



Caerus Operating LLC

LONG STRING POST JOB REPORT

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

CallSheet #: 80011
Proposal #: 57084



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,

Michael Harold

Field Engineer II | (970) 773-3636 | michael.harold@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	3000	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3000	6552	25
Open Hole	Outer	n/a	8.75	n/a	n/a	6552	11694	0
Casing	Inner	4.5	4	11.6	n/a	0	11678	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS(CTS)-469		
Field Storage Silo	FSS(CTS)-468		
AS Cement Trailer	CTF-9309	TRC(TRB)-202	Woronovitch, Collin
AS Cement Trailer	CTF-019	TRB-421	Kirchenwitz, Jacob
AS Cement Trailer	CTF-7145	TRC(TRB)-059	Martin, Chuck
AS Cement Trailer	CTF-048	TRC(TRB)-090	Brady, Shawn
Cement Trailer	CTF-263	TRC(TRB)-425	Martin, Chuck
Cement Pump	CPF-052	TRH-959	Brady, Shawn
Light Duty Vehicles	LDV-082		Kelsey, John

Timing

Event	Date/Time
Call Out	1/29/2022 12:00
Depart Facility	1/29/2022 18:00
On Location	1/29/2022 19:45
Rig Up Iron	1/29/2022 20:00
Job Started	1/30/2022 03:20
Job Completed	1/30/2022 06:08
Rig Down Iron	1/30/2022 06:15
Depart Location	1/30/2022 08:00

General Job Information

Metrics	Value
Well Fluid Density	10.4 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1000 bbls
Rig Circulation Time	2 hours
Calculated Displacement	179.6 bbls
Actual Displacement	179.6 bbls
Total Spacer to Surface	14 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	10.4 lb/gal
Well Fluid Density Out of Well	10.5 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	207 °F
BHST	271 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Upright Rig Tank	
Temperature	60 °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	>450 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

Rig pumped air into well to receive some returns until 100 away on Tail, Total of 417 BBLs recovered

Job Execution Information

Fluid	Product	Function	Density (lb/gal)	Yield (ft ³ /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	658
2	Scav Cement	Scavenger	11.50	2.76	16.68		235.00	115.48	1005
3	Lead Cement	Lead	12.70	2.00	11.00		682.00	243.18	3000
4	Tail Cement	Tail	13.50	2.00	9.66		802.00	285.28	6552
5	Water + KCL Sub	DisplacementFinal	8.34			42.00		182.00	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	Scav Cement	ASTM TYPE I/II	Cement	100.00	%
2	Scavenger	Scav Cement	BA-60	GasMigration	0.30	%BWOB
2	Scavenger	Scav Cement	FP-24	Defoamer	0.30	%BWOB
2	Scavenger	Scav Cement	GW-86	Viscosifier	0.20	%BWOB
2	Scavenger	Scav Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Scavenger	Scav Cement	R-3	Retarder	0.50	%BWOB
2	Scavenger	Scav Cement	STATIC FREE	Other	0.01	lb/sk
3	Lead	Lead Cement	ASTM TYPE I/II	Cement	100.00	%
3	Lead	Lead Cement	BA-60	GasMigration	0.30	%BWOB
3	Lead	Lead Cement	FL-66	FluidLoss	0.50	%BWOB
3	Lead	Lead Cement	FP-24	Defoamer	0.30	%BWOB
3	Lead	Lead Cement	GW-86	Viscosifier	0.10	%BWOB
3	Lead	Lead Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Lead	Lead Cement	R-3	Retarder	0.30	%BWOB
3	Lead	Lead Cement	STATIC FREE	Other	0.01	lb/sk
4	Tail	Tail Cement	CLASS G	Cement	70.00	%
4	Tail	Tail Cement	FLY ASH (POZZOLAN)	Extender	30.00	%
4	Tail	Tail Cement	BA-60	GasMigration	0.20	%BWOB
4	Tail	Tail Cement	BENTONITE	Viscosifier	8.00	%BWOB
4	Tail	Tail Cement	FL-24	FluidLoss	0.40	%BWOB
4	Tail	Tail Cement	FP-24	Defoamer	0.30	%BWOB
4	Tail	Tail Cement	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
4	Tail	Tail Cement	R-3	Retarder	0.35	%BWOB
4	Tail	Tail Cement	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	1/29/2022	12:00					Rig called to prepare for Production Cement job. RTS is 21:00
2	Safety Meeting	1/29/2022	17:30					Journey management meeting
3	Depart yard	1/29/2022	18:00					Crew departs yard for location
4	Arrive on Location	1/29/2022	19:45					Arrive on location, verify all proper products and equipment on location
5	Safety Meeting	1/29/2022	19:50					Rig up meeting
6	Spot Units	1/29/2022	19:55					Spot equipment for rig up
7	Rig Up	1/29/2022	20:00					Rig up all equipment
8	Standby	1/29/2022	21:00					Crew on standby while rig runs casing
9	Safety Meeting	1/30/2022	03:00					Pre job meeting with all crews involved
10	Load Lines	1/30/2022	03:20	8.34	5.5	3	340	Load lines for psi test
11	Pressure Test	1/30/2022	03:22	8.34	1	1	6150	Pressure test pump and lines to cement head
12	Mud Flush	1/30/2022	03:37	8.5	5	20	390	Weighted flush 20 bbls
13	Scavenger Cement	1/30/2022	03:44	11.5	6	10	540	115.5 BBLS CMT – 11.5 # 2.76 Y 16.7 MW 235 sks 10 bbls away Rig Began Air injection staged to 1K SCFM
14	Scavenger Cement	1/30/2022	03:52	11.5	6	40	430	50 bbls away
15	Scavenger Cement	1/30/2022	04:01	11.5	6	50	436	100 bbls away started getting returns
16	Scavenger Cement	1/30/2022	04:03	11.5	6	15	440	115 bbls away
17	Lead Cement	1/30/2022	04:04	12.7	6	10	450	243 BBLS CMT – 12.7 # 2.0 Y 11 MW 682 sks 10 bbls away
18	Lead Cement	1/30/2022	04:11	12.7	6	40	593	50 bbls away
19	Lead Cement	1/30/2022	04:20	12.7	6	50	616	100 bbls away
20	Lead Cement	1/30/2022	04:27	12.7	6	50	622	150 bbls away
21	Lead Cement	1/30/2022	04:37	12.7	6	50	660	200 bbls away
22	Lead Cement	1/30/2022	04:41	12.7	6	43	830	243 bbls away swap to Tail cement
23	Tail Cement	1/30/2022	04:42	13.5	6	10	839	285 BBLS CMT – 13.5 # 2.0 Y 9.7 MW 802 sks 10 bbls away
24	Tail Cement	1/30/2022	04:51	13.5	5.6	40	850	50 bbls away
25	Tail Cement	1/30/2022	05:00	13.5	5.8	50	837	100 bbls away Rig stops putting air to well and lost returns at 110 away
26	Tail Cement	1/30/2022	05:08	13.5	5.8	50	823	150 bbls away
27	Tail Cement	1/30/2022	05:17	13.5	5.8	50	825	200 bbls away
28	Tail Cement	1/30/2022	05:26	13.5	5.8	50	830	250 bbls away
29	Tail Cement	1/30/2022	05:32	13.5	5	35	800	285 bbls away shut down for washup
30	Washup	1/30/2022	05:33					Washup pump mix system and lines to pit
31	Displacement	1/30/2022	05:40	8.34	9	10	765	Begin displacement 10 bbls away
32	Displacement	1/30/2022	05:45	8.34	8	40	630	50 bbls away
33	Displacement	1/30/2022	05:53	8.34	8	50	1570	100 bbls away
34	Displacement	1/30/2022	06:00	8.34	8	50	2100	150 bbls away
35	Land Plug	1/30/2022	06:06	8.34	4	29.6	2198	179.6 bbls away Land plug
36	Check Floats	1/30/2022	06:08					Floats held 3 BBLS back
37	Safety Meeting	1/30/2022	06:10					Rig down meeting
38	Rig Down	1/30/2022	06:15					Rig down equipment

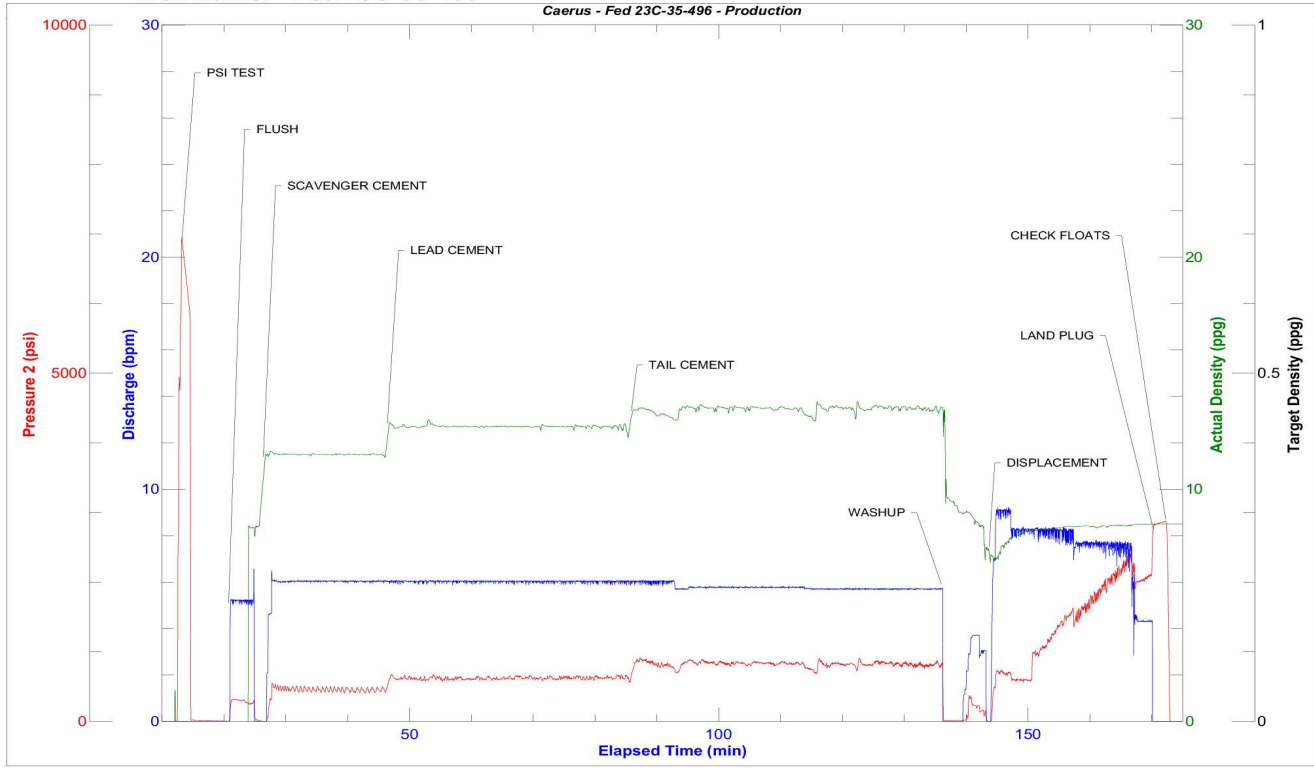


Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
39	Safety Meeting	1/30/2022	07:30					Journey management meeting
40	Depart Location	1/30/2022	08:00					Crew departs location - Estimated Top of tail @ 6505 / Estimated Top of Lead @ 2121 / Estimated top of Scavenger @ 115 / Estimated 417 bbls of mud recovered

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 80011
Customer: Cearus
Well Name: Fed 23C-35-496



BJ Services

Job Start: Sunday, January 30, 2022