

Cementing Treatment



Start Date	5/29/18	Project ID	PRJ1007073
End Date	5/29/18	Field Ticket#	FT-07061-X1L3Q40202-77915
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	Well	G & D HANKS X-27-28HN
Service Sup.	C. Johnson	API#	05-123-46030
District	Cheyenne, WY	County	WELD
Type of Job	Long String	State/Province	CO
Execution ID	EXC-07061-X1L3Q402	Rig	True Rig 38

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			18,352.00	7,291.00	10.00
Casing	4.78	5.50	20.00	18,330.00	7,291.00	

Shoe Length (ft): 23

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	18,307
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	12640
Top Plug Provided By	Bayswater	Max Casing Pressure - Operated (psi)	4000
Top Plug Size	5.5	Pipe Movement	No
Centralizers Used	Yes	Job Pumped Through	Head and manifold
Centralizers Quantity	225	Top Connection Thread	Butt
Centralizers Type	solid	Top Connection Size	5.5"

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	10 sec SGS	8
Circulation Time (min)	2hrs	10 min SGS	13
Lost Circulation Prior to Cement Job	No	30 min SGS	16
Mud Density In (ppg)	10.1	Flare Prior to/during the Cement Job	No
PV Mud In	26	Gas Present	No
PV Mud Out	26		
YP Mud In	10		
YP Mud Out	10		

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TEMPERATURE

Ambient Temperature (°F)	71	Flow Line Temperature (°F)	130
Mix Water Temperature (°F)	68		

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	7,000.00	1075	1,957.0000	348.4000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	7,000.00	11,320.00	1,850	2,728.0000	484.3000
Displacement 1	GW-86 Pill	8.3300			17,828.00				10.0000
Displacement 2	Retarded Water w/ Clay Protection & Biocide	8.3331							20.0000
Displacement Final	Water w/ Clay Protection & Biocide	8.3331			0.00				375.9000

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-247	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	GELLANT WATER, GW-86	0.9000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SPACER SURFACTANT, SS-267	0.7000	GPB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	GELLANT WATER, GW-86	0.0500	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	FLUID LOSS, FL-66	0.5000	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	GELLANT WATER, GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB

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Fluid Type	Fluid Name	Component	Concentration	UOM
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1500	BWOB
Displacement 1	GW-86 Pill	RETARDER, R-8L	0.5000	GPB
Displacement 1	GW-86 Pill	GELLANT WATER, GW-86	2.5000	PPB
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

TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
IntegraGuard EZ Spacer	5.00	80.00	420
BJCem P100.3.01C	6.00	348.40	581
BJCem P50.6.02C	6.00	484.30	400
GW-86 Pill	6.00	10.00	1000
Retarded Water w/ Clay Protection & Biocide	8.00	20.00	1000
Water w/ Clay Protection & Biocide	8.00	375.90	1000

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	70
Calculated Displacement Volume (bbls)	406	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	416	Amount of Spacer to Surface	80
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0
Bump Plug	No	Amount Bled Back After Job	3.5
Were Returns Planned at Surface	Yes	Total Volume Pumped (bbls)	1318
Cement returns During Job	Yes	Top Out Cement Spotted	No
		Lost Circulation During Cement Job	No

Customer Name Bayswater
 Well Name G&D hanks X-27-28HN
 Job Type Long String

District Cheyenne
 Supervisor Travis Tolman

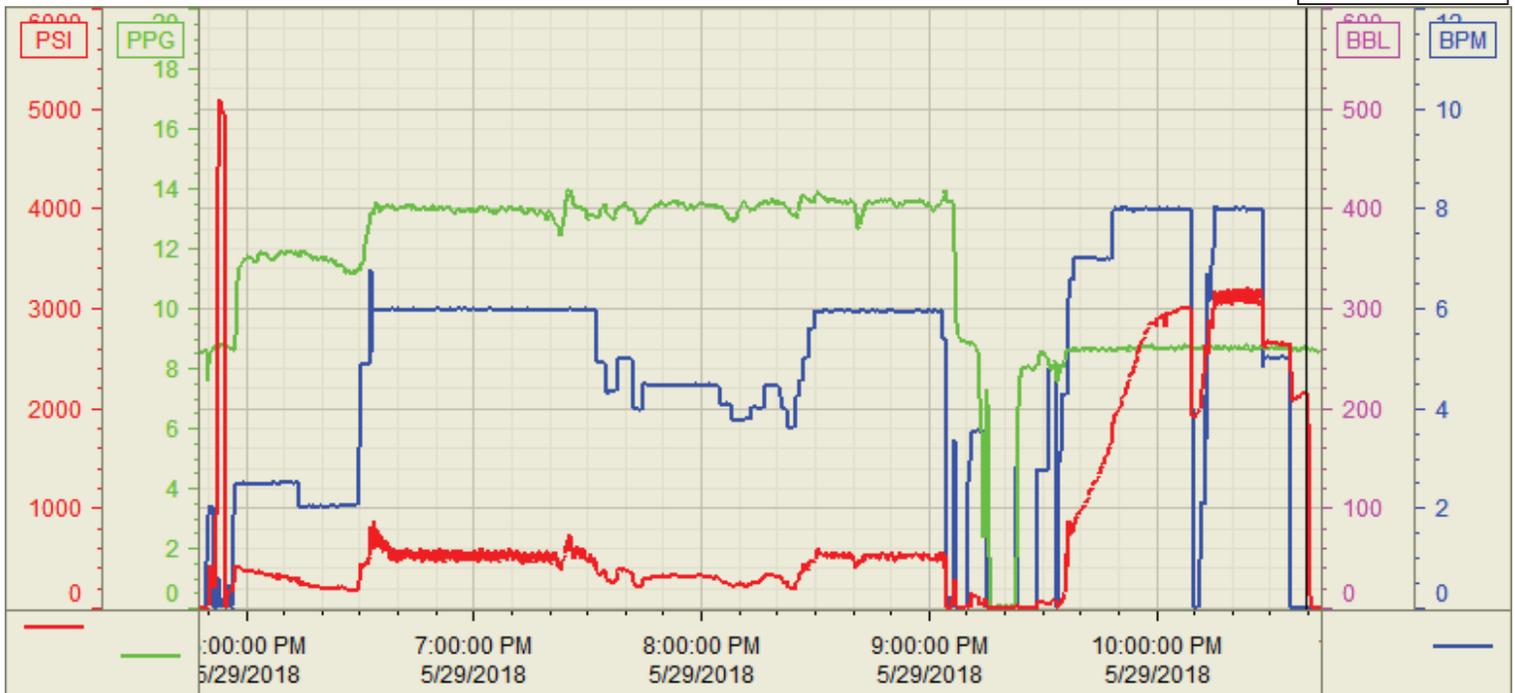


Start Date/Time	Category	Event	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
5/29/18 0900	Mobilization	Callout	1					Crew called out for RTS of 1500, pre-trip trucks ready for job.
5/29/18 1323	Mobilization	Leave Location	74					Crew left yard heading to location
5/29/18 1450	Mobilization	Arrive on Location	48					Crew arrived on location, rig circulating, casing done. Met with company man to get numbers discuss job and safety issues.
5/29/18 1457	Operational	Spot Units	49					Spotted trucks
5/29/18 1500	Operational	Safety Meeting	53					Held safety meeting with crew to discuss rig up tasks and safety
5/29/18 1515	Operational	Rig Up	50					Rigged up from trucks to rig floor
5/29/18 1720	Operational	Safety Meeting	53					Held safety meeting with company man, rig crew and crew to discuss job and safety issues.
5/29/18 1749	Operational	Start Pumping	55	8.3	2	3	230	Loaded pump and lines for pressure test
5/29/18 1751	Operational	Pressure Test	54				5200	Pressure test pump and lines
5/29/18 1756	Operational	Pump Spacer	56	11.5	2	80	420	Pump 11.5# spacer with adds
5/29/18 1830	Operational	Pump Lead Cement	58	13.2	6	348	581	Pump 1075sks/348.4bbls of 13.2#-1.82Y-9.88gps.
5/29/18 1930	Operational	Pump Tail Cement	60	13.5	6	484	400	Pump 1850 sks/484 bbls of 13.5#-1.48Y-7.45gps.
5/29/18 2119	Operational	Other (See comments)	76					Shutdown
5/29/18 2120	Operational	Clean Pumps and Lines	62					Wash pumps and lines
5/29/18 2137	Operational	Drop Top Plug	63					Drop third party plug
5/29/18 2140	Operational	Pump Displacement	64	8.34	8	380	1000	Pump 406 bbls water displacement w/ additives
5/29/18 2224	Operational	Spacer Back to Surface	65					Spacer back to surface at 266 bbls away, 80 bbls spacer to surface
5/29/18 2238	Operational	Cement Back to Surface	66					Cement back to surface at 346 bbls away, 70 bbls cement to surface
5/29/18 2250	Operational	Other (See comments)	76	8.34	5	36	2800	Slow pump rate to 5 bpm at 380 bbls away
5/29/18 2253	Operational	Other (See comments)	76					Plug did not land pumped a total of 416 bbls displacement, calculated displacement was 406 bbls
5/29/18 2310	Operational	Check Floats	68					Check floats, floats holding, 3.5 bbls back
5/29/18 2325	Operational	Safety Meeting	53					Safety meeting
5/29/18 2340	Operational	Rig Down	73					Rigged down all equipment
5/30/18 0100	Mobilization	Leave Location	74					Crew departed location

Customer: Bayswater
 Well Number: 27-28HN
 Lease Info: G&DHanks X



Print Date/Time
 5/29/2018 11:07:26 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	2163.0	5/29/2018 10:39:17 PM	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.68 i.	5/29/2018 10:39:11 PM i.	Cementer\DENSITY2_ACTUAL_RATE
3	Combined Rate	0.00 i.	5/29/2018 10:39:11 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 11:07:21 PM