



Caerus

Surface Post Job Report

NPR 13D-10-596 05-045-23779

S:10 T:5S R:96W Garfield CO

Quote #:

14055

I Execution #:

08392



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	7/3/2018	Field Ticket#	FT-08392-X0F5D30202-89538
End Date	7/4/2018	Well	NPR 13D-10-596
Client	CAERUS OPERATING, LLC	API#	05-045-23779
Client Field Rep.	Leonard Stomley	Well Classification	-
Service Sup.	Glen Gilliam	County	GARFIELD
District	Rifle, CO	State/Province	CO
Type of Job	Surface	Formation	-
Execution ID	EXC-08392-X0F5D302	Rig	H&P 273
Project ID	PRJ1008312		

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	13.50			2,400.00			
Casing	8.92	9.63	36.00	2,368.00		J-55	LTC

Shoe Length (ft): 40

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Bottom Plug Provided By	-	Tool Depth (ft)	2,323.00
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)	2,816.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2,000.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	5.00	Job Pumped Through	No Manifold
Centralizers Type	Bow	Top Connection Thread	8 ROUND
Landing Collar Depth (ft)	2,460	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)	60.00	10 min SGS	-
Circulation Rate (bpm)	5.00	30 min SGS	-
Circulation Volume (bbls)	180.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	-	Gas Units	0
Mud Density Out (ppg)	-		
PV Mud In	-		
PV Mud Out	-		
YP Mud In	-		
YP Mud Out	-		

TEMPERATURE

Ambient Temperature (°F)	76.00	Slurry Cement Temperature (°F)	80.00
Mix Water Temperature (°F)	68.00	Flow Line Temperature (°F)	-

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	2.5298	14.86	0.00	2,000.00	429	1,085.00	193.10
Tail Slurry	BJCem S100.3.01D	12.50	2.2256	12.59	2,000.00	500.00	118	262.00	46.60
Displacement Final	Displacement	8.33			0.00			0.00	190.20

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	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	FOAM PREVENTER, FP-25	0.3000	BWOB
Lead Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Lead Slurry	BJCem S100.3.01D	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	IntegraSeal CELLO	0.1300	LBS/SK
Tail Slurry	BJCem S100.3.01D	CEMENT EXTENDER, GYPSUM, A-10	5.0000	BWOB
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	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	LBS/SK
Tail Slurry	BJCem S100.3.01D	Cement Additive, Sodium Metasilicate A-2	2.0000	LBS/SK

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Comments
7/4/2018 1:36 AM	Water 1	5.50	20.00	387.00	
7/4/2018 1:39 AM	Sodium Silicate	5.50	20.00	395.00	
7/4/2018 1:43 AM	Water 2	5.50	20.00	391.00	
7/4/2018 1:50 AM	BJCem S100.3.01D	6.00	193.10	495.00	
7/4/2018 2:26 AM	BJCem S100.3.01D	3.00	46.60	102.00	
7/4/2018 2:37 AM	Displacement	8.00	179.00	1,376.00	106 BBLS OF CEMENT TO SURFACE

	Min	Max	Avg
Pressure (psi)	102.00	1,376.00	524.33
Rate (bpm)	3.00	8.00	5.58

Cementing Treatment



DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	106.00
Calculated Displacement Volume (bbls)	179.00	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	179.00	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	0.75
Bump Plug Pressure (psi)	785.00	Total Volume Pumped (bbls)	179.00
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 273
 Well Name NPR 13D-10
 Job Type Surface

District Rifle
 Supervisor GLEN GILLIAM
 Engineer ZEN KEITH



Seq No.	Start Date	Start Time	Event	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	7/3/2018	17:00	CALLOUT					BJ CREW CALLED OUT TO LOCATION WITH AN RTS OF 24:00
2	7/3/2018	18:00	STEACS/ JOURNEY					STEACS/ JOURNEY WITH BJ CREW ON CONVOY TO LOCATION
3	7/3/2018	19:15	DEPART YARD					BJ CREW DEPARTS YARD TO LOCATION
4	7/3/2018	20:30	ON LOCATION					BJ CREW ON LOCATION, SPOT EQUIPMENT, HAZARD CHECK
5	7/3/2018	21:15	RIG UP STEACS					STEACS/ RIG UP WITH BJ CREW
6	7/3/2018	21:30	RIG UP EQUIPMENT					BJ CREW RIGS UP EQUIPMENT
7	7/3/2018	22:15	STANDBY					BJ CREW ON STANDBY, RIG STILL RUNNING CASING, CIRCULATING ON BOTTOM
8	7/3/2018	1:10	SAFETY MEETING					SAFETY MEETING WITH RIG CREW ON CEMENT JOB OPERATIONS
9	7/4/2018	1:20	STAB HEAD					BJ CREW STABS HEAD TO WELL
10	7/4/2018	1:29	FILL LINES	8.33	2.5	5	65	FILL LINES 5 BBLS FRESH WATER
11	7/4/2018	1:31	PRESSURE TEST					TEST LINES TO 3000 PSI
12	7/4/2018	1:36	SPACER	8.33	5.5	15	387	FRESH WATER SPACER 15 BBLS
13	7/4/2018	1:39	SODIUM SILICATE	10.4	5.5	20	395	20 BBLS SODIUM SILICATE SPACER
14	7/4/2018	1:43	SPACER	8.33	5.5	20	391	20 BBLS FRESH WATER SPACER
15	7/4/2018	1:50	LEAD CEMENT	12	4		375	LEAD CEMENT DOWN HOLE AT 12.0 PPG
16	7/4/2018	1:59	50 BBLS GONE	12	5.5	50	495	50 BBLS GONE LEAD CEMENT
17	7/4/2018	2:08	100 BBLS GONE	12	6	100	421	100 BBLS GONE LEAD CEMENT
18	7/4/2018	2:16	150 BBLS GONE	12	6	150	324	150 BBLS GONE LEAD CEMENT/ 193 BBLS TOTAL PUMPED
23	7/4/2018	2:26	TAIL CEMENT	12.5	3		102	TAIL CEMENT DOWN HOLE AT 12.5 PPG
24	7/4/2018	2:30	20 BBLS GONE	12.5	6	20	343	20 BBLS GONE TAIL CEMENT/ 43 BBLS TOTAL PUMPED
25	7/4/2018	2:36	SHUT DOWN					SHUT DOWN, DROP TOP PLUG
26	7/4/2018	2:37	DISPLACEMENT	12.5	4	4	229	KICK OUT PLUG WITH 4 BBLS OF TAIL CEMENT
27	7/4/2018	2:48	50 BBLS GONE	8.33	8	50	736	50 BBLS GONE FRESH WATER DISPLACEMENT
28	7/4/2018	2:56	100 BBLS GONE	8.33	4	100	560	100 BBLS GONE FRESH WATER DISPLACEMENT
29	7/4/2018	3:05	150 BBLS GONE	8.33	6	150	910	150 BBLS GONE FRESH WATER DISPLACEMENT
31	7/4/2018	3:11	BUMP PLUG	8.33	2.5	179	785	BUMP PLUG FCP- 785 TOOK TO 1376 HELD FOR 2 MINS
32	7/4/2018	3:13	CHECK FLOATS					FLOATS HELD 0.75 BBLS BACK
35	7/4/2018	3:20	STEACS/ RIG DOWN					STEACS/ RIG DOWN WITH BJ CREW
36	7/4/2018	3:25	RIG DOWN					BJ CREW RIGS DOWN EQUIPMENT ON LOCATION
37	7/4/2018	4:45	STEACS/ JOURNEY					STEACS/ JOURNEY WITH BJ CREW ON CONVOY BACK TO YARD



JobMaster Program Version 4.02C1

Job Number: 6958

Customer: CAERUS

Well Name: NPR 13D-10

