

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	1552	20
Casing	Inner	9.625	8.921	36	n/a	0	1542	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2	Mileage
Cement Pump	103	203	Moore, Mike	Hyde, Zack	130
Light Duty Pickups	3		Acuna, Roger		130
Bulk Trailer	503	211	Steinmetz, Christopher		130
Bulk Trailer	505	208	Bueghly, Steve		130
Plug Container	150521				130

Timing

Event	Date/Time
Call Out	11/3/2016 10:00
Depart Facility	11/3/2016 12:00
On Location	11/3/2016 15:00
Rig Up Iron	11/3/2016 16:00
Job Started	11/3/2016 18:24
Job Completed	11/3/2016 19:29
Rig Down Iron	11/3/2016 19:45
Depart Location	11/3/2016 21:00

General Job Information

Metrics	Value
Well Fluid Density	8.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	240 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	115.5 bbls
Actual Displacement	115.5 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	25 bbls
Well Topped Out	No

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	8.8 lb/gal
Well Fluid Density Out of Well	8.8 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 (ft³/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	2.52	14.80		254.00	114.07	0
1	3	ALTCem S100-12	Tail	12.50	2.22	12.53		146.00	57.70	917
1	4	Water	DisplacementFinal	8.33			42.00		115.50	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		Called Out	11/3/2016	10:00						Called out to be on location 1600
2		Depart Camp	11/3/2016	12:00						Depart Cheyenne Camp
3		Arrive to Location	11/3/2016	15:00						Arrived to location, Check in with company man
4		Safety Meeting	11/3/2016	15:30						Pre rig up safety meeting
5		Rig Up Iron	11/3/2016	16:00						Rig up iron
6		Waiting	11/3/2016	16:15						Waiting for the rig to finish running casing
7		On Bottom	11/3/2016	17:45	8.8	6	240	146		Casing on bottom, rig circulating 6bpm for 30 min at 146psi
8		Safety Meeting	11/3/2016	18:00						Pre job safety meeting
9		Start Job	11/3/2016	18:24						Start job
10	1	Fill Lines	11/3/2016	18:25	8.33	2	5	50		Fill lines 5bbls fresh water
11		Test Lines	11/3/2016	18:27				2500		Test lines 2500psi, test good
12	2	Fresh Water	11/3/2016	18:30	8.33	8	15	250		Pump 15bbls fresh water spacer, total pumped 20bbls (first 10bbls dyed)
13	3	Lead Cement	11/3/2016	18:37	12	8	114	250		Pump 114bbls lead cement @12ppg (254sks 2.52yield 14.80gps) LA#2 for de-foamer
14	4	Tail Cement	11/3/2016	18:51	12.5	8	58	200		Pump 58bbls tail cement @12.5ppg (146sks 2.22yield 12.53gps) Calculated top, LA#2 for de-foamer
15		Shutdown	11/3/2016	18:57						Shutdown
16		Drop Top Plug	11/3/2016	18:58						Drop top plug, Wire indicated that the plug left the head
17	5	Displacement	11/3/2016	19:00	8.33	8	65	150		Pump fresh water displacement
18		Caught Cement	11/3/2016	19:04				225		Caught plug 20bbls into displacement
19	6	Slow Rate	11/3/2016	19:10	8.33	3	50.5	230		Slow rate, spacer to surface 65bbls into displacement
20		Cement to Surface	11/3/2016	19:18						Cement to surface 90bbls into displacement, total cement to surface 25bbls
21	7	Land Plug	11/3/2016	19:27	8.33	3		408		Landed plug 408psi final circulating, bought to 985psi held for 1 min, total displacement pumped 115.5bbls
22		Check Floats	11/3/2016	19:28						Checked floats, floats held getting 1bbls back to the pump
23		End Job	11/3/2016	19:29						End job, Company man was happy with the job and the crew
24		Safety Meeting	11/3/2016	19:30						Pre rig down safety meeting
25		Rig Down Iron	11/3/2016	19:45						Rig down iron
26		Depart Location	11/3/2016	21:00						Depart Location
27			11/3/2016	00:00						
28			11/3/2016	00:00						

Water Analysis

Metrics	Value	Recommended
Water Source	Upright	
Temperature	60 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	250	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	215 mg/L	0-100 mg/L
Sulfates	Below 200 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Pump Diagrams

