

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3751909		Quote #: 0022363011		Sales Order #: 0904373352					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Luke Rains							
Well Name: WAGNER			Well #: 1N-W10HZ		API/UWI #: 05-123-43476-00						
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO					
Legal Description: SE NE-22-1N-67W-1609FNL-761FEL											
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 464							
Job BOM: 7522 7522											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Luke Kosakewich							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		5905ft		Job Depth TVD		5806					
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	1870	0	0	
Casing		7	6.276	26	LTC	HCP110	0	5895	0	0	
Open Hole Section			8.5				1870	5905	0	5806	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe						Top Plug	7	1	Weatherford		
Float Shoe	7			5895		Bottom Plug	7	1	Weatherford		
Float Collar	7			5851		SSR plug set					
Insert Float						Plug Container	7	1	HES		
Stage Tool						Centralizers					
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 W/ Surfactants			40	bbl	10.5	6.25		4	

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	550	sack	13.2	1.57		6.5	7.53
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	Displacement Fluid	Displacement Fluid OBM	223.5	bbl	9.1			8.5	
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint	
Comment Full returns throughout the job. Got 5.5 bbls. of cement back to surface. Floats held. Got back 2.5 bbls. back to the truck.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Comments
Event	1	Call Out	Call Out	10/18/2017	10:30:00	USER				Crew was called out at 10:30 for an on location time of 13:30.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	10/18/2017	12:45:00	USER				Held a pre journey safety meeting and JSA with the crew.
Event	3	Depart Shop for Location	Depart Shop for Location	10/18/2017	13:00:00	USER				Started journey management with dispatch and left the yard.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	10/18/2017	13:20:00	USER				Crew performed a site assessment and hazard hunt on location. Checked in with the customer and discussed the job procedures, rig up and well bore schematics to calculate the job. The rig was running casing.
Event	5	Other	Other	10/18/2017	13:30:00	USER				W
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/18/2017	13:45:00	USER				Held a pre rig up safety meeting and JSA with the crew.
Event	7	Rig-Up Equipment	Rig-Up Equipment	10/18/2017	14:00:00	USER				The crew rigged up all lines, hoses and equipment for the job.
Event	8	Safety Meeting	Safety Meeting	10/18/2017	15:30:00	USER				Held a pre job safety meeting and JSA with all personnel on location.

Event	9	Start Job	Start Job	10/18/2017	18:08:41	COM4	0.00	-4.00	8.58	P
Event	10	Test Lines	Test Lines	10/18/2017	18:25:48	COM4	0.00	50.00	8.36	Pressure tested lines to 3,500 psi. with a 500 psi. electronic kick out test.
Event	11	Pump Spacer 1	Pump Spacer 1	10/18/2017	18:31:55	COM4	0.00	6.00	8.34	Pumped 40 bbls. of Tuned Spacer III with surfactants mixed at 10.5 ppg., Yield: 6.25 ft3/sks, 40.2 gal/sks. Density was verified by pressurized scales.
Event	12	Shutdown	Shutdown	10/18/2017	18:44:44	COM4	0.00	63.00	10.48	Shut down to drop the bottom plug.
Event	13	Drop Bottom Plug	Drop Bottom Plug	10/18/2017	18:44:56	COM4	0.00	22.00	10.55	Dropped the bottom plug which was witnessed by the customer.
Event	14	Pump Cement	Pump Cement	10/18/2017	18:49:50	COM4	0.00	9.00	10.59	Pumped 154 bbls. (550 sks.) of Elasticem mixed at 13.2 ppg., Yield: 1.57 ft3/sks, 7.53 gal/sks. Density was verified by pressurized scales.
Event	15	Check Weight	Check weight	10/18/2017	18:55:15	COM4	6.80	586.00	13.14	Cement weight up at 13.2 ppg.
Event	16	Shutdown	Shutdown	10/18/2017	19:18:30	COM4	0.00	76.00	14.55	Shutdown and washed up cement head and pre mix and down hole tubs.
Event	17	Drop Top Plug	Drop Top Plug	10/18/2017	19:24:48	COM4				Dropped the top plug which was witnessed by the customer.
Event	18	Pump Displacement	Pump Displacement	10/18/2017	19:24:54	COM4				Pumped 223.5 bbls. of OBM for displacement. Got 40 bbls. of spacer back and 5.5 bbls. of cement to surface.
Event	19	Bump Plug	Bump Plug	10/18/2017	20:04:49	COM4				Bumped the plug 500 psi. over 1,850 psi. Finale

											pressure was 2,450 psi. at 2 bpm. Held pressure for a 15 minute casing test.
Event	20	Other	Other	10/18/2017	20:05:03	COM4	0.00	2465.00	8.73		Bled off pressure to check floats. Floats held. Got 2.5 bbls. of fluid back to the truck.
Event	21	End Job	End Job	10/18/2017	21:23:32	COM4					Washed up pumps until clean and blew down all lines and equipment.
Event	22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/18/2017	21:30:00	USER					Held a pre rig down safety meeting and JSA.
Event	23	Rig-Down Equipment	Rig-Down Equipment	10/18/2017	21:40:00	USER					Rigged down all lines, hoses and equipment.
Event	24	Depart Location Safety Meeting	Depart Location Safety Meeting	10/18/2017	22:30:00	USER					Held a pre journey safety meeting with the crew.
Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	10/18/2017	22:40:00	USER					Started journey management with dispatch and left location.

3.0 Attachments

3.1 Anadarko Wagner 1N-W10HZ Intermediate Job Chart

