

Centana Laboratories

Analytical Chemistry Laboratories

GAS ANALYSIS

ANALYSIS NO.: K95NGII-1047 DATE RUN: 3-10-95
COMPANY: PEPL COMPANY DATE SAMPLED: 2-27-95
DESCRIPTION: OXY
WELL NAME: ENGLISH C2-20 LOCATION: 20-27-35
COUNTY: GRANT STATE: KS SAMPLED FROM: METER RUN #1
ZONE: PERF. FROM: TO: MS#: 8527-C
FIELD DETERMINATIONS: SAMPLE PRESS. (PSIG): 32 SAMPLE TEMP. (F):
HEATING VALUE (BTU): SPEC. GRAVITY:
REQUESTED BY: R. GRIFFIN SAMPLED BY: K. CAMERON

CHROMATOGRAPH METHOD (GPA 2261-86)

<u>COMPONENT</u>	<u>MOL%</u>	<u>G.P.M.*</u>
HELIUM	0.43	
HYDROGEN	0.00	
CARBON DIOXIDE	0.03	
NITROGEN	14.34	
METHANE	73.55	
ETHANE	6.25	1.671
PROPANE	3.52	0.969
I-BUTANE	0.40	0.130
N-BUTANE	0.95	0.299
I-PENTANE	0.18	0.065
N-PENTANE	0.20	0.072
HEXANES-PLUS	0.15	0.063
TOTAL	100.00	3.269

* CALCULATED VALUE BASED ON IDEAL
GAS VALUES FROM GPA 2145-94 AT
60F AND 14.73 PSIA.

** CALCULATED VALUE FROM GPA
2172-86 AND GAS VALUES FROM
GPA 2145-94.

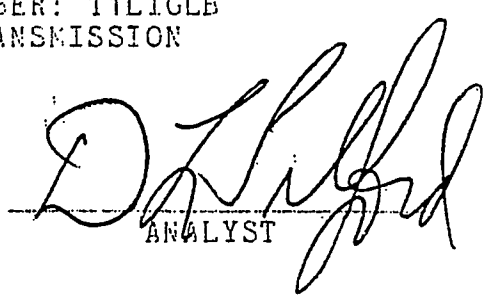
--->THIS COPY FOR ETU PRICE ADJ.<---

** Z FACTOR AT 60F & 14.73 PSIA DRY
** GROSS HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA SAT. 996.8 ETU
** GROSS HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA DRY 1013.5 ETU
** NET HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA SAT. 901.3 ETU
** NET HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA DRY 917.2 ETU
** RELATIVE DENSITY (SPECIFIC GRAVITY)(AIR=1.00) DRY 0.7075
GROSS HEATING VALUE PER CU.FT. AT 60F & 14.73 PSIA SAT.
DETERMINED BY RECORDING CALORIMETER

REMARKS: AMBIENT TEMPERATURE 35F ANNUAL SAMPLE
COPY TO ULYSSES

CC: GASPAY-H AREA
CRC CSC

DISTRIBUTION #: 40
ORDER NUMBER: 018842
ACCOUNT NUMBER: T1LIGL
INVOICE: TRANSMISSION


ANALYST

Centana Laboratories

Analytical Chemistry Laboratories

GAS ANALYSIS

ANALYSIS NO.: K94NGII-1895
COMPANY: PEPL COMPANY
DESCRIPTION: OXY
WELL NAME: ENGLISH C2-20
COUNTY: GRANT STATE: KS
ZONE: PERF. FROM: TO: MS#: 8527-C
FIELD DETERMINATIONS: SAMPLE PRESS. (PSIG): 35 SAMPLE TEMP. (F):
HEATING VALUE (BTU): SPEC. GRAVITY:
REQUESTED BY: S. STEPP SAMPLED BY: K. CAMERON

DATE RUN: 5-6-94

DATE SAMPLED: 5-3-94

LOCATION: 20-27-35

SAMPLED FROM: METER RUN #1

PERF. FROM:

TO: MS#: 8527-C

FIELD DETERMINATIONS: SAMPLE PRESS. (PSIG): 35 SAMPLE TEMP. (F):

HEATING VALUE (BTU): SPEC. GRAVITY:

SAMPLED BY: K. CAMERON

CHROMATOGRAPH METHOD (GPA 2261-86)

COMPONENT	MOL%	G.P.M.*
HELIUM	0.43	
HYDROGEN	0.00	
CARBON DIOXIDE	0.08	
NITROGEN	14.02	
METHANE	73.61	
ETHANE	6.27	1.676
PROPANE	3.59	0.989
I-BUTANE	0.41	0.134
N-BUTANE	0.99	0.312
I-PENTANE	0.19	0.069
N-PENTANE	0.22	0.079
HEXANES-PLUS	0.19	0.080

* CALCULATED VALUE BASED ON IDEAL
GAS VALUES FROM GPA 2145-94 AT
60F AND 14.73 PSIA.

** CALCULATED VALUE FROM GPA
2172-86 AND GAS VALUES FROM
GPA 2145-94.

--->THIS COPY FOR BTU PRICE ADJ.<---

TOTAL 100.00 3.339

** Z FACTOR AT 60F & 14.73 PSIA DRY

** GROSS HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA SAT. 1004.2 BTU

** GROSS HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA DRY 1021.2 BTU

** NET HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA SAT. 908.1 BTU

** NET HEATING VALUE PER CU.FT. @ 60F & 14.73 PSIA DRY 924.2 BTU

** RELATIVE DENSITY (SPECIFIC GRAVITY)(AIR=1.00) DRY 0.7105

GROSS HEATING VALUE PER CU.FT. AT 60F & 14.73 PSIA SAT.

DETERMINED BY RECORDING CALORIMETER

REMARKS: ANNUAL SAMPLE

AMBIENT TEMPERATURE 55F COPY TO ULYSSES

CC: GASPAY-H AREA
CRC CSC

DISTRIBUTION #: 40
ORDER NUMBER: 010510
ACCOUNT NUMBER: T1LIGLB
INVOICE: TRANSMISSION

ANALYST

Occidental Oil and Gas

Houston, Texas

Gas Analysis Certificate Report

06/01/2004

13:37:17

Fontenot

Analysis ID: 8527P

English C 2

Alternate ID: 8527

Effective Date: 06/10/2003 00:00

Saturated HV:

1026.8

Sample Date:

06/10/2003

Valid Thru Date: 01/18/2038 00:00

Sample ID:

Last Update: 06/10/2003 00:00

Dry HV:

1026.8

Sample Type:

Spot

Analysis Origin: Field Entry in RTU

Gravity:

0.7150

Sample Pressure Base: 14.730

Analysis Type: Lab analysis

Source:

Import

Sample Temperature: 0.0

Sample Pressure: 0.0

<u>Component</u>	<u>% Mol</u>	<u>GPM</u>
Methane	73.0500	
Ethane	6.2700	1.6759
Propane	3.6900	1.0160
I Butane	0.5000	0.1635
N Butane	1.0800	0.3405
I Pentane	0.2000	0.0732
Pentane	0.2300	0.0833
Hexane	0.1800	0.0740
Heptane	0.0000	0.0000
Octane	0.0000	0.0000
Nonane	0.0000	0.0000
Decane	0.0000	0.0000
Nitrogen	14.3430	
CO2	0.0280	
Oxygen	0.0000	
H2O	0.0000	
CO	0.0000	
H2S	0.0000	
Hydrogen	0.0000	
Helium	0.4200	
Argon	0.0000	
<u>Total</u>	<u>99.9910</u>	<u>3.4264</u>

Comments:

Gravity - Dry

0.00000

Gravity - Saturated

0.00000