



Caerus Operating LLC

LONG STRING POST JOB REPORT

BJU M33 FED #14A-33-496 05-045-18720
S:33 T:4S R:96W Garfield CO

CallSheet #: 88595
Proposal #: 71477



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,

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	9.625	8.921	36	n/a	0	2995.5	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3000	6582	25
Open Hole	Outer	n/a	8.75	n/a	n/a	6582	11311	0
Casing	Inner	4.5	3.92	13.5	Other	0	11296.2	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Cement Trailer Float	CTF-273	TRC-201	Steven Richey
Field Storage Silo	FSS-468		
Field Storage Silo	FSS-478		
Cement Pump Float	CPF-011	TRH-1522	Duewayne Jackson
Cement Pump Float	CPF-052	TRH-957	Jeremy Bradbrook
Light Duty Vehicles	LDV-022		Gerron McClure

Timing

Event	Date/Time
ERTS	10/09/2023 22:00
Call Out	10/9/2023 15:00
Depart Facility	10/9/2023 18:30
On Location	10/9/2023 22:00
Rig Up Iron	10/9/2023 22:30
Job Started	10/10/2023 02:05
Job Completed	10/10/2023 05:15
Rig Down Iron	10/10/2023 06:15
Depart Location	10/10/2023 06:30

General Job Information

Metrics	Value
Well Fluid Density	11.4 lb/gal
Well Fluid Type	OBM
Rig Circulation Vol	650 bbls
Rig Circulation Time	2 hours
Calculated Displacement	167 bbls
Actual Displacement	167 bbls
Total Spacer to Surface	0 bbls
Total CMT to Surface	0 bbls
Well Topped Out	NO
Top Out Volume	N/A bbls

Job Details

Metrics	Value
Flare Prior to Job	NO
Flare Prior to Job	N/A units
Flare During Job	NO
Flare During Job	N/A units
Flare at End of Job	NO
Flare at End of Job	N/A units
Well Full Prior to Job	YES
Well Fluid Density Into Well	11.4 lb/gal
Well Fluid Density Out of Well	11.4 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	221 °F
BHST	292 °F

Water Analysis

Metrics	Value	Recommended
Water Source	None	
Temperature	68 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	200 mg/L	0-3000 mg/L
Total Alkalinity	100	0-1000
Total Hardness	10 mg/L	0-500 mg/L
Carbonates	10 mg/L	0-100 mg/L
Sulfates	200 mg/L	0-1500 mg/L
Potassium	200 mg/L	0-3000 mg/L
Iron	10 mg/L	0-300 mg/L

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
YES	N/A	452	N/A

Circulation Details

WE STARTED CIRCULATING 20 BBLS INTO JOB, RETURNS WERE FULL THROUGHOUT UNTIL THE DISCONTINUATION OF THE PARASITE AIR 100 BBLS GONE INTO TAIL CEMENT... LOST ALL RETURNS AT 150 BBLS GONE TAIL.

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	1653
2	Scavenger	Scavenger	11.50	2.63	15.47		123.00	57.72	2000
3	Lead	Lead	12.70	2.15	11.51		640.00	245.04	3000
4	Tail	Tail	13.50	2.01	9.72		781.00	279.83	6582
5	Water + KCL Sub	DisplacementFinal	8.34			42.00		167.00	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	Scavenger	CLASS G	Cement	65.00	%
2	Scavenger	Scavenger	FLY ASH (POZZOLAN)	Extender	35.00	%
2	Scavenger	Scavenger	BENTONITE	Viscosifier	8.00	%BWOB
2	Scavenger	Scavenger	FP-24	Defoamer	0.30	%BWOB
2	Scavenger	Scavenger	GW-86	Viscosifier	0.20	%BWOB
2	Scavenger	Scavenger	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
2	Scavenger	Scavenger	R-7C	Retarder	0.25	%BWOB
3	Lead	Lead	ASTM TYPE IL	Cement	100.00	%
3	Lead	Lead	A-2	Accelerator	0.10	%BWOB
3	Lead	Lead	EC-2	BondEnhancer	1.00	%BWOB
3	Lead	Lead	FL-66	FluidLoss	0.20	%BWOB
3	Lead	Lead	FP-24	Defoamer	0.30	%BWOB
3	Lead	Lead	GW-86	Viscosifier	0.10	%BWOB
3	Lead	Lead	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
3	Lead	Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Lead	Lead	R-3	Retarder	1.00	%BWOB
3	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
3	Lead	Lead	XCem-1009	Extender	10.00	lb/sk
4	Tail	Tail	CLASS G	Cement	70.00	%
4	Tail	Tail	FLY ASH (POZZOLAN)	Extender	30.00	%
4	Tail	Tail	BA-60	GasMigration	0.20	%BWOB
4	Tail	Tail	BENTONITE	Viscosifier	8.00	%BWOB
4	Tail	Tail	FL-24	FluidLoss	0.40	%BWOB
4	Tail	Tail	FP-24	Defoamer	0.30	%BWOB
4	Tail	Tail	IntegraSeal PHENO	LostCirculation	3.00	lb/sk
4	Tail	Tail	S-8	StrengthRetroggression	26.00	%BWOB
4	Tail	Tail	XCem-916	Retarder	0.40	%BWOB

Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Annular Pressure (psi)	Comment
1	ARRIVED ON LOCATION	10/9/2023	22:00						ARRIVED ON LOCATION PER CUSTOMER REQUEST 22:00
2	HAZARD ASSESMENT	10/9/2023	22:05						
3	SPOT EQUIPMENT	10/9/2023	22:10						
4	PRE RIG UP SAFETY MEETING	10/9/2023	22:15						
5	RIGGED UP	10/9/2023	22:45						
6	PRE JOB SAFETY MEETING	10/10/2023	01:45						
7	STAB HEAD	10/10/2023	01:50						
8	START JOB	10/10/2023	02:05						START JOB
9	PRESSURE TEST LINES	10/10/2023	02:11	8.34	1	1	5000		PRESSURE TEST LINES 5000PSI
10	20 BBL MUD FLUSH	10/10/2023	02:13	8.45	4	20	242		20 BBL MUD FLUSH II
11	START 57 BBL SCAVENGER LEAD	10/10/2023	02:19	11.5	5.5	1	243		START SCAVENGER LEAD @ 11.5 (2.63/15.47) 123 SACKS
12	END OF SCAVENGER LEAD	10/10/2023	02:33	11.5	5.5	57	292		END OF SCAVENGER LEAD
13	START 245 BBL LEAD @ 12.7	10/10/2023	02:33	12.7	5.5	1	247		START 245 BBL LEAD CEMENT@ 12.7 (2.15/11.51) 640 SACKS
14	50 BBL GONE ON LEAD	10/10/2023	02:42	12.7	5.5	50	454		
15	150 BBL GONE ON LEAD	10/10/2023	03:00	12.7	5.5	100	436		
16	200 BBL GONE ON LEAD	10/10/2023	03:10	12.7	5.5	200	462		
17	END OF LEAD CEMENT	10/10/2023	03:19	12.7	5.5	245	467		END OF LEAD CEMENT
18	START 280 BBL TAIL CEMENT @ 13.5	10/10/2023	03:19	13.5	5.5	1	520		START 280 BBL TAIL CEMENT @ 13.5 (2.01,9.72) 280 BBLS OR 781 SACKS
19	50 BBL GONE ON TAIL	10/10/2023	03:29	13.5	5.5	50	505		
20	100 BBL GONE ON TAIL	10/10/2023	03:38	13.5	5.5	100	519		
21	150 BBL GONE ON TAIL	10/10/2023	03:47	13.5	5.5	150	580		
22	200 BBL GONE ON TAIL	10/10/2023	03:57	13.5	5.5	200	578		
23	250 BBL GONE ON TAIL	10/10/2023	04:07	13.5	3.5	250	535		
24	END OF TAIL CEMENT	10/10/2023	04:23	13.5	3	280	513		END OF TAIL CEMENT
25	SHUTDOWN/WASH LINES/ DROP PLUG	10/10/2023	04:24						SHUTDOWN/ WASH LINES/ DROP TOP PLUG/ SWAPPED TO OTHER PUMP
26	START 167 BBL FRESH WATER DISPLACEMENT	10/10/2023	04:48	8.34	4	1	223		START 167 BBL FRESH WATER DISPLACEMENT
27	50 BBL GONE ON DISPLACEMENT	10/10/2023	04:55	8.34	7	50	913		CAUGHT CEMENT @ 41 BBLS GONE
28	100 BBL GONE ON DISPLACEMENT	10/10/2023	05:03	8.34	7	100	1577		
29	PRESSURE BEFORE SLOW RATE @157 GONE	10/10/2023	05:10	8.34	7	157	2250		PRESSURE BEFORE SLOWING RATE TO 3BPM@ 157 GONE - 2250

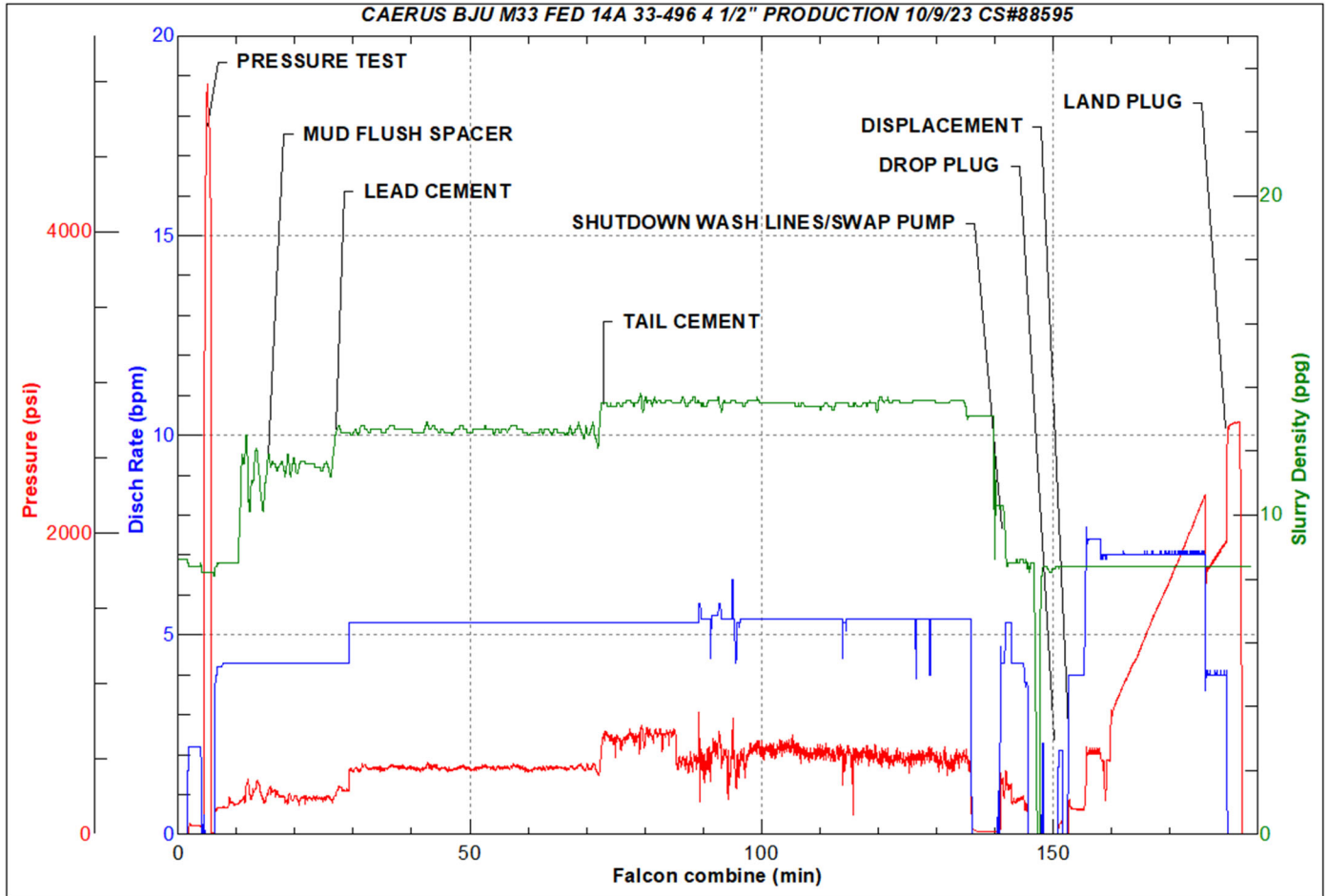


Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Annular Pressure (psi)	Comment
30	SLOW RATE PRESSURE @ 157 GONE	10/10/2023	05:10	8.34	4	157	1749		SLOW RATE PRESSURE @ 3BPM/157 BBL GONE - 1749
31	PRESSURE BEFORE LANDING PLUG	10/10/2023	05:15	8.34	4	167	1954		FINAL LIFT PRESSURE BEFORE LANDING PLUG - 1954
32	LAND PLUG	10/10/2023	05:15	8.34	4	167	2706		BUMPED PLUG TO - 2706PSI
33	CHECK FLOAT	10/10/2023	05:20						RETURNED 1.75 BBLS UPON FLOAT CHECK
34	END OF CEMENTING SERVICES	10/10/2023	05:21						END OF CEMENTING SERVICES
35	POST JOB/ RIGDOWN SAFETY MEETING	10/10/2023	05:25						
36	RIGGED DOWN	10/10/2023	06:15						
37	PRE CONVOY SAFETY MEETING	10/10/2023	06:30						
38	LOCATION DEPARTURE	10/10/2023	06:30						
39	END OF JOB	10/10/2023	06:30						END OF JOB

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 88595
Customer: CAERUS
Well Name: BJU M33 FED 14A 33 496



Job Start: Monday, October 16, 2023