



Caerus Operating LLC

LONG STRING POST JOB REPORT

BJU B26 FED #11C-26-496 05-045-24449
S:26 T:4S R:96W Garfield CO

CallSheet #: 83019
Proposal #: 62546



LONG STRING 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) 657-1157

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	3041	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3041	7095	25
Open Hole	Outer	n/a	8.75	n/a	n/a	7095	12070	0
Casing	Inner	4.5	4	11.6	n/a	0	12054.9	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Field Storage Silo	FSS(CTS)-469			
Field Storage Silo	FSS(CTS)-468			
AS Cement Trailer Float	CTF-901	TRC(TRB)-090	Richey, Steven	
AS Cement Trailer Float	CTF-9299	TRC(TRB)-090	Richey, Steven	
AS Cement Trailer Float	CTF-7145	TRB-421	Mendoza, Victor	
AS Cement Trailer Float	CTF-9309	TRC(TRB)-180	Kirchenwitz, Jacob	
Cement Trailer Float	CTF-273	TRC(TRB)-053	Burton, Devin	Bonin, Matthew
Cement Pump Float	CPF-053	TRH-1140	Kirchenwitz, Jacob	
Light Duty Vehicles	LDV-083		Putnam, Gage	

Timing

Event	Date/Time
Call Out	8/19/2022 18:00
Depart Facility	8/19/2022 19:00
On Location	8/19/2022 20:30
Rig Up Iron	8/19/2022 20:45
Job Started	8/20/2022 05:34
Job Completed	8/20/2022 09:17
Rig Down Iron	8/20/2022 09:30
Depart Location	8/20/2022 11:00

General Job Information

Metrics	Value
Well Fluid Density	10.8 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	600 bbls
Rig Circulation Time	2 hours
Calculated Displacement	185.5 bbls
Actual Displacement	185.5 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	N/A

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	10.8 lb/gal
Well Fluid Density Out of Well	10.8 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	215 °F
BHST	283 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	72 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	72 mg/L	0-3000 mg/L
Total Alkalinity	80	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	NA 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

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
Yes	0	237	0

Circulation Details

Regained circulation at 50 bbls of scavenger pumped. Had circulation until 237 bbls into lead cement and then no circulation for remainder of job. Recovered 480 bbls mud.

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	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		726.00	258.87	3000
4	Tail	Tail	13.50	2.00	9.66		830.00	295.16	6786
5	Water + KCL Sub	DisplacementFinal	8.34			42.00		185.50	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	%

Fluid	Type	Fluid	Product	Function	Conc.	Uom
4	Tail	Tail	BA-60	GasMigration	0.20	%BWOB
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/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	8/19/2022	18:00					CREW CALLED OUT FOR ON LOCATION TIME OF 1:00 8/20/22
2	Depart Location	8/19/2022	19:00					CREW DEPARTS RCO YARD FOR LOCATION
3	Arrive On Location	8/19/2022	20:30					FULL CREW ARRIVES ON LOCATION
4	Rig Up Iron	8/19/2022	20:45					RIG UP IRON AND HOSES
5	Safety Meeting	8/20/2022	05:17					JSA SAFETY MEETING WITH AC CREW, RIG HANDS, AND CUSTOMER REP
6	Fill Lines	8/20/2022	05:34	8.34	2	5	77	FILL LINES WITH 5 BBLs FRESH WATER
7	Pressure Test Lines	8/20/2022	05:38				5600	PRESSURE TEST LINES TO 5000 PSI
8	Pump Spacer	8/20/2022	05:42	8.45	5	20	247	PUMP MUD FLUSH WITH SURFACTANT. RIG BEGINS PUMPING 600 CFM DOWN PARASITE LINE. NO RETURNS.
9	Pump Scavenger	8/20/2022	05:46	11.5	3.6	0	378	BEGIN PUMPING 11.5 PPG SCAVENGER SLURRY, DENSITY VERIFIED WITH MUD SCALE
10	Pump Scavenger	8/20/2022	05:58	11.5	5	50	444	50 BBLs SCAVENGER PUMPED. BEGIN GETTING RETURNS AT 50 BBLs SCAVENGER PUMPED
11	Pump Scavenger	8/20/2022	06:07	11.5	5	50	296	100 BBLs SCAVENGER PUMPED
12	Pump Scavenger	8/20/2022	06:11	11.5	5	15.5	376	115.5 BBLs SCAVENGER PUMPED
13	Pump Lead Cement	8/20/2022	06:11	12.7	5	0	427	BEGIN PUMPING 12.7 PPG LEAD CEMENT, DENSITY VERIFIED WITH MUD SCALE
14	Pump Lead Cement	8/20/2022	06:21	12.7	5	50	411	50 BBLs LEAD CEMENT PUMPED
15	Pump Lead Cement	8/20/2022	06:31	12.7	5	50	416	100 BBLs LEAD CEMENT PUMPED
16	Pump Lead Cement	8/20/2022	06:41	12.7	5	50	425	150 BBLs LEAD CEMENT PUMPED
17	Pump Lead Cement	8/20/2022	06:55	12.7	5	50	447	200 BBLs LEAD CEMENT PUMPED
18	Slow Pump Rate	8/20/2022	06:58					TRANSMISSION LINE BREAKS, SLOWED TO 2.5 BPM WHILE FIXING THE LINE, SLOWED PARASITE AIR TO 200 CFM
19	Pump Lead Cement	8/20/2022	07:08	12.7	2.5	58.9	152	258.9 BBLs LEAD CEMENT PUMPED, LOST RETURNS AT 237 BBLs LEAD PUMPED
20	Pump Tail Cement	8/20/2022	07:08	13.5	2.5	0	154	BEGIN PUMPING TAIL AT 13.5 PPG, DENSITY VERIFIED WITH MUD SCALE
21	Pump Tail Cement	8/20/2022	07:31	13.5	2.5	50	200	50 BBLs TAIL CEMENT PUMPED
22	Pump Tail Cement	8/20/2022	07:47	13.5	4.7	50	705	100 BBLs TAIL CEMENT PUMPED, PICK RATE BACK UP TO 5 BPM, TRANSMISSION LINE FIXED

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
23	Pump Tail Cement	8/20/2022	07:59	13.5	4.7	50	651	150 BBLS TAIL CEMENT PUMPED, PARASITE AIR SHUT OFF AT 120 BBLS TAIL PUMPED
24	Pump Tail Cement	8/20/2022	08:10	13.5	4.7	50	630	200 BBLS TAIL CEMENT PUMPED
25	Pump Tail Cement	8/20/2022	08:20	13.5	4.7	50	660	250 BBLS TAIL CEMENT PUMPED
26	Pump Tail Cement	8/20/2022	08:28	13.5	3.3	45.2	232	295.2BBLS TAIL CEMENT PUMPED
27	Clean Pumps and Lines	8/20/2022	08:28					SHUT DOWN, WASH PUMP AND LINES
28	Drop Top Plug	8/20/2022	08:37	8.34	5	0	231	DROP TOP PLUG, WITNESSED BY CUSTOMER REP. BEGIN DISPLACEMENT
29	Pump Displacement	8/20/2022	08:46	8.34	4.7	50	433	50 BBLS DISPLACEMENT PUMPED, CAUGHT CEMENT
30	Pump Displacement	8/20/2022	08:57	8.34	4.7	50	1339	100 BBLS DISPLACEMENT PUMPED
31	Pump Displacement	8/20/2022	09:08	8.34	4.7	50	2170	150 BBLS DISPLACEMENT PUMPED
32	Pump Displacement	8/20/2022	09:17	8.34	4	35.5	2484	185.5 BBLS DISPLACEMENT PUMPED, SLOWED RATE LAST 10 BBLS TO 4 BPM TO LAND PLUG
33	Land Plug	8/20/2022	09:17				2964	LAND PLUG, FCP - 2484 PSI, BUMPED TO 2964 PSI. 480 BBLS OF MUD RETURNED DURING CEMENT JOB
34	Check Floats	8/20/2022	09:20					CHECK FLOATS, FLOATS HELD, 2.5 BBLS BACK
35	Rig Down Iron	8/20/2022	09:30					RIG DOWN IRON AND HOSES
36	Depart Location	8/20/2022	11:00					AC CREW DEPARTS LOCATION

Pump Diagrams

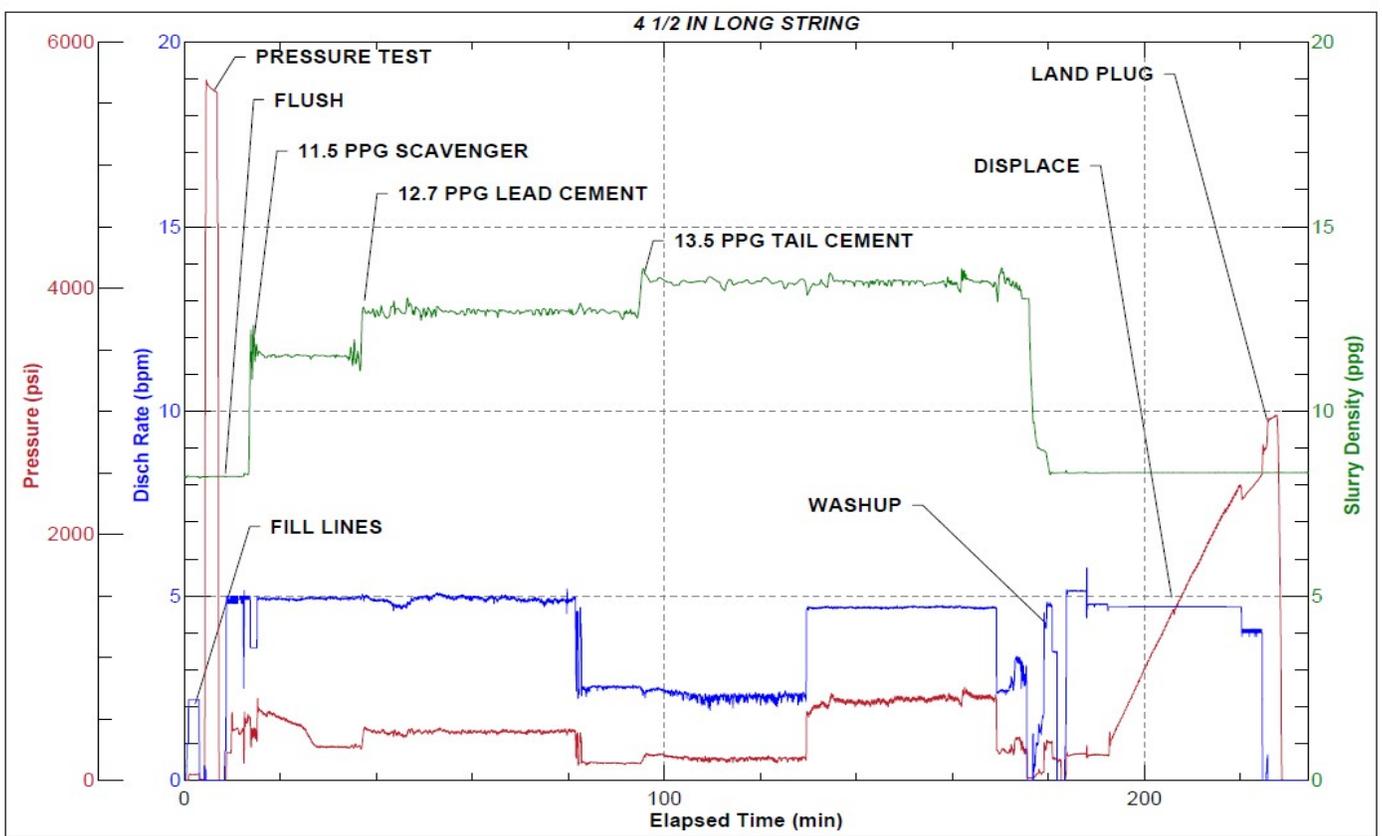


JobMaster Program Version 5.01C1

Job Number: 83019

Customer: Caerus

Well Name: BJU B26 FED 11C-26-496



Job Start: Saturday, August 20, 2022