

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3751863		Quote #: 0022378258		Sales Order #: 0904470709	
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Jackie Mckinley			
Well Name: WAGNER			Well #: 2N-10HZ		API/UWI #: 05-123-43471-00		
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO	
Legal Description: SW NE-22-1N-67W-1722FNL-1559FEL							
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 464			
Job BOM: 7525 7525							
Well Type: HORIZONTAL GAS							
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Luke Kosakewich			

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	15590ft		Job Depth TVD 7369ft
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
Drill Pipe		4	3.34	14			0	5772	0	5772
Casing		7	6.276	26	LTC	HCP110	0	6013	0	6013
Casing		4.5	4	11.6	LTC	HCP110	5772	15585	5772	7369
Open Hole Section			6.125				6013	15590	6013	7369

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	4.5	1	Weatherford
Float Shoe	4.5			15585	Bottom Plug			
Float Collar	4.5			15536	SSR plug set			
Insert Float					Plug Container			
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	60	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	EconoCem	ECONOCEM	590	sack	13.5	1.68		7	7.98	
3	Displacement Fluid	Displacement Fluid	208.5	bbl	8.34			6		
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint		
<p>Comment There were full returns throughout the job. Got 57 bbls. of spacer to surface followed by 17 bbls. of fresh water. There was no cement to surface. Estimated TOC is 5,933'. Floats held. Got 1.75 bbls. of fluid back to truck. Back side pressure test held at 3,030 psi. for 15 minutes, Finale pressure was 3,060 psi.</p>										

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	12/2/2017	04:40:00	USER				Crew was called out at 04:40 for an on location time of 10:30.
Event	2	Depart Location Safety Meeting	Depart Location Safety Meeting	12/2/2017	08:50:00	USER				Crew held a pre journey safety meeting and JSA.
Event	3	Depart Shop for Location	Depart Shop for Location	12/2/2017	09:00:00	USER				Started journey management with dispatch and left location.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	12/2/2017	09:30:00	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 circulating.
Event	5	Other	Other	12/2/2017	09:40:00	USER				W
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/2/2017	09:45:00	USER				The crew held a pre rig up safety meeting and JSA.
Event	7	Rig-Up Equipment	Rig-Up Equipment	12/2/2017	09:50:00	USER				The crew rigged up all lines, hoses and equipment for the job.
Event	8	Safety Meeting	Safety Meeting	12/2/2017	11:30:00	USER				All personnel on location held a pre job safety meeting and JSA.
Event	9	Start Job	Start Job	12/2/2017	19:55:10	COM4	0.00	-4.00	8.40	Pumped 3 bbls. of fresh water to fill lines and establish circulation.

Event	10	Test Lines	Test Lines	12/2/2017	19:57:42	COM4	0.00	432.00	8.48	Pressure tested lines to 4,500 psi. with a 500 psi. electronic kick out test.
Event	11	Pump Spacer 1	Pump Spacer 1	12/2/2017	20:03:31	COM4	0.00	215.00	8.37	Pumped 60 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	Pump Cement	Pump Cement	12/2/2017	20:20:24	COM4	3.00	672.00	11.17	Pumped 176.5 bbls. (590 sks.) of Econocem mixed at 13.5 ppg. Yield: 1.68 ft3/sk, 7.98 gal/sk. Density was verified by pressurized scales.
Event	13	Shutdown	Shutdown	12/2/2017	21:02:26	COM4	0.00	2.00	13.61	Broke off the iron and loaded the dart into the drill pipe, which was witnessed by the customer.
Event	14	Clean Lines	Clean Lines	12/2/2017	21:04:43	COM4	0.00	0.00	13.61	Washed pumps and lines until clean.
Event	15	Drop Top Plug	Drop Top Plug	12/2/2017	21:11:09	COM4	0.00	71.00	7.96	Dropped the top plug, which was witnessed by the customer.
Event	16	Pump Displacement	Pump Displacement	12/2/2017	21:13:37	COM4	0.00	-1.00	7.47	Pumped 208.5 bbls. of fresh water with MMCR in the first 20 bbls. and Biocide throughout the rest of displacement. Picked up the dart 56 bbls. away pumping 3 bpm. at 750 psi. Pressured up to 1,759 psi to pick up the latch plug.
Event	17	Bump Plug	Bump Plug	12/2/2017	22:00:48	COM4				Bumped the plug 500 psi. over 1,750 psi. at 3 bpm. Held pressure for 5 minutes.
Event	18	Check Floats	Check Floats	12/2/2017	22:02:40	USER	0.00	63.00	7.18	Bled off pressure to check

										floats. Floats held. Got 1.75 bbls. of fluid back to the truck.
Event	19	Set Packer	Set Packer	12/2/2017	22:08:12	COM4	0.00	-4.00	7.93	The rig set the packer.
Event	20	Pressure Up Well	Pressure Up Well	12/2/2017	22:21:19	COM4	2.00	91.00	7.95	Pressured up the well to 3,000 psi. for a 15 minute back side test. Pressure was monitored with the rig. Pressure held at 3,030 psi. Finale pressure was 3,060 psi. Bled off pressure.
Event	21	Sting out	Sting out	12/2/2017	22:44:56	USER	0.90	17.00	7.92	Pressured up to 1,000 psi. on the drill pipe to sting out.
Event	22	Clean Hole	Clean Hole	12/2/2017	22:48:07	COM4	0.00	390.00	7.97	Pumped 150 bbls. of fresh water to clean out the 7" casing. Got 57 bbls. of spacer to surface. There was no cement to surface. Estimated TOC is 5,933'
Event	23	End Job	End Job	12/2/2017	23:17:16	COM4				Washed pumps and lines until clean. Blew down all lines and pumps until dry.
Event	24	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/2/2017	23:30:00	USER	0.00	7.00	7.92	Halliburton cement crew held a pre rig down safety meeting and JSA.
Event	25	Rig-Down Equipment	Rig-Down Equipment	12/2/2017	23:35:00	USER	2.50	17.00	7.96	Rigged down all lines, hoses and equipment.
Event	26	Depart Location Safety Meeting	Depart Location Safety Meeting	12/3/2017	00:50:00	USER				Held a pre journey safety meeting with the crew.
Event	27	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	12/3/2017	01:00:00	USER				Started journey management with dispatch and left location.

3.0 Attachments

3.1 Anadarko Wagner 2N-10HZ Production Liner Job Chart

