

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Aldo Espinoza Galindo	RIG	True 38
CLIENT FIELD REPRESENTATIVE	Trevor Smith	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 (%)
Open Hole	8.50	0.00	0.00	15,447.00	7,267.00	5.00
Casing	4.78	5.50	20.00	15,437.00	7,267.00	
Previous Casing	8.92	9.63	36.00	1,554.00	1,554.00	

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	15,410.46
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	12640.00
Top Plug Size	5.500	Max Casing Pressure - Operated (psi)	3000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	87.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	btc
Landing Collar Depth (ft)	15,410	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Mud Density In (ppg)	9.70
Circulation Prior to Job	Yes	PV Mud In	17
Circulation Time (min)	180.00	YP Mud In	8
Circulation Rate (bpm)	5.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	900.00	Flare Prior to / during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	25.00	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	Dye Flush	8.3300			0.00				2.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	12.0000			0.00				28.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.5000			0.00				26.0000
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	11.0000			0.00				26.0000
Lead Slurry	BJCem P100.3.01C	13.2000	1.8295	9.87	0.00	6,971.00	945	1729.0000	307.9000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4774	7.45	6,971.00	8,482.00	1380	2039.0000	363.1000
Displacement 2	Retarded Water w/ Clay Protection & Biocide	8.3331				0.00	0	0.0000	10.0000
Displacement Final	Water w/ Clay Protection & Biocide	8.3331			0.00			0.0000	331.8000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	Dye Flush	DYE,LIQUID,BLUE	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-7C	2.0000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	WEIGHTING ADDITIVE, W-11	243.3100	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	IntegraGuard GW-86	1.2000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	RETARDER, R-31	0.5000	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	1.0000	GPB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraGuard GW-86	0.1000	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	IntegraCare EC-2	3.0000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.7000	BWOB
Tail Slurry	BJCem P50.6.02C	FLUID LOSS, FL-66	0.2000	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	BWOB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, SR-61L	0.1000	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	ResCare CS-2	0.0800	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water w/ Clay Protection & Biocide	ResCare CS-2	0.0800	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	10.00
Calculated Displacement Vol (bbls)	342.10	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	342.00	Amt of Spacer to Surface	80.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	4.50
Bump Plug Pressure (psi)	3000.00	Total Volume Pumped (bbls)	1102.40
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Partial	Lost Circulation During Cement Job	No

BJ Cementing Event Log

Long String - Cheyenne, WY - Aldo Espinoza Galindo

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/06/2020 13:00	Callout					Called out
2	01/06/2020 17:00	Rig Up					Rig out
3	01/06/2020 18:30	Other (See comment)					Had wrong info, with trucks, wait for dispatch to get it so we can start job
4	01/06/2020 19:30	Other (See comment)					Have the right info, safety meeting with company man and rig crew
5	01/06/2020 19:45	Pressure Test	8.3400	0.20	0.20	6200.00	Pressure test lines to 6200 psi
6	01/06/2020 19:54	Pump Spacer	12.0000	4.00	80.00	800.00	Pump spacer w/surfactants, 28 bbl@12#/ 26 bbl@11.5#/ 26 bbl @ 11#
7	01/06/2020 20:10	Pump Lead Cement	13.2000	7.00	307.90	700.00	Pump lead cement 935sk/ 307.9 bbl / @ 13.2#/ yield 1.82/ water 9.87
8	01/06/2020 21:04	Pump Tail Cement	13.5000	5.00	363.10	500.00	Pump tail cement 1380 sk/ 363.1 bbl/ @ 13.5#/ yield 1.47/ water 7.45
9	01/06/2020 22:00	Drop Top Plug					Drop plug, wash pumping lines to pit
10	01/06/2020 22:10	Pump Displacement	8.3400	5.00	10.00	100.00	Start displacement with 10 bbl of water retarder
11	01/06/2020 22:19	Pump Displacement	8.3400	8.00	40.00	980.00	50 bbl on to displacement, 980 psi
12	01/06/2020 22:25	Pump Displacement	8.3400	8.00	50.00	1284.00	100 bbl on to displacement, 1284 psi
13	01/06/2020 22:33	Pump Displacement	8.3400	8.00	50.00	2500.00	150 bbl on to displacement, 2500 psi
14	01/06/2020 22:37	Pump Displacement	8.3400	8.00	50.00	2800.00	200 bbl on to displacement, 2800 psi
15	01/06/2020 22:47	Pump Displacement	8.3400	8.00	50.00	3000.00	250 bbl on to displacement 3000 psi
16	01/06/2020 22:56	Pump Displacement	8.3400	8.00	70.00	2300.00	320 bbl on to displacement, slow down to 3 bpm, 2300 psi
17	01/06/2020 23:05	Land Plug	8.3400	3.00	22.00	2300.00	342 bbl, bump plug 2600 psi to 3000 psi, hold for 3 min.
18	01/06/2020 23:08	Check Floats	8.3400			3000.00	Check floats, 4.5 bbl back, floats holding, 10 bbl of cement and 80 bbl of spacer back to surface during displacement
19	01/06/2020 23:10	Rig Down					Rig equipment down
20	01/07/2020 01:00	Leave Location					Leave location, thanks

Client: Bayswater Exploration & Production, LLC

Well Name / API: COT EAST #U-30-29HN / 05-123-50412

Well 15477
MD:



Quote #: QUO-40818-D3R1L4

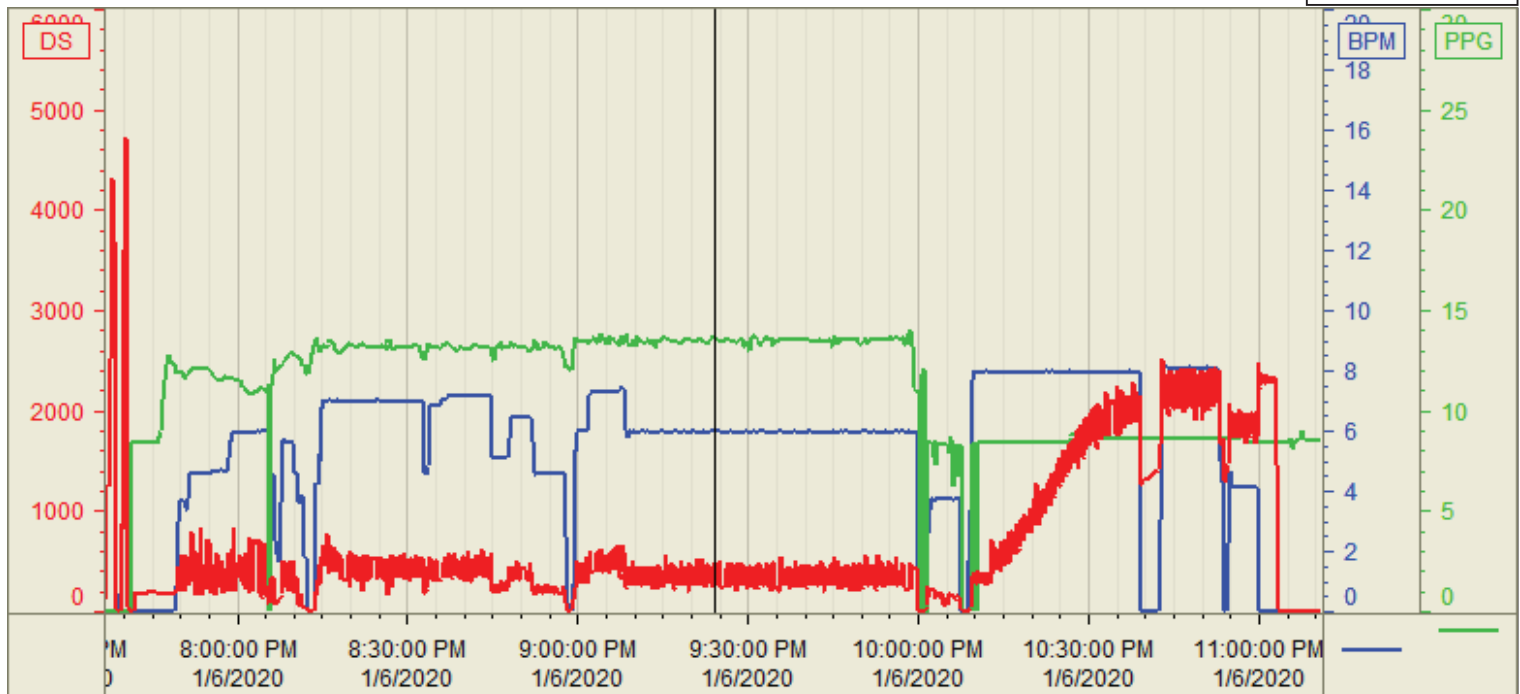
Plan #: ORD-23692-Y2B8D1

Execution #: EXC-23692-Y2B8D102

Customer: BAYSWATER
Well Number: U-30-29HN
Lease Info: COT EAST



Print Date/Time
1/7/2020 1:10:56 AM



	Name	Y value	X value/time stamp	Tag name Y
1	PS - Press (PSI)	425 i.	1/6/2020 9:24:02 PM i.	Cementer\PS_DISCHARGE_PRESS_DIAL
2	Density (PPG)	13.63	1/6/2020 9:24:04 PM	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate (BPM)	5.99 i.	1/6/2020 9:24:02 PM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 1:10:51 AM