



Caerus

Surface Post Job Report

Puckett 15A-26-697 05-045-23407

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,

Gage Putnam
Field Engineer I | (970) 632-2006 | 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

Cementing Treatment



Start Date	4/1/2018	Well	Puckett 15A-26-697
End Date	4/1/2018	County	GARFIELD
Client	CAERUS OPERATING, LLC	State/Province	CO
Client Field Rep	George Urban	API	05-045-23407
Service Supervisor	Javier Castillo	Formation	-
Field Ticket No.	Surface	Rig	H&P 330
District	Rifle, CO	Type of Job	Surface

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)
Previous Casing	19.50	20.00	52.73	100.00	
Open Hole	14.75			2,540.00	25.00
Casing	8.92	9.63	36.00	2,439.00	

Shoe Length (ft): 44

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Bottom Plug Provided By	-	Tool Depth (ft)	2,395.00
Bottom Plug Size	-	Max Tubing Pressure - Rated (psi)	-
Top Plug Used?	Yes	Max Tubing Pressure - Operated (psi)	-
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3,520.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2,816.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	-	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	8RD
Landing Collar Depth (ft)	2,395	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	-
Circulation Time (min)	24.00	10 min SGS	-
Circulation Rate (bpm)	8.00	30 min SGS	-
Circulation Volume (bbls)	191.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	Yes	Gas Present	No
Mud Density In (ppg)	8.70	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	11		
PV Mud Out	-		
YP Mud In	8		
YP Mud Out	-		

TEMPERATURE

Ambient Temperature (°F)	50.00	Slurry Cement Temperature (°F)	94.00
Mix Water Temperature (°F)	80.00	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 1	8.33			0.00				20.00
Spacer / Pre Flush / Flush	Sodium Silicate	10.00			0.00				20.00
Spacer / Pre Flush / Flush	Water 2	8.33			0.00				20.00
Lead Slurry	BJCem S100.3.01D	12.00	2.5329	14.89	0.00		704	1,774.00	317.00
Tail Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	2,000.00		162	358.00	64.00
Displacement Final	Displacement	8.33			0.00			0.00	185.00
Top Out Slurry	BJCem S100.3.01D	12.50	2.2282	12.62	0.00		165	368.00	65.00

Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Sodium Silicate	SILICATE, SODIUM, A-3L	21.00	GPB
Lead Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.00	LBS/SK
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.00	BWOB
Lead Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.13	LBS/SK
Lead Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.00	PCT
Lead Slurry	BJCem S100.3.01D	CEMENT EXTENDER, SODIUM METASILICATE A-2 ANHYDROUS	2.00	LBS/SK
Lead Slurry	BJCem S100.3.01D	Foam Preventer, FP-25	0.30	BWOB
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER, SODIUM METASILICATE A-2 ANHYDROUS	2.00	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.00	BWOB
Tail Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.13	LBS/SK

Cementing Treatment



Tail Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.00	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.00	PCT
Tail Slurry	BJCem S100.3.01D	Foam Preventer, FP-25	0.30	BWOB
Top Out Slurry	BJCem S100.3.01D	CEMENT EXTENDER, SODIUM METASILICATE A-2 ANHYDROUS	2.00	LBS/SK
Top Out Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.00	BWOB
Top Out Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.13	LBS/SK
Top Out Slurry	BJCem S100.3.01D	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.00	LBS/SK
Top Out Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.00	PCT
Top Out Slurry	BJCem S100.3.01D	Foam Preventer, FP-25	0.30	BWOB

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Comments
4/1/2018 12:20 PM	Water 1	5.50	20.00	169.00	SPACER
4/1/2018 12:24 PM	Sodium Silicate	5.50	20.00	157.00	SPACER
4/1/2018 12:28 PM	Water 2	5.50	20.00	153.00	SPACER
4/1/2018 12:32 PM	BJCem S100.3.01D	5.80	317.00	229.00	LEAD CEMENT
4/1/2018 1:29 PM	BJCem S100.3.01D	5.80	64.00	151.00	TAIL CEMENT
4/1/2018 1:42 PM	Displacement	5.50	185.00	379.00	DISPLACEMENT
4/1/2018 6:35 PM	BJCem S100.3.01D	3.00	65.00	71.00	TOP OUT

	Min	Max	Avg
Pressure (psi)	97.00	379.00	238.00
Rate (bpm)	2.00	6.00	4.00

Cementing Treatment



DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	185.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	185.00	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)	379.00	Total Volume Pumped (bbls)	627.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	Yes
Cement returns During Job	None	Lost Circulation During Cement Job	Yes



Customer Name CAERUS District RIFLE
 Well Name PUCKETT 15A-26 Supervisor JAVIER CASTILLO
 Job Type SURFACE Engineer GAGE PUTNAM

Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	3/30/2018	7:00	YARD CALL					ON LOCATION AT 14:00HRS
2	3/30/2018	9:10	MEETING					STEACS JOURNEY MANAGEMENT MEETING WITH BJ CREW
3	3/30/2018	9:15	LEAVE YARD					BJ CREW LEAVE YARD
4	3/30/2018	11:10	ARRIVE ON LOC.					ARRIVE ON LOCATION, RIG WAS RUNNING CASING
5	3/30/2018	11:20	MEETING					STEACS RIG UP SAFETY MEETING
6	3/30/2018	11:30	RIG UP					RIG UP PUMPING IRON STAYING AWAY FROM RED ZONE, RIG UP WATER HOSES, RIG UP BULK HOSES
7	3/30/2018	12:40	COMPLETE					RIG UP COMPLETE TILL RIG LANDS CASING
8	3/30/2018	14:00	RIG					RIG HAVING ISSUES LANDING CASING
9	3/30/2018	18:00	RELEASED					BJ CREW WAS RELEASED FROM LOCATION
10	3/30/2018	18:20	FLUSH LINES					PICKLED CEMENT PUMP
11	3/30/2018	18:50	MEETING					STEACS JOURNEY MANAGEMENT MEETING WITH BJ CREW
12	3/30/2018	19:00	LEAVE LOCATION					BJ CREW LEAVE LOCATION, EQUIPMENT STAYED ON LOCATION
13	4/1/2018	1:00	CALL OUT					YARD CALL, ON LOCATION 08:00 HRS
14	4/1/2018	1:20	MEETING					STEACS JOURNEY MANAGEMENT MEETING WITH BJ CREW
15	4/1/2018	1:30	LEAVE YARD					BJ CREW LEAVE YARD
16	4/1/2018	3:00	ON LOCATION					ARRIVE ON LOCATION, RIG WAS RUNNING CASING
17	4/1/2018	11:10	LAND CASING					
18	4/1/2018	11:30	MEETING					PRE-JOB SAFETY MEETING WITH RIG CREW
19	4/1/2018	12:13	FILL LINES	8.34	2	5	97	FILL LINES
20	4/1/2018	12:16	TEST LINES				3000	PRESSURE TEST PUMPING LINES
21	4/1/2018	12:20	SPACER	8.34	5.5	15	169	FRESH WATER
22	4/1/2018	12:24	SPACER	9	5.5	20	157	SODIUM SILICATE
23	4/1/2018	12:28	SPACER	8.34	5.5	20	153	FRESH WATER
24	4/1/2018	12:32	LEAD CEMENT	12				BEGIN LEAD CEMENT AT 12.0 PPG, 2.53, 14.89
25	4/1/2018	12:41	LEAD CEMENT	12	5.8	50	193	50 BBLs PUMPED LEAD CEMENT
26	4/1/2018	12:49	LEAD CEMENT	12	5.8	50	197	100 BBLs PUMPED LEAD CEMENT
27	4/1/2018	12:58	LEAD CEMENT	12	5.8	50	215	150 BBLs PUMPED LEAD CEMENT
28	4/1/2018	13:06	LEAD CEMENT	12	5.8	50	229	200 BBLs PUMPED LEAD CEMENT
29	4/1/2018	13:15	LEAD CEMENT	12	5.8	50	227	250 BBLs PUMPED LEAD CEMENT
30	4/1/2018	13:24	LEAD CEMENT	12	5.8	67	171	317 BBLs PUMPED LEAD CEMENT
31	4/1/2018	13:29	TAIL CEMENT	12.5	4.8	64	151	TAIL CEMENT AT 12.5 PPG, 2.22, 12.62, TOP OF TAIL 1,939 FT
32	4/1/2018	13:41	SHUTDOWN					NO RETURNS THROUGH OUT MIXING CEMENT
33	4/1/2018	13:42	DISPLACEMENT	8.34				BEGIN DISPLACEMENT
34	4/1/2018	13:53	DISPLACEMENT	8.34	6	50	160	50 BBLs DISPLACEMENT PUMPED
35	4/1/2018	14:02	DISPLACEMENT	8.34	5.5	50	207	100 BBLs DISPLACEMENT PUMPED
36	4/1/2018	14:13	DISPLACEMENT	8.34	5.5	75	379	175 BBLs DISPLACEMENT PUMPED
37	4/1/2018	14:15	SLOW RATE	8.34	2.5	10	379	SLOW RATE, 10 BBLs DISPLACEMENT LEFT
38	4/1/2018	14:19	BUMP PLUG				1153	LAND TOP PLUG, NO RETURN THROUGH OUT DISPLACEMENT
39	4/1/2018	14:25	FLOATS					FLOATS HELD, 0.5 BBL FLOW BACK
40	4/1/2018	14:31	PARASITE	8.34	2	10	550	SUGAR WATER THROUGH PARASITE, PSI BROKE AT 550 PSI
41	4/1/2018	14:36	SHUTDOWN					GET READY FOR TOPOUT JOB
42	4/1/2018	18:29	CACL2	8.9	3	2	15	200 LBS OF CACL2
43	4/1/2018	18:31	SPACER	8.34	3	2	17	WATER SPACER BEHIND

Customer Name CAERUS District RIFLE
 Well Name PUCKETT 15A-26 Supervisor JAVIER CASTILLO
 Job Type SURFACE Engineer GAGE PUTNAM



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
44	4/1/2018	18:35	TOPOUT	12.5	3	65	71	165SKS/65BBLS OF CMT TO GET TO SURFACE
45	4/1/2018	18:55	SHUTDOWN					USED 205 GAL OF SODIUM SILICATE FOR TOPOUT JOB
46	4/1/2018	19:00	MEETING					RIG DOWN SAFETY MEETING
47	4/1/2018	19:05	RIG DOWN					WASH LINES, PICKEL CMT PUMP, RIG DOWN BJ EQUIPMENT
48	4/1/2018	20:45	COMPLETE					RIG DOWN COMPLETE
49	4/1/2018	20:50	MEETING					AAR JM STEACS MEETING
50	4/1/2018	21:00	LEAVE LOCATION					BJ CREW LEAVE LOCATION, THANK YOU FOR YOUR BUSINESS



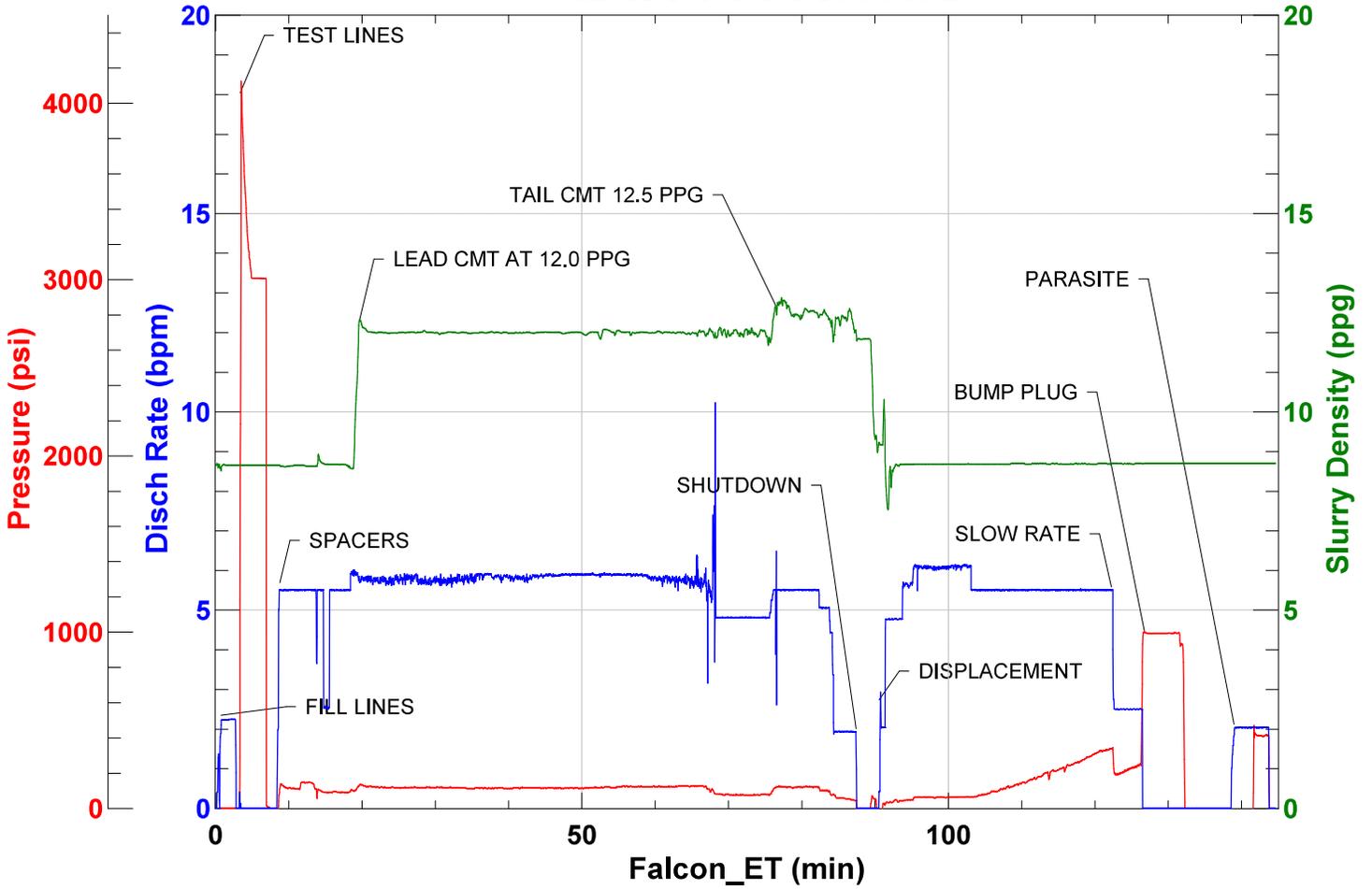
JobMaster Program Version 4.02C1

Job Number: 4272

Customer: CAERUS

Well Name: PUCKETT 15A-26

CAERUS 9 5/8 SURFACE





JobMaster Program Version 4.02C1

Job Number: 4272

Customer: CAERUS

Well Name: PUCKETT 15A-26

CAERUS TOPOUT

