

Cementing Treatment



Start Date	7/31/2018	Field Ticket#	FT-09285-TOP3Q20202-43107
End Date	7/31/2018	Well	KTC FARMS BA-35-36HN
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	API#	05-123-47270
Client Field Rep.		Well Classification	
Service Sup.	Paul Linn III	County	WELD
District	Rifle, CO	State/Province	CO
Type of Job	Surface	Formation	
Execution ID	EXC-09285-TOP3Q202	Rig	
Project ID	PRJ1009110		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Open Hole	13.50	0.00	0.00	1,562.00	25.00		
Casing	8.92	9.63	36.00	1,555.00			

Shoe Length (ft): 97.00

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,555.36
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	2,220.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	1,776.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	16.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	8 RND
Landing Collar Depth (ft)	1,458	Top Connection Size	9.625

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CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	10 sec SGS	1.00
Circulation Time (min)	30.00	10 min SGS	2.00
Circulation Rate (bpm)	11.50	30 min SGS	2.00
Circulation Volume (bbls)	345.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	8.80	Gas Units	0
Mud Density Out (ppg)	8.80		
PV Mud In	1		
PV Mud Out	1		
YP Mud In	4		
YP Mud Out	4		

TEMPERATURE

Ambient Temperature (°F)	58.00	Slurry Cement Temperature (°F)	73.90
Mix Water Temperature (°F)	69.80	Flow Line Temperature (°F)	0.00

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	Water	8.3337			0.00				20.0000
Lead Slurry	BJCem S100.03.1C	12.0000	2.5298	14.86	0.00	1000	242	611.0000	108.7000
Tail Slurry	BJCem S100.03.1C	12.5000	2.2256	12.59	1,000.00	500	146	324.0000	57.6000
Displacement Final	Water	8.3337			0.00			0.0000	112.7000

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Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Water	Fresh Water	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	IntegraSeal CELLO	0.1300	LBS/SK
Displacement Final	Water	Fresh Water	100.0000	PCT

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
7/31/2018 6:01:00 AM	Water	5.50	20.00	241.00		
7/31/2018 6:05:00 AM	BJCem S100.03.1C	5.50	109.04	269.00		
7/31/2018 6:24:00 AM	BJCem S100.03.1C	5.50	57.99	281.00		
7/31/2018 6:40:00 AM	Water	9.00	116.74	338.00		
		Min		Max		Avg
Pressure (psi)		68.00		698.00		325.00
Rate (bpm)		2.00		9.00		5.50

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DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	7.00
Calculated Displacement Volume (bbls)	116.74	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	116.00	Amount of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	0.50
Bump Plug Pressure (psi)	416.00	Total Volume Pumped (bbls)	300.00
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 BA-35-36HN

Job Type: Surface

Quote ID: QUO-16141-Q3J8N2

Plan ID: ORD-09285-T0P3Q2

Execution ID: EXC-09285-T0P3Q202

District: Rifle, CO

BJ Supervisor: Paul Linn III

Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
1	07/30/2018 20:00	Callout					CALL OUT ON LOCATION 02:00
2	07/31/2018 01:00	Arrive on Location					ARRIVE ON LOCATION, RIG WAS RUNNING BACK TO BOTTOM WITH DRILL PIPE, WAITING ON CASERS
3	07/31/2018 01:05	Spot Units					DID A SITE ASSEMENT, AND ROCK DRILL. SPOTTED EQUIPMENT
4	07/31/2018 01:12	Safety Meeting					PRE RIG UP SAFETY MEETING
5	07/31/2018 01:20	Rig Up					RIG IN ALL GROUND EQUIPMENT
6	07/31/2018 01:38	Customer					WAIT ON RIG TO PULL DRILL PIPE AND RUN CASING
7	07/31/2018 05:20	Safety Meeting					PRE JOB SAFETY MEETING WITH ALL BJ CEMENT CREW AND RIG CREW
8	07/31/2018 05:38	Rig Up					LOAD PLUG IN PLUG CONTAINER, STAB PLUG CONTAINER AND HOOK UP LINES
9	07/31/2018 05:54	Prime Up	8.3300	2.00	5.00	68.00	FILL LINES WITH 5 BBLs FRESH WATER
10	07/31/2018 05:57	Pressure Test				5,447.00	PRESSURE TEST TO 5447 PSI, PRESSURE HELD

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Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
11	07/31/2018 06:01	Pump Spacer	8.3300	5.50	20.00	241.00	PUMPED DYE WATER SPACER
12	07/31/2018 06:04	Pump Lead Cement	12.0000	5.50	50.00	269.00	PUMPED LEAD CEMENT 12 PPG, 242 SK, 2.53 CUFT/SK, 14.86 GAL/SK, FOR A TOTAL OF 109.04 BBLS OF LEAD REQUIRING 85.62 BBLS OF MIX WATER. WEIGHT VERIFIED BY MUD SCALE
13	07/31/2018 06:13	Pump Lead Cement	12.0000	5.50	100.00	261.00	PUMPED LEAD CEMENT
14	07/31/2018 06:22	Pump Lead Cement	12.0000	5.50	109.00	273.00	FINISHED PUMPING LEAD CEMENT
15	07/31/2018 06:23	Pump Tail Cement	12.5000	5.50	22.00	281.00	PUMPED TAIL CEMENT 12.5 PPG, 146 SK, 2.23 CUFT/SK, 12.59 GAL/SK, FOR A TOTAL OF 57.99 BBLS OF LEAD REQUIRING 43.77 BBLS OF MIX WATER. WEIGHT VERIFIED BY MUD SCALE
16	07/31/2018 06:27	Pump Tail Cement	12.5000	4.00	55.00	163.00	FINISHED PUMPING TAIL CEMENT
17	07/31/2018 06:36	Drop Top Plug					DROP TOP PLUG VERIFIED BY COMPANY MAN
18	07/31/2018 06:40	Pump Displacement	8.3300	9.00	50.00	412.00	FRESH WATER DISPLACEMENT
19	07/31/2018 06:44	Pump Displacement	8.3300	9.00	100.00	698.00	FRESH WATER DISPLACEMENT
20	07/31/2018 06:50	Cement Back to Surface					7 BBLS OF CEMENT TO SURFACE
21	07/31/2018 06:50	Pump Displacement	8.3300	2.00	116.00	416.00	FRESH WATER DISPLACEMENT
22	07/31/2018 06:57	Land Plug				946.00	LANDED PLUG AT 416 PSI TOOK TO 946 PSI.
23	07/31/2018 07:00	Check Floats					CHECK FLOATS, FLOATS HELD 1/2 BBL BACK
24	07/31/2018 07:08	Safety Meeting					PRE RIG DOWN SAFETY MEETING WITH RIG CREW
25	07/31/2018 07:16	Rig Down					RIG DOWN RIG FLOOR
26	07/31/2018 07:16	Clean Pumps and Lines					WASH PUMPS AND LINES INTO CELLAR
27	07/31/2018 07:28	Safety Meeting					PRE RIG DOWN SAFETY MEETING WITH ALL BJ CEMENT CREW

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Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
28	07/31/2018 07:35	Rig Down					RIG DOWN ALL EQUIPMENT
29	07/31/2018 07:50	Leave Location					DEPART FROM LOCATION. THANK YOU FOR USING BJ SERVICES, ANDREW LINN AND CREW

