



Caerus Operating LLC

TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU G35 FED #23C-35-496 05-045-24344
S:35 T:4S R:96W Garfield CO

CallSheet #: 79983
Proposal #: 57083



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,

Zen Keith

SME | (720) 934-5850 | zen.keith@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	2992	0
Casing	Inner	9.625	8.921	36	n/a	0	2972.6	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-263		Hansen, James
Field Storage Silo	FSS(CTS)-469		
Cement Trailer Float	CTF-407		Decker, Tonya
Cement Pump Float	CPF-012	TRH-1140	Gonzales, Ivan
Light Duty Vehicles	LDV-063		Linn, Paul

Timing

Event	Date/Time
Call Out	1/23/2022 07:58
Depart Facility	1/23/2022 21:06
On Location	1/23/2022 22:12
Rig Up Iron	1/23/2022 22:40
Job Started	1/24/2022 10:21
Job Completed	1/24/2022 15:06
Rig Down Iron	1/24/2022 15:28
Depart Location	1/24/2022 16:22

General Job Information

Metrics	Value
Well Fluid Density	9.3 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	400 bbls
Rig Circulation Time	1 hours
Calculated Displacement	224/ 72 bbls
Actual Displacement	224/ 72 bbls
Total Spacer to Surface	40/ 40 bbls
Total CMT to Surface	14/ 47 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	9.3 lb/gal
Well Fluid Density Out of Well	9.3 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	90 °F
BHST	129 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	58.6 °F	50-80 °F
pH Level	7.5	5.5-8.5
Chlorides	285 mg/L	0-3000 mg/L
Total Alkalinity	130	0-1000
Total Hardness	0 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	440 mg/L	0-1500 mg/L
Potassium	200 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

Rig finished circulating with no returns, got returns back 116 bbls into displacement on the 1st stage and had returns for all of 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		40.00	786
2	Stage-1 Lead	Lead	12.00	2.52	14.80		490.00	220.14	1050
3	Stage-1 Tail	Tail	12.50	2.23	12.56		161.00	63.94	2500
4	Water	DisplacementFinal	8.34			42.00		229.00	0
1	Water	Flush	8.34			42.00		40.00	0
2	Stage-2 Primary	Primary	12.00	2.55	14.95		379.00	172.13	0
3	Water	DisplacementFinal	8.34			42.00		82.00	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
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	1/23/2022	07:58					Callout, on location of 22:00 1/23/22
2	Safety Meeting	1/23/2022	20:50					Pre-Convoy safety meeting
3	Depart Location	1/23/2022	21:06					Depart Rifle yard for H&P 330
4	Arrive On Location	1/23/2022	22:12					Arrive on location, rig was running casing
5	Safety Meeting	1/23/2022	22:23					Pre-Rig up safety meeting
6	Rig Up Iron	1/23/2022	22:40					Rig up all equipment
7	Safety Meeting	1/24/2022	09:55					Pre-Job safety meeting with rig crew, company man, and American Cementing
8	Rig Up Iron	1/24/2022	10:16					Hook up lines to plug container
9	Fill Lines	1/24/2022	10:21	8.4	2	5	196	Fill lines
10	Pressure Test Lines	1/24/2022	10:24				3730	Pressure test to 3730 psi
11	Pump Spacer	1/24/2022	10:27	8.4	5	40	345	Pump water Spacer
12	Pump Lead Cement	1/24/2022	10:36	12	6	5	745	Pump Lead Cement @ 12 ppg
13	Pump Lead Cement	1/24/2022	10:44	12	6.5	50	630	Pump Lead Cement
14	Pump Lead Cement	1/24/2022	10:51	12	6.5	100	540	Pump Lead Cement
15	Pump Lead Cement	1/24/2022	10:59	12	6.5	150	612	Pump Lead Cement
16	Pump Lead Cement	1/24/2022	11:07	12	6.5	200	531	Pump Lead Cement
17	Pump Lead Cement	1/24/2022	11:08	12	5	212	348	Pump Lead Cement
18	Pump Tail Cement	1/24/2022	11:09	12.5	6.5	5	551	Pump Tail Cement @ 12.5 ppg
19	Pump Tail Cement	1/24/2022	11:17	12.5	5	50	361	Pump Tail Cement
20	Pump Tail Cement	1/24/2022	11:19	12.5	5	63	353	Pump Tail Cement
21	Shutdown	1/24/2022	11:19					Shutdown with 63 bbls of Tail away
22	Drop Top Plug	1/24/2022	11:22					Drop plug, verified by company man
23	Pump Displacement	1/24/2022	11:25	8.4	6.5	10	374	Pump Displacement
24	Pump Displacement	1/24/2022	11:31	8.4	7	50	407	Pump Displacement
25	Pump Displacement	1/24/2022	11:40	8.4	7	100	540	Pump Displacement
26	Pump Displacement	1/24/2022	11:48	8.4	7	150	732	Pump Displacement
27	Pump Displacement	1/24/2022	11:55	8.4	7	210	971	Pump Displacement
28	Pump Displacement	1/24/2022	11:59	8.4	3	224	655	Pump Displacement
29	Land Plug	1/24/2022	11:59				1101	Landed the plug @ 655 psi took to 1101 psi
30	Check Floats	1/24/2022	12:02					Check floats, floats held 1 bbl back
31	Pump Parasite	1/24/2022	12:06	8.4	3.5	10	762	Pump Sugar water on parasite sting
32	Drop Opening Plug	1/24/2022	12:14					Drop opening plug, and pre-loaded the closing plug in plun container
33	Open DV Tool	1/24/2022	12:24				520	Open the DV Tool with 520 psi
34	Circulate Well	1/24/2022	12:25	8.4	3.5	20	204	Ciculate the well
35	Cement Back to Surface	1/24/2022	12:55					14 bbls of cement circulated to surface
36	Pump Cement	1/24/2022	14:03					Pump 2 bbls of Cement down the last Parasite sting
37	Pump Spacer	1/24/2022	14:07	8.4	5	40	255	Pump Water Spacer
38	Pump Cement	1/24/2022	14:16	12	6.5	5	634	Pump Cement @ 12 ppg
39	Pump Cement	1/24/2022	14:23	12	6.5	50	575	Pump Cement
40	Pump Cement	1/24/2022	14:31	12	6.5	100	577	Pump Cement
41	Pump Cement	1/24/2022	14:41	12	4	150	298	Pump Cement
42	Pump Cement	1/24/2022	14:43	12	4	164	299	Pump Cement
43	Shutdown	1/24/2022	14:43					Shutdown with 164 bbls of Cement away
44	Drop Closing Plug	1/24/2022	14:44					Drop closing plug, verified by company man
45	Spacer Back to Surface	1/24/2022	14:45					40 bbls of spacer to surface

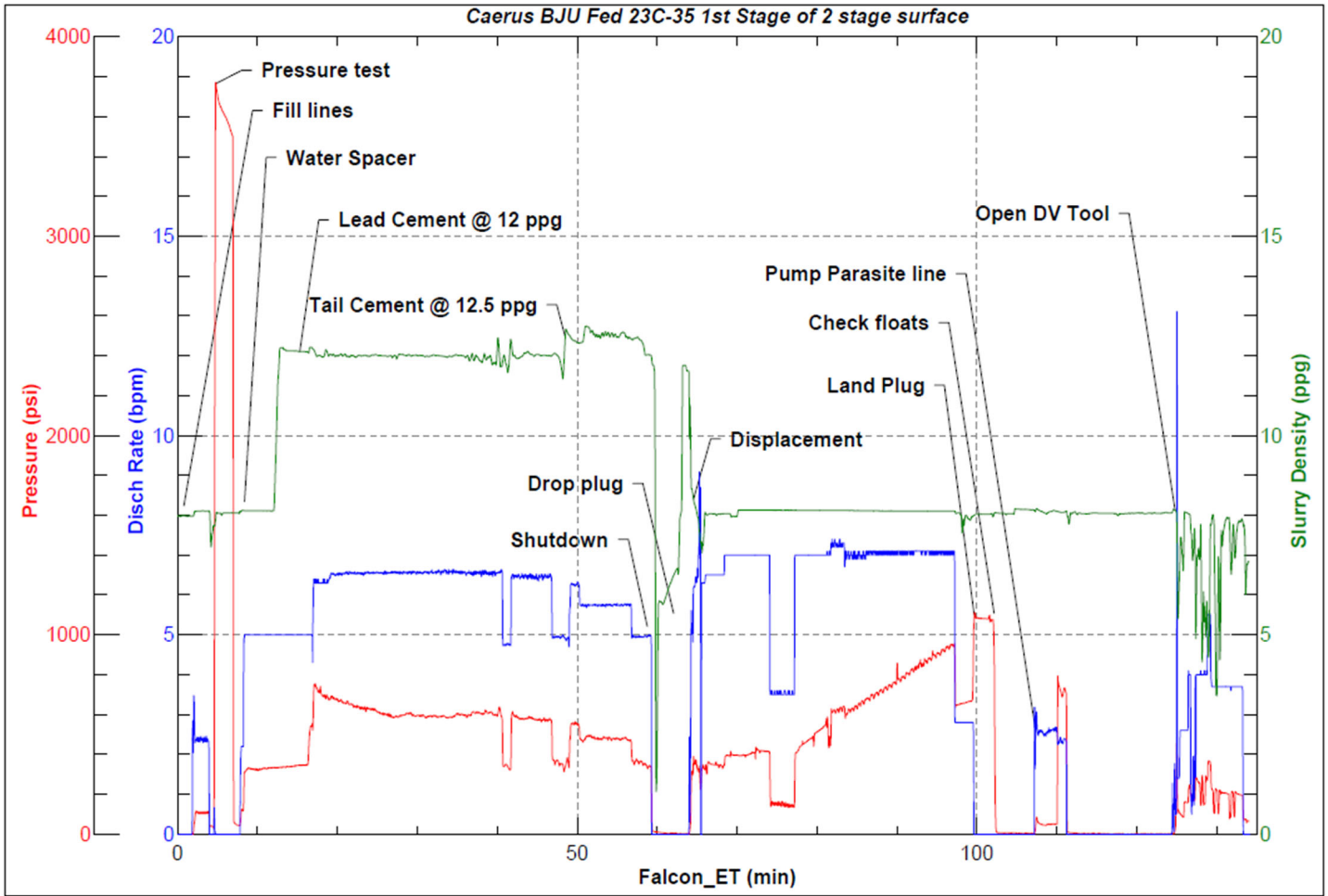


Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
46	Pump Displacement	1/24/2022	14:45	8.4	4	10	202	Pump Displacement
47	Cement Back to Surface	1/24/2022	14:52					47 bbls of cement to surface
48	Pump Displacement	1/24/2022	14:57	8.4	4	50	303	Pump Displacement
49	Pump Displacement	1/24/2022	15:02	8.4	4	72	355	Pump Displacement
50	Land Plug	1/24/2022	15:02				1852	Land the plug @355 psi took to 1852 psi
51	Check Floats	1/24/2022	15:06					Check floats, floats held 1 bbl back
52	Safety Meeting	1/24/2022	15:12					Pre- Rig down safety meeting
53	Rig Down Iron	1/24/2022	15:28					Rig down all equipment
54	Safety Meeting	1/24/2022	16:11					Pre-Convoy Safety meeting
55	Depart Location	1/24/2022	16:22					Depart from location for Rifle yard. Thank you for using American Cementing, Andrew Linn, and crew

Pump Diagrams



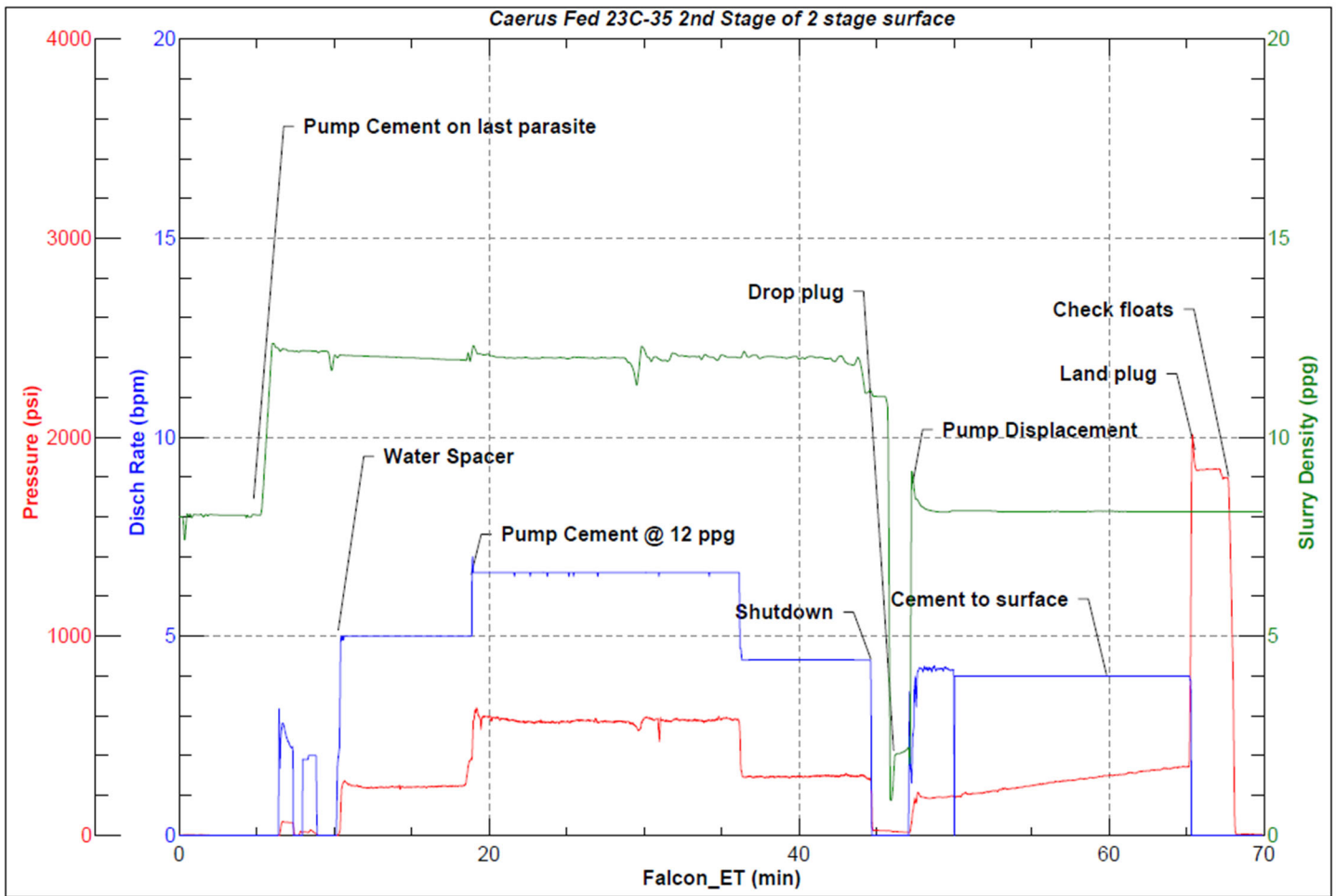
JobMaster Program Version 5.01C1
Job Number: 79983
Customer: Caerus
Well Name: BJU G35 Fed 23C-35-496



BJ Services

Job Start: Monday, January 24, 2022

Stage-1



BJ Services

Job Start: Monday, January 24, 2022

Stage-2