



# Chevron

## NAP Gov't 2-A

API # 05-045-05193

Job Type: Plug and Abandon

Date Job Completed: 1/14/20

Quote #: QUO-41293

Execution #: EXC-23876



# Chevron

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Attention: Mr. Kevin Hejl | (970) 250-9554 | kevinhejl@chevron.com

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Chevron | 100 Chevron Road | Rangely, CO 81648

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Dear Mr. Hejl,

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,

Devon Hanson  
Field Engineer | (701) 590-5946 | devon.hanson@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

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# BJ Cementing Treatment Report

<b>SERVICE SUPERVISOR</b>	Paul Linn III	<b>FORMATION</b>	
<b>CLIENT FIELD REPRESENTATIVE</b>	Kevin	<b>RIG</b>	Workover
<b>DISTRICT</b>	Rifle, CO	<b>COUNTY</b>	GARFIELD
<b>SERVICE</b>	Cementing	<b>STATE / PROVINCE</b>	CO

## WELL GEOMETRY

TYPE	ID (in)	OD (in)	WEIGHT (lbs/ft)	MD (ft)	TVD (ft)	EXCESS (%)	GRADE	THREAD
Previous Casing	10.05	10.75	40.50	171.00	171.00			
Open Hole	8.50			225.00	225.00			
Casing	6.37	7.00	23.00	225.00	225.00			
Tubing	2.44	2.88	6.40	225.00	225.00			

## HARDWARE

<b>Bottom Plug Used?</b>	No	<b>Tool Type</b>	Swege
<b>Top Plug Used?</b>	No	<b>Tool Depth (ft)</b>	0.00
<b>Centralizers Used</b>	No	<b>Pipe Movement</b>	None
<b>Landing Collar Depth (ft)</b>	225	<b>Job Pumped Through</b>	No Manifold
<b>Top Connection Size</b>	2	<b>Top Connection Thread</b>	8 RND

## TEMPERATURE

<b>Ambient Temperature (°F)</b>	21.00	<b>Slurry Cement Temperature (°F)</b>	63.40
<b>Mix Water Temperature (°F)</b>	55.30		

## FLUID DETAILS

FLUID TYPE	FLUID NAME	DENSITY (ppg)	YIELD (Cu Ft/sk)	H <sub>2</sub> O REQ. (gals/sk)	PLN TOP FLD (ft)	LENGTH (ft)	VOL (sk)	VOL (Cu Ft)	VOL (bbls)
Spacer / Pre Flush / Flush	Water	8.3000			0.00				5.0000
Tail Slurry	Cement Plug	15.8000	1.1556	5.00		0.00	100	116.0000	20.6000
Displacement Final	Displacement	8.3000			0.00			0.0000	2.0000

FLUID TYPE	FLUID NAME	COMPONENT	CONCENTRATION	UOM
Tail Slurry	Cement Plug	CEMENT, CLASS G	100.0000	PCT
Tail Slurry	Cement Plug	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	BWOW

## TREATMENT SUMMARY

TIME	FLUID	RATE (bpm)	FLUID VOL. (bbls)	PIPE PRESSURE (psi)	ANNULUS PRESSURE (psi)	COMMENTS
1/14/2020 9:18 AM	Water	2.00	2.00	249.00		
1/14/2020 9:26 AM	Cement Plug	2.00	24.00	151.00		
	Displacement	0.00	2.00			

## MIN / MAX / AVG PRESSURE AND RATES

	MIN	MAX	AVG
Pressure (psi)	80.00	506.00	236.00
Rate (bpm)	2.00	2.00	2.00

## SQUEEZE

Injection Rate (bpm)	2.000	Fluid Density (ppg)	8.40
Injection Pressure (psi)	249.000	ISIP (psi)	0.00
Type of Squeeze	Shoe	FSIP (psi)	0.00
Operators Max SQ Pressure (psi)	506.00		

# BJ Cementing Event Log

Plug & Abandon- Plug - Rifle, CO - Paul Linn III

SEQ	START DATE / TIME	EVENT	DENSITY (ppg)	PUMP RATE (bpm)	PUMP VOL (bbls)	PIPE PRESSURE (psi)	COMMENTS
1	01/14/2020 02:30	Callout					Call out, on location time of 08:00 01/14/2020
2	01/14/2020 04:48	STEACS Briefing					Pre-Convoy STEACS Briefing with all BJ Services cement crew
3	01/14/2020 05:09	Depart for Location					Depart from Rifle yard for location
4	01/14/2020 08:03	Arrive on Location					Arrive on location, rig was ready for us
5	01/14/2020 08:11	Spot Units					Did a site assessment and spotted in all equipment
6	01/14/2020 08:27	STEACS Briefing					Pre-Rig Up STEACS Briefing with all BJ Services cement crew
7	01/14/2020 08:38	Rig Up					Rig up all equipment
8	01/14/2020 09:06	STEACS Briefing					Pre-Job STEACS Briefing with rig crew, company man, and all BJ Services cement crew
9	01/14/2020 09:18	Prime Up	8.4000	2.00	2.00	249.00	Fill lines and establish circulation on well
10	01/14/2020 09:26	Pumping Cement	15.8000	2.00	24.00	478.00	Pump Plug Cement @ 15.8 ppg 1.15 cuft/sk 5 gals/sk
11	01/14/2020 09:40	Cement Back-to-Surface					Cement to surface
12	01/14/2020 09:47	Wash Pumps and Lines					Wash pumps and lines to open top tank
13	01/14/2020 10:01	STEACS Briefing					Pre-Rig Down STEACS Briefing with all BJ Services cement crew
14	01/14/2020 10:13	Rig Down					Rig down all equipment
15	01/14/2020 10:55	STEACS Briefing					Pre-Convoy STEACS Briefing with all BJ Services cement crew
16	01/14/2020 11:09	Leave Location					Depart from location for Rifle yard. Thank you for using BJ Services, Andrew Linn, and crew

