

RECEIVED  
925177  
AUG 25 1977

Gas Analysis

Laboratory No. K77NG-1383 Date July 22, 1977  
 Sample of Natural Gas Date Sampled July 14, 1977  
 Company Stoltz, Wagner & Brown  
 Description \_\_\_\_\_  
 Well Name Lindberg #1 Location Sec. 36-17S-37W  
 County Wichita State Kansas Zone \_\_\_\_\_  
 Perf. From To Sampled From \_\_\_\_\_  
 Requested By DHackler Sampled By RClay

CHROMATOGRAPH METHOD

Component	Mol %	G.P.M.*
Helium	1.34	
Hydrogen	-	
Carbon Dioxide	0.03	
Nitrogen	66.68	
Methane	28.64	
Ethane	1.16	
Propane	1.09	0.298
i-Eutane	0.21	0.067
n-Eutane	0.50	0.156
i-Pentane	0.13	0.047
n-Pentane	0.16	0.057
Hexanes-Plus	0.06	0.025
TOTALS	100.00	

\* Calculated value based on ideal gas values from latest G.P.A. pub. 2145

\*\* Calculated value using method from G.P.A. pub. 2172 and latest gas values from 2145.

\*\* Z Factor @ 60° F - 14.696 psia  
 \*\* Gross Heating Value per cu. ft. @ 60° F - 30" Hg Sat. 369.4 B.T.U.  
 \*\* Gross Heating Value per cu. ft. @ 60° F - 30" Hg Dry 376.0 B.T.U.  
 \*\* Net Heating Value per cu. ft. @ 60° F - 30" Hg Sat. 334.3 B.T.U.  
 \*\* Net Heating Value per cu. ft. @ 60° F - 30" Hg Dry 340.2 B.T.U.  
 \*\* Specific Gravity (Air = 1.00) 0.8584

Gross Heating Value per cu. ft. @ 60° F - 30" Hg Sat.  
 Determined by recording calorimeter \_\_\_\_\_ B.T.U.

REMARKS Sample from Goering #7 - Kearny, County, Kansas - Sec. 27-21S-37W was empty.

cc: CRC(2) FLFranz INVOICE: Stoltz-Wagner & Brown  
 2625 Liberty Tower  
 Oklahoma City, OK. 73102

**OWLL**

A. F. Telford  
 Analyst ✓

NORTHERN NATURAL GAS CO.  
NATURAL GAS ANALYSIS REPORT FORM

SAMPLE NO 1426

DATE RECEIVED \_\_\_\_\_ SECURED BY \_\_\_\_\_ TANK NUMBER 259 DATE ANALYZED AUG 10 1977

ANALYST SSK OPERATOR NAME Stoltz, Wagner, & Brown OUTSIDE LAB \_\_\_\_\_

WELL NAME OR SOURCE Lindberg #1 Sec. 36 Twp. 17 R. 37 COUNTY Wichita STATE Ks

36-175-37W

RECORD IDENTIFIER	CARD NO.	DATE SAMPLE TAKEN			LAB	GAS ANALYSIS DATA - MOLE FRACTION																								
		MO.	DAY	YR.		HE	O <sub>2</sub>	CO <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	H <sub>2</sub> S	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	I-C <sub>4</sub>	N-C <sub>4</sub>	I-C <sub>5</sub>	N-C <sub>5</sub>	C <sub>6</sub>	C <sub>7</sub>										
	60	08	03	77	L	01	27	00	19	56	81				38	71	01	11	00	59	00	19	00	47	00	12	00	19	00	37

RECORD IDENTIFIER	CARD NO.	DATE OF GRAVITY			MEASURED SPECIFIC GRAVITY	DATE SAMPLE TAKEN	CALCULATED SPECIFIC GRAVITY	SULFUR TEST						
		MO.	DAY	YR.				TEST DATE	TYPE	H <sub>2</sub> S GRS/100 CF	RSH GRS/100 CF	RSH+ GRS/100 CF		
	61													

OWELL

RECORD IDENTIFIER	CARD NO.	DATE SAMPLE TAKEN			LAB	LIQUID ANALYSIS DATA - MOLE FRACTION												
		MO.	DAY	YR.		C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	I-C <sub>4</sub>	N-C <sub>4</sub>	I-C <sub>5</sub>	N-C <sub>5</sub>	C <sub>6</sub>	C <sub>7</sub>	C <sub>8</sub>	C <sub>9</sub>		
	62																	

\* MUST TOTAL 1.0000  
+ INCLUDES OTHER SULFUR (SEE ITEM DESCRIPTION)

GPM BY CHROMATOGRAPH \_\_\_\_\_

CALC. BTU (SAT'D) 471

CALC. BTU (DRY) \_\_\_\_\_

CALC. SP. GR. 0.8237

DISTRIBUTION LIST:

Gas Supply, Liberal  
Mr. R. W. Thurber, G.S., OMAHA

*S. K. Lewis*  
Producer

REMARKS: Wellhead has  
NEW WELL: UNCONNECTED  
P= 26 psig insufficient pressure for calorimeter