



# Petroshare Corporation

Brighton Lakes 20-17-1NBH

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API #05-001-10086

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## Surface

July 25, 2019

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Quote #: QUO-34549-H9F2H3

Execution #: EXC-19890-R1Q9K7O2



# Petroshare Corporation

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Attention: Mr. Greg Thorlaksen | (719) 963-0714 | [gregthorlaksen@yahoo.com](mailto: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 li | (307) 365-8254 | [Gage.Putnam@bjservices.com](mailto: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

<b>SERVICE SUPERVISOR</b>	Eric Dewit	<b>FORMATION</b>	
<b>CLIENT FIELD REPRESENTATIVE</b>	Greg	<b>RIG</b>	
<b>DISTRICT</b>	Cheyenne, WY	<b>COUNTY</b>	ADAMS
<b>SERVICE</b>	Cementing	<b>STATE / PROVINCE</b>	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	1,891.00	1,891.00	15.00		
Casing	8.92	9.63	36.00	1,891.00	1,891.00		J-55	LTC

## HARDWARE

<b>Bottom Plug Used?</b>	Yes	<b>Landing Collar Depth (ft)</b>	1,849
<b>Bottom Plug Provided By</b>	Non BJ	<b>Tool Type</b>	Float Collar
<b>Bottom Plug Size</b>	9.625	<b>Tool Depth (ft)</b>	1,849.00
<b>Top Plug Used?</b>	Yes	<b>Max Casing Pressure - Rated (psi)</b>	2816.00
<b>Top Plug Provided By</b>	Non BJ	<b>Max Casing Pressure - Operated (psi)</b>	1500.00
<b>Top Plug Size</b>	9.625	<b>Pipe Movement</b>	None
<b>Centralizers Used</b>	Yes	<b>Job Pumped Through</b>	Manifold
<b>Centralizers Quantity</b>	12.00	<b>Top Connection Thread</b>	LTC
<b>Centralizers Type</b>	Bow	<b>Top Connection Size</b>	9.625

## CIRCULATION PRIOR TO JOB

<b>Circulation Prior to Job</b>	No	<b>Solids Present at End of Circulation</b>	No
<b>Lost Circulation Prior to Cement Job</b>	No	<b>Flare Prior to / during the Cement Job</b>	No
<b>Mud Density In (ppg)</b>	8.33	<b>Gas Present</b>	No

## TEMPERATURE

<b>Ambient Temperature (°F)</b>	71.00	<b>Slurry Cement Temperature (°F)</b>	65.00
<b>Mix Water Temperature (°F)</b>	63.00		

Client: Petroshare Corporation

Well: Brighton Lakes 20-17-1NBH

Well API: 05-001-10086

Start Date: 7/25/2019

End Date: 7/25/2019

Field Ticket #:



## 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 EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.03.1C	IntegraSeal POLI	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.03.1C	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.03.1C	IntegraSeal POLI	0.1300	LBS/SK
Tail Slurry	BJCem S100.03.1C	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Tail Slurry	BJCem S100.03.1C	CEMENT, ASTM TYPE III	100.0000	PCT
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>	0.00
<b>Calculated Displacement Vol (bbls)</b>	142.00	<b>Method Used to Verify Returns</b>	Visual
<b>Actual Displacement Vol (bbls)</b>	142.00	<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>	1104.00	<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 20-17-1NBH

Well 05-001-10086

API:

Start 7/25/2019

End 7/25/2019

Field Ticket

Date:

Date:

#:



# BJ Cementing Event Log

Surface - Cheyenne, WY - Eric Dewit

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	07/24/2019 20:30	Callout					Customer calls with an RTS of 2:30 on 7/25/19
2	07/24/2019 20:30	Other (See comment)					Get ready to travel to location
3	07/24/2019 22:30	Depart for Location					Travel to location
4	07/25/2019 00:30	Arrive on Location					Arrive on location, rig is RIH with casing
5	07/25/2019 08:00	STEACS Briefing					Pre-rig up safety meeting with BJ crew
6	07/25/2019 08:15	Rig Up					Rig up water, bulk, and high pressure treating line, and cement head (load bottom plug into casing before rigging up cement head)
7	07/25/2019 08:45	STEACS Briefing					Pre-job safety meeting with BJ crew, and rig crew
8	07/25/2019 09:05	Other (See comment)	8.3400	2.80	2.00	80.00	Load lines with 2 bbls of fresh water
9	07/25/2019 09:07	Pressure Test	8.3400	0.00	0.00	2460.00	Pressure test pumps and lines
10	07/25/2019 09:11	Pump Spacer	8.3400	5.60	20.00	202.00	Pump 20 bbls of fresh water ahead
11	07/25/2019 09:15	Pump Lead Cement	12.0000	6.10	144.00	386.00	Pump 320 sks of lead cement @12 ppg
12	07/25/2019 09:38	Pump Tail Cement	12.5000	6.00	53.00	217.00	Pump 13 sks of tail cement @12.5 ppg
13	07/25/2019 09:50	Drop Top Plug		0.00	0.00	0.00	Shut down, and drop the top plug
14	07/25/2019 09:54	Pump Displacement	8.3400	7.70	0.00	87.00	Send top plug, and start fresh water displacement
15	07/25/2019 10:03	Pump Displacement	8.3400	7.70	50.00	200.00	Pump displacement
16	07/25/2019 10:13	Other (See comment)	8.3400	2.80	130.00	380.00	Drop rate to land the plug
17	07/25/2019 10:16	Land Plug	8.3400	2.80	142.00	1104.00	Land plug with 390 psi bump up to 1104 (Started seeing trace cement to surface, will top out after the last surface if we need to)
18	07/25/2019 10:19	Check Floats	8.3400	0.00	0.00	0.00	Check floats (floats held) .5 bbls back
19	07/25/2019 10:21	STEACS Briefing					Pre-rig down safety meeting with BJ crew
20	07/25/2019 10:26	Rig Down					Rig down floor, high pressure treating line, water, and bulk
21	07/25/2019 10:55	Leave Location					Leave location



### 6th Surface (CPF-136)

