

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	828	0
Open Hole	Outer	n/a	8.75	n/a	n/a	828	5000	16
Open Hole	Outer	n/a	8.75	n/a	n/a	5000	6570	18
Casing	Inner	7	6.366	23	LTC	0	6552	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Bulk Trailer	504	Rubio, Ralph		140
Field Bin	601			140
Light Duty Pickups	6	Hyde, Andrew		140
Cement Pump	103	Cook, John	Vasquez, Mike	140

1.3 Timing

Event	Date/Time
Call Out	7/26/2017 00:00
Depart Facility	7/26/2017 01:30
On Location	7/26/2017 03:45
Rig Up Iron	7/26/2017 05:00
Job Started	7/26/2017 08:35
Job Completed	7/26/2017 10:18
Rig Down Iron	7/26/2017 11:30
Depart Location	7/26/2017 12:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	200 bbls
Rig Circulation Time	1 hours
Calculated Displacement	256 bbls
Actual Displacement	256 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	5 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	4
Yield Point	3
10 sec. SGS	4
10 min. SGS	7
Filtrate	8
Flow Line Temp.	115

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	10 lb/gal

1.7 Job Details (cont.)

Metrics	Value
BHCT	158 °F
BHST	215 °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			33.21		20.00	0
1	2	I100-X2	Lead	12.50	2.07	11.79		379.00	139.66	500
1	3	I100-X1	Tail	15.80	1.15	4.96		244.00	50.09	5000
1	4	Water	Displacement Final	8.33			42.00		256.00	0

1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	1	Spacer	CD Spacer	ASR-20	Strength Retrogression	179.60	lb/bbl
1	1	Spacer	CD Spacer	AR-20	Retarder	1.02	lb/bbl
1	1	Spacer	CD Spacer	ASF-20	Surfactant	0.50	gal/bbl
1	1	Spacer	CD Spacer	AVS-10	Viscosifier	0.80	lb/bbl
1	2	Lead	I100-X2	AC3-10	Cement	100.00	%
1	2	Lead	I100-X2	ABX-30	Bond Enhancer	0.30	%BWOB
1	2	Lead	I100-X2	ADF-11	Defoamer	0.30	%BWOB
1	2	Lead	I100-X2	AFL-10	Fluid Loss	0.30	%BWOB
1	2	Lead	I100-X2	AR-20	Retarder	0.40	%BWOB
1	3	Tail	I100-X1	ACG-10	Cement	100.00	%
1	3	Tail	I100-X1	ABX-30	Bond Enhancer	0.20	%BWOB
1	3	Tail	I100-X1	ADF-11	Defoamer	0.30	%BWOB
1	3	Tail	I100-X1	ADS-10	Dispersant	0.20	%BWOB
1	3	Tail	I100-X1	AFL-10	Fluid Loss	0.20	%BWOB
1	3	Tail	I100-X1	AR-10	Retarder	0.10	%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	7/26/2017	00:00					Bj crew gets called out for cement job.
2	Safety Meeting	7/26/2017	01:00					Bj crews talks about dangers of driving to location
3	Depart Yard	7/26/2017	01:30					Depart yard.
4	Arrive on location	7/26/2017	03:45					Arrive on location.
5	Safety Meeting	7/26/2017	04:50					Bj Crew talks about hazards of spotting in equipment and rigging up.
6	Rig up	7/26/2017	05:00					Rig up
7	Waiting	7/26/2017	06:00					Wait on rig to finish running casing.
8	Safety Meeting	7/26/2017	08:00					Bj and rig crew discuss hazards of job.
9	Fill lines	7/26/2017	08:35	8.33	2	3	26	Pump 3 bbls water ahead to fill lines.
10	Pressure test	7/26/2017	08:37					Pressure test to 4000 PSI
11	Pump water	7/26/2017	08:40	8.33	2	15	104	Pump 15 bbls of water
12	Pump Spacer	7/26/2017	08:45	11	4	20	200	Pump 20 bbls of cd spacer at 11.00 ppg
13	Pump Lead Cement	7/26/2017	08:50	12.5	5	139	250	Pump 139 bbls/379 sks of 100-x2 lead cement at 12.5ppg, 2.07 yld, 11.79wtr.
14	Pump Tail Cement	7/26/2017	09:15	15.8	5	50	150	Pump 50.1bbls/244 sks of 100-x1 tail cement at 15.8ppg, 1.15yld, 4.96wtr.
15	Shutdown	7/26/2017	09:25					Shutdown to line out manifold to drop top plug
16	Drop Top plug	7/26/2017	09:26					Company man witness plug leave manifold
17	Pump Displacement	7/26/2017	09:30	8.33	6	236	580	Displace 236 bbls of water.
18	Slow rate	7/26/2017	10:11	8.33	2	20	1100	Slow rate to 3 bbls/min last 20 bbls.
19	Bump plug	7/26/2017	10:15					Bump plug at 1700 psi took it up to 2200 psi
20	Check floats	7/26/2017	10:18					Check floats got 2 bbls back
21	Safety Meeting	7/26/2017	10:30					Bj crew talks about hazards of rigging down.
22	Rig Down	7/26/2017	10:40					Rig down
23	Safety Meeting	7/26/2017	11:30					Bj crew talks about hazards of driving.
24	Depart Location	7/26/2017	12:00					Depart location.