



---

# **Petroshare Corporation**

## **PRODUCTION POST JOB REPORT**

Shook 3-10-1CDH 05-001-09968  
S:3 T:1S R:67W Adams CO

CallSheet #: 806  
Proposal #: 13143



**PRODUCTION Post Job Report**

**Attention:** Mr. Bill Lloyd | (303) 500-1160 | blloyd@petroshare.com  
Petroshare Corporation  
9635 Maroon Circle, Ste 400 | Englewood, CO 80112

---

Dear Mr. Lloyd,

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,

**Zen Keith**

Technical Specialist-II | (307) 757-7178 | Zen.Keith@bjservices.com

**Field Office**      1716 East Allison Rd., Cheyenne WY, 82007  
Phone: (307) 638-5585

**Sales Office**      475 17th St. Suite 460 Denver Co., 80202  
Phone: (303) 296-1158



## Table of Contents

1 Job Details & Summary .....	3
1.1 Geometry .....	3
1.2 Equipment / People .....	3
1.3 Timing .....	3
1.4 General Job Information .....	3
1.5 Well Fluid Details .....	3
1.6 Job Details .....	3
1.7 Job Details (cont.) .....	3
1.8 Circulation .....	3
1.9 Job Execution Information .....	4
1.10 Job Fluid Details .....	4
2 Job Logs .....	5
3 Water Analysis .....	7
4 Pump Diagrams .....	7

## 1 Job Details & Summary

### 1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36	n/a	0	1800	0
Open Hole	Outer	n/a	8.5	n/a	n/a	1800	13217	15
Casing	Inner	5.5	4.892	17	n/a	0	13217	0

### 1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Silo	654		180
Silo	664	Paulson, Greg	180
Cement Pump	103	Kresge, Adam	180
Light Duty Pickups	7	Bushnell, Cody	180
Bulk Trailer	E467	Creel, Jason	180

### 1.3 Timing

Event	Date/Time
Call Out	5/22/2017 08:00
Depart Facility	5/22/2017 12:30
On Location	5/22/2017 14:30
Rig Up Iron	5/22/2017 14:45
Job Started	5/22/2017 23:20
Job Completed	5/23/2017 03:10
Rig Down Iron	5/23/2017 03:30
Depart Location	5/23/2017 06:00

### 1.4 General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	800 bbls
Rig Circulation Time	2 hours
Calculated Displacement	290.8 bbls
Actual Displacement	290 bbls
Total Spacer to Surface	40 bbls
Total CMT to Surface	50 bbls

### 1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	30
Yield Point	4
10 sec. SGS	5
10 min. SGS	9
30 min. SGS	-
Filtrate	8
Flow Line Temp.	130

### 1.6 Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10 lb/gal
Well Fluid Density Out of Well	10 lb/gal

### 1.7 Job Details (cont.)

Metrics	Value
BHCT	236 °F
BHST	236 °F

### 1.8 Circulation

Lost Circulation Experienced
No



### 1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Top (ft)
1	1	CD Spacer	Spacer	11.00			32.73		40.00	0
1	2	ALTCem P100-X2	Lead	12.50	2.07	11.81		1051.00	387.56	0
1	3	ALTCem P50-X1	Tail	13.50	1.47	7.43		897.00	235.59	8217
1	4	Water	DisplacementFinal	8.33			42.00		307.00	0

### 1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	1	Spacer	CD Spacer	ASR-20	StrengthRetrogression	179.68	lb/bbl
1	1	Spacer	CD Spacer	AR-31	Retarder	0.79	lb/bbl
1	1	Spacer	CD Spacer	ASF-20	Surfactant	0.50	gal/bbl
1	1	Spacer	CD Spacer	ASF-80	Surfactant	0.50	gal/bbl
1	1	Spacer	CD Spacer	AVS-10	Viscosifier	0.80	lb/bbl
1	2	Lead	ALTCem P100-X2	AC3-10	Cement	100.00	%
1	2	Lead	ALTCem P100-X2	ABX-30	BondEnhancer	0.40	%BWOB
1	2	Lead	ALTCem P100-X2	ADF-11	Defoamer	0.30	%BWOB
1	2	Lead	ALTCem P100-X2	AFL-10	FluidLoss	0.30	%BWOB
1	2	Lead	ALTCem P100-X2	AR-31	Retarder	0.20	%BWOB
1	2	Lead	ALTCem P100-X2	AVS-10	Viscosifier	0.10	%BWOB
1	3	Tail	ALTCem P50-X1	ACG-10	Cement	50.00	%
1	3	Tail	ALTCem P50-X1	AFA-10	Extender	50.00	%
1	3	Tail	ALTCem P50-X1	ADF-11	Defoamer	0.30	%BWOB
1	3	Tail	ALTCem P50-X1	AFL-50	FluidLoss	0.20	%BWOB
1	3	Tail	ALTCem P50-X1	AR-20	Retarder	0.10	%BWOB
1	3	Tail	ALTCem P50-X1	AVS-10	Viscosifier	0.10	%BWOB
1	3	Tail	ALTCem P50-X1	AVS-50	Viscosifier	2.00	%BWOB

## 2 Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Arrive on location	5/22/2017	14:30					Requested 15:00
2	Steacs briefing	5/22/2017	14:35					Meet with company about spotting equipment and brief crew
3	Rig in	5/22/2017	14:45					Rig in BJ treating lines and cement equipment
4	Wait on rig to run casing	5/22/2017	16:30					Wait for customer to get to bottom with casing
5	Steacs briefing	5/22/2017	23:00					Steacs briefing with rig crew prior to job
6	Pressure test	5/22/2017	23:23					Test BJ treating lines to 4,000 PSI
7	Pump spacer	5/22/2017	23:46	11	3	40	150	11# spacer / establish circulation / drop bottom plug. 20 gallons of ASF-80 and 20 gallons of ASF-20 was used on LA#1.
8	Pump lead cement	5/22/2017	23:57	12.5	6	387.5	450	Yield-2.07, WR-11.8, 1051 SX
9	Pump tail cement	5/23/2017	01:05	13.5	6	234.8	600	Yield-1.47, WR-7.4, (897 SX)
10	Shut down	5/23/2017	01:45					Pumps out set up valves
11	Wash lines	5/23/2017	01:47	8.34	3	5	0	Clear lines to cement tank with fresh water
12	Drop plug	5/23/2017	01:48					verify plug left cement head
13	Displace	5/23/2017	01:52	8.34	8	0	450	Fresh water displacement 290.8 BBLs calculated.
14	Displace	5/23/2017	01:59	8.34	8	50	750	Rate and pressure
15	Displace	5/23/2017	02:06	8.34	8	100	1300	Rate and pressure
16	Displace	5/23/2017	02:12	8.34	8	150	2000	Rate and pressure
17	Displace	5/23/2017	02:16	8.34	5	180	2200	Slow rate once we noticed rig was not feeding the needed water to the upright tanks
18	Displace	5/23/2017	02:24	8.34	4	200	2300	Slow rate again. Rig not able to get water through their lines
19	Displace	5/23/2017	02:31	8.34	2	240	2100	Slow rate again. Rig still not able to get water through their lines
20	Shut down	5/23/2017	02:36	8.34	0	250	0	Shut down. Both 400 BBL uprights ran empty.
21	Resume displacement	5/23/2017	02:56	8.34				Rig was able to pump water so displacement was resumed. Down 20 minutes total.
22	Displace	5/23/2017	02:59	8.34	6	260	2700	Rate and pressure
23	Displace	5/23/2017	03:01	8.34	3	275	2450	Slow rate to bump plug



24	Bump plug	5/23/2017	03:06	8.34	0	290	3200	Bump plug 750 PSI over as per customer request. 50 BBLS of lead cement to surface.
25	Check floats	5/23/2017	03:09	8.34	0	0	0	Check floats 3 BBLS back. Floats held.
26	Pre rig out meeting	5/23/2017	03:15					Meet with crew
27	Rig out	5/23/2017	04:00					Rig down BJ
28	Pre departure meeting	5/23/2017	05:45					Meet with crew
29	leave location	5/23/2017	06:00					Thank you for choosing BJ Cementing Services. Cody Bushnell and Crew.

### 3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	50 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	614	0-1000
Total Hardness	240 mg/L	0-500 mg/L
Carbonates	140 mg/L	0-100 mg/L
Sulfates	2 mg/L	0-1500 mg/L
Potassium	<400 mg/L	0-3000 mg/L
Iron	450 mg/L	0-300 mg/L

### 4 Pump Diagrams

