



Bayswater Exploration & Production, LLC

East Ault 15-18-19HNC

API # 05-123-47073

Production

August 9, 2020

Quote #: QUO-46656-C5J0W6

Execution #: EXC-26639-B5G0R502



Bayswater Exploration & Production, LLC

Attention: Mr. Trevor Smith | (720) 335-9045 | trevor.smith@iptenergyservices.com

Bayswater Exploration & Production | 730 17th Street, Suite 610 | Denver, CO. 80202

Dear Mr. Trevor Smith,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,
Jason Creel
Field Engineer | (307) 365-9038 | Jason.Creel@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
Phone: (307) 459-6487

Sales Office 999 18th St. Suite 1200 Denver, CO 80202
Phone: (281) 408-2361

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Aldo Espinoza Galindo	FORMATION	Nio C
CLIENT FIELD REPRESENTATIVE	Trevor	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 (%)
Previous Casing	8.92	9.63	36.00	1,545.00	1,545.00	
Open Hole	8.50	0.00	0.00	17,613.00	7,294.00	7.00
Casing	4.78	5.50	20.00	17,620.00	7,294.00	

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	17,591.00
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	209.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	BTC
Landing Collar Depth (ft)	17,591	Top Connection Size	5.5

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Lost Circulation Prior to Cement Job	No
Circulation Prior to Job	Yes	Mud Density In (ppg)	10.00
Circulation Time (min)	180.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	8.00	Flare Prior to / during the Cement Job	No
Circulation Volume (bbls)	1440.00	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	104.00	Slurry Cement Temperature (°F)	70.00
Mix Water Temperature (°F)	70.00	Flow Line Temperature (°F)	75.00

Client: Bayswater Exploration & Production, LLC

Well: EAST AULT 15-18-19HNC

Well API: 05-123-47073

Start Date: 8/9/2020

End Date: 8/9/2020

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 (bbls)
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	1.8290	9.86	0.00	6,954.00	955	1747.0000	311.1000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4769	7.45	6,954.00	10,600.00	1760	2600.0000	462.9000
Displacement 2	Retarded Water + Chems	8.3331				0.00	0	0.0000	10.0000
Displacement Final	Water + Chems	8.3331			0.00			0.0000	379.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
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	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	WEIGHTING ADDITIVE, W-11	242.6900	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	WEIGHTING ADDITIVE, W-11	242.6900	PPB
Spacer / Pre Flush / Flush	IntegraGuard EZ Spacer II	SPACER SURFACTANT, SS-267	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	WEIGHTING ADDITIVE, W-11	242.6900	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
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-24	0.3000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.7000	BWOB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	IntegraGuard GW-86	0.1000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraCare EC-2	3.0000	BWOB
Tail Slurry	BJCem P50.6.02C	CEMENT, FLY ASH (ROCKIES)	50.0000	PCT

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FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1000	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	FOAM PREVENTER, FP-24	0.3000	BWOB
Tail Slurry	BJCem P50.6.02C	EXTENDER, BENTONITE	2.0000	BWOB
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	BWOB
Displacement 2	Retarded Water + Chems	RETARDER, SR-61L	0.1000	GPB
Displacement 2	Retarded Water + Chems	ResCare CS-2	0.0800	GPB
Displacement 2	Retarded Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	GPB
Displacement 2	Retarded Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water + Chems	OXYGEN SCAVENGER, OS-30	0.1680	GPB
Displacement Final	Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water + Chems	ResCare CS-2	0.0800	GPB
Displacement Final	Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	GPB
Displacement Final	Water + Chems	OXYGEN SCAVENGER, OS-30	0.1680	GPB

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	0.00
Calculated Displacement Vol (bbls)	390.50	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	394.50	Amt of Spacer to Surface	50.50
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	No	Amt Bled Back After Job	4.00
Bump Plug Pressure (psi)	0.00	Total Volume Pumped (bbls)	1244.50
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	08/09/2020 11:00	Callout					crew called out to location
2	08/09/2020 13:00	Arrive on Location					on location, spot equipment
3	08/09/2020 13:30	Rig Up					rig up equipment
4	08/09/2020 15:00	Rig					rig circulating well
5	08/09/2020 18:00	STEACS Briefing					safety meeting with company man and rig crew
6	08/09/2020 18:20	Pressure Test	8.3400	0.20	0.20	6100.00	pressure test lines to 6100 psi
7	08/09/2020 18:24	Pump Spacer	12.0000	5.50	28.00	800.00	pump 28 bbl spacer w/surfactants @ 12 # / wet and dry samples taken, and weight verified
8	08/09/2020 18:27	Pump Spacer	11.5000	5.50	26.00	710.00	pump 26 bbl spacer w/surfactants @ 11.5 # / wet and dry samples taken, and weight verified
9	08/09/2020 18:32	Pump Spacer	11.0000	5.50	26.00	700.00	pump 26 bbl spacer w/surfactants @ 11 # / wet and dry samples taken, and weight verified
10	08/09/2020 18:40	Pump Lead Cement	13.2000	7.20	311.10	1100.00	pump lead cement / 955 sk / 311.1 bbl / @ 13.2 # / yield 1.82 / mix water 9.86 / wet and dry samples taken, and weight verified
11	08/09/2020 18:45	Pump Lead Cement	13.2000	6.50		500.00	slow down to 6.5 bpm to keep density
12	08/09/2020 18:48	Pump Lead Cement	13.2000	6.00		380.00	slow down to 6 bpm to keep density
13	08/09/2020 19:21	Pump Lead Cement	13.2000	5.50		380.00	slow down to 5.5 bpm to keep density
14	08/09/2020 19:25	Pump Lead Cement	13.2000	4.00		320.00	slow down to 4 bpm to keep density
15	08/09/2020 19:27	Pump Tail Cement	13.5000	6.20	199.90	490.00	pump tail cement / silo 453 / 760 sk / 199.9 bbl / yield 1.47 / mix water 7.45 / wet and dry samples taken and weight verified

Client: Bayswater Exploration & Production, LLC

Well Name / API: EAST AULT 15-18-19HNC / 05-123-47073

Well MD: 17620

Quote #: QUO-46656-C5J0W6

Plan #: ORD-26639-B5G0R5

Execution #: EXC-26639-B5G0R502



SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
16	08/09/2020 20:00	Pump Tail Cement	13.5000	6.20	263.00	500.00	second silo tail cement / silo 664 / 1000 sk / 263 bbl / yield 1.47 / mix water 7.45 / wet and dry samples taken and weight verified
17	08/09/2020 20:01	Pump Tail Cement	13.5000	5.00		480.00	slow down to 5 bpm to keep density over rate
18	08/09/2020 20:03	Pump Tail Cement	13.5000	6.30		495.00	back to 6.3 bpm
19	08/09/2020 20:34	Pump Tail Cement	13.5000	4.00		200.00	slow down to 4 bpm to keep density over rate
20	08/09/2020 20:42	Drop Top Plug					done with cement, drop plug, and wash pumping lines to pit
21	08/09/2020 20:47	Pump Displacement	8.3400	10.00	10.00	540.00	start pumping displacement with first 10 bbl of water retarder, and go on with biocide, rescare, oxygen scavenger, and corrosion inhibitor thru displacement
22	08/09/2020 20:53	Pump Displacement	8.3400	10.00	40.00	979.00	50 bbl on to displacement 979 psi
23	08/09/2020 20:58	Pump Displacement	8.3400	10.00	50.00	1665.00	100 bbl on to displacement 1665 psi
24	08/09/2020 21:02	Pump Displacement	8.3400	10.00	50.00	2355.00	150 bbl on to displacement 2355 psi
25	08/09/2020 21:07	Pump Displacement	8.3400	10.00	50.00	2074.00	200 bbl on to displacement 2074 psi
26	08/09/2020 21:12	Pump Displacement	8.3400	10.00	50.00	1796.00	250 bbl on to displacement 1796 psi
27	08/09/2020 21:17	Pump Displacement	8.3400	10.00	50.00	2945.00	300 bbl on to displacement 2945 psi
28	08/09/2020 21:20	Pump Displacement	8.3400		40.00		340 bbl on to displacement, see interface, stop pumping to swap rig lines to pit
29	08/09/2020 21:22	Pump Displacement	8.3400	6.00			lines swaped, start pumping at 6 bpm
30	08/09/2020 21:25	Pump Displacement	8.3400	6.00	10.00	2590.00	350 bbl on to displacement 2590 psi
31	08/09/2020 21:28	Pump Displacement	8.3400	4.00	20.00	2300.00	370 bbl on to displacement, slow down to 4 bpm to land plug
32	08/09/2020 21:32	Other (See comment)	8.3400	4.00	21.00	2300.00	391 bbl on to displacement, stop pumping, didnt land plug
33	08/09/2020 21:36	Other (See comment)	8.3400	4.00	1.00	2300.00	company man indicate us to pump one more barrel, we did, didnt land pressure keep at 2300 psi

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
34	08/09/2020 21:38	Other (See comment)	8.3400	4.00	1.00	2300.00	pumped one more barrel with same results at 2300 psi, not landing
35	08/09/2020 21:40	Other (See comment)	8.3400	4.00	2.00	2450.00	after another phone call, we pumped two more barrels, this time pressure is higher 2450 psi and holding, a total of 4 bbl over was pumped
36	08/09/2020 21:45	Check Floats					check floats, 4 bbl back and holding, 50.5 bbl of spacer back to surface and no cement back, i weight a sample of spacer of was coming at the end , it was 12.6 #
37	08/09/2020 21:47	Other (See comment)					pumped 15 bbl of water to clean up rig lines
38	08/09/2020 22:00	Rig Down					rig down equipment

