



1 Job Details & Summary

1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Top (ft)	Bottom (ft)
Casing	Outer	8.625	8.097	24	0	428
Open Hole	Outer	n/a	7.88	n/a	434	4750
DrillPipe	Inner	4	3.34	14	0	4750

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Cement Pump	C938	Martinez, Michael		352
Bulk Trailer	PPC41312	Bryson, Maurice		352
Light Duty Pickups	6	Staples, Anthony	Tolman, Travis	352

1.3 Timing

Event	Date/Time
Call Out	10/26/2017 21:00
Depart Facility	10/26/2017 22:20
On Location	10/27/2017 02:00
Rig Up Iron	10/27/2017 02:45
Job Started	10/27/2017 04:15
Job Completed	10/27/2017 14:00
Rig Down Iron	10/27/2017 14:45
Depart Location	10/27/2017 15:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	9.2 lb/gal
Well Fluid Type	WBM
Calculated Displacement	48 bbls
Actual Displacement	48 bbls

1.5 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	9.2 lb/gal
Well Fluid Density Out of Well	9.2 lb/gal

1.6 Job Details (cont.)

Metrics	Value
BHCT	120 °F
BHST	140 °F

1.7 Circulation

Lost Circulation Experienced
No



1.8 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	Water	Flush	8.33			42.00		10.00	0
1	2	J-Sand Plug	Plug	15.80	1.15	4.96		60.00	12.00	4411
1	3	Water	DisplacementFinal	8.33			42.00		48.00	4411
1	4	Water	Flush	8.33			42.00		10.00	0
1	5	Plug 2 - Surface Shoe	Plug	15.80	1.16	4.99		50.00	10.36	324
1	6	Water	DisplacementFinal	8.33			42.00		0.00	0
1	7	Surface Plug	Plug	15.80	1.16	4.99		25.00	5.18	0
1	8	Water	DisplacementFinal	8.33			42.00		0.00	0

1.9 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Plug	J-Sand Plug	ACG-10	Cement	100.00	%
1	2	Plug	J-Sand Plug	ADS-10	Dispersant	0.00	%BWOB
1	5	Plug	Plug 2 - Surface Shoe	ACG-10	Cement	100.00	%
1	5	Plug	Plug 2 - Surface Shoe	ACL-10	Accelerator	0.00	%BWOB
1	7	Plug	Surface Plug	ACG-10	Cement	100.00	%
1	7	Plug	Surface Plug	ACL-10	Accelerator	0.00	%BWOB



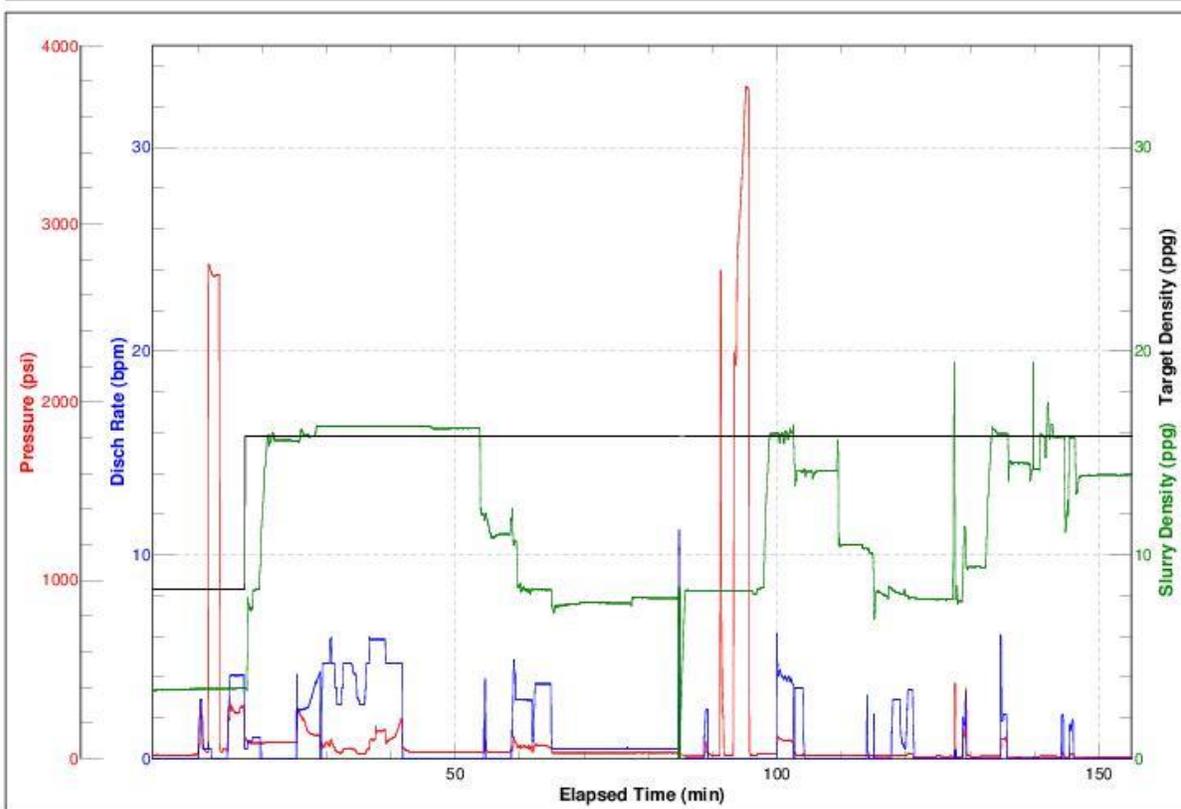
2 Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	10/26/2017	21:00	0	0	0	0	Crew called into yard at 2100 for on location of ASAP
2		10/26/2017	22:20	0	0	0	0	Leave yard
3	Arrive on Location	10/27/2017	02:00	0	0	0	0	Arrive on location
4	Spot Units	10/27/2017	02:15	0	0	0	0	Spot equipment
5	Safety Meeting	10/27/2017	02:30	0	0	0	0	Held STEACS meeting with crew
6	Rig up	10/27/2017	02:24	0	0	0	0	Rig up
7	Safety meeting	10/27/2017	03:41	0	0	0	0	Held STEACS meeting with company man and rig crew to discuss safety and job procedures of plug #1.
8	Start pumping	10/27/2017	04:15	8.33	2.8	1.5	300	Load lines
9	Pressure Test	10/27/2017	04:17	8.33	0	0	2800	Pressure test pumps and lines
10	Pump Spacer	10/27/2017	04:20	8.33	4	10	275	Pump fresh water spacer
11	Pumping Cement	10/27/2017	04:25	15.8	2.4	12	226	Batch, weight and pump cement @ 15.8ppg/ 60sks/ 1.15Y/ 4.96gps. Bottom of plug at 4614', Top of plug at 4411'.
12	Pump Displacement	10/27/2017	04:35	9.2	5	48	395	Pump mud displacement 9.2#
13	Other (See Comments)	10/27/2017	04:45	0	0	0	0	Shut down to balance plug
14	Clean Pumps & Lines	10/27/2017	05:00	0	0	0	0	Cleaned pump and lines to pit
15	3rd Party Other	10/27/2017	06:00	0	0	0	0	Waiting on rig to pull pipe
16	Safety Meeting	10/27/2017	12:08	0	0	0	0	Held STEACS meeting with company man and rig crew to discuss safety and job procedures of plug #2 & #3.
17	Start Pumping	10/27/2017	12:16	8.33	2.3	1	40	Load lines and well for plug #2
18	Pressure Test	10/27/2017	12:20	0	0	0	3550	Pressure test pumps and lines
19	Pumping Cement	10/27/2017	12:24	15.8	3.4	10	0	Batch, weight and pump cement @ 15.8ppg/ 50sks/ 1.15Y/ 4.96gps. Bottom of plug at 488', Top of plug at 324'.
20	Pump Displacement	10/27/2017	12:30	8.33	3.4	3	0	Pump fresh water displacement
21	Other (See Comments)	10/27/2017	12:32	0	0	0	0	Shut down to balance plug
22	3rd Party Other	10/27/2017	12:36	0	0	0	0	Waiting on rig to pull pipe
23	Rig Up	10/27/2017	13:10	0	0	0	0	Rig up to drill pipe
24	Start pumping	10/27/2017	13:26	8.33	3.4	1	24	Load lines and well for plug #3

25	Pumping Cement	10/27/2017	13:40	15.8	2	3	108	Batch, weight and pump cement @ 15.8ppg/ 25sks/ 1.15Y/4.96gps. Bottom of plug at 61', top of plug at surface.
26	Cement Back to Surface	10/27/2017	13:44	0	0	0	0	Shut down, rig down from pipe to pull drill pipe and rat and mouse hole to fill with cement.
27	Pumping Cement	10/27/2017	13:58	15.8	0.8	1	0	Pump cement into rat and mouse holes to surface.
28	End Pumping	10/27/2017	14:00	0	0	0	0	Shut down and rig up to wash up.
29	Clean Pumps & Lines	10/27/2017	14:03	0	0	0	0	Clean pump and lines to pit.
30	Safety Meeting	10/27/2017	14:40	0	0	0	0	Held rig down safety meeting with crew.
31	Rig Down	10/27/2017	14:45	0	0	0	0	Rig down pump and lines.
32	Leave Location	10/27/2017	15:30	0	0	0	0	Leave location.

3 Pump Diagrams

BJ JobMaster Program Version 4.02C1
 Job Number: 1579
 Customer: St. Croix
 Well Name: Clover-Schenk 1



BJ Services

Job Start: Friday, October 27, 2017