

Cementing Treatment



Start Date	9/3/2018	Well	KTC FARMS E-35-36HC
End Date	9/3/2018	API#	05-123-47091
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	PRJ1010416
Execution ID	EXC-10536-T0N1W202		

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	17,563.00	7,337.00	7.00
Casing	4.78	5.50	20.00	17,553.00	7,337.00	

Shoe Length (ft): 29.00

HARDWARE

Top Plug Used?	Yes	Tool Type	Float Collar
Top Plug Provided By	Non BJ	Tool Depth (ft)	17,527.00
Top Plug Size	5.500	Max Casing Pressure - Rated (psi)	12,640.00
Centralizers Used	Yes	Max Casing Pressure - Operated (psi)	3,000.00
Centralizers Quantity	205.00	Top Connection Thread	BTC
Centralizers Type	Bow	Top Connection Size	5.5"
Landing Collar Depth (ft)	17,527		

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud Out	8
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Mud Density In (ppg)	10.10	10 sec SGS	8.00
Mud Density Out (ppg)	10.10	10 min SGS	13.00
PV Mud In	17	30 min SGS	15.00
PV Mud Out	17	Flare Prior to/during the Cement Job	No
YP Mud In	8	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	80.00	Slurry Cement Temperature (°F)	80.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	120.00

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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			0.00				80.0000
Lead Slurry	BJCem P100.3.01C	13.2000	1.8298	9.87	1.00	6700	920	1,680.0000	299.5000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4777	7.45	5,890.00	10855	1810	2,666.0000	476.5000
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			1.00			0.0000	364.0000

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	SAND, S-8, Silica Flour, 200 Mesh	215.0000	PPB
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
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.8000	BWOB
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
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	GELLANT WATER, GW-86	0.1000	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	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1500	BWOB
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 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	5.00	80.00
BJCem P100.3.01C	6.00	299.50
BJCem P50.6.02C	6.00	476.50
Retarded Water w/ Clay Protection & Biocide	8.00	20.00
Water w/ Clay Protection & Biocide	8.00	364.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ Services	Amount of Cement Returned/Reversed	24.00
Calculated Displacement Volume (bbls)	389.10	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	384.00	Amount of Spacer to Surface	80.00
Did Float Hold?	Yes	Amount Bled Back After Job	3.50
Bump Plug	Yes	Total Volume Pumped (bbls)	1,240.00
Bump Plug Pressure (psi)	2,900.00	Top Out Cement Spotted	No
Were Returns Planned at Surface	Yes	Lost Circulation During Cement Job	No
Cement returns During Job	Full		

EVENT LOG



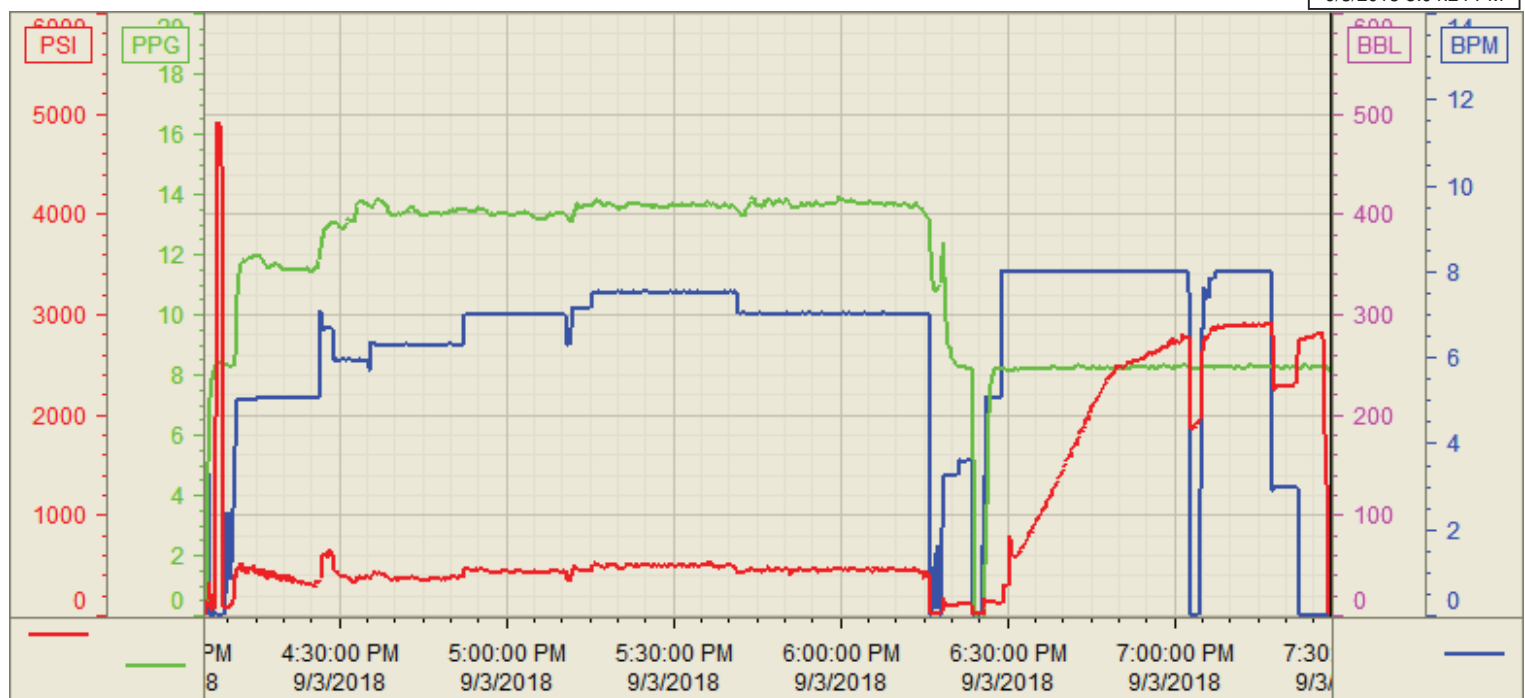
Customer Name: BAYSWATER EXPLORATION & PRODUCTION, LLC
Well Name: KTC FARMS E-35-36HC
Job Type: Long String
Quote ID: QUO-18375-S6Q0T9
Plan ID: ORD-10536-TON1W2
Execution ID: EXC-10536-TON1W202
District: Cheyenne, WY
BJ Supervisor: Wesley Bell

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	09/03/2018 13:00	Arrive on Location					arrive on location, requested time was 15:00
2	09/03/2018 13:10	Rig Up					Rig in all BJ equipment
3	09/03/2018 14:10	Customer					Wait on rig to finish circulating well
4	09/03/2018 15:45	Safety Meeting					Hold STEACS briefing with rig crew and pump crew. review job procedures and job hazards
5	09/03/2018 16:07	Pressure Test	8.3400	2.00	2.00	4,900.00	Pressure test lines, good test/no leaks
6	09/03/2018 16:10	Pump Spacer	11.5000	5.00	80.00	500.00	Pump 80bbls of Spacer at 11.5ppg
7	09/03/2018 16:30	Pump Lead Cement	13.2000	6.50	299.50	500.00	Pump 299.5bbls of Lead cement at 13.2ppg, 920sk, Y: 1.828, WR: 9.87
8	09/03/2018 17:11	Pump Tail Cement	13.5000	7.50	476.50	500.00	Pump 476.5bbls of Tail cement at 13.5ppg, 1810sk, Y: 1.478, WR: 7.45, Top cement at 5890'
9	09/03/2018 18:16	Clean Pumps and Lines	8.3400				Clean pumps and lines to rig tank, load top latch down plug in PLH
10	09/03/2018 18:25	Pump Displacement	8.3400	8.00	20.00	300.00	Begin displacement, add R8L in first 20bbls
11	09/03/2018 18:40	Pump Displacement	8.3400	8.00	80.00	1,100.00	100bbls away of displacement
12	09/03/2018 18:53	Pump Displacement	8.3400	8.00	100.00	2,500.00	200bbls away of displacement
13	09/03/2018 19:08	Pump Displacement	8.3400	8.00	100.00	3,000.00	300bbls of displacement away, 270bbls away Spacer to surface, divert to rig tanks.
14	09/03/2018 19:15	Pump Displacement	8.3400	8.00	60.00	3,000.00	360bbls of displacement away, cement to surface, 24bbls total to surface.
15	09/03/2018 19:22	Land Plug	8.3400	3.00	24.00	2,200.00	384bbls of displacement away land plug, bump pressure to 2900psi
16	09/03/2018 19:28	Check Floats	8.3400				check floats, 3.5bbls back, floats held
17	09/03/2018 19:30	Rig Down					Rig out all BJ equipment
18	09/03/2018 21:00	Leave Location					

Customer: Bayswater
Well Number: E-35-36HC
Lease Info: KTC Farms



Print Date/Time
9/3/2018 8:04:24 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	18.7 i.	9/3/2018 7:28:00 PM i.	CementerDS_DISCHARGE_PRESS_DIAL
2	DH - Density (PPG)	8.12	9/3/2018 7:28:03 PM	CementerDENSITY2_ACTUAL_RATE
3	Combined Rate	0.00	9/3/2018 7:28:03 PM	CementerFlow_Combined
4				
5				

Source: Control1 8:04:18 PM