



Caerus Operating LLC

TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU B26 FED #11A-26-496 05-045-24437
S:26 T:4S R:96W Garfield CO

CallSheet #: 82547
Proposal #: 61697



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) 657-1157

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	3003.6	0
Casing	Inner	9.625	8.921	36	n/a	0	3003.6	0

Timing

Event	Date/Time
Call Out	7/21/2022 09:30
Depart Facility	7/21/2022 13:40
On Location	7/21/2022 15:10
Rig Up Iron	7/21/2022 15:30
Job Started	7/21/2022 16:37
Job Completed	7/21/2022 22:00
Rig Down Iron	7/21/2022 22:25
Depart Location	7/21/2022 23:50

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS(CTS)-469		
Field Storage Silo	FSS(CTS)-468		
AS Cement Trailer Float	CTF-558	TRH(TRB)-769	Jackson, Duewayne
AS Cement Trailer Float	CTF-9898	TRC(TRB)-202	Bradbrook, Jeremy
Cement Trailer Float	CTF-340	TRB-421	Richey, Steven
Cement Pump Float	CPF-136	TRH-1137	Carrasco, Joel
Light Duty Vehicles	LDV-082		Kelsey, John

General Job Information

Metrics	Value
Well Fluid Density	9.3 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	500 bbls
Rig Circulation Time	1 hours
Calculated Displacement	226 bbls
Actual Displacement	226 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	39 bbls
Well Topped Out	yes
Top Out Volume	34 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	9.3 lb/gal
Well Fluid Density Out of Well	9.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	87 °F
BHST	123 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	65 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	80	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	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	0	0

Circulation Details

We had no returns on 1st stage, and full returns beginning the 2nd stage.

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	2.52	14.80		524.00	235.42	950
3	Stage-1 Tail	Tail	12.50	2.23	12.56		161.00	63.94	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	2.55	14.95		346.00	157.14	0
3	Water	DisplacementFinal	8.34			42.00		66.00	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Stage-1 Lead	ASTM TYPE I/II	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	FP-24	Defoamer	0.30	%BWOB
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	0.30	%BWOB
2	Lead	Stage-1 Lead	STATIC FREE	Other	0.01	lb/sk
3	Tail	Stage-1 Tail	ASTM TYPE I/II	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	FP-24	Defoamer	0.30	%BWOB
3	Tail	Stage-1 Tail	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
3	Tail	Stage-1 Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Stage-1 Tail	STATIC FREE	Other	0.01	lb/sk
2	Primary	Stage-2 Primary	ASTM TYPE I/II	Cement	100.00	%
2	Primary	Stage-2 Primary	A-10	Accelerator	5.00	%BWOB
2	Primary	Stage-2 Primary	A-2	Accelerator	3.00	lb/sk
2	Primary	Stage-2 Primary	A-7P	Accelerator	2.00	lb/sk
2	Primary	Stage-2 Primary	FP-24	Defoamer	0.30	%BWOB

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Primary	Stage-2 Primary	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Primary	Stage-2 Primary	STATIC FREE	Other	0.01	lb/sk

Job Logs

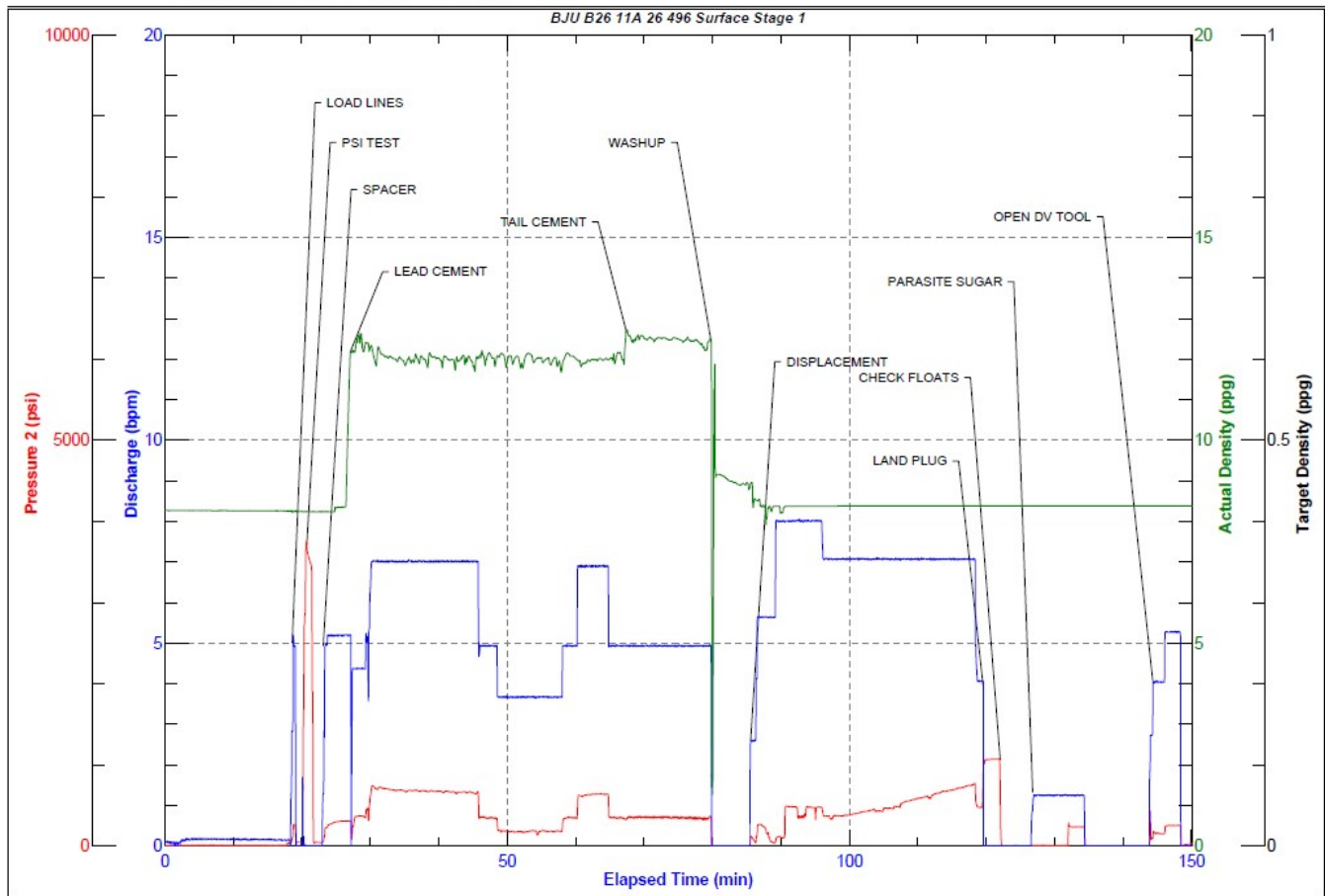
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	7/21/2022	09:30					Crew called to prepare for a 2-stage cement job and topout job, rts is 15:00
2	Safety meeting	7/21/2022	13:30					Journey management meeting
3	Depart yard	7/21/2022	13:40					Crew departs Rifle, CO for location
4	Arrive on location	7/21/2022	15:10					Arrive on location, verify all proper products, equipment, and job procedures with customer
5	Safety meeting	7/21/2022	15:15					Rig up meeting
6	Spot Units	7/21/2022	15:20					Spot all equipment for rig up
7	Rig up	7/21/2022	15:30					Rig up all equipment
8	Safety meeting	7/21/2022	16:15					Pre job meeting with all crews involved
9	Load lines	7/21/2022	16:37	8.34	3	3	90	Load lines for psi test
10	Pressure test	7/21/2022	16:38	8.34	1	1	3570	Pressure test pump and lines to cement head
11	Fresh spacer	7/21/2022	16:40	8.34	5	20	228	20 bbls fresh spacer
12	Lead cement	7/21/2022	16:45	12	4.5	10	362	235 BBLS Lead CMT – 12 # 2.52 Y 14.8 MW 524 sks 10 bbls away
13	Lead cement	7/21/2022	16:49	12	7	10	701	20 bbls away
14	Lead cement	7/21/2022	16:34	12	7	30	676	50 bbls away
15	Lead cement	7/21/2022	17:00	12	7	50	630	100 bbls away
16	Lead cement	7/21/2022	17:10	12	3.7	50	170	150 bbls away
17	Lead cement	7/21/2022	17:21	12	7	50	637	200 bbls away
18	Lead cement	7/21/2022	17:25	12	5	35	329	235 bbls away swap to tail cement
19	Tail Cement	7/21/2022	17:26	12.5	5	64	357	64 BBLS Tail CMT – 12.5 # 2.23 Y 12.6 MW 161 sks 64 bbls away
20	Washup	7/21/2022	17:39					Washup pump and load plug
21	Displacement	7/21/2022	17:44	8.34	4	10	71	Send plug and begin displacement 10 bbls away
22	Displacement	7/21/2022	17:48	8.34	8	10	482	20 bbls away
23	Displacement	7/21/2022	17:52	8.34	8	20	385	40 bbls away
24	Displacement	7/21/2022	17:55	8.34	8	20	478	60 bbls away
25	Displacement	7/21/2022	17:57	8.34	7	5	369	65 bbls away slow rate
26	Displacement	7/21/2022	18:00	8.34	7	35	424	100 bbls away
27	Displacement	7/21/2022	18:08	8.34	7	50	571	150 bbls away
28	Displacement	7/21/2022	18:17	8.34	4	60	473	210 bbls away slow rate
29	Land plug	7/21/2022	18:19	8.34	4	16.3	480	226.3 bbls away land plug, we had no returns through first stage.
30	Check Floats	7/21/2022	18:21					Check floats, floats held with 1 bbls back
31	Parasite Sugar	7/21/2022	18:25	8.34	2	10	90	Pump 10 bbls sugar water down parasite line break over at 7.5 away
32	Drop DV plug	7/21/2022	18:35					Send dv plug and wait for it to reach dv tool
33	Open DV tool	7/21/2022	18:43	8.34	4	20	444	Open dv tool and pump 20 bbls
34	Standby	7/21/2022	18:47					Turn well over to rig to circulate DV tool. We gained returns, no cement to surface
35	Fresh flush	7/21/2022	19:27	8.34	2.5	20	73	Begin 2nd stage with 20 bbls fresh flush

36	Primary Cement	7/21/2022	19:35	12	7.5	10	697	157 BBLS Primary CMT – 12 # 2.55 Y 14.9 MW 346 sks 10 bbls away
37	Primary Cement	7/21/2022	19:45	12	7.5	60	657	70 bbls away
38	Primary Cement	7/21/2022	19:49	12	7.5	30	724	100 bbls away
39	Primary Cement	7/21/2022	19:52	12	5	24	316	124 bbls away slow rate
40	Primary Cement	7/21/2022	19:53	12	3	6	110	130 bbls away slow rate
41	Primary Cement	7/21/2022	20:01	12	3	27	100	157 bbls away end cement
42	Washup	7/21/2022	20:02					Washup pump
43	Displacement	7/21/2022	20:05	8.34	5.6	10	329	Send plug and begin displacement 10 bbls away
44	Displacement	7/21/2022	20:11	8.34	7	17	503	27 bbls away, cement to surface
45	Displacement	7/21/2022	20:15	8.34	4	23	293	50 bbls away
46	Land plug	7/21/2022	20:18	8.34	4	16.2	318	66.2 bbls away, land plug
47	Check Floats	7/21/2022	20:19					Check floats, floats held with .5 bbls, back estimated 39 bbls cement to surface
48	Washup	7/21/2022	20:20					Washout cellar 40 bbls with sugar water
49	Standby	7/21/2022	20:30					
50	Rig up	7/21/2022	21:30					Rig up for top out job
51	Cement	7/21/2022	21:35	15.8	2	10	100	Pump 10 bbls top out cement with calcium chloride mixed into water, and receive cement to surface at 7 bbls away, estimated 3 bbls to surface, verify cement stays at surface
52	Washup	7/21/2022	22:00					Washup pump into cellar with sugar water
53	safety meeting	7/21/2022	22:20					rig down meeting
54	Rig Down	7/21/2022	22:25					rig down all equipment
55	safety meeting	7/21/2022	23:30					journey management meeting
56	Depart location	7/21/2022	23:50					crew departs location

Pump Diagrams

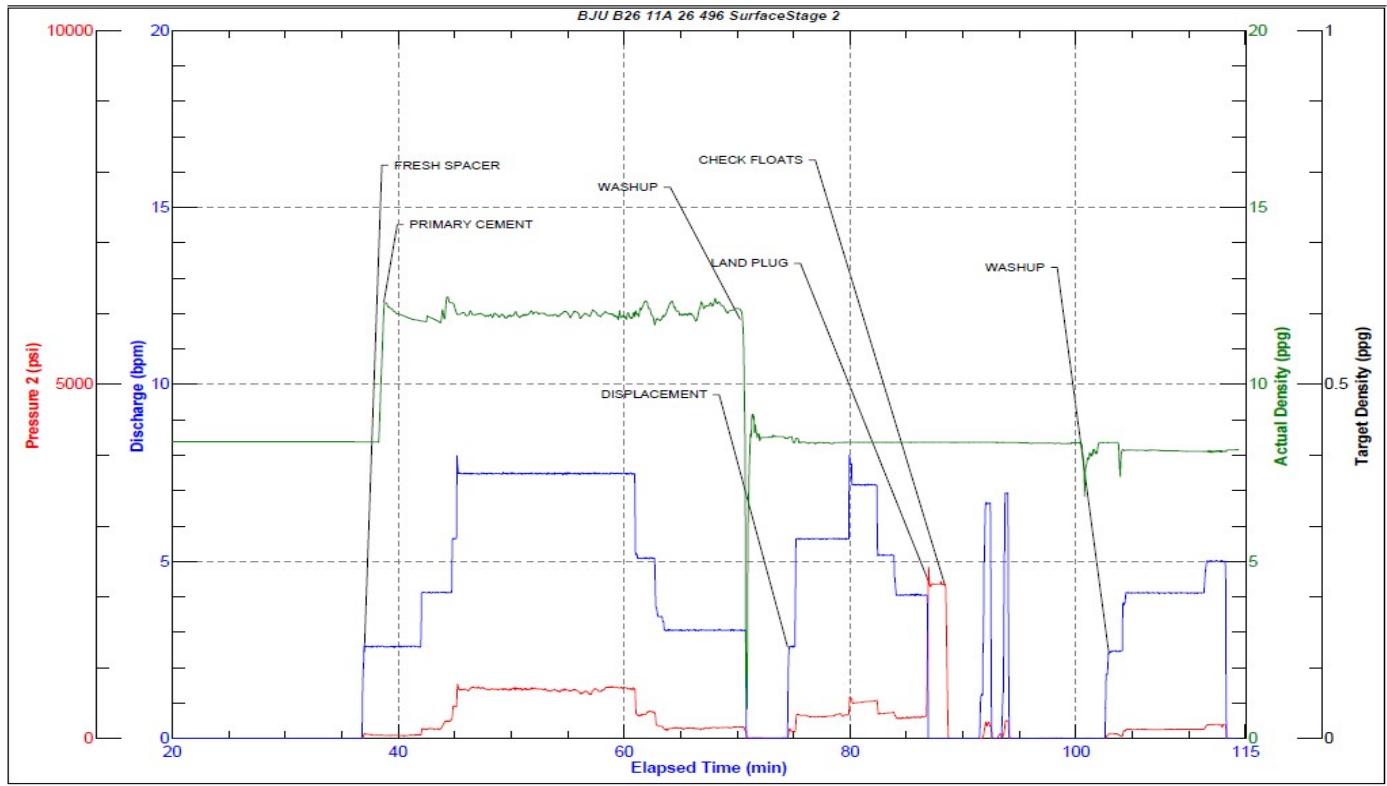


JobMaster Program Version 5.01C1
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Customer: Cearus
Well Name: BJU B26 Fed 11A-26-496

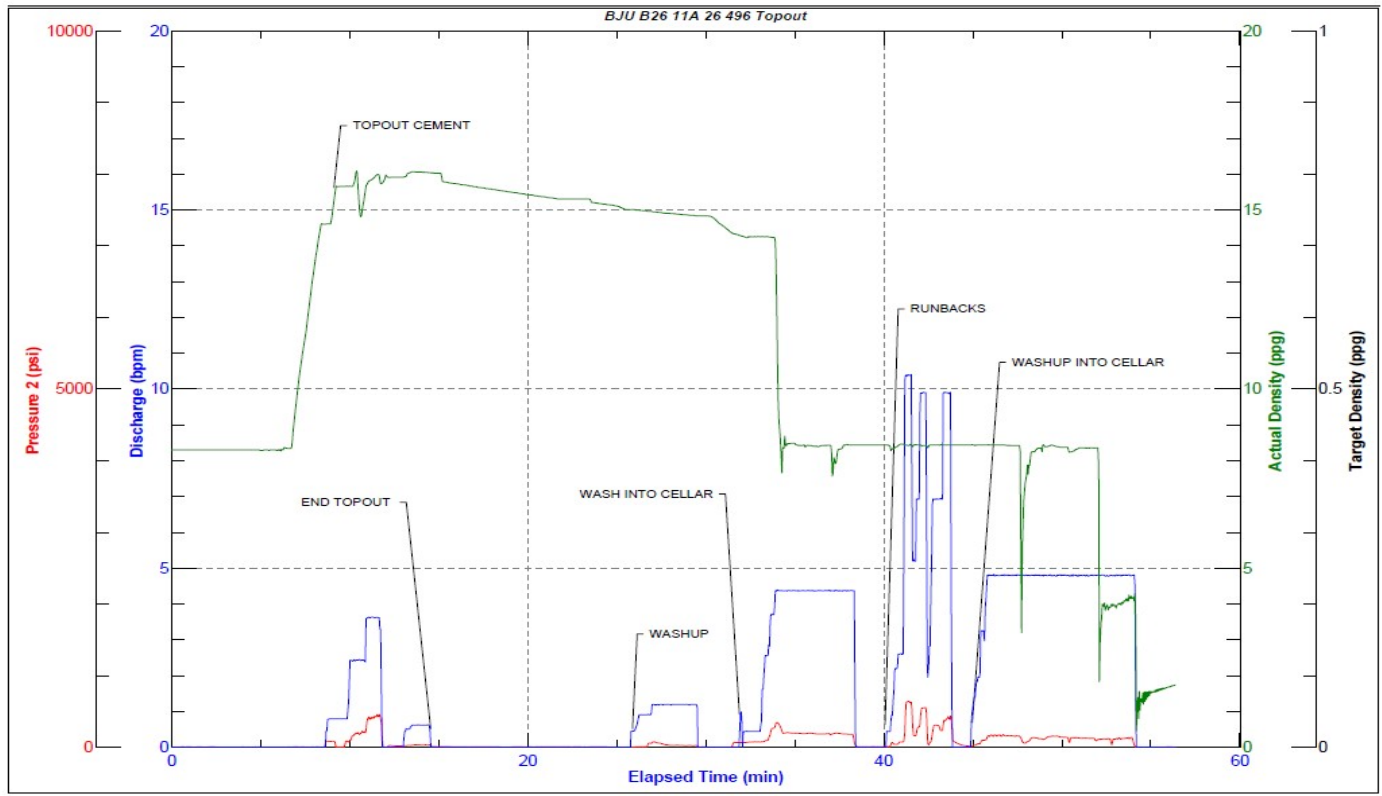


Job Start: Thursday, July 21, 2022

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