



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

 EXTENDED NATURAL GAS ANALYSIS

COMPANY NAME: MURFIN DRILLING LAB# 9213798
 SAMPLE ID: OXY-WATSON #1-13
 SETT #: DST #6
 COUNTY: SEWARD LEGAL LOCATION: 13-33S-33W
 DATE SAMPLED: N/A 0 SAMPLER: TRILOBITE
 SAMPLE PRESSURE: N/A TEMPERATURE (F): N/A
 DATE ANALYZED: AUGUST 25 1992
 QUALITY CONTROL DATE: AUGUST 25 1992

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

HYDROCARBONS	MOLAL%	LIQUID VOLUME%	BTU AMOUNT	GPM
METHANE	86.61	81.87	872.02	0
ETHANE	4.71	7.03	83.09	0
PROPANE	2.52	3.87	63.21	.69
ISO-BUTANE	.36	.66	11.67	.12
NORMAL-BUTANE	.8	1.41	26.02	.25
ISO-PENTANE	.21	.43	8.38	.08
NORMAL-PENTANE	.24	.49	9.59	.09
3-METHYLPENTANE	*			
2,3-DIMETHYLBUTANE	*			
2-METHYLPENTANE	*			
CYCLOPENTANE	*			
NORMAL HEXANE	*			
HEXANES+	.65	1.5	32.82	.28
NITROGEN	2.52	1.55	0	0
OXYGEN	0	0	0	0
CARBON DIOXIDE	1.18	1.11	0	0
HELIUM	.14	.08	0	0
HYDROGEN	.06		.19	
TOTALS*****	100	100	1106.99	1.51

BTU/FT³ DRY (IDEAL GROSS): 1106.99

BTU/FT³ SATURATED (IDEAL GROSS): 1088.5

IDEAL SPECIFIC GRAVITY: .6646

COMPRESSIBILITY: .9974

GPM: 1.51

*=COMBINED WITH HEXANES+

RESPECTFULLY SUBMITTED

Blair D. Jones
 PRIORITY ANALYTICAL LAB



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

EXTENDED NATURAL GAS ANALYSIS

COMPANY NAME: MURFIN DRILLING LAB# 9213799
 SAMPLE ID: OXY-WATSON #1-13
 SETT #: DST #7
 COUNTY: SEWARD LEGAL LOCATION: 13-33S-33W
 DATE SAMPLED: N/A 0 SAMPLER: TRILOBITE
 SAMPLE PRESSURE: <1 TEMPERATURE (F): N/A
 DATE ANALYZED: AUGUST 25 1992
 QUALITY CONTROL DATE: AUGUST 25 1992

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

HYDROCARBONS	MOLAL%	LIQUID VOLUME%	BTU AMOUNT	GPM
METHANE	80.27	76.6	808.19	0
ETHANE	4.68	7.05	82.58	0
PROPANE	2.54	3.94	63.71	.7
ISO-BUTANE	.44	.81	14.26	.14
NORMAL-BUTANE	.95	1.69	30.89	.0
ISO-PENTANE	.24	.5	9.57	.09
NORMAL-PENTANE	.34	.69	13.59	.12
3-METHYLPENTANE	*			
2,3-DIMETHYLBUTANE	*			
2-METHYLPENTANE	*			
CYCLOPENTANE	*			
NORMAL HEXANE	*			
HEXANES+	1.19	2.77	60.09	.51
NITROGEN	8.58	5.32	0	0
OXYGEN	.05	.03	0	0
CARBON DIOXIDE	.51	.48	0	0
HELIUM	.21	.12	0	0
HYDROGEN	TRACE (<.01)			
TOTALS*****	100	100	1082.86	1.86

BTU/FT³ DRY (IDEAL GROSS): 1082.86
 BTU/FT³ SATURATED (IDEAL GROSS): 1064.79
 IDEAL SPECIFIC GRAVITY: .7037
 COMPRESSIBILITY: .9974
 GPM: 1.86
 **COMBINED WITH HEXANES+

RESPECTFULLY SUBMITTED

Blair D. Fowler
 PRIORITY ANALYTICAL LAB