GAS QUALITY TEST REPORT

COMPANY SELLER Pennzoil

FIELD OR LOCATION So. Carlsbad

SOURCE OR RESERVOIR Morrow - [redacted] - Atoka

WELL OR STATION NAME Gulf Fed #2 Long String

STA. NO. 1096-2 1693

CONTRACT NO. 1681

TEST DATE 1/15/76

LAB A

COMPOUND COMPONENTS	COMPONENT SPECIFIC GRAVITY	COMPONENT MOLE FRACTION
NITROGEN	.9672	.0076
CARBON DIOXIDE	1.5195	.0065
HELIUM	.1382	.0001
OXYGEN	1.1048	. —
HYDROGEN SULFIDE	1.1766	. —
WATER VAPOR	.6220	. —
HYDROCARBON DILUENTS		(.0142)
METHANE	.5539	.8785
ETHANE	1.0382	.0648
PROPANE	1.5225	.0226
ISO-BUTANE	2.0068	.0045
N-BUTANE	2.0068	.0072
ISO-PENTANE	2.4910	.0027
N-PENTANE	2.4910	.0023
HEXANES	2.9753	.0021
HEPTANES +	3.7018	.0011
COMPOSITION		1.0000

LIQUEFIABLE HYDROCARBONS	COMPONENT G.P.M.	MOLE FRACTION	G.P.M. CONTENT
PROPANE	27.514	.	
ISO-BUTANE	32.698	.	
N-BUTANE	31.510	.	
LPG			
ISO-PENTANE	36.582	.	
N-PENTANE	36.213	.	
HEXANES	41.111	.	
HEPTANES +	46.126	.	
NATURAL GASOLINE			
TOTAL LIQUEFIABLE GPM			

WATER VAPOR CONTENT:

Gas Mixture Static Pressure PSI

Hydrocarbon Dew Point °F

Water Vapor Dew Point °F

Lbs Water Vapor per MMCF

Conversion Constant X 0.000021

Water Vapor Mole Fraction .

Moisture recorder reading

Make or type

MIXTURE SPECIFIC GRAVITY:

Calculated From Analysis .652

Determined by Test Instrument .651

Instrument Make or Type Ranarex

MIXTURE HEATING VALUE:
(Btu/cf at 14.73 Psia, 60°F, Sat.)

Calculated From Analysis 1119

Determined by Calorimeter .

Calorimeter Verified ( )

SULFUR CONTENT:

H_2S – Hydrogen Sulfide, Gr./100 cf .

RSH – Mercaptans " .

RSR – Sulfides " .

RSSR – Residuals " .

Total Sulfur, Gr./100 cf .

H_2S Grains to fraction conversion X 0.0000157

H_2S Mole Fraction

Critical Pressure 672 Critical Temperature 375

REMARKS Analysis After Working Over Well

MEASUREMENT AREA Roswell

GAS ANALYIST Acton

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