

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	1532	25
Casing	Inner	9.625	8.921	36	LTC	0	1520	0

1.2 Equipment / People

Unit Type	Unit	Employee #1	Mileage
Cement Pump	C992	Scott, Matthew	140
Light Duty Pickups	4	Snyder, Albert	140
Bulk Trailer	503	Garcia, Anthony	140
Bulk Trailer	PPC41311	Boyd, Brian	140

1.3 Timing

Event	Date/Time
Call Out	7/25/2017 19:30
Depart Facility	7/25/2017 21:30
On Location	7/26/2017 01:30
Rig Up Iron	7/26/2017 02:00
Job Started	7/26/2017 04:08
Job Completed	7/26/2017 05:16
Rig Down Iron	7/26/2017 05:30
Depart Location	7/26/2017 06:30

1.4 General Job Information

Metrics	Value
Well Fluid Density	10>4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	265 bbls
Rig Circulation Time	1 hours
Calculated Displacement	114 bbls
Actual Displacement	114 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	34 bbls
Well Topped Out	No

1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	120
Yield Point	9
10 sec. SGS	6
10 min. SGS	13
30 min. SGS	15
Filtrate	4
Flow Line Temp.	150

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	10.4 lb/gal
Well Fluid Density Out of Well	10.4 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	S100-12	Lead	12.00	2.53	14.85		260.00	116.99	0
1	3	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	5	S100-12	Topout	12.50	2.22	12.58		150.00	59.40	0

1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	S100-12	AC3-10	Cement	100.00	%
1	2	Lead	S100-12	ACL-10	Accelerator	2.00	lb/sk
1	2	Lead	S100-12	ACL-20	Accelerator	5.00	%BWOB
1	2	Lead	S100-12	ADF-11	Defoamer	0.30	%BWOB
1	2	Lead	S100-12	ALC-10	Lost Circulation	0.13	lb/sk
1	2	Lead	S100-12	AXE-30	Extender	2.00	lb/sk
1	3	Tail	S100-12	AC3-10	Cement	100.00	%
1	3	Tail	S100-12	ACL-10	Accelerator	2.00	lb/sk
1	3	Tail	S100-12	ACL-20	Accelerator	5.00	%BWOB
1	3	Tail	S100-12	ADF-11	Defoamer	0.30	%BWOB
1	3	Tail	S100-12	ALC-10	Lost Circulation	0.13	lb/sk
1	3	Tail	S100-12	AXE-30	Extender	2.00	lb/sk
1	5	Topout	S100-12	AC3-10	Cement	100.00	%
1	5	Topout	S100-12	ACL-10	Accelerator	2.00	lb/sk
1	5	Topout	S100-12	ACL-20	Accelerator	5.00	%BWOB
1	5	Topout	S100-12	ADF-11	Defoamer	0.30	%BWOB
1	5	Topout	S100-12	ALC-10	Lost Circulation	0.13	lb/sk
1	5	Topout	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	Callout	7/25/2017	19:30					WAITING AT JOHNSON CORNER
2	Depart Location	7/25/2017	21:30					BULK TRUCK LEFT THE YARD
3	requested on location	7/26/2017	02:30					
4	Arrive On Location	7/26/2017	01:30					1 hour early casing still being ran
5	STEACS BRIEFING	7/26/2017	01:45					DISCUSSED RIGGING UP IRON
6	Rig Up Iron	7/26/2017	01:55					USE TEAMWORK WATCH SWING PLAINS
7	STEACS BRIEFING	7/26/2017	00:00					DISCUSSED JOB PROCEEDURE
8	TEST LINES	7/26/2017	04:08	8.33	1	1	3000	LINES TESTED GOOD
9	Pump Spacer	7/26/2017	04:10	8.33	5	20	162	FRESH WATER SPACER DYED
10	Pump Lead Cement	7/26/2017	04:18	12	6	117	242	MIX AND PUMP 260 SKS OF ALTCEM S100-12 @12# YIELD 2.53 WR 14.85
11	Pump Tail Cement	7/26/2017	04:38	12.5	6	59.4	255	MIX AND PUMP 146 SKS OF ALTCEM S100-12 @12.5 2.22 YIELD 12.58 WR
12	DROP PLUG	7/26/2017	04:51					used their plug
13	Pump Displacement	7/26/2017	04:55	8.33	8	20	264	USED THEIR PLUG
14	Pump Displacement	7/26/2017	04:59	8.33	8	40	332	PUMP FRESH WATER
15	Pump Displacement	7/26/2017	05:02	8.33	8	60	408	GOOD CIRCUALTION
16	Pump Displacement	7/26/2017	05:05	8.33	8	80	425	spacer to surface 20 bbls
17	Pump Displacement	7/26/2017	05:09	8.33	6	100	484	cement to surface 34 bbls at 90 away
18	Slow Pump Rate	7/26/2017	05:10	8.33	3	110	422	good circulation
19	Land Plug	7/26/2017	05:13	8.33	3		1074	plug landed
20	Check Floats	7/26/2017	05:16					float is holding 1 barrels back
21	STEACS BRIEFING	7/26/2017	05:30					discussed rig down
22	Rig Down Iron	7/26/2017	05:45					all employees rigged down
23	MOVE OFF LOCATION	7/26/2017	06:09					use spotters to back
24	AFTER ACTION REVIEW	7/26/2017	07:00					discussed complete job
25	JOURNEY STEACS	7/26/2017	07:10					planned route back
26	Depart Location	7/26/2017	07:15					

3 Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	75 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	4 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	140 mg/L	0-100 mg/L
Sulfates	<200 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

4 Pump Diagrams

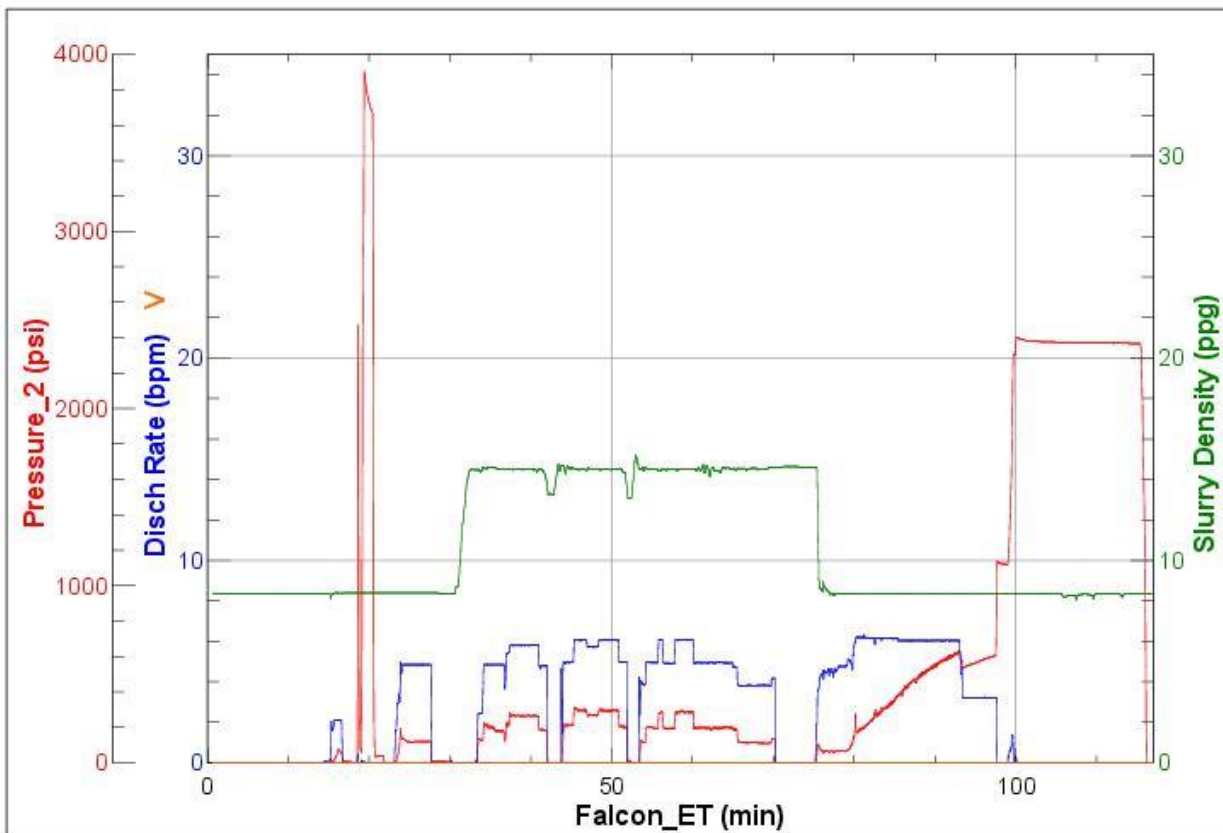


JobMaster Program Version 4.02C 1

Job Number: 996

Customer: Great Western

Well Name: Raindance FD 20-282HN



BJ Services

Job Start: Sunday, July 09, 2017