

Lab #: 707476 Job #: 40965 IS-103477 Co. Job#:
 Sample Name: Ute C3 BradenHead Co. Lab#:
 Company: LT Environmental
 API/Well:
 Container: Cali-5-Bond Bag
 Field/Site Name: Ute C1 & C3 Wellhead Gas Sampling
 Location: Ute C3 La Plata County, CO.
 Formation:
 Sampling Point:
 Date Sampled: 3/05/2019 9:20 Date Received: 3/07/2019 Date Reported: 4/05/2019

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	nd			
Hydrogen -----	15.24			
Argon -----	0.707			
Oxygen -----	8.32			
Nitrogen -----	54.96			
Carbon Dioxide -----	0.022			
Methane -----	19.40	-44.47	-207.1	
Ethane -----	0.788	-30.91		
Ethylene -----	0.0014			
Propane -----	0.408	-28.46		
Propylene -----	0.0009			
Iso-butane -----	0.0538	-29.27		
N-butane -----	0.0691	-28.04		
Iso-pentane -----	0.0139			
N-pentane -----	0.0081			
Hexanes + -----	0.0067			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 275

Specific gravity, calculated: 0.769

Remarks: Insufficient nC5 and CO2 concentrations for isotopic analysis.

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. All gas component carbon isotope values are reported on a scale defined by a two point calibration of LSVEC and NBS 19. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.