

Cementing Treatment



Start Date	8/7/2018	Field Ticket#	FT-09400-P2M2T70202-59462
End Date	8/7/2018	Well	KTC FARMS F-35-36HN
Client	BAYSWATER EXPLORATION & PRODUCTION, LLC	API#	05-123-47084
Client Field Rep.	Craig	Well Classification	
Service Sup.	Paul Linn III	County	WELD
District	Rifle, CO	State/Province	CO
Type of Job	Surface	Formation	
Execution ID	EXC-09400-P2M2T702	Rig	
Project ID	PRJ1009209		

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Open Hole	13.50	0.00	0.00	1,555.00	25.00		
Casing	8.92	9.63	36.00	1,544.97			

Shoe Length (ft): 42.22

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,502.75
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)	1,544.97	Top Connection Size	9.625

Cementing Treatment



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)	20.00	10 min SGS	2.00
Circulation Rate (bpm)	11.90	30 min SGS	2.00
Circulation Volume (bbls)	238.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	8.70	Gas Units	0
Mud Density Out (ppg)	8.70		
PV Mud In	1		
PV Mud Out	1		
YP Mud In	4		
YP Mud Out	4		

TEMPERATURE

Ambient Temperature (°F)	64.00	Slurry Cement Temperature (°F)	81.00
Mix Water Temperature (°F)	68.90	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

Cementing Treatment



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

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)
8/7/2018 2:56:00 AM	Water	5.50	20.00	193.00
8/7/2018 3:01:00 AM	BJCem S100.03.1C	6.50	109.04	384.00
8/7/2018 3:17:00 AM	BJCem S100.03.1C	6.50	57.99	405.00
8/7/2018 3:30:00 AM	Water	8.50	116.16	303.00
		Min	Max	Avg
Pressure (psi)		54.00	721.00	381.00
Rate (bpm)		2.00	8.50	6.00

Cementing Treatment



DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	18.00
Calculated Displacement Volume (bbls)	116.16	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)	411.00	Total Volume Pumped (bbls)	302.00
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 F-35-36HN

Job Type: Surface

Quote ID: QUO-16146-J4D2F7

Plan ID: ORD-09400-P2M2T7

Execution ID: EXC-09400-P2M2T702

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	08/06/2018 18:00	Callout					CALL OUT ON LOCATION TIME OF 24:00
2	08/06/2018 23:00	Arrive on Location					ARRIVE ON LOCATION. RIG CREW WAS RIGGING UP CASERS
3	08/06/2018 23:03	Spot Units					DID A SITE ASSESMENT, AND ROCK DRILL WITH CREW, THEN SPOTTED IN ALL EQUIPMENT
4	08/06/2018 23:11	Safety Meeting					PRE RIG UP SAFETY MEETING
5	08/06/2018 23:20	Rig Up					RIG IN ALL GROUND EQUIPMENT
6	08/06/2018 23:40	Customer					WAIT ON RIG TO RUN CASING
7	08/07/2018 02:38	Safety Meeting					PRE JOB SAFETY MEETING WITH ALL BJ SERVICES CEMENT CREW AND RIG CREW
8	08/07/2018 02:44	Rig Up					LOAD PLUG CONTAINER, STAB PLUG CONTAINER, HOOK UP LINES
9	08/07/2018 02:50	Prime Up	8.3300	2.00	5.00	54.00	FILL LINES WITH 5 BBLs OF FRESH WATER
10	08/07/2018 02:52	Pressure Test				5,620.00	PRESSURE TEST TO 5620 PSI. PRESSURE HELD

EVENT LOG



Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
11	08/07/2018 02:56	Pump Spacer	8.3300	5.50	20.00	193.00	PUMPED FRESH WATER SPACER WITH DYE
12	08/07/2018 03:01	Pump Lead Cement	12.0000	6.50	50.00	384.00	PUMPED LEAD CEMENT 12 PPG 242 SKS 2.53 CUFT/SK 14.86 GALS/SK FOR A TOTAL OF 109.04 BBLs OF LEAD CEMENT REQUIRING 85.62 BBLs OF MIX WATER. WEIGHT VERIFIED WITH MUD SCALE, HEIGHT OF LEAD IS 915.89 FT WITH A TOP OF 0 FT.
13	08/07/2018 03:08	Pump Lead Cement	12.0000	6.50	100.00	391.00	PUMPED LEAD CEMENT
14	08/07/2018 03:16	Pump Lead Cement	12.0000	6.50	109.00	398.00	FINISHED PUMPING LEAD CEMENT WITH 109 BBLs AWAY
15	08/07/2018 03:17	Pump Tail Cement	12.5000	6.50	45.00	405.00	PUMPED TAIL CEMENT 12.5 PPG 146 SKS 2.23 CUFT/SK 12.59 GALS/SK FOR A TOTAL OF 57.99 BBLs OF TAIL CEMENT REQUIRING 43.77 BBLs OF MIX WATER. WEIGHT VERIFIED WITH MUD SCALE, HEIGHT OF TAIL IS 629.08 FT WITH A TOP OF 915.89 FT.
16	08/07/2018 03:23	Pump Tail Cement	12.5000	4.00	57.00	161.00	FINISHED PUMPING TAIL CEMENT WITH 57 BBLs AWAY
17	08/07/2018 03:27	Drop Top Plug					DROP TOP PLUG, VERIFIED BY COMPANY MAN
18	08/07/2018 03:30	Pump Displacement	8.3300	8.50	50.00	440.00	PUMPED DISPLACEMENT
19	08/07/2018 03:37	Pump Displacement	8.3300	8.50	100.00	721.00	PUMPED DISPLACEMENT
20	08/07/2018 03:43	Cement Back to Surface					18 BBLs OF CEMENT TO SURFACE
21	08/07/2018 03:43	Pump Displacement	8.3300	2.00	116.00	411.00	PUMPED DISPLACEMENT
22	08/07/2018 03:49	Land Plug				1,002.00	LAND PLUG. FINAL CIRCULATING PRESSURE WAS 411 PSI TOOK TO 1002 PSI.
23	08/07/2018 03:52	Safety Meeting					PRE RIG DOWN SAFETY MEETING WITH RIG CREW

EVENT LOG



Seq.	Start Dt./Time	Event	Density (ppg)	Pump Rate (bpm)	Pump Vol(bbls)	Pipe Pressure(psi)	Comments
24	08/07/2018 03:56	Rig Down					RIG DOWN RIG FLOOR
25	08/07/2018 04:16	Clean Pumps and Lines					WASH PUMPS AND LINES INTO CELLAR
26	08/07/2018 04:29	Safety Meeting					PRE RIG DOWN SAFETY MEETING WITH ALL BJ SERVICES CEMENT CREW
27	08/07/2018 04:37	Rig Down					RIG DOWN ALL EQUIPMENT
28	08/07/2018 05:00	Safety Meeting					PRE CONVOY SAFETY MEETING
29	08/07/2018 05:08	Leave Location					DEPART FROM LOCATION. THANK YOU FOR USING BJ SERVICES, ANDREW LINN AND CREW

