



Certificate of Analysis

Number: 2500-20070220-001A

Greeley Laboratory
2881 S. 31st Ave
Unit 6-8
Greeley, CO 80631

Tony Walton
Bonanza Creek
4301 Industrial Parkway
Evans, CO 80620

July 27, 2020

Station Name: Mustang V41-34-33XRLNB Flare
Station Number: 63004595
Station Location: Mustang 42-34 Pad
Sample Point: Meter Tube Run
Analyzed: 07/27/2020 15:31:15 by KS

Sampled By: Russ Fox
Sample Of: Gas Spot
Sample Date: 07/23/2020 16:10
Sample Conditions: 71.31 psig, @ 103.68 °F
Method: GPA-2261M
Cylinder No: 004051

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	0.344	0.380		GPM TOTAL C2+	9.326
Carbon Dioxide	1.450	2.515		GPM TOTAL C3+	5.392
Methane	66.413	41.996		GPM TOTAL iC5+	1.424
Ethane	14.633	17.344	3.934		
Propane	8.747	15.203	2.422		
Iso-butane	1.189	2.724	0.391		
n-Butane	3.645	8.351	1.155		
Iso-pentane	0.865	2.460	0.318		
n-Pentane	1.136	3.231	0.414		
Hexanes Plus	1.578	5.796	0.692		
	100.000	100.000	9.326		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.8805	3.2176
Calculated Molecular Weight	25.37	93.19
Compressibility Factor	0.9945	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1480	5141
Water Sat. Gas Base BTU	1455	5052

Comments: H2S Field Content 0.50 ppm

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Field Tags

(WO# 20070220)



SPL


Emergency Contact Number: 800-424-9300

220 72 hr. RUSH !!
Cylinder #: 4051
Company: Bonanza Creek System: _____
Location: Mustang 42-34 Pst Sample of: ☒ Gas ☐ Oil ☐ Condensate
Station: Mustang Survey V4134-33 XRL No. Station No.: 63004595
Sample Point: Meter-tube Run Type: ☒ Spot ☐ Composite
Source Press.: 71.31 Source Temp.: 103.68 Ambient Temp.: 90.25
Sampled By: Russ Fox Company: Graves
Date/Time Off: 7-23-22 4:10 AM (PM) On: 4:06 AM (PM)
Sample Pressure: 71.31 ☒ PSIG ☐ PSIA Sample Temp.: 103.68 (F)
H₂O Cont.: _____ LBS/MMSCF H₂S Cont.: 0.50 ☒ PPM ☐ GRAINS ☐ %
% Outage: _____ Remarks: RUSH !!

WO# 20070220

Chain of Custody

(WO# 20070220)

		Report To: Bonanza Creek Energy (Company Name): Bonanza Creek Energy Address: 4301 Industrial Pkwy		SPL Work Order No.:		Acct. Mate Code:		Dept. Code:		Page 1 Pages 1	
City/State/Zip: Evans CO 80620		Contact: Russ Fox - Graves Analytical Phone: 970-286-5071 Fax:		Project/Station Name:		Project/Station Number:		Project/Station Location:		Requested TAT* 72 Hr 40 business days	
Invoice To: Bonanza Creek Energy (Company Name): Bonanza Creek Energy Address: 4301 Industrial Pkwy		CO 80620		Special Instructions: C6+		Indicate Billing Type: (Place "X", where appropriate) Net 30 day Acct. <input type="checkbox"/> Credit Card <input type="checkbox"/> Check # <input type="checkbox"/>		Requested Analysis (Place an "X" next to Sample ID below)		* Surcharges May Apply (See quote for details)	
City/State/Zip: Evans CO 80620 Contact: Tony Walton - BCE Phone: 970-301-1178 Client PO# or Ref. No.: N/A Contract/Proposal #: (i.e. SPLC##)		Mailto: twalton@bonanzack.com		Terms: Cylinders will be rented for \$10/cyl. All cylinders checked out are to be returned within 21 days, whether they contain sample or not. Cylinders not returned after 30 days will be considered lost and will be billed at current replacement cost.		Cylinder Tracking Info¹		Sample Temp (F)		Sample Pressure (PSIG)	
Sample ID (used to log/track sample)		Sample Date		Sample Time		Sample Type (Gas/Liq./Solid)		Duplicate		Composite	
63004596		07/23/20		13:19		Gas		X		810	
63004592		07/23/20		9:50		Gas		X		664	
63004597		07/23/20		14:00		Gas		X		24	
63004594		07/23/20		12:44		Gas		X		607	
63004595		07/23/20		16:10		Gas		X		4051	
63004584		07/23/20		11:08		Gas		X		4045	
63004500		07/23/20		12:34		Gas		X		456	
63010001		07/23/20		15:25		Gas		X		753	
63004583		07/23/20		11:55		Gas		X		4187	
All bottles 72 Hr. Rush											
Sampled By-Print Name: Russ Fox		Received By-Company: SPL		Signature:		Received By-Print Name: Carson Seathner		Signature:		Date: 7/23/20 Time: 17:30	
Relinquished By-Print Name: Russ Fox		Received By-Print Name: Russ Fox		Signature:		Received By-Print Name:		Signature:		Date: 7/23/20 Time: 17:30	
Relinquished By-Print Name:		Received By-Print Name:		Signature:		Received By-Print Name:		Signature:		Date: Time:	
Relinquished By-Print Name:		Received By-Print Name:		Signature:		Received By-Print Name:		Signature:		Date: Time:	
Choose SPL Facility>>>		Ship to Address: 208 Main St, Windsor, CO 80550		Phone: 970-460-0741							