



Certificate of Analysis
 Number: 2500-20100243-001A

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

Tony Walton
 Bonanza Creek
 4301 Industrial Parkway
 Evans, CO 80620

Nov. 02, 2020

Station Name: SPH W42-29-30 XRLNB GL
 Station Number: 66004652
 Station Location: PH B-28 Pad
 Sample Point: Meter Tube Run
 Analyzed: 11/02/2020 10:54:52 by KRS

Sampled By: Russ Fox
 Sample Of: Gas Spot
 Sample Date: 10/21/2020 11:50
 Sample Conditions: 1002.15 psig, @ 84.39 °F
 Method: GPA-2261M
 Cylinder No: 2500-00043

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.101	1.363		GPM TOTAL C2+	6.770
Carbon Dioxide	1.852	3.602		GPM TOTAL C3+	3.593
Methane	73.265	51.942		GPM TOTAL iC5+	0.542
Ethane	11.835	15.727	3.177		
Propane	7.438	14.495	2.057		
Iso-butane	0.750	1.926	0.246		
n-Butane	2.364	6.072	0.748		
Iso-pentane	0.418	1.333	0.153		
n-Pentane	0.520	1.658	0.189		
Hexanes Plus	0.457	1.882	0.200		
	100.000	100.000	6.770		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7842	3.2176
Calculated Molecular Weight	22.63	93.19
Compressibility Factor	0.9959	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1307	5141
Water Sat. Gas Base BTU	1285	5052

Comments: H2S Field Content 0.25 ppm

Hydrocarbon Laboratory Manager

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

wo# 20100243



SPL

Emergency Contact Number: 800-424-9300

1A

Cylinder #: 43
Company: Bonanza Creek System: _____
Location: PH B-28 Pad Sample of: Gas Oil Condensate
Station: SPT W42-29.30XRLAB 6L Station No.: 66004652
Sample Point: Meter Tube Run Type: Spot Composite
Source Press.: 1002.15 Source Temp.: 84.39 Ambient Temp.: 550 F
Sampled By: Russ Fox Company: Graves
Date/Time Off: 10-21-20 11:50 (AM/PM) On: _____ (AM/PM)
Sample Pressure: 1002.15 PSIG PSIA Sample Temp.: 84.39 (F)
H₂O Cont.: _____ LBS/MMSCF H₂S Cont.: 0.25 PPM GRAINS %
% Outage: _____ Remarks: Wet Gas !!



Report To: Bonanza Creek Energy (Company Name): 4301 Industrial Pkwy Address:		Project/Station Name: Project/Station Number: Project/Station Location:		SPL Work Order No.: Acct. Mate Code: Dept. Code:		Page 1 of 1 Pages	
City/State/Zip: Evans 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)	
Contact: Russ Fox - Graves Analytical Phone: 970-286-5071 Fax: ffoxmeasurement@gmail.com		1 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.		Requested Analysis (Place an "X" next to Sample ID below)		* Surcharges May Apply (See quote for details)	
Invoice To: Bonanza Creek Energy (Company Name): Address: 4301 Industrial Pkwy		City/State/Zip: Evans CO 80620		Contact: Tony Walton - BCE Phone: 970-301-1178 Email: twalton@bonanzacrk.com		Client PO# or Ref. No.: N/A Contract/Proposal #: (i.e. SPLC###)	
Sample ID (used to log/track sample)		Sample Date		Sample Time		Sample Type (Gas/Liq/Solid)	
Duplicate		Composite		Spot		Cylinder Tracking Info	
Cylinder #		Date Out		Date In		Sample Temp (F)	
Sample Pressure (PSIG)		Comments		Sample Temp (F)		Sample Pressure (PSIG)	
68004752		10/19/20		10:15		Gas	
66004754		10/19/20		11:40		Gas	
67004760		10/19/20		14:20		Gas	
WHT F-4 DEHY		10/19/20		12:50		Gas	
68011241		10/16/20		9:28		Gas	
66010211		10/15/20		9:01		Gas	
66004652		10/21/20		11:50		Gas	
66010177		10/22/20		10:14		Gas	
68004644		10/21/20		10:33		Gas	

SPL, Inc.

Russ Fox

10-23-20 16:15

Note - As a convenience to our clients, this form is available in an electronic format. Please contact one of our offices above for the form to be e-mailed to you.