

# BJ Cementing Treatment Report

SERVICE SUPERVISOR	Aldo Espinoza Galindo	RIG	True 38
CLIENT FIELD REPRESENTATIVE	Scott	COUNTY	WELD
DISTRICT	Cheyenne, WY	STATE / PROVINCE	CO
SERVICE	Cementing		

## WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)
Casing	8.92	9.63	36.00	1,560.00	1,530.00	
Open Hole	13.50	0.00	0.00	1,570.00	1,530.00	25.00

## HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,515.77
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3520.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2500.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	16.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	LTC
Landing Collar Depth (ft)	1,516	Top Connection Size	9.625

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density Out (ppg)	8.50
Circulation Prior to Job	Yes	PV Mud In	1
Circulation Time (min)	30.00	YP Mud In	4
Circulation Rate (bpm)	5.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	150.00	Flare Prior to / during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	8.50		

## TEMPERATURE

Ambient Temperature (°F)	33.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	60.00	Flow Line Temperature (°F)	65.00

Client: Bayswater Exploration & Production, LLC

Well: COT WEST #QA-30-25HN

Well API: 05-123-50404

Start Date: 1/31/2020

End Date: 1/31/2020



## FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> O REQ (gals/sk)	PLN TOP FLD (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	1,030.00	252	638.0000	113.5000
Tail Slurry	BJCem S100.03.1C	12.5000	2.2255	12.59	1,030.00	500.00	145	323.0000	57.5000
Displacement Final	Water	8.3337			0.00			0.0000	115.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	Water	Fresh Water	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
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 POLI	0.1300	LBS/SK
Lead Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	IntegraSeal POLI	0.1300	LBS/SK
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	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Displacement Final	Water	Fresh Water	100.0000	PCT

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ	<b>Amt of Cement Returned / Reversed</b>	31.00
<b>Calculated Displacement Vol (bbls)</b>	117.40	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	117.00	<b>Amt of Spacer to Surface</b>	20.00
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0.00
<b>Bump Plug</b>	Yes	<b>Amt Bled Back After Job</b>	1.00
<b>Bump Plug Pressure (psi)</b>	1200.00	<b>Total Volume Pumped (bbls)</b>	308.40
<b>Were Returns Planned at Surface</b>	Yes	<b>Top Out Cement Spotted</b>	No
<b>Cement Returns During Job</b>	Full	<b>Lost Circulation During Cement Job</b>	No

# BJ Cementing Event Log

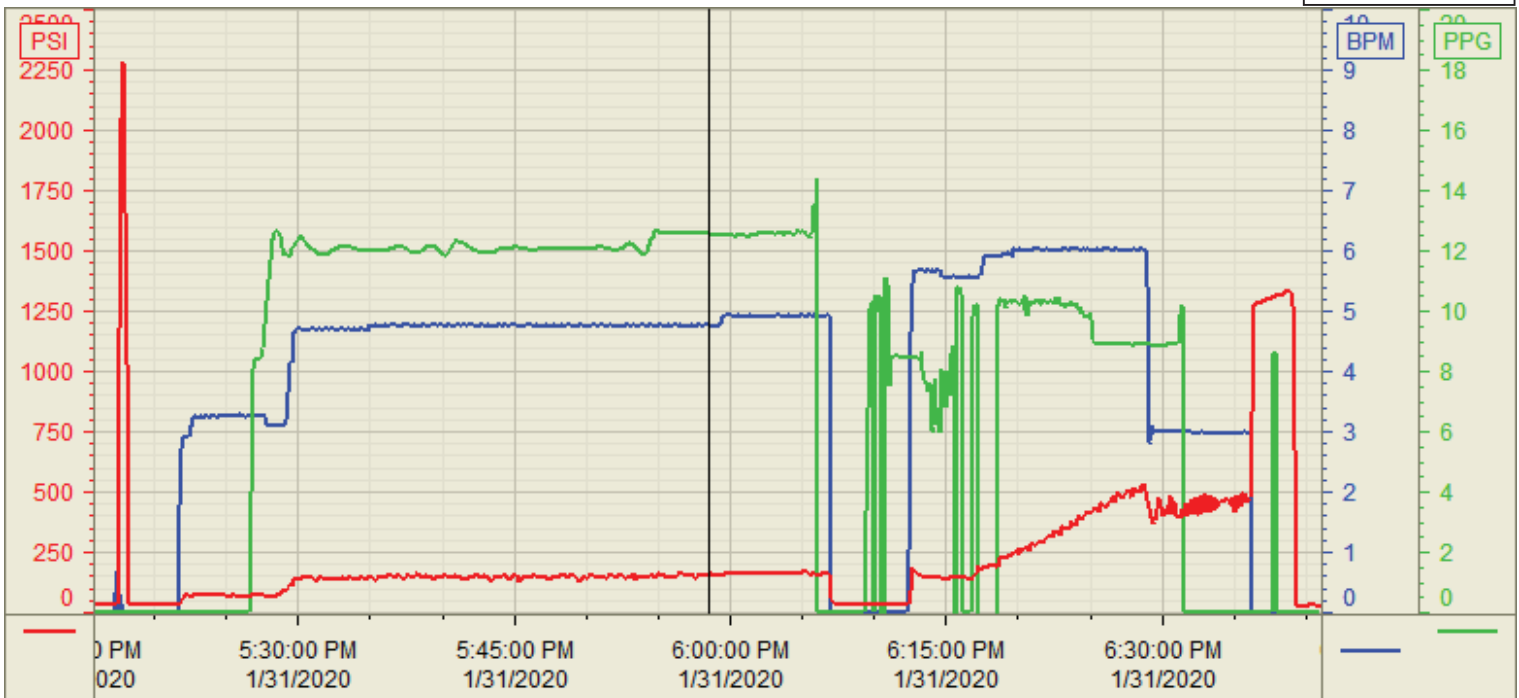
Surface - Cheyenne, WY - Aldo Espinoza Galindo

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/31/2020 09:00	Callout					Called out
2	01/31/2020 14:00	Arrive on Location					On location
3	01/31/2020 14:40	Rig Up					Rig up equipment and wait for rig to work pipe
4	01/31/2020 17:00	Other (See comment)					Pipe on bottom, safety meeting with company man and rig crew
5	01/31/2020 17:20	Pressure Test	8.3400	0.20	0.20	2300.00	Pressure test lines to 2300 psi
6	01/31/2020 17:23	Pump Spacer	8.3400	3.00	20.00	60.00	Pump 20 bbl of water with dye ahead of cement
7	01/31/2020 17:30	Pump Lead Cement	12.0000	5.00	113.50	100.00	Pump 252 sk/ 113.5 bbl of lead cement @ 12#/ yield 2.52/ water 14.86
8	01/31/2020 17:57	Pump Tail Cement	12.5000	5.00	57.50	200.00	Pump 145 sk/ 57.5 bbl of tail cement @ 12.5#/ yield 2.22/ water 12.59
9	01/31/2020 18:12	Drop Top Plug					Release pre-loaded plug from container, wash pumping lines on top of plug
10	01/31/2020 18:16	Pump Displacement	8.3400	5.00	20.00	180.00	Start pumping displacement,
11	01/31/2020 18:23	Pump Displacement	8.3400	5.00	20.00	260.00	40 bbl on to displacement 260 psi
12	01/31/2020 18:26	Pump Displacement	8.3400	5.00	20.00	430.00	60 bbl on to displacement 430 psi
13	01/31/2020 18:29	Pump Displacement	8.3400	5.00	30.00	600.00	90 bbl on to displacement slow down to 3 bpm to land plug
14	01/31/2020 18:35	Land Plug	8.3400	5.00	20.00	700.00	117 bbl bump plug from 700 psi to 1200 psi
15	01/31/2020 18:39	Check Floats				1200.00	Check floats, 1 bbl back, and 31 bbl of cement back to surface
16	01/31/2020 18:43	Other (See comment)					Blow down diesel lines and water lines to ensure there is no spills
17	01/31/2020 19:00	Rig Down					Rig down equipment, thanks

Customer: BaysWater Exploration  
 Well Number: QA-30-25HN  
 Lease Info: COT WEST



Print Date/Time  
 1/31/2020 8:13:54 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	167.9 i.	1/31/2020 5:58:29 PM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Density (PPG)	12.55	1/31/2020 5:58:28 PM	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate (BPM)	4.78 i.	1/31/2020 5:58:29 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 8:13:48 PM