



# Bayswater Exploration & Production, LLC

East Ault 9-18-19HNB

API # 05-123-47067

## Production

July 4, 2020

Quote #: QUO-46130-T6H9X5

Execution #: EXC-26403-V7H7W102



# Bayswater Exploration & Production, LLC

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

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

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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](mailto: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

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# BJ Cementing Treatment Report

SERVICE SUPERVISOR	Brian Boyd	FORMATION	Nio B
CLIENT FIELD REPRESENTATIVE	Marsh	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 (%)
Casing	4.78	5.50	20.00	17,277.00	7,217.00	
Open Hole	8.50	0.00	0.00	17,289.00	7,217.00	7.00
Previous Casing	8.92	9.63	36.00	1,545.00	1,545.00	

## HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	17,250.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	11091.00
Top Plug Size	5.500	Max Casing Pressure - Operated (psi)	8891.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	207.00	Job Pumped Through	Manifold
Centralizers Type	Rigid	Top Connection Thread	BTC
Landing Collar Depth (ft)	17,250	Top Connection Size	5.5

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	YP Mud In	8
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Circulation Time (min)	150.00	10 sec SGS	8
Circulation Rate (bpm)	7.00	10 min SGS	13
Circulation Volume (bbls)	1600.00	30 min SGS	15
Lost Circulation Prior to Cement Job	No	Flare Prior to / during the Cement Job	No
Mud Density In (ppg)	10.00	Gas Present	No
PV Mud In	19		

Client: Bayswater Exploration & Production, LLC

Well: EAST AULT 9-18-19HNB

Well API: 05-123-47067

Start Date: 7/4/2020

End Date: 7/4/2020

Field Ticket #:



## TEMPERATURE

Ambient Temperature (°F)	87.00	Slurry Cement Temperature (°F)	78.00
Mix Water Temperature (°F)	71.00	Flow Line Temperature (°F)	130.00

## FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> 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	6,751.00	925	1692.0000	301.3000
Tail Slurry	BJCem P50.6.02C	13.5000	1.4769	7.45	6,751.00	10,500.00	1740	2570.0000	457.7000
Displacement 2	Retarded Water + Chems	8.3331				0.00	0	0.0000	10.0000
Displacement Final	Water + Chems	8.3331			0.00			0.0000	372.3000

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	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-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-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	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	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	SPACER SURFACTANT, SS-267	1.0000	GPB
Lead Slurry	BJCem P100.3.01C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem P100.3.01C	IntegraCare EC-2	3.0000	BWOB
Lead Slurry	BJCem P100.3.01C	IntegraGuard GW-86	0.1000	BWOB
Lead Slurry	BJCem P100.3.01C	FOAM PREVENTER, FP-24	0.3000	BWOB

Client: Bayswater Exploration & Production, LLC

Well: EAST AULT 9-18-19HNB

Well API: 05-123-47067

Start Date: 7/4/2020

End Date: 7/4/2020

Field Ticket #:

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Lead Slurry	BJCem P100.3.01C	FLUID LOSS, FL-66	0.5000	BWOB
Lead Slurry	BJCem P100.3.01C	RETARDER, SR-20	0.7000	BWOB
Tail Slurry	BJCem P50.6.02C	IntegraGuard GW-86	0.1000	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	CEMENT, FLY ASH (ROCKIES)	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	CEMENT, CLASS G	50.0000	PCT
Tail Slurry	BJCem P50.6.02C	RETARDER, SR-20	0.1000	BWOB
Tail Slurry	BJCem P50.6.02C	FOAM PREVENTER, FP-24	0.3000	BWOB
Displacement 2	Retarded Water + Chems	OXYGEN SCAVENGER, OS-30	0.1680	GPB
Displacement 2	Retarded Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	GPB
Displacement 2	Retarded Water + Chems	RETARDER, SR-61L	0.1000	GPB
Displacement 2	Retarded Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement 2	Retarded Water + Chems	ResCare CS-2	0.0800	GPB
Displacement Final	Water + Chems	CORROSION INHIBITORS, CI-27	0.2100	GPB
Displacement Final	Water + Chems	BIOCIDE, BIOC11139W	0.0100	GPB
Displacement Final	Water + Chems	ResCare CS-2	0.0800	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	2.00
Calculated Displacement Vol (bbls)	383.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	383.00	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)	3333.00	Total Volume Pumped (bbls)	1236.00
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 - Brian Boyd

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	07/04/2020 02:00	Callout					Customer requested for crew on location at 7:00
2	07/04/2020 03:15	Depart for Location					BJ crew has journey management and departs from shop
3	07/04/2020 04:15	Arrive on Location					BJ crew arrives on location and meet with customer
4	07/04/2020 04:30	STEACS Briefing					BJ crew has steacs over rigging up iron and hoses
5	07/04/2020 04:45	Rig Up					BJ crew rigs up iron and hoses , waiting on rig to finish circulating rig started at 6:00 and finished at 9:00
6	07/04/2020 08:43	STEACS Briefing					Steacs briefing with BJ crew, rig crew and company man over job and hazards
7	07/04/2020 09:01	Prime Up	8.3300	2.00	4.00	570.00	Fill pumps and lines
8	07/04/2020 09:03	Pressure Test	8.3300	0.50	0.50	5230.00	Pressure test iron and hoses to 5000 PSI
9	07/04/2020 09:11	Pump Spacer	12.0000	4.00	28.00	400.00	Pump 28 bbls of 12 PPG spacer from CTF-009 FP
10	07/04/2020 09:20	Pump Spacer	11.5000	4.00	26.00	700.00	Pump 26 bbls of 11.5 PPG spacer from CTF-009 FP
11	07/04/2020 09:25	Pump Spacer	11.0000	4.00	26.00	700.00	Pump 26 bbls of 11 PPG spacer from CTF-009 FP
12	07/04/2020 09:45	Pump Lead Cement	13.2000	6.00		500.00	Pump 301 bbls of 13.2 PPG lead cement from Silo CTS-449 ( 925 Sks, 1.82 Yield, 9.87 Gals/Sks)
13	07/04/2020 10:01	Pump Lead Cement	13.2000	6.00	80.00	800.00	80 bbls into lead cement
14	07/04/2020 10:13	Pump Lead Cement	13.2000	6.00	160.00	750.00	160 bbls into lead cement
15	07/04/2020 10:28	Pump Lead Cement	13.2000	6.00	240.00	640.00	240 bbls into lead cement
16	07/04/2020 10:44	Pump Lead Cement	13.2000	6.00	307.00	640.00	Pump total of 307 bbls from Silo CTS-449, Swapping to Tail silo CTS-453
17	07/04/2020 10:44	Pump Tail Cement	13.5000	6.00		700.00	Pump 457 bbls of Tail cement ( 1740 Sks, 1.47 Yield, 7.45 Gals/Sks)
18	07/04/2020 11:09	Pump Tail Cement	13.5000	6.00	80.00	715.00	80 bbls into tail cement

Client: Bayswater Exploration & Production, LLC

Well Name / API: EAST AULT 9-18-19HNB / 05-123-47067

Well MD: 17289



Quote #: QUO-46130-T6H9X5

Plan #: ORD-26403-V7H7W1

Execution #: EXC-26403-V7H7W102

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
19	07/04/2020 11:18	Pump Tail Cement	13.5000	6.00	160.00	700.00	160 bbls into tail cement
20	07/04/2020 11:22	Pump Tail Cement	13.5000	6.00	194.00	700.00	Pump total of 194 bbls from Tail silo CTS-453 swapping to Silo 655
21	07/04/2020 11:26	Pump Tail Cement	13.5000	6.00	240.00	660.00	240 bbls into tail cement
22	07/04/2020 11:38	Pump Tail Cement	13.5000	6.00	320.00	660.00	320 bbls into tail cement
23	07/04/2020 11:51	Pump Tail Cement	13.5000	6.00	457.00	600.00	Pump total 457 bbls of tail cement and 252 bbls from silo 655
24	07/04/2020 12:14	End Pumping					Shut down pumping
25	07/04/2020 12:18	Wash Pumps and Lines	8.3300	3.00	15.00	45.00	Wash pumps and lines
26	07/04/2020 12:25	Drop Top Plug					Drop top plug with company man
27	07/04/2020 12:25	Pump Displacement	8.3300	10.00		1500.00	Pump total of 383 bbls of fresh water displacement
28	07/04/2020 12:36	Pump Displacement	8.3300	10.00	100.00	1700.00	100 bbls into displacement
29	07/04/2020 12:47	Pump Displacement	8.3300	10.00	200.00	2700.00	200 bbls into displacement
30	07/04/2020 12:57	Pump Displacement	8.3300	8.00	280.00	2400.00	280 bbls into displacement slow rate to 8 bpm
31	07/04/2020 13:01	End Pumping			310.00	1600.00	310 bbls into displacement shut down spacer to surface and rig to bypass to 3 way tanks
32	07/04/2020 13:03	Pump Displacement	8.3300	8.00	310.00	2900.00	310 bbls away pump back online for displacement
33	07/04/2020 13:10	Pump Displacement	8.3300	5.00	350.00	2600.00	350 bbls into displacement slow rate to 5 bpm
34	07/04/2020 13:12	Pump Displacement	8.3300	4.00	360.00	2600.00	360 bbls into displacement slow rate to 4 bpm
35	07/04/2020 13:17	Cement Back-to-Surface	8.3300	4.00	381.00	2562.00	381 bbls into displacement got cement to surface for 2 bbls to surface
36	07/04/2020 13:18	Land Plug			383.00	3333.00	Bump plug to 3333 PSI, FCP of 2562 PSI pump total displacement of 383 bbls
37	07/04/2020 13:22	Check Floats					Check floats got 4.5 bbls back to pump floats holding
38	07/04/2020 13:25	STEACS Briefing					BJ crew has steacs over rigging down iron and hoses
39	07/04/2020 13:35	Rig Down					BJ crew rigs down iron and hoses
40	07/04/2020 14:45	Leave Location					BJ crew has journey management and departs from location

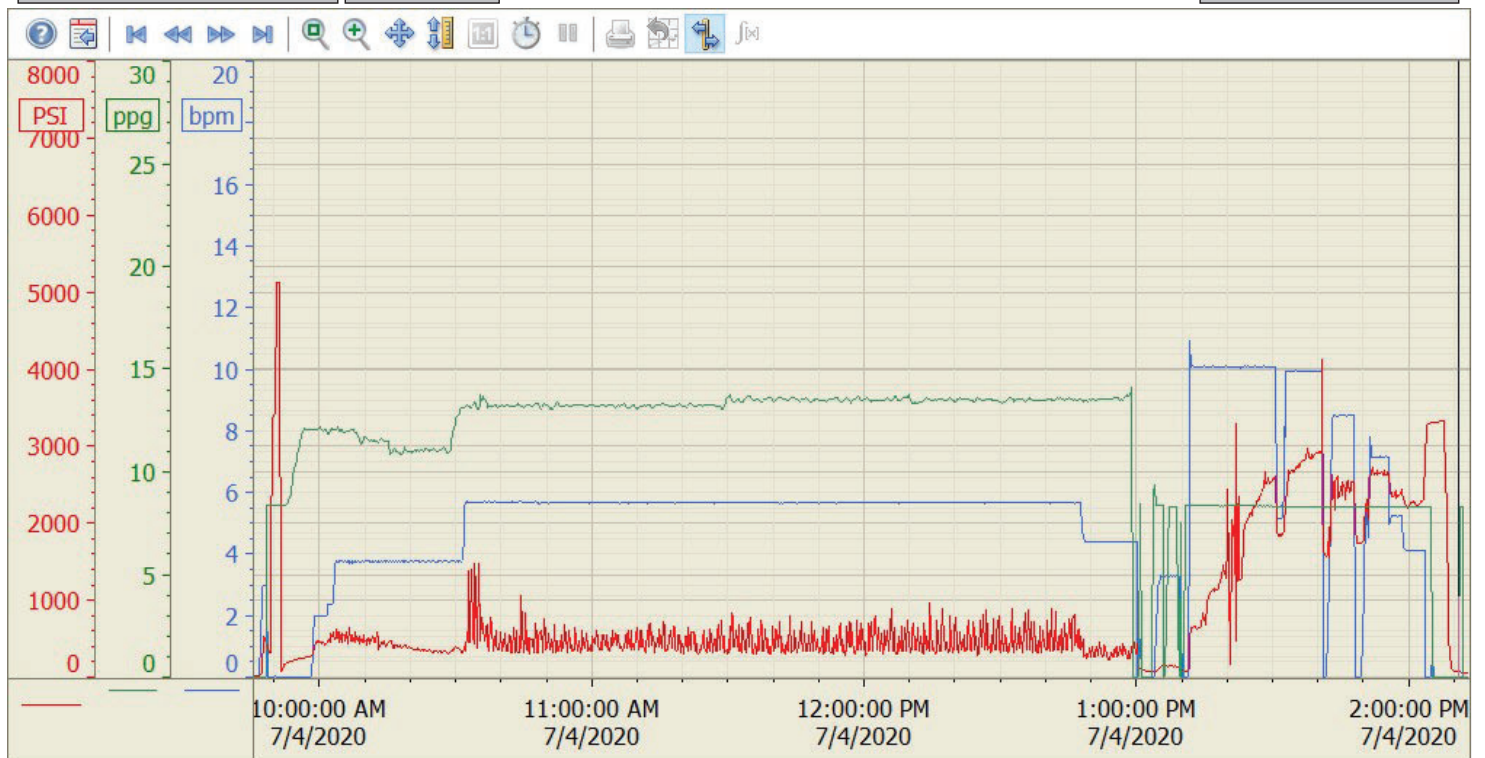
# Summary Trend

BAYSWATER

9-18-19 HNB



Lease: EAST AULT



7/5/2020 10:48:52 AM