Caerus Operating LLC
LONG STRING POST JOB REPORT

BJU G35 FED 23B-35-496 05-045-24339
S:35 T:4S R:96W Garfield CO

CallSheet #: 80126
Proposal #: 57660

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@americancementing.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	6512	25
Open Hole	Outer	n/a	8.75	n/a	n/a	6512	11712	0
Casing	Inner	4.5	4	11.6	n/a	0	11712	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-019	TRC(TRB)-201	
AS Cement Trailer	CTF-7145	TRC(TRB)-195	
AS Cement Trailer	CTF-9309	TRC(TRB)-195	
AS Cement Trailer	CTF-901	TRC(TRB)-201	
Cement Trailer	CTF-249	TRC(TRB)-201	Gonzales, Ivan
Cement Pump Float	CPF-136	TRH-1137	McNeal, Lawrence
Light Duty Vehicles	LDV-082		Kelsey, John

Timing

Event	Date/Time
Call Out	2/8/2022 01:00
Depart Facility	2/8/2022 02:05
On Location	2/8/2022 03:35
Rig Up Iron	2/8/2022 04:00
Job Started	2/8/2022 09:51
Job Completed	2/8/2022 12:09
Rig Down Iron	2/8/2022 12:20
Depart Location	2/8/2022 13:00

General Job Information

Metrics	Value
Well Fluid Density	10.5 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	1700 bbls
Rig Circulation Time	2 hours
Calculated Displacement	179.4 bbls
Actual Displacement	179.4 bbls
Total Spacer to Surface	13 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	10.5 lb/gal
Well Fluid Density Out of Well	10.7 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	207 °F
BHST	271 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	45 °F	50-80 °F
pH Level	7	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

No returns on the well prior to the job, during the job the rig began parasite air starting at the mud flush and ending at 100 away on tail cement. With parasite air we received returns from 100 away scavenger cement to 145 away tail cement. Total of 440 bbls Mud recovered as estimate

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	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		674.00	240.33	3000
4	Tail Cement	Tail	13.50	2.00	9.66		802.00	285.28	6512
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

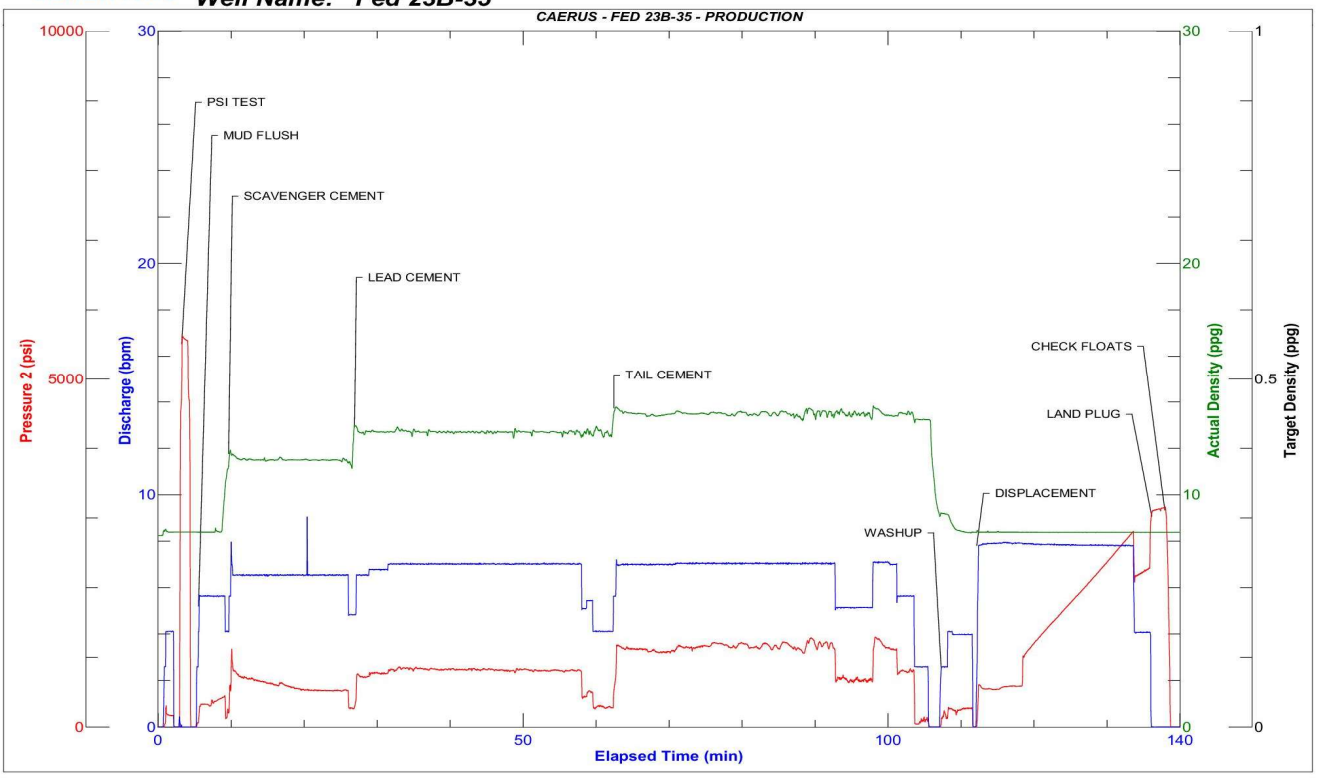
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	2/8/2022	01:00					Crew called to prepare for Production cement job. RTS is 05:30
2	Safety Meeting	2/8/2022	02:00					Journey management meeting
3	Depart Yard	2/8/2022	02:05					depart Rifle, Co yard for location
4	Arrive on Location	2/8/2022	03:35					arrive on location, verify job procedure and all proper equipment and products on location
5	Safety Meeting	2/8/2022	03:45					rig up meeting
6	Spot Units	2/8/2022	03:50					spot equipment for rig up
7	Rig up	2/8/2022	04:00					rig up all equipment
8	Standby	2/8/2022	05:00					crew on standby while rig runs casing and circulates the well
9	Safety Meeting	2/8/2022	09:30					pre job meeting with all crews involved
10	Load Lines	2/8/2022	09:51	8.34	4	5	242	load lines for psi test
11	Pressure Test	2/8/2022	09:53	8.34	1	1	5631	psi test pump and lines to cement head
12	Mud Flush	2/8/2022	09:54	8.5	4.1	20	200	20 bbls mud flush begin Parasite air
13	Scavenger Cement	2/8/2022	10:00	11.5	6.5	10	808	115.5 BBLS CMT – 11.5 # 2.76 Y 16.7 MW 235 sks 10 bbls away
14	Scavenger Cement	2/8/2022	10:08	11.5	6.5	40	661	50 bbls away
15	Scavenger Cement	2/8/2022	10:13	11.5	6.5	50	586	100 bbls away, start receiving returns
16	Scavenger Cement	2/8/2022	10:17	11.5	4.8	15.5	347	115.5 bbls away, swap to Lead Cement
17	Lead Cement	2/8/2022	10:18	12.7	6.5	10	735	240 BBLS CMT – 12.7 # 2.0 Y 11 MW 674 sks 10 bbls away
18	Lead Cement	2/8/2022	10:25	12.7	7	40	901	50 bbls away
19	Lead Cement	2/8/2022	10:32	12.7	7	50	882	100 bbls away
20	Lead Cement	2/8/2022	10:39	12.7	7	50	860	150 bbls away
21	Lead Cement	2/8/2022	10:46	12.7	7	50	850	200 bbls away
22	Lead Cement	2/8/2022	10:52	12.7	7	40.3	500	240.3 bbls away swap to Tail Cement
23	Tail Cement	2/8/2022	10:53	13.5	7	10	1200	285 BBLS CMT – 13.5 # 2.0 Y 9.7 MW 802 sks 10 bbls away
24	Tail Cement	2/8/2022	11:00	13.5	7	40	1189	50 bbls away
25	Tail Cement	2/8/2022	11:07	13.5	7	50	1230	100 bbls away, stop parasite air
26	Tail Cement	2/8/2022	11:14	13.5	7	50	1243	150 bbls away, stopped receiving returns @ 145 away
27	Tail Cement	2/8/2022	11:21	13.5	7	50	1274	200 bbls away
28	Tail Cement	2/8/2022	11:30	13.5	7	50	1264	250 bbls away
29	Tail Cement	2/8/2022	11:34	13.5	7	35	1270	285 bbls away, end Tail Cement and set up to washup and drop plug
30	Washup	2/8/2022	11:35					washup pump and lines to pit, drop plug
31	Displacement	2/8/2022	11:43	8.34	8	10	590	begin displacement and send plug, 10 bbls away
32	Displacement	2/8/2022	11:47	8.34	8	20	636	30 bbls away
33	Displacement	2/8/2022	11:51	8.34	8	30	1260	60 bbls away
34	Displacement	2/8/2022	11:55	8.34	8	30	1830	90 bbls away
35	Displacement	2/8/2022	11:59	8.34	8	30	2180	120 bbls away
36	Displacement	2/8/2022	12:03	8.34	8	30	2789	150 bbls away
37	Land Plug	2/8/2022	12:07	8.34	4	29.4	2350	179.4 bbls away, land plug
38	Check Floats	2/8/2022	12:09					Check Floats, floats held with 2 bbls back
39	Safety Meeting	2/8/2022	12:15					rig down meeting
40	Rig Down	2/8/2022	12:20					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
41	Safety Meeting	2/8/2022	12:50					journey management meeting
42	Depart Location	2/8/2022	13:00					crew departs location
43	General Information	2/8/2022	13:01					Estimated Top of Tail @ 6472’ Estimated Top of Lead @ 2126’ Estimated Top of Scavenger @ 121’ Estimated 440 BBLS mud Recovered

Pump Diagrams

JobMaster Program Version 5.01C1
Job Number: 80126
Customer: Caerus
Well Name: Fed 23B-35



BJ Services

Job Start: Tuesday, February 08, 2022