



Caerus

Surface Post Job Report

Puckett 34C-26-697 05-045-23412

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

Quote #:

| Execution #:



Caerus

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

Caerus | 1001 17th Street, Suite 1600 | Denver, CO 80202

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,

Zen Keith
Field Engineer III | (307) 757-7178 | Zen.Keith@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

Cementing Treatment



Start Date 6/27/2018 **Field Ticket#** FT-08140-J0K9C10202-85428
End Date 6/28/2018 **Well** Puckett 34C-26-697
Client CAERUS OPERATING, LLC **API#** 05-045-23412
Client Field Rep. Clint McPhie **Well Classification**
Service Sup. Hamza Busheri **County** GARFIELD
District Rifle, CO **State/Province** CO
Type of Job Surface **Formation**
Execution ID EXC-08140-J0K9C102 **Rig** H&P 330
Project ID PRJ1008084

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	19.50	20.00	52.73	130.00			
Open Hole	14.75			2,546.00	0.00		
Casing	8.92	9.63	36.00	2,526.00			

Shoe Length (ft): 42

HARDWARE

Bottom Plug Used? No **Tool Type** Float Collar
Top Plug Used? Yes **Tool Depth (ft)** 2,484.00
Top Plug Provided By Non BJ **Max Casing Pressure - Rated (psi)** 2,816.00
Top Plug Size 9.625 **Max Casing Pressure - Operated (psi)** 2,000.00
Centralizers Used Yes **Pipe Movement** None
Centralizers Quantity 5.00 **Job Pumped Through** No Manifold
Centralizers Type Bow **Top Connection Thread** 8 round
Landing Collar Depth (ft) 2,526 **Top Connection Size** 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)	60.00	10 min SGS	15.00
Circulation Rate (bpm)	3.00	30 min SGS	28.00
Circulation Volume (bbls)	180.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.30	Gas Units	
PV Mud In	19		
YP Mud In	10		

TEMPERATURE

Ambient Temperature (°F)	75.00	Slurry Cement Temperature (°F)	67.00
Mix Water Temperature (°F)	65.00	Flow Line Temperature (°F)	

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 / Pre Flush / Flush	Water 1	8.3300			0.00				20.0000
Spacer / Pre Flush / Flush	Sodium Silicate	10.0000			0.00				20.0000
Spacer / Pre Flush / Flush	Water 2	8.3300			0.00				20.0000
Lead Slurry	BJCem S100.3.01D	12.0000	2.5329	14.89	0.00	2,000.00	573	1,451.0000	258.3000
Tail Slurry	BJCem S100.3.01D	12.5000	2.2282	12.62	2,000.00	500.00	161	358.0000	63.7000
Displacement Final	Displacement	8.3300			0.00			0.0000	190.2000
Top Out Slurry	BJCem S100.3.01D	12.5000	2.2282	12.62	0.00	0.00	50	112.5000	20.0000

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	CEMENT, ASTM TYPE III	100.0000	PCT
Lead Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Lead Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem S100.3.01D	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Lead 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	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail 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 Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Top Out Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
Top Out Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Top Out Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB
Top Out Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Top Out Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.0000	PCT
Top Out Slurry	BJCem S100.3.01D	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
6/28/2018 2:51 AM	Water 1	2.50	20.00	360.00		
6/28/2018 3:04 AM	Sodium Silicate	4.00	20.00	360.00		
6/28/2018 3:06 AM	Water 2	5.00	20.00	300.00		
6/28/2018 3:12 AM	BJCem S100.3.01D	6.00	235.00	248.00		
6/28/2018 3:56 AM	BJCem S100.3.01D	4.00	63.70	111.00		
6/28/2018 4:11 AM	Displacement	8.00	192.00	1,215.00		
6/28/2018 9:39 AM	BJCem S100.3.01D	3.00	20.00	87.00		50sks Topout

Cementing Treatment



	Min	Max	Avg
Pressure (psi)	87.00	1,215.00	383.00
Rate (bpm)	2.50	8.00	4.64

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	1.00
Calculated Displacement Volume (bbls)	192.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	192.00	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)	1,215.00	Total Volume Pumped (bbls)	192.00
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement returns During Job	Partial	Lost Circulation During Cement Job	Yes

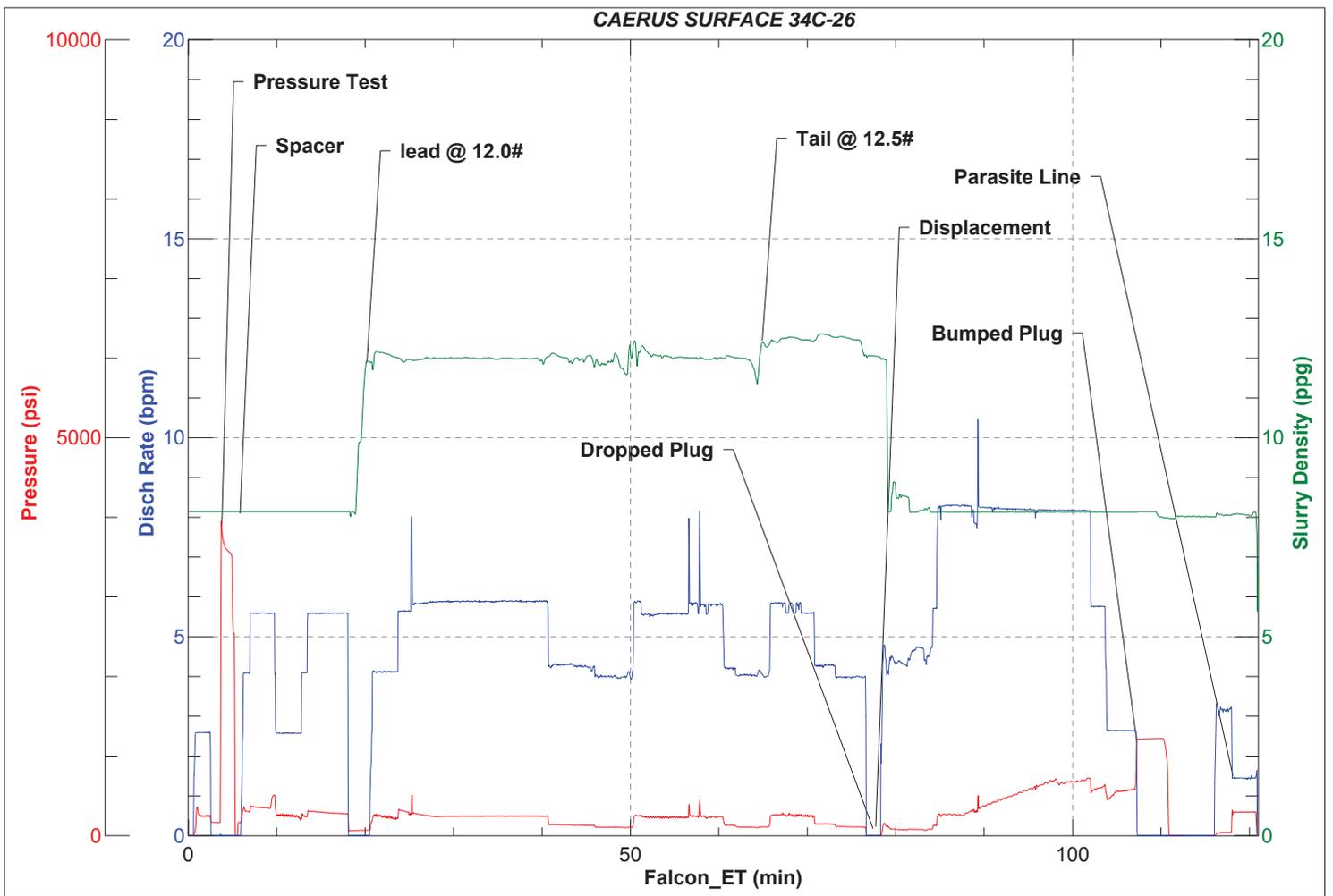


Customer Name CAERUS 330 District Rifle
 Well Name PUCKETT 34C-26 Supervisor ZEKE BUSHERI
 Job Type Surface Engineer GAGE PUTNAM

Seq No.	Start Date	Start Time	Event	Equipment	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	6/27/2018	16:00	CALLOUT						BJ CREW CALLED OUT WITH AN RTS OF 23:00
2	6/27/2018	19:07	STEACS/ JOURNEY						STEACS/ JOURNEY WITH BJ CREW ON CONVOY TO LOCATION
3	6/27/2018	19:15	DEPART YARD						BJ CREW DEPARTS YARD
4	6/27/2018	20:30	ON LOCATION						BJ CREW ARRIVES ON LOCATION, SPOT EQUIPMENT
5	6/27/2018	20:40	STEACS/ RIG UP						STEACS/ RIG UP WITH BJ CREW AS WELL AS JOB OPERATIONS
6	6/27/2018	20:45	RIG UP EQUIPMENT						BJ CREW RIGS UP EQUIPMENT FOR SURFACE JOB
7	6/27/2018	21:30	STANDBY						BJ CREW ON STANDBY, RIG RUNNING CASING
8	6/28/2018	2:10	SAFETY MEETING						SAFETY MEETING WITH RIG CREW ON CEMENT JOB OPERATIONS
9	6/28/2018	2:45	STAB HEAD						BJ CREW STABS HEAD TO WELL
10	6/28/2018	2:51	FILL LINES		8.33		5	360	FILL LINES 5 BBLs FRESH WATER
11	6/28/2018	2:55	TEST LINES					3000	TEST LINES AT 3000 PSI
12	6/28/2018	2:57	SPACER		8.33	4	15	360	15 BBLs FRESH WATER SPACER
13	6/28/2018	3:01	SODIUM SILICATE		10.4	4	20	234	20 BBLs SODIUM SILICATE SPACER
14	6/28/2018	3:06	SPACER		8.33	5	20	300	20 BBLs FRESH WATER SPACER
15	6/28/2018	3:12	LEAD DOWN HOLE		12	4		250	LEAD CEMENT DOWN HOLE AT 12.0 PPG
16	6/28/2018	3:22	50 BBLs GONE		12	6	50	245	50 BBLs GONE LEAD CEMENT
17	6/28/2018	3:31	100 BBLs GONE		12	6	100	248	100 BBLs GONE LEAD CEMENT
18	6/28/2018	3:42	150 BBLs GONE		12	5	150	205	150 BBLs GONE LEAD CEMENT
19	6/28/2018	3:51	200 BBLs GONE		12	6	200	235	200 BBLs GONE LEAD CEMENT / 235 BBLs Lead Pumped
22	6/28/2018	3:56	TAIL DOWN HOLE		12.5	4		110	TAIL CEMENT DOWN HOLE AT 12.5 PPG
23	6/28/2018	4:06	50 BBLs GONE		12.5	4	50	111	50 BBLs GONE TAIL CEMENT
24	6/28/2018	4:09	SHUT DOWN						DROP TOP PLUG, START DISPLACEMENT
25	6/28/2018	4:11	DISPLACEMENT		8.33	4	4	180	KICK OUT PLUG, START DISPLACEMENT
26	6/28/2018	4:24	50 BBLs GONE		8.33	8	50	282	50 BBLs GONE DISPLACEMENT
27	6/28/2018	4:30	100 BBLs GONE		8.33	8	100	520	100 BBLs GONE DISPLACEMENT
28	6/28/2018	4:36	150 BBLs GONE		8.33	8	150	688	150 BBLs GONE DISPLACEMENT
29	6/28/2018	4:43	BUMP PLUG		8.33	2.5	191	575	BUMP PLUG FCP- 575 PSI TOOK TO 1215 PSI HELD FOR 2 MINS
30	6/28/2018	4:45	CHECK FLOATS						FLOATS HELD 0.5 BBLs BACK
31	6/28/2018	4:48	PARASITE LINE		8.4	3	10	370	PUMPED 10 BBLs SUGAR WATER, BREAKOVER PRESSURE WAS 370 PSI
32	6/28/2018	5:15	STANDBY						BJ CREW ON STANDBY FOR 4 HRS FOR TOPOUT JOB
33	6/28/2018	9:00	STEACS/ TOPOUT						STEACS/ TOPOUT WITH BJ CREW, BJ CREW RIGS UP FOR TOPOUT JOB
34	6/28/2018	9:30	SPACER		9	4	2	79	PUMPED 2 BBLs OF CALCIUM CHLORIDE, WHILE PUMPING SODIUM SILICATE
35	6/28/2018	9:45	CEMENT		12.5	4	21	87	PUMPED 20 BBLs OF TOPOUT CEMENT/ 50 SKS TOTAL
36	6/28/2018	9:51	CEMENT TO SURFACE						CEMENT TO SURFACE, JOB COMPLETE
37	6/28/2018	10:00	STEACS/ RIG DOWN						STEACS/ RIG DOWN WITH BJ CREW
38	6/28/2018	10:45	RIG DOWN						BJ CREW RIGS DOWN EQUIPMENT
39	6/28/2018	11:15	STEACS/ JOURNEY						STEACS/ JOURNEY WITH BJ CREW ON CONVOY BACK TO DISTRICT
40	6/28/2018	12:00	DEPART LOCATION						BJ CREW DEPARTS LOCATION
41	6/28/2018		***MISC***						BUMP PLUG FCP- 575 PSI TOOK TO 1215 PSI HELD FOR 2 MINS, FLOATS HELD 0.5 BBLs BACK, PARASITE LINE BREAKOVER PRESSURE WAS 130 PSI, TOPOUT WAS 50 SKS/ 20 BBLs TOTAL, NO ISSUES DURING JOB, Top Of tail @ 2057.5, top of lead @ 0, Height of lead @ 2126, Height of tail 469



JobMaster Program Version 4.02C1
Job Number: 6726
Customer: Caerus
Well Name: Puckett 34C-26





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