



# **Caerus Operating LLC**

## **LONG STRING POST JOB REPORT**

**BJU B26 FED #23D-26-496 05-045-24453**  
**S:26 T:4S R:96W Garfield CO**

CallSheet #: 84477  
Proposal #: 64892



**LONG STRING Post Job Report**

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

Caerus Operating LLC

1001 17TH STREET | DENVER, CO 80202

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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) 657-1157

## Job Details & Summary

### Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Casing	Outer	9.625	8.921	36	n/a	0	3020	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3020	7224	25
Open Hole	Outer	n/a	8.75	n/a	n/a	7224	12348	0
Casing	Inner	4.5	4	11.6	n/a	0	12323	0

### Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
AS Cement Trailer Float	CTF-138	TRC-115	Wall, Lynn	
AS Cement Trailer Float	CTF-048	TRC-424	Hansen, James	
AS Cement Trailer Float	CTF-901	TRC-115	Wall, Lynn	Schweitzer, Casey
AS Cement Trailer Float	CTF-558	TRC-424	Hansen, James	
Cement Trailer Float	CTF-182	TRC-054	Hutchinson, Michael	
Field Storage Silo	FSS-469			
Field Storage Silo	FSS-468			
Light Duty Vehicles	LDV-061		Billman, Robert	Woronovitch, Collin
Cement Pump Float	CPF-058	TRH-959	Morales, Adrian	Hale, Jason

### Timing

Event	Date/Time
Call Out	11/17/2022 06:00
Depart Facility	11/17/2022 13:00
On Location	11/17/2022 15:00
Rig Up Iron	11/17/2022 15:30
Job Started	11/17/2022 21:26
Job Completed	11/18/2022 00:29
Rig Down Iron	11/18/2022 01:00
Depart Location	11/18/2022 02:30

### General Job Information

Metrics	Value
Well Fluid Density	10.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1440 bbls
Rig Circulation Time	2 hours
Calculated Displacement	190 bbls
Actual Displacement	190 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	No

### 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	10.4 lb/gal
Well Fluid Density Out of Well	10.4 lb/gal

### Job Details (cont.)

Metrics	Value
BHCT	222 °F
BHST	290 °F

### Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	40 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	1500 mg/L	0-3000 mg/L
Total Alkalinity	0	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	0 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	0	200 bbls Tail	0

#### Circulation Details

Lost returns 200 bbls in to tail cement

### Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sk)	Volume (bbl)	Designed Top (ft)
1	Mud Flush	Flush	8.45			40.86		20.00	653
2	Scavenger	Scavenger	11.50	2.76	16.68		235.00	115.48	1000
3	Lead	Lead	12.70	2.00	11.00		811.00	289.18	3000
4	Tail	Tail	13.50	2.00	9.66		818.00	290.89	7224
5	Water + KCL Sub	DisplacementFinal	8.34			42.00		190.00	0

### Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	Flush	Mud Flush	SAPP	Surfactant	10.00	lb/bbl
1	Flush	Mud Flush	SS-201	Surfactant	0.50	gal/bbl
2	Scavenger	Scavenger	ASTM TYPE I/II	Cement	100.00	%
2	Scavenger	Scavenger	BA-60	GasMigration	0.30	%BWOB
2	Scavenger	Scavenger	FP-24	Defoamer	0.30	%BWOB
2	Scavenger	Scavenger	GW-86	Viscosifier	0.20	%BWOB
2	Scavenger	Scavenger	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Scavenger	Scavenger	R-3	Retarder	0.50	%BWOB
2	Scavenger	Scavenger	STATIC FREE	Other	0.01	lb/sk
3	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
3	Lead	Lead	BA-60	GasMigration	0.30	%BWOB
3	Lead	Lead	FL-66	FluidLoss	0.50	%BWOB
3	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
3	Lead	Lead	GW-86	Viscosifier	0.10	%BWOB
3	Lead	Lead	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Lead	Lead	R-3	Retarder	0.30	%BWOB
3	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
4	Tail	Tail	CLASS G	Cement	70.00	%
4	Tail	Tail	FLY ASH (POZZOLAN)	Extender	30.00	%
4	Tail	Tail	BA-60	GasMigration	0.20	%BWOB

Fluid	Type	Fluid	Product	Function	Conc.	Uom
4	Tail	Tail	BENTONITE	Viscosifier	8.00	%BWOB
4	Tail	Tail	FL-24	FluidLoss	0.40	%BWOB
4	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
4	Tail	Tail	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
4	Tail	Tail	R-3	Retarder	0.25	%BWOB
4	Tail	Tail	S-8	StrengthRetrogression	25.00	%BWOB

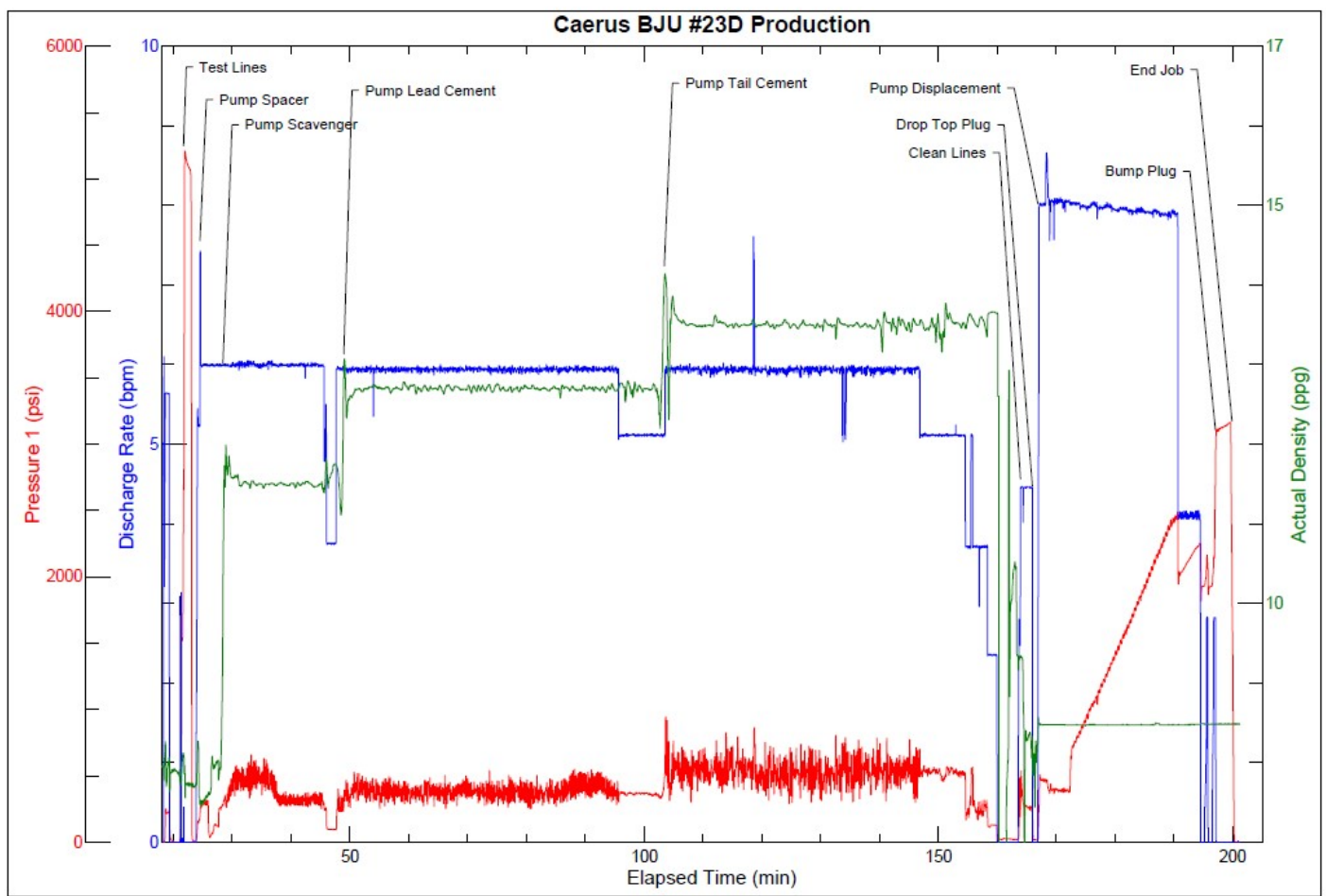
## Job Logs

Line	Event	Date (MM/DD/Y Y)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Call Out	11/17/2022	06:00					
2	Safety Meeting	11/17/2022	12:30					Pre Convoy Safety Meeting
3	Depart Service Center	11/17/2022	13:00					
4	Arrive At Location	11/17/2022	15:00					Requested On Location @ 15:00
5	Safety Meeting	11/17/2022	15:15					Pre Rig- Up Safety Meeting
6	Rig-Up Equipment	11/17/2022	15:30					
7	Standby	11/17/2022	16:30					Wait for rig to finish running 12322.67' of 4 1/2 11.6# casing with a 89.53' shoe trac
8	Other	11/17/2022	19:00					Casing on bottom, rig start circulating through CRT with 10.4# WBM 12bbl/min @ 1130 psi. Pumped 1440bbls
9	Safety Meeting	11/17/2022	21:00					Pre Job Safety Meeting
10	Start Job	11/17/2022	21:26					
11	Test Lines	11/17/2022	21:28					5000 psi
12	Pump Spacer	11/17/2022	21:31	8.5	6	20	240	Pump 20 bbls Mud Flush 6 bbl/min @ 240psi
13	Pump Scavenger	11/17/2022	21:36	11.5	6	116	300	Pump 116 bbls Scavenger 11.5# 6 bbl/min @ 300psi. 11.4# Verified on mud scale. Rig started pushing air 1000 CFM. Got returns 46 bbls gone.
14	Pump Lead Cement	11/17/2022	21:57	12.7	6	289	390	Pump 289 bbls Type I/II Cement 12.7# 6 bbl/min @ 390 psi. 12.7# Verified on mud scale
15	Pump Tail Cement	11/17/2022	22:51	13.5	6	291	550	
16	Clean Lines	11/17/2022	23:50					Pump 291 bbls Class G Cement 13.5#, 6 bbl/min, @ 550 psi. 13.6# Verified on mud scale. Rig bypassed air injection. 150 bbls into tail cement. Lost returns 200 bbls tail gone.
17	Drop Top Plug	11/17/2022	23:53					Weatherford Top Plug
18	Pump Displacement	11/17/2022	23:54	190		8.33		Pump 190 bbls/ 20 Fresh Water, 150 Treated Fresh Water, 20 Fresh Water
19	Other	11/18/2022	00:02	8.33	8	50	850	50 bbls gone 8bbl/min @ 850psi
20	Other	11/18/2022	00:09	8.33	8	100	1500	100 bbls gone 8bbl/min @ 1500psi
21	Other	11/18/2022	00:16	8.33	8	150	2200	150 bbls gone 8bbl/min @ 2200psi
22	Bump Plug	11/18/2022	00:25	8.33	4	190	3122	2248-3122psi
23	End Job	11/18/2022	00:29					Bled back 1.5 bbls, floats holding
24	Safety Meeting	11/18/2022	00:45					Pre Rig-Down Safety Meeting
25	Rig- Down Equipment	11/18/2022	01:00					Pump Pickle, Blow down lines
26	Safety Meeting	11/18/2022	02:00					Pre Convoy Safety Meeting
27	Depart Location	11/18/2022	02:30					

## Pump Diagrams



JobMaster Program Version 5.01C1  
Job Number: Production  
Customer: Caerus  
Well Name: BJU B26 Fed 23D



Job Start: Thursday, November 17, 2022