



Caerus

Production Post Job Report

Puckett 25A-23 697 05-045-23392

S:23 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 II | (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	10/18/2017	Well	Puckett #25A-23 697
End Date	11/30/2017	County	GARFIELD
Client	CAERUS OPERATING, LLC	State/Province	CO
Client Field Rep		API	05-045-23392
Service Supervisor		Formation	
Field Ticket No.	Caerus 330 Puckett 25A-23	Rig	H&P 330
District	Rifle, CO	Type of Job	Long String

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	Excess(%)	Grade	Thread
Previous Casing	8.92	9.63	36.00	2,500.00		J-55	LTC
Open Hole	8.75			6,989.00	20.00		
Open Hole	8.75			9,012.00			
Casing	4.00	4.50	11.60	8,995.00			

Shoe Length (ft): 40

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Bottom Plug Provided By		Tool Depth (ft)	8,994.50
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)	7,780.00
Top Plug Size	4.500	Max Casing Pressure - Operated (psi)	6,224.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	52.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	8 RND
Landing Collar Depth (ft)	8,949	Top Connection Size	4.5

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	3.00
Circulation Time (min)	85.00	10 min SGS	9.00
Circulation Rate (bpm)	10.00	30 min SGS	14.00
Circulation Volume (bbls)	850.00	Flare Prior to/during the Cement Job	No
Lost Circulation Prior to Cement Job	No	Gas Present	No
Mud Density In (ppg)	9.40	Gas Units	0
Mud Density Out (ppg)	9.40		
PV Mud In	12		
PV Mud Out	12		
YP Mud In	10		
YP Mud Out	10		

TEMPERATURE

Ambient Temperature (°F)	24.00	Slurry Cement Temperature (°F)	62.00
Mix Water Temperature (°F)	62.00	Flow Line Temperature (°F)	86.00

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Spacer / Pre Flush / Flush	Water	8.3300					20.0000
Spacer / Pre Flush / Flush	Sodium Silicate	9.1600					20.0000
Spacer / Pre Flush / Flush	Water	8.3300					180.0000
Lead Slurry	P100-X2	12.7000	1.9821	11.10	615	1,215.0000	216.2000
Tail Slurry	P70-X1	13.5000	1.9033	9.59	326	618.0000	110.0000
Displacement Final	KCL Displacement	8.4900				0.0000	139.1000

Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	Sodium Silicate	SILICATE, SODIUM, A-3L	10.50	GPB
Lead Slurry	P100-X2	R-6 LOW TEMP RETARDER 50 LB BAG BJS	0.50	BWOB
Lead Slurry	P100-X2	FLUID LOSS, FL-66	0.50	BWOB
Lead Slurry	P100-X2	BONDING AGENT, BA-60	0.30	BWOB
Lead Slurry	P100-X2	GELLANT WATER, GW-86	0.10	BWOB
Lead Slurry	P100-X2	CEMENT, ASTM TYPE III	100.00	PCT
Lead Slurry	P100-X2	DISPERSANT, CD-31	0.10	BWOB
Lead Slurry	P100-X2	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB
Tail Slurry	P70-X1	CEMENT, CLASS G	70.00	PCT
Tail Slurry	P70-X1	AXE-20	10.00	PCT
Tail Slurry	P70-X1	Flyash (Rockies)	20.00	PCT
Tail Slurry	P70-X1	FLUID LOSS, FL-24, (BJS Only)	0.40	BWOB
Tail Slurry	P70-X1	R-6 LOW TEMP RETARDER 50 LB BAG BJS	0.30	BWOB
Tail Slurry	P70-X1	SAND, S-8, Silica Flour, 200 Mesh	25.00	BWOB
Tail Slurry	P70-X1	BONDING AGENT, BA-60	0.20	BWOB
Tail Slurry	P70-X1	EXTENDER, BENTONITE	6.00	BWOB
Tail Slurry	P70-X1	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
	Water	5.00	20.00			
	Sodium Silicate	5.00	20.00			
	Water	5.00	180.00			
	P100-X2	5.00	216.20			
	P70-X1	5.00	110.00			
	KCL Displacement	5.00	139.10			

Cementing Treatment



	Min	Max	Avg
Pressure (psi)	0.00	3,000.00	600.00
Rate (bpm)	6.00	7.50	6.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	0.00
Calculated Displacement Volume (bbls)	138.68	Method Used to Verify Returns	Visual
Actual Displacement Volume (bbls)	138.68	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	1.50
Bump Plug Pressure (psi)	679.00	Total Volume Pumped (bbls)	698.00
Were Returns Planned at Surface	No	Top Out Cement Spotted	No
Cement returns During Job		Lost Circulation During Cement Job	No

Customer Name Caerus Energy District Rifle
 Well Name Puckett 25A-23 Supervisor Allen Tippetts
 Job Type Long String Engineer



Seq No.	Start Date	Start Time	Event	Equipment	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	11/18/2017	2:00	Call Out						BJ Services crew called out for Caerus Energy production cement job. On location time 0800 11/18/2017
2	11/18/2017	3:00	STEACS						STEACS briefing. Discuss driving conditions, directions to rig, weather conditions, SWA, OS13, and reasons for travel to stop.
3	11/18/2017	3:30	Depart for Caerus Energy						Depart for Caerus Energy. H&P330
4	11/18/2017	4:25	Inspections						Vehicle inspection in Parachutte
5	11/18/2017	5:00	Arrive at Location						BJ Services crew arrive at Caerus Energy H&P 330
6	11/18/2017	5:10	STEACS						STEACS briefing. Discuss spotting of equipment, job procedures, rig-up procedures, safety concerns, SWA, Evacuation routes, contingency plans,
7	11/18/2017	5:30	Rig-Up						Spot equipment and rig-up surface equipment
8	11/18/2017	6:15	Waiting						Waiting on location for rig to finish casing run.
9	11/18/2017	9:30	STEACS						STEACS briefing with BJ Services crew, rig crew and company rep. Discuss spotting of equipment, job procedures, rig-up procedures, safety concerns, SWA, Evacuation routes, contingency plans,
10	11/18/2017	10:40	Rig-Up						Finial Rig-Up of surface equipment.
11	11/18/2017	11:17	Pump Fresh Water		8.33	4	5	85	Pump 5 barrels fresh water to fill pumps and lines.
12	11/18/2017	11:22	Pressure Test						Pressure test surface equipment to 5,000PSI
13	11/18/2017	11:23	Release Pressure						Release pressure. Good test
14	11/18/2017	11:24	Pump Fresh Water		8.33	7.5	15	230	Pump remaining 15 barrels fresh water spacer
15	11/18/2017	11:28	Pump SS Spacer		8.6	7.5	20	400	Mix and pump 20 barrels sodium silicate spacer
16	11/18/2017	11:30	Pump Fresh Water		8.33	7.5	180	421	Pump 180 barrels fresh water spacer
17	11/18/2017	11:38	Pump Fresh Water		8.33	7.5	50	400	Pump Fresh Water
18	11/18/2017	11:43	Pump Fresh Water		8.33	7.5	50	610	Pump Fresh Water
19	11/18/2017	11:51	Pump Fresh Water		8.33	7.5	50	555	Pump Fresh Water
20	11/18/2017	11:52	Shutdown						Shutdown. 180 barrels fresh water away. Bring Lead Cement up to weight
21	11/18/2017	11:53	Pump Lead Cement		12.7	6	216.87	352	Mix and pump 216.87 (615sks) barrels Lead Cement @ 12.7 PPG, 1.98 YLD, 11.10 GAL/SK
22	11/18/2017	12:03	Pump Lead Cement		12.7	6	50	356	Pump Lead Cement
23	11/18/2017	12:12	Pump Lead Cement		12.7	6	50	352	Pump Lead Cement
24	11/18/2017	12:21	Pump Lead Cement		12.7	6	50	357	Pump Lead Cement
25	11/18/2017	12:28	Pump Lead Cement		12.7	6	50	318	Pump Lead Cement
26	11/18/2017	12:29	Pump Tail Cement		13.5	6	110.31	265	Mix and pump 110.31 (326sks) barrels Tail Cement @ 13.5 PPG,
27	11/18/2017	12:38	Pump Tail Cement		13.5	6	50	296	Pump Tail Cement
28	11/18/2017	12:44	Pump Tail Cement		13.5	6	50	373	Pump Tail Cement
29	11/18/2017	12:48	Shutdown						Shutdown. All cement pumped away.
30	11/18/2017	12:48	Wash Pumps and Lines						Wash Pumps and lines to 3-side tank. Drop Plug. Plug witnessed by company rep.
31	11/18/2017	12:52	Pump Displacement		8.6	6	141.43	143	Pump 138.69 barrels KCL water displacement
32	11/18/2017	13:03	Pump Displacement		8.6	6	50	278	Pump Displacement
33	11/18/2017	13:12	Pump Displacement		8.6	6	50	357	Pump Displacement
34	11/18/2017	13:21	Land Plug					652	Land Plug with 138.69 barrels KCL displacement away. Pressure up casing to 1341 PSI for 5 min. Finial circulating pressure 679PSI
35	11/18/2017	13:27	Check Floats						Check Floats. .5 barrels back to truck.
36									
37	11/18/2017	13:45	STEACS						STEACS briefing. Discuss rig-Down procedures, safety concerns, SWA, Evacuation routes, contingency plans, And SWA
38	11/18/2017	14:00	Rig-Down						Rig-Down all surface equipment
39	11/18/2017	14:30	STEACS						STEACS Briefing. Discuss driving conditions, all equipment will stop at the upper guard shack and check breaks, and do a vehicle inspection. All equipment will travel down using 1st gear and engine break.
40	11/18/2017	14:50							Depart location for Rifle Yard



JobMaster Program Version 4.02C1

Job Number: 909

Customer: Caerus Energy

Well Name: Puckett 25A-23

