

Cementing Treatment



Start Date	6/15/18	Field Ticket#	07666-S8R6R50202-87177
End Date	6/15/18	Well	Thornton A-29-30HN
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	API#	05-123-43605
Client Field Rep.	Scott	County	WELD
Service Sup.	C. Johnson	State/Province	CO
District	Cheyenne, WY	Execution ID	EXC-07666-S8R6R502
Type of Job	Long String	Project ID	PRJ1007696

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	8.92	9.63	36.00	1,552.00	1,552.00	
Open Hole	8.50			17,788.00	7,213.00	10.00
Casing	4.78	5.50	20.00	17,778.00	7,213.00	

Shoe Length (ft): 26

HARDWARE

Top Plug Used?	Yes	Landing Collar Depth (ft)	17,752
Top Plug Provided By	BJ	Job Pumped Through	Cement head
Top Plug Size	5.5"	Top Connection Thread	BTC
Centralizers Used	Yes	Top Connection Size	5.5"
Centralizers Quantity	205		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	10
Circulation Prior to Job	Yes	YP Mud Out	10
Circulation Time (min)	150	Solids Present at End of Circulation	No
Lost Circulation Prior to Cement Job	No	10 sec SGS	10
Mud Density In (ppg)	10	10 min SGS	17
Mud Density Out (ppg)	10	30 min SGS	20
PV Mud In	22	Flare Prior to/during the Cement Job	No
PV Mud Out	22	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	95	Mix Water Temperature (°F)	65
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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	980	1,785.0000	317.7000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	6,975.00	11,345.00	1,950	2,864.0000	510.1000
Displacement 1	GW-86 Pill	8.3300			17,828.00			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	375.4000

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Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	215.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.9000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-6	1.4000	GPB
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	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	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	GELLANT WATER, GW-86	0.0500	BWOB
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	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	GELLANT WATER, GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1500	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Displacement 1	GW-86 Pill	GELLANT WATER, GW-86	2.5000	PPB
Displacement 1	GW-86 Pill	RETARDER, R-8L	0.5000	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 2	Retarded Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	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	319.00
BJCem P50.6.02C	6.00	514.00
GW-86 Pill	0.00	0.00
Retarded Water w/ Clay Protection & Biocide	8.00	30.00
Water w/ Clay Protection & Biocide	8.00	364.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	100
Calculated Displacement Volume (bbls)	394	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	394	Amount of Spacer to Surface	80
Did Float Hold?	Yes	Amount Bled Back After Job	4.5
Bump Plug	Yes	Total Volume Pumped (bbls)	1307
Bump Plug Pressure (psi)	2500	Top Out Cement Spotted	No
Were Returns Planned at Surface	Yes	Lost Circulation During Cement Job	No
Cement returns During Job	Yes		

Event Log



Customer Name: BAYSWATER EXPLORATION & PRODUCTION,
Well Name: Thornton A-29-30HN
Job Type: Long String
TMD (ft): _____

District: Cheyenne, WY
Field Leader: Chad Johnson
Quote ID: QUO-13434-P8Y6G2
Plan ID: ORD-07666-S8R6R5
Execution ID: EXC-07666-S8R6R502

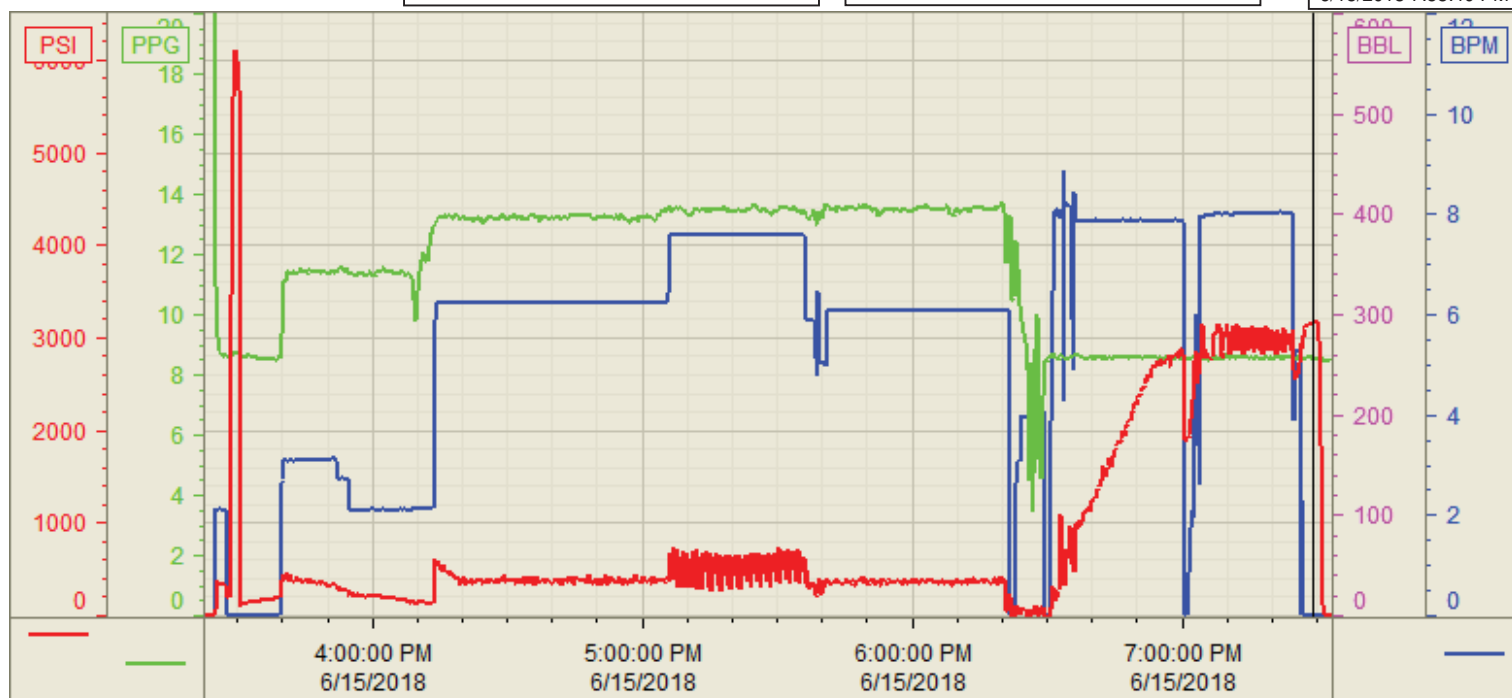
Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	06/15/2018 05:30	Callout					Crew called out requested on location at 1200
2	06/15/2018 10:00	Arrive on Location					Crew arrived on location
3	06/15/2018 10:05	Safety Meeting					Safety meeting
4	06/15/2018 10:20	Spot Units					Spotted all units
5	06/15/2018 10:25	Rig Up					Rigged up all equipment
6	06/15/2018 11:45	Customer					Waiting on customer to finish running casing and circulate the well
7	06/15/2018 15:15	Safety Meeting					Safety meeting
8	06/15/2018 15:40	Prime Up	8.3400	2.00	5.00	450.00	Fill lines with 5 bbls fresh water
9	06/15/2018 15:43	Pressure Test					Pressure test lines to 6000 psi
10	06/15/2018 15:54	Pump Spacer	11.5000	3.00	80.00	450.00	Pump 80 bbls spacer at 11.5 ppg
11	06/15/2018 16:28	Pump Lead Cement	13.2000	6.00	319.00	600.00	Pump 319 bbls lead cement at 13.2 ppg (980 sks, 1.83 Y, 9.88 gal/sk)
12	06/15/2018 17:04	Pump Tail Cement	13.5000	6.00	514.00	400.00	Pump 514 bbls tail cement at 13.5 ppg (1950 sks, 1.48 Y, 7.45 gal/sk)
13	06/15/2018 18:37	Other (See comment)					Shutdown
14	06/15/2018 18:38	Clean Pumps and Lines					Clean pumps and lines to pit
15	06/15/2018 18:44	Drop Top Plug					Drop third party top plug
16	06/15/2018 18:45	Pump Displacement	8.3400	8.00	30.00	500.00	Pump 30 bbls water displacement W/ R-8L
17	06/15/2018 18:48	Pump Displacement	8.3400	8.00	364.00	3,000.00	Pump 364 bbls water displacement W/ biocide and rescare
18	06/15/2018 19:17	Spacer Back to Surface					Spacer back to surface at 214 bbls away, 80 bbls spacer to surface
19	06/15/2018 19:28	Cement Back to Surface					Cement back to surface at 294 bbls away, 100 bbls of cement back to surface
20	06/15/2018 19:40	Other (See comment)	8.3400	5.00		2,500.00	Slow pump rate to 5 bpm at 380 bbls away
21	06/15/2018 19:43	Land Plug					Land plug at 2500 psi took to 3000 psi
22	06/15/2018 19:46	Check Floats					Check floats, floats holding, 4.5 bbls back
23	06/15/2018 20:00	Safety Meeting					Safety meeting
24	06/15/2018 20:15	Rig Down					Rigged down all equipment
25	06/15/2018 21:45	Leave Location					Crew departed location

Customer: BAYSWATER
Well Number: A-29-30HN
Lease Info: THORTON



Print Date/Time

6/15/2018 7:58:40 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	3151.7	6/15/2018 7:29:07 PM	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.55 i.	6/15/2018 7:29:04 PM i.	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00 i.	6/15/2018 7:29:04 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 7:58:34 PM