



Caerus

Surface Post Job Report

Puckett 15B-26-697 05-045-23409

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	4/7/2018	Well	Puckett 15B-26-697
End Date	4/8/2018	County	GARFIELD
Client	CAERUS OPERATING, LLC	State/Province	CO
Client Field Rep		API	05-045-23409
Service Supervisor		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)	TVD (ft)	Excess(%)	Grade	Thread
Previous Casing	19.50	20.00	52.73	100.00	100.00			
Open Hole	14.75			2,000.00	2,000.00	25.00		
Open Hole	14.75			2,540.00	2,500.00	0.00		
Casing	8.92	9.63	36.00	2,520.00	2,500.00			

Shoe Length (ft): 40

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	2,476.00
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	No	Pipe Movement	None
Landing Collar Depth (ft)	2,460	Job Pumped Through	Manifold
		Top Connection Thread	butress
		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	5.00
Circulation Time (min)	60.00	10 min SGS	11.00
Circulation Rate (bpm)	5.00	30 min SGS	18.00
Circulation Volume (bbls)	200.00	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
PV Mud In	17		
YP Mud In	11		

TEMPERATURE

Ambient Temperature (°F)	42.00	Slurry Cement Temperature (°F)	66.00
Mix Water Temperature (°F)	55.00	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 / 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		704	1,774.0000	315.9000
Tail Slurry	BJCem S100.3.01D	12.5000	2.2282	12.62	2,000.00		162	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	2,000.00		15	33.3000	5.9000

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	CEMENT, ASTM TYPE III	100.0000	PCT
Tail Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.3.01D	Foam Preventer, FP-25	0.3000	BWOB
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	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
Top Out Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.0000	PCT
Top Out Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Top Out Slurry	BJCem S100.3.01D	Foam Preventer, FP-25	0.3000	BWOB
Top Out Slurry	BJCem S100.3.01D	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	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

Cementing Treatment



TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
04/08/2018 07:48	Water 1	4.00	20.00	75.00		
04/08/2018 07:55	Sodium Silicate	4.00	20.00	123.00		
04/08/2018 07:59	Water 2	4.00	20.00	123.00		
04/08/2018 08:05	BJCem S100.3.01D	5.50	317.00	153.00		
04/08/2018 09:04	BJCem S100.3.01D	5.50	64.00	267.00		
04/08/2018 09:24	Displacement	5.50	191.40	316.00		
04/08/2018 15:02	BJCem S100.3.01D	2.00	5.90	105.00		Top Out Slurry

	Min	Max	Avg
Pressure (psi)	75.00	1,006.00	258.00
Rate (bpm)	0.50	5.50	5.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	191.40	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	187.00	Amount of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amount Bled Back After Job	1.00
Bump Plug Pressure (psi)	502.00	Total Volume Pumped (bbls)	633.00
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
Well Name PUCKETT 15B-26
Job Type Surface

District Rifle
Supervisor WENDELL YOUNGBERG
Engineer GAGE PUTNAM

Seq No.	Start Date	Start Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	4/7/2018	19:00	Mobilization	Callout		1					BJ CREW CALLED OUT WITH A RTS OF 02:00 AM 4/8/18
2	4/7/2018	19:30	Mobilization								JOURNEY MANAGEMENT WITH BJ CREW
3	4/7/2018	19:45	Mobilization	Leave Location		74					LEAVE DISTRICT
4	4/7/2018	20:30	Mobilization	Arrive on Location		48					ARRIVE ON LOCATION
5	4/7/2018	20:40	Operational								STEACS BREIFING WITH BJ CREW
6	4/7/2018	20:50	Operational	Spot Units		49					SPOT TRUCKS
7	4/7/2018	21:00	Operational	Rig Up		50					RIG UP ALL EQUIPMENT
9	4/8/2018	5:30	Operational	Prime Up		52					PIPE ON BOTTOM, RIG TO CIRCULATE
10	4/8/2018	7:00	Operational	Safety Meeting		53					SAFTEY MEETING WITH BJ CREW, COMPANY, AND RIG CREW
11	4/8/2018	7:35	Operational	Rig Up		50					RIG UP CEMENT HEAD TO CASING
12	4/8/2018	7:45	Operational	Start Pumping		55	8.34	2	5	75	BREAK CIRCULATION
13	4/8/2018	7:48	Operational	Pressure Test		54					TEST LINES 3000
14	4/8/2018	7:50	Operational	Pump Spacer		56	8.34	4	15	123	FRESH WATER SPACER
15	4/8/2018	7:55	Operational	Pump Spacer		56	10	4	20	125	SODIUM SILICATE SPACER
16	4/8/2018	7:59	Operational	Pump Spacer		56	8.34	4	20	123	FRESH WATER SPACER
17	4/8/2018	8:05	Operational	Pump Lead Cement		58	12				BATCH UP LEAD CEMENT @ 12.0 PPG (704 SXS Y- 2.53 MW- 14.89)
18	4/8/2018	8:07	Operational	Pump Lead Cement		58	12	5	317	168	LEAD CEMENT @ 12.0 PPG DOWNHOLE
19	4/8/2018	8:17	Operational	Pump Lead Cement		58	12	5.5		150	50 BBLS GONE LEAD SLURRY
20	4/8/2018	8:26	Operational	Pump Lead Cement		58	12	5.5		148	100 BBLS GONE LEAD SLURRY
21	4/8/2018	8:35	Operational	Pump Lead Cement		58	12	5.5		153	150 BBLS GONE LEAD SLURRY
22	4/8/2018	8:44	Operational	Pump Lead Cement		58	12	5.5		153	200 BBLS GONE LEAD SLURRY
23	4/8/2018	8:54	Operational	Pump Lead Cement		58	12	4.5		86	250 BBLS GONE LEAD SLURRY
24	4/8/2018	9:02	Operational	Pump Lead Cement		58	12	3		82	300 BBLS GONE LEAD SLURRY
25	4/8/2018	9:04	Operational	Pump Tail Cement		60	12.5				BATCH UP TAIL SLURRY @ 12.5 PPG (162 SXS Y- 2.22 MW-12.62)
26	4/8/2018	9:10	Operational	Pump Tail Cement		60	12.5	5	60	427	TAIL CEMENT @ 12.5 PPG DOWN HOLE
27	4/8/2018	9:16	Operational	Pump Tail Cement		60	12.5	5		169	50 BBLS GONE TAIL SLURRY
28	4/8/2018	9:24	Operational	Pump Displacement		64			189		DROP TOP PLUG START DISPLACEMENT
29	4/8/2018	9:25	Operational	Pump Displacement		64	12.5	5	4	195	4 BBLS @ 12.5 PPG ON TOP OF PLUG
30	4/8/2018	9:30	Operational	Pump Displacement		64	8.34	5.5		172	50 BBLS GONE DISPLACEMENT
31	4/8/2018	9:39	Operational	Pump Displacement		64	8.34	5.5		220	100 BBLS GONE DISPLACEMENT
32	4/8/2018	9:48	Operational	Pump Displacement		64	8.34	5.5		506	150 BBLS GONE DISPLACEMENT
33	4/8/2018	9:54	Operational	Pump Displacement		64	8.34	2	10	465	SLOW RATE TO BUMP PLUG
34	4/8/2018	9:59	Operational	Land Plug		67				1006	BUMP PLUG 1464 PSI
35	4/8/2018	10:06	Operational	Check Floats		68					BLEED PRESSURE, CHECK FLOATS 1 BBLS BACK
36	4/8/2018	10:09									RIG UP TO PUMP PARASITE LINE
37	4/8/2018	10:18	Operational	Start Pumping		55	8.34	1	10	277	PUMP 10 BBLS SUGAR WATER
43	4/8/2018	10:30	StandBy	Customer		85					BJ ON STANDBY, WAIT 4 HOURS TO DO TOP OUT JOB
44	4/8/2018	14:15	Operational	Rig Up		50					BJ RIG UP TO DO TOPOUT JOB
45	4/8/2018	14:52	Operational	Pump Spacer		56	8.6	2.5	3	50	PUMP CACL WATER AHEAD
46	4/8/2018	15:00	Operational								START INJECTING SODIUM SILICATE
47	4/8/2018	15:02	Operational	Pumping Cement		61	12.5				BATCH UP CEMENT @ 12.5 PPG
48	4/8/2018	15:03	Operational	Pumping Cement		61	12.5	0.5	5	52	PUMP CEMENT @ 12.5 PPG down back side
	4/8/2018	15:10	Operational	Cement Back to Surface							CEMENT TO SURFACE
49	4/8/2018	15:15	Operational	Pumping Cement		61	12.5	0.5	2	25	Pumped 2 BBls cement @12.5 previous wells parasite line per customer
53	4/8/2018	15:20	Operational	End Pumping		69					SHUT DOWN BLEED PRESSURE



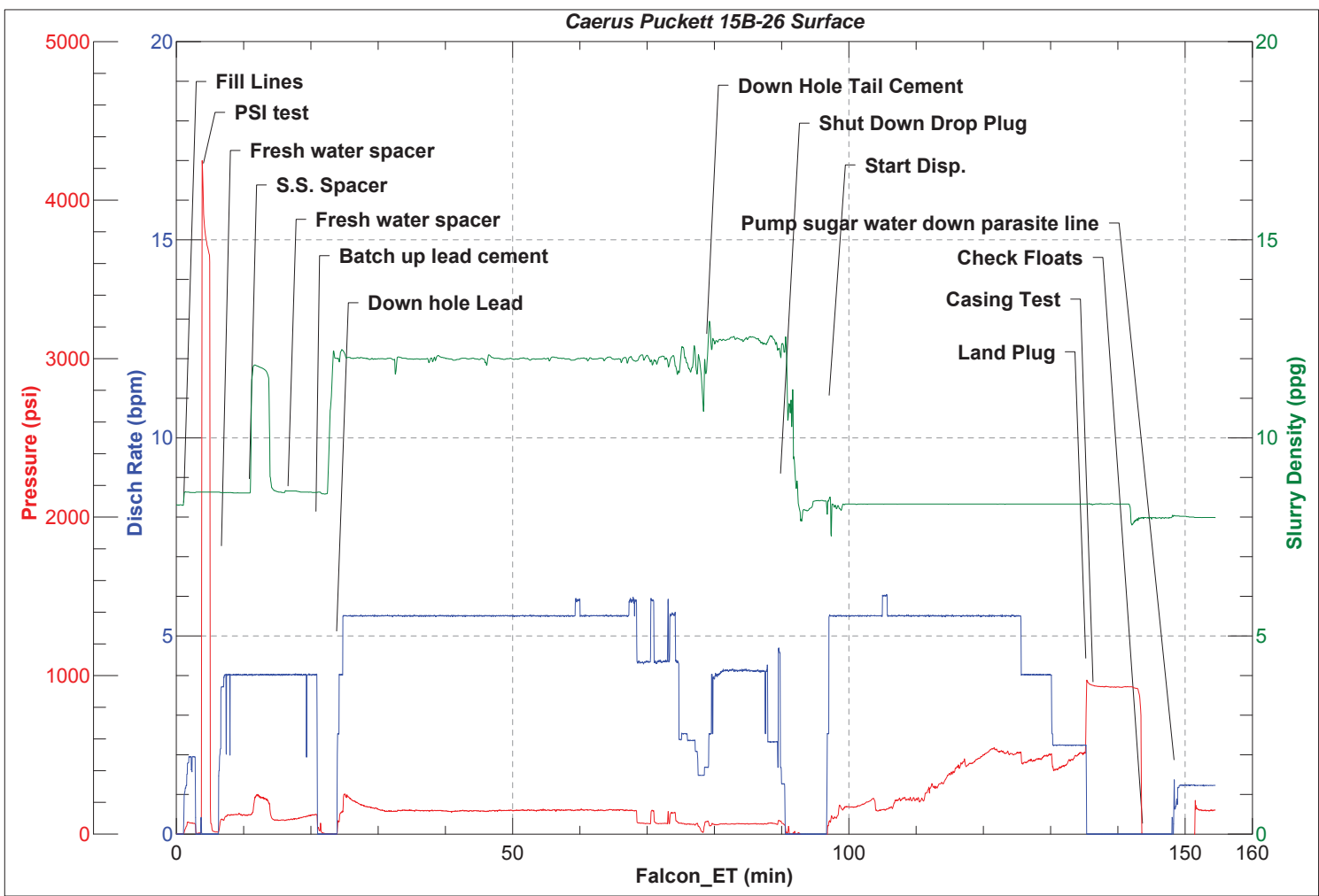
Customer Name CAERUS
Well Name PUCKETT 15B-26
Job Type Surface

District Rifle
Supervisor WENDELL YOUNGBERG
Engineer GAGE PUTNAM

Seq No.	Start Date	Start Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
54	4/8/2018	15:35	Operational	Safety Meeting		53					RIG DOWN MEETING WITH BJ CREW
55	4/8/2018	15:45	Operational	Clean Pumps and Lines		62					START WASH UP OF PUMP AND RIG DOWN EQUIPMENT
56	4/8/2018	16:30	Operational	Safety Meeting		53					JOURNEY MANAGEMENT WITH BJ CREW
57	4/8/2018	17:00	Mobilization	Leave Location		74					LEAVE LOCATION
58											
59											FCP-502 PSI, BUMP PLUG- 1006 PSI, BLEED PRESSURE FLOATS HOLDING- 1 BBL BACK
60											
61											CALCULATED CEMENT TOPS- LEAD - 0' TAIL- 2017'
62											
63											TOPOUT- 15SXS Y-2.22 MW-12.62 (5 BBLs) 1 BBL TO SURFACE



JobMaster Program Version 4.02C1
Job Number: 4490
Customer: Caerus
Well Name: Puckett 15B-26





JobMaster Program Version 4.02C1

Job Number: 4490

Customer: caerus

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