



Bonanza Creek Energy

Antelope E14-20-17XRLNC

API # 05-123-48965

Surface

01/06/2019

Quote #: 48965

Execution #: 14604



Bonanza Creek Energy

Attention: Mr. Adam Conry | (303) 883.3351 | AConry@bonanzacrk.com

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

Dear Mr. Adam Conry,

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 | (307) 887-4243 | Gage.Putnam@bjservices.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

BJ Cementing Treatment Report

SERVICE SUPERVISOR	Brian Boyd	RIG	519
CLIENT FIELD REPRESENTATIVE	Kenny	COUNTY	WELD
DISTRICT	Cheyenne, WY	STATE / PROVINCE	CO
SERVICE	Cementing		

WELL GEOMETRY

TYPE	OD (in)	ID (in)	WEIGHT (lb/ft)	MD (ft)	TVD (ft)	EXCESS (%)
Casing	9.63	8.92	36.00	1,606.00	1,606.00	
Open Hole	0.00	13.50	0.00	1,616.00	1,616.00	30.00

HARDWARE

Bottom Plug Used?	No	Tool Type	Float Collar
Top Plug Used?	Yes	Tool Depth (ft)	1,564.00
Top Plug Provided By	Non BJ	Max Casing Pressure - Rated (psi)	3512.00
Top Plug Size	9.625	Max Casing Pressure - Operated (psi)	2015.00
Centralizers Used	Yes	Pipe Movement	None
Centralizers Quantity	16.00	Job Pumped Through	Manifold
Centralizers Type	Bow	Top Connection Thread	LTC
Landing Collar Depth (ft)	1,564	Top Connection Size	9.625

CIRCULATION PRIOR TO JOB

Well Circulated By	Rig	PV Mud In	4
Circulation Prior to Job	Yes	YP Mud In	2
Circulation Time (min)	50.00	Solids Present at End of Circulation	No
Circulation Rate (bpm)	5.00	10 sec SGS	1
Circulation Volume (bbls)	130.00	10 min SGS	1
Lost Circulation Prior to Cement Job	No	Flare Prior to / during the Cement Job	No
Mud Density In (ppg)	8.40	Gas Present	No

TEMPERATURE

Ambient Temperature (°F)	44.00	Slurry Cement Temperature (°F)	69.00
Mix Water Temperature (°F)	57.00	Flow Line Temperature (°F)	83.00

FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H ₂ O REQ (gals/sk)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	Water (Pre-flush)	8.3308					20.0000
Tail Slurry	BJCem S100.3.XC	14.5000	1.3902	6.81	745	1034.0000	184.1000
Displacement Final	Water	8.3300				0.0000	120.4000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	BJCem S100.3.XC	CEMENT, ASTM TYPE III	100.0000	PCT

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	Amt of Cement Returned / Reversed	50.00
Calculated Displacement Vol (bbls)	121.00	Method Used to Verify Returns	Visual
Actual Displacement Vol (bbls)	121.00	Amt of Spacer to Surface	20.00
Did Float Hold?	Yes	Pressure Left on Casing (psi)	0.00
Bump Plug	Yes	Amt Bled Back After Job	0.50
Bump Plug Pressure (psi)	1168.00	Total Volume Pumped (bbls)	319.00
Were Returns Planned at Surface	Yes	Top Out Cement Spotted	No
Cement Returns During Job	Full	Lost Circulation During Cement Job	No



BJ Cementing Event Log

Surface - Cheyenne, WY - Brian Boyd

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/06/2019 06:02	Callout					Customer requested crew to be on location at 12:00
2	01/06/2019 07:30	Arrive on Location					BJ crew has journey management and departs from shop, BJ crew arrives on location and meet with company man
3	01/06/2019 09:30	STEACS Briefing					BJ crew has steacs over rigging up iron and hoses
4	01/06/2019 09:45	Rig Up					BJ crew rigs up iron and hoses
5	01/06/2019 13:01	STEACS Briefing					Steacs briefing with Bj crew, rig crew and company man over job and hazards
6	01/06/2019 13:16	Prime Up	8.3300	2.50	2.50	100.00	Fill pumps and lines
7	01/06/2019 13:19	Pressure Test	8.3300	0.50	0.50	3000.00	Pressure test iron and head to 3000 PSI
8	01/06/2019 13:22	Pump Spacer	8.3300	5.00	20.00	140.00	Pump 20 bbls of fresh water spacer with dye
9	01/06/2019 13:26	Pump Tail Cement	14.5000	5.00	184.00	409.00	Pump 184 bbls of 14.5 PPG cement (745 Sks, 1.39 Yield, 6.81 Gals/Sks)
10	01/06/2019 14:12	End Pumping					Shut down pumping
11	01/06/2019 14:16	Drop Top Plug					Drop top plug with company man
12	01/06/2019 14:16	Pump Displacement	8.3300	7.00	121.00	330.00	Pump 121 bbls of fresh water displacement
13	01/06/2019 14:27	Cement Back-to-Surface	8.3300	7.00	70.00	550.00	70 bbls into displacement got cement to surface for total of 50 bbls to surface
14	01/06/2019 14:33	Pump Displacement	8.3300	3.40	100.00	660.00	Last 20 bbls of displacement slow rate to 2.5 bpm
15	01/06/2019 14:36	Land Plug			121.00	1168.00	Bump plug to 1168 PSI, FCP of 638 PSI
16	01/06/2019 14:39	Check Floats					floats held got .5 bbl back to pump truck
17	01/06/2019 14:40	Pressure Test	8.3300	0.50	0.50	540.00	15 min 500 PSI casing test
18	01/06/2019 14:55	STEACS Briefing					BJ crew has steacs over rigging down iron and hoses
19	01/06/2019 15:00	Rig Down					BJ crew rigs down iron and hoses
20	01/06/2019 16:00	Leave Location					BJ crew has journey management and departs from location



JobMaster Program Version 4.02C1

Job Number:

Customer: Bonanza Creek

Well Name: Antelope E14-20-17XRLNC

