

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	1552	25
Casing	Inner	9.625	8.921	36	LTC	0	1542	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Bulk Trailer	PPC41311	Seghetti, Joshua	160
Bulk Trailer	503	Hyde, Andrew	160
Cement Pump	102	Vasquez, Mike	160
Light Duty Pickups	7	Chambers, Andrew	160

1.3 Timing

Event	Date/Time
Call Out	7/20/2017 18:00
Depart Facility	7/20/2017 19:00
On Location	7/20/2017 21:00
Rig Up Iron	7/20/2017 21:30
Job Started	7/21/2017 01:21
Job Completed	7/21/2017 02:39
Rig Down Iron	7/21/2017 03:15
Depart Location	7/21/2017 04:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	8.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	134 bbls
Rig Circulation Time	0.3 hours
Calculated Displacement	115.69 bbls
Actual Displacement	115.6 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	37 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	8.4 lb/gal
Well Fluid Density Out of Well	8.4 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		146.00	57.82	1040
1	4	Water	DisplacementFinal	8.33			42.00		116.00	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	7/20/2017	18:00					BJ CREW CALLED OUT ON LOCATION AT 12:00AM
2	PRE-CONVOY	7/20/2017	18:45					DISCUSSED HAZARDS OF DRIVING
3	DEPART FOR LOCATION	7/20/2017	19:00					CREW LEFT YARD FOR LOCATION
4	ASSESSMENT OF LOCATION	7/20/2017	21:00					MET WITH CUSTOMER REP WENT OVER JOB DETAILS AND WHERE TO SPOT EQUIPMENT
5	PRE-RIG UP	7/20/2017	21:30					DISCUSSED HAZARDS OF RIG UP
6	RIG UP IRON	7/20/2017	21:45					BJ CREW RIGGED UP LOCATION
7	RIG UP COMPLETE	7/20/2017	22:30					BJ CREW COMPLETES RIG UP SAFELY
8	PRE-JOB SAFETY MEETING	7/21/2017	00:35					CONDUCTED STEACS BRIEFING WITH CREW AND SAFETY MEETING WITH RIG HANDS
9	FILL LINES	7/21/2017	01:21	8.33	2	2		FILLED LINES WITH 2BBL FRESH WATER
10	PRESSURE TEST	7/21/2017	01:23	8.33	1	2		TESTED LINES TO 3000 PSI
11	PUMP SPACER	7/21/2017	01:25	8.33	5	20		PUMPED 20BBL OF DYED SPACER
12	PUMP LEAD CEMENT	7/21/2017	01:32	12	5	117		PUMPED 260/SKS,12/LB,2.53CUFT/FT,14.85GAL/SK OF LEAD CEMENT
13	PUMP TAIL CEMENT	7/21/2017	01:52	12.5	5	57.8		PUMPED 146/SKS,12.5/LB,2.22CUFT/FT,12.85GAL/SK OF TAIL CEMENT
14	SHUTDOWN	7/21/2017	02:06					ALL CEMENT PUMPING COMPLETE
15	DROP PLUG	7/21/2017	02:11					TOP PLUG LEFT CEMENTING HEAD
16	DISPLACEMENT	7/21/2017	02:12	8.33	6	115.69		STARTED PUMPING 115.69 BBL OF FRESH WATER DISPLACEMENT
17	CEMENT TO SURFACE	7/21/2017	02:30					37 BBLs OF CEMENT TO SURFACE AT 78 BBLs DISPLACED
18	SLOW RATE	7/21/2017	02:33	8.33		105		SLOWED RATE AT 105 BBL DISPLACED TO BUMP PLUG
19	BUMP PLUG	7/21/2017	02:39					BUMPED PLUG AT CALCULATED OF 115, FCP 500 TO 1100 PSI
20	CHECK FLOATS	7/21/2017	02:44					FLOATS HELD .5 BBLs BACK
21	PRE-RIG DOWN	7/21/2017	03:00					DISCUSSED HAZARDS OF RIG DOWN
22	RIG DOWN	7/21/2017	03:15					BJ CREW RIGGED DOWN LOCATION
23	RIG DOWN COMPLETE	7/21/2017	04:00					RIG DOWN COMPLETED SAFELY



24	PRE-CONVOY	7/21/2017	04:15					DISSCUSSED HAZARDS OF DRIVING
25	DEPART LOCATION	7/21/2017	04:30					BJ CREW DEPARTS LOCATION FOR SHOP

3 Water Analysis

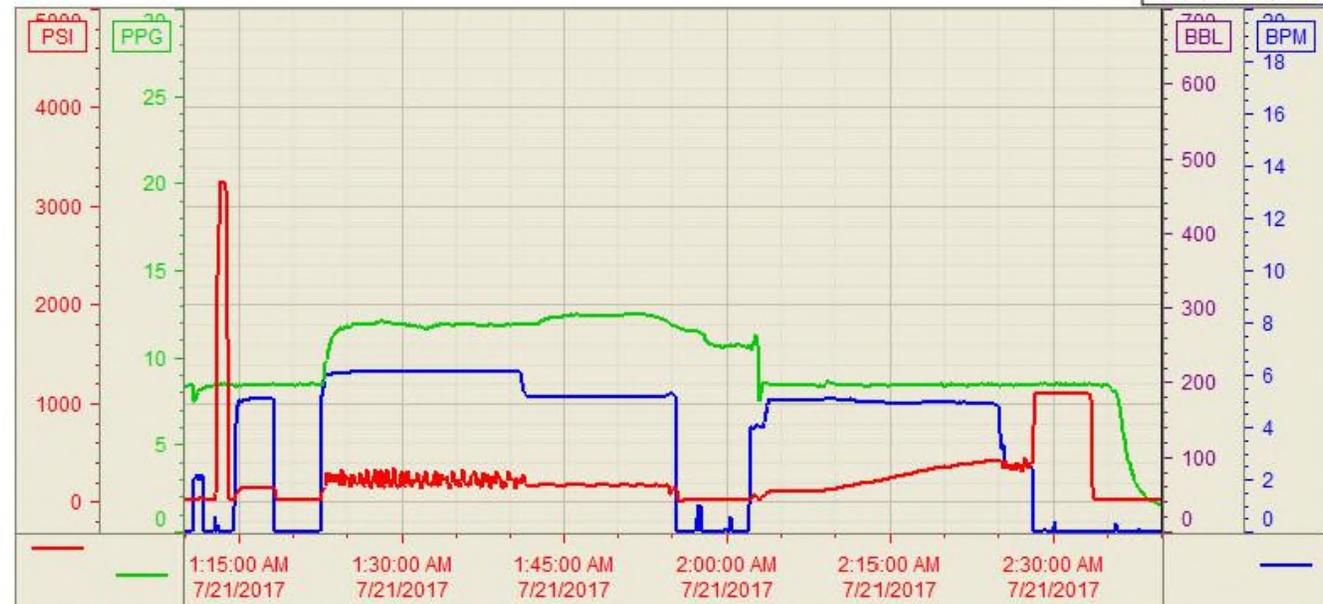
Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	73 °F	50-80 °F
pH Level	7.5	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	250	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	>300 mg/L	0-1500 mg/L
Potassium	400 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

Customer: Cub Creek
Well Number: 13 05-123-42772
Lease Info: Litzenberger



Print Date/Time
7/21/2017 2:47:34 AM



	Name	Y value	X value/time stamp	Tag name Y
1	DS - Press (PSI)	29.2	7/21/2017 2:40:00 AM	CementerDS_DISCHARGE_PRESS_DIAL
2	Den2 - Discharge Density (F 1.53)		7/21/2017 2:40:02 AM	CementerDENSITY2_ACTUAL_RATE
3	Combined Rate	0.00	7/21/2017 2:40:02 AM	CementerFlow_Combined
4				
5				

Source: Control1 2:47:29 AM