



Caerus Operating LLC

TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU B26 FED 25B-26-496 05-045-24460
S:26 T:4S R:96W Garfield CO

CallSheet #: 86031
Proposal #: 67400



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	130	0
Open Hole	Outer	n/a	14.75	n/a	n/a	130	2500	25
Open Hole	Outer	n/a	14.75	n/a	n/a	2500	3045	0
Casing	Inner	9.625	8.921	36	n/a	0	2999.35	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-254	TRC-054	Hutchinson, Michael
Field Storage Silo	FSS-469		
Field Storage Silo	FSS-468		
Light Duty Vehicles	LDV-063		Castillo, Francisco
Cement Pump Float	CPF-053	TRH-964	Carrasco, Joel

Timing

Event	Date/Time
ERTS	00/06/2023 00:00
Call Out	3/6/2023 14:30
Depart Facility	3/6/2023 15:55
On Location	3/6/2023 17:55
Rig Up Iron	3/6/2023 18:15
Job Started	3/6/2023 20:37
Job Completed	3/7/2023 06:00
Rig Down Iron	3/7/2023 06:15
Depart Location	3/7/2023 07:30

General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	228/71 bbls
Actual Displacement	228/71 bbls
Total Spacer to Surface	20/20 bbls
Total CMT to Surface	10/5 bbls
Well Topped Out	Yes
Top Out Volume	35 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	10 lb/gal
Well Fluid Density Out of Well	10 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	87 °F
BHST	123 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	70 °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

STG-1 GOT RETURNS 108 BBLS INTO DISPLACEMENT AND KEPT IT. STG-2 HAD RETURNS TILL 20 BBLS INTO DISPLACEMENT AND NEVER GOT THEM BACK

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	13.00	2.06	11.21		175.00	64.08	2500
4	Water	DisplacementFinal	8.34			42.00		228.00	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		71.00	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-5	Accelerator	5.00	%BWOW
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
2	Primary	Stage-2 Primary	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Primary	Stage-2 Primary	STATIC FREE	Other	0.01	lb/sk

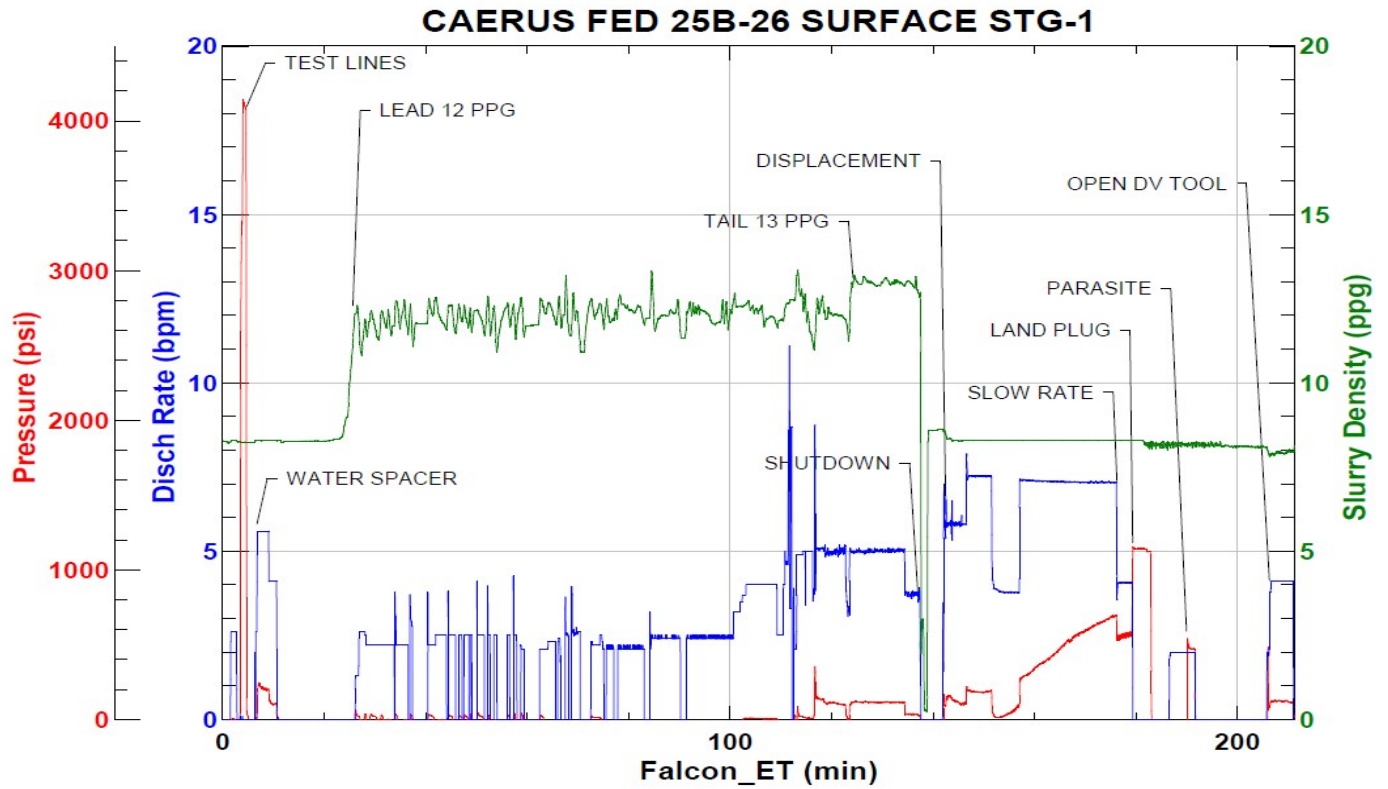
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	3/6/2023	14:30					ON LOCATION 17:00 HRS ASAP
2	LEAVE THE YARD	3/6/2023	15:55					CREW LEAVE THE YARD
3	ON LOCATION	3/6/2023	17:55					CREW ON LOCATION
4	RIG UP	3/6/2023	18:15					RIG UP MEETING, RIG UP
5	SAFETY MEETING	3/6/2023	20:05					PRE-JOB SAFETY MEETING
6	PRESSURE TEST	3/6/2023	20:34					PRESSURE TEST LINES
7	WATER SPACER	3/6/2023	20:37	8.34	5	40	93	WATER SPACER
8	LEAD CEMENT	3/6/2023	20:57	12	2	50	71	LEAD 524 SKS/235 BBLS AT 12 PPG, HAD ISSUES WITH SILO DELIVERY
9	LEAD CEMENT	3/6/2023	21:39	12	2	50	63	100 BBLS LEAD CEMENT PUMPED
10	LEAD CEMENT	3/6/2023	21:57	12	2	50	71	150 BBLS LEAD CEMENT PUMPED
11	LEAD CEMENT	3/6/2023	22:15	12	5	85	219	235 BBLS LEAD CEMENT PUMPED
12	TAIL CEMENT	3/6/2023	22:34	13	5	64	207	TAIL 175 SKS/64 BBLS AT 13 PPG
13	SHUTDOWN	3/6/2023	22:48					SHUTDOWN, DROP PLUG
14	DISPLACEMENT	3/6/2023	22:52	8.34	7	50	229	DISPLACEMENT WATER
15	DISPLACEMENT	3/6/2023	23:00	8.34	7	50	397	100 BBLS DISPLACEMENT PUMPED, GOT RETURNS 108 BBLS INTO DISPLACEMENT
16	DISPLACEMENT	3/6/2023	23:10	8.34	7	50	593	150 BBLS DISPLACEMENT PUMPED
17	DISPLACEMENT	3/6/2023	23:17	8.34	7	68	695	218 BBLS DISPLACEMENT PUMPED
18	SLOW RATE	3/6/2023	23:26	8.34	3.5	10	629	SLOW RATE
19	LAND PLUG	3/6/2023	23:30				1141	LAND PLUG
20	CHECK FLOATS	3/6/2023	23:33					FLOATS HELD, 1 BBL FLOW BACK
21	PARASITE	3/6/2023	23:36	8.5	2	10	655	SUGAR WATER, BROKE AT 655 PSI
22	OPENING DEVICE	3/6/2023	23:44					DROP DV TOOL OPENING DEVICE
23	OPEN DV TOOL	3/6/2023	23:56	8.34	4	20	627	OPEN DV TOOL AT 627 PSI, CIRCULATED 10 BBLS CMT FROM TOP OF DV TOOL
24	WATER SPACER	3/7/2023	00:08	8.34	5.5	20	159	STG-2 WATER SPACER
25	STG-2 CEMENT	3/7/2023	00:12	12	5.5	50	237	STG-2 CMT 346 SKS/157 BBLS AT 12 PPG
26	STG-2 CEMENT	3/7/2023	00:23	12	5.5	50	233	100 BBLS STG-2 CEMENT PUMPED
27	STG-2 CEMENT	3/7/2023	00:31	12	5.5	57	235	157 BBLS STG-2 CEMENT PUMPED
28	SHUTDOWN	3/7/2023	00:42					SHUTDOWN, DROP PLUG
29	DISPLACEMENT	3/7/2023	00:46	8.34	6	61	331	DISPLACEMENT WATER, LOST RETURNS 20 BBLS INTO DISPLACEMENT
30	SLOW RATE	3/7/2023	00:57	8.34	4	10	253	SLOW RATE
31	LAND PLUG	3/7/2023	00:59				1667	LAND CLOSING PLUG
32	CHECK PLUG	3/7/2023	01:03					CLOSING PLUG CLOSED, 0.5 BBLS FLOW BACK
33	TOPOUT	3/7/2023	04:50	15.8	2.5	35	53	147 SKS/30 BBLS CMT TO TOPOUT WELL, 24 SKS/5 BBLS TO PIT, TOTAL 171 SKS / 35 BBLS
34	SHUTDOWN	3/7/2023	05:15					SHUTDOWN, WASH UP
35	RIG DOWN	3/7/2023	06:00					RIG DOWN MEETING, RIG DOWN
36	LEAVE LOCATION	3/7/2023	07:30					CREW LEAVE LOCATION

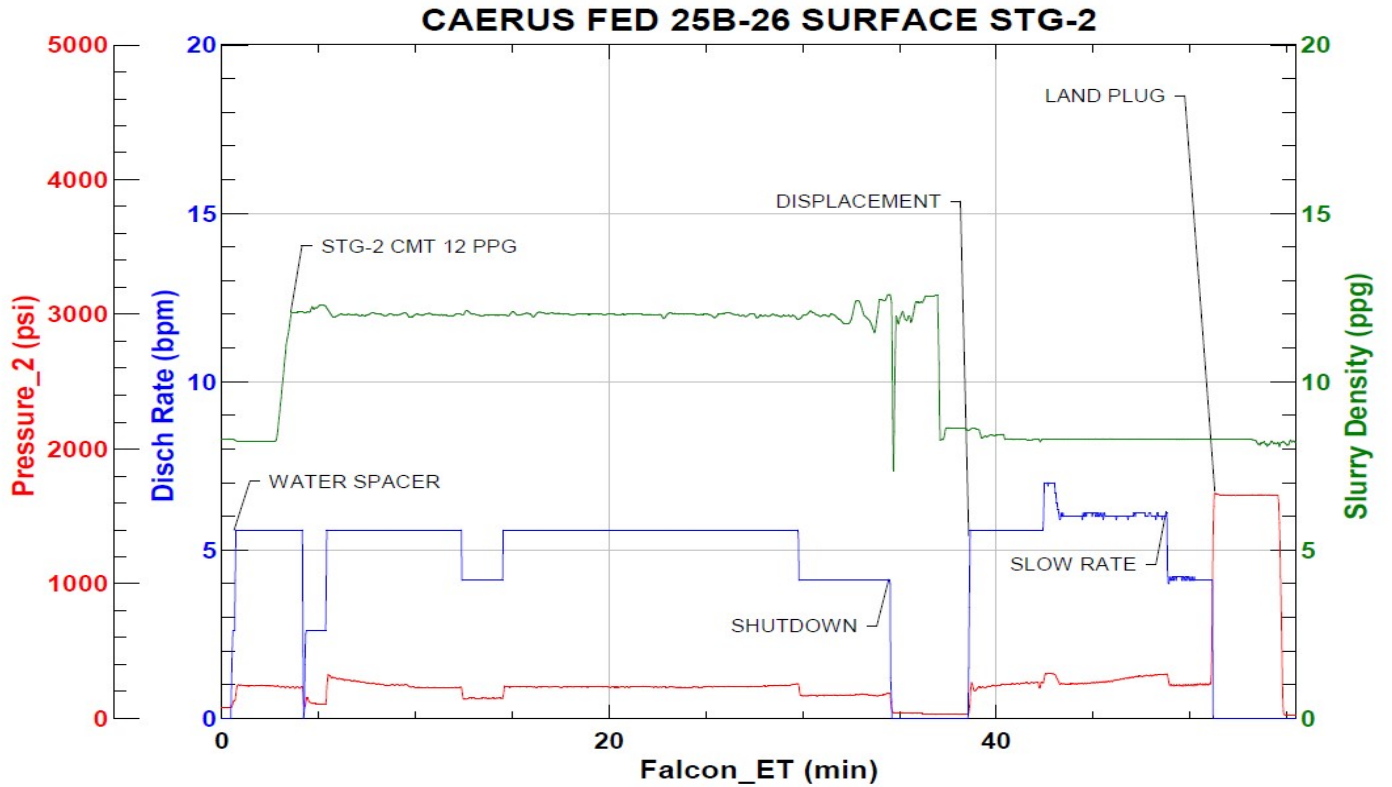
Pump Diagrams



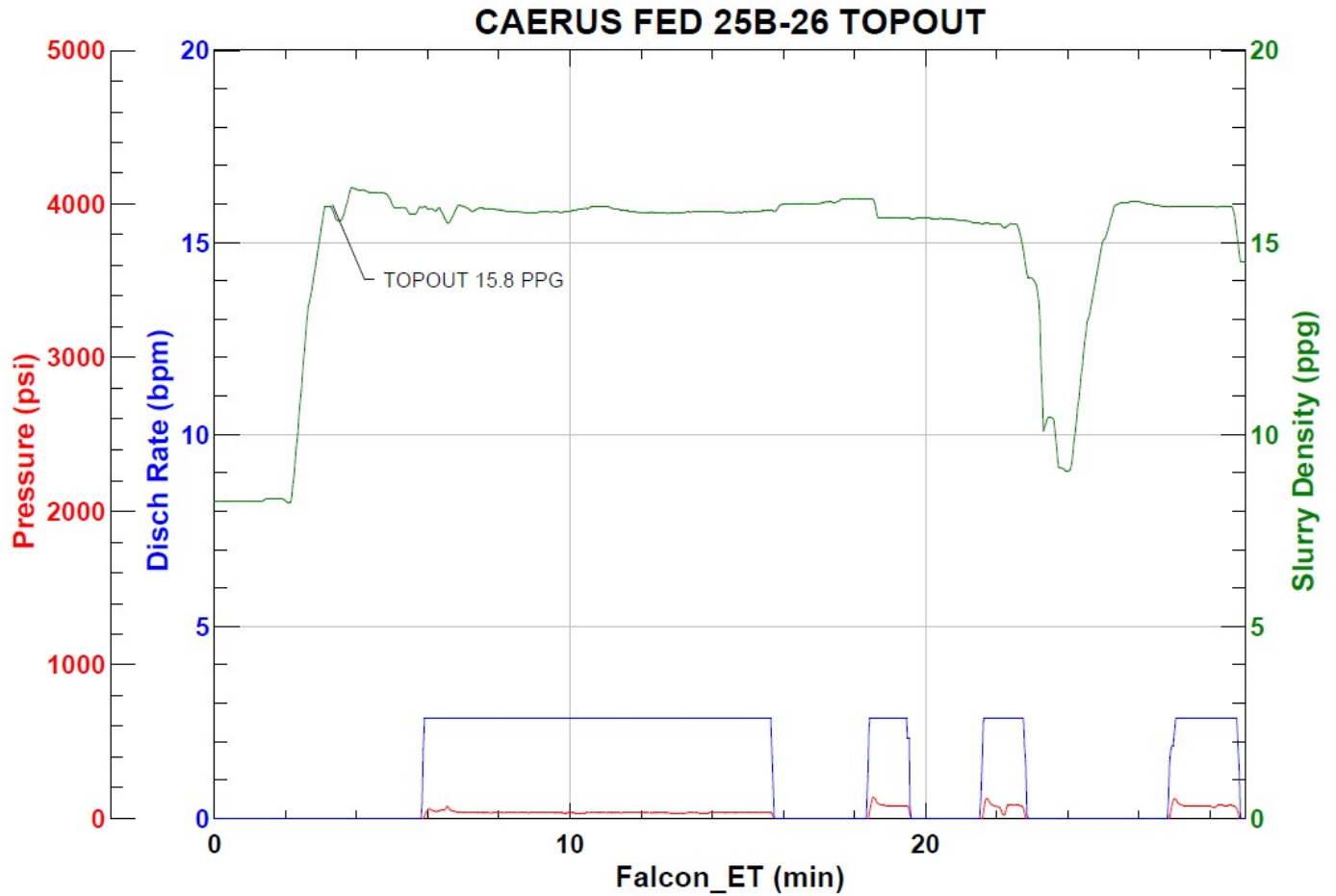
JobMaster Program Version 5.01C1
Job Number: 86031
Customer: CAERUS
Well Name: FED 25B-26



Job Start: Monday, March 06, 2023



Job Start: Tuesday, March 07, 2023



Job Start: Tuesday, March 07, 2023