



1 Job Details & Summary

1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	7	6.276	26	LTC	0	6554	0
DrillPipe	Inner	4	3.34	14	XT39	0	5590	0
Casing	Inner	4.5	4	11.6	LTC	5590	16282	0
Open Hole	Outer	n/a	6.13	n/a	n/a	6554	16282	10

1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Field Bin	601			194
Bulk Trailer	504	Agosto, Miguel	Rangel, Mario	194
Cement Pump	101	Chaparro, Hector		194
Light Duty Pickups	8	Zuniga, Jesus		194

1.3 Timing

Event	Date/Time
Call Out	7/30/2017 07:30
Depart Facility	7/30/2017 09:00
On Location	7/30/2017 11:00
Rig Up Iron	7/30/2017 11:30
Job Started	7/30/2017 13:38
Job Completed	7/30/2017 16:12
Rig Down Iron	7/30/2017 16:30
Depart Location	7/30/2017 18:00

1.4 General Job Information

Metrics	Value
Well Fluid Density	9 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	200 bbls
Rig Circulation Time	2 hours
Calculated Displacement	200 bbls
Actual Displacement	200 bbls
Total Spacer to Surface	25 bbls
Total CMT to Surface	15 bbls

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	12
Yield Point	4
10 sec. SGS	1
10 min. SGS	4
30 min. SGS	6
Flow Line Temp.	92

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 lb/gal
Well Fluid Density Out of Well	9 lb/gal

1.7 Job Details (cont.)

Metrics	Value
BHCT	215 °F
BHST	215 °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 (sk)	Volume (bbl)	Top (ft)
1	1	CD Spacer	Spacer	11.00			33.75		25.00	4490
1	2	ALTCem P50-X1	Primary	13.50	1.60	8.01		695.00	197.65	5590
1	3	Water + MMCR + Chems	Displacement	8.34			41.81		20.00	14995
1	4	Water + Chems	Displacement	8.33			41.91		130.00	6631
1	5	Water + MMCR	Displacement	8.33			41.90		20.00	5237
1	6	Water	DisplacementFinal	8.33			42.00		57.00	0

1.11 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	1	Spacer	CD Spacer	ASR-20	StrengthRetrogression	179.40	lb/bbl
1	1	Spacer	CD Spacer	AR-20	Retarder	0.60	lb/bbl
1	1	Spacer	CD Spacer	AVS-10	Viscosifier	0.80	lb/bbl
1	2	Primary	ALTCem P50-X1	ACG-10	Cement	50.00	%
1	2	Primary	ALTCem P50-X1	AFA-10	Extender	50.00	%
1	2	Primary	ALTCem P50-X1	ABX-20	BondEnhancer	3.00	%BWOB
1	2	Primary	ALTCem P50-X1	ADF-11	Defoamer	0.30	%BWOB
1	2	Primary	ALTCem P50-X1	AFL-10	FluidLoss	0.40	%BWOB
1	2	Primary	ALTCem P50-X1	AR-20	Retarder	0.20	%BWOB
1	2	Primary	ALTCem P50-X1	AVS-10	Viscosifier	0.10	%BWOB
1	2	Primary	ALTCem P50-X1	AVS-50	Viscosifier	4.00	%BWOB
1	2	Primary	ALTCem P50-X1	AXE-20	Extender	3.00	lb/sk
1	3	Displacement	Water + MMCR + Chems	AR-61	Retarder	0.10	gal/bbl
1	3	Displacement	Water + MMCR + Chems	ASF-50	ClayProtection	0.08	gal/bbl
1	3	Displacement	Water + MMCR + Chems	Biocide	Other	0.01	gal/bbl
1	4	Displacement	Water + Chems	ASF-50	ClayProtection	0.08	gal/bbl
1	4	Displacement	Water + Chems	Biocide	Other	0.01	gal/bbl
1	5	Displacement	Water + MMCR	AR-61	Retarder	0.10	gal/bbl



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	Callout	7/30/2017	07:30					Crews gets called out, Requested on location at 1300
2	Depart Facility	7/30/2017	09:00					Crew leaves facility
3	Arrive On Location	7/30/2017	11:00					Crew arrives on location, talked to customer about numbers and job, Rig was on bottom but still had to circulate and drop dart
4	Crew rigs up	7/30/2017	11:30					crew rigs up after discussing how to spot equipment
5	Safety Meeting	7/30/2017	12:30					Crew has safety meeting with customer, tool hand and rig crew discussing the job
6	Waiting	7/30/2017	13:00					Rig circulation
7	Fill Lines	7/30/2017	13:38	8.33	2	2	0	Fill lines
8	Pressure Test Lines	7/30/2017	13:41					Pressure test to 4500 psi
9	CD Spacer	7/30/2017	13:47	11	5	25	600	Pumped 25 bbls of CD Spacer at 11 ppg at 5bpm
10	Primary	7/30/2017	13:51	13.5	5.5	198	750	pumped 198bbls od Primary at 13.5ppg (695 sacks, 1.60yld, 8.01gal/sk) Had to shutdown 20 bbls in mixing due to powdering off mixing tub. Was only shutdown for 10 mins.
11	Shutdown	7/30/2017	14:51					Shutdown to wash pump and lines and to drop dart
12	Displacement	7/30/2017	15:00	8.33	5	20	120	20bbls away, 5bpm, 120psi.
13	Displacement	7/30/2017	15:04	8.33	2	10	1200	Slowed rate at 20 away for the dart to
14	Displacement	7/30/2017	15:08	8.33	5	20	1750	50bbls away, 5bpm, 1750psi
15	Displacement	7/30/2017	15:17	8.33	5	50	2100	100bbls away, 5bpm, 2100psi
16	Displacement	7/30/2017	15:33	8.33	5	50	2100	150bbls away, 5bpm, 2100psi
17	Displacement	7/30/2017	15:38	8.33	5	30	2200	180bbls away, 5bpm, 2200psi
18	Displacement	7/30/2017	15:44	8.33	3	20	1200	200bbls away, 3bpm, 1200psi
19	Landed Plug	7/30/2017	15:44					Landed plug at 1250psi brought it up to 1750psi. Held for 3 mins
20	Burst Plug	7/30/2017	15:47					Pressure was at 1750psi kicked pumps in at the plug burst at 2750psi
21	Wet Shoe	7/30/2017	15:47	8.33	4	5	60	After bursting plug bumped 5bbl wet shoe at 4bpm with 600psi
22	Testing Liner Top	7/30/2017	16:08					Testing liner top, pressured up to 600 psi and held it for 7 mins



23	Job Complete	7/30/2017	16:12					Job complete, Rig circulated at the well, got 25bbls of spacer to surface along with 15 bbls primary cmt
24	Rig Down	7/30/2017	16:30					Crew rigged down iron and hoses
25	Leave Location	7/30/2017	18:00					Crew leaves location