

Cementing Treatment



Start Date	10/1/2018	Well	KTC FARMS A-35-36HN
End Date	10/1/2018	API#	05-123-47272
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	Project ID	PRJ1011312
Execution ID	EXC-11504-V1R4B302		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)
Previous Casing	8.92	9.63	36.00	1,555.00	1,555.00	
Open Hole	8.50	0.00	0.00	17,307.00	7,175.00	7.00
Casing	4.78	5.50	20.00	17,295.00	7,175.00	

Shoe Length (ft): 26.00

HARDWARE

Top Plug Used?	Yes	Tool Type	Float Collar
Top Plug Provided By	Non BJ	Tool Depth (ft)	17,269.00
Top Plug Size	5.500	Max Casing Pressure - Rated (psi)	12,360.00
Centralizers Used	Yes	Max Casing Pressure - Operated (psi)	3,200.00
Centralizers Quantity	210.00	Pipe Movement	None
Centralizers Type	Bow	Top Connection Thread	BTC
Landing Collar Depth (ft)	17,269	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	18
Circulation Prior to Job	Yes	YP Mud In	9
Circulation Time (min)	150.00	YP Mud Out	9
Circulation Rate (bpm)	13.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	1,950.00	10 sec SGS	10.00
Lost Circulation Prior to Cement Job	No	10 min SGS	15.00
Mud Density In (ppg)	10.00	30 min SGS	17.00
Mud Density Out (ppg)	10.00	Flare Prior to/during the Cement Job	No
PV Mud In	18	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	60.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	65.00	Flow Line Temperature (°F)	110.00

Cementing Treatment



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	1.8298	9.87	0.00	6700	920	1,680.0000	299.1000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	5,901.00	10602	1770	2,604.0000	463.7000
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	363.4000

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	SPACER SURFACTANT, SS-267	0.7000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer	GELLANT WATER, GW-86	0.9000	PPB
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	GELLANT WATER, GW-86	0.0500	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.8000	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
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	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	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	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
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 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, R-8L	0.5000	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

Cementing Treatment



DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ Services	Amount of Cement Returned/Reversed	30.00
Calculated Displacement Volume (bbls)	383.40	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	380.00	Amount of Spacer to Surface	80.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	4.50
Bump Plug Pressure (psi)	3,200.00	Total Volume Pumped (bbls)	1,228.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

EVENT LOG



Customer Name: BAYSWATER EXPLORATION & PRODUCTION, LLC

Well Name: KTC FARMS A-35-36HN

Job Type: Long String

Quote ID: QUO-20103-N6K6Q4

Plan ID: ORD-11504-V1R4B3

Execution ID: EXC-11504-V1R4B302

District: Cheyenne, WY

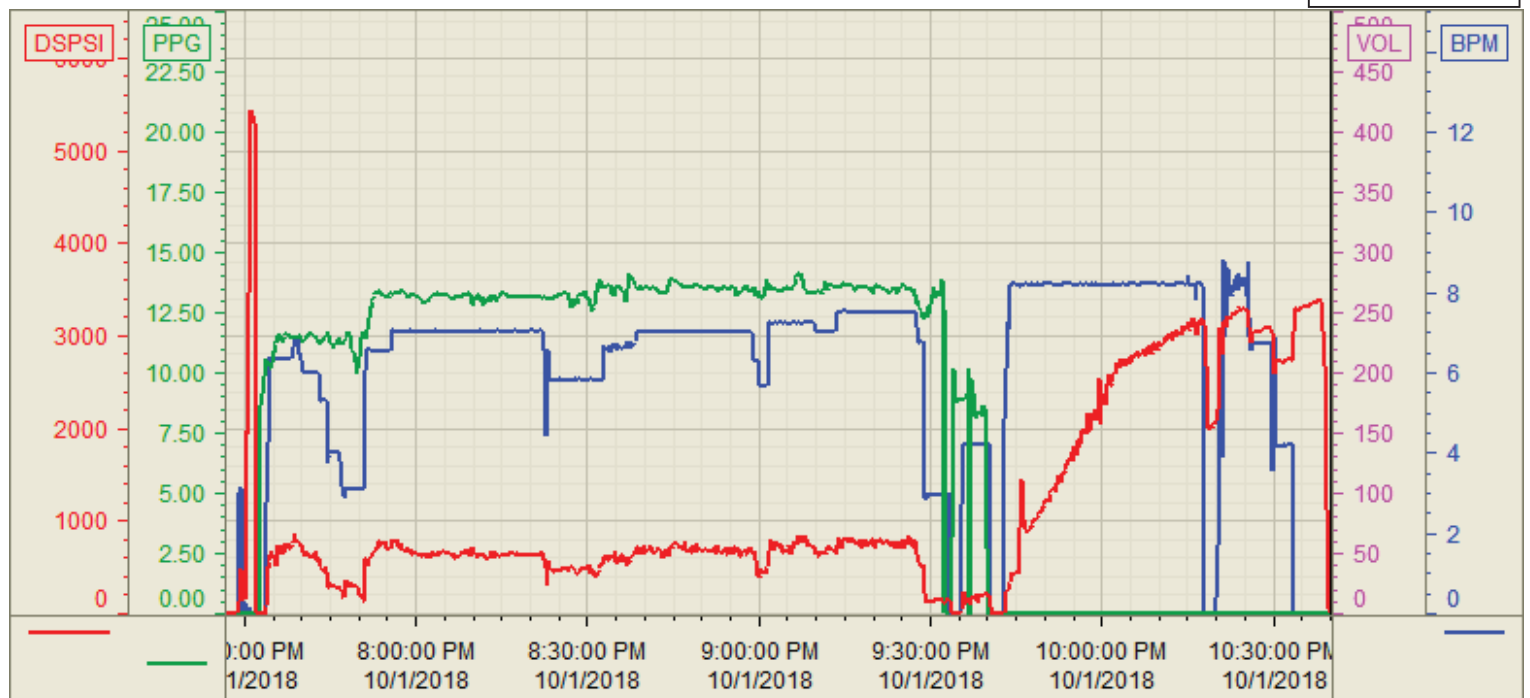
BJ Supervisor: Wesley Bell

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	10/01/2018 16:30	Arrive on Location					
2	10/01/2018 16:40	Rig Up					Rig in all BJ equipment
3	10/01/2018 17:50	Customer					Wait for rig to finish circulating well
4	10/01/2018 19:00	Safety Meeting					Hold STEACS briefing with rig crew and pump crew
5	10/01/2018 19:33	Pressure Test	8.3400	2.00	2.00	5,000.00	Pressure test lines to 5000psi with water
6	10/01/2018 19:35	Pump Spacer	11.5000	5.00	80.00	300.00	Pump 80bbls of Spacer with surfactants.
7	10/01/2018 19:54	Pump Lead Cement	13.2000	7.00	299.70	800.00	Pump 299.7bbls of Lead Cement at 13.2ppg, Y: 1.829, WR: 9.8, 920sk,
8	10/01/2018 20:34	Pump Tail Cement	13.5000	7.00	465.60	800.00	Pump 465.6bbls of Tail Cement at 13.5ppg, Y: 1.477, WR: 7.45, 1770sk. Top of Tail at 5901'
9	10/01/2018 21:35	Clean Pumps and Lines	8.3400	0.00	0.00	0.00	Clean pumps and lines to rig tank, drop top plug
10	10/01/2018 21:45	Drop Top Plug	8.3400	8.00	0.00	350.00	Drop top latch down plug
11	10/01/2018 21:57	Pump Displacement	8.3400	8.00	100.00	1,700.00	100bbls of displacement away
12	10/01/2018 22:09	Pump Displacement	8.3400	8.00	100.00	2,800.00	200bbls of displacement away
13	10/01/2018 22:20	Pump Displacement	8.3400	8.00	90.00	2,900.00	290bbls of displacement away, divert to rig tanks, spacer to surface.
14	10/01/2018 22:32	Pump Displacement	8.3400	8.00	70.00	2,700.00	360bbls of displacement away, slow down for bump, cement to surface at 350bbls away
15	10/01/2018 22:36	Land Plug	8.3400	4.00	20.00	2,500.00	380bbls of displacement away, bump pressure to 3200psi
16	10/01/2018 22:41	Check Floats	8.3400	0.00	0.00	0.00	check floats, 4.5bbls back, floats hold.
17	10/01/2018 23:42	Rig Down					Rig out all BJ equipment
18	10/01/2018 23:59	Leave Location					

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



Print Date/Time
10/1/2018 11:21:44 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press(PSI)	23.2 i.	10/1/2018 10:40:00 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	0.01	10/1/2018 10:40:03 PM	Cementer\DENSITY_ACTUAL_RATE
3	Combined rate (BPM)	0.00	10/1/2018 10:40:03 PM	Cementer\Flow_Combined
4				
5				

Source: Control1 11:21:40 PM