

BJ Cementing Treatment Report

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

WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)
Open Hole	13.50	0.00	0.00	1,566.00	1,566.00	25.00
Casing	8.92	9.63	36.00	1,556.00	1,556.00	

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,514.60
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	17.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	LTC
Landing Collar Depth (ft)	1,515	Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

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

TEMPERATURE

Ambient Temperature (°F)	29.00	Slurry Cement Temperature (°F)	60.00
Mix Water Temperature (°F)	60.00	Flow Line Temperature (°F)	65.00

FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ 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	IntegraSeal POLI	0.1300	LBS/SK
Lead Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead 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	CEMENT, ASTM TYPE III	100.0000	PCT
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	IntegraSeal POLI	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Displacement Final	Water	Fresh Water	100.0000	PCT

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	25.00
Calculated Displacement Vol (bbls)	117.20	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	117.00	Amt of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	0.50
Bump Plug Pressure (psi)	1140.00	Total Volume Pumped (bbls)	308.20
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Full	Lost Circulation During Cement Job	No

BJ Cementing Event Log

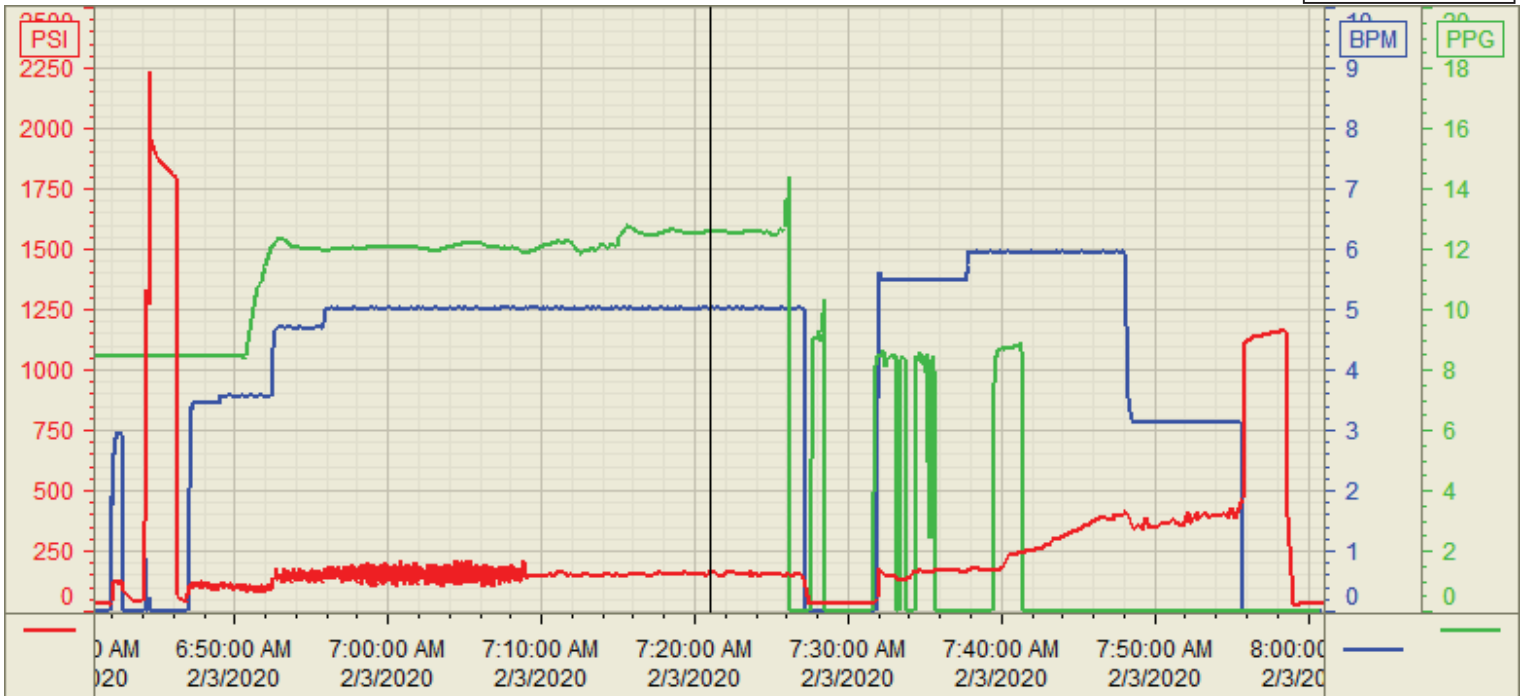
Surface - Cheyenne, WY - Aldo Espinoza Galindo

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	02/02/2020 21:30	Callout					Called out
2	02/03/2020 02:00	Arrive on Location					On location
3	02/03/2020 02:30	Rig Up					Rig up equipment
4	02/03/2020 03:00	Rig					Rig working on pipe
5	02/03/2020 06:15	STEACS Briefing					Safety meeting with rig crew and company man
6	02/03/2020 06:35	Pressure Test	8.3400	0.20	0.20	2200.00	Pressure test lines to 2200 psi
7	02/03/2020 06:40	Pump Spacer	8.3400	4.00	20.00	90.00	Pump 20 bbl of water with dye
8	02/03/2020 06:50	Pump Lead Cement	12.0000	5.00	113.50	160.00	Pump 252 sk/ 113.5 bbl/of lead cement @12#/yield 2.52/ water 14.86
9	02/03/2020 07:19	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/ water12.59
10	02/03/2020 07:32	Drop Top Plug					Release pre-loaded plug from container, wash on top
11	02/03/2020 07:36	Pump Displacement	8.3400	5.00	10.00	80.00	Start pumping displacement
12	02/03/2020 07:41	Pump Displacement	8.3400	5.00	20.00	130.00	30 bbl on to displacement 130 psi
13	02/03/2020 07:46	Pump Displacement	8.3400	5.00	30.00	580.00	60 bbl on to displacement 580 psi
14	02/03/2020 07:56	Pump Displacement	8.3400	5.00	30.00	90.00	90 bbl slow down to 3 bpm to land plug
15	02/03/2020 08:00	Land Plug	8.3400	5.00	30.00	580.00	117 bbl bump plug from 580 psi to 1140 psi
16	02/03/2020 08:03	Check Floats				1140.00	Check floats, 1/2 bbl back, 25 bbl of cement back to surface
17	02/03/2020 08:06	Rig Down					Rig equipment down, thanks

Customer: Bayswater Exploration
 Well Number: N-30-25HC
 Lease Info: COT WEST



Print Date/Time
 2/3/2020 9:25:00 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	160.5 i.	2/3/2020 7:21:00 AM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Density (PPG)	12.56	2/3/2020 7:20:59 AM	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate (BPM)	5.02 i.	2/3/2020 7:21:00 AM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 9:24:55 AM