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# Caerus

## SURFACE POST JOB REPORT

Chevron 21E-17 05-045-23240  
S:17 T:6S R:96W Garfield CO

CallSheet #: 798  
Proposal #: 13263



**SURFACE Post Job Report**

**Attention:** Mr. Steve Schmitz | (720) 880-6412 | [sschmitz@caerusoilandgas.com](mailto:sschmitz@caerusoilandgas.com)  
Caerus  
600 17th Street Suite 1600N | Denver, CO 80202

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Dear Mr. Schmitz,

Thank you for the opportunity to provide cementing services on this well. BJ Services strives to achieve complete customer satisfaction. If you have any questions regarding the services or data provided, please contact BJ Services at any time.

Sincerely,

**Oscar Medrano**

Technical Specialist-II | (307) 996-6222 | [Oscar.Medrano@bjservices.com](mailto:Oscar.Medrano@bjservices.com)

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## 1 Job Details & Summary

### 1.1 Geometry

Type	Function	OD (in)	ID (in)	Weight (lb/ft)	Thread	Top (ft)	Bottom (ft)	Excess (%)
Open Hole	Outer	n/a	13.5	n/a	n/a	100	675	15
Open Hole	Outer	n/a	13.5	n/a	n/a	675	1015	0
Open Hole	Outer	n/a	15.5	n/a	n/a	0	100	0
Casing	Inner	9.625	8.921	36	LTC	0	1001	0

### 1.2 Equipment / People

Unit Type	Unit	Employee #1	Employee #2	Mileage
Bulk Trailer	501	Cook, John		700
Bulk Trailer	512	Philman, Douglas		700
Cement Pump	104			700
Light Duty Pickups	5	Acuna, Roger	Seghetti, Joshua	700

### 1.3 Timing

Event	Date/Time
Call Out	5/17/2017 19:30
Depart Facility	5/17/2017 20:30
On Location	5/17/2017 22:00
Rig Up Iron	5/17/2017 22:30
Job Started	5/18/2017 04:24
Job Completed	5/18/2017 05:50
Rig Down Iron	5/18/2017 06:15
Depart Location	5/18/2017 07:30

### 1.4 General Job Information

Metrics	Value
Well Fluid Density	10 lb/gal
Well Fluid Type	WBM
Rig Circulation Vol	300 bbls
Rig Circulation Time	0.3 hours
Calculated Displacement	74 bbls
Actual Displacement	74 bbls
Total Spacer to Surface	20 bbls
Total CMT to Surface	24 bbls
Well Topped Out	No

### 1.5 Well Fluid Details

Metrics	Value
Plastic Viscosity	21
Yield Point	18
10 sec. SGS	5
10 min. SGS	13
30 min. SGS	38
Filtrate	7.2
Flow Line Temp.	66

### 1.6 Job Details

Metrics	Value
Flare Prior to Job	No
Flare During Job	No
Flare at End of Job	No
Well Full Prior to Job	Yes
Well Fluid Density Into Well	10 lb/gal
Well Fluid Density Out of Well	10 lb/gal

### 1.7 Job Details (cont.)

Metrics	Value
BHCT	86 °F
BHST	109 °F

### 1.8 Circulation

Lost Circulation Experienced
No

### 1.9 Job Execution Information

Job	Fluid	Product	Function	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water Rq. (gal/sk)	Water Rq. (gal/bbl)	Volume (sks)	Volume (bbl)	Top (ft)
1	1	Water	Flush	8.33			42.00		20.00	0
1	2	ALTCem S100-12	Lead	12.00	2.53	14.85		127.00	57.00	0
1	3	ALTCem S100-12	Tail	12.50	2.22	12.58		118.00	46.73	675
1	4	Water	DisplacementFinal	8.33			42.00		74.00	0

### 1.10 Job Fluid Details

Job	Fluid	Type	Fluid	Product	Function	Conc.	Uom
1	2	Lead	ALTCem S100-12	AC3-10	Cement	100.00	%
1	2	Lead	ALTCem S100-12	ACL-10	Accelerator	2.00	lb/sk
1	2	Lead	ALTCem S100-12	ACL-20	Accelerator	5.00	%BWOB
1	2	Lead	ALTCem S100-12	ADF-11	Defoamer	0.30	%BWOB
1	2	Lead	ALTCem S100-12	ALC-10	LostCirculation	0.13	lb/sk
1	2	Lead	ALTCem S100-12	AXE-30	Extender	2.00	lb/sk
1	3	Tail	ALTCem S100-12	AC3-10	Cement	100.00	%
1	3	Tail	ALTCem S100-12	ACL-10	Accelerator	2.00	lb/sk
1	3	Tail	ALTCem S100-12	ACL-20	Accelerator	5.00	%BWOB
1	3	Tail	ALTCem S100-12	ADF-11	Defoamer	0.30	%BWOB
1	3	Tail	ALTCem S100-12	ALC-10	LostCirculation	0.13	lb/sk
1	3	Tail	ALTCem S100-12	AXE-30	Extender	2.00	lb/sk

## 2 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	Called Out	5/17/2017	19:30					Called out
2	Pre-Convoy	5/17/2017	20:00					Pre-journey management
3	Depart Camp	5/17/2017	20:30					Depart Rifle yard
4	Arrive to Location	5/17/2017	22:00					Arrived to location, checked in with the company man, 13.5"OH 1015', 9.625" 36ppf 1001', 10ppg mud in hole
5	Safety Meeting	5/17/2017	22:15					Pre-spot and rig up safety meeting
6	Rig up Iron	5/17/2017	22:30					Rig up iron
7	Waiting	5/17/2017	23:00					Waiting on rig to run casing
8	Casing on Bottom	5/18/2017	03:30					Casing on bottom, rig circulating
9	Safety Meeting	5/18/2017	04:00					Pre-job safety meeting
10	Start Job	5/18/2017	04:24					Start job
11	Fill Lines	5/18/2017	04:28	8.33	2	2	30	Fill lines 2bbls fresh water
12	Test Lines	5/18/2017	04:31				2000	Test lines 2000psi test good
13	Pump Spacer	5/18/2017	04:36	8.33	4	20	273	Pump fresh water spacer
14	Pump Lead Cement	5/18/2017	04:42	12	4	57	250	Pump lead cement @ 12ppg (127 sks 2.53yld 14.85gps)
15	Pump Tail Cement	5/18/2017	04:55	12.5	4	47	150	Pump tail cement @ 12.5ppg (118 sks 2.22yld 12.58gps)
16	Shutdown	5/18/2017	05:08					Shutdown
17	Drop Top Plug	5/18/2017	05:12					Drop top plug
18	Displacement	5/18/2017	05:13	8.33	5	60	200	Pump fresh water displacement
19	Cement to Surface	5/18/2017	05:26					Cement to surface 24bbls back
20	Slow Rate	5/18/2017	05:27	8.33	2	14	215	Slow rate to land plug
21	Bump Plug	5/18/2017	05:33				1590	Bumped plug final circulating pressure 390psi brought pressure to 1590psi for casing test, total displacement pumped 74bbls
22	Casing Test	5/18/2017	05:34	8.33			1590	1590psi casing test held for 15min, test good
23	Check Floats	5/18/2017	05:49					Check floats, floats held getting 0.5bbl back
24	End Job	5/18/2017	05:50					End job
25	Safety Meeting	5/18/2017	06:00					Pre rig down safety meeting
26	Rig down Iron	5/18/2017	06:15					Rig down iron
27	Pre Convoy	5/18/2017	07:15					Pre journey management
28	Depart Location	5/18/2017	07:30					Depart location

### 3 Water Analysis

Metrics	Value	Recommended
Water Source	Flat Tank	
Temperature	50 °F	50-80 °F
pH Level	7	5.5-8.5
Chlorides	0 mg/L	0-3000 mg/L
Total Alkalinity	250	0-1000
Total Hardness	250 mg/L	0-500 mg/L
Carbonates	0 mg/L	0-100 mg/L
Sulfates	Below 200 mg/L	0-1500 mg/L
Potassium	450 mg/L	0-3000 mg/L
Iron	0 mg/L	0-300 mg/L

### 4 Pump Diagrams

