



# Petroshare Corporation

Brighton Lakes 20-17-3NBH

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API #05-001-10088

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## Surface

July 21, 2019

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Quote #: QUO-19768-V6F5K2

Execution #: EXC-19768-V6F5K202



# Petroshare Corporation

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Attention: Mr. Greg Thorlaksen | (719) 963-0714 | gregthorlaksen@yahoo.com

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Dear Mr. Greg Thorlaksen,

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,  
Gage Putnam  
Field Engineer I | (307) 365-8254 | Gage.Putnam@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	Eric Dewit	CLIENT FIELD REPRESENTATIVE	Greg
DISTRICT	Cheyenne, WY	COUNTY	ADAMS
SERVICE	Cementing	STATE / PROVINCE	CO

## WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Open Hole	13.50	0.00	0.00	1,869.00	1,869.00	15.00		
Casing	8.92	9.63	36.00	1,869.00	1,869.00		J-55	LTC

## HARDWARE

Bottom Plug Used?	Yes	Landing Collar Depth (ft)	1,828.00
Bottom Plug Provided By	Non BJ	Tool Type	Float Collar
Bottom Plug Size	9.625	Tool Depth (ft)	1,828.00
Top Plug Used?	Yes	Max Casing Pressure - Rated (psi)	2816.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Operated (psi)	1500.00
Top Plug Size	9.625	Pipe Movement	None
Centralizers Used	Yes	Job Pumped Through	Manifold
Centralizers Quantity	12.00	Top Connection Thread	LTC
Centralizers Type	Bow	Top Connection Size	9.625

## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Lost Circulation Prior to Cement Job	No
Circulation Prior to Job	Yes	Solids Present at End of Circulation	No
Circulation Time (min)	30.00	Flare Prior to / during the Cement Job	No
Circulation Rate (bpm)	5.00	Gas Present	No
Circulation Volume (bbls)	150.00		

## TEMPERATURE

Ambient Temperature (°F)	78.00	Slurry Cement Temperature (°F)	75.00
Mix Water Temperature (°F)	70.00		

Client: Petroshare Corporation

Well: Brighton Lakes 20-17-3NBH

Well API: 05-001-10088

Start Date: 7/21/2019

End Date: 7/21/2019



## 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	Water	8.3337			0.00				20.0000
Lead Slurry	BJCem S100.03.1C	12.0000	2.5298	14.86	0.00	1,450.00	320	810.0000	144.2000
Tail Slurry	BJCem S100.03.1C	12.5000	2.2255	12.59	1,450.00	500.00	135	299.0000	53.2000
Displacement Final	Water	8.3337			0.00			0.0000	147.5000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Spacer / Pre Flush / Flush	Water	Fresh Water	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	IntegraSeal POLI	0.1300	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	IntegraSeal POLI	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Displacement Final	Water	Fresh Water	100.0000	PCT

## DISPLACEMENT AND END OF JOB SUMMARY

<b>Displaced By</b>	BJ	<b>Amt of Cement Returned / Reversed</b>	22.00
<b>Calculated Displacement Vol (bbls)</b>	141.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	141.00	<b>Amt of Spacer to Surface</b>	20.00
<b>Did Float Hold?</b>	Yes	<b>Pressure Left on Casing (psi)</b>	0.00
<b>Bump Plug</b>	Yes	<b>Amt Bled Back After Job</b>	0.50
<b>Bump Plug Pressure (psi)</b>	1069.00	<b>Total Volume Pumped (bbls)</b>	360.00
<b>Were Returns Planned at Surface</b>	Yes	<b>Top Out Cement Spotted</b>	No
<b>Cement Returns During Job</b>	Full	<b>Lost Circulation During Cement Job</b>	No

Client: Petroshare Corporation

Well: Brighton Lakes 20-17-3NBH

Well API: 05-001-10088

Start Date: 7/21/2019

End Date: 7/21/2019



# BJ Cementing Event Log

Surface - Cheyenne, WY

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	07/21/2019 02:00	Callout					Rig calls out with an RTS of 08:00 7/21/19
2	07/21/2019 02:00	Other (See comment)					Get ready to leave the yard and travel to location
3	07/21/2019 04:00	Depart for Location					Leave yard to travel to location
4	07/21/2019 06:30	Arrive on Location					Arrive on location, rig is RIH with casing
5	07/21/2019 06:30	STEACS Briefing					Pre-rig up safety meeting with BJ crew
6	07/21/2019 06:45	Rig Up					Rig up water, and bulk
7	07/21/2019 07:15	Rig					Waiting on the rig to finish RIH with casing
8	07/21/2019 08:13	STEACS Briefing					Pre-job safety meeting with BJ crew, and rig crew
9	07/21/2019 08:18	Rig Up					Load bottom plug into casing, and rig up cement head
10	07/21/2019 08:35	Other (See comment)	8.3400	2.80	2.00	90.00	Pump 2 bbls of fresh water to load pumps and lines
11	07/21/2019 08:38	Pressure Test	8.3400	0.00	0.00	2780.00	Pressure test pumps and lines
12	07/21/2019 08:44	Pump Spacer	8.3400	5.80	20.00	189.00	Pump 20 bbls of Fresh Water + Dye
13	07/21/2019 08:50	Pump Lead Cement	12.0000	5.70	144.00	224.00	Pump 320 sks of lead cement @12 ppg
14	07/21/2019 09:18	Pump Tail Cement	12.5000	5.70	53.00	163.00	Pump 135 sks of tail cement @12.5 ppg
15	07/21/2019 09:28	Drop Top Plug		0.00	0.00	0.00	Shut down and drop the top plug
16	07/21/2019 09:34	Pump Displacement	8.3400	5.70	0.00	57.00	Send plug and start fresh water displacement
17	07/21/2019 09:44	Pump Displacement	8.3400	5.70	50.00	150.00	
18	07/21/2019 09:52	Spacer Back-to-Surface	8.3400	5.60	98.00	400.00	Start getting spacer to surface
19	07/21/2019 09:56	Cement Back-to-Surface	8.3400	5.60	119.00	450.00	Start getting good cement to surface
20	07/21/2019 09:57	Other (See comment)	8.3400	2.80	120.00	385.00	Drop rate to land the plug
21	07/21/2019 10:03	Land Plug	8.4000	2.80	141.00	1069.00	Land plug with 452 psi, Bump up to 1069 (22 bbls of cement to surface)
22	07/21/2019 10:05	Check Floats	8.3400	0.00	0.00	0.00	Check floats (floats held) .5 bbls back
23	07/21/2019 10:07	STEACS Briefing					Pre-rig down safety meeting
24	07/21/2019 10:15	Rig Down					Rig down floor, and water
25	07/21/2019 10:30	Leave Location					Leave location



JobMaster Program Version 4.02C1  
Job Number: 16958  
Customer: Petroshare  
Well Name: Brighton Lakes 20-17-3NBH

