

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: 20053576
Sample From: Sowers 20-1
Producer: Imperial Oil Properties
Date:
Time:
Sampler:
Source: DST 1

Analyzed: 07/25/05
Pressure:
Temperature:
Location: 20-29-6
County: Kingman
State: Kansas
Formation: Miss

	Mole %	GPM
Helium He:	0.508	0.000
Hydrogen H2:	0.006	0.000
Oxygen O2:	0.000	0.000
Nitrogen N2:	11.769	0.000
Carbon Dioxide CO2:	0.015	0.000
Methane C1:	74.352	0.000
Ethane C2:	6.551	1.752
Propane C3:	3.869	1.066
Iso Butane iC4:	0.487	0.159
Normal Butane nC4:	1.299	0.410
Iso Pentane iC5:	0.268	0.098
Normal Pentane nC5:	0.355	0.129
Hexanes Plus C6+:	0.521	0.227

TOTAL: 100.000 3.841
Z Fact: 0.9973
SP.GR.: 0.7239
BTU (SAT): 1060.7 @ 14.73 psia
BTU (DRY): 1079.5 @ 14.73 psia
OCTANE RATING: 109.3

COMMENTS:

0.000

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Lab Number: 20053577
 Sample From: Sowers 20-1
 Producer: Imoerial Oil Properties
 Date:
 Time:
 Sampler:
 Source: **DST 2**

Analyzed: 07/25/05
 Pressure:
 Temperature:
 Location: 20-29-6
 County: Kingman
 State: Kansas
 Formation: Miss

	Mole %	GPM
Helium	He: 0.464	0.000
Hydrogen	H2: 0.006	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 10.941	0.000
Carbon Dioxide	CO2: 0.285	0.000
Methane	C1: 74.739	0.000
Ethane	C2: 7.005	1.873
Propane	C3: 3.892	1.072
Iso Butane	iC4: 0.463	0.151
Normal Butane	nC4: 1.196	0.377
Iso Pentane	iC5: 0.226	0.083
Normal Pentane	nC5: 0.297	0.108
Hexanes Plus	C6+: 0.486	0.212

TOTAL: 100.000 3.877
 Z Fact: 0.9973
 SP.GR.: 0.7210
 BTU (SAT): 1063.3 @ 14.73 psia
 BTU (DRY): 1082.1 @ 14.73 psia
 OCTANE RATING: 110.1

COMMENTS:

0.000