



COGCC doc # 2597536

Caerus

Surface Post Job Report

Puckett 35B-26-697 05-045-23399

S:26 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	6/2/2018	Field Ticket#	FT-07346-F7X5V80202-21388
End Date	6/3/2018	Well	Puckett 35B-26-697
Client	CAERUS OPERATING, LLC	API#	05-045-23399
Client Field Rep.	George Urban	Well Classification	
Service Sup.	Paul Linn III	County	GARFIELD
District	Rifle, CO	State/Province	CO
Type of Job	Surface	Formation	
Execution ID	EXC-07346-F7X5V802	Rig	H&P 330
Project ID	PRJ1007341		

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			2,522.00	0.00		
Casing	8.92	9.63	36.00	2,502.90			

Shoe Length (ft): 40

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	2,462.00
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	9.625	Job Pumped Through	Manifold
Centralizers Used	Yes	Top Connection Thread	8 RND.
Centralizers Quantity	9.00	Top Connection Size	9.625
Centralizers Type	Bow		
Landing Collar Depth (ft)	2,503		

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	6.00
Circulation Time (min)	45.00	10 min SGS	12.00
Circulation Rate (bpm)	7.00	30 min SGS	21.00
Circulation Volume (bbls)	315.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.20	Gas Units	0
Mud Density Out (ppg)	9.20		
PV Mud In	15		
PV Mud Out	15		
YP Mud In	10		
YP Mud Out	10		

TEMPERATURE

Ambient Temperature (°F)	51.00	Slurry Cement Temperature (°F)	82.60
Mix Water Temperature (°F)	60.10	Flow Line Temperature (°F)	0.00

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	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		500.00	115	256.4500	45.8000

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, ASTM TYPE III	100.0000	PCT
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 EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
Lead Slurry	BJCem S100.3.01D	FOAM PREVENTER, FP-25	0.3000	BWOB
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,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	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
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	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	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

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
6/3/2018 4:35 AM	Water 1	4.00	20.00	185.00		
6/3/2018 4:40 AM	Sodium Silicate	4.00	20.00	410.00		
6/3/2018 4:45 AM	Water 2	4.00	20.00	316.00		
6/3/2018 4:56 AM	BJCem S100.3.01D	4.00	258.19	220.00		
6/3/2018 5:52 AM	BJCem S100.3.01D	6.00	63.94	118.00		
6/3/2018 6:16 AM	Displacement	5.50	190.33	153.00		
6/3/2018 11:41 AM	BJCem S100.3.01D	2.00	46.00	190.00		Top Out

Cementing Treatment



	Min	Max	Avg
Pressure (psi)	114.00	706.00	220.00
Rate (bpm)	2.00	7.00	4.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	190.33	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	190.00	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	1.00
Bump Plug Pressure (psi)	706.00	Total Volume Pumped (bbls)	613.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	Yes
Cement returns During Job	Partial	Lost Circulation During Cement Job	Yes

Customer Name CAERUS District Rifle
 Well Name PUCKETT 358-26 Supervisor ANDREW LINN
 Job Type Surface Engineer ZEN KEITH



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	6/2/2018	17:30	CALL OUT					CALL OUT ON LOCATION TIME OF 01:00
2	6/2/2018	19:33	STEACS					PRE CONVOY SAFETY MEETING
3	6/2/2018	20:00	LEAVE RIFLE YARD					LEAVE RIFLE YARD FOR H&P 330.
4	6/2/2018	22:16	ARRIVE ON LOCATION					ARRIVE ON LOCATION. RIG CREW WAS RUNNING CASING.
5	6/2/2018	22:19	SITE ASSESSMENT					DID ROCK DRILL WITH CREW AND WALKED LOCATION
6	6/2/2018	22:22	SPOT EQUIPMENT					SPOT IN EQUIPMENT AND RIG UP ALL GROUND EQUIPMENT
7	6/2/2018	22:28	STEACS					PRE RIG UP SAFETY MEETING
8	6/2/2018	22:32	RIG UP					RIGGED IN ALL GROUND EQUIPMENT
9	6/3/2018	2:11	STEACS					PRE JOB SAFETY MEETING WITH RIG CREW AND ALL BJ SERVICES CEMENT CREW
10	6/3/2018	4:16	RIG UP					STAB PLUG CONTAINER, AND HOOK UP LINES TO PLUG CONTAINER
11	6/3/2018	4:27	FILL LINES	8.33	2	5	278	FILL LINES WITH 5 BBLS. OF FRESH WATER AT 2 BBLS./MIN.
12	6/3/2018	4:29	PRESSURE TEST				3419	PRESSURE TEST TO 3419 PSI. PRESSURE HELD
13	6/3/2018	4:39	FRESH WATER SPACER	8.33	4	20	343	REMAINING 15 BBLS. OF FRESH WATER FOR A TOTAL OF 20 BBLS. OF FRESH WATER
14	6/3/2018	4:44	SODIUM SILICATE SPACER	10.5	4	20	410	SODIUM SILICATE SPACER 50/50
15	6/3/2018	4:50	FRESH WATER SPACER	8.33	4	20	323	FRESH WATER SPACER
16	6/3/2018	4:56	LEAD CEMENT	12	4	20	220	LEAD CEMENT 12 PPG. 573 SKS. 2.53 CUFT./SK. 14.89 GAL./SK. FOR 258.19 BBLS OF LEAD REQUIRING A TOTAL OF 203.14 BBLS. OF MIX WATER. WEIGHT VERIFIED WITH MUD SCALES.
17	6/3/2018	5:05	LEAD CEMENT	12	4	50	166	PUMPED LEAD CEMENT
18	6/3/2018	5:14	LEAD CEMENT	12	4	100	158	PUMPED LEAD CEMENT
19	6/3/2018	5:21	LEAD CEMENT	12	3	124	116	PUMPED LEAD CEMENT
20	6/3/2018	5:30	LEAD CEMENT	12	3	150	114	PUMPED LEAD CEMENT
21	6/3/2018	5:35	LEAD CEMENT	12	6	200	114	PUMPED LEAD CEMENT
22	6/3/2018	5:41	LEAD CEMENT	12	6	250	112	PUMPED LEAD CEMENT
23	6/3/2018	5:52	LEAD CEMENT	12	5	285	105	FINISHED PUMPING LEAD CEMENT WITH 285. BBLS. AWAY.
24	6/3/2018	5:54	TAIL CEMENT	12.5	6.5	5	118	TAIL CEMENT 12.5 PPG. 161 SKS. 2.23 CUFT./SK. 12.62 GAL./SK. FOR 63.94 BBLS OF TAIL REQUIRING A TOTAL OF 48.38 BBLS. OF MIX WATER. WEIGHT VERIFIED WITH MUD SCALES.
25	6/3/2018	6:01	TAIL CEMENT	12.5	6	50	111	PUMPED TAIL CEMENT
26	6/3/2018	6:11	TAIL CEMENT	12.5	3	78	107	FINISHED PUMPING TAIL CEMENT WITH 78 BBLS. AWAY.
27	6/3/2018	6:11	SHUT DOWN					SHUT DOWN
28	6/3/2018	6:13	DROP PLUG					DROP TOP PLUG VERIFIED BY COMPANY MAN
29	6/3/2018	6:16	DISPLACEMENT	8.33	5.5	10	153	FRESH WATER DISPLACEMENT WITH THE FIRST 4 BBLS. OF DISPLACEMENT BEING TAIL CEMENT AT 12.5 PPG.
30	6/3/2018	6:24	DISPLACEMENT	8.33	5.5	50	214	FRESH WATER DISPLACEMENT
31	6/3/2018	6:33	DISPLACEMENT	8.33	5.5	100	505	FRESH WATER DISPLACEMENT
32	6/3/2018	6:37	LOST RETURNS					FRESH WATER DISPLACEMENT
33	6/3/2018	6:39	DISPLACEMENT	8.33	4	130	426	FRESH WATER DISPLACEMENT
34	6/3/2018	6:44	DISPLACEMENT	8.33	4	150	506	FRESH WATER DISPLACEMENT
35	6/3/2018	6:50	DISPLACEMENT	8.33	4	180	632	FRESH WATER DISPLACEMENT
36	6/3/2018	6:50	DISPLACEMENT	8.33	2	181	504	FRESH WATER DISPLACEMENT
37	6/3/2018	6:52	DISPLACEMENT	8.33	2	190	706	FINISHED PUMPING DISPLACEMENT
38	6/3/2018	6:52	LAND PLUG				1350	LANDED PLUG AT 706 PSI TOOK TO 1350 PSI.
39	6/3/2018	6:55	CHECK FLOATS					CHECK FLOATS FLOATS HELD 1 BBL. BACK
40	6/3/2018	6:56	RIG UP TO PARASITE STRING					BREAK OFF OF PLUG CONTAINER AND RIG UP TO PARASITE STRING
41	6/3/2018	6:59	PUMP ON PARASITE STRING	8.33	2	5	0	PUMP ON PARASITE STRING
42	6/3/2018	7:01	BREAK CIRCULATION ON PARASITE STING	8.33	2	6	288	BREAK CIRCULATION ON PARASITE STING WITH 6BBLS. AWAY AT 288 PSI.
43	6/3/2018	7:05	SHUT DOWN					SHUT DOWN
44	6/3/2018	7:06	WAIT 4 HOURS					WAIT 4 HOURS TO TOP OUT. START TOP OUT AT 11:06.
45	6/3/2018	11:15	STEACS					PRE TOP OUT SAFETY MEETING WITH RIG CREW AND ALL BJ SERVICES CEMENT CREW
46	6/3/2018	10:50	RIG UP					RIG UP TO TOP OUT
47	6/3/2018	11:29	CALCIUM CHLORIDE					200 LBS. OF CALCIUM CHLORIDE IN 2.5 BBLS. OF FRESH WATER
48	6/3/2018	11:33	SODIUM SILICATE SPACER					SODIUM SILICATE SPACER
49	6/3/2018	11:41	TOP OUT	12.5	2	5	190	PUMP TOP OUT CEMENT 115 SKS. 2.23 CUFT./SK. 12.62 GAL./SK. FOR 45.67 BBLS OF TOP OUT REQUIRING A TOTAL OF 34.55 BBLS. OF MIX WATER. WEIGHT VERIFIED WITH MUD SCALES.
50	6/3/2018	11:50	TOP OUT	12.5	2	20	106	PUMPED TOP OUT CEMENT

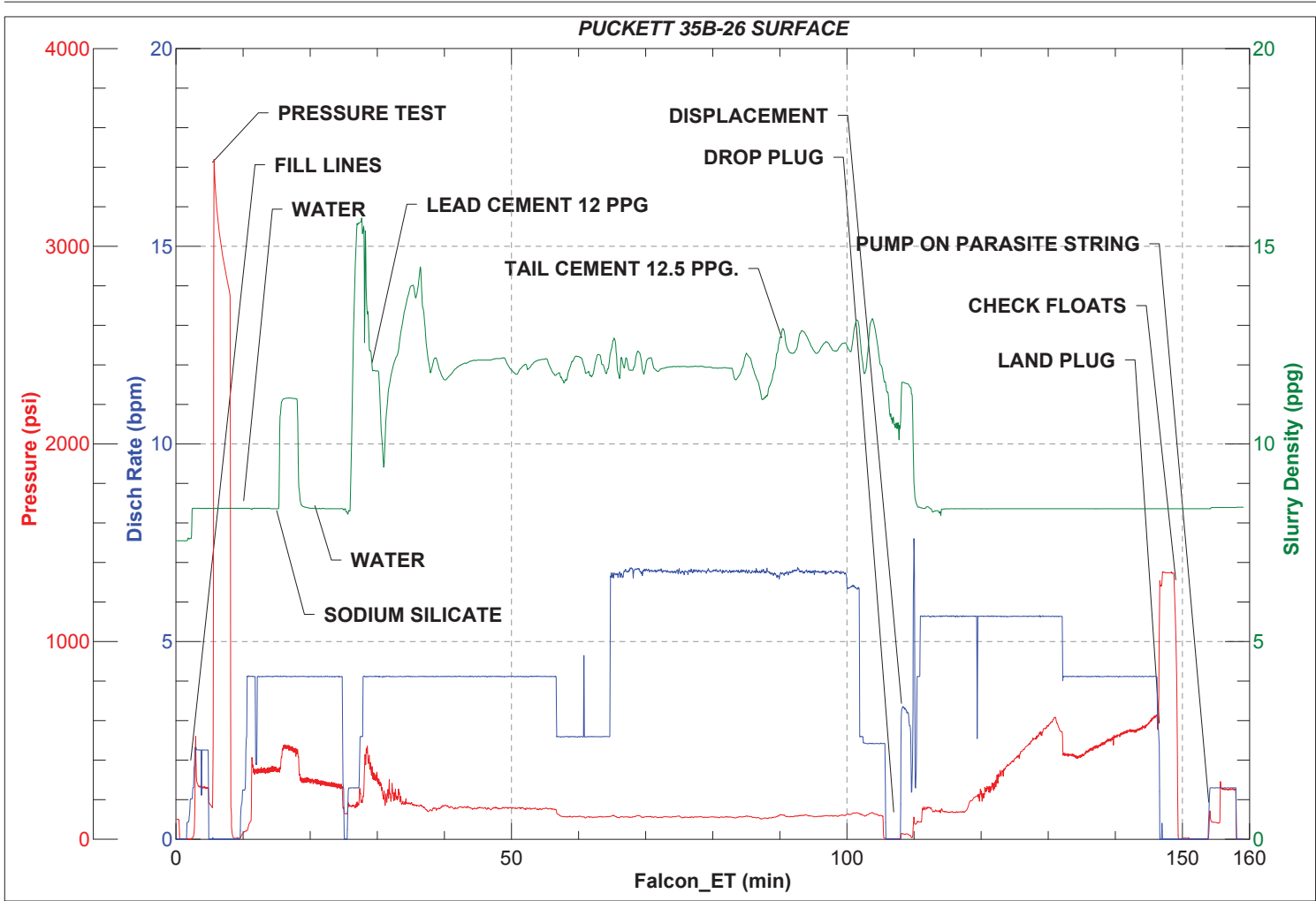
Customer Name CAERUS District Rifle
 Well Name PUCKETT 358-26 Supervisor ANDREW LINN
 Job Type Surface Engineer ZEN KEITH



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
51	6/3/2018	11:50	CEMENT TO SURFACE					CEMENT TO SURFACE. SHUT DOWN CEMENT FELL
52	6/3/2018	11:52	TOP OUT	12.5	2	21	106	PUMPED TOP OUT CEMENT
53	6/3/2018	11:52	CEMENT TO SURFACE					CEMENT TO SURFACE. SHUT DOWN CEMENT STAYED AT SURFACE
54	6/3/2018	11:55	PUMP ON LAST PARASITE STRING	12.5	2	6	85	PUMPED 6 BBLS. OF TOP OUT CEMENT AT 12.5 PPG. ON LAST PARASITE STRING
55	6/3/2018	11:55	SHUT DOWN					SHUT DOWN
56	6/3/2018	12:06	STEACS					PRE RIG DOWN SAFETY MEETING WITH ALL BJ SERVICES CEMENT CREW.
57	6/3/2018	12:15	PUMP INTO CELLAR					PUMPED 10 BBLS. OF SUGAR WATER INTO CELLAR TO CLEAN RIG PUMP.
58	6/3/2018	12:19	WASH PUMPS AND LINES					WASH PUMPS AND LINES TO 3- SIDED TANK
59	6/3/2018	12:19	BLOW DOWN SILO					BLOW DOWN SILO 11 INTO SILO 652
60	6/3/2018	12:30	RIG DOWN					RIG DOWN ALL EQUIPMENT
61	6/3/2018	12:44	AAR					AFTER ACTION REVIEW
62	6/3/2018	12:50	STEACS					PRE CONVOY SAFETY MEETING
63	6/3/2018	13:02	DEPART LOCATION					DEPART FROM H&P 330 FOR RIFLE YARD. THANK YOU FOR USING BJ SERVICES, ANDREW LINN AND CREW.



JobMaster Program Version 4.02C1
Job Number: 6006
Customer: CAERUS
Well Name: PUCKETT 35B-26





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Job Number: 6006
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