



Caerus

Kickoff Plug Post Job Report

Puckett 23C-19 05-045-23200

S:24 T:6S R:97W Garfield CO

Quote #:

I 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	2/10/2018	Well	Puckett 23C-19
End Date	2/11/2018	County	GARFIELD
Client	CAERUS OPERATING, LLC	State/Province	CO
Client Field Rep		API	05-045-23200
Service Supervisor		Formation	
Field Ticket No.	Plug	Rig	H&P 329
District	Rifle, CO	Type of Job	Kick-off plug

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	8.92	9.63	36.00	2,527.00			
Open Hole	8.75			5,000.00	10.00		
Drill Pipe	4.28	5.00	19.50	5,000.00			

HARDWARE

Bottom Plug Used?	No	Tool Type
Bottom Plug Provided By		Tool Depth (ft)
Bottom Plug Size		Max Tubing Pressure - Rated (psi)
Top Plug Used?	No	Max Tubing Pressure - Operated (psi)
Top Plug Provided By		Max Casing Pressure - Rated (psi)

Cementing Treatment



Top Plug Size		Max Casing Pressure - Operated (psi)	
Centralizers Used	No	Pipe Movement	None
Centralizers Quantity		Job Pumped Through	
Centralizers Type		Top Connection Thread	1502
Landing Collar Depth (ft)	5,000	Top Connection Size	1502

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	Solids Present at End of Circulation	No
Circulation Prior to Job	Yes	10 sec SGS	8.00
Circulation Time (min)	1.00	10 min SGS	26.00
Circulation Rate (bpm)		30 min SGS	44.00
Circulation Volume (bbls)		Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.60	Gas Units	
PV Mud In	15		
YP Mud In	15		

TEMPERATURE

Ambient Temperature (°F)	17.00	Slurry Cement Temperature (°F)	65.00
Mix Water Temperature (°F)	55.00	Flow Line Temperature (°F)	82.00

Cementing Treatment



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	8.3300			0.00				10.0000
Tail Slurry	Plug	17.0000	0.9897	3.79	0.00	0.00	233	230.0000	40.0000
Displacement Final	Water	8.3300			0.00			0.0000	75.0000

Fluid Type	Fluid Name	Component	Concentration	UOM
Tail Slurry	Plug	DISPERSANT, CD-31	0.5000	BWOB
Tail Slurry	Plug	CEMENT, CLASS G	100.0000	PCT
Tail Slurry	Plug	R-6 LOW TEMP RETARDER 50 LB BAG BJS	0.2000	BWOB

Cementing Treatment



TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
2/11/2018 1:22 AM	Water	4.50	20.00	127.00		SPACER AHEAD
2/11/2018 1:37 AM	Plug	5.00	40.00	307.00		CEMENT
2/11/2018 1:47 AM	Water	5.00	75.00	201.00		DISPLACEMENT

	Min	Max	Avg
Pressure (psi)	127.00	307.00	217.00
Rate (bpm)	4.00	5.00	4.50

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	
Calculated Displacement Volume (bbls)	78.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	75.00	Amount of Spacer to Surface	
Did Float Hold?	No	Total Volume Pumped (bbls)	130.00
Bump Plug	No	Top Out Cement Spotted	No
Were Returns Planned at Surface	No	Lost Circulation During Cement Job	No
Cement returns During Job			



Customer Name	CAERUS	District	RIFLE
Well Name	PUCKET 23C-19	Supervisor	JAVIER CASTILLO
Job Type	KICK-OFF PLUG	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	2/10/2018	14:00	CALL OUT						ON LOCATION AT ASAP
2	2/10/2018	16:00	MEETING						STEACS JOURNEY MANAGEMENT MEETING WITH BJ CREW
3	2/10/2018	16:10	LEAVE YARD						LEAVE YARD
4	2/10/2018	19:00	ON LOCATION						ARRIVE ON LOCATION, RIG STARTING TO RUN DRILL PIPE
5	2/10/2018	19:30	MEETING						RIG UP SAFETY MEETING
6	2/10/2018	19:40	RIG UP						TARP AND HEAT CMT PUMP, RIG UP IRON/HOSES
7	2/10/2018	21:15	RIG UP						RIG UP COMPLETE TILL MUD TRANSPORT ARRIVES
8	2/11/2018	0:15	MEETING						PRE-JOB SAFETY MEETING WITH RIG CREW
9	2/11/2018	1:10	FILL LINES		8.34	3	5	56	FILL LINES
10	2/11/2018	1:12	TEST LINES					5400	PRESSURE TEST PUMPING LINES
11	2/11/2018	1:22	SPACER		8.34	4.5	10	127	WATER SPACER AHEAD OF CEMENT
12	2/11/2018	1:37	CEMENT		17	5	40	307	233 SKS/40 BBLS CEMENT AT 17.0 PPG, 0.98, 3.79 WITH 44lbs R-6, 110lbs CD-31
13	2/11/2018	1:47	DISPLACEMENT		8.34	5	3.5	215	WATER SPACER BEHIND
14	2/11/2018	1:48	DISPLACEMENT		9.6	5	72	201	DISPLACEMENT WITH MUD
15	2/11/2018	2:06	SHUTDOWN						DISCONNECT FROM DRILL PIPE
16	2/11/2018	2:15							RIG PULLED OUT 8 STANDS DRILL PIPE TO 4280ft, ALL STANDS DRY
17	2/11/2018	2:30	MEETING						RIG DOWN MEETING
18	2/11/2018	2:45	RIG DOWN						WASH UP PUMP TO THE PIT AND PICKLE PUMP, RIG DOWN IRON/HOSES
19	2/11/2018	3:45							RIG DOWN COMPLETE
20	2/11/2018	3:50	MEETING						AAR JOURNEY MANAGEMENT SAFETY MEETING WITH BJ CREW
21	2/11/2018	4:00	LEAVE LOCATION						BJ CREW LEAVE LOCATION



CAERUS BALANCE PLUG

