



Petroshare Corporation

PRODUCTION POST JOB REPORT

Shook 3-10-5CDH 05-001-09979
S:3 T:1S R:67W Adams CO

CallSheet #: 1083
Proposal #: 13605



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,

Jason Creel

Field Engineer | (307) 256-0306 | Jason.Creel@BJSERVICES.COM

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

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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	1813	0
Open Hole	Outer	n/a	8.5	n/a	n/a	1813	14024	15
Casing	Inner	5.5	4.778	20	n/a	0	13992	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Bulk Trailer	508	Bryson, Maurice		192
Silo	654			192
Silo	664			192
Light Duty Pickups	7	Hyde, Zack	Bell, Wesley	192
Cement Pump	102	Beal, Scott		192

1.3 Timing

Event	Date/Time
Call Out	7/27/2017 23:00
Depart Facility	7/28/2017 00:30
On Location	7/28/2017 02:00
Rig Up Iron	7/28/2017 02:30
Job Started	7/28/2017 03:27
Job Completed	7/28/2017 06:15
Rig Down Iron	7/28/2017 07:30
Depart Location	7/28/2017 08:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	na bbls
Rig Circulation Time	10 hours
Calculated Displacement	308 bbls
Actual Displacement	308 bbls
Total Spacer to Surface	40 bbls
Total CMT to Surface	88 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	36
Yield Point	9
10 sec. SGS	11
10 min. SGS	21
30 min. SGS	33
Filtrate	12
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	10.8 lb/gal
Well Fluid Density Out of Well	10.8 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	P100-X2	Lead	12.50	2.07	11.81		951.00	350.68	0
1	3	P50-X1	Tail	13.50	1.47	7.43		1191.00	312.80	7427
1	4	Water	Displacement Final	8.33			42.00		308.00	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	Strength Retrogression	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	20	0	20
1	1	Spacer	CD Spacer	ASF-80	Surfactant	0.50	gal/bbl	20	0	20
1	1	Spacer	CD Spacer	AVS-10	Viscosifier	0.80	lb/bbl			
1	2	Lead	P100-X2	AC3-10	Cement	100.00	%			
1	2	Lead	P100-X2	ABX-30	Bond Enhancer	0.40	%BWOB			
1	2	Lead	P100-X2	ADF-11	Defoamer	0.30	%BWOB			
1	2	Lead	P100-X2	AFL-10	Fluid Loss	0.30	%BWOB			
1	2	Lead	P100-X2	AR-31	Retarder	0.20	%BWOB			
1	2	Lead	P100-X2	AVS-10	Viscosifier	0.10	%BWOB			
1	3	Tail	P50-X1	ACG-10	Cement	50.00	%			
1	3	Tail	P50-X1	AFA-10	Extender	50.00	%			
1	3	Tail	P50-X1	ADF-11	Defoamer	0.30	%BWOB			
1	3	Tail	P50-X1	AFL-50	Fluid Loss	0.20	%BWOB			
1	3	Tail	P50-X1	AR-20	Retarder	0.10	%BWOB			
1	3	Tail	P50-X1	AVS-10	Viscosifier	0.10	%BWOB			
1	3	Tail	P50-X1	AVS-50	Viscosifier	2.00	%BWOB			
1	4	DisplacementFinal	Water	AR-61	Retarder	0.00		2	0	2

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	Callout	7/27/2017	23:00					Crew gets called out, requested time on location 0500
2	Depart Facility	7/28/2017	00:30					Crew leaves facility
3	Arrive on location	7/28/2017	02:00					Crew arrives on location, Talked to customer about the job
4	Rig up	7/28/2017	02:30					Crew rigs up iron and hoses
5	Waiting	7/28/2017	03:30					Crew waits for casing crew to run casing, rig is having trouble running casing, they got to the landing joint at 1300 and top drive broke
6	Safety Meeting	7/29/2017	03:00					Crew has safety meeting with rig crew and company man discussing job
7	Fill lines	7/29/2017	03:27					Fill lines and dropped bottom plug
8	Pressure Test Lines	7/29/2017	03:28	8.33	0.5	1	5000	Pressure tested to 5000psi
9	Spacer	7/29/2017	03:33	11	5	40	300	Pumped 40 bbls of spacer at 11ppg 5bpm with 300psi
10	Lead	7/29/2017	03:41	12.5	7	350	600	Pumped 350 bbls of lead at 12.5ppg(951sk,2.07yd,11.81gal/sk) 7bpm 600psi
11	Tail	7/29/2017	04:34	13.5	7	312	400	Pumped 312 bbls of tail at 13.5ppg(1191sk,1.47yd,7.43gal/sk) at 7bpm with 400psi
12	Shutdown	7/29/2017	05:22					Shutdown
13	Drop top plug	7/29/2017	05:30					Drop top plug
14	Displacement	7/29/2017	05:30	8.33	10	50	100	50 bbls away, 100psi, 10bpm
15	Displacement	7/29/2017	05:36	8.33	10	50	1300	100 bbls away, 1300psi, 10bpm
16	Displacement	7/29/2017	05:42	8.33	10	50	1500	150 bbls away, 1500psi, 10bpm
17	Displacement	7/29/2017	05:48	8.33	10	50	1750	200 bbls away, 1750psi,10bpm. Started seeing spacer at 180bbls away. Rig crew wasn't prepared for spacer/cement to surface. Possible 30bbls of spacer in to active mud system.
18	Displacement	7/29/2017	05:54	8.33	10	50	1800	250 bbls away, 1800psi, 10bpm. Started seeing cement to surface at 220bbls away.
19	Displacement	7/29/2017	06:00	8.33	10	30	1900	280 bbls away, 1900psi, slowed rate to 2 bpm.
20	Landed plug	7/29/2017	06:12	8.33	3	28	2400	Landed plug at 2400psi brought it up to 3100psi

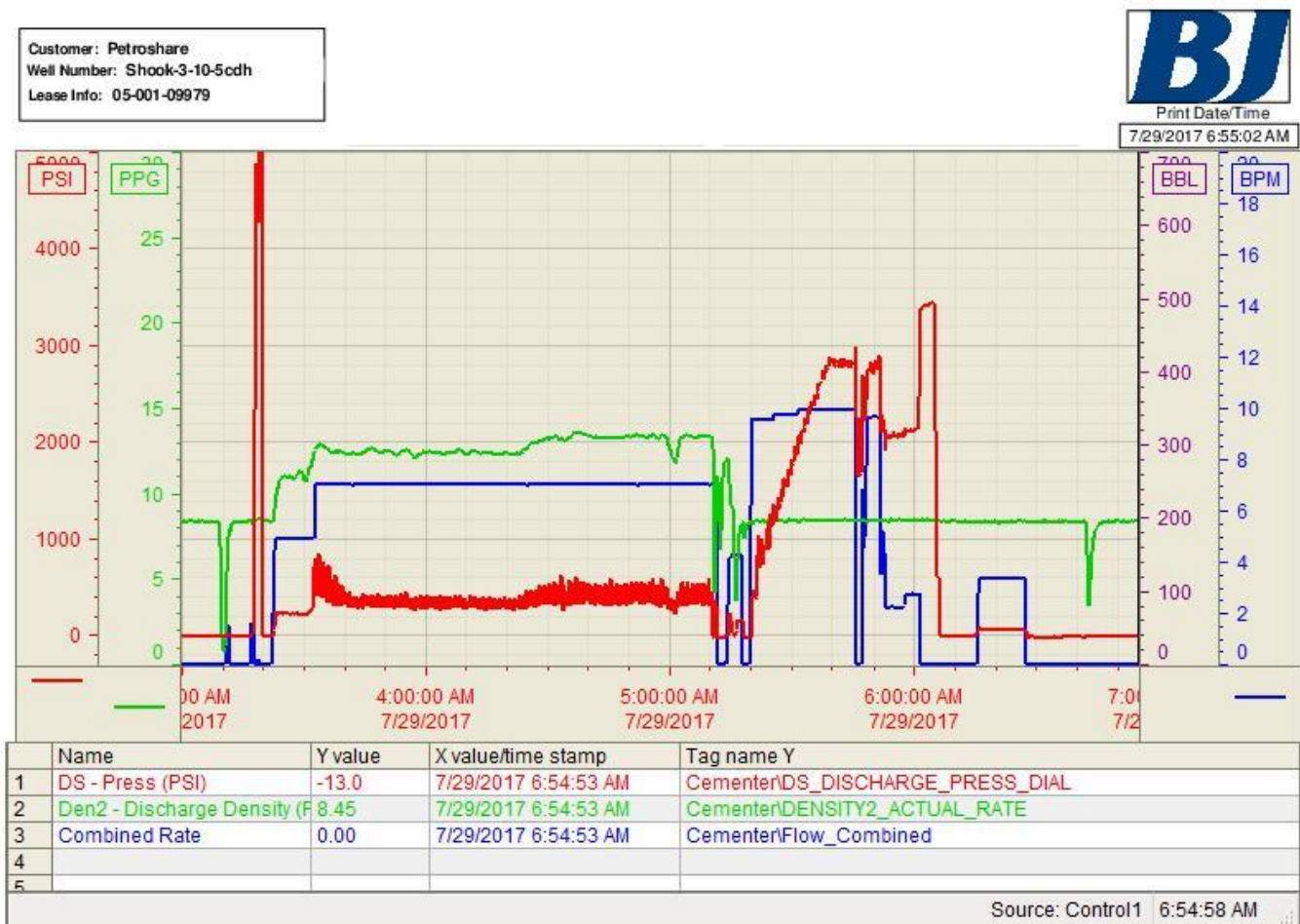


21	Check Floats	7/29/2017	06:15					Checked floats, floats held 3 bbls back.
22	Job Complete	7/29/2017	06:17					Job complete

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	75 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	150 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	5 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	15	\$22,500.00
2	Depth Charge (based on MD)	\$0.50	foot	14024	\$7,012.00
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:					\$46,192.00
Discount (%):					% 65.00
Discount (\$):					\$30,024.80
Total:					\$16,167.20

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	951	sack	\$27,579.00
2703	ABX-30	\$22.50	lb	358	lb	\$8,055.00
2504	ADF-11	\$8.60	lb	269	lb	\$2,313.40
2301	AFL-10	\$32.50	lb	269	lb	\$8,742.50
2213	AR-31	\$17.50	lb	179	lb	\$3,132.50
2901	AVS-10	\$52.05	lb	90	lb	\$4,684.50
2001	ACG-10	\$28.00	sack	596	sack	\$16,688.00
2602	AFA-10	\$0.11	lb	44943	lb	\$4,943.73
2504	ADF-11	\$8.60	lb	303	lb	\$2,605.80
2308	AFL-50	\$33.50	lb	202	lb	\$6,767.00
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	2019	lb	\$807.60
2212	AR-61	\$54.80	gal	2	gal	\$109.60
Subtotal:						\$103,908.08
Discount (%):						% 65.00
Discount (\$):						\$67,540.25
Total:						\$36,367.83



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
\$16,167.20	\$36,367.83	\$162.65	\$52,697.68