

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Zachary Hyde	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	8.50	0.00	0.00	15,583.00	7,345.00	5.00
Previous Casing	8.92	9.63	36.00	1,576.00	1,576.00	
Casing	4.78	5.50	20.00	15,573.00	7,345.00	

HARDWARE

Bottom Plug Used?	No	Centralizers Type	Rigid
Top Plug Used?	Yes	Landing Collar Depth (ft)	15,546
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	5.500	Job Pumped Through	No Manifold
Centralizers Used	Yes	Top Connection Thread	BTC
Centralizers Quantity	185.00	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	15
Circulation Prior to Job	Yes	YP Mud In	8
Circulation Time (min)	180.00	YP Mud Out	8
Circulation Rate (bpm)	10.00	Solids Present at End of Circulation	No
Circulation Volume (bbls)	1800.00	10 sec SGS	5
Lost Circulation Prior to Cement Job	No	10 min SGS	11
Mud Density In (ppg)	10.40	30 min SGS	15
Mud Density Out (ppg)	10.40	Flare Prior to / during the Cement Job	No
PV Mud In	15	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	20.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	120.00

Client: Bayswater Exploration & Production, LLC

Well: COT EAST #V-30-29HN

Well API: 05-123-50403

Start Date: 1/12/2020

End Date: 1/12/2020



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	6,900.00	935	1711.0000	304.7000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4774	7.45	6,900.00	8,696.00	1415	2091.0000	372.3000
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	335.0000

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	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-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-7C	2.0000	PPB
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	RETARDER, R-31	0.5000	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	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
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	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	Flyash (Rockies)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-25	0.3000	BWOB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, SR-61L	0.1000	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water w/ Clay Protection & Biocide	ResCare CS-2	0.0800	GPB
Displacement Final	Water w/ Clay Protection & Biocide	ResCare CS-2	0.0800	GPB
Displacement Final	Water w/ Clay Protection & Biocide	BIOCIDE, BIOC11139W	0.0100	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	35.00
Calculated Displacement Vol (bbls)	345.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	335.00	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	4.00
Bump Plug Pressure (psi)	2500.00	Total Volume Pumped (bbls)	1110.00
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

Long String - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/11/2020 23:21	Callout					Crew gets called out. Requested time 1/12/20 300
2	01/11/2020 23:30	Depart for Location					Crew departs for location
3	01/12/2020 02:00	Arrive on Location					Crew arrives on location
4	01/12/2020 02:00	Spot Units					Spot units
5	01/12/2020 02:30	Rig Up					Crew rigs up iron and hoses
6	01/12/2020 04:00	STEACS Briefing					Crew has a briefing with company man and rig crew
7	01/12/2020 04:52	Prime Up	8.3300	3.00	3.00	200.00	Filled lines 3 bbls of Blue dye
8	01/12/2020 04:56	Pressure Test					Pressure tested lines 5500psi
9	01/12/2020 05:04	Pump Spacer	12.0000	6.00	28.00	400.00	Pumped 28bbls of Spacer at 12ppg with surfactant
10	01/12/2020 05:11	Pump Spacer	11.5000	6.00	26.00	400.00	Pumped 26 bbls of Spacer at 11.5ppg with surfactant
11	01/12/2020 05:14	Pump Spacer	11.0000	6.00	26.00	400.00	Pumped 26 bbls of Spacer at 11ppg with surfactant
12	01/12/2020 05:26	Pump Lead Cement	13.2000	6.00	305.00	400.00	Pumped 305bbls of Lead at 13.2ppg(935sk,1.82yld,9.87gal/sk)
13	01/12/2020 06:39	Pump Tail Cement	13.5000	6.00	372.00	400.00	Pumped 372bbls of Tail at 13.5ppg(1415sk,1.47yld,7.45gal/sk)
14	01/12/2020 07:46	End Pumping					Shutdown
15	01/12/2020 07:46	Wash Pumps and Lines					Washed pump and lines to pit
16	01/12/2020 07:56	Drop Top Plug					Dropped top plug
17	01/12/2020 07:56	Pump Displacement	8.3300	7.00	10.00	100.00	Pumped the first 10 bbls of displacement with retarder
18	01/12/2020 07:58	Pump Displacement	8.3300	7.00	315.00	2700.00	Pumped 315 bbls with rescare and biocide
19	01/12/2020 09:01	Spacer Back-to-Surface					At 230 away had spacer to surface
20	01/12/2020 09:01	Cement Back-to-Surface					At 310 away had cement to surface. Had a total of 35 bbls
21	01/12/2020 09:01	Pump Displacement	8.3300	4.00	20.00	2500.00	Slowed rate last 20 bbls to 4 bpm
22	01/12/2020 09:04	Land Plug					Landed plug 10 bbls early. FCP was 2500psi brought it up to 3500psi
23	01/12/2020 09:08	Check Floats					Checked floats got 4 bbls back
24	01/12/2020 09:08	Rig Down					Crew rigs down iron and hoses

Client: Bayswater Exploration & Production, LLC

Well Name / API: COT EAST #V-30-29HN / 05-123-50403

Well 15596
MD:



Quote #: QUO-41047-P6R0J8

Plan #: ORD-23773-D9Z3C4

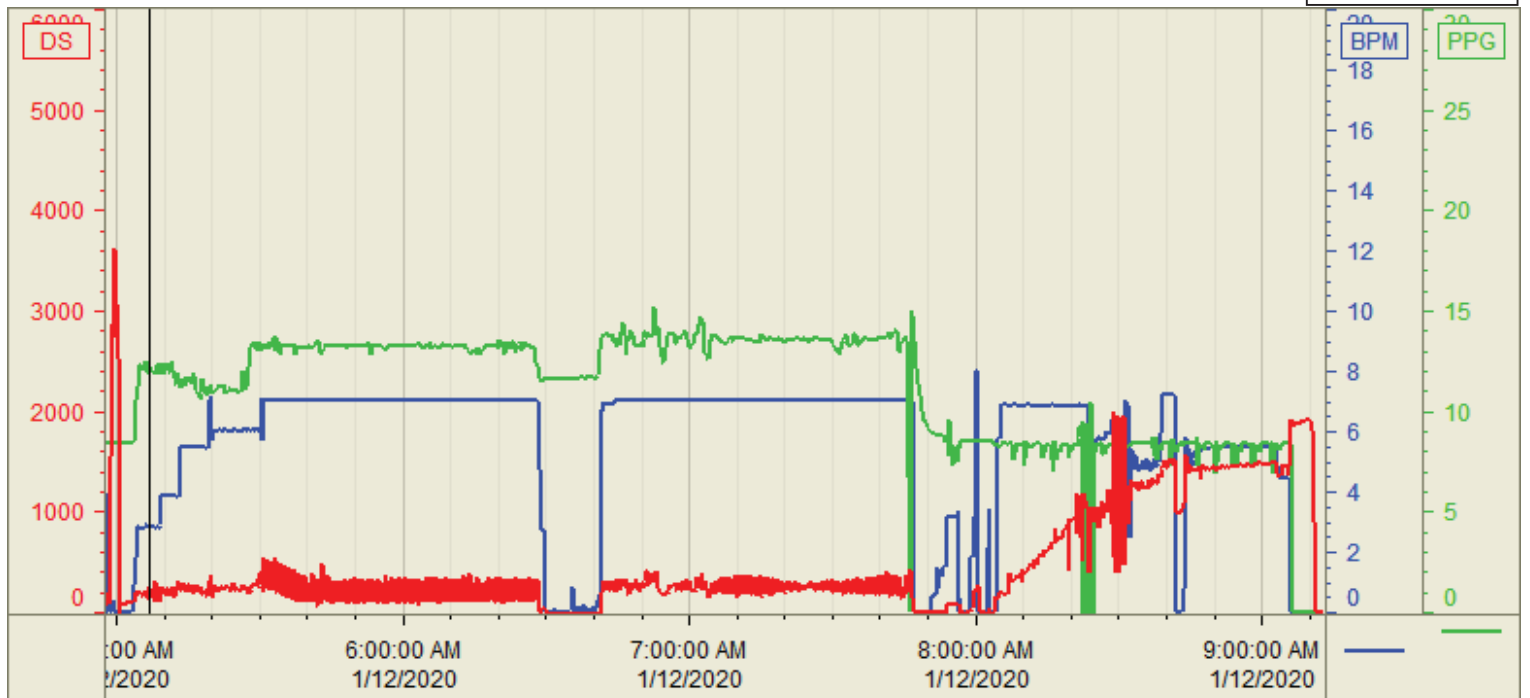
Execution #: EXC-23773-D9Z3C402

Customer: Bayswater
 Well Number: V-30-29HN
 Lease Info: COT East



Print Date/Time

1/12/2020 9:59:16 AM



	Name	Y value	X value/time stamp	Tag name Y
1	PS - Press (PSI)	326	1/12/2020 5:06:59 AM	Cementer\PS_DISCHARGE_PRESS_DIAL
2	Density (PPG)	12.15	1/12/2020 5:06:59 AM	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate (BPM)	2.79 i.	1/12/2020 5:06:58 AM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 9:59:10 AM