

Lab #: 657190 Job #: 37837 IS-94649 Co. Job#: \_\_\_\_\_  
 Sample Name: Pratt 4G / Surface CSG Co. Lab#: \_\_\_\_\_  
 Company: Crestone Peak Resources  
 API/Well: \_\_\_\_\_  
 Container: IsoTube®  
 Field/Site Name: Bradenhead Testing  
 Location: \_\_\_\_\_  
 Formation: \_\_\_\_\_  
 Sampling Point: 434525  
 Date Sampled: 2/26/2018 13:45 Date Received: 3/26/2018 Date Reported: 6/01/2018

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	$\delta\text{D}$ ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	0.0126			
Hydrogen -----	nd			
Argon -----	0.572			
Oxygen -----	13.05			
Nitrogen -----	47.69			
Carbon Dioxide -----	0.044			
Methane -----	32.64	-48.99	-236.2	
Ethane -----	3.96	-31.95		
Ethylene -----	0.0002			
Propane -----	1.45	-28.66		
Propylene -----	0.0006			
Iso-butane -----	0.174	-31.20		
N-butane -----	0.308	-27.63		
Iso-pentane -----	0.0467			
N-pentane -----	0.0381			
Hexanes + -----	0.0171			
Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 458				
Specific gravity, calculated: 0.870				

Remarks: Cost Center 13175931

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. %.