



Caerus Operating LLC

TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU M33 FED #24A-32-496 05-045-24326
S:33 T:4S R:96W Garfield CO

CallSheet #: 88684
Proposal #: 71600



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,

Krystal Schell

Field Engineer I | (719) 992-1830 | krystal.schell@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	100	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	3015	0
Casing	Inner	9.625	8.921	36	n/a	0	2970.39	0
DV Tool						923.7	926.3	

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-385	TRC-090	Danny Ridgeway
Field Storage Silo	FSS-468		
Field Storage Silo	FSS-478		
Cement Pump Float	CPF-053	TRH-677	Collin Woronovitch
Light Duty Vehicles	LDV-063		Francisco Castillo

Timing

Event	Date/Time
ERTS	10/12/2023 02:00
Call Out	10/11/2023 20:00
Depart Facility	10/11/2023 21:52
On Location	10/12/2023 01:30
Rig Up Iron	10/12/2023 02:00
Job Started	10/12/2023 08:56
Job Completed	10/12/2023 14:30
Rig Down Iron	10/12/2023 15:00
Depart Location	10/12/2023 16:00

General Job Information

Metrics	Value
Well Fluid Density	9.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	226/69 bbls
Actual Displacement	226/69 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	15 bbls
Well Topped Out	Yes
Top Out Volume	23 bbls

Job Details

Metrics	Value
Flare Prior to Job	No
Flare Prior to Job	0 units
Flare During Job	No
Flare During Job	0 units
Flare at End of Job	No
Flare at End of Job	0 units
Well Full Prior to Job	Yes
Well Fluid Density Into Well	9.5 lb/gal
Well Fluid Density Out of Well	9.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	94 °F
BHST	124 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
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

Circulation Details

FULL RETURNS THROUGH OUT CEMENT. LOST RETURNS 190 BBL INTO DISPLACEMENT

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			42.00		20.00	686
2	Stage 1 Lead	Lead	12.00	2.47	14.43		535.00	235.32	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		20.00	0
2	Stage 2 Primary	Primary	12.00	2.51	14.63		352.00	157.07	0
3	Water	DisplacementFinal	8.34			42.00		69.00	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	%BWOW
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

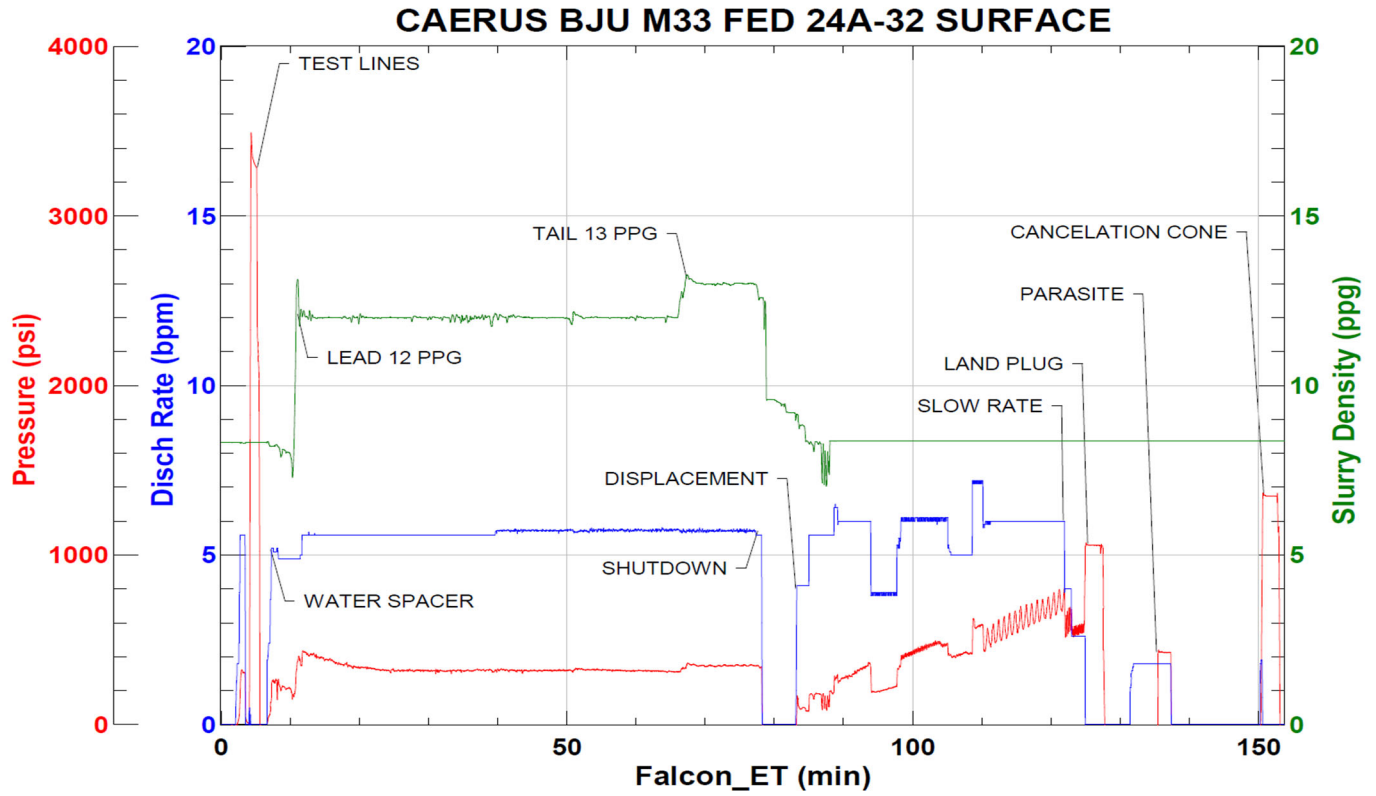
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	10/11/2023	20:00					ON LOCATION AT 02:30 HRS
2	LEAVE THE YARD	10/11/2023	21:52					CREW LEAVE THE YARD
3	ON LOCATION	10/12/2023	01:30					CREW ON LOCATION
4	RIG UP	10/12/2023	02:00					RIG UP MEETING, RIG UP
5	SAFETY MEETING	10/12/2023	08:30					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	10/12/2023	08:52				3475	PRESSURE TEST LINES
7	WATER SPACER	10/12/2023	08:56	8.34	5.5	20	219	WATER SPACER
8	LEAD CEMENT	10/12/2023	09:00	12	5.5	50	337	LEAD 705 SKS/310 BBLS AT 12 PPG
9	LEAD CEMENT	10/12/2023	09:09	12	5.5	50	323	100 BBLS LEAD CEMENT PUMPED
10	LEAD CEMENT	10/12/2023	09:17	12	5.5	50	325	150 BBLS LEAD CEMENT PUMPED
11	LEAD CEMENT	10/12/2023	09:26	12	5.5	50	319	200 BBLS LEAD CEMENT PUMPED
12	LEAD CEMENT	10/12/2023	09:36	12	5.7	50	321	250 BBLS LEAD CEMENT PUMPED
13	LEAD CEMENT	10/12/2023	09:45	12	5.7	60	317	310 BBLS LEAD CEMENT PUMPED
14	TAIL CEMENT	10/12/2023	09:55	13	5.7	64	345	TAIL 185 SKS/64 BBLS AT 13 PPG
15	SHUTDOWN	10/12/2023	10:06					SHUTDOWN, DROP PLUG
16	DISPLACEMENT	10/12/2023	10:11	8.34	6	50	361	DISPLACEMENT WATER
17	DISPLACEMENT	10/12/2023	10:21	8.34	6	50	527	100 BBLS DISPLACEMENT PUMPED
18	DISPLACEMENT	10/12/2023	10:31	8.34	6	50	551	150 BBLS DISPLACEMENT PUMPED, LOST RETURNS AT 190 BBLS
19	DISPLACEMENT	10/12/2023	10:39	8.34	6	66	821	216 BBLS DISPLACEMENT PUMPED
20	SLOW RATE	10/12/2023	10:50	8.34	3	10	605	SLOW RATE
21	LAND PLUG	10/12/2023	10:53				1061	LAND PLUG, 15 BBLS CMT TO SURFACE
22	CHECK FLOATS	10/12/2023	10:56					FLOATS HELD, 1.5 BBLS FLOW BACK
23	PARASITE	10/12/2023	10:59	8.7	2	10	521	SUGAR WATER THROUGH PARASITE, BROKE AT 521 PSI
24	CANCELATION CONE	10/12/2023	11:07					DROP CANCELATION CONE
25	CLOSE DV TOOL	10/12/2023	11:18					CLOSE DV TOOL
26	CHECK FLOW	10/12/2023	11:21					DV TOOL CLOSED, 0.5 BBL FLOW BACK
27	TOPOUT	10/12/2023	13:09	12	2	23	85	52 SKS/23 BBLS, 18 BBLS TO TOPOUT, 5 BBLS LEFT IN THE TUB, TOPOUT WITH 2 STG PRIMARY CEMENT
28	SHUTDOWN	10/12/2023	13:19					SHUTDOWN
29	WASHUP	10/12/2023	13:40					WASH PUMP AND LINES
30	RELEASED	10/12/2023	14:30					CREW RELEASED

Pump Diagrams

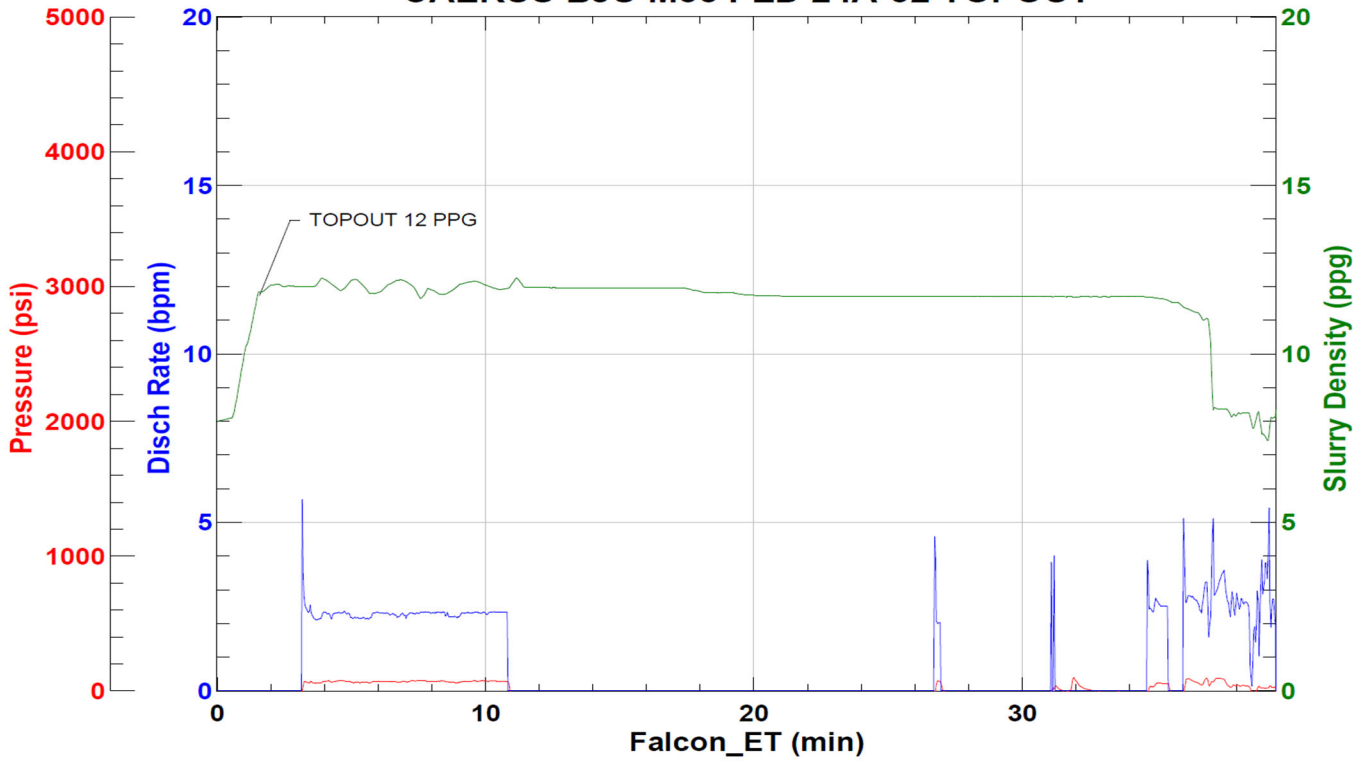


JobMaster Program Version 5.01C1
Job Number: 88684
Customer: CAERUS
Well Name: FED 24A-32



Job Start: Thursday, October 12, 2023

CAERUS BJU M33 FED 24A-32 TOPOUT



Job Start: Thursday, October 12, 2023