



COGCC doc # 2597544

# Caerus

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## Surface Post Job Report

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Puckett 23B-26-697 05-045-23419

S:26 T:6S R:97W Garfield CO

Quote #:

13358

| Execution #:

07946



## Caerus

Attention: Mr. Steve Schmitz | (720) 880-6412 | [sschmitz@caerusoilandgas.com](mailto:sschmitz@caerusoilandgas.com)

Caerus | 1001 17th Street, Suite 1600 | 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,

Gage Putnam  
Field Engineer I | (970) 632-2006 | [Gage.Putnam@BJServices.com](mailto:Gage.Putnam@BJServices.com)

Field Office 28730 US-6, Rifle, CO 81650  
Phone: (970) 632-2412

Sales Office 999 18th St. Suite 1200 Denver, CO 80202  
Phone: (281) 408-2361

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# Cementing Treatment



<b>Start Date</b>	6/21/2018	<b>Field Ticket#</b>	FT-07946-Z0Q6R70202-94235
<b>End Date</b>	6/22/2018	<b>Well</b>	Puckett 23B-26-697
<b>Client</b>	CAERUS OPERATING, LLC	<b>API#</b>	05-045-23419
<b>Client Field Rep.</b>	George Urban	<b>Well Classification</b>	-
<b>Service Sup.</b>	Glen Gilliam	<b>County</b>	GARFIELD
<b>District</b>	Rifle, CO	<b>State/Province</b>	CO
<b>Type of Job</b>	Surface	<b>Formation</b>	-
<b>Execution ID</b>	EXC-07946-Z0Q6R702	<b>Rig</b>	H&P 330
<b>Project ID</b>	PRJ1007910		

## WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	19.50	20.00	52.73	100.00			
Open Hole	14.75			2,539.00	0.00		
Casing	8.92	9.63	36.00	2,519.00			

**Shoe Length (ft):** 44

## HARDWARE

<b>Bottom Plug Used?</b>	No	<b>Tool Type</b>	Float Collar
<b>Bottom Plug Provided By</b>	-	<b>Tool Depth (ft)</b>	2,519.00
<b>Bottom Plug Size</b>	-	<b>Max Tubing Pressure - Rated (psi)</b>	-
<b>Top Plug Used?</b>	Yes	<b>Max Tubing Pressure - Operated (psi)</b>	-
<b>Top Plug Provided By</b>	Non BJ	<b>Max Casing Pressure - Rated (psi)</b>	2,816.00
<b>Top Plug Size</b>	9.625	<b>Max Casing Pressure - Operated (psi)</b>	2,000.00
<b>Centralizers Used</b>	Yes	<b>Pipe Movement</b>	None
<b>Centralizers Quantity</b>	5.00	<b>Job Pumped Through</b>	No Manifold
<b>Centralizers Type</b>	Bow	<b>Top Connection Thread</b>	8 ROUND
<b>Landing Collar Depth (ft)</b>	2,519	<b>Top Connection Size</b>	9.625

# Cementing Treatment



## CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	10 sec SGS	7.00
Circulation Time (min)	90.00	10 min SGS	15.00
Circulation Rate (bpm)	5.00	30 min SGS	28.00
Circulation Volume (bbls)	450.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.00	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	19		
PV Mud Out	-		
YP Mud In	13		
YP Mud Out	-		

## TEMPERATURE

Ambient Temperature (°F)	62.00	Slurry Cement Temperature (°F)	78.00
Mix Water Temperature (°F)	68.00	Flow Line Temperature (°F)	98.00

## BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Flush	Water 1	8.33			0.00				20.00
Spacer / Flush	Sodium Silicate	10.00			0.00				20.00
Spacer / Flush	Water 2	8.33			0.00				20.00
Lead Slurry	BJCem S100.3.01D	12.00	2.5329	14.89	0.00	2,000	573	1,451.00	258.30
Tail Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	2,000.00	500	161	358.00	63.70
Displacement Final	Displacement	8.33			0.00			0.00	190.20
Top Out Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	0.00	0.00	57	127.00	22.60

# Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Sodium Silicate	SILICATE, SODIUM, A-3L	21.0000	GPB
Lead Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Lead Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Tail Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB

## TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Comments
6/22/2018 2:05 AM	Water 1	4.00	20.00	90.00	
6/22/2018 2:10 AM	Sodium Silicate	4.00	20.00	105.00	
6/22/2018 2:14 AM	Water 2	4.00	20.00	87.00	
6/22/2018 2:21 AM	BJCem S100.3.01D	6.00	258.30	246.00	
6/22/2018 3:05 AM	BJCem S100.3.01D	4.00	63.70	110.00	
6/22/2018 3:17 AM	Displacement	7.00	191.00	1,075.00	
6/22/2018 10:00 AM	BJCem S100.3.01D	2.70	21.00	157.00	52 SKS OF TOPOUT

	Min	Max	Avg
Pressure (psi)	87.00	1,075.00	267.14
Rate (bpm)	2.70	7.00	4.53

# Cementing Treatment



## DISPLACEMENT AND END OF JOB SUMMARY

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Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	191.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	191.00	Amount of Spacer to Surface	0.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	0.50
Bump Plug Pressure (psi)	565.00	Total Volume Pumped (bbls)	191.00
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement returns During Job	None	Lost Circulation During Cement Job	Yes

Customer Name CAERUS 330 District Rifle  
 Well Name PUCKETT 23B-26 Supervisor GLEN GILLIAM  
 Job Type Surface Engineer GAGE PUTNAM



Seq No.	Start Date	Start Time	Event	Equipment	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	6/21/2018	16:00	CALLOUT						BJ CREW CALLED OUT WITH AN RTS OF 00:00 6-22-18
2	6/21/2018	19:50	STEACS/ JOURNEY						STEACS/ JOURNEY WITH BJ CREW ON CONVOY TO LOCATION
3	6/21/2018	20:00	DEPART YARD						BJ CREW DEPARTS YARD
4	6/21/2018	21:15	ON LOCATION						BJ CREW ARRIVES ON LOCATION, SPOT EQUIPMENT
5	6/21/2018	21:30	STEACS/ RIG UP						STEACS/ RIG UP WITH BJ CREW AS WELL AS JOB OPERATIONS
6	6/21/2018	21:45	RIG UP EQUIPMENT						BJ CREW RIGS UP EQUIPMENT FOR SURFACE JOB
7	6/21/2018	22:30	STANDBY						BJ CREW ON STANDBY, RIG RUNNING CASING
8	6/22/2018	1:10	SAFETY MEETING						SAFETY MEETING WITH RIG CREW ON CEMENT JOB OPERATIONS
9	6/22/2018	1:50	STAB HEAD						BJ CREW STABS HEAD TO WELL
10	6/22/2018	2:00	FILL LINES		8.33	1.5	5	85	FILL LINES 5 BBLS FRESH WATER
11	6/22/2018	2:02	TEST LINES					3000	TEST LINES AT 3000 PSI
12	6/22/2018	2:05	SPACER		8.33	4	15	90	15 BBLS FRESH WATER SPACER
13	6/22/2018	2:10	SODIUM SILICATE		10.4	4	20	105	20 BBLS SODIUM SILICATE SPACER
14	6/22/2018	2:14	SPACER		8.33	4	20	87	20 BBLS FRESH WATER SPACER
15	6/22/2018	2:21	LEAD DOWN HOLE		12	4		121	LEAD CEMENT DOWN HOLE AT 12.0 PPG
16	6/22/2018	2:31	50 BBLS GONE		12	5.5	50	246	50 BBLS GONE LEAD CEMENT
17	6/22/2018	2:39	100 BBLS GONE		12	5.5	100	250	100 BBLS GONE LEAD CEMENT
18	6/22/2018	2:49	150 BBLS GONE		12	4	150	102	150 BBLS GONE LEAD CEMENT
19	6/22/2018	2:58	200 BBLS GONE		12	4	200	110	200 BBLS GONE LEAD CEMENT
20	6/22/2018	3:04	250 BBLS GONE		12	5.5	250	235	250 BBLS GONE LEAD CEMENT
22	6/22/2018	3:05	TAIL DOWN HOLE		12.5	4		110	TAIL CEMENT DOWN HOLE AT 12.5 PPG
23	6/22/2018	3:15	50 BBLS GONE		12.5	4	50	146	50 BBLS GONE TAIL CEMENT
24	6/22/2018	3:16	SHUT DOWN						DROP TOP PLUG, START DISPLACEMENT
25	6/22/2018	3:17	DISPLACEMENT		8.33	4	4	110	KICK OUT PLUG, START DISPLACEMENT
26	6/22/2018	3:28	50 BBLS GONE		8.33	5.5	50	143	50 BBLS GONE DISPLACEMENT
27	6/22/2018	3:36	100 BBLS GONE		8.33	7	100	415	100 BBLS GONE DISPLACEMENT
28	6/22/2018	3:44	150 BBLS GONE		8.33	7	150	646	150 BBLS GONE DISPLACEMENT
29	6/22/2018	3:52	BUMP PLUG		8.33	2.5	191	565	BUMP PLUG FCP- 565 PSI TOOK TO 1075 PSI HELD FOR 2 MINS
30	6/22/2018	3:54	CHECK FLOATS						FLOATS HELD 0.5 BBLS BACK
31	6/22/2018	4:00	PARASITE LINE		8.4	3	10	130	PUMPED 10 BBLS SUGAR WATER, BREAKOVER PRESSURE WAS 130 PSI
32	6/22/2018	4:15	STANDBY						BJ CREW ON STANDBY FOR 4 HRS FOR TOPOUT JOB
33	6/22/2018	9:30	STEACS/ TOPOUT						STEACS/ TOPOUT WITH BJ CREW, BJ CREW RIGS UP FOR TOPOUT JOB
34	6/22/2018	10:00	SPACER		9	2.5	2	110	PUMPED 2 BBLS OF CALCIUM CHLORIDE, WHILE PUMPING SODIUM SILICATE
35	6/22/2018	10:01	CEMENT		12.5	2.7	21	157	PUMPED 21 BBLS OF TOPOUT CEMENT/ 52 SKS TOTAL
36	6/22/2018	10:15	CEMENT TO SURFACE						CEMENT TO SURFACE, JOB COMPLETE
37	6/22/2018	10:30	STEACS/ RIG DOWN						STEACS/ RIG DOWN WITH BJ CREW
38	6/22/2018	10:35	RIG DOWN						BJ CREW RIGS DOWN EQUIPMENT
39	6/22/2018	11:30	STEACS/ JOURNEY						STEACS/ JOURNEY WITH BJ CREW ON CONVOY BACK TO DISTRICT
40	6/22/2018	11:45	DEPART LOCATION						BJ CREW DEPARTS LOCATION
41	6/22/2018		***MISC***						BUMP PLUG FCP- 565 PSI TOOK TO 1075 PSI HELD FOR 2 MINS, FLOATS HELD 0.5 BBLS BACK, PARASITE LINE BREAKOVER PRESSURE WAS 130 PSI, TOPOUT WAS 52 SKS/ 21 BBLS TOTAL, NO ISSUES DURING JOB

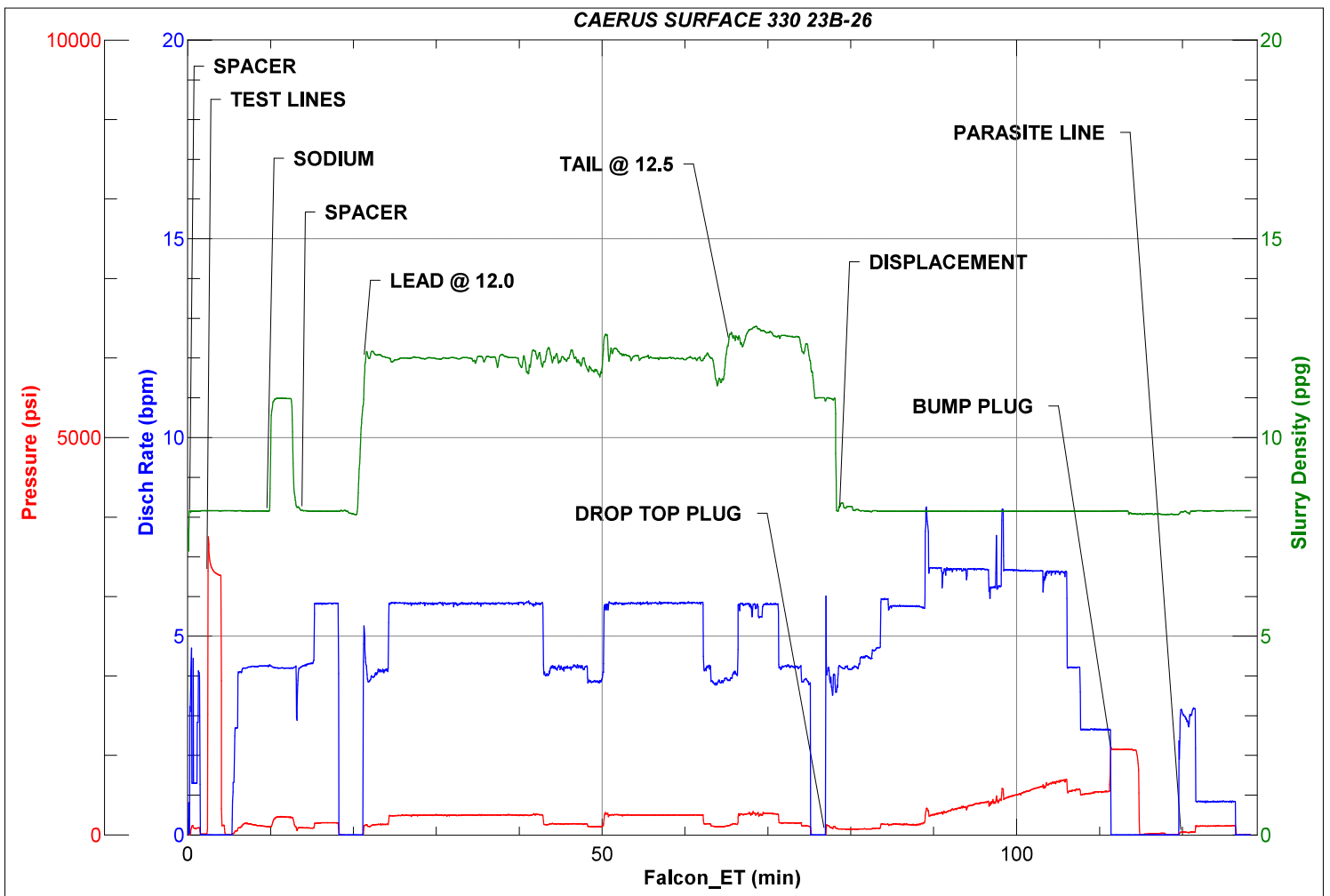


JobMaster Program Version 4.02C1

Job Number: 6541

Customer: CAERUS

Well Name: PUCKETT 23B-26







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