Tail Cement	10/28/2019	19:29:02	COM4	13.34	8.00	471.00	197.20	177.58 bbl., 590 sacks EconoCem Tail Cement, 13.5 ppg, 1.69 yield, 8.08 gal/sack
Event	14	Shutdown	Shutdown	10/28/2019	19:55:19	COM4	0.71	0.00	27.00	188.90	Shutdown to wash pumps and lines
Event	15	Drop Top Plug	Drop Top Plug	10/28/2019	20:03:59	COM4	8.15	0.00	-11.00	9.70	Verified by Josh
Event	16	Pump Displacement	Pump Displacement	10/28/2019	20:04:02	COM4	8.17	0.00	-11.00	9.70	312 bbl. fresh water displacement, 10 gal Micro Matrix in first 20 bbl., 4.2 gallons Customer supplied Biocide throughout
Event	17	Bump Plug	Bump Plug	10/28/2019	20:44:12	COM4	8.28	0.00	2868.00	321.00	Bump psi 2900 psi. FCP 2230 psi @ 2 bpm, 27 bbl. spacer to surface TOLC 1823, TOTC 7706

Event	18	Other	Other	10/28/2019	21:02:52	COM4	8.24	0.00	3263.00	0.00	Pressure up 4546 psi to shift Wet Shoe and pump 3 bbl. wet shoe
Event	19	Other	Other	10/28/2019	21:05:09	COM4	8.28	0.00	2075.00	4.80	Check Floats, Floats hold, 2 bbl. back to pump truck
Event	20	End Job	End Job	10/28/2019	21:06:18	COM4	8.28	0.00	22.00	4.80	Stop recording data
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/28/2019	21:10:00	USER					JSA safe Rig-Down
Event	22	Rig-Down Equipment	Rig-Down Equipment	10/28/2019	21:15:00	USER					Rig down equipment
Event	23	Crew Leave Location	Crew Leave Location	10/28/2019	22:30:00	USER					Thanks for choosing Halliburton Energy Services!

3.0 Attachments

3.1 Farley 23-1HZ.png

