



Petroshare Corporation

PRODUCTION POST JOB REPORT

Shook 3-10-4NBH 05-001-09976
S:3 T:1S R:67W Adams CO

CallSheet #: 1020
Proposal #: 13547



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,

Oscar Medrano

Technical Specialist-II | (307) 996-6222 | Oscar.Medrano@bjservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
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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	1811	0
Open Hole	Outer	n/a	8.5	n/a	n/a	1811	13770	15
Casing	Inner	5.5	4.778	20	n/a	0	13750	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Bulk Trailer	508	Mellon, Zacahria		172
Silo	654			172
Silo	664			172
Cement Pump	102	Beal, Scott		172
Light Duty Pickups	7	Bell, Wesley	Chambers, Andrew	172

1.3 Timing

Event	Date/Time
Call Out	7/16/2017 07:00
Depart Facility	7/16/2017 08:30
On Location	7/16/2017 10:17
Rig Up Iron	7/16/2017 17:30
Job Started	7/16/2017 21:30
Job Completed	7/17/2017 00:38
Rig Down Iron	7/17/2017 00:40
Depart Location	7/17/2017 02:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	10.9 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	N/A bbls
Rig Circulation Time	2 hours
Calculated Displacement	303 bbls
Actual Displacement	300 bbls
Total Spacer to Surface	40 bbls
Total CMT to Surface	40 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	30
Yield Point	12
10 sec. SGS	10
10 min. SGS	18
30 min. SGS	33
Filtrate	8
Flow Line Temp.	150

1.6 Job Details

Metrics	Value
Flare Prior to Job	Yes
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	yes
Well Fluid Density Into Well	10.9 lb/gal
Well Fluid Density Out of Well	10.9 lb/gal

1.7 Job Details (cont.)

Metrics	Value
BHCT	228 °F
BHST	228 °F



1.8 Circulation

Lost Circulation Experienced
No

1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /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		923.00	340.36	0
1	3	ALTCem P50-X1	Tail	13.50	1.47	7.43		1185.00	311.22	6172
1	4	Water	DisplacementFinal	8.33			42.00		303.00	0

1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom	Start (gal)	End (gal)	Used (gal)
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	1	Spacer	CD Spacer	ADF-20	Defoamer	0.00		5	3	2
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	2	Lead	ALTCem P100-X2	ADF-20	Defoamer	0.00		3	0	3
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			

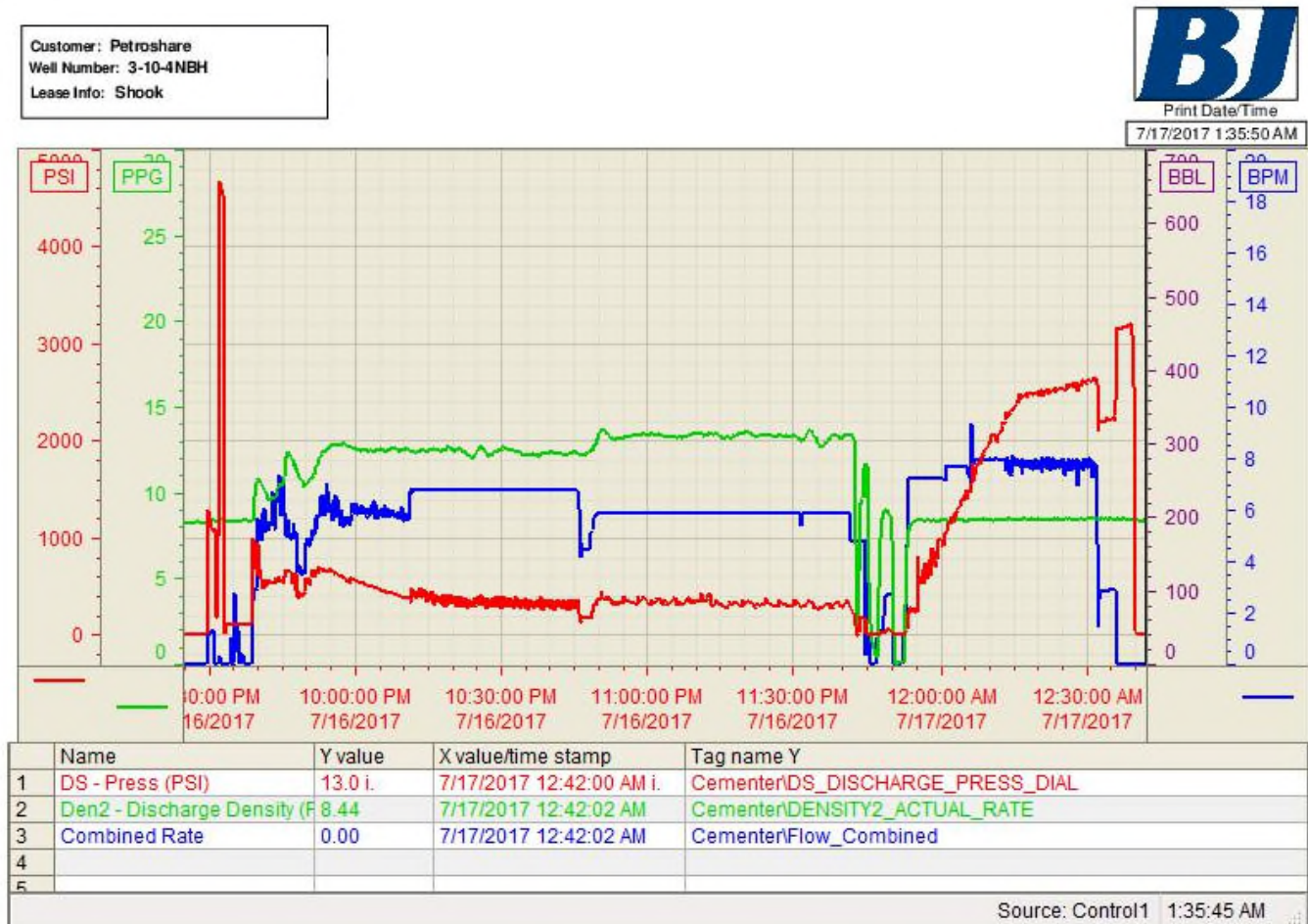
2 Job Logs

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	7/16/2017	10:15					arrive on location, requested time 13:00
2	Waiting	7/16/2017	10:30					Wait for rig to finish running casing
3	Rig In	7/16/2017	17:30					Spot and rig in all pump and bulk units. Run bulk, water, and treating lines
4	Waiting	7/16/2017	18:45					Wait for rig to finish circulating gas out of the hole
5	Safety meeting	7/16/2017	21:00					hold pre-job meeting with rig crew and pump crew. Review job procedures and job hazards.
6	Fill lines	7/16/2017	21:30	8.34	2	2	300	Fill lines with fresh water
7	Pressure Test Lines	7/16/2017	21:33	8.34			4600	Pressure test all lines to well. Good test, no leak.
8	Pump Spacer	7/16/2017	21:37	11	5	40	500	Pump 40bbls of spacer at 11ppg
9	Pump Lead Cement	7/16/2017	21:50	12.5	6.7	340	400	Pump 340bbls of Lead Cement at 12.5ppg, Y: 2.07 WR: 11.81, 923sks, 260bbls mix water
10	Pump Tail Cement	7/16/2017	22:50	13.5	6.7	311	350	Pump 311bbls of Tail Cement at 13.5ppg, Y: 1.47, WR: 7.43, 1185sks, 210bbls of mix water
11	Shut down/drop plug	7/16/2017	23:44					Finish mixing, shut down, clean pumps and lines to rig tank. Drop Top rubber plug 5.5"
12	Displace	7/16/2017	23:52	8.34	8			Begin displacement, 303bbls of fresh water
13	Pump	7/17/2017	00:01	8.34	8	50	1750	50bbls of displacement away
14	Pump	7/17/2017	00:08	8.34	8	50	1900	100bbls of displacement away
15	Pump	7/17/2017	00:13	8.34	8	50	2100	150bbls of displacement away
16	Pump	7/17/2017	00:20	8.34	8	50	2400	200bbls of displacement away
17	Pump	7/17/2017	00:27	8.34	8	50	2800	250bbls of displacement away, Spacer to surface at 223bbls away in displacement
18	Slow rate	7/17/2017	00:31	8.34	3	30	2000	280bbls of displacement away, slow rate for last 20bbls. Cement back to surface at 263bbls away
19	Land plug	7/17/2017	00:36	8.34	3	20	2750	Land plug at 300bbls of displacement away, final circulating pressure was 2000psi and bumped to 2750psi
20	Check Floats	7/17/2017	00:38	8.34				Floats hold, 1.5bbls back to tank.
21	Job complete	7/17/2017	00:40					
22	Rig Out	7/17/2017	00:45					
23	Leave Location	7/17/2017	02:00					

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	70 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	155 mg/L	0-3000 mg/L
Total Alkalinity	90	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	100 mg/L	0-100 mg/L
Sulfates	300 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams





5 Field Ticket

5.1 Service Charges

Part #	Name	Unit Price	Unit	Quantity	Total
5	Additional Hours	\$1,500.00	hour	5	\$7,500.00
2	Depth Charge (based on MD)	\$0.50	foot	13770	\$6,885.00
6	Drayage Per Additional Unit Roundtrip	\$160.00	hour	18	\$2,880.00
14	Mobilization, Other	\$600.00	hour	3	\$1,800.00
1	Pumping Charge (includes 8 hours of location time)	\$12,000.00	job	1	\$12,000.00
Subtotal:					\$31,065.00
Discount (%):					% 65.00
Discount (\$):					\$20,192.25
Total:					\$10,872.75

5.2 Material Charges

Part #	Name	Unit Price	Unit	Quantity	Unit	Total
2605	ASR-20	\$0.55	lb	7188	lb	\$3,953.40
2213	AR-31	\$17.50	lb	32	lb	\$560.00
2402	ASF-20	\$70.70	gal	20	gal	\$1,414.00
2408	ASF-80	\$103.20	gal	20	gal	\$2,064.00
2901	AVS-10	\$52.05	lb	32	lb	\$1,665.60
2002	AC3-10	\$29.00	sack	923	sack	\$26,767.00
2703	ABX-30	\$22.50	lb	348	lb	\$7,830.00
2504	ADF-11	\$8.60	lb	261	lb	\$2,244.60
2301	AFL-10	\$32.50	lb	261	lb	\$8,482.50
2213	AR-31	\$17.50	lb	174	lb	\$3,045.00
2901	AVS-10	\$52.05	lb	87	lb	\$4,528.35
2001	ACG-10	\$28.00	sack	593	sack	\$16,604.00
2602	AFA-10	\$0.11	lb	44716	lb	\$4,918.76
2504	ADF-11	\$8.60	lb	302	lb	\$2,597.20
2308	AFL-50	\$33.50	lb	201	lb	\$6,733.50
2202	AR-20	\$25.40	lb	101	lb	\$2,565.40
2901	AVS-10	\$52.05	lb	101	lb	\$5,257.05
2905	AVS-50	\$0.40	lb	2009	lb	\$803.60
2502	ADF-20	\$107.00	gal	5	gal	\$535.00
Subtotal:						\$102,568.96
Discount (%):						% 65.00
Discount (\$):						\$66,669.82
Total:						\$35,899.14



5.3 Casing Equipment Charges

Part #	Name	Unit Price	Unit	Quantity	Unit	Total
11055	Bottom Plugs 5 ½"	\$269.97	each	1	each	\$269.97
10055	Top Plugs 5 ½"	\$136.65	each	1	each	\$136.65
Subtotal:						\$406.62
Discount (%):						% 60.00
Discount (\$):						\$243.97
Total:						\$162.65

5.4 Grand Total

Services	Materials	Casing Equipment	Grand Total
\$10,872.75	\$35,899.14	\$162.65	\$46,934.53