



Bonanza Creek Energy

Production Post Job Report

Mustang V41-34-33XRLNB

S:34 T:4N R:63W Weld CO

Quote #:

03656

I Execution #:

02180



Bonanza Creek Energy

Attention: Mr. Joel Dill | (720) 633-5871 | JDill@bonanzacrk.com

Bonanza Creek Energy | 410 17th Street, Suite 1400 | Denver, CO. 80202

Dear Mr. Joel Dill,

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,
Jacob Ojeda
Field Engineer I | (763) 516-3012 | jacob.ojeda@bjsservices.com

Field Office 1716 East Allison Rd., Cheyenne WY, 82007
Phone: (307) 638-5585

Sales Office 999 18th St. Suite 1200 Denver, CO 80202
Phone: (281) 408-2361

Cementing Treatment



Start Date	10/13/2017	Well	Mustang V41-34-33XRLNB
End Date	12/30/2017	County	Weld
Client	BONANZA CREEK ENERGY	State/Province	CO
Service Supervisor	Zach Hyde	API	05-123-46001
District	Cheyenne, WY	Rig	Xtreme 19
		Type of Job	Long String

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Previous Casing	8.92	9.63	36.00	1,700.00	1,700.00			
Open Hole	8.50			16,554.00	6,513.00	10.00		
Casing	4.89	5.50	17.00	16,534.00	6,513.00			

Shoe Length (ft.): 42

HARDWARE

Bottom Plug Used?	No	Landing Collar Depth (ft)	16,534
Top Plug Used?	Yes	Tool Type	92 Frac Sleeves
Top Plug Provided By	Customer	Job Pumped Through	Iron
Top Plug Size	5.5	Top Connection Thread	LTC
Centralizers Used	No	Top Connection Size	5.5

Cementing Treatment



CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud Out	20
Circulation Prior to Job	Yes	YP Mud In	10
Circulation Time (min)	120	YP Mud Out	10
Circulation Rate (bpm)	8	Solids Present at End of Circulation	No
Circulation Volume (bbls)	960	10 sec SGS	8
Lost Circulation Prior to Cement Job	Yes	10 min SGS	10
Mud Density In (ppg)	9.6	30 min SGS	15
Mud Density Out (ppg)	9.6	Flare Prior to/during the Cement Job	No
PV Mud In	20	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	0	Slurry Cement Temperature (°F)	70
Mix Water Temperature (°F)	80	Flow Line Temperature (°F)	120

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	CD Spacer	11.5000					40.0000
Lead Slurry	P100-X2 (Lead)	12.5000	2.0754	11.84	622	1,289.0000	229.6000
Tail Slurry	P50-X1 (Tail)	13.5000	1.4774	7.45	1,969	2,909.0000	517.9000
Displacement 1	GW-86 Pill	8.3300				0.0000	10.0000
Displacement 2	Retarded Water	8.3337				0.0000	80.0000
Displacement Final	Displacement Final (Water)	8.3308				0.0000	293.1000

Cementing Treatment



Fluid Type	Fluid Name	Component	Concentration	UOM
Spacer / Pre Flush / Flush	CD Spacer	SAND, S-8, Silica Flour, 200 Mesh	208.53	PPB
Spacer / Pre Flush / Flush	CD Spacer	SURFACTANT, SS-267, (BJS ONLY)	0.50	GPB
Spacer / Pre Flush / Flush	CD Spacer	Spacer Surfactant, SS-247, (BJS Only)	0.50	GPB
Spacer / Pre Flush / Flush	CD Spacer	GELLANT WATER, GW-86	0.90	PPB
Spacer / Pre Flush / Flush	CD Spacer	EXTENDER, BENTONITE	5.00	PPB
Spacer / Pre Flush / Flush	CD Spacer	RETARDER, HIGH TEMP, R-31 (BJS Only)	0.51	PPB
Lead Slurry	P100-X2 (Lead)	GELLANT WATER, GW-86	0.05	BWOB
Lead Slurry	P100-X2 (Lead)	IntegraSeal CELLO	0.13	LBS/SK
Lead Slurry	P100-X2 (Lead)	CEMENT, ASTM TYPE III	100.00	PCT
Lead Slurry	P100-X2 (Lead)	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB
Lead Slurry	P100-X2 (Lead)	RETARDER, HIGH TEMP, R-31 (BJS Only)	0.17	BWOB
Lead Slurry	P100-X2 (Lead)	FLUID LOSS, FL-24, (BJS Only)	0.30	BWOB
Lead Slurry	P100-X2 (Lead)	BONDING AGENT, BA-60	0.40	BWOB
Tail Slurry	P50-X1 (Tail)	Flyash (Rockies)	50.00	PCT
Tail Slurry	P50-X1 (Tail)	GELLANT WATER, GW-86	0.10	BWOB
Tail Slurry	P50-X1 (Tail)	EXTENDER, BENTONITE	2.00	BWOB
Tail Slurry	P50-X1 (Tail)	CEMENT, CLASS G	50.00	PCT
Tail Slurry	P50-X1 (Tail)	AR-20	0.10	BWOB
Tail Slurry	P50-X1 (Tail)	FP-25, Dry Foam Preventer (BJS Only)	0.30	BWOB
Tail Slurry	P50-X1 (Tail)	FLUID LOSS, FL-66	0.20	BWOB
Displacement 1	GW-86 Pill	RETARDER, R-8L	0.50	GPB
Displacement 1	GW-86 Pill	BIOCIDE, MAQUAT 12:3	0.10	GPB
Displacement 1	GW-86 Pill	GELLANT WATER, GW-86	2.50	PPB
Displacement 2	Retarded Water	RETARDER, R-8L	0.50	GPB
Displacement 2	Retarded Water	BIOCIDE, MAQUAT 12:3	0.10	GPB
Displacement Final	Displacement Final (Water)	BIOCIDE, MAQUAT 12:3	0.10	GPB

Cementing Treatment



TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
12:58	CD Spacer	5.00	40.00	300		
13:05	P100-X2 (Lead)	6.00	229.60	300		
13:45	P50-X1 (Tail)	6.00	517.90	300-3500		
15:37	GW-86 Pill	0.00	10.00	3500		
15:42	Retarded Water	5.00	80.00	3500		
17:57	Displacement Final (Water)	8.00	293.10	4200		

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amount of Cement Returned/Reversed	No
Calculated Displacement Volume (bbls)	382.6	Amount of Spacer to Surface	0
Actual Displacement Volume (bbls)	382.6	Pressure Left on Casing (psi)	No
Did Float Hold?	Yes	Amount Bled Back After Job	3500
Bump Plug	No	Top Out Cement Spotted	No
Were Returns Planned at Surface	Yes	Lost Circulation During Cement Job	Yes
Cement returns During Job	No		

Job Summary

Lost returns 260 bbls into tail we were pumping at 6 bpm with 300 psi then right when we lost returns we pressured up to 3500 psi through the rest of the job. They had 92 frac sleeves. We didn't land the plug customer requested to pump 5 bbls past which was a total of 397 bbls



Customer Name Bonanza Creek
Well Name Mustang V41-34-33XRLNB
Job Type Long String

District Cheyenne
Supervisor Zach Hyde
Engineer

Seq No.	Start Date/Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
1	12/27/2017 3:00		Call Out							Crew gets called out at 300 requested time was 700
2	12/27/2017 5:00		Depart facility							Crew leaves facility
3	12/27/2017 7:00		On Location							Crew arrives on location. I went over the job with customer and grabbed numbers from him
4	12/27/2017 7:30		Rig Up		50					Crew rigs up iron and hoses needed for the job
5	12/27/2017 8:00		Wait							Crew waits for rig to finish circulating
6	12/27/2017 12:30		Safety Meeting							Crew has safety meeting with rig crew and company man discussing the job
7	12/27/2017 12:50		Fill Lines			8.33	2	5		Fill lines 5 bbls at 2 bpm
8	12/27/2017 12:58		CD Spacer			11.5	5	40	300	Pump 40 bbls of CD Spacer at 11.5 ppg at 5 bpm with 300 psi
9	12/27/2017 13:05		Lead			12.5	6	229	300	Pump 229 bbls of Lead at 12.5 ppg (622sk, 2.07 yld, 11.81 gal/sk) at 6 bpm with 300 psi
10	12/27/2017 13:45		Tail			13.5	6	515	350	Pump 515 bbls of Tail at 13.5 ppg (1969 sks, 1.47 yld, 7.43 gal/sk) at 7 bpm with 350 psi
										260 bbls away of tail cement lost returns, before we we lost them pressure was around 300 psi then right when we lost returns pressure increased to 3500 psi through remainder of job
11	12/27/2017 14:20		Lost Returns							Shutdown was pump and lines out to the pit
12	12/27/2017 15:30		Shutdown							Drop top plug
	12/27/2017 15:38		Drop Plug							First 10 bbls of displacement has 22 lb of AVS-10 and 1 gallon of AR-61
13	12/27/2017 15:38		Displacement			9	4	10	3500	90 bbls of displacement away we put 1 gallon in every 10 bbls for the first 100 bbls at 4 bpm with 2700 psi
14	12/27/2017 16:42		Displacement			8.33	4	90	2700	2700 psi
15	12/27/2017 16:42		Displacement			8.33	4	180	3000	280 bbls away at 4 bpm with 2700 psi
16	12/27/2017 16:45		Shutdown							Rig ran out of water they said they had 1200 bbls. There up wrights were frozen on top so the tattle tale was reading full
17	12/27/2017 17:00		Displacement			8.33	2	50	3500	330 bbls away of displacement at 2 bpm pressure was 3500 psi. We were pumping slow waiting for water
18	12/27/2017 17:35		Displacement			8.33	4	57	3500	387 bbls away of displacement at 4 bpm with 4200 psi



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Well Name Mustang V41-34-33XRLNB

Job Type Long String

District Cheyenne

Supervisor Zach Hyde

Engineer

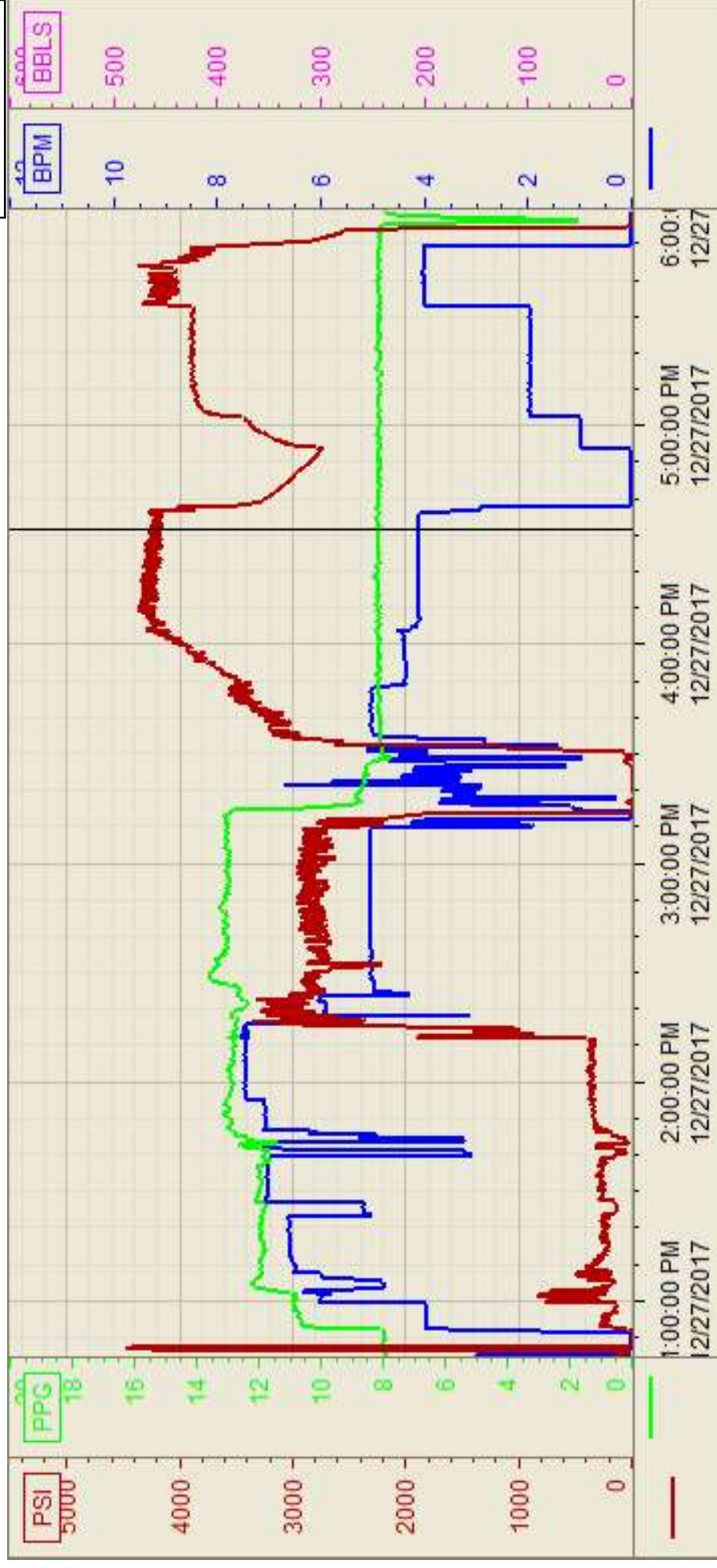
Seq No.	Start Date/Time	Category	Event	Equipment	Event ID	Density (lb/gal)	Pump Rate (bpm)	Pump Vol (bbls)	Pipe Pressure (psi)	Comments
19	12/27/2017 17:57		Land Plug		67					Displacement was 382.6 bbls we pumped 387 bbls didn't land customer requested to pump an extra 5 bbls
20	12/27/2017 18:00		Check Floats		68					Check floats got 3 bbls back
21	12/27/2017 18:30		Rig Down		73					Crew rigs down iron and hoses
22	12/27/2017 19:30		Depart Location							Crew leaves location
23										



Customer: Bonanza Creek
Well Number: V41-34-33XRLNB
Lease Info: Mustang

Print Date/Time

12/27/2017 6:17:52 PM



Name	Y value	X value/time stamp	Tag name Y
1 PS - Press (PSI)	4172.0 i.	12/27/2017 4:31:49 PM i.	CementerPS_DISCHARGE_PRESS_DIAL
2 DH - Density (PPG)	8.08	12/27/2017 4:31:47 PM	CementerDENSITY2_ACTUAL_RATE
3 Combined Rate (BPM)	4.10	12/27/2017 4:31:53 PM	CementerFlow_Combined
4			
5			
Source: Control1 6:17:47 PM			