

# Cementing Treatment



<b>Start Date</b>	3/24/18	<b>Well</b>	X-27-28HN G & D HANKS X-27-28HN
<b>End Date</b>	3/24/18	<b>County</b>	WELD
<b>Client</b>	BAYSWATER EXPLORATION & PRODUCTION, LLC	<b>State/Province</b>	CO
<b>Client Field Rep</b>	Mark Stoner	<b>API</b>	05-123-46030
<b>Service Supervisor</b>	Eric Dewit	<b>Formation</b>	
<b>Field Ticket No.</b>		<b>Rig</b>	True 38
<b>District</b>	Cheyenne, WY	<b>Type of Job</b>	Surface

## WELL GEOMETRY

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Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Casing	8.92	9.63	36.00	1,552.00	1,552.00	
Open Hole	13.50			1,563.00	1,563.00	30.00

**Shoe Length (ft):** 46

## HARDWARE

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<b>Bottom Plug Used?</b>	No	<b>Max Casing Pressure - Rated (psi)</b>	2816
<b>Top Plug Used?</b>	Yes	<b>Max Casing Pressure - Operated (psi)</b>	2000
<b>Top Plug Provided By</b>	Rig	<b>Pipe Movement</b>	None
<b>Top Plug Size</b>	9.625	<b>Job Pumped Through</b>	BJ Cement head
<b>Centralizers Used</b>	Yes	<b>Top Connection Thread</b>	LTC
<b>Centralizers Type</b>	Bow Spring	<b>Top Connection Size</b>	8.625
<b>Landing Collar Depth (ft)</b>	1,507		

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## CIRCULATION PRIOR TO JOB

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Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	Flare Prior to/during the Cement Job	No
Circulation Time (min)	30	Gas Present	No
Circulation Rate (bpm)	5		
Circulation Volume (bbls)	150		
Lost Circulation Prior to Cement Job	No		
Mud Density In (ppg)	8.5		
Mud Density Out (ppg)	8.5		

## TEMPERATURE

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Ambient Temperature (°F)	63
Mix Water Temperature (°F)	50

## BJ FLUID DETAILS

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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	8.3300			0.00			0.0000	116.6000

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

## TREATMENT SUMMARY

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	Min	Max
Pressure (psi)	88	564
Rate (bpm)	2.5	6

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## DISPLACEMENT AND END OF JOB SUMMARY

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<b>Displaced By</b>	BJ	<b>Amount of Cement Returned/Reversed</b>	35
<b>Calculated Displacement Volume (bbls)</b>	116.5	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Volume (bbls)</b>	116.5	<b>Amount of Spacer to Surface</b>	11
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0
<b>Bump Plug</b>	Yes	<b>Amount Bled Back After Job</b>	.5
<b>Bump Plug Pressure (psi)</b>	842	<b>Total Volume Pumped (bbls)</b>	353.5
<b>Were Returns Planned at Surface</b>	Yes	<b>Top Out Cement Spotted</b>	No
<b>Cement returns During Job</b>	Yes	<b>Lost Circulation During Cement Job</b>	No

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

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



Seq No.	Start Date/Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	3/24/2018 6:30	Mobilization	Callout		1					Customer calls with an O/L time of 12:30
2	3/24/2018 9:44	Mobilization								Leave yard and travel to location
3	3/24/2018 10:35	Mobilization	Arrive on Location		48					Arrive on location (rig is running in the hole with casing)
4	3/24/2018 10:40	Operational	Safety Meeting		53					Have a STEACS briefing with crew before spotting equipment on location
5	3/24/2018 10:50	Operational	Spot Units		49					Spot trucks on location
6	3/24/2018 10:55	Operational	Rig Up		50					Rig up everything up to the cat walk of the rig
7	3/24/2018 11:45	StandBy	Other (See comment)		82					Waiting on the rig to finish running in the hole
8	3/24/2018 13:24	Operational	Rig Up		50					Rig up cement head for rig to circulate, and finish rigging up to the floor
9	3/24/2018 13:53	Operational	Safety Meeting		53					Have a pre-job safety meeting with the rig crew and the company man
10	3/24/2018 14:07	Operational	Rig Up		50					Rig up our line to the cement head
11	3/24/2018 14:13	Operational	Start Pumping		55	8.34	2	3	0	Load lines with 3 bbls of fresh water
12	3/24/2018 14:15	Operational	Pressure Test		54	8.34	0	0	2300	Pressure test pumps and lines
13	3/24/2018 14:18	Operational	Pump Spacer		56	8.34	4.5	20	88	Pump 20 bbls of fresh water + Dye
14	3/24/2018 14:22	Operational	Pump Lead Cement		58	12	5.8	118	564	Pump 265 sacks of lead cement @12 ppg (Yield: 2.52 Mix Water: 14.86)
15	3/24/2018 14:42	Operational	Pump Tail Cement		60	12.5	5.8	59	213	Pump 150 sacks of tail cement @12.5 ppg (Yield: 2.22 Mix Water: 12.59)
16	3/24/2018 14:52	Operational	Drop Top Plug		63					Shut down and drop the top plug
17	3/24/2018 14:57	Operational	Pump Displacement		64	8.34	6	0	140	Wash up on top of the plug and start fresh water displacement
18	3/24/2018 15:10	Operational	Spacer Back to Surface		65	8.34	6	70	375	Start getting Dye to surface
19	3/24/2018 15:12	Operational	Cement Back to Surface		66	8.34	6	81	420	Start getting good cement to surface
20	3/24/2018 15:16	Operational	Other (See comments)		76	8.34	2.4	105	262	Slow pump rate to land the plug
21	3/24/2018 15:21	Operational	Land Plug		67	8.34	2.4	116.5	842	Land plug @301 psi, Bump up to 842 psi (35 bbls of cement to surface)
22	3/24/2018 15:31	Operational	Check Floats		68	8.34	0	0	0	Check floats (floats held) .5 bbls back
23	3/24/2018 15:35	Operational	Safety Meeting		53					Pre-rig down safety meeting
24	3/24/2018 15:45	Operational	Rig Down		73					Rig down the floor and the iron at the bottom of the cat walk. Leave everthing else rigged up for the next job
25	3/24/2018 16:00	Operational								Done rigging down.



JobMaster Program Version 4.02C1

Job Number: 4130

Customer: Bayswater

Well Name: G&D X-37-28HN

