



Petroshare Corporation

PRODUCTION POST JOB REPORT

Shook 3-10-1NAH 05-001-09978
S:3 T:1S R:67W Adams CO

CallSheet #: 847
Proposal #: 13313



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

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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	1824	0
Open Hole	Outer	n/a	8.5	n/a	n/a	1824	12820	15
Casing	Inner	5.5	4.892	17	n/a	0	12795	0

1.2 Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Mileage
Silo	654			88
Silo	664			88
Bulk Trailer	508	5468	Reineheart,Anthony	175
Light Duty Pickups	6		Saldivar, Jesus	175
Light Duty Pickups	4		Boyd, Brian	175
Cement Pump	101	201	Kresge, Adam	175

1.3 Timing

Event	Date/Time
Call Out	5/29/2017 22:00
Depart Facility	5/30/2017 00:30
On Location	5/30/2017 01:30
Rig Up Iron	5/30/2017 01:45
Job Started	5/30/2017 13:15
Job Completed	5/30/2017 16:47
Rig Down Iron	5/30/2017 17:00
Depart Location	5/30/2017 18:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1500 bbls
Rig Circulation Time	2.5 hours
Calculated Displacement	282 bbls
Actual Displacement	282 bbls
Total Spacer to Surface	10 bbls
Total CMT to Surface	0 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	2
Yield Point	7
10 sec. SGS	7
10 min. SGS	21
30 min. SGS	31
Filtrate	1.45
Flow Line Temp.	116

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	8.33 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		979.00	361.01	0
1	3	ALTCem P50-X1	Tail	13.50	1.47	7.43		916.00	240.58	5833
1	4	Water	DisplacementFinal	8.33			42.00		296.00	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	Call Out	5/29/2017	22:00					Company man requested crew to be on location at 4:30
2	Depart Shop	5/30/2017	00:30					Crew has journey Management briefing
3	Arrive On Location	5/30/2017	01:30					Crew arrives on location and meet with customer to obtain numbers
4	STEACS Briefing	5/30/2017	01:35					Crew has STEACS briefing over rigging up and hazards
5	Rig Up Iron	5/30/2017	01:45					Rig up iron and hoses
6	Waiting	5/30/2017	03:00					Waiting on rig to land casing
7	Rig Lands Casing	5/30/2017	08:00					Rig lands casing and recirculates two bottoms up
8	STEACS Briefing	5/30/2017	12:45					STEACS briefing with BJ crew, rig crew and company man over job procedure and job hazards
9	Fill Pumps And Lines	5/30/2017	13:15	8.33	3	3	30	Fill pumps and lines
10	Pressure Test	5/30/2017	13:27	8.33	0.5	0.5	5000	Pressure test and head to 5000 PSI
11	Pump Spacer	5/30/2017	13:37	11	5	40	300	Pump 40 bbls of spacer
12	Pump Lead	5/30/2017	13:44	12.5	5	361	389	Pump 361 bbls of lead cement (979 Sks, 12.5 PPG, 2.07 Yield, 11.81 Gals/Sks)
13	Pump Tail	5/30/2017	14:57	13.5	5	240	317	Pump 240 bbls of tail cement (916 Sks, 13.5 PPG, 1.47 Yield, 7.43 Gals/Sks)
14	Shut Down	5/30/2017	15:33					Shut Down pumping
15	Wash Pumps And Lines	5/30/2017	15:35		3	10		Wash pumps and Lines
16	Pump Displacement	5/30/2017	15:47			283		Pump 283 bbls of fresh water displacement
17	Pump Displacement	5/30/2017	15:56	8.33	7	100	1400	100 bbls into displacement
18	Pump Displacement	5/30/2017	16:20	8.33	7	100	2000	200 bbls into displacement
19	Spacer To Surface	5/30/2017	16:20	8.33	7	273	1985	10 bbls of spacer to surface at 273 bbls
20	Slow Rate	5/30/2017	16:35	8.33	2.5	20	2081	Last 20 bbls of displacement slow rate to 2.5 bpm
21	Land Plug	5/30/2017	16:42				3017	Land plug and bump 750 PSI over
22	Check Floats	5/30/2017	16:45					Hold pressure for 3 mins and check floats
23	STEACS Briefing	5/30/2017	16:50					Crew has STEACS briefing on rigging down and hazards



24	Rig Down Iron	5/30/2017	17:00					Rig down iron and hoses
25	Depart Location	5/30/2017	18:30					Crew has journey management briefing and departs location

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	62 °F	50-80 °F
pH Level	5	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	80	0-1000
Total Hardness	70 mg/L	0-500 mg/L
Carbonates	140 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0.15 mg/L	0-300 mg/L

4 Pump Diagrams

