

Cementing Treatment



Start Date	8/14/2018	Well	KTC FARMS F-35-36HN
End Date	8/14/2018	API#	05-123-47084
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	County	WELD
Service Sup.	Wesley Bell	State/Province	CO
District	Cheyenne, WY	Rig	True 38
Type of Job	Long String	Execution ID	EXC-09814-Y4T4W102

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	8.92	9.63	36.00	1,545.00	1,545.00	
Open Hole	8.50	0.00	0.00	17,524.00	7,246.00	7.00
Casing	4.78	5.50	20.00	17,511.00	7,246.00	

Shoe Length (ft): 42.00

HARDWARE

Top Plug Used?	Yes	Landing Collar Depth (ft)	17,454
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	12,630.00
Top Plug Size	5.500	Max Casing Pressure - Operated (psi)	2,800.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	210.00	Top Connection Thread	BTC
Centralizers Type	Bow	Top Connection Size	5.5"

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	17
Circulation Prior to Job	Yes	YP Mud In	9
Circulation Time (min)	250.00	YP Mud Out	9
Circulation Rate (bpm)	10.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	2,400.00	10 sec SGS	9.00
Lost Circulation Prior to Cement Job	No	10 min SGS	14.00
Mud Density In (ppg)	9.00	30 min SGS	16.00
Mud Density Out (ppg)	9.00	Flare Prior to/during the Cement Job	No
PV Mud In	17	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	85.00	Slurry Cement Temperature (°F)	80.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	160.00

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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			1.00				80.0000
Lead Slurry	BJCem P100.3.01C	13.2000	1.8283	9.87	1.00	6750	930	1,692.0000	303.1000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	5,896.00	10746	1800	2,640.0000	474.0000
Displacement 2	Retarded Water w/ Clay Protection & Biocide	8.3331				0	0	0.0000	20.0000
Displacement Final	Water w/ Clay Protection & Biocide	8.3331			0.00			0.0000	363.0000

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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	SPACER SURFACTANT, SS-267	0.7000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.9000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	SAND, S-8, Silica Flour, 200 Mesh	215.0000	PPB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	BONDING AGENT, EC-2	3.0000	BWOB
Lead Slurry	BJCem P100.3.01C	GELLANT WATER, GW-86	0.0500	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.6000	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	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1500	BWOB
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	GELLANT WATER, GW-86	0.1000	BWOB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, R-8L	0.5000	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water w/ Clay Protection & Biocide	CLAY STABILIZER ResCare CS	0.0800	GPB
Displacement Final	Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB

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TREATMENT SUMMARY

Fluid	Rate (bpm)	Fluid Vol. (bbls)
IntegraGuard EZ Spacer	3.5	80.00
BJCem P100.3.01C	5.0	303.10
BJCem P50.6.02C	6.2	474.00
Retarded Water w/ Clay Protection & Biocide	8.0	20.00
Water w/ Clay Protection & Biocide	8.0	363.10

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ Services	Amount of Cement Returned/Reversed	23.00
Calculated Displacement Volume (bbls)	388.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	383.00	Amount of Spacer to Surface	23.00
Did Float Hold?	Yes	Amount Bled Back After Job	23.00
Bump Plug	Yes	Total Volume Pumped (bbls)	1,240.1
Bump Plug Pressure (psi)	2,800.00	Top Out Cement Spotted	No
Were Returns Planned at Surface	Yes	Lost Circulation During Cement Job	No
Cement returns During Job	Full		

EVENT LOG



Customer Name: BAYSWATER EXPLORATION &
PRODUCTION, LLC

Well Name: KTC FARMS F-35-36HN

Job Type: Long String

Quote ID: QUO-17252-W2P4G5

Plan ID: ORD-09814-Y4T4W1

Execution ID: EXC-09814-Y4T4W102

District: Cheyenne, WY

BJ Supervisor: Wesley Bell

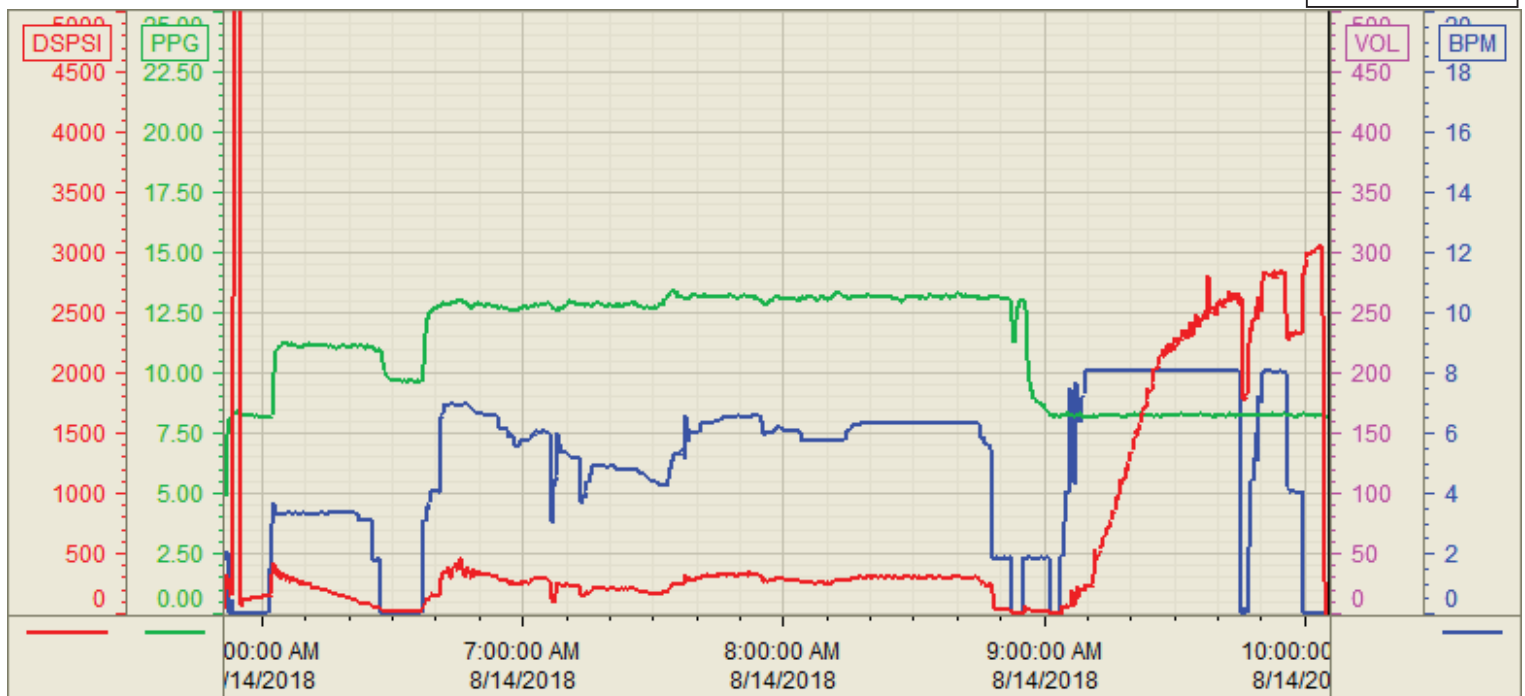
Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	08/14/2018 04:30	Arrive on Location					
2	08/14/2018 04:35	Rig Up					Spot and rig in all BJ equipment
3	08/14/2018 05:40	Safety Meeting					Hold STEACS briefing with rig crew and pump crew. Review job procedures and job hazards
4	08/14/2018 06:01	Pressure Test	8.3400	2.00	2.00	5,600.00	Pressure test lines with fresh water.
5	08/14/2018 06:12	Pump Spacer	11.5000	3.50	80.00	500.00	Pump 80bbls of Spacer at 11.4ppg+surfactants
6	08/14/2018 06:47	Pump Lead Cement	13.2000	5.00	303.10	300.00	Pump 303.1bbls of Lead Cement at 13.2ppg, 930sk, Y: 1.828, WR: 9.87
7	08/14/2018 07:42	Pump Tail Cement	13.5000	6.20	474.00	250.00	Pump 474bbls of Tail cement at 13.5ppg, 1800sk, Y: 1.477, WR: 7.45. Top of Tail at 5896'
8	08/14/2018 09:01	Clean Pumps and Lines					clean pumps and lines to rig tank, load 5.5" latch down plug into PLH
9	08/14/2018 09:12	Drop Top Plug	8.3400	8.00	20.00	350.00	Drop latch down plug, pump 20bbls with R8L in fresh water
10	08/14/2018 09:27	Pump Displacement	8.3400	8.00	80.00	1,100.00	100bbls of displacement away +Clay control and Biocide
11	08/14/2018 09:40	Pump Displacement	8.3400	8.00	100.00	2,100.00	200bbls of displacement away
12	08/14/2018 09:52	Pump Displacement	8.3400	8.00	100.00	2,400.00	300bbls of displacement away
13	08/14/2018 10:02	Pump Displacement	8.3400	8.00	50.00	2,700.00	350bbls of displacement away. Diverted returns at 307away
14	08/14/2018 10:05	Pump Displacement	8.3400	4.00	20.00	2,000.00	370bbls of displacement away. Cement to surface at 360bbls away, 23bbls to surface
15	08/14/2018 10:08	Land Plug	8.3400	4.00	23.00	2,200.00	383bbls of displacement away, land plug, bump to 2800psi
16	08/14/2018 10:12	Check Floats	8.3400				Floats held, 4bbls back to truck.
17	08/14/2018 10:15	Rig Down					Rig down all BJ equipment
18	08/14/2018 12:00	Leave Location					

Customer: Bayswater
Well Number: F-35-36HN
Lease Info: KTC Farms



Print Date/Time

8/14/2018 11:01:42 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press(PSI)	-15.8 i.	8/14/2018 10:05:30 AM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.20	8/14/2018 10:05:32 AM	Cementer\DENSITY2_ACTUAL_RATE
3	Combined rate (BPM)	0.00	8/14/2018 10:05:32 AM	Cementer\Flow_Combined
4				
5				

Source: Control1 11:01:37 AM