

Job Details & Summary

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	1560	25
Casing	Inner	9.625	8.921	36	n/a	0	1547	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2	Mileage
Cement Pump	103	203	Allred, David	Hyde, Zack	100
Bulk Trailer	503	211	Chambers, Andrew		100
Bulk Trailer	505	208	Bueghly, Steve		100
Light Duty Pickups	3		Hyde, Andrew		100
Plug Container	150519				
Swage	150539				

Timing

Event	Date/Time
Call Out	11/4/2016 20:00
Depart Facility	11/4/2016 21:30
On Location	11/4/2016 23:00
Rig Up Iron	11/4/2016 23:25
Job Started	11/5/2016 02:19
Job Completed	11/5/2016 03:25
Rig Down Iron	11/5/2016 03:50
Depart Location	11/5/2016 04:30

General Job Information

Metrics	Value
Well Fluid Density	8.6 lb/gal
Well Fluid Type	Water
Rig Circulation Vol	130 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	116 bbls
Actual Displacement	116 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	20 bbls
Well Topped Out	No
Top Out Volume	0 bbls

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

Job Details (cont.)

Metrics	Value
BHCT	88 °F
BHST	109 °F

Circulation

Lost Circulation Experienced
No



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	2.52	14.80		260.00	116.77	0
1	3	ALTCem S100-12	Tail	12.50	2.22	12.53		145.00	57.31	1052
1	4	Water	DisplacementFinal	8.33			42.00		116.00	0

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-20	Defoamer	0.03	gal/sk
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-20	Defoamer	0.03	gal/sk
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



Job Logs

Line	#	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Annular Pressure (psi)	Comment
1		Call Out	11/4/2016	20:00						ALTCem crew got called out
2		Arrive on Location	11/4/2016	23:00						ALTCem crew arrived on location
3		Safety Meeting	11/4/2016	23:05						ALTCem crew talked about the hazards of spotting in equipment and rigging up
4		Rig Up	11/4/2016	23:25						Rig up
5		Waiting	11/5/2016	00:00						Wait for casing crew to finish running casing,
6		Safety Meeting	11/5/2016	01:50						ALTCem and rig crew talked about the hazards of pumping the job
7		Fill Lines	11/5/2016	02:19	8.33	2	3	50		Pump 3 bbls of water ahead to fill lines
8		Pressure Test	11/5/2016	02:22						Pressure test pumps and lines to 3000 psi
9		Pump Spacer	11/5/2016	02:23	8.33	2	20	50		Pump 20 bbls of dyed water spacer ahead
10		Pump Lead Cement	11/5/2016	02:31	12	8	116	360		Mix up and pump 260 sks of ALTCem S100-12 lead cement at 12 ppg, yield 2.52, 14.8 gal/sk, 116 bbls
11		Pump Tail Cement	11/5/2016	02:47	12.5	8	57	370		Mix up and pump 145 sks of ALTCem S100-12 tail cement at 12.5 ppg, yield 2.22, 12.53 gal/sk, 57 bbls
12		Shutdown	11/5/2016	02:54						Shutdown to line out manifold to drop top plug
13		Drop Top Plug	11/5/2016	02:55						Company man witness top plug leave manifold
14		Pump Displacement	11/5/2016	02:56	8.33	8	70	250		Pump 116 bbls of water displacement
15		Slow Rate	11/5/2016	03:08	8.33	3	46	200		Slow rate to 3 bpm at 70 bbls away started getting spacer to surface
16		Bump Plug	11/5/2016	03:23						Bump plug at 325 psi took it up to 850 psi
17		Check Floats	11/5/2016	03:25						Check floats got .5 bbls back to the truck
18		Safety Meeting	11/5/2016	03:45						ALTCem crew talked about the hazards of rigging down
19		Rig Down	11/5/2016	03:50						Rig down
20		Depart Location	11/5/2016	04:30						Depart location to head for the yard
21		Other	11/5/2016	04:31						Estimated top of tail 924 ft, 20 bbls cement to surface, thanks from altcem crew

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	60 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	1 mg/L	0-3000 mg/L
Total Alkalinity	40	0-1000
Total Hardness	25 mg/L	0-500 mg/L
Carbonates	8 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	0 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Pump Diagrams

