



Caerus Operating LLC

LONG STRING POST JOB REPORT

BJU G35 FED #14D-35-496 05-045-24345
S:35 T:4S R:96W Garfield CO

CallSheet #: 81472
Proposal #: 59890



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,

Zen Keith

SME | (307) 757-7178 | 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	9.625	8.921	36	n/a	0	3036	0
Open Hole	Outer	n/a	8.75	n/a	n/a	3036	6799	25
Open Hole	Outer	n/a	8.75	n/a	n/a	6799	12012	0
Casing	Inner	4.5	4	11.6	n/a	0	12005	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1	Employee #2
Field Storage Silo	FSS(CTS)-469			
Field Storage Silo	FSS(CTS)-468			
AS Cement Trailer Float	CTF-9309	TRB-421		
AS Cement Trailer Float	CTF-7145	TRC(TRB)-180		
AS Cement Trailer Float	CTF(FTF)-148	TRC(TRB)-115		
Cement Trailer Float	CTF-286	TRC(TRB)-090		
Cement Trailer Float	CTF-579	TRC(TRB)-195	Manuelito, Hamilton	Jackson, Duewayne
Cement Pump Float	CPF-011	TRH-959	Hale, Jason	
Light Duty Vehicles	LDV-082		Kelsey, John	

Timing

Event	Date/Time
Call Out	5/13/2022 15:00
Depart Facility	5/13/2022 21:30
On Location	5/13/2022 23:00
Rig Up Iron	5/13/2022 23:20
Job Started	5/14/2022 01:42
Job Completed	5/14/2022 05:36
Rig Down Iron	5/14/2022 05:45
Depart Location	5/14/2022 07:45

General Job Information

Metrics	Value
Well Fluid Density	10.2 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	900 bbls
Rig Circulation Time	1 hours
Calculated Displacement	184.7 bbls
Actual Displacement	184.7 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	10.2 lb/gal
Well Fluid Density Out of Well	10.2 lb/gal

Job Details (cont.)

Metrics	Value
BHCT	207 °F
BHST	271 °F

Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	54 °F	50-80 °F
pH Level	6	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	180	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	500	0

Circulation Details

no returns from the beginning, rig starts parasite air 1200 CFM during mud flush, returns @ 45 away on scavenger, End parasite air @ 100 away Tail, lost returns @ 125 away Tail

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		729.00	259.94	3000
4	Tail Cement	Tail	13.50	2.00	9.66		802.00	285.20	6799
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	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	0.25	%BWOB
4	Tail	Tail Cement	S-8	StrengthRetgression	25.00	%BWOB

Job Logs

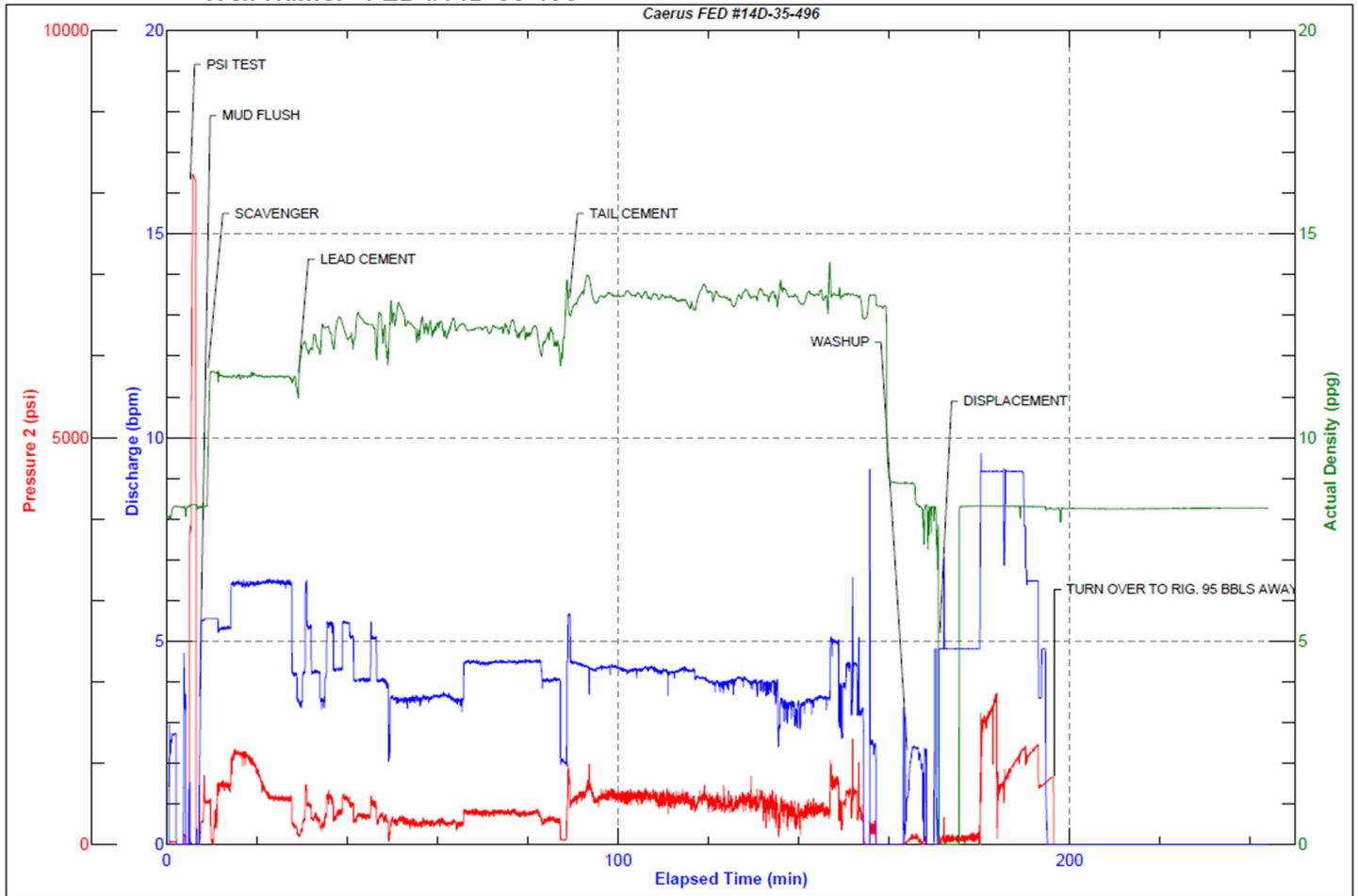
Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Callout	5/13/2022	15:00					Crew called to prepare for a production cement job. RTS is 23:00
2	Safety Meeting	5/13/2022	20:45					journey management meeting
3	Depart Yard	5/13/2022	21:30					depart Rifle, CO yard
4	Arrive on Location	5/13/2022	23:00					arrive on location, verify all proper products and equipment on location verify job procedure
5	Safety Meeting	5/13/2022	23:10					rig up safety meeting
6	Spot Units	5/13/2022	23:15					spot all equipment for rig up
7	Rig Up	5/13/2022	23:20					rig up all equipment
8	Standby	5/14/2022	00:30					crew on standby while rig circulates bottoms up
9	Safety Meeting	5/14/2022	01:00					pre job meeting with all crews
10	Load Lines	5/14/2022	01:42	8.34	2	3	100	load lines for psi test
11	Pressure Test	5/14/2022	01:48	8.34	1	1	5360	psi test pump and lines to cement head
12	Mud Flush	5/14/2022	01:50	8.4	5.5	20	400	20 bbls mud flush begin parasite air at 1200 CFM
13	Scavenger	5/14/2022	01:53	11.5	5.2	10	500	10 bbls away scavenger@ 11.5#
14	Scavenger	5/14/2022	02:02	11.5	6.5	40	550	50 bbls away
15	Scavenger	5/14/2022	02:10	11.5	3.4	65	200	115 bbls away swap to Lead Cement
16	Lead Cement	5/14/2022	02:11	12.7	5.5	10	300	260 BBLS Lead CMT – 12.7 # 2.0 Y 11 MW 729 sks 10 bbls away
17	Lead Cement	5/14/2022	02:22	12.7	5.5	40	350	50 bbls away
18	Lead Cement	5/14/2022	02:34	12.7	3.5	50	200	100 bbls away
19	Lead Cement	5/14/2022	02:49	12.7	4.5	50	410	150 bbls away
20	Lead Cement	5/14/2022	02:59	12.7	4.5	50	280	200 bbls away
21	Lead Cement	5/14/2022	03:09	12.7	4.5	60	300	260 bbls away swap to tail cement
22	Tail Cement	5/14/2022	03:10	13.5	4.5	10	330	285 BBLS Tail CMT – 13.5 # 2.0 Y 9.7 MW 802 sks 10 bbls away
23	Tail Cement	5/14/2022	03:22	13.5	4.5	40	380	50 bbls away
24	Tail Cement	5/14/2022	03:32	13.5	4.5	50	380	100 bbls away end parasite air, lost returns at 125 away
25	Tail Cement	5/14/2022	03:46	13.5	4	50	300	150 bbls away
26	Tail Cement	5/14/2022	04:00	13.5	4.5	50	280	200 bbls away
27	Tail Cement	5/14/2022	04:12	13.5	4.5	50	278	250 bbls away
28	Tail Cement	5/14/2022	04:27	13.5	4.5	35	270	285 bbls away end cement and get ready for washup, pump malfunctions during last tub of cement
29	Washup	5/14/2022	04:28					washup pump and lines and drop plug
30	Displacement	5/14/2022	04:34	8.34	4.8	10	55	10 bbls away
31	Displacement	5/14/2022	04:45	8.34	9	40	1050	50 bbls away
32	Displacement	5/14/2022	04:53	8.34	6.5	30	691	80 bbls away slow rate due to pump malfunction
33	Displacement	5/14/2022	04:55	8.34	6	15	650	95 bbls away, pump malfunctions completely
34	Shutdown	5/14/2022	04:57					shutdown due to inoperable pump truck, swap over to rig to finish displacement
35	Rig wash	5/14/2022	05:14					rig send 10 bbls to pit
36	Rig Displacement	5/14/2022	05:15					rig begins displacement starting from 95 gone where AC pump failed
37	Rig Displacement	5/14/2022	05:18	8.34	4.2	25	1371	120 bbls away
38	Rig Displacement	5/14/2022	05:20	8.34	4.2	10	1560	130 bbls away

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
39	Rig Displacement	5/14/2022	05:28	8.34	4.2	35	2084	165 bbls away
40	Land Plug	5/14/2022	05:34	8.34	3	19.7	2171	184.7 bbls away
41	Check Floats	5/14/2022	05:36					checked floats, floats held, no returns throughout job.
42	Safety Meeting	5/14/2022	05:40					rig down meeting
43	Rig down	5/14/2022	05:45					rig down all equipment
44	Safety Meeting	5/14/2022	07:30					journey management meeting
45	Depart Location	5/14/2022	07:45					crew leaves location

Pump Diagrams



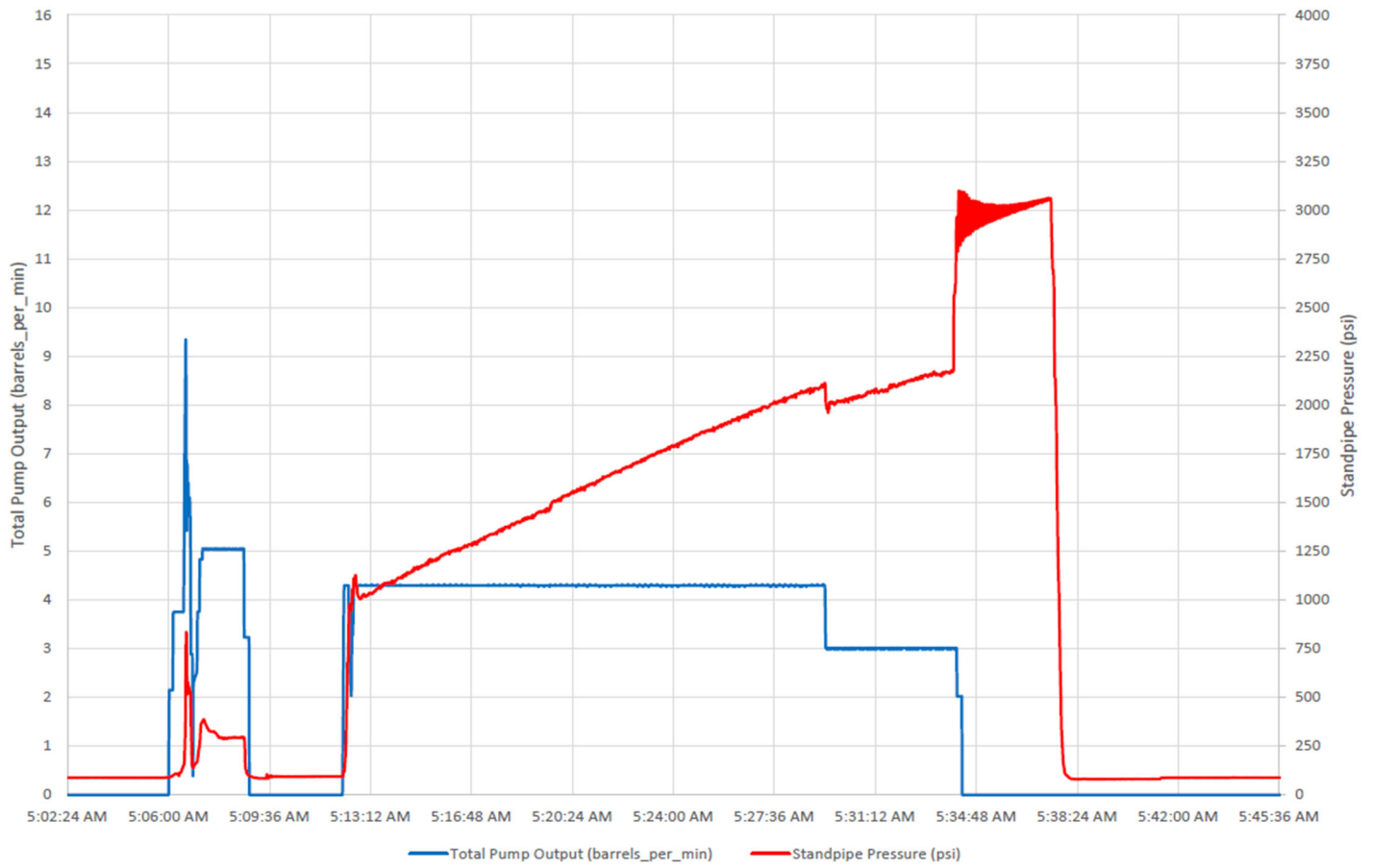
JobMaster Program Version 5.01C1
Job Number: 81472
Customer: Caerus
Well Name: FED #14D-35-496



Job Start: Saturday, May 14, 2022

AC Job Chart

Rig Displacement Data - Caerus - BJU Fed 14D-35-496 - Production



Rig Displacement Data