

15-033-21470

18-32s-20w

Murfin Gal 1-18 dst 3

NATURAL GAS ANALYSIS REPORT

Sampled by:  
Trilobite Testing, Inc.  
Hays, Kansas  
Scott City, Kansas  
Phone: 800-728-5369  
Fax: 785-625-5620

Analyzed by:  
Caraway Analytical, Inc  
P. O. Box 2137  
Liberal, Kansas 67905  
Phone: 620-624-5389  
Fax: 620-626-7108

Lab Number: 20063815  
Sample From: Gal 1-18  
Producer: Murfin Drilling  
Date:  
Time:  
Sampler:  
Source: DST 3

Analyzed: 07/20/06  
Pressure:  
Temperature:  
Location: 18-32-20  
County: Comanche  
State: Kansas  
Formation:

	Mole %	GPM
Helium	He: 0.221	0.000
Hydrogen	H2: 0.112	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 7.181	0.000
Carbon Dioxide	CO2: 0.095	0.000
Methane	C1: 84.870	0.000
Ethane	C2: 4.457	1.192
Propane	C3: 1.945	0.536
Iso Butane	ic4: 0.230	0.075
Normal Butane	nC4: 0.523	0.165
Iso Pentane	ic5: 0.106	0.039
Normal Pentane	nC5: 0.118	0.043
Hexanes Plus	C6+: 0.142	0.062

TOTAL: 100.000 2.112  
Z Fact: 0.9978  
SP.GR.: 0.6442  
BTU (SAT): 1012.9 @ 14.73 psia  
BTU (DRY): 1030.8 @ 14.73 psia  
OCTANE RATING: 117.7

COMMENTS:

0.000