Caerus Operating LLC
TWO-STAGE/MULTI-STAGE CEMENT POST JOB REPORT

BJU G35 FED #23D-35-496 05-045-24347
S:35 T:4S R:96W Garfield CO

CallSheet #: 79774
Proposal #: 57063

TWO-STAGE/MULTI-STAGE CEMENT 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	20	19.5	53	n/a	0	100	0
Open Hole	Outer	n/a	14.75	n/a	n/a	100	2500	25
Open Hole	Outer	n/a	14.75	n/a	n/a	2500	3000	0
Casing	Inner	9.625	8.921	36	n/a	0	3000	0

Equipment / People

Unit Type	Unit	Power Unit	Employee #1
AS Cement Trailer	CTF-558		
Cement Trailer	CTF-249	TRC(TRB)-090	
Field Storage Silo	FSS(CTS)-469		
Cement Trailer	CTF-579	TRC(TRB)-090	Carrasco, Joel
Cement Pump	CPF-058	TRH-855	Castillo, Francisco
Light Duty Vehicles	LDV-062		Lancaster, Stephen

Timing

Event	Date/Time
Call Out	1/10/2022 11:00
Depart Facility	1/10/2022 12:45
On Location	1/10/2022 14:05
Rig Up Iron	1/10/2022 14:25
Job Started	1/11/2022 06:50
Job Completed	1/11/2022 13:30
Rig Down Iron	1/11/2022 13:35
Depart Location	1/11/2022 15:45

General Job Information

Metrics	Value
Well Fluid Density	10.2 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	130 bbls
Rig Circulation Time	0.5 hours
Calculated Displacement	226 bbls
Actual Displacement	226 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	80 bbls
Well Topped Out	No

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	90 °F
BHST	129 °F

Circulation

Lost Circulation Experienced	Losses into Spacer	Losses into Cement	Losses into Displacement
No			

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	Water	Flush	8.34			42.00		40.00	786
2	Stage-1 Lead	Lead	12.00	2.52	14.80		490.00	220.14	1050
3	Stage-1 Tail	Tail	12.50	2.23	12.56		161.00	63.94	2500
4	Water	DisplacementFinal	8.34			42.00		226.00	0
1	Water	Flush	8.34			42.00		40.00	0
2	Stage-2 Primary	Primary	12.00	2.55	14.95		379.00	172.13	0
3	Water	DisplacementFinal	8.34			42.00		70.40	0

Job Fluid Details

Fluid	Type	Fluid	Product	Function	Conc.	Uom
2	Lead	Stage-1 Lead	ASTM TYPE I/II	Cement	100.00	%
2	Lead	Stage-1 Lead	A-10	Accelerator	5.00	%BWOB
2	Lead	Stage-1 Lead	A-2	Accelerator	3.00	lb/sk
2	Lead	Stage-1 Lead	FP-24	Defoamer	0.30	%BWOB
2	Lead	Stage-1 Lead	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
2	Lead	Stage-1 Lead	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Lead	Stage-1 Lead	R-7C	Retarder	0.30	%BWOB
2	Lead	Stage-1 Lead	STATIC FREE	Other	0.01	lb/sk
3	Tail	Stage-1 Tail	ASTM TYPE I/II	Cement	100.00	%
3	Tail	Stage-1 Tail	A-10	Accelerator	5.00	%BWOB
3	Tail	Stage-1 Tail	A-2	Accelerator	2.00	lb/sk
3	Tail	Stage-1 Tail	A-7P	Accelerator	2.00	lb/sk
3	Tail	Stage-1 Tail	FP-24	Defoamer	0.30	%BWOB
3	Tail	Stage-1 Tail	IntegraSeal PHENO	LostCirculation	0.50	lb/sk
3	Tail	Stage-1 Tail	IntegraSeal POLI	LostCirculation	0.25	lb/sk
3	Tail	Stage-1 Tail	STATIC FREE	Other	0.01	lb/sk
2	Primary	Stage-2 Primary	ASTM TYPE I/II	Cement	100.00	%
2	Primary	Stage-2 Primary	A-10	Accelerator	5.00	%BWOB
2	Primary	Stage-2 Primary	A-2	Accelerator	3.00	lb/sk
2	Primary	Stage-2 Primary	A-7P	Accelerator	2.00	lb/sk
2	Primary	Stage-2 Primary	FP-24	Defoamer	0.30	%BWOB
2	Primary	Stage-2 Primary	IntegraSeal POLI	LostCirculation	0.25	lb/sk
2	Primary	Stage-2 Primary	STATIC FREE	Other	0.01	lb/sk

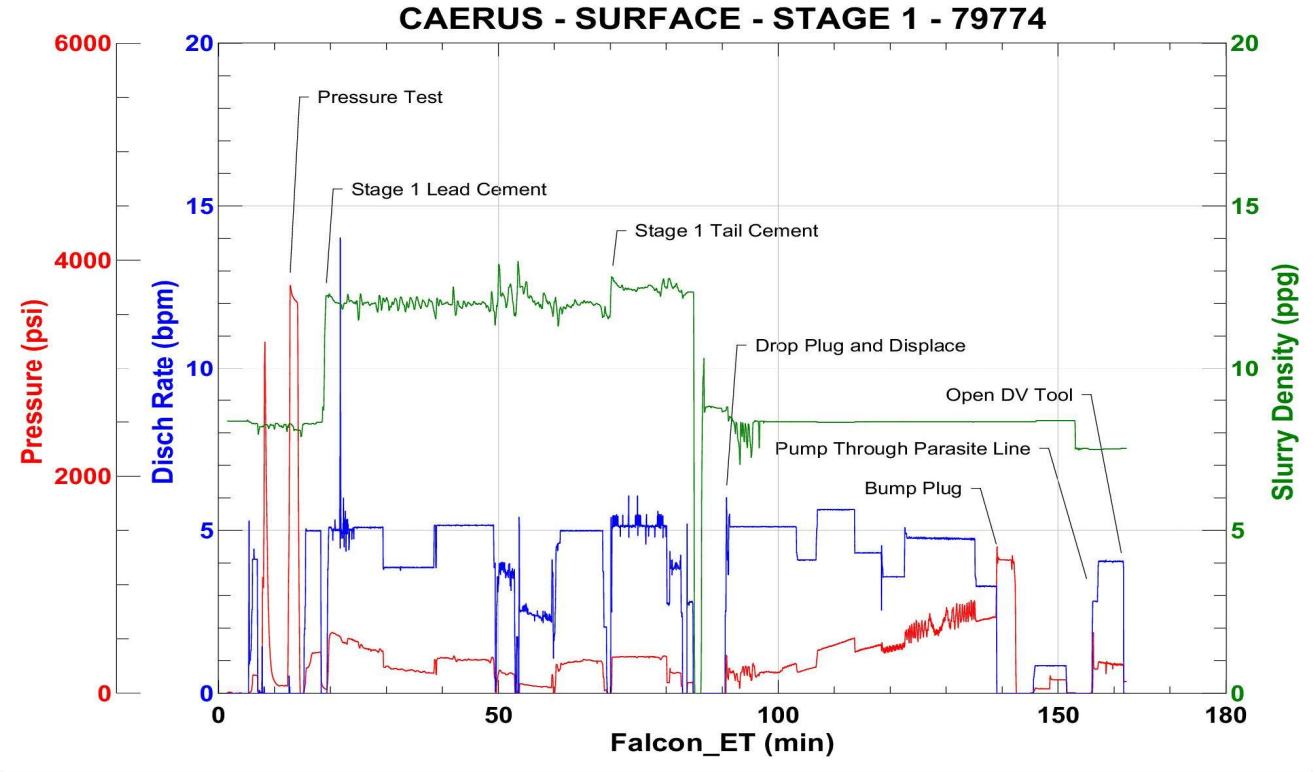
Job Logs

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
1	Job Call Out	1/10/2022	11:00					Job call out
2	Depart Rifle Yard	1/10/2022	12:45					Leave yard
3	On Location	1/10/2022	14:05					Arrive on location
4	Rig up Iron	1/10/2022	14:25					Rig up iron
5	Finish riggin up iron	1/11/2022	04:05					Done rigging up iron
6	Pre job safety meeting	1/11/2022	06:50					Held pre job safety meeting on rig floor
7	Press test line	1/11/2022	07:56	8.3	2		3400	Pressure test lines
8	Pump water spacer	1/11/2022	08:04	8.3	5		230	Pump water spacer
9	Start lead cement	1/11/2022	08:08	12	5		730	Start Stage 1 Lead
10	Pump lead cement	1/11/2022	08:18	12	4	50	260	Pump lead cement
11	Pump lead cement	1/11/2022	08:29	12	5	100	320	Pump lead cement
12	Pump lead cement	1/11/2022	08:40	12	4	150	182	Pump lead cement
13	Pump lead cement	1/11/2022	08:54	12	5	200	307	Pump lead cement
14	End lead cement	1/11/2022	08:58	12	5	220	312	End lead cement
15	Start Tail Cement	1/11/2022	08:58	12.5	5	5	120	Start Stage 1 Tail
16	Pump tail cement	1/11/2022	09:09	12.5	3	50	98	Pump tal cement
17	End tail cement	1/11/2022	09:12	12.5	4	64	190	Pump tail cement
18	Drop top plug	1/11/2022	09:13					Drop top plug
19	Start displacing	1/11/2022	09:19	8.3	5	4	110	Displacing 5 bbls pumped
20	Displacing	1/11/2022	09:29	8.3	5	50	240	Got returns at 45 bbls pumped on displacment
21	Displacing	1/11/2022	09:32	8.3	4	60	207	Slow to 4 bpm
22	Displacing	1/11/2022	09:36	8.3	5.6	82	398	Increase rate to 5.6 bpm
23	Displacing	1/11/2022	09:39	8.3	5.6	100	463	Displacing 100 bbls pumped
24	Displacing	1/11/2022	09:50	8.3	3.6	150	435	Displacing 150 bbls pumped/ cellar pump not keeping up with higher rate
25	Displacing	1/11/2022	09:57	8.3	4.8	180	670	Displacing 180 bbls pumped
26	Displacing	1/11/2022	10:02	8.3	4.8	200	795	Displacing 200 bbls pumped
27	Bump plug	1/11/2022	10:08	8.3	3.3	226	1239	Bump plug at 226 pumped
28	Bleed Press check floats	1/11/2022	10:11					Bleed press Floats are holding 1 bbl back
29	Pump 10 bbls sugar water	1/11/2022	10:18		1	7	160	Broke over at 160 psi 7 bbls pumped
30		1/11/2022	00:00			10		10 bbls pumped Shut Down
31	Rig drop bomb	1/11/2022	10:25					Drop Bomb to open DV Tool
32	Start pumping	1/11/2022	10:35	2.8			223	Opening DV tool
33	End pumping	1/11/2022	10:40	4		20	218	End pumping 20 bbls pumped
34	Pump 20 bbls water	1/11/2022	12:32		5	20	213	Start Stage 2 Pump 20 bbls water
35	Start Primary Cement	1/11/2022	12:37	12	5	5	382	Start Cement
36	Pump Cement	1/11/2022	12:46	12	5	50		50 bbls pumped
37	Pump Cement	1/11/2022	12:50	12	5	100		100 bbls pumped
38	Pump Cement	1/11/2022	13:01	12	5	150		150 bbls pumped (Good cement to surface at 160 bbls pumped)

Line	Event	Date (MM/DD/YY)	Time (HH:MM)	Density (lb/gal)	Pump Rate (bpm)	Pump Volume (bbls)	Pipe Pressure (psi)	Comment
39	End Cement	1/11/2022	13:06	12	5	170		End Cement 170 bbls pumped
40	Drop Plug	1/11/2022	13:13		5			Drop Plug Start displacing
41	Start Displacing	1/11/2022	13:14	8.3	5	10	267	Start displacing
42	Displacing	1/11/2022	13:23	8.3	5	50	370	50 bbls pumped
43	Bump Plug	1/11/2022	13:30	8.3	4	70.3	2135	Bump plug at 70.3 bbsl pumped
44	Bleed press Check floats	1/11/2022	13:31					Floats are holding - Final Circ Press 370 - 80 bbls cement to surface

Pump Diagrams

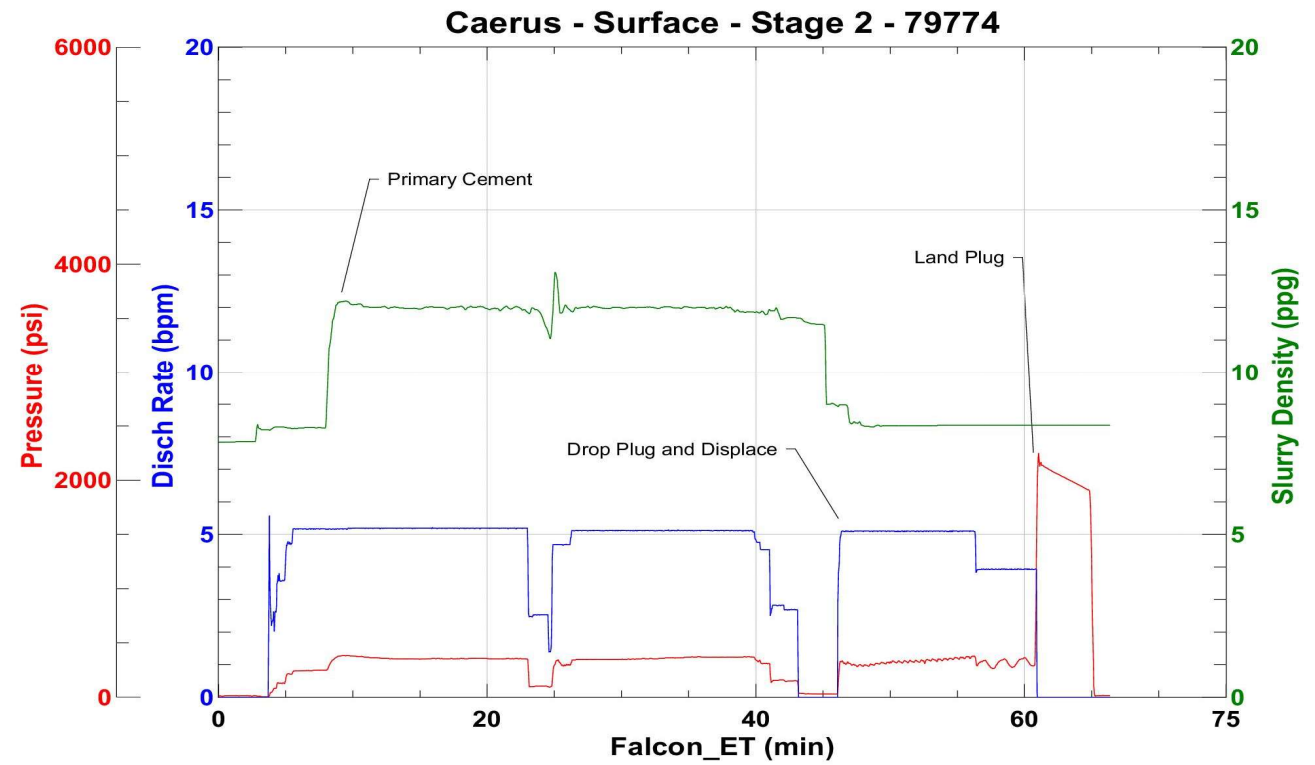
JobMaster Program Version 5.01C1
Job Number: 79774
Customer: Caerus
Well Name: Fed 23D-35-496



BJ Services

Job Start: Tuesday, January 11, 2022

JobMaster Program Version 5.01C1
Job Number: 79774
Customer: Caerus
Well Name: Fed 23D-35-496



BJ Services

Job Start: Tuesday, January 11, 2022