



PRIORITY

ANALYTICAL LABORATORY, INC.

424 Greenwood • Wichita, Kansas 67211 • (316) 269-4200

 EXTENDED NATURAL GAS ANALYSIS

COMPANY NAME: MCCOY PETROLEUM LAB# 9214112
 SAMPLE ID: TUTTLE A 1-9
 SETT #: DST #3--MORROW SAND
 COUNTY: CLARK LEGAL LOCATION: 9-35S-21W
 DATE SAMPLED: N/A 0 SAMPLER: TRILOBITE
 SAMPLE PRESSURE: N/A TEMPERATURE (F): N/A
 DATE ANALYZED: OCTOBER 14 1992
 QUALITY CONTROL DATE: OCTOBER 14 1992

*****ANALYSIS*****CALCULATED AT 14.65 PSIA. AT 60 F**NORMALIZED*****

HYDROCARBONS	MOLAL%	LIQUID VOLUME%	BTU AMOUNT	GPM
METHANE	85.71	79.98	862.96	0
ETHANE	5.18	7.63	91.38	0
PROPANE	2.77	4.2	69.48	.76
ISO-BUTANE	.46	.83	14.91	.15
NORMAL-BUTANE	.75	1.3	24.39	.24
ISO-PENTANE	.25	.5	9.97	.04
NORMAL-PENTANE	.25	.5	9.99	.04
3-METHYLPENTANE	*			
2,3-DIMETHYLBUTANE	*			
2-METHYLPENTANE	*			
CYCLOPENTANE	*			
NORMAL HEXANE	*			
HEXANES+	1.32	3.01	66.66	.57
NITROGEN	3.04	1.84	0	0
OXYGEN	0	0	0	0
CARBON DIOXIDE	.15	.14	0	0
HELIUM	.12	.07	0	
HYDROGEN	TRACE (<.01)			

TOTALS***** 100 100 1149.74 1.9

BTU/FT³ DRY (IDEAL GROSS): 1149.74

BTU/FT³ SATURATED (IDEAL GROSS): 1130.5

IDEAL SPECIFIC GRAVITY: .6812

COMPRESSIBILITY: .9971

GPM: 1.9

*=COMBINED WITH HEXANES+

RESPECTFULLY SUBMITTED

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 EXTENDED NATURAL GAS ANALYSIS

COMPANY NAME: MCCOY PETROLEUM LAB# 9214113
 SAMPLE ID: TUTTLE A 1-9
 SETT #: DST #4--MORROW FORMATION
 COUNTY: CLARK LEGAL LOCATION: 9-35S-21W
 DATE SAMPLED: N/A 0 SAMPLER: TRILOBITE
 SAMPLE PRESSURE: N/A TEMPERATURE (F): N/A
 DATE ANALYZED: OCTOBER 14 1992
 QUALITY CONTROL DATE: OCTOBER 14 1992

*****ANALYSIS*****CALCULATED AT 14.65 PSIA. AT 60 F**NORMALIZED*****

HYDROCARBONS	MOLAL%	LIQUID VOLUME%	BTU AMOUNT	GPM
METHANE	86.66	81.73	872.53	0
ETHANE	5.18	7.71	91.38	0
PROPANE	2.54	3.89	63.71	.7
ISO-BUTANE	.42	.77	13.62	.14
NORMAL-BUTANE	.71	1.25	23.09	.22
ISO-PENTANE	.22	.45	8.77	.08
NORMAL-PENTANE	.22	.44	8.79	.08
3-METHYLPENTANE	*			
2,3-DIMETHYLBUTANE	*			
2-METHYLPENTANE	*			
CYCLOPENTANE	*			
NORMAL HEXANE	.74	1.7	37.37	.32
HEXANES+	3.08	1.89	0	0
NITROGEN	0	0	0	0
OXYGEN	.12	.11	0	0
CARBON DIOXIDE	.11	.06	0	0
HELIUM	TRACE (<.01)			
HYDROGEN				
TOTALS*****	100	100	1119.26	1.54

BTU/FT³ DRY (IDEAL GROSS): 1119.26
 BTU/FT³ SATURATED (IDEAL GROSS): 1100.55
 IDEAL SPECIFIC GRAVITY: .6614
 COMPRESSIBILITY: .9972
 GPM: 1.54
 **=COMBINED WITH HEXANES+

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