



Caerus Operating LLC

TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU M33 FED #14B-32-496 05-045-18721
S:33 T:4S R:96W Garfield CO

CallSheet #: 88866
Proposal #: 71971



TWO-STAGE/MULTI-STAGE CEMENT Post Job Report

Attention: Mr. Cole Walton | (720) 880-6325 | cwalton@caerusoilandgas.com

Caerus Operating LLC

1001 17TH STREET | DENVER, CO 80202

Dear Mr. Cole Walton,

Thank you for the opportunity to provide cementing services on this well. American Cementing strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact American Cementing at any time.

Sincerely,

Lyndon Chandarjit

Field Engineer II | (281) 690-3840 | lyndon.chandarjit@americacementing.com

Field Office 28730 US-6, Rifle, CO 81650
Phone: (970) 657-1187

Job Details & Summary

Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	20	19.5	53	n/a	0	130	0
Open Hole	Outer	n/a	14.75	n/a	n/a	100	2500	25
Open Hole	Outer	n/a	14.75	n/a	n/a	2500	3017	0
Casing	Inner	9.625	8.921	36	n/a	0	2971.28	0
DV Tool						923.8	926.4	

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-249	TRC-425	Duewayne Jackson
Field Storage Silo	FSS-468		
Field Storage Silo	FSS-478		
Light Duty Vehicles	LDV-063		Francisco Castillo
Cement Pump Float	CPF-058	TRH-959	Jeremy Bradbrook

Timing

Event	Date/Time
ERTS	10/18/2023 21:00
Call Out	10/18/2023 17:00
Depart Facility	10/18/2023 18:45
On Location	10/18/2023 20:11
Rig Up Iron	10/18/2023 20:45
Job Started	10/19/2023 01:59
Job Completed	10/19/2023 12:00
Rig Down Iron	10/19/2023 12:15
Depart Location	10/19/2023 14:00

General Job Information

Metrics	Value
Well Fluid Density	9.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	226 bbls
Actual Displacement	226 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	10 bbls
Well Topped Out	Yes
Top Out Volume	77 bbls

Job Details

Metrics	Value
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.4 lb/gal
Well Fluid Density Out of Well	9.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	94 °F
BHST	124 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	67 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	240	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	250 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement

Yes	N/A	N/A	N/A
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Circulation Details

LOST RETURNS 90 BBLS INTO DISPLACEMENT, GOT IT BACK AT 120 BBL AND LOST IT AT 130 BBLS WITH 10 CEMENT TO SURFACE

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Designed Top (ft)
1	Water	Flush	8.34			20.00		20.00	686
2	Stage 1 Lead	Lead	12.00	2.47	14.42		535.00	235.16	950
3	Stage 1 Tail	Tail	13.00	1.94	10.51		185.00	64.07	2500
4	Water	DisplacementFinal	8.34			42.00		226.00	0
1	Water	Flush	8.34			42.00		0.00	0
2	Stage 2 Primary	Primary	12.00	2.51	14.63		352.00	0.00	0
3	Water	DisplacementFinal	8.34			42.00		0.00	0

Job Fluid Details

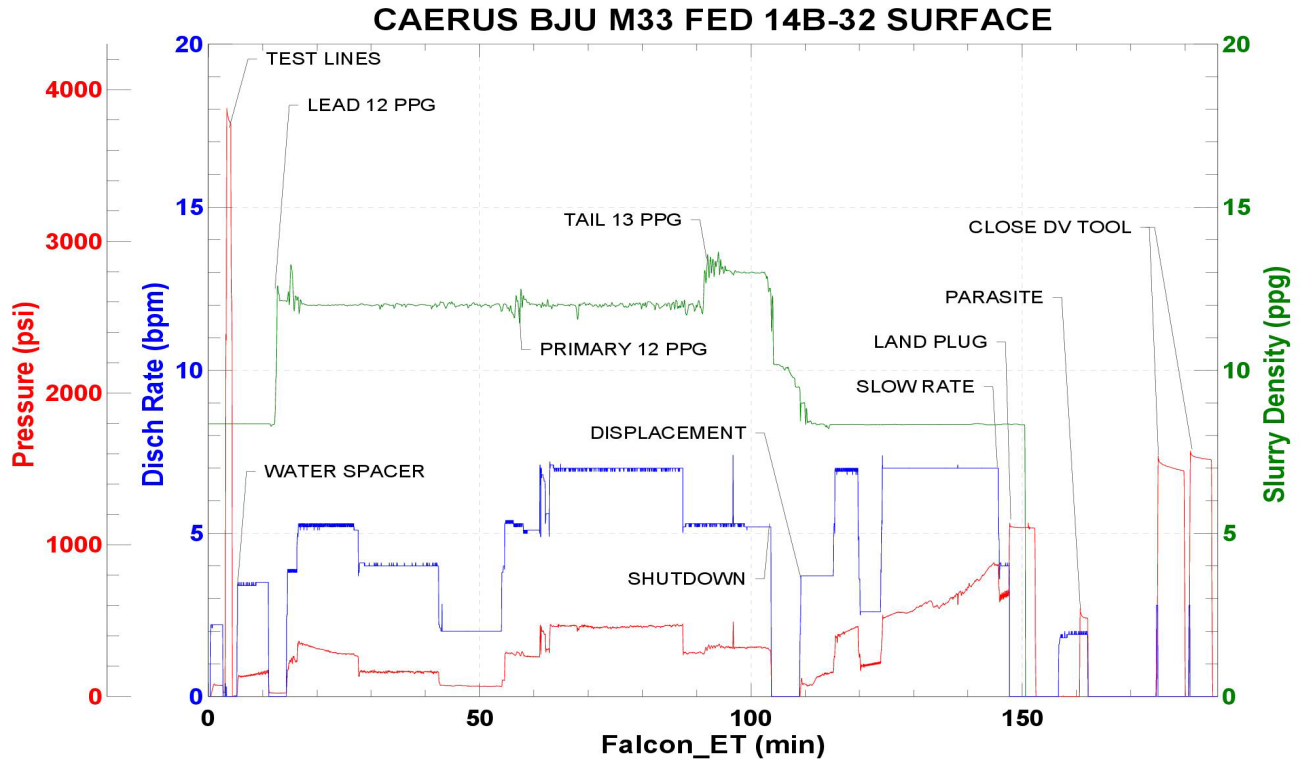
Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Stage 1 Lead	ASTM TYPE IL	Cement	100.00	%
2	Lead	Stage 1 Lead	A-10	Accelerator	5.00	%BWOB
2	Lead	Stage 1 Lead	A-2	Accelerator	3.00	lb/sk
2	Lead	Stage 1 Lead	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
2	Lead	Stage 1 Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Stage 1 Lead	R-7C	Retarder	0.10	%BWOB
2	Lead	Stage 1 Lead	STATIC FREE	Other	0.01	%BWOB
2	Lead	Stage 1 Lead	XCem-308	Defoamer	0.30	%BWOB
3	Tail	Stage 1 Tail	ASTM TYPE IL	Cement	100.00	%
3	Tail	Stage 1 Tail	A-10	Accelerator	5.00	%BWOB
3	Tail	Stage 1 Tail	A-2	Accelerator	2.00	lb/sk
3	Tail	Stage 1 Tail	A-7P	Accelerator	2.00	lb/sk
3	Tail	Stage 1 Tail	XCem-308	Defoamer	0.30	%BWOB
2	Primary	Stage 2 Primary	ASTM TYPE IL	Cement	100.00	%
2	Primary	Stage 2 Primary	A-10	Accelerator	5.00	%BWOB
2	Primary	Stage 2 Primary	A-2	Accelerator	3.50	lb/sk
2	Primary	Stage 2 Primary	A-7P	Accelerator	2.00	lb/sk
2	Primary	Stage 2 Primary	XCem-308	Defoamer	0.30	%BWOB

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	10/18/2023	17:00					ON LOCATION AT 21:00 HRS
2	LEAVE THE YARD	10/18/2023	18:45					CREW LEAVE THE YARD
3	ON LOCATION	10/18/2023	20:11					CREW ON LOCATION
4	RIG UP	10/18/2023	20:45					RIG UP MEETING, RIG UP
5	SAFETY MEETING	10/19/2023	01:40					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	10/19/2023	01:56				3881	PRESSURE TEST LINES
7	WATER SPACER	10/19/2023	01:59	8.34	3.5	20	165	WATER SPACER
8	LEAD CEMENT	10/19/2023	02:07	12	5.3	50	275	LEAD 535 SKS/235 BBLS AT 12 PPG, GOT RETURNS 3 BBLS INTO LEAD
9	LEAD CEMENT	10/19/2023	02:18	12	4	50	163	100 BBLS LEAD CEMENT PUMPED
10	LEAD CEMENT	10/19/2023	02:30	12	5.3	50	293	150 BBLS LEAD CEMENT PUMPED
11	LEAD CEMENT	10/19/2023	02:48	12	7	85	463	235 BBLS LEAD CEMENT PUMPED
12	PRIMARY CEMENT	10/19/2023	03:00	12	7	50	453	PRIMARY 352 SKS/157 BBLS AT 12 PPG
13	PRIMARY CEMENT	10/19/2023	03:07	12	7	50	457	100 BBLS PRIMARY PUMPED
14	PRIMARY CEMENT	10/19/2023	03:15	12	7	57	473	157 BBLS PRIMARY PUMPED
15	TAIL CEMENT	10/19/2023	03:23	13	5.3	64	321	TAIL 185 SKS/64 BBLS AT 13 PPG, TOP OF TAIL 2,469'
16	SHUTDOWN	10/19/2023	03:36					SHUTDOWN, DROP PLUG
17	DISPLACEMENT	10/19/2023	03:41	8.34	7	50	487	DISPLACEMENT WATER, LOST RETURNS AT 90 BBLS
18	DISPLACEMENT	10/19/2023	03:52	8.34	7	50	575	100 BBLS DISPLACEMENT PUMPED
19	DISPLACEMENT	10/19/2023	04:01	8.34	7	50	637	150 BBLS DISPLACEMENT PUMPED, GOT RETURNS AT 120 BBLS AND LOST IT AT 130 BBLS, 10 BBLS CMT TO SURFACE
20	DISPLACEMENT	10/19/2023	04:08	8.34	7	66	869	216 BBLS DISPLACEMENT PUMPED
21	SLOW RATE	10/19/2023	04:18	8.34	4	10	793	SLOW RATE
22	LAND PLUG	10/19/2023	04:20				1141	LAND PLUG, 10 BBLS CMT TO SURFACE
23	CHECK FLOATS	10/19/2023	04:24					FLOATS HELD, 1 BBL FLOW BACK
24	PARASTIE	10/19/2023	04:29	9	2	10	563	SUGAR WATER THROUGH PARASITE, BROKE AT 563 PSI
25	CANCELATION CONE	10/19/2023	04:37					DROP CANCELATION CONE
26	CLOSE DV TOOL	10/19/2023	04:47				1551	CLOSE DV TOOL
27	PRESSURE UP	10/19/2023	04:53				1591	PUT PRESSURE ON IT
28	RELEASE PSI	10/19/2023	04:57					RELEASE PSI, 0.75 BBL FLOW BACK
29	TOPOUT-1	10/19/2023	07:09	15.8	2	36	105	TOPOUT 176 SKS/36 BBLS AT 15.8 PPG
30	SHUTDOWN	10/19/2023	07:50					MONITOR CEMENT FALL
31	TOPOUT-2	10/19/2023	10:05	15.8	2	41	97	TOPOUT 200 SKS/41 BBLS AT 15.8 PPG
32	SHUTDOWN	10/19/2023	10:53					MONITOR CEMENT FALL
33	RELEASED	10/19/2023	12:00					CREW RELEASED
34	RIG DOWN	10/19/2023	12:15					RIG DOWN MEETING, RIG DOWN
35	LEAVE LOCATION	10/19/2023	14:00					CREW LEAVE LOCATION

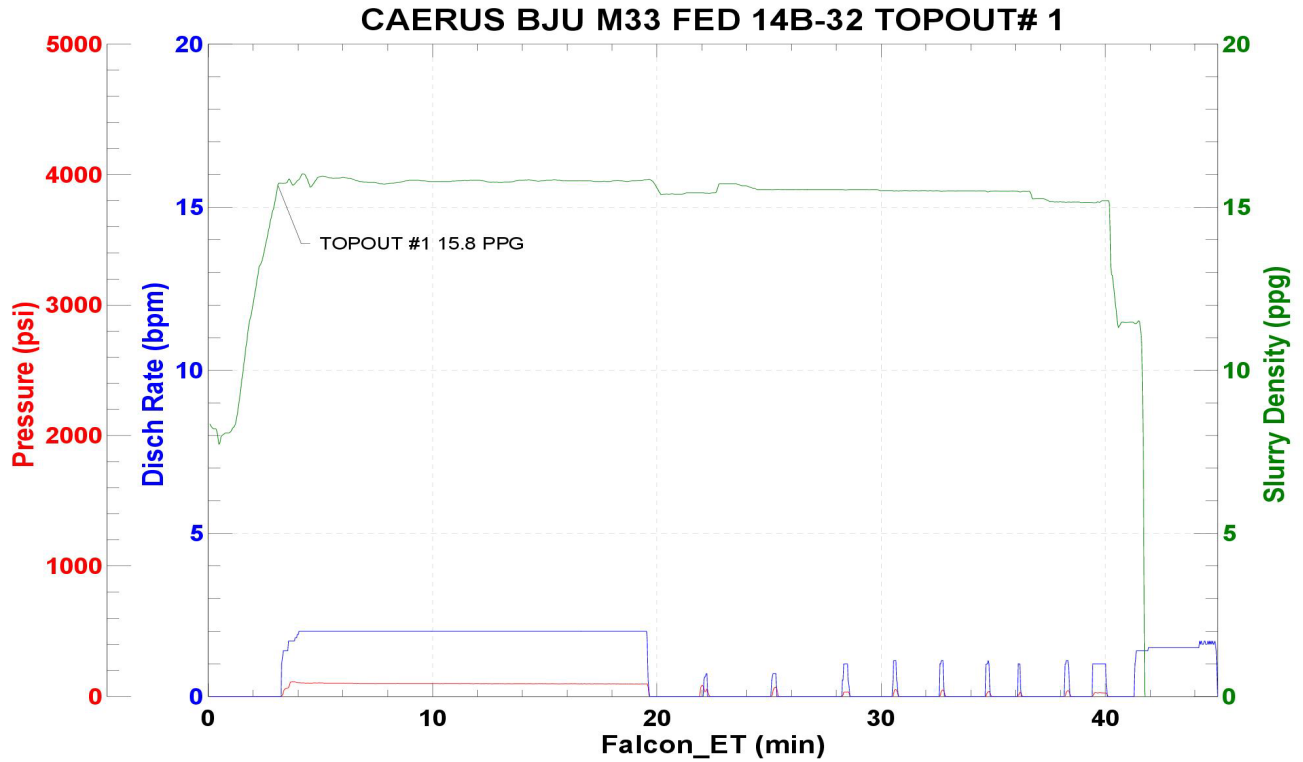
Pump Diagrams

JobMaster Program Version 5.01C1
Job Number: 88866
Customer: CAERUS
Well Name: BJU M33 FED 14B-33



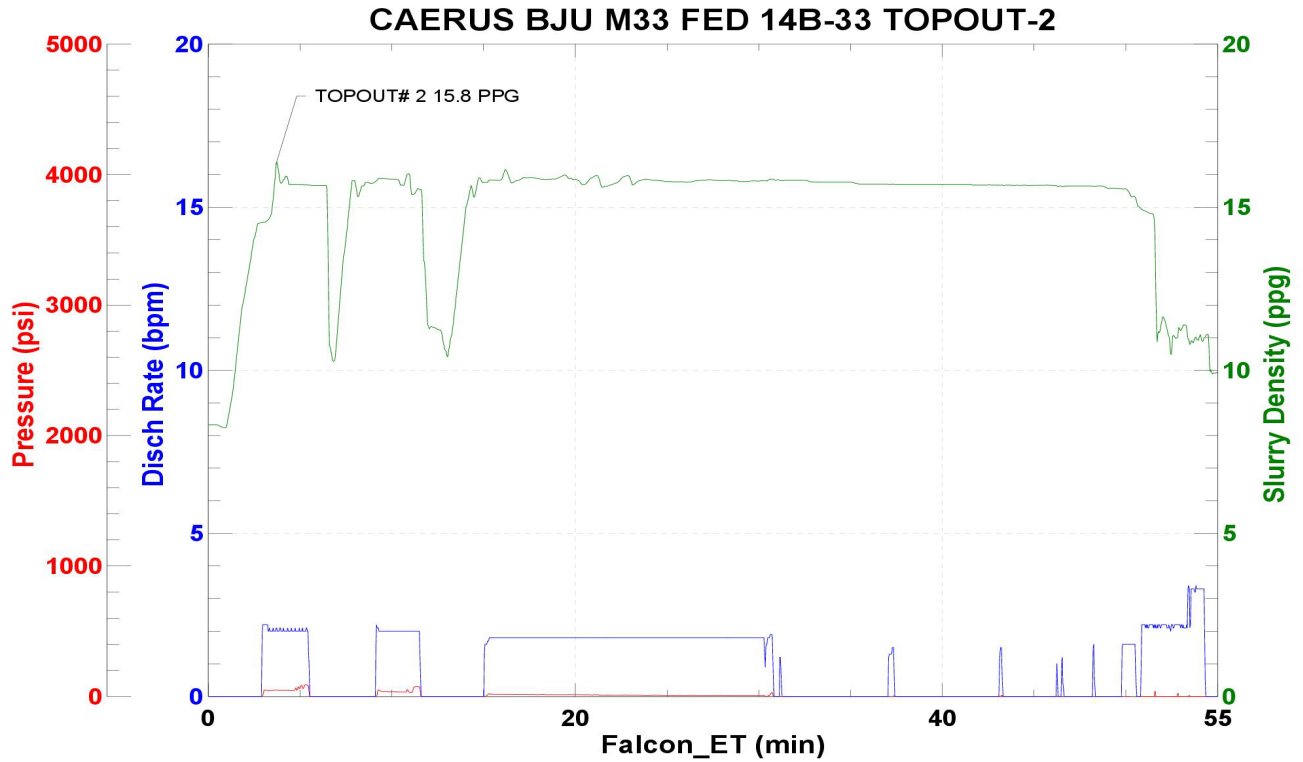
Job Start: Thursday, October 19, 2023

JobMaster Program Version 5.01C1
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