

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Aldo Espinoza Galindo	RIG	True 38
CLIENT FIELD REPRESENTATIVE	Marsh	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	16,157.00	7,434.00	5.00
Casing	4.78	5.50	20.00	16,149.97	7,434.00	
Previous 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)	16,123.47
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	12630.00
Top Plug Size	5.500	Max Casing Pressure - Operated (psi)	4000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	189.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	LTC
Landing Collar Depth (ft)	16,150	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	9
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Circulation Time (min)	240.00	Flare Prior to / during the Cement Job	No
Circulation Rate (bpm)	8.00	Gas Present	No
Circulation Volume (bbls)	1920.00	Lost Circulation Prior to Cement Job	No
Mud Density In (ppg)	10.00	30 min SGS	
PV Mud In	25		

TEMPERATURE

Ambient Temperature (°F)	8.00	Slurry Cement Temperature (°F)	62.00
Mix Water Temperature (°F)	60.00	Flow Line Temperature (°F)	70.00

Client: Bayswater Exploration & Production, LLC

Well: COT WEST #W-30-25HC

Well API: 05-123-50501

Start Date: 2/20/2020

End Date: 2/20/2020

Field Ticket #:



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 (bbbls)
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	7,182.00	970	1775.0000	316.1000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4774	7.45	7,182.00	8,958.00	1500	2217.0000	394.7000
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	347.1000

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	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	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	RETARDER, R-7C	2.0000	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	IntegraGuard GW-86	1.2000	PPB
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-7C	2.0000	PPB
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

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Lead Slurry	BJCem P100.3.01C	IntegraCare EC-2	3.0000	BWOB
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-25	0.3000	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	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	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, FLY ASH (ROCKIES)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
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 2	Retarded Water w/ Clay Protection & Biocide	RETARDER, SR-61L	0.1000	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	0.00
Calculated Displacement Vol (bbls)	357.90	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	357.00	Amt of Spacer to Surface	40.00
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)	3500.00	Total Volume Pumped (bbls)	1150.70
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	None	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	02/20/2020 00:00	Callout					called out
2	02/20/2020 04:30	Arrive on Location					on location, spot equipment
3	02/20/2020 04:40	Rig Up					rig up equipment
4	02/20/2020 07:00	STEACS Briefing					safety meeting with rig crew and company man
5	02/20/2020 07:30	Pressure Test	8.3400	0.20	0.20	6000.00	pressure test lines to 6000 psi
6	02/20/2020 07:35	Pump Spacer	12.0000	5.00	28.00	700.00	28 bbl spacer w/surfactants @ 12#
7	02/20/2020 07:40	Pump Spacer	11.5000	5.00	26.00	700.00	26 bbl spacer w/surfactants @ 11.5#
8	02/20/2020 07:45	Pump Spacer	11.0000	5.00	26.00	700.00	26 bbl spacer w/surfactants @ 11#
9	02/20/2020 07:52	Pump Lead Cement	13.2000	6.00	316.10	620.00	pump 970 sk/ 316.1 bbl lead cement @ 13.2 #/ yield 1.82/ water 9.87
10	02/20/2020 08:47	Pump Tail Cement	13.5000	7.00	394.70	450.00	pump 1500 sk/ 394.7 bbl tail cement @ 13.5 #/ yield 1.47/ water 7.45
11	02/20/2020 10:00	Drop Top Plug					drop plug and wash pumping lines to pit
12	02/20/2020 10:05	Pump Displacement	8.3400	8.00	10.00	350.00	start pumping displacement with 10 bbl of water retarder
13	02/20/2020 10:11	Pump Displacement	8.3400	9.00	40.00	1300.00	50 bbl on to displacement 1300 psi
14	02/20/2020 10:16	Pump Displacement	8.3400	9.00	50.00	2100.00	100 bbl on to displacement 2100 psi
15	02/20/2020 10:22	Pump Displacement	8.3400	9.00	50.00	2450.00	150 bbl on to displacement 2450 psi
16	02/20/2020 10:28	Pump Displacement	8.3400	9.00	50.00	2800.00	200 bbl on to displacement 2800 psi
17	02/20/2020 10:32	Pump Displacement	8.3400		43.00		243 bbl shutdown, rig swapping lines from sheakers to pit
18	02/20/2020 10:35	Pump Displacement	8.3400	7.00	7.00	2700.00	250 bbl on to displacement 2700 psi
19	02/20/2020 10:43	Pump Displacement	8.3400	7.00	50.00	3000.00	300 bbl on to displacement 3000 psi
20	02/20/2020 10:50	Pump Displacement	8.3400	4.00	40.00	2500.00	340 bbl on to displacement 2500psi, 4 bpm
21	02/20/2020 10:58	Land Plug	8.3400	4.00	12.00	2500.00	352 bbl bump plug 2500 psi to 3500 psi
22	02/20/2020 11:00	Check Floats				3500.00	check floats 4.5 bbl back, and 29 bbl of spacer back to surface
23	02/20/2020 11:05	Rig Down					rig down equipment
24	02/20/2020 12:30	Leave Location					leave location thanks

Client: Bayswater Exploration & Production, LLC

Well Name / API: COT WEST #W-30-25HC / 05-123-50501

Well 16157 MD:



Quote #: QUO-42630-N2H3L5

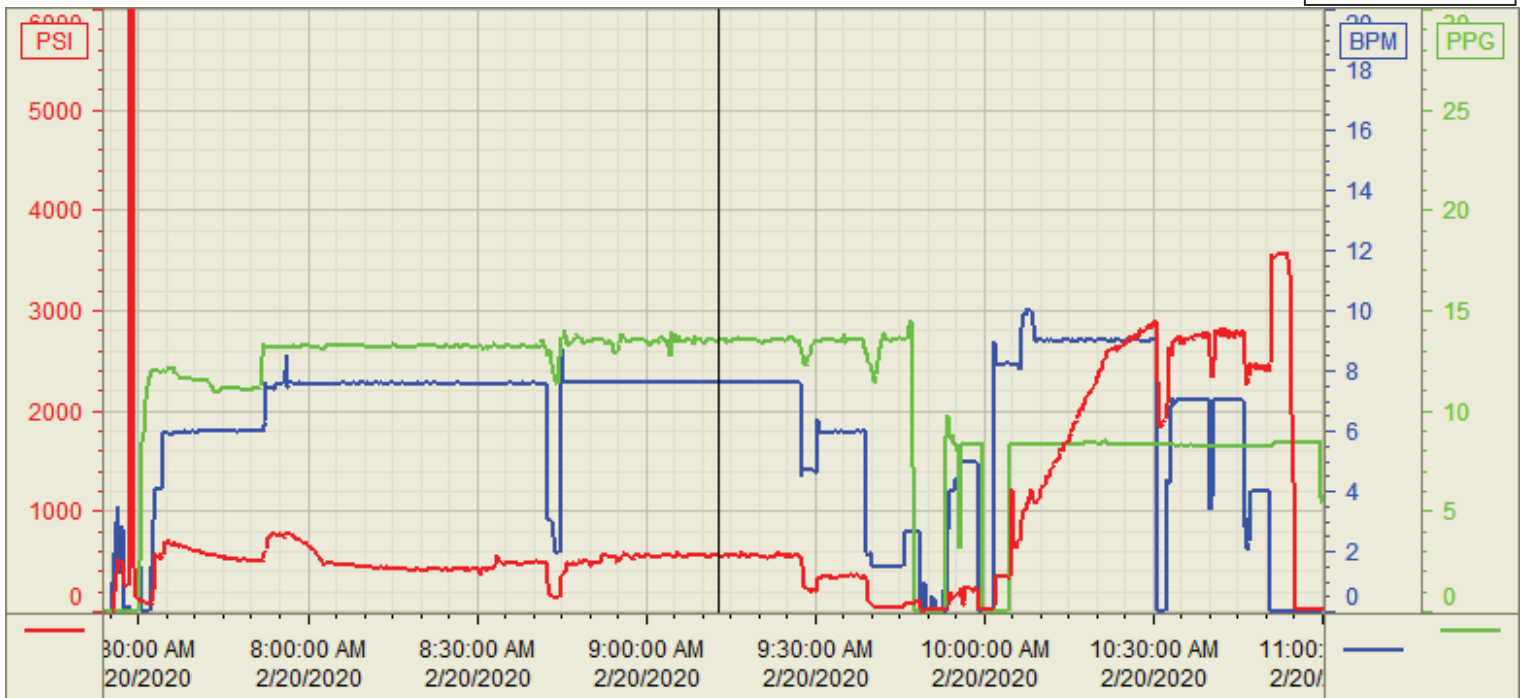
Plan #: ORD-24718-G2T0R5

Execution #: EXC-24718-G2T0R502

Customer: BAYSWATER
 Well Number: W-30-25HC
 Lease Info: COT WEST



Print Date/Time
 2/20/2020 8:20:10 PM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	564.2 i.	2/20/2020 9:12:51 AM i.	Cementer\DS_DISCHARGE_PRESS_DIAL
2	Recirc - Density (PPG)	13.47 i.	2/20/2020 9:12:51 AM i.	Cementer\DENSITY_ACTUAL_RATE
3	Combined Rate	7.61 i.	2/20/2020 9:12:51 AM i.	Cementer\Flow_Combined
4				
5				

Source: Control1 8:20:04 PM