

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	25
Casing	Inner	9.625	8.921	36	LTC	0	1549	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Bulk Trailer	E421	Dorlean, Jean	110
Bulk Trailer	E435	Borst, David	110
Cement Pump	C992	Scott, Matthew	110
Light Duty Pickups	7	Chambers, Andrew	110
Plug Container	150519		
Swage	150539		

1.3 Timing

Event	Date/Time
Call Out	6/26/2017 04:30
Depart Facility	6/26/2017 05:30
On Location	6/26/2017 08:00
Rig Up Iron	6/26/2017 08:30
Job Started	6/26/2017 09:23
Job Completed	6/26/2017 10:56
Rig Down Iron	6/26/2017 11:30
Depart Location	6/26/2017 13:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	8.6 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	201 bbls
Rig Circulation Time	0.25 hours
Calculated Displacement	116.7 bbls
Actual Displacement	116.7 bbls
Total Spacer to Surface	40 bbls
Total CMT to Surface	31 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	8.6 lb/gal
Well Fluid Density Out of Well	8.6 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 (sks)	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		260.00	116.99	0
1	3	ALTCem S100-12	Tail	12.50	2.22	12.58		142.00	56.23	1000
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	6/26/2017	04:30					BJ CREW CALLE DOUT
2	DEPART SHOP	6/26/2017	05:30					BJ CREW LEFT FOR LOCATION
3	ASSESSMENT OF LOCATION	6/26/2017	08:00					ARRIVED AT 8:00 AM MET WITH CUSTOMER REP WENT OVER JOB DETAILS
4	PRE RIG UP	6/26/2017	08:30					DISSCUSSED HAZARDS OF RIGGING UP IRON
5	RIG UP	6/26/2017	08:45					BJ CREW RIGGED UP IRON
6	RIG UP COMPLETE	6/26/2017	09:00					RIGGING OF IRON COMPLETE
7	PRE JOB	6/26/2017	09:23					CONDUCTED STEACS BRIEFING WITH BJ AND RIG CREW
8	FILL LINES	6/26/2017	09:48	8.33	1	2		FILLED LINES WITH 2 BBL FRESH WATER
9	PRESSURE TEST	6/26/2017	09:50	8.33	1	2		PRESSURE TESTED LINES TO 3000 PSI
10	PUMP SPACER	6/26/2017	09:52	8.33	5	40		PUMPED 40 BBL FRESH WATER SPACER
11	PUMP LEAD CEMENT	6/26/2017	10:00	12	6.6	117		PUMPED 117 BBL OF 12/LB, 2.53 CUFT.FT, 14.85GAL/SK, 260/SKS
12	PUMP TAIL CEMENT	6/26/2017	10:18	12.5	5	56.2		PUMPED 56.2BBL OF 12.5/LB,2.22CUFT/FT,12.58GAL/SK OFTAIL CEMENT,142/SKS
13	SHUT DOWN	6/26/2017	10:28					ALL CEMENT PUMPING COMPLETE
14	DROP PLUG	6/26/2017	10:30					TOP PLUG LEFT CEMENTING HEAD
15	DISPLACEMENT	6/26/2017	10:31	8.33	5	116.7		START DISPLACING 116.7 BBL OF FRESH WATER
16	CEMENT TO SURFACE	6/26/2017	10:49					CEMENT TO SURFACE AT 85 BBL DISPLACED,31BBLS TO SURFACE
17	SLOW RATE	6/26/2017	10:54	8.33	2	95		SLOWED RATE TO 2BBL/MIN TO BUMP PLUG
18	BUMP PLUG	6/26/2017	10:56					BUMPED PLUG AT CALCULATED OF 116.7 FCP WAS 420 TO 920 PSI
19	CHECK FLOATS	6/26/2017	10:59					FLOATS HELD .75 BBL BACK
20	PRE RIG DOWN	6/26/2017	11:15					DISSCUSSED HAZARDS OF RIG DOWN
21	RIG DOWN	6/26/2017	11:30					BJ CREW RIGGED DOWN EQUIPMENT
22	RIG DOWN COMPLETE	6/26/2017	11:45					RIG DOWN COMPLETED SAFELY
23	PRE CONVOY	6/26/2017	12:15					DISSCUSSED HAZARDS OF DRIVING
24	DEPART LOCATION	6/26/2017	13:00					DEPART LOCATION FOR SHOP



3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	70 °F	50-80 °F
pH Level	7.5	5.5-8.5
Chlorides	7 mg/L	0-3000 mg/L
Total Alkalinity	250	0-1000
Total Hardness	259 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	<400 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L