



Caerus Operating LLC

LONG STRING POST JOB REPORT

BJU B26 FED #12D-26-496 05-045-24456
S:26 T:4S R:96W Garfield CO

CallSheet #: 84026
Proposal #: 64097



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) 657-1157

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	2998	0
Open Hole	Outer	n/a	8.75	n/a	n/a	2998	7095	25
Open Hole	Outer	n/a	8.75	n/a	n/a	7095	11988	0
Casing	Inner	4.5	4	11.6	n/a	0	11973	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
Field Storage Silo	FSS-469		
Field Storage Silo	FSS-468		
Cement Trailer Float	CTF-254	TRC-059	Richey, Steven
AS Cement Trailer Float	CTF-9898	TRC-244	Jackson, Duewayne
AS Cement Trailer Float	CTF-048	TRC-244	Jackson, Duewayne
AS Cement Trailer Float	CTF-901	TRC-090	Bradbrook, Jeremy
AS Cement Trailer Float	CTF-138	TRC-090	Bradbrook, Jeremy
Light Duty Vehicles	LDV-082		Kelsey, John
Cement Pump Float	CPF-058	TRH-959	Hale, Jason

Timing

Event	Date/Time
Call Out	10/15/2022 00:00
Depart Facility	10/15/2022 02:30
On Location	10/15/2022 03:45
Rig Up Iron	10/15/2022 04:30
Job Started	10/15/2022 08:52
Job Completed	10/15/2022 12:03
Rig Down Iron	10/15/2022 12:10
Depart Location	10/15/2022 13:30

General Job Information

Metrics	Value
Well Fluid Density	10.6 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	800 bbls
Rig Circulation Time	2 hours
Calculated Displacement	186 bbls
Actual Displacement	186 bbls
Total Spacer to Surface	0 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	10.6 lb/gal
Well Fluid Density Out of Well	10.6 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	214 °F
BHST	282 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	65 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	0-1000
Total Hardness	400 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

WE STARTED THE JOB WITH NO RETURNS AND NO PARASITE AIR. PARASITE AIR WAS INTRODUCED AT THE BEGINNING OF SCAVENGER AND WE RECEIVED RETURNS AT 48 BBLS AWAY SCAVENGER. PARASITE AIR WAS THEN BYPASSED AT 100 BBLS AWAY TAIL CEMENT AND RETURNS WERE LOST AT 200 BBLS AWAY TAIL CEMENT.

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	653
2	Scavenger	Scavenger	11.50	2.76	16.68		235.00	115.48	1000
3	Lead	Lead	12.70	2.00	11.00		712.00	253.88	3000
4	Tail	Tail	13.50	1.82	8.86		913.00	296.18	6709
5	Water + KCL Sub	DisplacementFinal	8.34			42.00		186.00	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	ASTM TYPE I/II	Cement	100.00	%
2	Scavenger	Scavenger	BA-60	GasMigration	0.30	%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-3	Retarder	0.50	%BWOB
2	Scavenger	Scavenger	STATIC FREE	Other	0.01	lb/sk
3	Lead	Lead	ASTM TYPE I/II	Cement	100.00	%
3	Lead	Lead	BA-60	GasMigration	0.30	%BWOB
3	Lead	Lead	FL-66	FluidLoss	0.50	%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	R-3	Retarder	0.30	%BWOB
3	Lead	Lead	STATIC FREE	Other	0.01	lb/sk
4	Tail	Tail	BA-90	BondEnhancer	10.00	%
4	Tail	Tail	CLASS G	Cement	70.00	%
4	Tail	Tail	FLY ASH (POZZOLAN)	Extender	20.00	%
4	Tail	Tail	BA-60	GasMigration	0.20	%BWOB



Fluid	Type	Fluid	Product	Function	Conc.	Uom
4	Tail	Tail	BENTONITE	Viscosifier	4.00	%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	R-3	Retarder	0.30	%BWOB
4	Tail	Tail	S-8C	StrengthRetgression	25.00	%BWOB

Job Logs

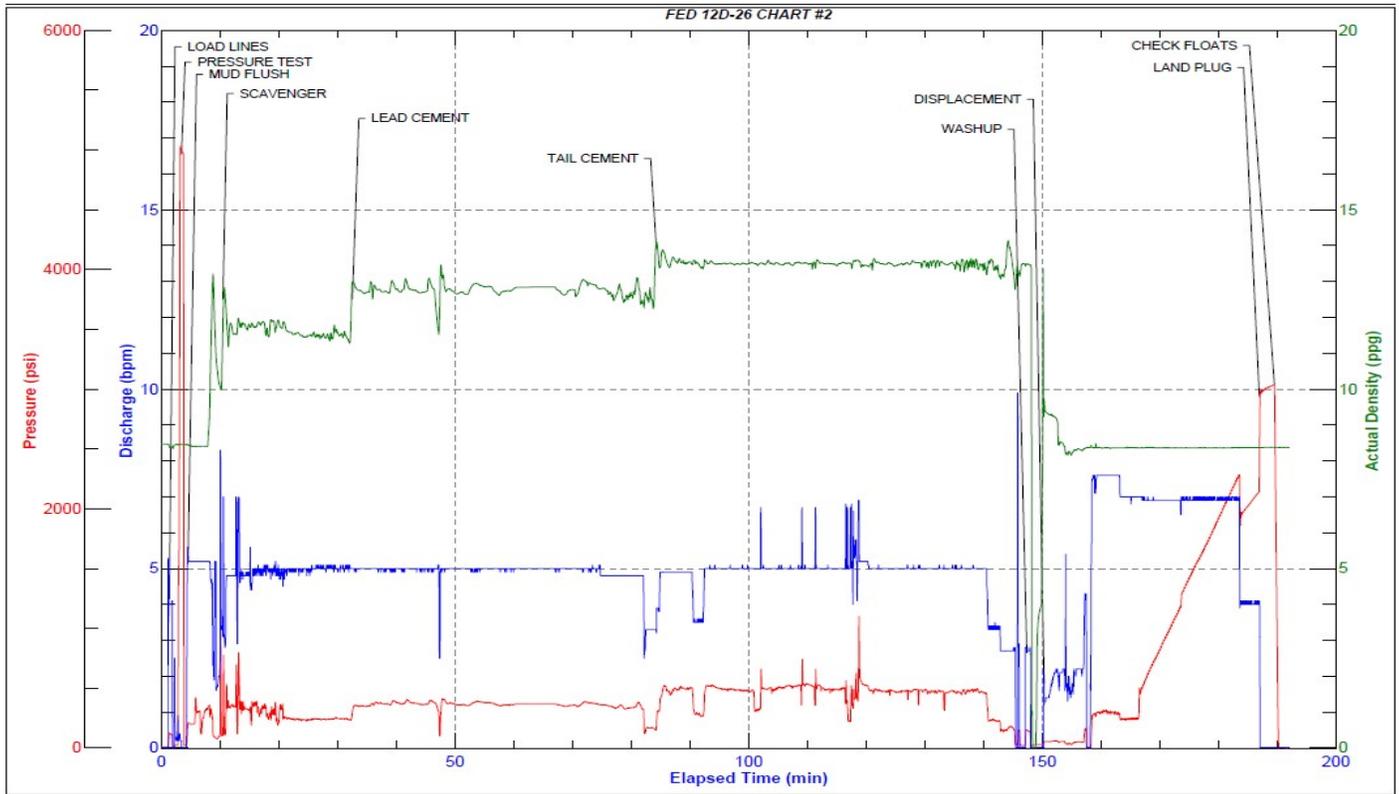
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	CALLOUT	10/15/2022	00:00					CREW CALLED TO PREPARE FOR A 4.5 PRODUCTION JOB. RTS IS 04:30
2	SAFETY MEETING	10/15/2022	02:15					JOURNEY MANAGEMENT MEETING
3	DEPART YARD	10/15/2022	02:30					CREW DEPARTS RIFLE, CO YARD FOR LOCATION
4	ARRIVE ON LOCATION	10/15/2022	03:45					ARRIVE ON LOCATION AND VERIFY ALL PROPER PRODUCTS, EQUIPMENT AND JOB PROCEDURES WITH THE CUSTOMER
5	SAFETY MEETING	10/15/2022	04:00					PRE-RIG UP MEETING
6	SPOT UNITS	10/15/2022	04:10					SPOT ALL EQUIPMENT FOR RIG UP
7	RIG UP	10/15/2022	04:30					RIG UP ALL EQUIPMENT
8	STANDBY	10/15/2022	05:00					CREW ON STANDBY WHILE RIG RUNS CASING AND CIRCULATES THE WELL
9	SAFETY MEETING	10/15/2022	08:30					PRE JOB-MEETING WITH ALL CREWS INVOLVED
10	LOAD LINES	10/15/2022	08:52	8.34	2	3	100	LOAD PUMP AND LINES FOR A PRESSURE TEST BEGIN JOB WITH NO RETURNS
11	PRESSURE TEST	10/15/2022	08:53	8.34	1	1	5000	PRESSURE TEST PUMP AND LINES TO THE CEMENT HEAD
12	MUD FLUSH	10/15/2022	08:55	8.34	5	20	200	20 BBLS MUD FLUSH WITH CHEMICALS
13	SCAVENGER	10/15/2022	09:00	11.5	5	10	350	115.5 BBLS SCAVENGER CMT – 11.5 # 2.76 Y 16.7 MW 235 sks (95 BBLS H2O) 10 BBLS AWAY, BEGIN PARASITE AIR @ 1000 CFM
14	SCAVENGER	10/15/2022	09:10	11.5	5	40	280	50 BBLS AWAY GAIN RETURNS
15	SCAVENGER	10/15/2022	09:22	11.5	5	66	240	116 BBLS AWAY SWAP TO LEAD CEMENT
16	LEAD CEMENT	10/15/2022	09:23	12.7	5	10	260	254 BBLS LEAD CMT – 12.7 # 2.0 Y 11 MW 712 sks (187 BBLS H2O) 10 BBLS AWAY
17	LEAD CEMENT	10/15/2022	09:33	12.7	5	40	380	50 BBLS AWAY
18	LEAD CEMENT	10/15/2022	09:44	12.7	5	50	310	100 BBLS AWAY, HAD TO START A NEW CHART 62 MINS INTO THE JOB DUE TO LOSS OF CONNECTION, RAN A HARD LINE FOR THE NEW CHART AND RESTARTED TIME AT 67 MINS INTO THE JOB.
19	LEAD CEMENT	10/15/2022	09:55	12.7	5	50	320	150 BBLS AWAY
20	LEAD CEMENT	10/15/2022	10:05	12.7	5	50	330	200 BBLS AWAY
21	LEAD CEMENT	10/15/2022	10:15	12.7	3.3	54	160	254 BBLS AWAY SWAP TO TAIL CEMENT
22	TAIL CEMENT	10/15/2022	10:16	13.5	4	10	314	296 BBLS TAIL CMT – 13.5 # 1.82 Y 8.9 MW 913 sks (193 BBLS H2O) 10 BBLS AWAY
23	TAIL CEMENT	10/15/2022	10:27	13.5	5	40	440	50 BBLS AWAY
24	TAIL CEMENT	10/15/2022	10:37	13.5	5	50	456	100 BBLS AWAY BYPASS PARASITE AIR
25	TAIL CEMENT	10/15/2022	10:47	13.5	5	50	456	150 BBLS AWAY
26	TAIL CEMENT	10/15/2022	10:57	13.5	5	50	450	200 BBLS AWAY LOST RETURNS
27	TAIL CEMENT	10/15/2022	11:07	13.5	5	50	455	250 BBLS AWAY
28	TAIL CEMENT	10/15/2022	11:19	13.5	5	46	453	296 BBLS AWAY END CEMENT AND SHUTDOWN
29	WASHUP	10/15/2022	11:20					SWAP LINES OVER TO THREE-SIDED TANK, WASHUP PUMP, AND LINES. DROP THE TOP PLUG
30	DISPLACEMENT	10/15/2022	11:30	8.34	7.5	10	280	SEND TOP PLUG AND BEGIN DISPLACEMENT, 10 BBLS AWAY ADD CHEMICAL THROUGHOUT DISPLACEMENT

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
31	DISPLACEMENT	10/15/2022	11:38	8.34	7	40	250	50 BBLS AWAY CATCH PRESSURE UP TO 500 PSI AT 55 AWAY
32	DISPLACEMENT	10/15/2022	11:46	8.34	7	50	1180	100 BBLS AWAY
33	DISPLACEMENT	10/15/2022	11:56	8.34	7	70	1966	160 BBLS AWAY SLOW RATE FOR BUMPING THE PLUG
34	LAND PLUG	10/15/2022	11:59	8.34	4	16	2142	LAND THE PLUG UP TO 2975 PSI
35	CHECK FLOATS	10/15/2022	12:03					CHECK FLOATS, FLOATS HELD WITH 2 BBLS BACK
36	SAFETY MEETING	10/15/2022	12:05					RIG DOWN SAFETY MEETING
37	RIG DOWN	10/15/2022	12:10					RIG DOWN ALL EQUIPMENT
38	SAFETY MEETING	10/15/2022	13:20					JOURNEY MANAGEMENT MEETING
39	DEPART LOCATION	10/15/2022	13:30					CREW DEPARTS LOCATION

Pump Diagrams



JobMaster Program Version 5.01C1
Job Number: 84026
Customer: Cearus
Well Name: FED 12D-26



Job Start: Monday, October 17, 2022