



Caerus

Surface Post Job Report

NPR 23B-10-596 05-045-23775

S:10 T:5S R:96W 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	5/7/2018	Field Ticket#	FT-06509-R5C9L10202-77669
End Date	5/8/2018	Well	NPR 23B-10-596
Client	CAERUS OPERATING, LLC	API#	05-045-23775
Client Field Rep.	Clint McPhie	Well Classification	
Service Sup.	Francisco Castillo	County	GARFIELD
District	Rifle, CO	State/Province	CO
Type of Job	Surface	Formation	
Execution ID	EXC-06509-R5C9L102	Rig	H&P 273
Project ID	PRJ1006539		

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			3,000.00			
Casing	8.92	9.63	36.00	2,949.82		J-55	LTC

Shoe Length (ft): 45

HARDWARE

Bottom Plug Used?	No	Max Casing Pressure - Rated (psi)	3,520.00
Top Plug Used?	Yes	Max Casing Pressure - Operated (psi)	2,816.00
Top Plug Provided By	Non BJ	Pipe Movement	None
Top Plug Size	9.625	Job Pumped Through	Manifold
Centralizers Used	Yes	Top Connection Thread	8RD
Centralizers Quantity		Top Connection Size	9.625
Centralizers Type	Bow		
Landing Collar Depth (ft)	2,950		

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	9.00
Circulation Time (min)	60.00	10 min SGS	16.00
Circulation Rate (bpm)	7.00	30 min SGS	28.00
Circulation Volume (bbls)	420.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.10	Gas Units	
Mud Density Out (ppg)	9.10		
PV Mud In	15		
PV Mud Out	15		
YP Mud In	10		
YP Mud Out	10		

TEMPERATURE

Ambient Temperature (°F)	60.00	Slurry Cement Temperature (°F)	63.00
Mix Water Temperature (°F)	54.00	Flow Line Temperature (°F)	92.00

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	Fresh Water	8.3300			0.00				20.0000
Spacer / Pre Flush / Flush	Sodium Silicate	10.0000			0.00				20.0000
Spacer / Pre Flush / Flush	Fresh Water	8.3300			0.00				20.0000
Lead Slurry	BJCem S100.3.01D	12.0000	2.5298	14.86	0.00	2,500.00	788	1,036.0000	355.0000
Tail Slurry	BJCem S100.3.01D	12.5000	2.2256	12.59	2,500.00	500.00	118	262.0000	46.6000
Displacement Final	Displacement	8.3300			0.00			0.0000	225.0000

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,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK
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	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT, ASTM TYPE III	100.0000	PCT
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	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	CEMENT EXTENDER,SODIUM METASILICATE A-2 ANHYDROUS	2.0000	LBS/SK

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
5/8/2018 12:39 AM	Fresh Water	5.50	20.00	237.00		SPACER
5/8/2018 12:42 AM	Sodium Silicate	5.50	20.00	250.00		SPACER
5/8/2018 12:46 AM	Fresh Water	4.50	20.00	89.00		SPACER
5/8/2018 12:49 AM	BJCem S100.3.01D	5.50	355.00	183.00		LEAD CEMENT
5/8/2018 2:05 AM	BJCem S100.3.01D	3.50	46.60	129.00		TAIL CEMENT
5/8/2018 2:20 AM	Displacement	5.00	225.00	675.00		DISPLACEMENT

	Min	Max	Avg
Pressure (psi)	81.00	675.00	378.00
Rate (bpm)	3.50	6.00	4.75

Cementing Treatment



DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	40.00
Calculated Displacement Volume (bbls)	225.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	225.00	Amount of Spacer to Surface	
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)	560.00	Total Volume Pumped (bbls)	687.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement returns During Job	Full	Lost Circulation During Cement Job	No

Customer Name CAERUS District RIFLE
 Well Name NPR 23B-10 Supervisor JAVIER CASTILLO
 Job Type SURFACE Engineer GAGE PUTNAM



Seq No.	Start Date	Start Time	Event	Equipment	Density (lb/gal)	Pump Rate	Pump Vol (bbls)	Pipe Pressure	Comments
1	5/7/2018	5:00	YARD CALL						ON LOCATION AT 09:00 HRS
2	5/7/2018	5:50	MEETING						STEACS JOURNEY MANAGEMENT MEETING WITH BJ CREW
3	5/7/2018	6:00	LEAVE YARD						BJ CREW LEAVE YARD
4	5/7/2018	7:30	ARRIVE ON LOC.						ARRIVE ON LOCATION, RIG WAS GETTING READY TO RUN CASING
5	5/7/2018	21:40	LAND CASING						RIG LANDED CASING, CIRCULATE WELL
6	5/7/2018	22:20	MEETING						RIG UP MEETING
7	5/7/2018	22:30	RIG UP						RIG UP BJ EQUIPMENT
8	5/7/2018	23:30	COMPLETE						RIG UP COMPLETE
9	5/8/2018	0:05	MEETING						PRE-JOB SAFETY MEETING WITH RIG CREW
10	5/8/2018	0:34	SPACER		8.34	2	5	200	FILL LINES
11	5/8/2018	0:36	TEST LINES					2930	PRESSURE TEST PUMPING IRON
12	5/8/2018	0:39	SPACER		8.34	5.5	15	237	WATER SPACER
13	5/8/2018	0:42	SPACER		11	5.5	20	250	SODIUM SILICATE SPACER
14	5/8/2018	0:46	SPACER		8.34	4.5	20	189	WATER SPACER
15	5/8/2018	0:49	LEAD CEMENT		12				BEGIN LEAD CEMENT, 788SKS/355BBLs AT 12.0 PPG, 2.53, 14.89
16	5/8/2018	0:59	LEAD CEMENT		12	4	50	127	50BBLs PUMPED LEAD CEMENT
17	5/8/2018	1:10	LEAD CEMENT		12	4	50	85	100BBLs PUMPED LEAD CEMENT
18	5/8/2018	1:23	LEAD CEMENT		12	4	50	81	150BBLs PUMPED LEAD CEMENT
19	5/8/2018	1:33	LEAD CEMENT		12	5.5	50	181	200BBLs PUMPED LEAD CEMENT
20	5/8/2018	1:42	LEAD CEMENT		12	5.5	50	177	250BBLs PUMPED LEAD CEMENT
21	5/8/2018	1:51	LEAD CEMENT		12	6	50	183	300BBLs PUMPED LEAD CEMENT
22	5/8/2018	2:00	LEAD CEMENT		12	4	55	89	355BBLs PUMPED LEAD CEMENT
24	5/8/2018	2:05	TAIL CEMENT		12.5	3.5	46.6	129	TAIL CEMENT, 118SKS/46.6BBLs, AT 12.5 PPG, 2.22, 12.59
25	5/8/2018	2:19	SHUTDOWN						SHUTDOWN, DROP TOP PLUG, FULL RETURNS ON CEMENT JOB
26	5/8/2018	2:20	DISPLACEMENT		8.34				BEGIN DISPLACEMENT
27	5/8/2018	2:32	DISPLACEMENT		8.34	6	50	309	50 BBLs PUMPED DISPLACEMENT
28	5/8/2018	2:41	DISPLACEMENT		8.34	5.5	50	405	100 BBLs PUMPED DISPLACEMENT
29	5/8/2018	2:50	DISPLACEMENT		8.34	5	50	509	150 BBLs PUMPED DISPLACEMENT
30	5/8/2018	3:01	DISPLACEMENT		8.34	5	65	675	215 BBLs PUMPED DISPLACEMENT
31	5/8/2018	3:03	SLOW RATE		8.34	2.5	10	635	SLOW RATE ON LAST 10 BBLs
32	5/8/2018	3:05	LAND PLUG					1135	LAND TOP PLUG, 40 BBLs OF CEMENT TO SURFACE
33	5/8/2018	3:11	FLOATS						FLOATS HELD, 1 BBL FLOW BACK
34	5/8/2018	3:19	PARASITE		8.34	1.5	10	370	10BBLs OF SUGAR WATER THROUGH PARASITE, BROKE AT 370 PSI
35	5/8/2018	3:25	SHUTDOWN						SHUTDOWN
36	5/8/2018	3:35	MEETING						RIG DOWN SAFETY MEETING
37	5/8/2018	3:40	RIG DOWN						RIG DOWN BJ EQUIPMENT
38	5/8/2018	4:30	COMPLETE						RIG DOWN COMPLETE
39	5/8/2018	4:45	MEETING						AAR JM STEACS MEETING
40	5/8/2018	5:00	LEAVE LOCATION						BJ CREW LEAVE LOCATION
41	5/8/2018	5:01							TOP OF TAIL AT 2,594'
42	5/8/2018	5:02							40 BBLs CEMENT TO SURFACE
43	5/8/2018	5:03							THANK YOU FOR YOUR BUSINESS FROM JAVIER AND CREW



JobMaster Program Version 4.02C1
Job Number: 5291
Customer: CAERUS
Well Name: NPR 23B-10

CAERUS 9 5/8 SURFACE

