

NATURAL GAS ANALYSIS REPORT

Sampled by:
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Analyzed by:
Caraway Analytical, Inc
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Lab Number: 995784	Analyzed: 10/31/99
Sample From: White #1 lpt	Pressure:
Producer: Horseshoe Operating	Temperature:
Date:	Location: 7-23-40
Time:	County: Hamilton
Sampler:	State: Kansas
Source:	Formation: Winfield

	Mole %	GPM
Helium	He: 0.640	0.000
Hydrogen	H2: 0.018	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 28.440	0.000
Carbon Dioxide	CO2: 0.029	0.000
Methane	C1: 59.489	0.000
Ethane	C2: 5.493	1.469
Propane	C3: 3.551	0.978
Iso Butane	iC4: 0.411	0.134
Normal Butane	nC4: 1.094	0.345
Iso Pentane	iC5: 0.229	0.084
Normal Pentane	nC5: 0.276	0.100
Hexanes Plus	C6+: 0.330	0.144

TOTAL: 100.000 3.255
Z Fact: 0.9980
SP.GR.: 0.7723
BTU (SAT): 862.2 @ 14.73 psia
BTU (DRY): 877.5 @ 14.73 psia
OCTANE RATING: 88.2

COMMENTS:

0.000

Horseshoe Operating Inc
NE 7 23s 40w Hamilton county Kansas

White #1

FieldNotes

Field Measurements

		Clock	Casing	Static1	Diff1	Meter1	Gas1
	Date	Time	Comments	Pres	Pres	Temp	Rate
	yyyy/mm/dd	hh:mm:ss		psi(g)	psi(g)	in of H2O	°F
							MMCF/D
1	1999/10/29	08:45:00	Shut-in	113.80			
2		08:55:00		104.40	90.00	4.00	60.00
3		09:00:00		90.00	90.00	2.00	60.00
4	1999/10/30	13:00:00		81.60	80.00	1.00	60.00
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							