

## Cementing Treatment



<b>Start Date</b>	3/27/18	<b>Well</b>	G & D HANKS V-27-28HN
<b>End Date</b>	3/27/18	<b>County</b>	WELD
<b>Client</b>	BAYSWATER EXPLORATION & PRODUCTION, LLC	<b>State/Province</b>	CO
<b>Client Field Rep</b>	Gary	<b>API</b>	05-123-46035
<b>Service Supervisor</b>	Eric Dewit	<b>Type of Job</b>	Surface
<b>District</b>	Cheyenne, WY		

### WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Open Hole	13.50			1,563.00	1,563.00	30.00
Casing	8.92	9.63	36.00	1,553.00	1,553.00	

Shoe Length (ft): 46

### HARDWARE

<b>Top Plug Used?</b>	Yes	<b>Max Casing Pressure - Rated (psi)</b>	2816
<b>Top Plug Provided By</b>	Rig	<b>Max Casing Pressure - Operated (psi)</b>	1500
<b>Top Plug Size</b>	9.625	<b>Pipe Movement</b>	None
<b>Centralizers Used</b>	Yes	<b>Job Pumped Through</b>	BJ Cement head
<b>Centralizers Type</b>	Bow Spring	<b>Top Connection Thread</b>	LTC
<b>Landing Collar Depth (ft)</b>	1,507	<b>Top Connection Size</b>	9.625

### CIRCULATION PRIOR TO JOB

<b>Well Circulated By</b>	Rig	<b>Mud Density Out (ppg)</b>	8.5
<b>Circulation Prior to Job</b>	Yes	<b>PV Mud In</b>	3
<b>Circulation Time (min)</b>	30	<b>PV Mud Out</b>	3
<b>Circulation Rate (bpm)</b>	5	<b>YP Mud In</b>	1
<b>Circulation Volume (bbls)</b>	150	<b>YP Mud Out</b>	1
<b>Lost Circulation Prior to Cement Job</b>	No	<b>Solids Present at End of Circulation</b>	No
<b>Mud Density In (ppg)</b>	8.5	<b>Gas Present</b>	No

### TEMPERATURE

<b>Ambient Temperature (°F)</b>	33	<b>Mix Water Temperature (°F)</b>	40
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### BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	Water	8.3337			0.00				20.0000
Lead Slurry	BJCem S100.03.1C	12.0000	2.5298	14.86	0.00	1,050.00	265	667.0000	118.7000
Tail Slurry	BJCem S100.03.1C	12.5000	2.2256	12.59	1,050.00	500.00	150	336.0000	59.8000
Displacement Final	Water	8.3340			0.00			0.0000	116.6000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Water	Fresh Water	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	Foam Preventer, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.03.1C	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Displacement Final	Water	Fresh Water	100.0000	PCT

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### DISPLACEMENT AND END OF JOB SUMMARY

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Displaced By	BJ	Amount of Cement Returned/Reversed	31
Calculated Displacement Volume (bbls)	116.5	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	116.5	Amount of Spacer to Surface	17
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	Yes	Amount Bled Back After Job	0.5
Bump Plug Pressure (psi)	811	Total Volume Pumped (bbls)	316.5
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Yes	Lost Circulation During Cement Job	No



Customer Name Bayswater  
 Well Name G&D Hanks V-27-28HN  
 Job Type Surface

District Cheyenne  
 Supervisor Eric Dewit  
 Engineer \_\_\_\_\_

Seq No.	Start Date/Time	Category	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	3/26/2018 18:00	Mobilization	Callout	1					Customer calls with an O/L time of 4:30. Equipment and personel already on location
2	3/26/2018 23:00	Operational	Safety Meeting	53					Pre-rig up STEACS Briefing
3	3/26/2018 23:10	Operational	Rig Up	50					Rig up the iron on the ground
4	3/26/2018 23:25	StandBy	Customer	85					Waiting on rig to finish running in the hole with casing
5	3/27/2018 0:04	Operational	Rig Up	50					Casing at set depth, rig up head for rig to circulate through
6	3/27/2018 0:20	Operational	Safety Meeting	53					Pre-job safety meeting with the rig crew and company man
7	3/27/2018 0:53	Operational	Start Pumping	55	8.34	2	3	30	Load lines with 3 bbls of fresh water
8	3/27/2018 0:57	Operational	Pressure Test	54	8.34	0	0	2000	Pressure test pumps and lines
9	3/27/2018 1:00	Operational	Pump Spacer	56	8.34	4.7	20	135	Pump 20 bbls of fresh water + Dye
10	3/27/2018 1:03	Operational	Pump Lead Cement	58	12	5.8	118	454	Pump 265 sacks of lead cement @12 ppg (Yield: 2.52 Mix Water: 14.86)
11	3/27/2018 1:22	Operational	Pump Tail Cement	60	12.5	5.8	59	278	Pump 150 sacks of tail cement @12.5 ppg (Yield: 2.22 Mix Water: 12.59)
12	3/27/2018 1:36	Operational	Drop Top Plug	63					Shut down and release top plug
13	3/27/2018 1:41	Operational	Pump Displacement	64	8.34	6	0	195	Send plug start fresh water displacement
14	3/27/2018 1:54	Operational	Spacer Back to Surface	65	8.34	6	68	500	Start getting the dye back to surface
15	3/27/2018 1:56	Operational	Cement Back to Surface	66	8.34	6	85	658	Start getting good cement to surface
16	3/27/2018 2:00	Operational	Other (See comments)	76	8.34	2.4	105	296	Slow pump rate to land the plug
17	3/27/2018 2:04	Operational	Land Plug	67	8.34	2.4	116.5	811	Land the plug @325 psi, Bump up to 811 (31 bbls of cement to surface)
18	3/27/2018 2:06	Operational	Check Floats	68	8.34	0	0	0	Check floats (floats held) .5 bbl back
19	3/27/2018 2:09	Operational	Safety Meeting	53					Pre-rig down safety meeting
20	3/27/2018 2:15	Operational	Rig Down	73					Rig down the iron, water, and bulk on the. Leave the head on the rig floor
21	3/27/2018 3:15	Mobilization	Leave Location						Leave location return back to the yard



JobMaster Program Version 4.02C1  
Job Number: 4192  
Customer: Bayswater  
Well Name: G&D V-27-28HN

