

1 Job Details & Summary

1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer	n/a	13.5	n/a	n/a	0	1555	30
Casing	Inner	9.625	8.921	36	LTC	0	1552	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Bulk Trailer	509	Vasquez, Mike		140
Bulk Trailer	E696	Borst, David		140
Cement Pump	C092		Zuniga, Jesus	140
Light Duty Pickups	51	Chambers, Andrew	Boyd, Brian	140

1.3 Timing

Event	Date/Time
Call Out	6/30/2017 02:30
Depart Facility	6/30/2017 03:30
On Location	6/30/2017 05:00
Rig Up Iron	6/30/2017 05:30
Job Started	6/30/2017 08:45
Job Completed	6/30/2017 10:15
Rig Down Iron	6/30/2017 10:25
Depart Location	6/30/2017 11:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	250 bbls
Rig Circulation Time	1.5 hours
Calculated Displacement	115 bbls
Actual Displacement	115 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	30 bbls
Well Topped Out	No

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	8.4 lb/gal
Well Fluid Density Out of Well	8.33 lb/gal

1.6 Job Details (cont.)

Metrics	Value
BHCT	88 °F
BHST	110 °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 (sk)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.33			42.00		20.00	0
1	2	ALTCem S100-12	Lead	12.00	2.53	14.85		270.00	121.49	0
1	3	ALTCem S100-12	Tail	12.50	2.22	12.58		155.00	61.38	855
1	4	Water	DisplacementFinal	8.33			42.00		113.00	0

1.9 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	ALTCem S100-12	AC3-10	Cement	100.00	%
1	2	Lead	ALTCem S100-12	ACL-10	Accelerator	2.00	lb/sk
1	2	Lead	ALTCem S100-12	ACL-20	Accelerator	5.00	%BWOB
1	2	Lead	ALTCem S100-12	ADF-11	Defoamer	0.30	%BWOB
1	2	Lead	ALTCem S100-12	ALC-10	LostCirculation	0.13	lb/sk
1	2	Lead	ALTCem S100-12	AXE-30	Extender	2.00	lb/sk
1	3	Tail	ALTCem S100-12	AC3-10	Cement	100.00	%
1	3	Tail	ALTCem S100-12	ACL-10	Accelerator	2.00	lb/sk
1	3	Tail	ALTCem S100-12	ACL-20	Accelerator	5.00	%BWOB
1	3	Tail	ALTCem S100-12	ADF-11	Defoamer	0.30	%BWOB
1	3	Tail	ALTCem S100-12	ALC-10	LostCirculation	0.13	lb/sk
1	3	Tail	ALTCem S100-12	AXE-30	Extender	2.00	lb/sk



2 Job Logs

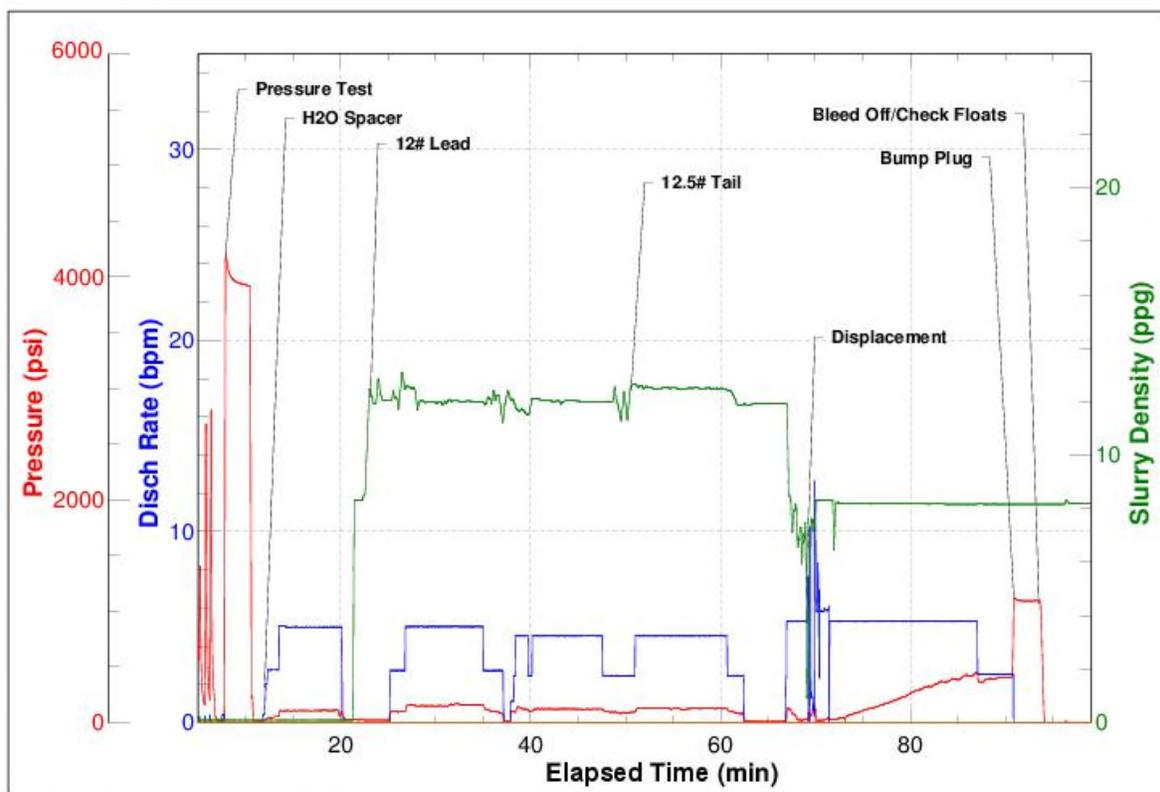
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Call Out	6/30/2017	02:30					Customer requested crew on location at 5:00
2	Depart Shop	6/30/2017	03:30					Crew departs shop and has journey management
3	Arrive On Location	6/30/2017	05:00					Arrive on location and meet with customer
4	STEACS breifing	6/30/2017	05:15					Have STEACS briefing with BJ crew over rigging up and hazards
5	Rig Up Iron	6/30/2017	05:30					Rig up iron and hoses
6	Waiting	6/30/2017	06:00					Waiting on rig to run casing
7	Rig Lands Casing	6/30/2017	07:45					Rig lands casing and re-circulates through cement head
8	STEACS breifing	6/30/2017	08:35					STEACS briefing with BJ crew, Rig hands, and company man
9	Fill Lines	6/30/2017	08:45	8.33	3	3	30	Fill pumps and lines
10	Pressure Test	6/30/2017	08:50	8.33	0.5	0.5	3000	Pressure test iron and head to 3000 PSI
11	Pump Water Spacer	6/30/2017	08:55	8.33	4.5	20	108	Pump 20 bbls of water spacer with poly flake
12	Pump Lead Cement	6/30/2017	09:05	12	5	121	161	Pump 121 bbls Lead Cement 12 PPG @ 5 bpm (270 Sks, 12 PPG, 2.53 Yield, 14.85 Gals/Sks)
13	Pump Tail Cement	6/30/2017	09:30	12.5	5	61	127	Pump 61 bbls Tail Cement 12.5 PPG @ 5 bpm (155 Sks, 12.5 PPG, 2.22 Yield, 12.58 Gals/ Sks)
14	Shut Down	6/30/2017	09:44					Shut down pumping
15	Drop Plug	6/30/2017	09:48					Drop top plug with company man to verify plug went down hole
16	Pump Displacement	6/30/2017	09:49	8.33	5	115	358	Pump fresh water displacement
17	Cement To Surface	6/30/2017	09:50	12	5		347	At 86 bbls away got cement to surface got 30 bbls to surface
18	Slow Rate	6/30/2017	10:08	8.33	2	10	371	106 bbls into displacement slow rate to 2 bpm
19	Land Plug	6/30/2017	10:12	8.33			900	Landed plug at 900 PSI FCP 371 PSI
20	Check Floats	6/30/2017	10:15					Check floats and got .5 bbl back
21	STEACS breifing	6/30/2017	10:20					STAECs briefing with crew over rigging down and hazards
22	Rig Down Iron	6/30/2017	10:25					Rig down iron and equipment
23	Depart Location	6/30/2017	11:30					Crew departs from location

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	120 mg/L	0-3000 mg/L
Total Alkalinity	140	0-1000
Total Hardness	120 mg/L	0-500 mg/L
Carbonates	80 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	130 mg/L	0-3000 mg/L
Iron	0.15 mg/L	0-300 mg/L

4 Pump Diagrams

BJ JobMaster Program Version 4.02
Job Number: 965
Customer: Bayswater
Well Name: Ward R-20-19HN



Job Start: Friday, June 30, 2017