

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	1551	25
Casing	Inner	9.625	8.921	36	LTC	0	1541	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Bulk Trailer	502	Vasquez, Mike	150
Bulk Trailer	E435	Groneman, Josh	150
Cement Pump	101	Casciato, Luke	150
Light Duty Pickups	3	Dent, Jerod	150
Cement Chemical	402		150

1.3 Timing

Event	Date/Time
Call Out	5/17/2017 03:30
Depart Facility	5/17/2017 05:00
On Location	5/17/2017 06:30
Rig Up Iron	5/17/2017 10:00
Job Started	5/17/2017 13:01
Job Completed	5/17/2017 14:15
Rig Down Iron	5/17/2017 14:30
Depart Location	5/17/2017 16:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	9.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	250 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	33 bbls
Well Topped Out	No
Top Out Volume	0 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	1
Yield Point	4
10 sec. SGS	1
10 min. SGS	2
30 min. SGS	3
Filtrate	0.3
Flow Line Temp.	70

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	9.8 lb/gal
Well Fluid Density Out of Well	9.8 lb/gal

1.7 Job Details (cont.)

Metrics	Value
BHCT	88 °F
BHST	110 °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	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		146.00	57.82	1045
1	4	Water	DisplacementFinal	8.33			42.00		117.00	0

1.10 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	5/17/2017	03:30					BJ Crew was called out
2	Pre-Convoy Safety meeting	5/17/2017	04:00					BJ Crew discussed hazards of driving, such as wildlife, road conditions, etc.
3	Departs Facility	5/17/2017	05:00					BJ Crew departs facility
4	Arrive on Location	5/17/2017	06:30					Crew arrives on location and conducts safety meeting prior to spotting in
5	Assess location	5/17/2017	07:00					BJ Crew walked location to decide and understand where equipment was to be spotted.
6	Spot equipment in	5/17/2017	10:00					BJ Crew spotted equipment
7	Rig up Iron	5/17/2017	10:30					Crew Rigged up all iron and fitting on ground and rig floor
8	Safety Meeting	5/17/2017	12:00					BJ Crew, Rig Crew, and company representative discussed Job procedures, and possible hazards such as, slips trips and falls, pinch points overhead loads, and red zones
9	Fill Lines	5/17/2017	13:00	8.33	2	2	50	2BBL of H2O ahead to fill lines
10	Pressure Test	5/17/2017	13:03	8.33			3000	Tested all Iron to 3000psi, after holding bled pressure back to pump
11	Pump Spacer	5/17/2017	13:07	8.33	6	18	180	pumped 20 BBL of H2O spacer with Dye, at 6bpm, 180psi
12	Pump Lead Cement	5/17/2017	13:30	12	6	117	180	Pumped 117 BBL of lead cmt, at 12.0 ppg, at 6BPM, full returns
13	Pump Tail Cement	5/17/2017	13:36	12.5	6	57	220	Pumped 57 BBL of tail cmt at 12.5ppg, 6bpm, full returns
14	Shutdown	5/17/2017	13:47					Shutdown to drop top plug
15	Drop Top Plug	5/17/2017	13:48	8.33	2			Plug left plug container, verified by company representative
16	Pump Displacement	5/17/2017	13:50	8.33	6	100	400	Displaced H2O at 8 bpm, 400psi, full returns
17	Pump Displacement	5/17/2017	14:10	8.33	2	15	320	Slowed rate for last 15 bbl in order to land plug.
18	Land Plug	5/17/2017	14:12	8.33			320	Landed plug at 115 BBL pumped, final circulating pressure was 320. pressured up to 850psi. Held for 3 Min.
19	Check Floats	5/17/2017	14:15					Floats held, received .5BBL back to pump.



20	Pre-Rig Down Safety meeting	5/17/2017	14:30					BJ Crew, Rig Crew discussed hazards of rig down such as overhead loads, pinch points, etc.
21	Rig down	5/17/2017	14:45					Bj Crew Rigged down all iron and fitting on ground and rig floor
22	Depart Location	5/17/2017	16:00					BJ Crew departs location for facility

3 Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	55 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	29 mg/L	0-3000 mg/L
Total Alkalinity	120	0-1000
Total Hardness	>375 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	>200 mg/L	0-1500 mg/L
Potassium	1000 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

