

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 300466		Quote #: 0022477749		Sales Order #: 0905064221	
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Alan Maden			
Well Name: Gracie			Well #: 24-6HZ		API/UWI #: 05-123-46434		
Field:		City (SAP): Fort Lupton		County/Parish: WELD		State: COLORADO	
Legal Description:							
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 461			
Job BOM: 7523 7523							
Well Type: OIL & GAS WELL							
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Luke Kosakewich			

Job

Formation Name							
Formation Depth (MD)		Top		Bottom			
Form Type		BHST					
Job depth MD		12577ft		Job Depth TVD		7391ft	
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	1888	0	1888
Casing		5.5	4.892	17	LTC	HCP110	0	12566	0	7391
Open Hole Section			7.875				1888	12577	1888	7391

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	5.5	1	HES
Float Shoe	5.5			12566	Bottom Plug	5.5	1	HES
Float Collar	5.5			12553	SSR plug set			
Insert Float					Plug Container	5.5	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 and Biocide	60	bbl	10.5	6.96		3		

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	Gasstop B1	GASSTOP (TM) SYSTEM	630	sack	13.2	1.59		6	7.83	
3	EconoCem	ECONOCEM (TM) SYSTEM	500	sack	13.5	1.68		7	7.99	
4	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			8		
5	Biocide Water	Biocide Water	271.2	bbl	8.34			8		
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe		
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		72 °F	
Plug Bumped?		Yes	Bump Pressure:		2,350 psi		Floats Held?		Yes	
<p>Comment There were full returns throughout the job. We bumped the plug at 2,350 psi. at 2 bpm. Final pressure was 2,850. Pressured up the well to 3,000 psi. for a 15 minute casing test. Pressured up to 4,900 psi. to burst the plug. Pumped a 3 bbl. wet shoe at 5 bpm. Check floats. Floats held. Got 2 bbls. of fluid back to the truck. There was no spacer or cement to surface. Estimated Tops are, TOT 7,734', TOL 1,960', and TOS 682'.</p>										

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	8/13/2018	14:30:00	USER	Crew was called out at 14:30 for an on location time of 19:30.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	8/13/2018	17:50:00	USER	Crew held a pre journey safety meeting and JSA.
Event	3	Depart Shop for Location	Depart Shop for Location	8/13/2018	19:20:00	USER	Started journey management with dispatch and left location.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/13/2018	19:40:00	USER	Crew performed a site assessment, safety meeting and hazard hunt on location. Checked in with the customer and discussed the job procedures, rig up and well bore schematics. The rig was running casing.
Event	5	Other	Other	8/13/2018	19:45:00	USER	Well bore: MD: 12,577', TP: 5.5" 17# set at 12,566', FC: 12,553', TVD: 7,391', SC: 9.625" 36# set at 1,888'. OH: 7.875". Mud # 9.4 ppg. Water test: PH: 7, Chlorides: 0, Temp: 72 Degrees.
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/13/2018	19:50:00	USER	The crew held a pre rig up safety meeting and JSA.
Event	7	Rig-Up Equipment	Rig-Up Equipment	8/13/2018	20:00:00	USER	The crew rigged up all lines, hoses and equipment for the job.
Event	8	Safety Meeting	Safety Meeting	8/13/2018	22:30:00	USER	Halliburton cement crew held a pre cement job safety meeting and JSA with third party personnel and rig crew.
Event	9	Start Job	Start Job	8/13/2018	23:04:15	COM5	Pumped 3 bbls. of fresh water at 3 bpm. to fill lines and establish circulation.

Event	10	Test Lines	Test Lines	8/13/2018	23:07:21	COM5	Pressure tested lines to 6,500 psi. with a 500 psi. electronic kick out test.
Event	11	Pump Spacer 1	Pump Spacer 1	8/13/2018	23:25:44	COM5	Pumped 60 bbls. of Tuned Spacer III with surfactants and biocide mixed at 10.5 ppg.,Yield: 6.96 ft3/sks, 44.4 gal/sks. Density was verified by pressurized scales.
Event	12	Drop Bottom Plug	Drop Bottom Plug	8/13/2018	23:46:20	COM5	Halliburton dropped the bottom plug, which was witnessed by the customer.
Event	13	Pump Lead Cement	Pump Lead Cement	8/14/2018	00:14:16	COM5	Pumped 178 bbls. (630 sks.) of Gas stop mixed at 13.2 ppg.,Yield: 1.59 ft3/sks, 7.83 gal/sks. Density was verified by pressurized scales. The pump truck had a difficult time mixing the Gas stop. Half way through the lead cement we had to switch to mixing by hand.
Event	14	Check Weight	Check Weight	8/14/2018	00:49:20	COM5	Cement weighed up at 13.2 ppg. Density was verified by pressurized scales.
Event	15	Pump Tail Cement	Pump Tail Cement	8/14/2018	00:53:31	COM5	Pumped 149 bbls. (500 sks.) of Econocem mixed at 13.5 ppg. Yield: 1.68 ft3/sk, 7.99 gal/sk. Density was verified by pressurized scales.
Event	16	Check Weight	Check Weight	8/14/2018	00:58:33	COM5	Cement weighed up at 13.5 ppg. Density was verified by pressurized scales.
Event	17	Shutdown	Shutdown	8/14/2018	01:17:24	COM5	Shutdown and washed pumps and lines until clean.
Event	18	Drop Top Plug	Drop Top Plug	8/14/2018	01:34:03	COM5	Dropped the top plug, which was witnessed by the customer.
Event	19	Pump Displacement	Pump Displacement	8/14/2018	01:34:06	COM5	Pumped 291.2 bbls. of fresh water with MMCR in the first 20 bbls. Biocide was added throughout the rest of displacement.
Event	20	Displ Reached Cement	Displ Reached Cement	8/14/2018	01:40:09	COM5	44 bbls. into displacment we pressured up indicating that displacment had caught up with cement.

Event	21	Bump Plug	Bump Plug	8/14/2018	02:18:43	COM5	Bumped the plug 500 psi. over 2,350 psi. at 2 bpm. Finale pressure was 2,850 psi. Pressured up to 3,000 psi. for a 15 minute casing test. Pressure held. Circulated no cement or spacer to surface. Estimated TOT is 7,734', TOL 1,960', TOS 682'.
Event	22	Pressure Up Well	Pressure Up Well	8/14/2018	02:37:00	USER	Pressured up the well to 4,900 psi. to burst the plug. Pumped 3 bbls. of fresh water at 5 bpm. for a wet shoe.
Event	23	Check Floats	Check Floats	8/14/2018	02:38:05	USER	Bled off pressrue to check floats and floats held. Got 2 bbls. of fluid back to the truck.
Event	24	End Job	End Job	8/14/2018	02:39:27	COM5	Washed pumps and lines until clean and dry.
Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/14/2018	02:45:00	USER	Halliburton cement crew held a pre rig down safety meeting and JSA.
Event	26	Rig-Down Equipment	Rig-Down Equipment	8/14/2018	02:50:00	USER	Rigged down all lines, hoses and equipment.
Event	27	Safety Meeting - Departing Location	Safety Meeting - Departing Location	8/14/2018	04:30:00	USER	Held a pre journey safety meeting with the crew.
Event	28	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	8/14/2018	04:45:00	USER	Started journey management with dispatch and left location.

3.0 Attachments

3.1 Job Chart

