

Cementing Treatment



Start Date	5/7/18	Well	V-27-28HN G & D HANKS V-27-28HN
End Date	5/7/18	County	WELD
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	State/Province	CO
Client Field Rep	Marsh	API	05-123-46035
Service Supervisor	C Johnson	Type of Job	Long String
District	Cheyenne, WY		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Open Hole	8.50			18,169.00	7,206.00	5.00
Casing	4.78	5.50	20.00	18,157.00	7,206.00	
Previous Casing	8.92	9.63	36.00	1,553.00	1,553.00	

Shoe Length (ft): 28

HARDWARE

Top Plug Used?	Yes	Centralizers Type	Bow spring
Top Plug Provided By	Bayswater	Landing Collar Depth (ft)	18,132
Top Plug Size	5.5	Job Pumped Through	Cement Head
Centralizers Used	Yes	Top Connection Thread	BTC
Centralizers Quantity	233	Top Connection Size	5.5"

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud Out	7
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	10 sec SGS	5
Mud Density In (ppg)	9.6	10 min SGS	8
Mud Density Out (ppg)	9.6	30 min SGS	11
PV Mud In	11	Flare Prior to/during the Cement Job	No
PV Mud Out	11	Gas Present	No
YP Mud In	7		

TEMPERATURE

Ambient Temperature (°F)	80	Mix Water Temperature (°F)	60
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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	IntegraGuard EZ Spacer	11.5000			0.00				80.0000
Lead Slurry	BJCem P100.3.01C	13.2000	1.8254	9.88	0.00	6,975.00	950	1,722.0000	306.7000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	6,975.00	11,198.00	1,830	2,699.0000	480.6000
Displacement 1	GW-3LF Pill	8.3300			17,681.00			0.0000	10.0000
Displacement 2	Retarded Water w/ Clay Protection & Biocide	8.3331				0.00	0	0.0000	20.0000
Displacement Final	Water w/ Clay Protection & Biocide	8.3331			0.00			0.0000	372.1000

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Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.9000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-267	0.7000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	215.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	Spacer Surfactant, SS-247	0.7000	GPB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	Foam Preventer, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	BONDING AGENT, EC-2	3.0000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, R-31	0.1700	BWOB
Lead Slurry	BJCem P100.3.01C	GELLANT WATER, GW-86	0.0500	BWOB
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	GELLANT WATER, GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1500	BWOB
Displacement 1	GW-3LF Pill	GELLANT WATER, GW-3LF	0.7500	GPB
Displacement 1	GW-3LF Pill	RETARDER, R-8L	0.5000	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, R-8L	0.5000	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement Final	Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water w/ Clay Protection & Biocide	CLAY STABILIZER ResCare CS	0.0800	GPB

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TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
IntegraGuard EZ Spacer	3.00	80.00
BJCem P100.3.01C	6.00	310.00
BJCem P50.6.02C	6.00	482.00
GW-3LF Pill	5.00	10.00
Retarded Water w/ Clay Protection & Biocide	8.00	20.00
Water w/ Clay Protection & Biocide	8.00	370.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	50
Calculated Displacement Volume (bbls)	403	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	413	Amount of Spacer to Surface	80
Did Float Hold?	Yes	Amount Bled Back After Job	4
Were Returns Planned at Surface	Yes	Total Volume Pumped (bbls)	1272
Cement returns During Job	Yes	Top Out Cement Spotted	No
		Lost Circulation During Cement Job	No

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

District Cheyenne
 Supervisor C. Johnson
 Engineer _____



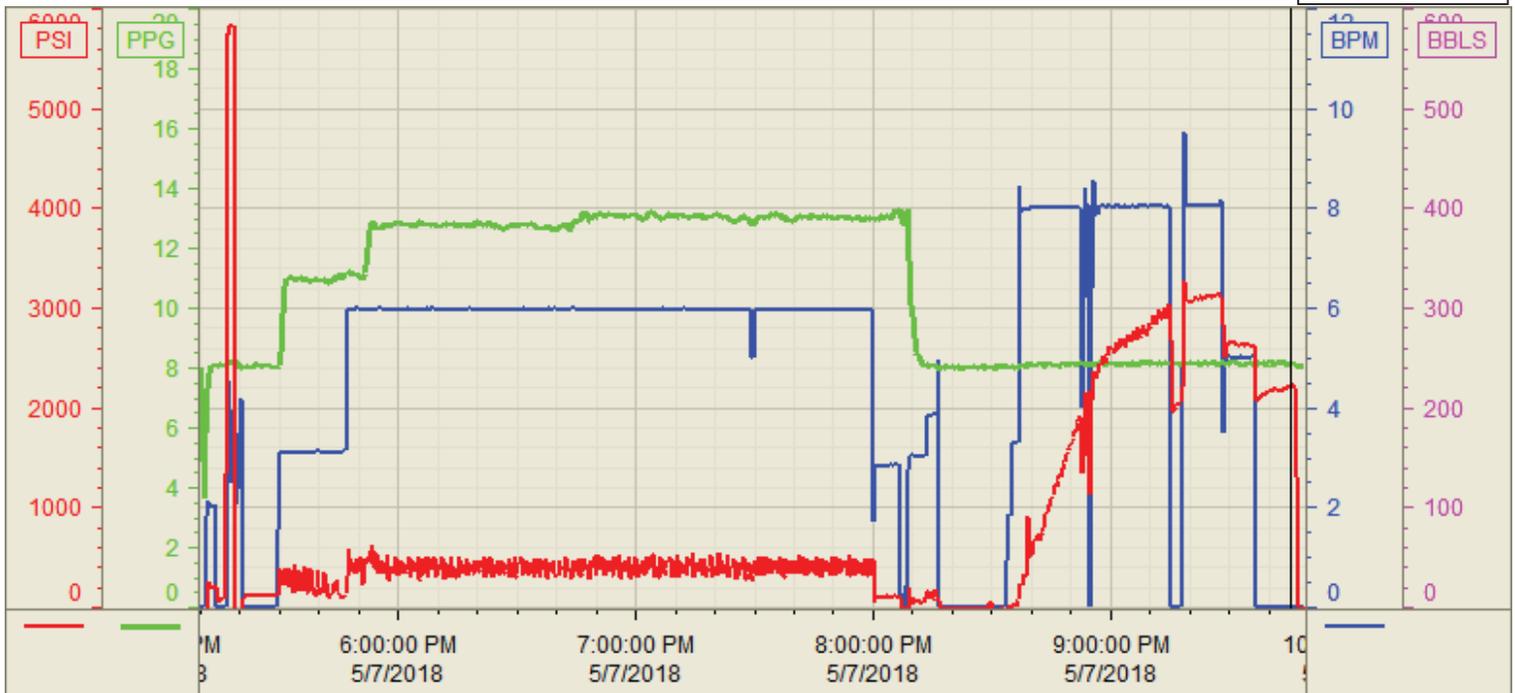
Seq No.	Start Date/Time	Category	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	5/7/18 0800	Mobilization	Callout	1					Crew called out requested on location at 1400
2	5/7/18 1200	Mobilization	Callout	1					Crew arrived on location
3	5/7/18 1215	Operational	Safety Meeting	53					Safety meeting
4	5/7/18 1230	Operational	Spot Units	49					Spotted all units
5	5/7/18 1245	Operational	Rig Up	50					Rigged up all units
6	5/7/18 1700	Operational	Safety Meeting	53					Safety meeting
7	5/7/18 1719	Operational	Prime Up	52	8.34	2	5	250	Fill lines with 5 bbls fresh water
8	5/7/18 1723	Operational	Pressure Test	54					Pressure test lines to 5000 psi
9	5/7/18 1736	Operational	Pump Spacer	56	11.5	3	80	250	Pump 80 bbls spacer at 11.5 ppg
10	5/7/18 1759	Operational	Pump Lead Cement	58	13.2	6	310	450	Pump 310 bbls lead cement at 13.2 ppg (950 sks, 1.83 Y, 9.88 gal/sk)
11	5/7/18 1852	Operational	Pump Tail Cement	60	13.5	6	482	400	Pump 482 bbls tail cement at 13.5 ppg (1830 sks, 1.48 Y, 7.45 gal/sk)
12	5/7/18 2014	Operational	Other (See comments)	76					Shutdown
13	5/7/18 2015	Operational	Clean Pumps and Lines	62					Wash pumps and lines to the pit
14	5/7/18 2040	Operational	Drop Top Plug	63					Drop top plug
15	5/7/18 2041	Operational	Pump Displacement	64	8.34	8	370	1300	Pump 403 bbls water displacement
16	5/7/18 2121	Operational	Spacer Back to Surface	65					Spacer back to surface at 271 bbls away, 80 bbls spacer to surface
17	5/7/18 2131	Operational	Cement Back to Surface	66					Cement back to surface at 351 bbls away, 50 bbls cement to surface
18	5/7/18 2137	Operational	Other (See comments)	76	8.34	5	43	2600	Slow pump rate at 370 bbls away to 3 bpm
19	5/7/18 2144	Operational	Other (See comments)	76					Plug did not land, Shutdown at 413 bbls away as per customer
20	5/7/18 2154	Operational	Check Floats	68					Check floats, floats holding, 4 bbls back
21	5/7/18 2200	Operational	Safety Meeting	53					Safety meeting
22	5/7/18 2215	Operational	Rig Down	73					Rigged down all equipment
23	5/7/18 2359	Mobilization	Leave Location	74					Crew departed location

Customer: Bayswater
 Well Number: V-27-28HN
 Lease Info: G & D Hanks



Print Date/Time

5/7/2018 10:16:46 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	2212.5	5/7/2018 9:45:29 PM	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.11 i.	5/7/2018 9:45:30 PM i.	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate (BPM)	0.00 i.	5/7/2018 9:45:30 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 10:16:41 PM