NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
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Analyzed by:
Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number:	972573	Analyzed:	09/04/97
Sample From:	Graber #2 DST 2	Pressure:	
Producer:	Messenger Petorleum	Temperature:	
Date:		Location:	1-31-17
Time:		County:	Harper
Sampler:		State:	Kansas
Source:		Formation:	Miss

		Mole %	GPM
Helium	He:	0.354	0.000
Hydrogen	H2:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	7.419	0.000
Carbon Dioxide	CO2:	0.130	0.000
Methane	C1:	78.526	0.000
Ethane	C2:	7.165	1.916
Propane	C3:	3.504	0.966
Iso Butane	iC4:	0.446	0.146
Normal Butane	nC4:	1.154	0.364
Iso Pentane	iC5:	0.263	0.096
Normal Pentane	nC5:	0.357	0.129
Hexanes Plus	C6+:	0.682	0.298
	TOTAL:	100.000	3.915
	Z Fact:	0.9972	
	SP.GR.:	0.7064	
	BTU (SAT):	1106.2 @ 14.73 psia	
	BTU (DRY):	1125.8 @ 14.73 psia	
	OCTANE RATING:	114.9	

COMMENTS: 0.000

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Lab Number:	972572	Analyzed:	09/04/97
Sample From:	Graber #2 DST 1	Pressure:	
Producer:	Messenger Petorleum	Temperature:	
Date:		Location:	1-31-17
Time:		County:	Harper
Sampler:		State:	Kansas
Source:		Formation:	Miss

		Mole %	GPM
Helium	He:	0.370	0.000
Hydrogen	H2:	0.009	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	7.668	0.000
Carbon Dioxide	CO2:	0.201	0.000
Methane	C1:	78.828	0.000
Ethane	C2:	7.007	1.874
Propane	C3:	3.367	0.928
Iso Butane	iC4:	0.422	0.138
Normal Butane	nC4:	1.074	0.339
Iso Pentane	iC5:	0.237	0.087
Normal Pentane	nC5:	0.316	0.114
Hexanes Plus	C6+:	0.501	0.219
	TOTAL:	100.000	3.698
	Z Fact:	0.9973	
	SP.GR.:	0.6983	
	BTU (SAT):	1087.8 @ 14.73 psia	
	BTU (DRY):	1107.0 @ 14.73 psia	
	OCTANE RATING:	114.8	

COMMENTS:

0.000