

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3837896		Quote #: 0022410333		Sales Order #: 0904664905					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: TERRY HACKFORD							
Well Name: HERGENREDER			Well #: 5N-4HZ		API/UWI #: 05-123-45860-00						
Field: WATTENBERG		City (SAP): LONGMONT		County/Parish: WELD		State: COLORADO					
Legal Description: NW NW-33-3N-68W-247FNL-991FWL											
Contractor: Xtreme				Rig/Platform Name/Num: Xtreme 24							
Job BOM: 7523 7523											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Vitali Neverdasov							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		13862ft		Job Depth TVD		7273					
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		9.625	8.921	36		J-55	0	2284	0	2284	
Casing	0	5.5	4.892	17	LTC	HCP110	0	13862	0	7273	
Open Hole Section			8.5				2284	13872	2284	7273	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	WHED		
Float Shoe	5.5	1	N/A	13862		Bottom Plug	5.5	1	WHED		
Float Collar	5.5	1	N/A	13860		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5	231	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 Spacer III	Tuned Spacer III			60	bbl	10.5	6.32		4	
37.58 gal/bbl		FRESH WATER									
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)									
0.70 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)									
87.97 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
2	ElastiCem	ELASTICEM (TM) SYSTEM	700	sack	13.2	1.57		6	7.53
	0.10 %	SUPER CBL, 50 LB PAIL (100003668)							
	0.45 %	SCR-100 (100003749)							
	7.53 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
3	EconoCem	ECONOCEM (TM) SYSTEM	1140	sack	13.5	1.68		6	7.99
	7.99 Gal	FRESH WATER							
	0.32 %	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
4	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			6.5	
	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
5	Biocide Water	Biocide Water	302	bbl	8.34			6.5	

Cement Left In Pipe	Amount	0 ft	Reason	WET SHOE
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Comment : ESTIMATED TOT @ 5233. TOL @ 788'. 22 BBLS OF SPACER BACK TO SURFACE. TOTAL DICPLACEMENT 322 BBLS.

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	2/23/2018	17:00:00	USER	ON LOCATION @ 22:00
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	2/23/2018	20:30:00	USER	JSA PRIOR LEAVING THE YARD
Event	3	Depart Shop for Location	Depart Shop for Location	2/23/2018	20:57:00	USER	CALLED JORNEY
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	2/23/2018	21:31:00	USER	24 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING.
Event	5	Other	Other	2/23/2018	21:45:00	USER	SPOT TRUCKS
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	2/23/2018	21:50:00	USER	RIG UP SAFETY MEETING
Event	7	Rig-up Lines	Rig-up Lines	2/23/2018	21:55:00	USER	RIG UP ALL LINES TO THE BUFFER ZONE
Event	8	Casing on Bottom	Casing on Bottom	2/24/2018	00:28:00	USER	CASING LANDED
Event	9	Other	Other	2/24/2018	00:50:00	USER	RIG UP FLOOR FOR RIG TO CIRCULATE
Event	10	Safety Meeting - Pre Job	Safety Meeting - Pre Job	2/24/2018	01:45:00	USER	HELD JSA WITH ALL PERSONAL INVOLVED IN CEMENT JOB
Event	11	Start Job	Start Job	2/24/2018	03:01:59	COM4	
Event	12	Pressure Test	Pressure Test	2/24/2018	03:08:00	USER	LOAD AND TEST LINE AND PRESSURE TEST TO 6703 PSI
Event	13	Drop Bottom Plug	Drop Bottom Plug	2/24/2018	03:12:00	USER	
Event	14	Pump Spacer 1	Pump Spacer 1	2/24/2018	03:15:34	COM4	BATCH/WEIGH/PUMP 60 BBLS OF TUNED SPACER WITH SURFACTANTS @ 10.5 PPG
Event	15	Pump Lead Cement	Pump Lead Cement	2/24/2018	03:33:48	COM4	BATCH/WEIGH/PUMP 700 SKS (195.7 BBLS) OF ELASTICEM @ 13.2 PPG
Event	16	Pump Tail Cement	Pump Tail Cement	2/24/2018	04:04:51	COM4	WEIGH/PUMP 1140 SKS (341.1 BBLS) OF ECONOCEM @ 13.5 PPG
Event	17	Shutdown	Shutdown	2/24/2018	05:01:33	USER	WASH PUMPS AND LINES

Event	18	Drop Top Plug	Drop Top Plug	2/24/2018	05:10:00	USER	
Event	19	Pump Displacement	Pump Displacement	2/24/2018	05:15:38	COM4	FIRST 20 BBLS WITH MMCR + BIOCID. TOTAL DISPLACEMENT 322.2 BBLS. 22 BBLS OF SPACER BACK TO SURFACE.
Event	20	Slow Rate	Slow Rate	2/24/2018	06:03:56	USER	SLOW RATE TO 3 BPM
Event	21	Bump Plug	Bump Plug	2/24/2018	06:07:00	USER	BUMP PLUG @ 3035 PSI WITH 500 PSI OVER FINAL CIRCULATING PRESSURE OF 2475 PSI.PER CUSTOMER HOLD PRESSURE FOR 15 MIN CASING TEST.
Event	22	Other	Other	2/24/2018	06:25:00	USER	BURST WET SHOE SUB @ 5210 PSI AND PUMP 3 BBLS WET SHOE.
Event	23	Shutdown	Shutdown	2/24/2018	06:26:00	USER	
Event	24	Check Floats	Check Floats	2/24/2018	06:27:00	USER	FLOATS HOLD
Event	25	End Job	End Job	2/24/2018	06:33:06	COM4	
Event	26	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	2/24/2018	06:35:00	USER	RIG DOWN JSA
Event	27	Depart Location Safety Meeting	Depart Location Safety Meeting	2/24/2018	08:10:00	USER	

3.0 Attachments

3.1 Job Chart

