

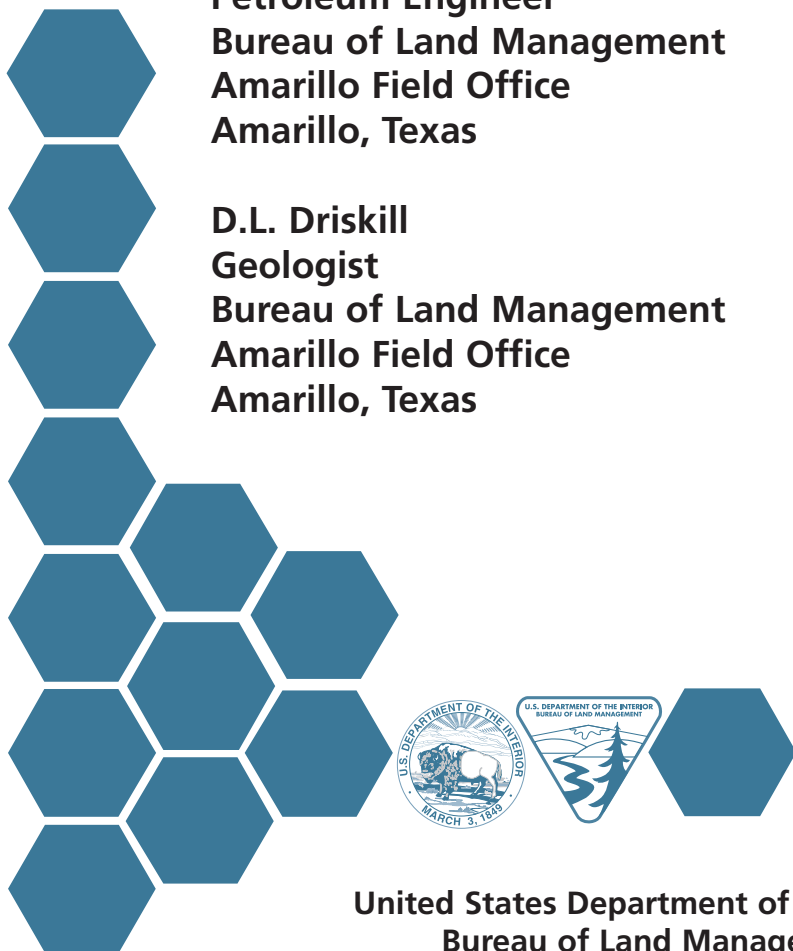
Analyses of Natural Gases, 1998–2001

Technical Note 412

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By B.D.Gage
Petroleum Engineer
Bureau of Land Management
Amarillo Field Office
Amarillo, Texas

D.L. Driskill
Geologist
Bureau of Land Management
Amarillo Field Office
Amarillo, Texas



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Information and Communications Staff
Peter Doran, Chief (303-236-1601)

Ethel Coontz: Layout and Design
Kathy Rohling: Editing

Lee Barkow, Director
National Science & Technology Center
P.O. Box 25047
Denver, Colorado 80225-0047

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A b s t r a c t

Technical Note 412 contains analyses and related source data for 311 natural gas samples from 13 States. Of the total samples, 309 were collected during calendar years 1998 through 2001. The analyses were made using mass spectroscopy and gas chromatography. None of the analyses have been published previously in other analyses reports. All samples were obtained and analyzed as

part of the United States Department of the Interior's Bureau of Land Management investigations of the occurrences of helium in natural gases of countries with free-market economies. The results of these investigations are published periodically to make the information available to members of the helium and petroleum industries and to the general public.

Introduction

Bureau of Land Management Technical Note 412, *Analyses of Natural Gases, 1998–2001*, contains analyses and related source data for 311 natural gas samples from 13 States. Of the total samples, 309 were collected during calendar years 1998 through 2001. The remaining two were collected earlier, but releases granting permission to publish them were received at a later date. None of these analyses have been published previously in other analyses reports.

The analyses were made using mass spectroscopy and gas chromatography. All samples were obtained and analyzed as part of the Bureau of Land Management investigations of the occurrences of helium in natural gases of countries with free-market economies. This helium survey program has been conducted since 1917. The results are published periodically to make the information available to members of the helium and petroleum industries and to the general public.

Forty-two publications have presented the results of 16,058 gas analyses performed through 1997. These publications are referenced at the end of this report in the section “Previous Publications in the Helium Survey Series.”

The first three bulletins (1–3)¹ contain analyses and related source data on 5,218 gas samples collected from 1917 through

1960. These bulletins have been supplemented periodically by information circulars and technical notes (4–17, 19–24, 26–30, 32–36, 38–42) containing 10,840 analyses of samples collected since 1960.

In 1976, a compilation of the analyses made prior to 1975 was prepared by the United States Bureau of Mines (USBM) and published by the National Technical Information Service of the United States Department of Commerce (18). The 1976 compilation contains 10,562 analyses of gas samples from gas and oil wells and natural gas pipelines in 37 States and 23 foreign countries.

Three other compilations of analyses have been published (25, 31, 37) by the USBM. The first of these was published in 1982 and contained analyses performed prior to 1981. The 1982 publication contains 12,554 analyses of gas samples from gas and oil wells and natural gas pipelines in 39 States and 24 foreign countries and includes the analyses from the 1976 publication (25). The second of these compilations was published in 1987 and contains 14,242 analyses performed prior to 1986. The samples were taken from gas and oil wells and natural gas pipelines in 40 States and 24 foreign countries (31). In 1991, a compilation of analyses was completed as a supplement to the 1987 publication and contains all analyses published from 1986

¹The numbers in parentheses refer to items in the list of previous publications at the end of this report.

through 1990. The 1991 publication contains 920 samples from gas and oil wells and natural gas pipelines in 26 States and 2 foreign countries (37).

In addition to appearing in the publications, all analyses and related information published through 1997 are available on CD-ROM from the National Technical Information Service (NTIS) in Springfield, Virginia (1-800-553-NTIS). Orders should refer to Bureau of Land Management CD-ROM PB98-502206. The update to the 1997 CD-ROM, which will include

the 1998–2001 analyses, should be available for purchase around the time this report is published.

The helium survey program is conducted by soliciting natural gas samples from throughout the United States and other countries with free-market economies. The helium survey, in its present scope, would not be possible without the assistance of the helium and petroleum industries, State and Federal agencies, and the many individuals engaged in oil and gas exploration and production.

Tables

Tables 1 and 2—the main focus of this technical note—include the results of analyses and related source data from the gas samples. This information is divided into two groups. Table 1 contains information on samples from gas and oil wells in the United States. Table 2 contains information on samples from natural gas pipelines in the United States. The following

chart indicates the sources of the samples listed in these tables. All components of the analyses in the tables are reported to the nearest 0.1 percent, except helium, which is reported to the nearest 0.01 percent. The word “trace” is used to denote quantities of helium of less than 0.005 percent and quantities of other components of less than 0.05 percent.

Source	Number of Samples	Table(s)	Source	Number of Samples	Table(s)
Arizona	1	1	Oregon	1	1
Arkansas	2	1	Pennsylvania	2	1
Colorado	35	1,2	Tennessee	1	1
Kansas	77	1	Texas	20	1
New Mexico	126	1	Utah	2	1
Ohio	2	1	Wyoming	3	1
Oklahoma	39	1			

Geologic Provinces of the United States

Tables 1 and 2 also include geologic province codes so each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists. The provinces and their associated codes are provided in the list that follows and are also illustrated in Figure 1². They are

delineated by political boundaries for convenience and for accommodation of the data processing equipment. Because not all of the provinces shown are gas-producing areas, many of the codes are not used in this publication. In addition, since State or Federal ownership is not always known in offshore areas, only one code is used for each State. Due to the lack of information on the location of wells in Alaska, only one code (972) is used for all wells.

²The list and Figure 1 are taken from the article cited as: Meyer, R.F. 1970. Geologic provinces code map for computer use: American Association of Petroleum Geologists Bulletin, v. 54, n. 7, p.1301-1305.

Code	Province
100	New England Province
110	Adirondack Uplift
120	Atlantic Coast Basin
130	South Georgia-North Florida Sedimentary Province
140	South Florida Province
150	Piedmont-Blue Ridge Province
160	Appalachian Basin
200	Black Warrior Basin
210	Mid-Gulf Coast Basin
220	Gulf Coast Basin
230	Arkla Basin
240	Desha Basin
250	Upper Mississippi Embayment
260	East Texas Basin
300	Cincinnati Arch
305	Michigan Basin
310	Wisconsin Arch
315	Illinois Basin
320	Sioux Uplift
325	Iowa Shelf
330	Lincoln Anticline
335	Forest City Basin
340	Ozark Uplift
345	Arkoma Basin
350	South Oklahoma Folded Belt Province
355	Chautauqua Platform
360	Anadarko Basin
365	Cherokee Basin
370	Nemaha Anticline
375	Sedgwick Basin
380	Salina Basin
385	Central Kansas Uplift
390	Chadron Arch
395	Williston Basin
400	Ouachita Tectonic Belt Province
405	Kerr Basin
410	Llano Uplift
415	Strawn Basin

Code	Province
420	Fort Worth Syncline
425	Bend Arch
430	Permian Basin
435	Palo Duro Basin
440	Amarillo Arch
445	Sierra Grande Uplift
450	Las Animas Arch
455	Las Vegas-Raton Basin
460	Estancia Basin
465	Orogrande Basin
470	Pedregosa Basin
475	Basin-and-Range Province
500	Sweetgrass Arch
505	Montana Folded Belt Province
510	Central Montana Uplift
515	Powder River Basin
520	Big Horn Basin
525	Yellowstone Province
530	Wind River Basin
535	Green River Basin
540	Denver Basin
545	North Park Basin
550	South Park Basin
555	Eagle Basin
560	San Luis Basin
565	San Juan Mountain Province
570	Uinta Uplift
575	Uinta Basin
580	San Juan Basin
585	Paradox Basin
590	Black Mesa Basin
595	Piceance Basin
600	Northern Cascade Range-Okanagan Province
605	Eastern Columbia Basin
610	Idaho Mountains Province
615	Snake River Basin
620	Southern Oregon Basin
625	Great Basin Province

Code	Province
630	Wasatch Uplift
635	Plateau Sedimentary Province
640	Mojave Basin
645	Salton Basin
650	Sierra Nevada Province
700	Bellingham Basin
705	Puget Sound Province
710	Western Columbia Basin
715	Klamath Mountains Province
720	Eel River Basin
725	Northern Coast Range Province
730	Sacramento Basin
735	Santa Cruz Basin
740	Coastal Basins
745	San Joaquin Basin
750	Santa Maria Basin
755	Ventura Basin
760	Los Angeles Basin
765	Capistrano Basin
800	Heceta Island Area
805	Keku Islands Area
810	Gulf of Alaska Basin
815	Copper River Basin
820	Cook Inlet Basin
830	Kandik Province
835	Kobuk Province
840	Koyukuk Province
845	Bristol Bay Basin
850	Bethel Basin
855	Norton Basin
860	Selawik Basin
863	Yukon Flats Basin
865	Lower Tanana Basin
867	Middle Tanana Basin
870	Upper Tanana Basin
873	Galena Basin
875	Innoko Basin
877	Minchumina Basin

Code	Province
880	Holitna Basin
885	Arctic Foothills Province
890	Arctic Slope Basin
900	Maine Atlantic offshore–general
901	Maine Atlantic offshore–State
902	Maine Atlantic offshore–Federal
903	New Hampshire Atlantic offshore–general
904	New Hampshire Atlantic offshore–State
905	New Hampshire Atlantic offshore–Federal
906	Massachusetts Atlantic offshore–general
907	Massachusetts Atlantic offshore–State
908	Massachusetts Atlantic offshore–Federal
909	Rhode Island Atlantic offshore–general
910	Rhode Island Atlantic offshore–State
911	Rhode Island Atlantic offshore–Federal
912	Connecticut Atlantic off shore–general
913	Connecticut Atlantic offshore–State
914	Connecticut Atlantic offshore–Federal
915	New York Atlantic offshore–general
916	New York Atlantic offshore–State
917	New York Atlantic offshore–Federal
918	New Jersey Atlantic offshore–general
919	New Jersey Atlantic offshore–State
920	New Jersey Atlantic offshore–Federal
921	Delaware Atlantic offshore–general
922	Delaware Atlantic offshore–State
923	Delaware Atlantic offshore–Federal
924	Maryland Atlantic offshore–general
925	Maryland Atlantic offshore–State
926	Maryland Atlantic offshore–Federal
927	Virginia Atlantic offshore–general
928	Virginia Atlantic offshore–State
929	Virginia Atlantic offshore–Federal
930	North Carolina Atlantic offshore–general
931	North Carolina Atlantic offshore–State
932	North Carolina Atlantic offshore–Federal
933	South Carolina Atlantic offshore–general
934	South Carolina Atlantic offshore–State

Code	Province
935	South Carolina Atlantic offshore–Federal
936	Georgia Atlantic offshore–general
937	Georgia Atlantic offshore–State
938	Georgia Atlantic offshore–Federal
939	Florida Atlantic offshore–general
940	Florida Atlantic offshore–State
941	Florida Atlantic offshore–Federal
942	Florida Gulf of Mexico offshore–general
943	Florida Gulf of Mexico offshore–State
944	Florida Gulf of Mexico offshore–Federal
945	Alabama Gulf of Mexico offshore–general
946	Alabama Gulf of Mexico offshore–State
947	Alabama Gulf of Mexico offshore–Federal
948	Mississippi Gulf of Mexico offshore–general
949	Mississippi Gulf of Mexico offshore–State
950	Mississippi Gulf of Mexico offshore–Federal
951	Louisiana Gulf of Mexico offshore–general
952	Louisiana Gulf of Mexico offshore–State
953	Louisiana Gulf of Mexico offshore–Federal
954	Texas Gulf of Mexico offshore–general
955	Texas Gulf of Mexico offshore–State
956	Texas Gulf of Mexico offshore–Federal
957	California Pacific offshore–general
958	California Pacific offshore–State
959	California Pacific offshore–Federal
960	Oregon Pacific offshore–general
961	Oregon Pacific offshore–State
962	Oregon Pacific offshore–Federal
963	Washington Pacific offshore–general
964	Washington Pacific offshore–State
965	Washington Pacific offshore–Federal
972	Alaska Arctic offshore–general
973	Alaska Arctic offshore–State
974	Alaska Arctic offshore–Federal
975	Alaska Bering Sea offshore–general
976	Alaska Bering Sea offshore–State
977	Alaska Bering Sea offshore–Federal
978	Alaska Pacific offshore–general

Code	Province
979	Alaska Pacific offshore–State
980	Alaska Pacific offshore–Federal
987	Minnesota Lake Superior offshore
988	Wisconsin Lake Superior offshore
989	Michigan Lake Superior offshore
990	Indiana Lake Michigan offshore
991	Illinois Lake Michigan offshore
992	Wisconsin Lake Michigan offshore
993	Michigan Lake Michigan offshore
994	Michigan Lake Huron offshore
995	Michigan Lake Erie offshore
996	Ohio Lake Erie offshore
997	Pennsylvania Lake Erie offshore
998	New York Lake Erie offshore
999	New York Lake Ontario offshore

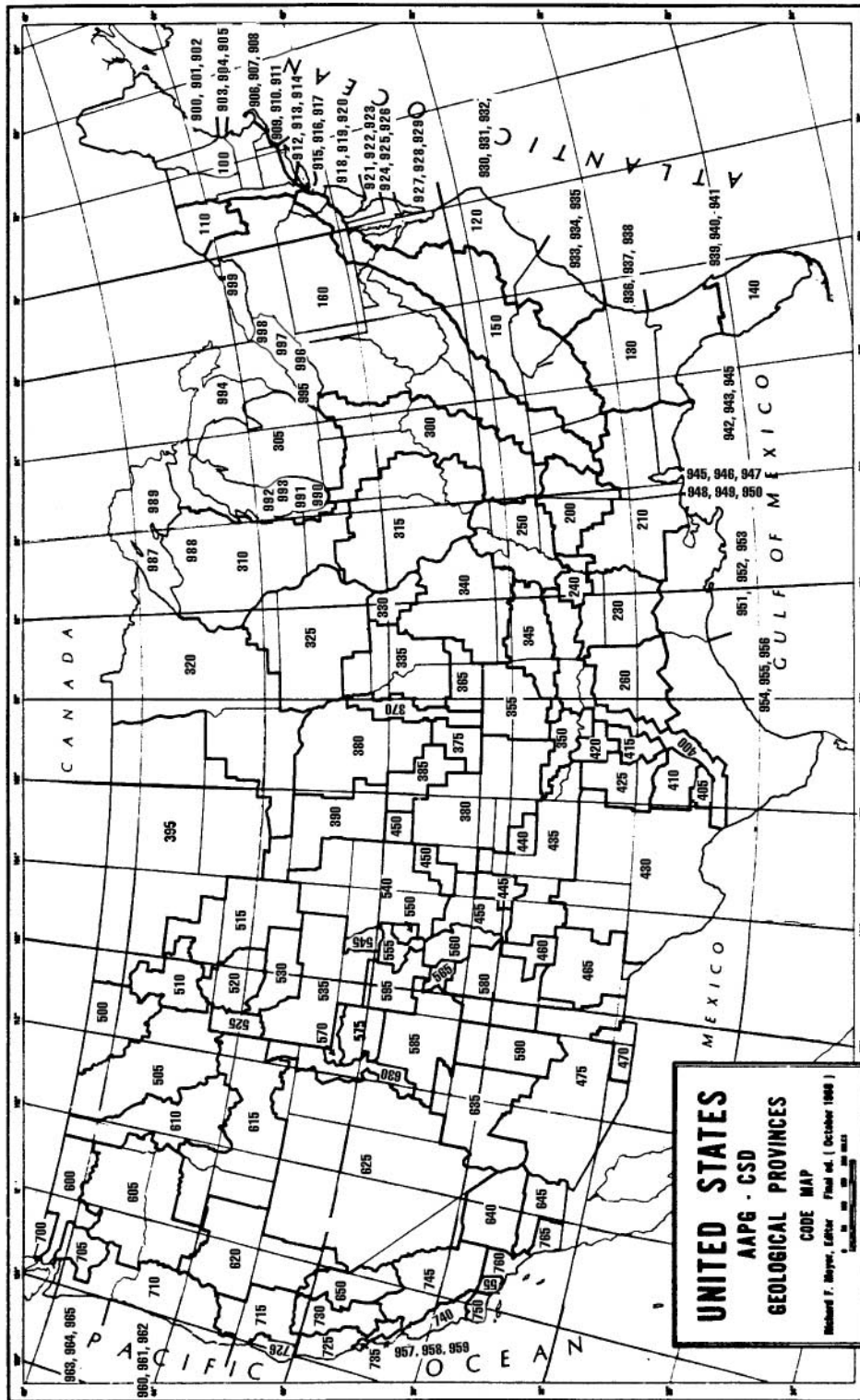


Figure 1. Geologic Provinces of the United States.

T a b l e 1

*Samples from Gas and Oil Wells
in the United States*

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20044	COMPONENT, MOLE PCT
STATE _____	ARIZONA	METHANE _____ 0.1
COUNTY _____	APACHE	ETHANE _____ TRACE
FIELD _____	WILDCAT	PROPANE _____ TRACE
WELL NAME _____	STATE NO. 3-1	N-BUTANE _____ TRACE
API _____	0200120299	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 3, T11N, R29E	N-PENTANE _____ TRACE
OWNER _____	RIDGEWAY ARIZONA OIL CORP.	ISOPENTANE _____ 0.0
COMPLETED _____	950913	CYCLOPENTANE _____ --
SAMPLED _____	991220	HEXANES PLUS _____ 0.0
FORMATION _____	PERM-AMOS WASH	NITROGEN _____ 2.4
GEOLOGIC PROVINCE CODE _____	590	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1676	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	420	HYDROGEN SULFIDE** _____ TRACE
OPEN FLOW, MCFD _____	1347	CARBON DIOXIDE _____ 96.5
		HELIUM _____ 0.69
		HEATING VALUE* _____ 6
		SPECIFIC GRAVITY _____ 1.505
<hr/>		
SAMPLE	20918	COMPONENT, MOLE PCT
STATE _____	ARKANSAS	METHANE _____ 95.8
COUNTY _____	POPE	ETHANE _____ 1.0
FIELD _____	SILEX	PROPANE _____ 0.1
WELL NAME _____	SILEX 8-22-C	N-BUTANE _____ 0.0
API _____	0311510617	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 22, T10N, R21W	N-PENTANE _____ 0.0
OWNER _____	XTO ENERGY, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	001126	CYCLOPENTANE _____ --
SAMPLED _____	011029	HEXANES PLUS _____ 0.0
FORMATION _____	MISS-BOONE, DEVO-PENTERS	NITROGEN _____ 2.7
GEOLOGIC PROVINCE CODE _____	345	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4560	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	345	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	100	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.08
		HEATING VALUE* _____ 988
		SPECIFIC GRAVITY _____ 0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20008	COMPONENT, MOLE PCT
STATE _____	ARKANSAS	METHANE _____ 95.6
COUNTY _____	YELL	ETHANE _____ 2.0
FIELD _____	WAVELAND	PROPANE _____ 0.2
WELL NAME _____	USA NO. 1-10	N-BUTANE _____ TRACE
API _____	0314910013	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 10, T5N, R25W	N-PENTANE _____ 0.0
OWNER _____	SEECO, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	971201	CYCLOPENTANE _____ --
SAMPLED _____	980000	HEXANES PLUS _____ 0.0
FORMATION _____	PENN-BORUM U&L	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	345	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6754	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1994	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	7752	CARBON DIOXIDE _____ 1.2
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.013
		SPECIFIC GRAVITY _____ 0.582
<hr/>		
SAMPLE	20915	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 50.2
COUNTY _____	BACA	ETHANE _____ 2.3
FIELD _____	GREENWOOD	PROPANE _____ 1.5
WELL NAME _____	BRANDT O'NEILL UNIT 1	N-BUTANE _____ 0.7
API _____	0500906220	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 16, T34S, R41W	N-PENTANE _____ 0.2
OWNER _____	KAISER-FRANCIS OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	920813	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 42.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1260	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.4
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	338	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 1.16
		HEATING VALUE* _____ 646
		SPECIFIC GRAVITY _____ 0.778

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20917	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.1
COUNTY _____	BACA	ETHANE _____ 1.7
FIELD _____	GREENWOOD	PROPANE _____ 0.9
WELL NAME _____	SEMINOLE 1-33	N-BUTANE _____ 0.4
API _____	0500906601	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 33, T34S, R41W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.2
COMPLETED _____	000212	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 60.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1290	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	147	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 1.51
		HEATING VALUE* _____ 444
		SPECIFIC GRAVITY _____ 0.836

SAMPLE	20909	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.9
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	WALSH	PROPANE _____ 0.6
WELL NAME _____	GREENSBURG STATE 1-16	N-BUTANE _____ 0.2
API _____	0500906560	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 16, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.1
COMPLETED _____	960118	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 61.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1609	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	800	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 1.61
		HEATING VALUE* _____ 405
		SPECIFIC GRAVITY _____ 0.821

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20911	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.1
COUNTY _____	BACA	ETHANE _____ 1.0
FIELD _____	SPELUNKER	PROPANE _____ 0.6
WELL NAME _____	KITO 1-21	N-BUTANE _____ 0.2
API _____	0500906588	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 21, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.1
COMPLETED _____	981217	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 61.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1609	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	62	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	480	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.62
		HEATING VALUE* _____ 397
		SPECIFIC GRAVITY _____ 0.823
<hr/>		
SAMPLE	20912	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 35.3
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	WALSH	PROPANE _____ 0.6
WELL NAME _____	MCKINLEY 2-20	N-BUTANE _____ 0.3
API _____	0500906564	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 20, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.1
COMPLETED _____	960331	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 60.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1624	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	487	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.62
		HEATING VALUE* _____ 415
		SPECIFIC GRAVITY _____ 0.82

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20910	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 36.8
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	UNNAMED	PROPANE _____ 0.6
WELL NAME _____	ALLEY 2-17	N-BUTANE _____ 0.3
API _____	0500906569	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 17, T33S, R43W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO. INC.	ISOPENTANE _____ 0.1
COMPLETED _____	961005	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-RED CAVE, PENN-WABAUNSEE	NITROGEN _____ 58.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3079	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	322	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1391	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.65
		HEATING VALUE* _____ 430
		SPECIFIC GRAVITY _____ 0.814

SAMPLE	20916	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 66.1
COUNTY _____	BACA	ETHANE _____ 6.5
FIELD _____	GREENWOOD	PROPANE _____ 4.0
WELL NAME _____	BURGHART A-1 LEASE	N-BUTANE _____ 1.3
API _____	0500905038	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 22, T34S, R41W	N-PENTANE _____ 0.4
OWNER _____	BEREXCO, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	560502	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-TOPEKA	NITROGEN _____ 19.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2830	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1620	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.54
		HEATING VALUE* _____ 993
		SPECIFIC GRAVITY _____ 0.755

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20914	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 63.7
COUNTY _____	BACA	ETHANE _____ 5.8
FIELD _____	MIDWAY	PROPANE _____ 3.4
WELL NAME _____	LEACH 1-10	N-BUTANE _____ 1.0
API _____	0500906397	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 10 T33S R42W	N-PENTANE _____ 0.3
OWNER _____	SANDLIN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	991102	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-TOPEKA	NITROGEN _____ 24.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3063	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	150	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.62
		HEATING VALUE* _____ 907
		SPECIFIC GRAVITY _____ 0.748

SAMPLE	20906	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 57.8
COUNTY _____	BACA	ETHANE _____ 5.5
FIELD _____	GREENWOOD	PROPANE _____ 3.6
WELL NAME _____	MCCALL NO. 1-23	N-BUTANE _____ 1.1
API _____	0500906544	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 23 T31S R42W	N-PENTANE _____ 0.3
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.2
COMPLETED _____	950426	CYCLOPENTANE _____ --
SAMPLED _____	011031	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-TOPEKA	NITROGEN _____ 29.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3264	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	368	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.75
		HEATING VALUE* _____ 860
		SPECIFIC GRAVITY _____ 0.777

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20875	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.2</u>
COUNTY _____	<u>GARFIELD</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>PARACHUTE</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>AMERICAN SODA GM 268-3</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>0504507313</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 3, T7S, R96W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>000809</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011015</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6266</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>2000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1128</u>	CARBON DIOXIDE _____ <u>4.0</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.041</u>
		SPECIFIC GRAVITY _____ <u>0.639</u>

SAMPLE	20812	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>88.7</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.3</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>2.4</u>
WELL NAME _____	<u>SULFUR GULCH 9-98-10</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>0507708682</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 10, T9S, R98W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>MARALEX RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>950225</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-CAMEO</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3052</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>368</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.116</u>
		SPECIFIC GRAVITY _____ <u>0.64</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20811	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>91.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>4.0</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>SULFUR GULCH 9-98-2</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>0507708709</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 2, T9S, R98W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MARALEX RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>000518</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CAMEO COAL</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2600</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>20</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.061</u>
		SPECIFIC GRAVITY _____ <u>0.619</u>

SAMPLE	20796	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.3</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>2.3</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>FEDERAL 1-3</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708192</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 1, T10S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>ROCKY MOUNTAIN OPERATING CO., INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>791129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-CORCORAN</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3262</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>0</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1057</u>	CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.599</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20800	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 87.9
COUNTY _____	MESA	ETHANE _____ 6.5
FIELD _____	SHIRE GULCH	PROPANE _____ 2.3
WELL NAME _____	FEDERAL 35-1	N-BUTANE _____ 0.6
API _____	0507708178	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 35, T9S, R97W	N-PENTANE _____ 0.2
OWNER _____	ROCKY MOUNTAIN OPERATING CO., INC.	ISOPENTANE _____ 0.2
COMPLETED _____	791226	CYCLOPENTANE _____ --
SAMPLED _____	010827	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-CORCORAN	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3072	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	0	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1000	CARBON DIOXIDE _____ 1.2
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.124
		SPECIFIC GRAVITY _____ 0.651

SAMPLE	20816	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 87.5
COUNTY _____	MESA	ETHANE _____ 7.1
FIELD _____	BRONCO FLATS	PROPANE _____ 2.6
WELL NAME _____	WAGON TRACK FEDERAL 12-16	N-BUTANE _____ 0.6
API _____	0507708700	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T9S, R98W	N-PENTANE _____ 0.2
OWNER _____	BLACK HILLS EXPL. & PROD. INC.	ISOPENTANE _____ 0.2
COMPLETED _____	961226	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-CORCORAN	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2879	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	433	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.137
		SPECIFIC GRAVITY _____ 0.65

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20815	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>88.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>WAGON TRACK FEDERAL 12-14</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>0507708699</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12, T9S, R98W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BLACK HILLS EXPL. & PROD. INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>961228</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-CORCORAN</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2854</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>475</u>	CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.131</u>
		SPECIFIC GRAVITY _____ <u>0.642</u>

SAMPLE	20819	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>92.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>2.0</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>HORSESHOE CANYON 4-21</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708486</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 21, T9S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>830218</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CORCORAN, DAKOTA</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7671</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>100</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2947</u>	CARBON DIOXIDE _____ <u>4.2</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>999</u>
		SPECIFIC GRAVITY _____ <u>0.617</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20803	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.8</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>4.6</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>HORSESHOE CANYON 3</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>0507708656</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 28, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930315</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-COZZETTE</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2902</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>360</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>501</u>	CARBON DIOXIDE _____ <u>2.1</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.071</u>
		SPECIFIC GRAVITY _____ <u>0.634</u>

SAMPLE	20814	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>87.3</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>7.1</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>2.7</u>
WELL NAME _____	<u>WAGON TRAIL FEDERAL 44-11</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>0507708606</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 11, T9S, R98W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BLACK HILLS EXPL. & PROD. INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>911220</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-COZZETTE</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2790</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1300</u>	CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.139</u>
		SPECIFIC GRAVITY _____ <u>0.652</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20820	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.1</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>HORSESHOE CANYON 2-22</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>0507708654</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 22, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930105</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-COZZETTE, CORCORAN</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3175</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>905</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.109</u>
		SPECIFIC GRAVITY _____ <u>0.634</u>
SAMPLE	20817	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>HORSESHOE CANYON 3-16</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>0507708660</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 16, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930106</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-COZZETTE, CORCORAN</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3190</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>300</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1357</u>	CARBON DIOXIDE _____ <u>1.2</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.104</u>
		SPECIFIC GRAVITY _____ <u>0.635</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20818	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.6</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>5.7</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>HORSESHOE CANYON 1-16</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>0507708650</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 16, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>921216</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-COZZETTE, CORCORAN</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3165</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>310</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>745</u>	CARBON DIOXIDE _____ <u>1.3</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.106</u>
		SPECIFIC GRAVITY _____ <u>0.637</u>

SAMPLE	20824	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>89.7</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>5.7</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>HORSESHOE CANYON 3-27</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>0507708655</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 27, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>921229</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-COZZETTE, CORCORAN</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3091</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>360</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>425</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.110</u>
		SPECIFIC GRAVITY _____ <u>0.636</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20825	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 89.4
COUNTY _____	MESA	ETHANE _____ 5.8
FIELD _____	ROBERTS CANYON	PROPANE _____ 2.0
WELL NAME _____	HORSESHOE CANYON 1-27	N-BUTANE _____ 0.5
API _____	0507708663	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 27, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.2
COMPLETED _____	930125	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-COZZETTE CORCORAN	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3126	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	185	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	555	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.112
		SPECIFIC GRAVITY _____ 0.638

SAMPLE	20823	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 88.2
COUNTY _____	MESA	ETHANE _____ 6.4
FIELD _____	SHIRE GULCH	PROPANE _____ 2.3
WELL NAME _____	HORSESHOE CANYON 2-17	N-BUTANE _____ 0.6
API _____	0507708651	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 17, T9S, R97W	N-PENTANE _____ 0.2
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.2
COMPLETED _____	930112	CYCLOPENTANE _____ --
SAMPLED _____	010828	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-COZZETTE CORCORAN	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2978	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	580	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4296	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.127
		SPECIFIC GRAVITY _____ 0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20806	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>92.8</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>1.8</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>HORSESHOE CANYON 3-29</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0507708658</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 29, T9S, R97W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>921214</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-COZZETTE, DAKOTA</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7203</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>300</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1953</u>	CARBON DIOXIDE _____ <u>4.2</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>994</u>
		SPECIFIC GRAVITY _____ <u>0.614</u>

SAMPLE	20822	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>90.6</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>HORSESHOE CANYON 2-20</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>0507708645</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 20, T9S, R97W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930222</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-CZZT, CRGR, DKOT</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7575</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>830</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1728</u>	CARBON DIOXIDE _____ <u>3.5</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1,034</u>
		SPECIFIC GRAVITY _____ <u>0.631</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20821	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 85.7
COUNTY _____	MESA	ETHANE _____ 3.0
FIELD _____	SHIRE GULCH	PROPANE _____ 0.9
WELL NAME _____	HORSESHOE CANYON 1-21	N-BUTANE _____ 0.2
API _____	0507708456	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 21, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.1
COMPLETED _____	820630	CYCLOPENTANE _____ -
SAMPLED _____	010828	HEXANES PLUS _____ 0.1
FORMATION _____	CRET-CZZT, CRGR, DKOT	NITROGEN _____ 0.9
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7744	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	300	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3403	CARBON DIOXIDE _____ 3.8
		HELIUM _____ 0.09
		HEATING VALUE* _____ 967
		SPECIFIC GRAVITY _____ 0.677

SAMPLE	20802	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 89.9
COUNTY _____	MESA	ETHANE _____ 4.6
FIELD _____	SHIRE GULCH	PROPANE _____ 1.7
WELL NAME _____	HORSESHOE CANYON 1-33	N-BUTANE _____ 0.4
API _____	0507708426	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 33, T9S, R97W	N-PENTANE _____ 0.1
OWNER _____	KOCH EXPLORATION CO., LLC	ISOPENTANE _____ 0.1
COMPLETED _____	820201	CYCLOPENTANE _____ -
SAMPLED _____	010827	HEXANES PLUS _____ 0.2
FORMATION _____	CRET-DAKOTA	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	595	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7098	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	50	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	685	CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1,075
		SPECIFIC GRAVITY _____ 0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20804	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	85.8
COUNTY	MESA	ETHANE	6.1
FIELD	SHIRE GULCH	PROPANE	3.1
WELL NAME	HORSESHOE CANYON 2-29	N-BUTANE	1.2
API	0507708657	ISOBUTANE	0.9
LOCATION	SEC. 29 T9S R97W	N-PENTANE	0.3
OWNER	KOCH EXPLORATION CO., LLC	ISOPENTANE	0.5
COMPLETED	930301	CYCLOPENTANE	--
SAMPLED	010827	HEXANES PLUS	0.4
FORMATION	CRET-DAKOTA	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7172	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	430	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2106	CARBON DIOXIDE	1.2
		HELIUM	0.09
		HEATING VALUE*	1.176
		SPECIFIC GRAVITY	0.682

SAMPLE	20809	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	90.5
COUNTY	MESA	ETHANE	4.0
FIELD	PLATEAU	PROPANE	0.8
WELL NAME	NICHOLS 2-26	N-BUTANE	0.2
API	0507708332	ISOBUTANE	0.2
LOCATION	SEC. 26 T10S R97W	N-PENTANE	TRACE
OWNER	ROCKY MOUNTAIN OPERATING CO., INC.	ISOPENTANE	0.1
COMPLETED	810527	CYCLOPENTANE	--
SAMPLED	010828	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7687	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	0	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	885	CARBON DIOXIDE	3.6
		HELIUM	0.09
		HEATING VALUE*	1.029
		SPECIFIC GRAVITY	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20795	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>93.2</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>BLAIR NO. 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>0507708156</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 1, T10S, R97W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>ROCKY MOUNTAIN OPERATING CO., INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>790502</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-DAKOTA, FRONTIER</u>	NITROGEN _____ <u>1.6</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7412</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>0</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>230</u>	CARBON DIOXIDE _____ <u>4.0</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>965</u>
		SPECIFIC GRAVITY _____ <u>0.605</u>

SAMPLE	20813	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>95.5</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>1.5</u>
FIELD _____	<u>BRONCO FLATS</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>WAGON TRAIL NO. 1-3</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>0507708672</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 3, T9S, R98W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MARALEX RESOURCES, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>950511</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010828</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2226</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>290</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>300</u>	CARBON DIOXIDE _____ <u>2.6</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1,002</u>
		SPECIFIC GRAVITY _____ <u>0.591</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20805	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>MESA</u>	ETHANE _____ <u>6.1</u>
FIELD _____	<u>SHIRE GULCH</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>HORSESHOE CANYON 2-29</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>0507708657</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 29, T9S, R97W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>KOCH EXPLORATION CO., LLC</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>930301</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010827</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2506</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1350</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1051</u>	CARBON DIOXIDE _____ <u>1.2</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>1.176</u>
		SPECIFIC GRAVITY _____ <u>0.682</u>

SAMPLE	20735	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.1</u>
COUNTY _____	<u>BARBER</u>	ETHANE _____ <u>3.7</u>
FIELD _____	<u>MEDICINE LODGE-BOGGS</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>RICKE NO. 2</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1500722610</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 29, T33S, R13W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CLARK EXPLORATION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>000229</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010712</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-SNYDERVILLE</u>	NITROGEN _____ <u>9.1</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3990</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>520</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2022</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.27</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.659</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20405	COMPONENT MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>CARLTON A1-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1505521445</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960423</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2668</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>66</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>156</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1,006</u>
		SPECIFIC GRAVITY _____ <u>0.721</u>

SAMPLE	20406	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>5.9</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>JONES 6-2</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505521506</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 29, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970304</u>	CYCLOPENTANE _____ <u>-</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2726</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>98</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>320</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.44</u>
		HEATING VALUE* _____ <u>977</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20004	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>61.2</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>2.5</u>
WELL NAME _____	<u>JACKSON, ALVIN NO. 2-33</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1505521564</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 33, T22S, R32W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CROSS TIMBERS OPERATING CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>970829</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>980127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>29.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2702</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>70</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>406</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.65</u>
		HEATING VALUE* _____ <u>817</u>
		SPECIFIC GRAVITY _____ <u>0.744</u>

SAMPLE	20404	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>6.3</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>CARLTON B-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1505520270</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780216</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000815</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>16.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2950</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>174</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>998</u>
		SPECIFIC GRAVITY _____ <u>0.719</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20407	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.9</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>6.0</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>BROWN C1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505520304</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 34, T25S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780726</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000817</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>17.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2891</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>279</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.44</u>
		HEATING VALUE* _____ <u>975</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

SAMPLE	20288	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.0</u>
COUNTY _____	<u>GRANT</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>MEYERS 2-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1506720511</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 17, T27S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>SAMEDAN OIL CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780119</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>14.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2946</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4100</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1,021</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20287	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.9
COUNTY _____	GRANT	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	MEYERS 1-2	N-BUTANE _____ 1.0
API _____	1506720563	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T27S, R35W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	791213	CYCLOPENTANE _____ -
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 14.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2840	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4200	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.020
		SPECIFIC GRAVITY _____ 0.714
<hr/>		
SAMPLE	20437	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 64.8
COUNTY _____	HASKELL	ETHANE _____ 5.1
FIELD _____	HUGOTON	PROPANE _____ 2.7
WELL NAME _____	GUNNELL 1-2	N-BUTANE _____ 0.8
API _____	1508121175	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 11, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	980414	CYCLOPENTANE _____ -
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 23.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 2.2
TRUE VERTICAL DEPTH (FT) _____	2662	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	134	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	257	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.36
		HEATING VALUE* _____ 866
		SPECIFIC GRAVITY _____ 0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20444	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.7</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>JONES 11-2</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1508121095</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 8, T27S, R34W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>970802</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2694</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>137</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>249</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.38</u>
		HEATING VALUE* _____ <u>1.022</u>
		SPECIFIC GRAVITY _____ <u>0.735</u>

SAMPLE	20442	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>JONES 9</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508100354</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 4, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>480116</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2740</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>418</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>254</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>968</u>
		SPECIFIC GRAVITY _____ <u>0.711</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20443	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	HASKELL	ETHANE _____ 5.8
FIELD _____	HUGOTON	PROPANE _____ 3.1
WELL NAME _____	JONES 9-2	N-BUTANE _____ 0.9
API _____	1508121110	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 4, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	970602	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2695	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	129	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	330	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 971
		SPECIFIC GRAVITY _____ 0.712

SAMPLE	20440	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.8
COUNTY _____	HASKELL	ETHANE _____ 5.8
FIELD _____	HUGOTON	PROPANE _____ 3.1
WELL NAME _____	JONES 12-2	N-BUTANE _____ 0.9
API _____	1508120758	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 10, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	930413	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 17.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2701	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	277	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.43
		HEATING VALUE* _____ 970
		SPECIFIC GRAVITY _____ 0.712

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20436	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 72.2
COUNTY	HASKELL	ETHANE 5.6
FIELD	HUGOTON	PROPANE 2.9
WELL NAME	GUNNELL 1	N-BUTANE 0.8
API	1508100349	ISOBUTANE 0.3
LOCATION	SEC. 2, T27S, R34W	N-PENTANE 0.2
OWNER	CIMAREX ENERGY CO.	ISOPENTANE 0.1
COMPLETED	490831	CYCLOPENTANE --
SAMPLED	001107	HEXANES PLUS 0.1
FORMATION	PERM-CHASE GROUP	NITROGEN 17.3
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2765	ARGON TRACE
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	420	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	333	CARBON DIOXIDE TRACE
		HELIUM 0.45
		HEATING VALUE* 958
		SPECIFIC GRAVITY 0.707

SAMPLE	20446	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 72.0
COUNTY	HASKELL	ETHANE 5.5
FIELD	HUGOTON	PROPANE 2.9
WELL NAME	GOVERNMENT 3-2	N-BUTANE 0.8
API	1508121007	ISOBUTANE 0.3
LOCATION	SEC. 12, T27S, R34W	N-PENTANE 0.2
OWNER	CIMAREX ENERGY CO.	ISOPENTANE 0.1
COMPLETED	990726	CYCLOPENTANE --
SAMPLED	001107	HEXANES PLUS 0.1
FORMATION	PERM-CHASE GROUP	NITROGEN 17.5
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2762	ARGON TRACE
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	203	CARBON DIOXIDE TRACE
		HELIUM 0.46
		HEATING VALUE* 954
		SPECIFIC GRAVITY 0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20447	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>2.8</u>
WELL NAME _____	<u>GOVERNMENT 3</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508100288</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 12, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>490727</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>17.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2770</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>172</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>946</u>
		SPECIFIC GRAVITY _____ <u>0.706</u>

SAMPLE	20439	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>68.9</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.6</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>JONES U1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508120133</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 10, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>781012</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>19.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>1.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2858</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>201</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>925</u>
		SPECIFIC GRAVITY _____ <u>0.722</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING. THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20438	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	HASKELL	ETHANE _____ 5.7
FIELD _____	PANOMA	PROPANE _____ 3.0
WELL NAME _____	GUNNELL A-1	N-BUTANE _____ 0.8
API _____	1508120157	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 2, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.1
COMPLETED _____	790227	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 17.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2938	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	256	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	109	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.43
		HEATING VALUE* _____ 962
		SPECIFIC GRAVITY _____ 0.709

SAMPLE	20441	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.7
COUNTY _____	HASKELL	ETHANE _____ 5.9
FIELD _____	PANOMA	PROPANE _____ 3.1
WELL NAME _____	JONES K-1	N-BUTANE _____ 0.9
API _____	1508120103	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 7, T27S, R34W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	771215	CYCLOPENTANE _____ --
SAMPLED _____	001107	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 17.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2912	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	248	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	213	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.44
		HEATING VALUE* _____ 971
		SPECIFIC GRAVITY _____ 0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20445	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.0</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>GOVERNMENT A-3</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1508120175</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 12, T27S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>800318</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>17.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2922</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>294</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.48</u>
		HEATING VALUE* _____ <u>954</u>
		SPECIFIC GRAVITY _____ <u>0.707</u>

SAMPLE	50574	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>77.4</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>EUBANK S</u>	PROPANE _____ <u>3.9</u>
WELL NAME _____	<u>ADAMS 'I' NO. 2</u>	N-BUTANE _____ <u>2.0</u>
API _____	<u>1508121093</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 33, T29S, R34W</u>	N-PENTANE _____ <u>0.8</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.7</u>
COMPLETED _____	<u>970221</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>970911</u>	HEXANES PLUS _____ <u>2.0</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>5.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5296</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>--</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>7710</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.63</u>
		HEATING VALUE* _____ <u>1 246</u>
		SPECIFIC GRAVITY _____ <u>0.767</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20060	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>JOHNSON 4B-19</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1509321372</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 19, T25S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OSBORN HEIRS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>941020</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000413</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2586</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>39</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>305</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.37</u>
		HEATING VALUE* _____ <u>1.023</u>
		SPECIFIC GRAVITY _____ <u>0.725</u>

SAMPLE	20059	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.5</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>JOHNSON 4-19</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1509300320</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 19, T25S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OSBORN HEIRS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>481027</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000413</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2555</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>39</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.38</u>
		HEATING VALUE* _____ <u>1.036</u>
		SPECIFIC GRAVITY _____ <u>0.722</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20305	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.0</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>TATE 4-I</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320911</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T26S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>880129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2710</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>157</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>766</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.39</u>
		HEATING VALUE* _____ <u>1.017</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

SAMPLE	20307	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.1</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>TATE 8-I</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320909</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 23, T26S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>871231</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2762</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>183</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>889</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.39</u>
		HEATING VALUE* _____ <u>1.018</u>
		SPECIFIC GRAVITY _____ <u>0.713</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20301	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.6
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.4
WELL NAME _____	MASONIC HOME 2-1	N-BUTANE _____ 1.0
API _____	1509321264	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6 T26S R35W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	930710	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2716	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	153	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.014
		SPECIFIC GRAVITY _____ 0.716

SAMPLE	20303	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.2
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.6
WELL NAME _____	TATE 3	N-BUTANE _____ 1.1
API _____	1509300514	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13 T26S R36W	N-PENTANE _____ 0.3
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	491019	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2632	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	402	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1949	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.025
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20308	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.0</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>TATE 8</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300524</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 23, T26S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>501011</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2688</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>409</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2587</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.021</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

SAMPLE	20302	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.5</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.2</u>
WELL NAME _____	<u>MASONIC HOME 2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300468</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>380928</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2690</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>430</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>7000</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.009</u>
		SPECIFIC GRAVITY _____ <u>0.715</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20310	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.1</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>TATE 9-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509321032</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 26 T26S R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900724</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2773</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>177</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>670</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.019</u>
		SPECIFIC GRAVITY _____ <u>0.713</u>

SAMPLE	20282	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.4</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>4.0</u>
WELL NAME _____	<u>WHITE 2-2</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1509321509</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12 T26S R35W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960728</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2692</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>118</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>287</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.046</u>
		SPECIFIC GRAVITY _____ <u>0.725</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20300	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.3</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>MASONIC HOME 2-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509321264</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6 T26S R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>930710</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2716</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>153</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.018</u>
		SPECIFIC GRAVITY _____ <u>0.718</u>

SAMPLE	20306	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.5</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.5</u>
WELL NAME _____	<u>TATE 4</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1509300512</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11 T26S R36W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>491130</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>14.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2627</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>406</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2300</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.023</u>
		SPECIFIC GRAVITY _____ <u>0.718</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20298	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>MASONIC HOME 6</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300501</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 2, T26S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>471022</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2720</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>386</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3240</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.011</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

SAMPLE	20299	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.6</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>MASONIC HOME 9</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300469</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 6, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>620619</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2688</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>353</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13700</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.011</u>
		SPECIFIC GRAVITY _____ <u>0.715</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20295	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.7
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.4
WELL NAME _____	LEF 6-I	N-BUTANE _____ 1.0
API _____	1509320927	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 27, T25S, R36W	N-PENTANE _____ 0.2
OWNER _____	WILLIAMS PRODUCTION RMT CO.	ISOPENTANE _____ 0.2
COMPLETED _____	880329	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2676	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	153	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	701	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.017
		SPECIFIC GRAVITY _____ 0.715

SAMPLE	20331	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.6
COUNTY _____	KEARNY	ETHANE _____ 6.7
FIELD _____	HUGOTON	PROPANE _____ 3.6
WELL NAME _____	JOHNSON 3	N-BUTANE _____ 1.1
API _____	1509300319	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 18, T25S, R36W	N-PENTANE _____ 0.3
OWNER _____	OSBORN HEIRS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	481103	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2500	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	40	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.40
		HEATING VALUE* _____ 1.029
		SPECIFIC GRAVITY _____ 0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20272	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.0
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	CB & L NO. 8	N-BUTANE _____ 1.0
API _____	1509300483	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 22, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	480116	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2699	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	413	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	208	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.011
		SPECIFIC GRAVITY _____ 0.718

SAMPLE	20275	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.1
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	CB & L NO. 9	N-BUTANE _____ 1.0
API _____	1509300473	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 10, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	480116	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2750	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	419	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	79	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.007
		SPECIFIC GRAVITY _____ 0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20274	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.1
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.4
WELL NAME _____	CB & LB 11-2	N-BUTANE _____ 1.0
API _____	1509321610	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	980209	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2676	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	109	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	154	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.012
		SPECIFIC GRAVITY _____ 0.718

SAMPLE	20284	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	WHITE 1	N-BUTANE _____ 1.1
API _____	1509300472	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T26S, R35W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	450703	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	2704	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	183	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.019
		SPECIFIC GRAVITY _____ 0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20276	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.2</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>CB & I NO. 10</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509300474</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>480116</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2742</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>412</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>119</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.006</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>

SAMPLE	20278	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.2</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>CB & I 1-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509321557</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 14, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970302</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>15.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2676</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>120</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>297</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1.008</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20277	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.2
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.3
WELL NAME _____	CB & I NO. 11	N-BUTANE _____ 1.0
API _____	1509300478	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	450221	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2720	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	421	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	256	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.004
		SPECIFIC GRAVITY _____ 0.716
<hr/>		
SAMPLE	20281	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.8
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	HUGOTON	PROPANE _____ 3.5
WELL NAME _____	WHITE 2	N-BUTANE _____ 1.0
API _____	1509300475	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	480116	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 15.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	2714	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	406	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	223	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.42
		HEATING VALUE* _____ 1.009
		SPECIFIC GRAVITY _____ 0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20333	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.0
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	PANOMA	PROPANE _____ 3.4
WELL NAME _____	MASONIC HOME 2-2	N-BUTANE _____ 1.0
API _____	1509320640	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	791103	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 16.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.3
TRUE VERTICAL DEPTH (FT) _____	2852	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.39
		HEATING VALUE* _____ 995
		SPECIFIC GRAVITY _____ 0.722

SAMPLE	20286	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 73.1
COUNTY _____	KEARNY	ETHANE _____ 6.7
FIELD _____	PANOMA	PROPANE _____ 3.8
WELL NAME _____	HILLYARD A-4	N-BUTANE _____ 1.0
API _____	1509320202	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 20, T26S, R36W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	751014	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 13.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2812	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	139	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.39
		HEATING VALUE* _____ 1.035
		SPECIFIC GRAVITY _____ 0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20297	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.8</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>MASONIC HOME 4-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320304</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 35, T25S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>760714</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>14.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2796</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>199</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1200</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.013</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

SAMPLE	20309	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.8</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.5</u>
WELL NAME _____	<u>TATE 8-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320216</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 23, T26S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>751229</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>14.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2855</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>216</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2600</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.022</u>
		SPECIFIC GRAVITY _____ <u>0.715</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20330	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>JOHNSON 4A</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320092</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 19, T25S, R36W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OSBORN HEIRS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>731128</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000619</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>14.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2770</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>36</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.035</u>
		SPECIFIC GRAVITY _____ <u>0.719</u>

SAMPLE	20304	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.3</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>TATE 3-2</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1509320218</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 13, T26S, R36W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>751229</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2803</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>223</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2000</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.024</u>
		SPECIFIC GRAVITY _____ <u>0.721</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20296	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>RODERICK 3-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320305</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 26, T25S, R36W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>WILLIAMS PRODUCTION RMT CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>760721</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000620</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2798</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>207</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1057</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.40</u>
		HEATING VALUE* _____ <u>1.012</u>
		SPECIFIC GRAVITY _____ <u>0.713</u>

SAMPLE	20285	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.3</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>WHITE A-2</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1509320457</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 9, T26S, R35W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>780111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2962</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>126</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.045</u>
		SPECIFIC GRAVITY _____ <u>0.734</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20334	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.5
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	TATE 4-2	N-BUTANE _____ 1.0
API _____	1509320697	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 11, T26S, R36W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	800818	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 14.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2806	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.020
		SPECIFIC GRAVITY _____ 0.717

SAMPLE	20332	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 72.3
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	MASONIC HOME 9-2	N-BUTANE _____ 1.0
API _____	1509320639	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 6, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	SAMEDAN OIL CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	800805	CYCLOPENTANE _____ --
SAMPLED _____	000620	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2830	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2050	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.012
		SPECIFIC GRAVITY _____ 0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20279	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.4
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	CB & L B-3	N-BUTANE _____ 1.0
API _____	1509320415	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, T26S, R35W	N-PENTANE _____ 0.2
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	770816	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2886	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	161	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.013
		SPECIFIC GRAVITY _____ 0.72

SAMPLE	20273	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 71.9
COUNTY _____	KEARNY	ETHANE _____ 6.5
FIELD _____	PANOMA	PROPANE _____ 3.5
WELL NAME _____	CB & LB C-1	N-BUTANE _____ 1.1
API _____	1509320518	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 15, T26S, R35W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	780710	CYCLOPENTANE _____ --
SAMPLED _____	000612	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 15.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2930	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	143	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.41
		HEATING VALUE* _____ 1.016
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20270	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.0</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>C B & L B-6</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320434</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 24, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>771122</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2792</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>206</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1,007</u>
		SPECIFIC GRAVITY _____ <u>0.718</u>

SAMPLE	20283	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.8</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>WHITE A-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320447</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>771122</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2888</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>113</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1,007</u>
		SPECIFIC GRAVITY _____ <u>0.719</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20271	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.1</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.3</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>CITIZEN BLDG B-7</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1509320435</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 35, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>771107</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>15.9</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2949</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>132</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1.003</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

SAMPLE	20280	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.7</u>
COUNTY _____	<u>KEARNY</u>	ETHANE _____ <u>6.3</u>
FIELD _____	<u>PANOMA</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>WHITE A-3</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1509320553</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 13, T26S, R35W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>781130</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000612</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>16.2</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2873</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>157</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>998</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20290	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 67.9
COUNTY _____	KEARNY	ETHANE _____ 5.8
FIELD _____	PANOMA	PROPANE _____ 3.1
WELL NAME _____	ZIBELL 1	N-BUTANE _____ 0.9
API _____	1509320258	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 10, T22S, R36W	N-PENTANE _____ 0.2
OWNER _____	CONTINENTAL ENERGY CORP.	ISOPENTANE _____ 0.1
COMPLETED _____	781120	CYCLOPENTANE _____ --
SAMPLED _____	000614	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 20.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2978	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.54
		HEATING VALUE* _____ 937
		SPECIFIC GRAVITY _____ 0.727
<hr/>		
SAMPLE	20144	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 62.3
COUNTY _____	MORTON	ETHANE _____ 5.5
FIELD _____	INTERSTATE	PROPANE _____ 3.3
WELL NAME _____	INTERSTATE B2-18	N-BUTANE _____ 1.0
API _____	1512920400	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 18, T34S, R43W	N-PENTANE _____ 0.3
OWNER _____	EDGAR W. WHITE	ISOPENTANE _____ 0.2
COMPLETED _____	800604	CYCLOPENTANE _____ --
SAMPLED _____	000502	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 25.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	2564	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.62
		HEATING VALUE* _____ 903
		SPECIFIC GRAVITY _____ 0.76

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20045	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>51.6</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>INTERSTATE</u>	PROPANE _____ <u>1.2</u>
WELL NAME _____	<u>INTERSTATE NO. D3-9</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1512930085</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 9, T34S, R43W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>651202</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000200</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-RED CAVE</u>	NITROGEN _____ <u>41.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1358</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.5</u>
WELLHEAD PRESSURE, PSIG _____	<u>170</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>80</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.89</u>
		HEATING VALUE* _____ <u>689</u>
		SPECIFIC GRAVITY _____ <u>0.788</u>

SAMPLE	20145	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>52.7</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>2.4</u>
FIELD _____	<u>INTERSTATE</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>INTERSTATE RED CAVE 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1512920339</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T34S, R43W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>EDGAR W. WHITE</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>780313</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000501</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-RED CAVE</u>	NITROGEN _____ <u>39.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1292</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.5</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>140</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.96</u>
		HEATING VALUE* _____ <u>705</u>
		SPECIFIC GRAVITY _____ <u>0.779</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20148	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.6</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>MCCLAIN 2-33</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>1512920620</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 33, T33S, R42W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>820317</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000502</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PENN-SHAWNEE</u>	NITROGEN _____ <u>18.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3104</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>473</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>1.050</u>
		SPECIFIC GRAVITY _____ <u>0.777</u>

SAMPLE	20176	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>62.9</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.2</u>
WELL NAME _____	<u>CENTRAL LIFE 1-32</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>1512910350</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 32, T34S, R42W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>551214</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000509</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-TOPEKA</u>	NITROGEN _____ <u>22.0</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3646</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5000</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.60</u>
		HEATING VALUE* _____ <u>1.005</u>
		SPECIFIC GRAVITY _____ <u>0.783</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20146	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.1</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.9</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>INTERSTATE A1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512920377</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 19, T34S, R43W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>EDGAR W. WHITE</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000501</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-TOPEKA</u>	NITROGEN _____ <u>24.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2720</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>90</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.64</u>
		HEATING VALUE* _____ <u>924</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

SAMPLE	20041	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>66.0</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.7</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>INTERSTATE NO. 1-11</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>1512910513</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 11, T34S, R43W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>550601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>991202</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>21.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2955</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>426</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>5129</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.48</u>
		HEATING VALUE* _____ <u>980</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20191	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.7</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>UNION 1-4</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>1512910371</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 4, T34S, R42W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>NADEL & GUSSMAN, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>550515</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000509</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>20.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2537</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>34050</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.53</u>
		HEATING VALUE* _____ <u>1.039</u>
		SPECIFIC GRAVITY _____ <u>0.786</u>

SAMPLE	20758	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.1</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>INTERSTATE NO. 1-11</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1512910513</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T34S, R43W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>550601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>21.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2955</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>426</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5129</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.55</u>
		HEATING VALUE* _____ <u>969</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20040	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.1</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>BERRYMAN</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>CMT NO. 1-20</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1512920006</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 20, T33S, R41W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>800722</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>991202</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>23.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2960</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>231</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>104</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.61</u>
		HEATING VALUE* _____ <u>906</u>
		SPECIFIC GRAVITY _____ <u>0.742</u>

SAMPLE	20761	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.5</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>BERRYMAN</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>CMT NO. 1-20</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1512920006</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 20, T33S, R41W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEARTOOTH OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>800722</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>24.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2960</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>231</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>104</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.65</u>
		HEATING VALUE* _____ <u>882</u>
		SPECIFIC GRAVITY _____ <u>0.737</u>

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20427	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>68.1</u>
COUNTY _____	<u>SEWARD</u>	ETHANE _____ <u>9.1</u>
FIELD _____	<u>HITCH</u>	PROPANE _____ <u>8.8</u>
WELL NAME _____	<u>HITCH 1-36</u>	N-BUTANE _____ <u>3.3</u>
API _____	<u>1517520981</u>	ISOBUTANE _____ <u>1.3</u>
LOCATION _____	<u>SEC. 36, T32S, R34W</u>	N-PENTANE _____ <u>1.0</u>
OWNER _____	<u>BEREXCO, INC.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>870722</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>001107</u>	HEXANES PLUS _____ <u>1.3</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>5.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5708</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>30</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2000</u>	CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.358</u>
		SPECIFIC GRAVITY _____ <u>0.852</u>
<hr/>		
SAMPLE	20358	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.9</u>
COUNTY _____	<u>STEVENS</u>	ETHANE _____ <u>5.1</u>
FIELD _____	<u>WIDE AWAKE</u>	PROPANE _____ <u>2.8</u>
WELL NAME _____	<u>BAKER 1-3</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1518920860</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 3, T35S, R35W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>QUINQUE OPERATING CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>850829</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>000711</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>5.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6272</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>50</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.20</u>
		HEATING VALUE* _____ <u>1.101</u>
		SPECIFIC GRAVITY _____ <u>0.673</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20357	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 83.8
COUNTY _____	STEVENS	ETHANE _____ 5.0
FIELD _____	WIDE AWAKE	PROPANE _____ 2.7
WELL NAME _____	GRIZZEL NO. 1	N-BUTANE _____ 0.9
API _____	1518920928	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 3, T35S, R35W	N-PENTANE _____ 0.3
OWNER _____	AMERICAN WARRIOR, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	861101	CYCLOPENTANE _____ --
SAMPLED _____	000711	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6522	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2117	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.21
		HEATING VALUE* _____ 1.089
		SPECIFIC GRAVITY _____ 0.67

SAMPLE	20356	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 82.9
COUNTY _____	STEVENS	ETHANE _____ 5.1
FIELD _____	WIDE AWAKE	PROPANE _____ 2.9
WELL NAME _____	BAKER 2-3	N-BUTANE _____ 1.2
API _____	1518920949	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 3, T35S, R35W	N-PENTANE _____ 0.5
OWNER _____	QUINQUE OPERATING CO.	ISOPENTANE _____ 0.3
COMPLETED _____	870402	CYCLOPENTANE _____ --
SAMPLED _____	000711	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6254	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	20	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.21
		HEATING VALUE* _____ 1.107
		SPECIFIC GRAVITY _____ 0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20408	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>0.1</u>
COUNTY _____	<u>CATRON</u>	ETHANE _____ <u>0.1</u>
FIELD _____	<u>WILDCAT</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>STATE 1-4 NO. 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3000320019</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC. 4, T1N, R21W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>RIDGEWAY ARIZONA OIL CORP.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____		CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>000828</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PERM-FORT APACHE</u>	NITROGEN _____ <u>0.0</u>
GEOLOGIC PROVINCE CODE _____	<u>475</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1783</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>318</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>99.4</u>
		HELIUM _____ <u>0.20</u>
		HEATING VALUE* _____ <u>6</u>
		SPECIFIC GRAVITY _____ <u>1.515</u>

SAMPLE	20566	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.0</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>5.1</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>HELEN COLLINS FEDERAL NO. 3</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3000562072</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 9, T7S, R26E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>PECOS RIVER OPERATING, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>831211</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>4.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4156</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>962</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2440</u>	CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.33</u>
		HEATING VALUE* _____ <u>1,094</u>
		SPECIFIC GRAVITY _____ <u>0.666</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20567	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.8</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.5</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>HELEN COLLINS FEDERAL NO. 6</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000562139</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 4, T7S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>PECOS RIVER OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>840518</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4271</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>739</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1455</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.34</u>
		HEATING VALUE* _____ <u>1.062</u>
		SPECIFIC GRAVITY _____ <u>0.643</u>

SAMPLE	20586	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>PECOS SLOPE S.</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>PENJACK FEDERAL NO. 6</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000562562</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 7, T10S, R26E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>871209</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010228</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>3.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4428</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>970</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1193</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.34</u>
		HEATING VALUE* _____ <u>1.068</u>
		SPECIFIC GRAVITY _____ <u>0.631</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20563	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.8
COUNTY _____	CHAVES	ETHANE _____ 4.7
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	SUN FEDERAL NO. 4	N-BUTANE _____ 0.6
API _____	3000561596	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 28, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	820629	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-ABO	NITROGEN _____ 4.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4472	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1079	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	873	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.35
		HEATING VALUE* _____ 1.066
		SPECIFIC GRAVITY _____ 0.643

SAMPLE	20548	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.1
COUNTY _____	CHAVES	ETHANE _____ 4.9
FIELD _____	PECOS SLOPE	PROPANE _____ 1.8
WELL NAME _____	NICHOLS DALE FEDERAL NO. 5	N-BUTANE _____ 0.6
API _____	3000561806	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 33, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821112	CYCLOPENTANE _____ --
SAMPLED _____	001219	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-ABO	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4197	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	909	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1321	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.35
		HEATING VALUE* _____ 1.069
		SPECIFIC GRAVITY _____ 0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20560	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.9</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>VANCE FED. A NO. 1</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561509</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 34, T7S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>EXCO RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>820624</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>4.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4508</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>891</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2527</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.36</u>
		HEATING VALUE* _____ <u>1.064</u>
		SPECIFIC GRAVITY _____ <u>0.641</u>

SAMPLE	20547	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.1</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>NICHOLS DALE FEDERAL NO. 6</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561854</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 33, T7S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>PECOS RIVER OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>821229</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001219</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4319</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>832</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>547</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.37</u>
		HEATING VALUE* _____ <u>1.060</u>
		SPECIFIC GRAVITY _____ <u>0.645</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20602	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.1
COUNTY _____	CHAVES	ETHANE _____ 5.9
FIELD _____	PECOS SLOPE S	PROPANE _____ 2.1
WELL NAME _____	PENJACK FEDERAL NO. 2	N-BUTANE _____ 0.5
API _____	3000562465	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T10S, R25E	N-PENTANE _____ 0.1
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	870428	CYCLOPENTANE _____ --
SAMPLED _____	010228	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-ABO	NITROGEN _____ 4.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4421	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	980	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1600	CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.070
		SPECIFIC GRAVITY _____ 0.64

SAMPLE	20562	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.4
COUNTY _____	CHAVES	ETHANE _____ 4.8
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	VANCE FED. A NO. 2	N-BUTANE _____ 0.6
API _____	3000561762	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 34, T7S, R26E	N-PENTANE _____ 0.2
OWNER _____	EXCO RESOURCES, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821028	CYCLOPENTANE _____ --
SAMPLED _____	001220	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-ABO	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4398	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	983	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6024	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.064
		SPECIFIC GRAVITY _____ 0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20552	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 86.6
COUNTY	CHAVES	ETHANE 4.7
FIELD	PECOS SLOPE	PROPANE 1.7
WELL NAME	VANCE FED. NO. 3	N-BUTANE 0.6
API	3000561508	ISOBUTANE 0.3
LOCATION	SEC. 26, T7S, R26E	N-PENTANE 0.2
OWNER	EXCO RESOURCES, INC.	ISOPENTANE 0.2
COMPLETED	820709	CYCLOPENTANE --
SAMPLED	001220	HEXANES PLUS 0.4
FORMATION	PERM-ABO	NITROGEN 5.0
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4556	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	865	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1753	CARBON DIOXIDE TRACE
		HELIUM 0.39
		HEATING VALUE* 1.064
		SPECIFIC GRAVITY 0.643
SAMPLE	20573	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 83.7
COUNTY	CHAVES	ETHANE 5.0
FIELD	PECOS SLOPE	PROPANE 2.0
WELL NAME	O'CONNELL FEDERAL COM NO. 1	N-BUTANE 0.7
API	3000562740	ISOBUTANE 0.3
LOCATION	SEC. 15, T6S, R26E	N-PENTANE 0.3
OWNER	PECOS RIVER OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	891228	CYCLOPENTANE --
SAMPLED	001221	HEXANES PLUS 0.3
FORMATION	PERM-ABO	NITROGEN 6.9
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4150	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	800	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1772	CARBON DIOXIDE TRACE
		HELIUM 0.46
		HEATING VALUE* 1.055
		SPECIFIC GRAVITY 0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20608	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.0</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>PECOS SLOPE S</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>PENJACK FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000560531</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 6, T10S, R26E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>790208</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010228</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>4.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4334</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>961</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1272</u>	CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.47</u>
		HEATING VALUE* _____ <u>1.050</u>
		SPECIFIC GRAVITY _____ <u>0.633</u>

SAMPLE	20603	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.2</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.9</u>
FIELD _____	<u>PECOS SLOPE S</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>JJ FEDERAL COM. 2</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000562678</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 1, T10S, R25E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>890509</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010228</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.3</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4307</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>972</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4000</u>	CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>1.053</u>
		SPECIFIC GRAVITY _____ <u>0.64</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20536	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.6
COUNTY _____	CHAVES	ETHANE _____ 4.3
FIELD _____	PECOS SLOPE	PROPANE _____ 1.6
WELL NAME _____	COBIE-EBEID FEDERAL COM NO. 1	N-BUTANE _____ 0.6
API _____	3000561350	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 13 T8S R25E	N-PENTANE _____ 0.2
OWNER _____	PECOS RIVER OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	820227	CYCLOPENTANE _____ -
SAMPLED _____	001219	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-ABO	NITROGEN _____ 9.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4164	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	955	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1304	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.60
		HEATING VALUE* _____ 1.007
		SPECIFIC GRAVITY _____ 0.654

SAMPLE	20534	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.8
COUNTY _____	CHAVES	ETHANE _____ 4.5
FIELD _____	PECOS SLOPE	PROPANE _____ 1.8
WELL NAME _____	PECOS SLOPE 24 FEDERAL NO. 1	N-BUTANE _____ 0.6
API _____	3000563043	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 24 T8S R25E	N-PENTANE _____ 0.2
OWNER _____	MEWBOLURNE OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	950408	CYCLOPENTANE _____ -
SAMPLED _____	001218	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-ABO	NITROGEN _____ 9.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4270	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	195	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.61
		HEATING VALUE* _____ 1.008
		SPECIFIC GRAVITY _____ 0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20538	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 81.4
COUNTY	CHAVES	ETHANE 4.3
FIELD	PECOS SLOPE	PROPANE 1.7
WELL NAME	COBIE-FBEID FEDERAL COM NO. 2	N-BUTANE 0.8
API	3000561873	ISOBUTANE 0.3
LOCATION	SEC. 13, T8S, R25E	N-PENTANE 0.2
OWNER	PECOS RIVER OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	830216	CYCLOPENTANE --
SAMPLED	001219	HEXANES PLUS 0.2
FORMATION	PERM-ABO	NITROGEN 10.1
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3892	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	77.1	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	881	CARBON DIOXIDE TRACE
		HELIUM 0.62
		HEATING VALUE* 1.009
		SPECIFIC GRAVITY 0.663

SAMPLE	20604	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 86.7
COUNTY	CHAVES	ETHANE 4.0
FIELD	PECOS SLOPE S	PROPANE 1.1
WELL NAME	MM FEDERAL NO. 7	N-BUTANE 0.3
API	3000562493	ISOBUTANE 0.1
LOCATION	SEC. 25, T9S, R25E	N-PENTANE 0.1
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.1
COMPLETED	870730	CYCLOPENTANE --
SAMPLED	010228	HEXANES PLUS 0.2
FORMATION	PERM-ABO	NITROGEN 6.7
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4298	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	93.4	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	598	CARBON DIOXIDE TRACE
		HELIUM 0.64
		HEATING VALUE* 1.005
		SPECIFIC GRAVITY 0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20605	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>84.1</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.5</u>
FIELD _____	<u>PECOS SLOPE S</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>RICK FEDERAL COM. 1</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000562215</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 26, T9S, R25E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>841220</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010228</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>7.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4104</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1870</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.66</u>
		HEATING VALUE* _____ <u>1.022</u>
		SPECIFIC GRAVITY _____ <u>0.646</u>

SAMPLE	20514	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>COYOTE FEDERAL NO. 3</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561099</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 7, T8S, R25E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>820226</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001207</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>8.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3589</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>875</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1546</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.77</u>
		HEATING VALUE* _____ <u>1.029</u>
		SPECIFIC GRAVITY _____ <u>0.66</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20513	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 83.1
COUNTY _____	CHAVES	ETHANE _____ 4.6
FIELD _____	PECOS SLOPE	PROPANE _____ 1.7
WELL NAME _____	COYOTE FEDERAL NO. 4-Y	N-BUTANE _____ 0.6
API _____	3000561880	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 7, T8S, R25E	N-PENTANE _____ 0.3
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	830208	CYCLOPENTANE _____ --
SAMPLED _____	001207	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-ABO	NITROGEN _____ 7.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3711	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	826	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1129	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.77
		HEATING VALUE* _____ 1.033
		SPECIFIC GRAVITY _____ 0.657
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SAMPLE	20606	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 83.5
COUNTY _____	CHAVES	ETHANE _____ 4.3
FIELD _____	CHAVES CO. UNDESIGNATED	PROPANE _____ 1.6
WELL NAME _____	PECOS RIVER FEDERAL NO. 1	N-BUTANE _____ 0.5
API _____	3000561237	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 23, T9S, R25E	N-PENTANE _____ 0.2
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	820119	CYCLOPENTANE _____ --
SAMPLED _____	010228	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-ABO	NITROGEN _____ 8.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4036	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	971	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1139	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.79
		HEATING VALUE* _____ 1.009
		SPECIFIC GRAVITY _____ 0.646

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20516	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.9</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.5</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>COYOTE FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3000560978</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 1, T8S, R24E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>810721</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001207</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>8.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3760</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>7797</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.80</u>
		HEATING VALUE* _____ <u>1.036</u>
		SPECIFIC GRAVITY _____ <u>0.66</u>

SAMPLE	20515	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>81.6</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>COYOTE FED. NO. 2</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000561100</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 12, T8S, R24E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>811214</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001207</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>9.5</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3691</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>887</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>220</u>	CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.84</u>
		HEATING VALUE* _____ <u>1.017</u>
		SPECIFIC GRAVITY _____ <u>0.663</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20529	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 82.5
COUNTY	CHAVES	ETHANE 4.2
FIELD	PECOS SLOPE	PROPANE 1.4
WELL NAME	DANA FED. NO. 4	N-BUTANE 0.5
API	3000561810	ISOBUTANE 0.2
LOCATION	SEC. 3, T9S, R25E	N-PENTANE 0.4
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	821111	CYCLOPENTANE --
SAMPLED	001222	HEXANES PLUS 1.8
FORMATION	PERM-ABO	NITROGEN 7.7
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4007	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	1020	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2055	CARBON DIOXIDE TRACE
		HELIUM 0.97
		HEATING VALUE* 1.079
		SPECIFIC GRAVITY 0.684

SAMPLE	20528	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 84.2
COUNTY	CHAVES	ETHANE 4.7
FIELD	PECOS SLOPE	PROPANE 1.8
WELL NAME	DANA FED. NO. 3	N-BUTANE 0.7
API	3000561435	ISOBUTANE 0.3
LOCATION	SEC. 3, T9S, R25E	N-PENTANE 0.3
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	820423	CYCLOPENTANE --
SAMPLED	001218	HEXANES PLUS 0.3
FORMATION	PERM-ABO	NITROGEN 6.4
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4011	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1022	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1474	CARBON DIOXIDE 0.1
		HELIUM 0.97
		HEATING VALUE* 1.045
		SPECIFIC GRAVITY 0.65

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20500	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.0
COUNTY _____	CHAVES	ETHANE _____ 9.1
FIELD _____	BUFFALO VALLEY	PROPANE _____ 4.8
WELL NAME _____	TANNER FEDERAL NO. 1	N-BUTANE _____ 1.6
API _____	3000562701	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 35, T14S, R27E	N-PENTANE _____ 0.5
OWNER _____	SNOW OIL & GAS, INC.	ISOPENTANE _____ 0.5
COMPLETED _____	890824	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.9
FORMATION _____	PENN-ATOKA	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8387	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1839	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1,263
		SPECIFIC GRAVITY _____ 0.73

SAMPLE	20502	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.4
COUNTY _____	CHAVES	ETHANE _____ 7.3
FIELD _____	BUFFALO VALLEY	PROPANE _____ 2.5
WELL NAME _____	ROSE FEDERAL NO. 4	N-BUTANE _____ 0.6
API _____	3000561597	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 13, T15S, 27E	N-PENTANE _____ 0.2
OWNER _____	READ & STEVENS, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	821206	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-ATOKA	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8789	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1751	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	240	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1,150
		SPECIFIC GRAVITY _____ 0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20503	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.0</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>7.5</u>
FIELD _____	<u>BUFFALO VALLEY</u>	PROPANE _____ <u>2.8</u>
WELL NAME _____	<u>HARRIS FEDERAL COM NO. 2</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3000560277</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 24 T15S R27E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>READ & STEVENS, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>740401</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>001206</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-ATOKA</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8807</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>700</u>	CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.150</u>
		SPECIFIC GRAVITY _____ <u>0.656</u>

SAMPLE	20504	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>83.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>8.7</u>
FIELD _____	<u>DIAMOND MOUND</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>MESA STATE COM NO. 3</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3000562255</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 31 T15S R28E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OCEAN ENERGY, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>851009</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>001206</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9050</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>2320</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>14569</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.198</u>
		SPECIFIC GRAVITY _____ <u>0.691</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20493	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>26.1</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>10.9</u>
FIELD _____	<u>ROUND TANK</u>	PROPANE _____ <u>8.0</u>
WELL NAME _____	<u>J.W. STATE NO. 2</u>	N-BUTANE _____ <u>2.5</u>
API _____	<u>3000560105</u>	ISOBUTANE _____ <u>1.2</u>
LOCATION _____	<u>SEC. 30, T15S, R29E</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>ELK OIL CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>700210</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001205</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-QUEEN</u>	NITROGEN _____ <u>49.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1482</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>856</u>
		SPECIFIC GRAVITY _____ <u>0.986</u>

SAMPLE	20570	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>5.0</u>
FIELD _____	<u>HAYSTACK</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>WEST HAYSTACK FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000560290</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 19, T6S, R27E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>READ & STEVENS, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>811117</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-VIRGIL</u>	NITROGEN _____ <u>4.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5704</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1792</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>611</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.34</u>
		HEATING VALUE* _____ <u>1.067</u>
		SPECIFIC GRAVITY _____ <u>0.64</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20571	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.9</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>HAYSTACK</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>FEDERAL I NO. 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3000560135</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 21, T6S, R27E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>READ & STEVENS, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>700921</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001220</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-VIRGIL</u>	NITROGEN _____ <u>4.3</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5977</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5714</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.35</u>
		HEATING VALUE* _____ <u>1.084</u>
		SPECIFIC GRAVITY _____ <u>0.652</u>
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SAMPLE	20697	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.4</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>9.0</u>
FIELD _____	<u>NOT GIVEN</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>LITTLEFIELD EM FEDERAL NO. 1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3001521996</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 20, T18S, R31E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OCEAN ENERGY, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>770328</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-ATOKA, MORROW</u>	NITROGEN _____ <u>1.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11102</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>3103</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>8173</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.196</u>
		SPECIFIC GRAVITY _____ <u>0.693</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20695	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>59.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>14.4</u>
FIELD _____	<u>POWER</u>	PROPANE _____ <u>10.1</u>
WELL NAME _____	<u>SHINNERY FEDERAL NO. 1</u>	N-BUTANE _____ <u>3.2</u>
API _____	<u>3001529976</u>	ISOBUTANE _____ <u>1.3</u>
LOCATION _____	<u>SEC. 5, T18S, R31E</u>	N-PENTANE _____ <u>0.9</u>
OWNER _____	<u>ROBERT H. FORREST, JR. OIL LLC</u>	ISOPENTANE _____ <u>1.0</u>
COMPLETED _____	<u>980201</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.1</u>
FORMATION _____	<u>PERM-GRAYBURG</u>	NITROGEN _____ <u>7.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3442</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.14</u>
		HEATING VALUE* _____ <u>1.388</u>
		SPECIFIC GRAVITY _____ <u>0.883</u>
SAMPLE	20694	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>38.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>17.4</u>
FIELD _____	<u>GRAYBURG JACKSON</u>	PROPANE _____ <u>15.6</u>
WELL NAME _____	<u>SKELLY UNIT NO. 274</u>	N-BUTANE _____ <u>5.0</u>
API _____	<u>3001529210</u>	ISOBUTANE _____ <u>2.2</u>
LOCATION _____	<u>SEC. 28, T17S, R31E</u>	N-PENTANE _____ <u>2.2</u>
OWNER _____	<u>WISER OIL CO.</u>	ISOPENTANE _____ <u>1.9</u>
COMPLETED _____	<u>970110</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>2.4</u>
FORMATION _____	<u>PERM-GRAYBURG</u>	NITROGEN _____ <u>12.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3541</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>40</u>	CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.22</u>
		HEATING VALUE* _____ <u>1.612</u>
		SPECIFIC GRAVITY _____ <u>1.098</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20509	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 83.2
COUNTY _____	EDDY	ETHANE _____ 7.7
FIELD _____	LOGAN DRAW	PROPANE _____ 4.5
WELL NAME _____	OXY HARVESTER FEDERAL NO. 1	N-BUTANE _____ 1.9
API _____	3001530882	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 26, T17S, R27E	N-PENTANE _____ 0.4
OWNER _____	OXY USA WTP LIMITED PARTNERSHIP	ISOPENTANE _____ 0.5
COMPLETED _____	000519	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9640	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1738	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.225
		SPECIFIC GRAVITY _____ 0.706

SAMPLE	20508	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.9
COUNTY _____	EDDY	ETHANE _____ 7.2
FIELD _____	LOGAN DRAW	PROPANE _____ 2.9
WELL NAME _____	OXY SKINNY SALOON FEDERAL NO. 1	N-BUTANE _____ 0.8
API _____	3001530756	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 11, T17S, R27E	N-PENTANE _____ 0.2
OWNER _____	OXY USA WTP LIMITED PARTNERSHIP	ISOPENTANE _____ 0.2
COMPLETED _____	991129	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9394	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	880	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	532	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.157
		SPECIFIC GRAVITY _____ 0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20455	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>91.9</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>4.0</u>
FIELD _____	<u>HAPPY VALLEY</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>LANCASTER SPRING COM NO. 3</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3001530965</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 8 T22S R26E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>RICKS EXPLORATION ACQUISITION CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>001101</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11486</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>91</u>	CARBON DIOXIDE _____ <u>2.5</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.038</u>
		SPECIFIC GRAVITY _____ <u>0.616</u>

SAMPLE	20456	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.3</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>EDDY UNDESIGNATED</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>FEDERAL AA NO. 1</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3001522926</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 17 T22S R26E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>RICKS EXPLORATION ACQUISITION CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>791009</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11290</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1300</u>	CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.031</u>
		SPECIFIC GRAVITY _____ <u>0.587</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20457	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.9</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>2.7</u>
FIELD _____	<u>HAPPY VALLEY</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>FEDERAL BN NO. 1</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3001523498</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 17, T22S, R26E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>RICKS EXPLORATION ACQUISITION CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>810113</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11668</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1778</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>6500</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.034</u>
		SPECIFIC GRAVITY _____ <u>0.59</u>

SAMPLE	20459	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>2.1</u>
FIELD _____	<u>HAPPY VALLEY</u>	PROPANE _____ <u>0.3</u>
WELL NAME _____	<u>LANCASTER SPRING COM NO. 1</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3001523437</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 8, T22S, R26E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>RICKS EXPLORATION ACQUISITION CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>801028</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001127</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11330</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13000</u>	CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.026</u>
		SPECIFIC GRAVITY _____ <u>0.583</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20507	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.8
COUNTY _____	EDDY	ETHANE _____ 7.1
FIELD _____	CROW FLATS	PROPANE _____ 2.9
WELL NAME _____	FED. CX GAS COM NO. 1	N-BUTANE _____ 0.8
API _____	3001524025	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 12, T17S, R27E	N-PENTANE _____ 0.3
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	820222	CYCLOPENTANE _____ --
SAMPLED _____	001206	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9400	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1410	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.167
		SPECIFIC GRAVITY _____ 0.667

SAMPLE	20458	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 91.9
COUNTY _____	EDDY	ETHANE _____ 4.1
FIELD _____	HAPPY VALLEY	PROPANE _____ 1.2
WELL NAME _____	STATE IM COM NO. 1	N-BUTANE _____ 0.4
API _____	3001523461	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 16, T22S, R26E	N-PENTANE _____ 0.1
OWNER _____	RICKS EXPLORATION ACQUISITION CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	810622	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11542	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3598	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1492	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.085
		SPECIFIC GRAVITY _____ 0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20460	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.3
COUNTY _____	EDDY	ETHANE _____ 11.2
FIELD _____	CARLSBAD E	PROPANE _____ 3.7
WELL NAME _____	E.G. GARNER COM NO. 1	N-BUTANE _____ 1.2
API _____	3001522722	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 26, T21S, R27E	N-PENTANE _____ 0.4
OWNER _____	DELTA PETROLEUM CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	790220	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11616	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1095	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.219
		SPECIFIC GRAVITY _____ 0.701

SAMPLE	20485	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 78.6
COUNTY _____	LEA	ETHANE _____ 10.3
FIELD _____	DRINKARD	PROPANE _____ 4.6
WELL NAME _____	LOCKHART A27 NO. 5	N-BUTANE _____ 1.4
API _____	3002506803	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 27, T21S, R37E	N-PENTANE _____ 0.4
OWNER _____	CONOCO INC.	ISOPENTANE _____ 0.3
COMPLETED _____	971027	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-BLINEBRY	NITROGEN _____ 2.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6387	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	97	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.217
		SPECIFIC GRAVITY _____ 0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20484	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 77.3
COUNTY _____	LEA	ETHANE _____ 10.9
FIELD _____	BLINEBRY	PROPANE _____ 5.3
WELL NAME _____	LOCKHART B35 NO. 1	N-BUTANE _____ 1.8
API _____	3002507029	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 35, T21S, R37E	N-PENTANE _____ 0.6
OWNER _____	CONOCO, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	980323	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 0.8
FORMATION _____	PERM-BLINEBRY	NITROGEN _____ 2.1
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6226	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	493	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.269
		SPECIFIC GRAVITY _____ 0.747

SAMPLE	20684	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 70.4
COUNTY _____	LEA	ETHANE _____ 11.5
FIELD _____	YOUNG N.	PROPANE _____ 6.3
WELL NAME _____	R.E. GRAHAM 7 NO. 1	N-BUTANE _____ 2.5
API _____	3002529002	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 7, T18S, R32E	N-PENTANE _____ 0.9
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.9
COMPLETED _____	850415	CYCLOPENTANE _____ --
SAMPLED _____	010618	HEXANES PLUS _____ 1.6
FORMATION _____	PERM-BONE SPRING	NITROGEN _____ 4.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8546	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.342
		SPECIFIC GRAVITY _____ 0.817

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20465	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 65.7
COUNTY _____	LEA	ETHANE _____ 12.1
FIELD _____	AIRSTRIP	PROPANE _____ 7.3
WELL NAME _____	TEAPOT NO. 1 UNIT J	N-BUTANE _____ 2.7
API _____	3002525955	ISOBUTANE _____ 1.0
LOCATION _____	SEC. 34, T18S, R34E	N-PENTANE _____ 0.8
OWNER _____	AMTEX ENERGY, INC.	ISOPENTANE _____ 0.8
COMPLETED _____	880421	CYCLOPENTANE _____ --
SAMPLED _____	001127	HEXANES PLUS _____ 1.2
FORMATION _____	PERM-BONE SPRING	NITROGEN _____ 4.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9975	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	32	CARBON DIOXIDE _____ 3.8
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.305
		SPECIFIC GRAVITY _____ 0.859

SAMPLE	20679	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 67.2
COUNTY _____	LEA	ETHANE _____ 13.8
FIELD _____	YOUNG N.	PROPANE _____ 7.8
WELL NAME _____	YOUNG 8709 JV-P NO. 1	N-BUTANE _____ 2.7
API _____	3002530051	ISOBUTANE _____ 1.0
LOCATION _____	SEC. 11, T18S, R32E	N-PENTANE _____ 0.7
OWNER _____	BTA OIL PRODUCERS	ISOPENTANE _____ 0.7
COMPLETED _____	871119	CYCLOPENTANE _____ --
SAMPLED _____	010618	HEXANES PLUS _____ 1.2
FORMATION _____	PERM-BONE SPRING	NITROGEN _____ 2.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8435	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	249	CARBON DIOXIDE _____ 1.9
		HELIUM _____ 0.10
		HEATING VALUE* _____ 1.356
		SPECIFIC GRAVITY _____ 0.837

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20700	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 55.7
COUNTY _____	LEA	ETHANE _____ 9.5
FIELD _____	LEA NE	PROPANE _____ 10.3
WELL NAME _____	PEARL 33 FEDERAL NO. 1	N-BUTANE _____ 3.6
API _____	3002534119	ISOBUTANE _____ 1.8
LOCATION _____	SEC. 33, T19S, R34E	N-PENTANE _____ 0.9
OWNER _____	READ & STEVENS, INC.	ISOPENTANE _____ 1.3
COMPLETED _____	980929	CYCLOPENTANE _____ --
SAMPLED _____	010619	HEXANES PLUS _____ 1.3
FORMATION _____	PERM-DELAWARE	NITROGEN _____ 15.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5640	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	124	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.16
		HEATING VALUE* _____ 1.320
		SPECIFIC GRAVITY _____ 0.916
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SAMPLE	20486	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 76.7
COUNTY _____	LEA	ETHANE _____ 10.6
FIELD _____	DRINKARD	PROPANE _____ 5.5
WELL NAME _____	CENTRAL DRINKARD UNIT 111	N-BUTANE _____ 2.0
API _____	3002506845	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 28, T21S, R37E	N-PENTANE _____ 0.7
OWNER _____	CHEVRON U.S.A. INC.	ISOPENTANE _____ 0.5
COMPLETED _____	540423	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 1.0
FORMATION _____	PERM-DRINKARD	NITROGEN _____ 2.2
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6379	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2980	CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.282
		SPECIFIC GRAVITY _____ 0.758

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20488	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 73.5
COUNTY _____	LEA	ETHANE _____ 8.0
FIELD _____	EUMONT	PROPANE _____ 4.8
WELL NAME _____	GILLULY FEDERAL GAS COM NO. 4	N-BUTANE _____ 1.7
API _____	3002504309	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 24, T20S, R36E	N-PENTANE _____ 0.4
OWNER _____	OCCIDENTAL PERMIAN LTD	ISOPENTANE _____ 0.6
COMPLETED _____	531128	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-GRAYBURG	NITROGEN _____ 3.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3470	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 1.3
OPEN FLOW, MCFD _____	8800	CARBON DIOXIDE _____ 4.6
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.167
		SPECIFIC GRAVITY _____ 0.782

SAMPLE	20693	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 58.2
COUNTY _____	LEA	ETHANE _____ 15.5
FIELD _____	MAL JAMAR	PROPANE _____ 9.8
WELL NAME _____	BROWN FEDERAL NO. 1	N-BUTANE _____ 3.3
API _____	3002530199	ISOBUTANE _____ 1.1
LOCATION _____	SEC. 31, T17S, R32E	N-PENTANE _____ 1.4
OWNER _____	MACK ENERGY CORP.	ISOPENTANE _____ 1.2
COMPLETED _____	880225	CYCLOPENTANE _____ --
SAMPLED _____	010619	HEXANES PLUS _____ 1.7
FORMATION _____	PERM-GRAYBURG	NITROGEN _____ 6.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3820	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.5
OPEN FLOW, MCFD _____	55	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.13
		HEATING VALUE* _____ 1.444
		SPECIFIC GRAVITY _____ 0.915

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20471	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 90.4
COUNTY _____	LEA	ETHANE _____ 4.8
FIELD _____	BUFFALO	PROPANE _____ 1.8
WELL NAME _____	NELLIS C. FEDERAL GAS COM NO. 1	N-BUTANE _____ 0.6
API _____	3002526799	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 8, T19S, R33E	N-PENTANE _____ 0.2
OWNER _____	PENROCK OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	830711	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13620	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	463	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.106
		SPECIFIC GRAVITY _____ 0.635

SAMPLE	20470	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.8
COUNTY _____	LEA	ETHANE _____ 5.7
FIELD _____	BUFFALO	PROPANE _____ 2.5
WELL NAME _____	KUDU 9 FEDERAL COM 1	N-BUTANE _____ 0.8
API _____	3002534707	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 9, T19S, R33E	N-PENTANE _____ 0.2
OWNER _____	NEARBURG PRODUCING CO.	ISOPENTANE _____ 0.2
COMPLETED _____	000612	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13373	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.125
		SPECIFIC GRAVITY _____ 0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20468	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.2
COUNTY _____	LEA	ETHANE _____ 6.2
FIELD _____	GEM F	PROPANE _____ 2.6
WELL NAME _____	LAGUNA DEEP FEDERAL UNIT NO. 2	N-BUTANE _____ 0.8
API _____	3002526440	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 26, T19S, R33E	N-PENTANE _____ 0.3
OWNER _____	MATADOR OPERATING CO.	ISOPENTANE _____ 0.3
COMPLETED _____	830705	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13390	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	344	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.146
		SPECIFIC GRAVITY _____ 0.663

SAMPLE	20012	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 84.6
COUNTY _____	LEA	ETHANE _____ 7.9
FIELD _____	TOWNSEND	PROPANE _____ 3.5
WELL NAME _____	BUFFALO ARJ STATE COM NO. 1	N-BUTANE _____ 1.0
API _____	3002502801	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 18, T16S, R35E	N-PENTANE _____ 0.3
OWNER _____	YATES PETROLEUM CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	971222	CYCLOPENTANE _____ --
SAMPLED _____	980728	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12950	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1650	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1630	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.180
		SPECIFIC GRAVITY _____ 0.68

* CALCULATED GROSS BTU PER CU FT, DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20489	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>75.3</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>FUMONT</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>FUMONT 21 FEDERAL NO. 1</u>	N-BUTANE _____ <u>1.9</u>
API _____	<u>3002533170</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 21, T20S, R37E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>MEWBOURNE OIL CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>951203</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001130</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PERM-QUEEN</u>	NITROGEN _____ <u>1.1</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3550</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____	_____	HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	_____	HYDROGEN SULFIDE** _____ <u>1.7</u>
OPEN FLOW, MCFD _____	<u>250</u>	CARBON DIOXIDE _____ <u>5.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.182</u>
		SPECIFIC GRAVITY _____ <u>0.79</u>

SAMPLE	20491	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>76.6</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>7.1</u>
FIELD _____	<u>FUMONT</u>	PROPANE _____ <u>4.4</u>
WELL NAME _____	<u>GILLULY B. FEDERAL RA A NO. 7</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3002506236</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 22, T20S, R37E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OCCIDENTAL PERMIAN LTD</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>560329</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001130</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-QUEEN</u>	NITROGEN _____ <u>1.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3658</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____	_____	HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	_____	HYDROGEN SULFIDE** _____ <u>1.1</u>
OPEN FLOW, MCFD _____	<u>2718</u>	CARBON DIOXIDE _____ <u>6.4</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.144</u>
		SPECIFIC GRAVITY _____ <u>0.765</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20487	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 77.0
COUNTY _____	LEA	ETHANE _____ 8.0
FIELD _____	EUMONT	PROPANE _____ 4.3
WELL NAME _____	GILLULLY FEDERAL GAS COM NO. 15	N-BUTANE _____ 1.3
API _____	3002525866	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 24, T20S, R36E	N-PENTANE _____ 0.3
OWNER _____	OCCIDENTAL PERMIAN LTD	ISOPENTANE _____ 0.4
COMPLETED _____	780531	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-QUEEN	NITROGEN _____ 1.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3610	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.3
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.4
OPEN FLOW, MCFD _____	296	CARBON DIOXIDE _____ 5.2
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.141
		SPECIFIC GRAVITY _____ 0.748

SAMPLE	20490	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.8
COUNTY _____	LEA	ETHANE _____ 9.6
FIELD _____	EUMONT	PROPANE _____ 4.5
WELL NAME _____	GILLULLY B FEDERAL RA A NO. 4	N-BUTANE _____ 1.2
API _____	3002506234	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 22, T20S, R37E	N-PENTANE _____ 0.3
OWNER _____	OCCIDENTAL PERMIAN LTD	ISOPENTANE _____ 0.3
COMPLETED _____	540317	CYCLOPENTANE _____ --
SAMPLED _____	001130	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-SEVEN RIVERS	NITROGEN _____ 5.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3550	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 2.9
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.134
		SPECIFIC GRAVITY _____ 0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20473	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	66.1
COUNTY _____	LEA	ETHANE _____	10.8
FIELD _____	JALMAT	PROPANE _____	8.0
WELL NAME _____	STATE H NO. 5	N-BUTANE _____	3.1
API _____	3002534529	ISOBUTANE _____	1.3
LOCATION _____	SEC. 17, T22S, R36E	N-PENTANE _____	1.0
OWNER _____	DOYLE HARTMAN	ISOPENTANE _____	1.0
COMPLETED _____	981231	CYCLOPENTANE _____	--
SAMPLED _____	001128	HEXANES PLUS _____	1.4
FORMATION _____	PERM-SEVEN RIVERS	NITROGEN _____	1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	3607	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.7
OPEN FLOW, MCFD _____	394	CARBON DIOXIDE _____	5.5
		HELIUM _____	0.10
		HEATING VALUE* _____	1.355
		SPECIFIC GRAVITY _____	0.888

SAMPLE	20043	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	83.2
COUNTY _____	LEA	ETHANE _____	9.6
FIELD _____	JOHNSON RANCH	PROPANE _____	3.7
WELL NAME _____	TRISTE DRAW 34 STATE NO. 1	N-BUTANE _____	1.3
API _____	3002534502	ISOBUTANE _____	0.5
LOCATION _____	SEC. 34, T24S, R33E	N-PENTANE _____	0.2
OWNER _____	EOG RESOURCES	ISOPENTANE _____	0.3
COMPLETED _____	980930	CYCLOPENTANE _____	--
SAMPLED _____	991209	HEXANES PLUS _____	0.3
FORMATION _____	PERM-WOLF CAMP	NITROGEN _____	0.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	13636	ARGON _____	TRACE
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____	1350	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	4200	CARBON DIOXIDE _____	0.2
		HELIUM _____	0.00
		HEATING VALUE* _____	1.213
		SPECIFIC GRAVITY _____	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20469	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.4
COUNTY _____	LEA	ETHANE _____ 7.1
FIELD _____	GEM.N	PROPANE _____ 4.0
WELL NAME _____	SUN BRIGHT FEDERAL NO. 1	N-BUTANE _____ 1.7
API _____	3002529140	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T19S, R33E	N-PENTANE _____ 1.0
OWNER _____	E G I RESOURCES, INC.	ISOPENTANE _____ 1.0
COMPLETED _____	000331	CYCLOPENTANE _____ --
SAMPLED _____	001128	HEXANES PLUS _____ 1.8
FORMATION _____	PERM-WOLFCAMP	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11108	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	15	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.294
		SPECIFIC GRAVITY _____ 0.756

SAMPLE	20476	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.2
COUNTY _____	LEA	ETHANE _____ 10.7
FIELD _____	RHODES	PROPANE _____ 5.9
WELL NAME _____	H.G. MOBERLY C FEDERAL NO. 1	N-BUTANE _____ 2.2
API _____	3002511993	ISOBUTANE _____ 0.9
LOCATION _____	SEC. 17, T26S, R37E	N-PENTANE _____ 0.8
OWNER _____	LANEXCO, INC.	ISOPENTANE _____ 1.0
COMPLETED _____	290311	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 1.9
FORMATION _____	PERM-YATES	NITROGEN _____ 1.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3075	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.354
		SPECIFIC GRAVITY _____ 0.806

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20482	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 71.0
COUNTY _____	LEA	ETHANE _____ 10.7
FIELD _____	JALMAT	PROPANE _____ 7.4
WELL NAME _____	MYERS B FED. NO. 33	N-BUTANE _____ 3.1
API _____	3002525973	ISOBUTANE _____ 1.3
LOCATION _____	SEC. 7, T24S, R37E	N-PENTANE _____ 1.0
OWNER _____	DOYLE HARTMAN	ISOPENTANE _____ 1.1
COMPLETED _____	780726	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 1.5
FORMATION _____	PERM-YATES	NITROGEN _____ 1.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3207	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	580	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 0.11
		HEATING VALUE* _____ 1.389
		SPECIFIC GRAVITY _____ 0.844

SAMPLE	20480	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 70.0
COUNTY _____	LEA	ETHANE _____ 11.3
FIELD _____	JALMAT	PROPANE _____ 7.6
WELL NAME _____	LANGLIE C FEDERAL NO. 1	N-BUTANE _____ 3.0
API _____	3002525898	ISOBUTANE _____ 1.3
LOCATION _____	SEC. 9, T25S, R37E	N-PENTANE _____ 0.8
OWNER _____	OCCIDENTAL PERMIAN LTD	ISOPENTANE _____ 1.1
COMPLETED _____	790706	CYCLOPENTANE _____ --
SAMPLED _____	001129	HEXANES PLUS _____ 1.2
FORMATION _____	PERM-YATES & SEVEN RIVERS	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3130	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.5
OPEN FLOW, MCFD _____	279	CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.377
		SPECIFIC GRAVITY _____ 0.845

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20474	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	75.2
COUNTY _____	<u>LEA</u>	ETHANE _____	11.9
FIELD _____	<u>EUMONT</u>	PROPANE _____	5.7
WELL NAME _____	<u>ELLIOTT B NO. 6</u>	N-BUTANE _____	1.8
API _____	<u>3002510333</u>	ISOBUTANE _____	0.7
LOCATION _____	<u>SEC. 17, T22S, R37E</u>	N-PENTANE _____	0.5
OWNER _____	<u>ZIA ENERGY, INC.</u>	ISOPENTANE _____	0.4
COMPLETED _____	<u>380805</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>001128</u>	HEXANES PLUS _____	0.7
FORMATION _____	<u>PERM-YATES,SVN,RVRS,QUEEN</u>	NITROGEN _____	2.3
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	<u>3480</u>	ARGON _____	0.1
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	<u>58</u>	CARBON DIOXIDE _____	0.7
		HELIUM _____	0.05
		HEATING VALUE* _____	1.264
		SPECIFIC GRAVITY _____	0.759

SAMPLE	20657	COMPONENT, MOLE PCT	
STATE _____	<u>NEW MEXICO</u>	METHANE _____	79.8
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____	10.7
FIELD _____	<u>BASIN</u>	PROPANE _____	4.8
WELL NAME _____	<u>SAN JUAN 28-6 UNIT NO. 99</u>	N-BUTANE _____	1.3
API _____	<u>3003908141</u>	ISOBUTANE _____	0.9
LOCATION _____	<u>SEC. 24, T28N, R6W</u>	N-PENTANE _____	0.3
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____	0.4
COMPLETED _____	<u>651014</u>	CYCLOPENTANE _____	--
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____	0.4
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____	0.3
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	<u>7749</u>	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	0.0
WELLHEAD PRESSURE, PSIG _____	<u>2678</u>	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	<u>4048</u>	CARBON DIOXIDE _____	1.0
		HELIUM _____	0.08
		HEATING VALUE* _____	1.237
		SPECIFIC GRAVITY _____	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20659	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>84.2</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>8.7</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>SAN JUAN 28-5 UNIT NO. 58M</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>3003925597</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 30, T28N, R5W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>970122</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>CRET-DAKOTA, MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7792</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>610</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2205</u>	CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.182</u>
		SPECIFIC GRAVITY _____ <u>0.682</u>

SAMPLE	20663	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>83.0</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>0.3</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>SAN JUAN 29-5 UNIT NO. 226</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3003925076</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 7, T29N, R5W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>PHILLIPS PETROLEUM CO., NW</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>921001</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-FRUITLAND</u>	NITROGEN _____ <u>0.0</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3330</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1200</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>328</u>	CARBON DIOXIDE _____ <u>16.6</u>
		HELIUM _____ <u>TRACE</u>
		HEATING VALUE* _____ <u>847</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20664	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 76.3
COUNTY _____	RIO ARRIBA	ETHANE _____ 0.3
FIELD _____	BASIN	PROPANE _____ 0.0
WELL NAME _____	SAN JUAN 30-6 UNIT NO. 459	N-BUTANE _____ 0.0
API _____	3003924289	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 20, T30N R6W	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.0
COMPLETED _____	881007	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.0
FORMATION _____	CRET-FRUITLAND	NITROGEN _____ 0.0
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3157	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	356	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	103	CARBON DIOXIDE _____ 23.4
		HELIUM _____ TRACE
		HEATING VALUE* _____ 777
		SPECIFIC GRAVITY _____ 0.782

SAMPLE	20662	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 88.8
COUNTY _____	RIO ARRIBA	ETHANE _____ 5.8
FIELD _____	BASIN	PROPANE _____ 1.9
WELL NAME _____	SAN JUAN 29-5 UNIT NO. 32M	N-BUTANE _____ 0.5
API _____	3003925817	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 29, T29N R5W	N-PENTANE _____ 0.1
OWNER _____	PHILLIPS PETROLEUM CO., NW	ISOPENTANE _____ 0.2
COMPLETED _____	991019	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5905	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	313	CARBON DIOXIDE _____ 1.6
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,110
		SPECIFIC GRAVITY _____ 0.644

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20660	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.4
COUNTY _____	RIO ARRIBA	ETHANE _____ 9.8
FIELD _____	BLANCO	PROPANE _____ 3.9
WELL NAME _____	SAN JUAN 28-5 UNIT NO. 14A	N-BUTANE _____ 1.0
API _____	3003922205	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 20, T28N, R5W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	000530	CYCLOPENTANE _____ -
SAMPLED _____	010412	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5000	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.199
		SPECIFIC GRAVITY _____ 0.693

SAMPLE	20656	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.6
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.3
FIELD _____	BLANCO	PROPANE _____ 4.1
WELL NAME _____	SAN JUAN 28-6 UNIT NO. 5A	N-BUTANE _____ 1.0
API _____	3003921869	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 14, T28N, R6W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	790728	CYCLOPENTANE _____ -
SAMPLED _____	010412	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5875	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	663	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1841	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.207
		SPECIFIC GRAVITY _____ 0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20658	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.4
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.2
FIELD _____	BLANCO	PROPANE _____ 4.0
WELL NAME _____	SAN JUAN 28-6 UNIT NO. 65	N-BUTANE _____ 1.1
API _____	3003907375	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 24, T28N, R6W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	561108	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5730	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1032	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3897	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.214
		SPECIFIC GRAVITY _____ 0.703

SAMPLE	20872	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.6
COUNTY _____	RIO ARRIBA	ETHANE _____ 10.1
FIELD _____	BLANCO	PROPANE _____ 4.2
WELL NAME _____	JICARILLA 96 NO. 6C	N-BUTANE _____ 1.1
API _____	3003926549	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 2, T26N, R3W	N-PENTANE _____ 0.3
OWNER _____	ENERGEN RESOURCES CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	010417	CYCLOPENTANE _____ --
SAMPLED _____	011003	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5477	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1190	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	636	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.213
		SPECIFIC GRAVITY _____ 0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20661	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.8</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>9.6</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>SAN JUAN 28-5 UNIT NO. 33</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>3003907413</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 17, T28N, R5W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>590624</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE, DAKOTA</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8041</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>2699</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5518</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.194</u>
		SPECIFIC GRAVITY _____ <u>0.689</u>

SAMPLE	20580	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>63.0</u>
COUNTY _____	<u>ROOSEVELT</u>	ETHANE _____ <u>11.1</u>
FIELD _____	<u>ALLISON</u>	PROPANE _____ <u>7.7</u>
WELL NAME _____	<u>EL ZORRO NO. 1</u>	N-BUTANE _____ <u>2.7</u>
API _____	<u>3004120797</u>	ISOBUTANE _____ <u>1.1</u>
LOCATION _____	<u>SEC. 25, T8S, R36E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>LAYTON ENTERPRISES, INC.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>860201</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001221</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-CISCO</u>	NITROGEN _____ <u>10.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>1.1</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9614</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>102</u>	CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>1.217</u>
		SPECIFIC GRAVITY _____ <u>0.835</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20578	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.3
COUNTY _____	ROOSEVELT	ETHANE _____ 7.3
FIELD _____	BLUITT	PROPANE _____ 3.0
WELL NAME _____	BLUITT SAN ANDRES 18 FEDERAL NO. 14	N-BUTANE _____ 0.8
API _____	3004120855	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 18, T8S, R38E	N-PENTANE _____ 0.2
OWNER _____	SAGA PETROLEUM LLC	ISOPENTANE _____ 0.2
COMPLETED _____	900601	CYCLOPENTANE _____ --
SAMPLED _____	001221	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-SAN ANDRES	NITROGEN _____ 6.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4712	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.1
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 6.6
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.026
		SPECIFIC GRAVITY _____ 0.745

SAMPLE	20574	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.2
COUNTY _____	ROOSEVELT	ETHANE _____ 7.0
FIELD _____	BLUITT	PROPANE _____ 2.9
WELL NAME _____	FEDERAL BL 1	N-BUTANE _____ 0.7
API _____	3004110135	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 8, T8S, R37E	N-PENTANE _____ 0.2
OWNER _____	BRECK OPERATING CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	641115	CYCLOPENTANE _____ --
SAMPLED _____	001221	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-SAN ANDRES	NITROGEN _____ 7.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4445	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.2
OPEN FLOW, MCFD _____	85	CARBON DIOXIDE _____ 6.3
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.014
		SPECIFIC GRAVITY _____ 0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20575	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>75.8</u>
COUNTY _____	<u>ROOSEVELT</u>	ETHANE _____ <u>7.7</u>
FIELD _____	<u>BLUITT</u>	PROPANE _____ <u>4.0</u>
WELL NAME _____	<u>FEDERAL C NO. 1</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>3004120402</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 4, T8S, R37E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>H.L. BROWN OPERATING, LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>751205</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001221</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PERM-WOLFCAMP</u>	NITROGEN _____ <u>8.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8011</u>	ARGON _____ <u>0.2</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>7680</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.21</u>
		HEATING VALUE* _____ <u>1.139</u>
		SPECIFIC GRAVITY _____ <u>0.734</u>

SAMPLE	20863	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.9</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>PAYNE NO. 5</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004511280</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 27, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>600607</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-CLIFF HOUSE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6262</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>671</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5212</u>	CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.123</u>
		SPECIFIC GRAVITY _____ <u>0.654</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20858	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.3</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.0</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 38</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004511192</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 35, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>560922</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-CLIFF HOUSE</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5420</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1050</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5389</u>	CARBON DIOXIDE _____ <u>2.2</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.099</u>
		SPECIFIC GRAVITY _____ <u>0.647</u>

SAMPLE	20864	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.0</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>0.3</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>PAYNE NO. 4-A</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004523911</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 22, T32N, R10W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>800812</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8353</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>2748</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3950</u>	CARBON DIOXIDE _____ <u>4.4</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>968</u>
		SPECIFIC GRAVITY _____ <u>0.6</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20647	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.6</u>
FIELD _____	<u>UTE DOME</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>UTE INDIANS A NO. 18</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3004524609</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35, T32N, R14W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>XTO ENERGY, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>810326</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2268</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>576</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1539</u>	CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.164</u>
		SPECIFIC GRAVITY _____ <u>0.667</u>

SAMPLE	20632	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>80.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>11.9</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>3.9</u>
WELL NAME _____	<u>FARFELL U 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3004529426</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 19, T25N, R11W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ELM RIDGE RESOURCES</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970414</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.9</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5784</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>113</u>	CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.202</u>
		SPECIFIC GRAVITY _____ <u>0.693</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20848	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 92.2
COUNTY _____	SAN JUAN	ETHANE _____ 3.0
FIELD _____	BASIN	PROPANE _____ 0.8
WELL NAME _____	PAYNE NO. 2-A	N-BUTANE _____ 0.2
API _____	3004523910	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 21, T32N, R10W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	800903	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.1
FORMATION _____	CRET-DAKOTA, MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7718	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	645	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2445	CARBON DIOXIDE _____ 3.2
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.031
		SPECIFIC GRAVITY _____ 0.618

SAMPLE	20655	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.6
COUNTY _____	SAN JUAN	ETHANE _____ 0.4
FIELD _____	BASIN	PROPANE _____ 0.0
WELL NAME _____	HOWELL E NO. 300	N-BUTANE _____ TRACE
API _____	3004526918	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 14, T30N, R8W	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.0
COMPLETED _____	880910	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-FRUITLAND	NITROGEN _____ 0.0
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2719	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	888	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1896	CARBON DIOXIDE _____ 17.0
		HELIUM _____ TRACE
		HEATING VALUE* _____ 844
		SPECIFIC GRAVITY _____ 0.72

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20652	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>92.3</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>1.5</u>
WELL NAME _____	<u>FLORENCE 119 NO. 120</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004528727</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 21, T29N, R9W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CONOCO, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930422</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-FRUITLAND</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1964</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>130</u>	CARBON DIOXIDE _____ <u>0.9</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.075</u>
		SPECIFIC GRAVITY _____ <u>0.611</u>

SAMPLE	20633	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>79.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>0.3</u>
FIELD _____	<u>CEDAR HILL</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>F.C. DECKER PRIMO COM 2 UNIT H</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004527480</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 19, T32N, R10W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>CONOCO, INC.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>910411</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-FRUITLAND COAL</u>	NITROGEN _____ <u>0.0</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2848</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1764</u>	CARBON DIOXIDE _____ <u>20.2</u>
		HELIUM _____ <u>TRACE</u>
		HEATING VALUE* _____ <u>810</u>
		SPECIFIC GRAVITY _____ <u>0.751</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20871	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.9
COUNTY _____	SAN JUAN	ETHANE _____ 9.1
FIELD _____	TOCITO DOME	PROPANE _____ 4.0
WELL NAME _____	NAVAJO TRIBAL "N" NO. 1	N-BUTANE _____ 1.4
API _____	3004505809	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 17, T26N, R18W	N-PENTANE _____ 0.4
OWNER _____	ROBERT L. BAYLESS	ISOPENTANE _____ 0.4
COMPLETED _____	630421	CYCLOPENTANE _____ --
SAMPLED _____	011003	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-HERMOSA	NITROGEN _____ 5.7
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6410	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5077	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.50
		HEATING VALUE* _____ 1.169
		SPECIFIC GRAVITY _____ 0.734

SAMPLE	20648	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 68.4
COUNTY _____	SAN JUAN	ETHANE _____ 3.3
FIELD _____	BARKER DOME	PROPANE _____ 1.1
WELL NAME _____	UTE MOUNTAIN NO. 40	N-BUTANE _____ 0.4
API _____	3004529354	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 20, T32N, R14W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	960805	CYCLOPENTANE _____ --
SAMPLED _____	010411	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-ISMAV PARADOX	NITROGEN _____ 19.0
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 3.2
TRUE VERTICAL DEPTH (FT) _____	7430	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2595	CARBON DIOXIDE _____ 3.5
		HELIUM _____ 0.35
		HEATING VALUE* _____ 824
		SPECIFIC GRAVITY _____ 0.73

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20846	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>92.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>PAYNE NO. 1-A</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004522172</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 20, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>780720</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5515</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>5769</u>	CARBON DIOXIDE _____ <u>2.7</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.037</u>
		SPECIFIC GRAVITY _____ <u>0.614</u>

SAMPLE	20861	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>91.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 49A</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3004529443</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 23, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>970823</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6327</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1643</u>	CARBON DIOXIDE _____ <u>2.2</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.062</u>
		SPECIFIC GRAVITY _____ <u>0.622</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20869	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.9</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>1.3</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 75</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004511427</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 18, T32N, R9W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>600607</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6040</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1021</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2559</u>	CARBON DIOXIDE _____ <u>2.3</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.004</u>
		SPECIFIC GRAVITY _____ <u>0.587</u>
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SAMPLE	20850	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>90.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>PAGE 1-A</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3004522455</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>770624</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5514</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>863</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3322</u>	CARBON DIOXIDE _____ <u>2.1</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.076</u>
		SPECIFIC GRAVITY _____ <u>0.63</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20849	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 90.7
COUNTY _____	SAN JUAN	ETHANE _____ 4.8
FIELD _____	BLANCO	PROPANE _____ 1.3
WELL NAME _____	VANDERSLICE NO. 2Y	N-BUTANE _____ 0.3
API _____	3004520996	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 18, T32N, R10W	N-PENTANE _____ 0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.1
COMPLETED _____	930821	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.2
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5430	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	875	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	123	CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.070
		SPECIFIC GRAVITY _____ 0.627
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SAMPLE	20844	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 95.1
COUNTY _____	SAN JUAN	ETHANE _____ 1.6
FIELD _____	BLANCO	PROPANE _____ 0.1
WELL NAME _____	HARRISON NO. 1	N-BUTANE _____ TRACE
API _____	3004511124	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 31, T32N, R10W	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ TRACE
COMPLETED _____	690325	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5060	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	788	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3632	CARBON DIOXIDE _____ 2.9
		HELIUM _____ 0.02
		HEATING VALUE* _____ 997
		SPECIFIC GRAVITY _____ 0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20865	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>PAYNE NO. 4-A</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004523911</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 22, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>800812</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6298</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>754</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2784</u>	CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.102</u>
		SPECIFIC GRAVITY _____ <u>0.641</u>

SAMPLE	20870	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.3</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 68</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004511316</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 24, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>590423</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6040</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1020</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>6919</u>	CARBON DIOXIDE _____ <u>2.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.105</u>
		SPECIFIC GRAVITY _____ <u>0.647</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20847	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>PAYNE NO. 3-E</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004527543</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 20, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>971115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5701</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>434</u>	CARBON DIOXIDE _____ <u>2.3</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.098</u>
		SPECIFIC GRAVITY _____ <u>0.648</u>
SAMPLE	20845	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>5.0</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>PAYNE NO. 1-B</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3004530432</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 20, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>010319</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5644</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>307</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2506</u>	CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.082</u>
		SPECIFIC GRAVITY _____ <u>0.638</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20653	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.3</u>
WELL NAME _____	<u>HOWELL J NO. 3A</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004521987</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 11, T30N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>760505</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>4.8</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5161</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3660</u>	CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.074</u>
		SPECIFIC GRAVITY _____ <u>0.675</u>

SAMPLE	20654	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.9</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.0</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.4</u>
WELL NAME _____	<u>HOWELL E NO. 2B</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004527563</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 14, T30N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900915</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.0</u>
MEASURED DEPTH _____	<u>6664</u>	HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>121</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>12200</u>	CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.128</u>
		SPECIFIC GRAVITY _____ <u>0.658</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20866	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	86.8
COUNTY _____	SAN JUAN	ETHANE _____	7.2
FIELD _____	BLANCO	PROPANE _____	2.2
WELL NAME _____	SAN JUAN NO. 28-A	N-BUTANE _____	0.5
API _____	3004522916	ISOBUTANE _____	0.4
LOCATION _____	SEC. 26, T32N, R10W	N-PENTANE _____	0.1
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____	0.2
COMPLETED _____	781017	CYCLOPENTANE _____	-
SAMPLED _____	011003	HEXANES PLUS _____	0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____	0.2
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	6357	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____	712	HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____	1587	CARBON DIOXIDE _____	1.9
		HELIUM _____	0.04
		HEATING VALUE* _____	1.126
		SPECIFIC GRAVITY _____	0.659

SAMPLE	20669	COMPONENT, MOLE PCT	
STATE _____	NEW MEXICO	METHANE _____	86.9
COUNTY _____	SAN JUAN	ETHANE _____	7.1
FIELD _____	BLANCO	PROPANE _____	2.5
WELL NAME _____	HOWELL A NO. 3	N-BUTANE _____	0.7
API _____	3004509794	ISOBUTANE _____	0.4
LOCATION _____	SEC. 4, T30N, R8W	N-PENTANE _____	0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____	0.2
COMPLETED _____	940125	CYCLOPENTANE _____	-
SAMPLED _____	010412	HEXANES PLUS _____	0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____	0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____	0.0
TRUE VERTICAL DEPTH (FT) _____	5374	ARGON _____	0.0
MEASURED DEPTH _____		HYDROGEN _____	TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____	0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____	1.5
		HELIUM _____	0.04
		HEATING VALUE* _____	1.138
		SPECIFIC GRAVITY _____	0.66

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20852	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.7</u>
WELL NAME _____	<u>VANDERSLICE NO. 1</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004511365</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 19, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>700622</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5240</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>864</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2542</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.140</u>
		SPECIFIC GRAVITY _____ <u>0.666</u>

SAMPLE	20860	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.4</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.5</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 9A</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004529736</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 25, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>991022</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6102</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>497</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2085</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.136</u>
		SPECIFIC GRAVITY _____ <u>0.664</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20851	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.7</u>
WELL NAME _____	<u>VANDERSLICE NO. 1-B</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004530014</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 19, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>000324</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5440</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>187</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>217</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.144</u>
		SPECIFIC GRAVITY _____ <u>0.669</u>

SAMPLE	20857	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.6</u>
WELL NAME _____	<u>SAN JUAN 32-9 UNIT NO. 34A</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004522917</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780717</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5636</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>576</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2779</u>	CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.140</u>
		SPECIFIC GRAVITY _____ <u>0.667</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20859	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.2
COUNTY _____	SAN JUAN	ETHANE _____ 7.9
FIELD _____	BLANCO	PROPANE _____ 2.8
WELL NAME _____	SAN JUAN 32-9 UNIT NO. 9	N-BUTANE _____ 0.8
API _____	3004511219	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 25, T32N, R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	610802	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5650	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	981	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	483	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.151
		SPECIFIC GRAVITY _____ 0.674

SAMPLE	20856	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 84.3
COUNTY _____	SAN JUAN	ETHANE _____ 8.5
FIELD _____	BLANCO	PROPANE _____ 3.0
WELL NAME _____	SCOTT NO. 5R	N-BUTANE _____ 0.8
API _____	3004528519	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 34, T32N, R10W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	910904	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5635	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	550	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	18992	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.163
		SPECIFIC GRAVITY _____ 0.68

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20855	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>84.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>8.6</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>SCOTT NO. 5A</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3004522547</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 34, T32N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>770913</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5408</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>199</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4933</u>	CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.166</u>
		SPECIFIC GRAVITY _____ <u>0.681</u>

SAMPLE	20853	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>83.3</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>9.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>SCOTT NO. 7-A</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3004521967</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 3, T31N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>760707</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5337</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>705</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4133</u>	CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.178</u>
		SPECIFIC GRAVITY _____ <u>0.688</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20668	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 83.4
COUNTY _____	SAN JUAN	ETHANE _____ 9.1
FIELD _____	BLANCO	PROPANE _____ 3.8
WELL NAME _____	HOWELL C NO. 3C	N-BUTANE _____ 1.0
API _____	3004530009	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 7, T30N, R8W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	000416	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5298	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	370	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	870	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.200
		SPECIFIC GRAVITY _____ 0.688
SAMPLE	20843	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 82.3
COUNTY _____	SAN JUAN	ETHANE _____ 9.1
FIELD _____	BLANCO	PROPANE _____ 3.7
WELL NAME _____	HARRISON NO. 1-R	N-BUTANE _____ 1.1
API _____	3004529533	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 31, T32N, R10W	N-PENTANE _____ 0.3
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	980514	CYCLOPENTANE _____ --
SAMPLED _____	011002	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5786	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	317	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1150	CARBON DIOXIDE _____ 1.9
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.192
		SPECIFIC GRAVITY _____ 0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20651	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 79.2
COUNTY _____	SAN JUAN	ETHANE _____ 10.8
FIELD _____	BLANCO	PROPANE _____ 5.0
WELL NAME _____	FLORANCE NO. 41	N-BUTANE _____ 1.4
API _____	3004508105	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T29N, R9W	N-PENTANE _____ 0.4
OWNER _____	CONOCO, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	510806	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4694	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1090	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3120	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.246
		SPECIFIC GRAVITY _____ 0.725

SAMPLE	20670	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.3
COUNTY _____	SAN JUAN	ETHANE _____ 7.3
FIELD _____	BLANCO	PROPANE _____ 2.7
WELL NAME _____	WOODRIVER NO. 2	N-BUTANE _____ 0.7
API _____	3004513226	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 9, T30N, R8W	N-PENTANE _____ 0.2
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	560227	CYCLOPENTANE _____ --
SAMPLED _____	010412	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-MESAVERDE, MANCOS	NITROGEN _____ 0.1
GEOLOGIC PROVINCE CODE _____	580	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4865	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1055	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	11500	CARBON DIOXIDE _____ 1.5
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.147
		SPECIFIC GRAVITY _____ 0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20868	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>78.0</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>8.7</u>
FIELD _____	<u>TOCITO DOME</u>	PROPANE _____ <u>3.5</u>
WELL NAME _____	<u>NAVAJO TRIBAL "N" NO. 11</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3004520583</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 17, T26N, R18W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>ROBERT L. BAYLESS</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>700130</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-PARADOX</u>	NITROGEN _____ <u>5.4</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6390</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>271</u>	CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.47</u>
		HEATING VALUE* _____ <u>1.137</u>
		SPECIFIC GRAVITY _____ <u>0.71</u>

SAMPLE	20867	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>SAN JUAN NO. 39</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3004511286</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 26, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>561017</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6197</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>1022</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>12095</u>	CARBON DIOXIDE _____ <u>2.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.088</u>
		SPECIFIC GRAVITY _____ <u>0.638</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20854	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>SCOTT NO. 12</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004521822</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 3, T31N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>750925</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011002</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2806</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>944</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2999</u>	CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.103</u>
		SPECIFIC GRAVITY _____ <u>0.637</u>

SAMPLE	20862	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>SAN JUAN NO. 27</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004511314</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 23, T32N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>551111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011003</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6109</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>970</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>3400</u>	CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.104</u>
		SPECIFIC GRAVITY _____ <u>0.642</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20927	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 0.0
COUNTY _____	SOCORRO	ETHANE _____ 0.0
FIELD _____	WILDCAT	PROPANE _____ 0.0
WELL NAME _____	DULCE DRAW STATE NO. 1	N-BUTANE _____ 0.0
API _____	3005320014	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 2, T4S, R9E	N-PENTANE _____ 0.0
OWNER _____	PRIMERO OPERATING, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	010431	CYCLOPENTANE _____ --
SAMPLED _____	010808	HEXANES PLUS _____ 0.0
FORMATION _____	PERM-ABO	NITROGEN _____ 8.3
GEOLOGIC PROVINCE CODE _____	465	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2846	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 91.4
		HELIUM _____ 0.09
		HEATING VALUE* _____ 0
		SPECIFIC GRAVITY _____ 1.472

SAMPLE	20873	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 0.8
COUNTY _____	SOCORRO	ETHANE _____ 0.0
FIELD _____	WILDCAT	PROPANE _____ 0.0
WELL NAME _____	DULCE DRAW STATE NO. 1	N-BUTANE _____ 0.0
API _____	3005320014	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 2, T4S, R9E	N-PENTANE _____ 0.0
OWNER _____	PRIMERO OPERATING, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	010431	CYCLOPENTANE _____ --
SAMPLED _____	010808	HEXANES PLUS _____ 0.0
FORMATION _____	PERM-ABO	NITROGEN _____ 65.6
GEOLOGIC PROVINCE CODE _____	465	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2650	ARGON _____ 0.4
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	200	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 31.1
		HELIUM _____ 2.02
		HEATING VALUE* _____ 9
		SPECIFIC GRAVITY _____ 1.12

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20018	COMPONENT, MOLE PCT
STATE _____	OHIO	METHANE _____ 83.6
COUNTY _____	HOCKING	ETHANE _____ 4.5
FIELD _____	HAYNES	PROPANE _____ 1.9
WELL NAME _____	AZBELL NO. 2	N-BUTANE _____ 0.6
API _____	3407323485	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 5N. SALT CREEK TWP	N-PENTANE _____ 0.1
OWNER _____	COLUMBIA NATURAL RESOURCES, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	980608	CYCLOPENTANE _____ --
SAMPLED _____	981210	HEXANES PLUS _____ TRACE
FORMATION _____	ORDO-ROSE RUN	NITROGEN _____ 8.2
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.4
TRUE VERTICAL DEPTH (FT) _____	3530	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1330	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5700	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.16
		HEATING VALUE* _____ 1.017
		SPECIFIC GRAVITY _____ 0.649

SAMPLE	20046	COMPONENT, MOLE PCT
STATE _____	OHIO	METHANE _____ 88.5
COUNTY _____	PORTAGE	ETHANE _____ 6.6
FIELD _____	RAVENNA	PROPANE _____ 2.7
WELL NAME _____	SHEWELL UNIT NO. P-11	N-BUTANE _____ 0.8
API _____	3413324209	ISOBUTANE _____ 0.3
LOCATION _____	EDINBURG TWP. ATWATER QUAD, LOT 4SW	N-PENTANE _____ 0.1
OWNER _____	EASTERN STATES OIL & GAS, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	980924	CYCLOPENTANE _____ --
SAMPLED _____	000211	HEXANES PLUS _____ 0.1
FORMATION _____	ORDO-ROSE RUN, KNOX	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7376	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	2550	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1200	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.139
		SPECIFIC GRAVITY _____ 0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20726	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 75.6
COUNTY _____	CUSTER	ETHANE _____ 13.4
FIELD _____	WEATHERFORD	PROPANE _____ 6.3
WELL NAME _____	CRALL NO. 12-1	N-BUTANE _____ 1.4
API _____	3503920567	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 12 T13N R15W	N-PENTANE _____ 0.4
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	820322	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-ATOKA	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12246	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	950	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.291
		SPECIFIC GRAVITY _____ 0.748

SAMPLE	20732	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 83.2
COUNTY _____	CUSTER	ETHANE _____ 6.0
FIELD _____	FAY F	PROPANE _____ 2.1
WELL NAME _____	MILTON NO. 1-25	N-BUTANE _____ 0.4
API _____	3503921581	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 25 T15N R14W	N-PENTANE _____ 0.1
OWNER _____	MARSHALL OIL CORP.	ISOPENTANE _____ 0.1
COMPLETED _____	940904	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-ATOKA, MORROW	NITROGEN _____ 5.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 1.2
TRUE VERTICAL DEPTH (FT) _____	10766	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4100	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1000	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.049
		SPECIFIC GRAVITY _____ 0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20705	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 88.8
COUNTY _____	CLUSTER	ETHANE _____ 6.0
FIELD _____	HAMMON E	PROPANE _____ 2.1
WELL NAME _____	WHITE NO. 1-13	N-BUTANE _____ 0.4
API _____	3503921437	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 13, T13N, R20W	N-PENTANE _____ 0.1
OWNER _____	APACHE CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	920928	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13000	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4633	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	785	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.121
		SPECIFIC GRAVITY _____ 0.645

SAMPLE	20707	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 79.8
COUNTY _____	CLUSTER	ETHANE _____ 10.5
FIELD _____	HAMMON E	PROPANE _____ 5.0
WELL NAME _____	SMITH B21 NO. 2	N-BUTANE _____ 1.4
API _____	3503921375	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T14N, R20W	N-PENTANE _____ 0.3
OWNER _____	CIMAREX ENERGY CO.	ISOPENTANE _____ 0.4
COMPLETED _____	900409	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12242	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	6517	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	700	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.238
		SPECIFIC GRAVITY _____ 0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20725	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.4
COUNTY _____	CLUSTER	ETHANE _____ 10.4
FIELD _____	WEATHERFORD	PROPANE _____ 6.1
WELL NAME _____	HORSE CREEK NO. 13-1	N-BUTANE _____ 1.5
API _____	3503921652	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 13, T13N, R15W	N-PENTANE _____ 0.5
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	960805	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11330	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3900	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3822	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.267
		SPECIFIC GRAVITY _____ 0.736

SAMPLE	20734	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 95.8
COUNTY _____	CLUSTER	ETHANE _____ 2.2
FIELD _____	CLINTON S	PROPANE _____ 0.3
WELL NAME _____	CLINTON NO. 13-31	N-BUTANE _____ TRACE
API _____	3503920825	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 31, T12N, R16W	N-PENTANE _____ TRACE
OWNER _____	PETRO ENGINEERING, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	821108	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ TRACE
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	15472	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	9500	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2025	CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.019
		SPECIFIC GRAVITY _____ 0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20728	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 87.9
COUNTY _____	CLUSTER	ETHANE _____ 6.7
FIELD _____	CLUSTER CITY E	PROPANE _____ 2.4
WELL NAME _____	DECKER NO. 1-23	N-BUTANE _____ 0.5
API _____	3503920338	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 23, T14N, R15W	N-PENTANE _____ 0.1
OWNER _____	WARREN AMERICAN OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	800709	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12708	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3000	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1150	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.132
		SPECIFIC GRAVITY _____ 0.649
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SAMPLE	20727	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 91.8
COUNTY _____	CLUSTER	ETHANE _____ 4.8
FIELD _____	CLUSTER CITY E	PROPANE _____ 1.2
WELL NAME _____	BLACK WOLF NO. 1-25	N-BUTANE _____ 0.3
API _____	3503920485	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 25, T14N, R15W	N-PENTANE _____ 0.1
OWNER _____	WARREN AMERICAN OIL CO.	ISOPENTANE _____ 0.1
COMPLETED _____	811101	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-MORROW, SPRINGER	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13016	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	408	CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.074
		SPECIFIC GRAVITY _____ 0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20730	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>83.1</u>
COUNTY _____	<u>CUSTER</u>	ETHANE _____ <u>8.6</u>
FIELD _____	<u>FAY E</u>	PROPANE _____ <u>4.1</u>
WELL NAME _____	<u>CATTLE 4-D NO. 1-24</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3503920156</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 24, T15N, R14W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>APACHE CORP.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>770616</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010711</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-MORROW, SPRINGER</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10897</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>872</u>	CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.204</u>
		SPECIFIC GRAVITY _____ <u>0.694</u>

SAMPLE	20729	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>87.3</u>
COUNTY _____	<u>CUSTER</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>THOMAS S</u>	PROPANE _____ <u>2.7</u>
WELL NAME _____	<u>HALLE NO. 1-7</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3503920956</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 7, T14N, R14W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>UNIT PETROLEUM CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>831004</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010711</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-RED FORK</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10885</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>350</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>300</u>	CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.145</u>
		SPECIFIC GRAVITY _____ <u>0.656</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20731	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 83.7
COUNTY _____	CLUSTER	ETHANE _____ 8.3
FIELD _____	FAY E	PROPANE _____ 4.0
WELL NAME _____	KENT NO. 1-24	N-BUTANE _____ 1.0
API _____	3503921461	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 24, T15N, R14W	N-PENTANE _____ 0.2
OWNER _____	MARSHALL OIL CORP.	ISOPENTANE _____ 0.4
COMPLETED _____	920821	CYCLOPENTANE _____ --
SAMPLED _____	010711	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-SPRINGER	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	380	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	10990	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4600	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1750	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.197
		SPECIFIC GRAVITY _____ 0.69

SAMPLE	20721	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 84.1
COUNTY _____	DEWEY	ETHANE _____ 8.8
FIELD _____	PUTNAM	PROPANE _____ 3.3
WELL NAME _____	SHIRLEY NO. 1-22	N-BUTANE _____ 0.8
API _____	3504321704	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 22, T17N, R18W	N-PENTANE _____ 0.2
OWNER _____	EXOK, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	830802	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-MORROW	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	380	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	10750	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3020	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.175
		SPECIFIC GRAVITY _____ 0.68

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20715	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>93.6</u>
COUNTY _____	<u>DEWEY</u>	ETHANE _____ <u>3.5</u>
FIELD _____	<u>NOBSCOT NW</u>	PROPANE _____ <u>0.9</u>
WELL NAME _____	<u>FRANS USA NO. 1</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3504321760</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 10, T16N, R15W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>VERNON E. FAULCONER, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>830823</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010710</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10243</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>2245</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1297</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.058</u>
		SPECIFIC GRAVITY _____ <u>0.602</u>
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SAMPLE	20720	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>79.9</u>
COUNTY _____	<u>DEWEY</u>	ETHANE _____ <u>10.6</u>
FIELD _____	<u>PUTNAM</u>	PROPANE _____ <u>4.8</u>
WELL NAME _____	<u>SHIRLEY NO. 4-22</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3504322517</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 22, T17N, R18W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>EXOK, INC.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>960121</u>	CYCLOPENTANE _____ <u>—</u>
SAMPLED _____	<u>010710</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10786</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>4000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>377</u>	CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.233</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20718	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 80.6
COUNTY _____	DEWEY	ETHANE _____ 10.4
FIELD _____	PUTNAM	PROPANE _____ 4.5
WELL NAME _____	GORE UNIT NO. 1-23	N-BUTANE _____ 1.2
API _____	3504320618	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 23, T17N, R18W	N-PENTANE _____ 0.4
OWNER _____	CONTINENTAL OPERATING CO.	ISOPENTANE _____ 0.4
COMPLETED _____	750923	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-OSWEGO	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9248	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1506	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1250	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.239
		SPECIFIC GRAVITY _____ 0.716

SAMPLE	20722	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 71.1
COUNTY _____	DEWEY	ETHANE _____ 14.5
FIELD _____	PUTNAM	PROPANE _____ 7.9
WELL NAME _____	FAIRCHILD A NO. 1	N-BUTANE _____ 2.1
API _____	3504350100	ISOBUTANE _____ 1.0
LOCATION _____	SEC. 8, T17N, R19W	N-PENTANE _____ 0.6
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.6
COMPLETED _____	640116	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.7
FORMATION _____	PENN-OSWEGO	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9494	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4128	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3174	CARBON DIOXIDE _____ 0.9
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.355
		SPECIFIC GRAVITY _____ 0.795

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20724	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 76.5
COUNTY _____	DEWEY	ETHANE _____ 11.9
FIELD _____	PUTNAM	PROPANE _____ 5.9
WELL NAME _____	GOVERNMENT-SPAID NO. 1-5	N-BUTANE _____ 1.7
API _____	3504350098	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 5, T17N, R19W	N-PENTANE _____ 0.5
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.5
COMPLETED _____	630320	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-OSWEGO	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9436	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4372	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	5500	CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.292
		SPECIFIC GRAVITY _____ 0.753
SAMPLE	20719	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.7
COUNTY _____	DEWEY	ETHANE _____ 10.7
FIELD _____	PUTNAM	PROPANE _____ 5.2
WELL NAME _____	COLLIER ESTATE NO. 1	N-BUTANE _____ 1.4
API _____	3504320543	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 21, T17N, R18W	N-PENTANE _____ 0.4
OWNER _____	VERNON E. FAULCONER, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	741117	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-TONKAWA	NITROGEN _____ 1.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7826	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1585	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	387	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.254
		SPECIFIC GRAVITY _____ 0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20022	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>98.3</u>
COUNTY _____	<u>KIOWA</u>	ETHANE _____ <u>1.0</u>
FIELD _____	<u>MOUNTAIN VIEW W</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>HAWKINS NO. 1-13</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3507521917</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 13, T7N, R15W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>980616</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>990111</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PENN-SPRINGER (OVERTURNED)</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11391</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>4250</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>31000</u>	CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.565</u>

SAMPLE	20874	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>94.4</u>
COUNTY _____	<u>LATIMER</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>WILBURTON</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>YOURMAN NO. 7-15</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>3507721167</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC. 15, T5N, R18E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>001003</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011011</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PENN-CROMWELL 2</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>345</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11462</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1770</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1558</u>	CARBON DIOXIDE _____ <u>4.6</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>968</u>
		SPECIFIC GRAVITY _____ <u>0.603</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20788	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>72.6</u>
COUNTY _____	<u>LINCOLN</u>	ETHANE _____ <u>10.3</u>
FIELD _____	<u>RED MOUND W</u>	PROPANE _____ <u>5.4</u>
WELL NAME _____	<u>WILKERSON NO. 2-3</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>3508123598</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 3, T15N, R2E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>MARJO OPERATING CO., INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>001115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010813</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>DEVO-HUNTON</u>	NITROGEN _____ <u>9.2</u>
GEOLOGIC PROVINCE CODE _____	<u>355</u>	OXYGEN _____ <u>0.8</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.0</u>
MEASURED DEPTH _____	<u>6276</u>	HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>950</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1170</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>1,104</u>
		SPECIFIC GRAVITY _____ <u>0.722</u>

SAMPLE	20409	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>81.8</u>
COUNTY _____	<u>MAJOR</u>	ETHANE _____ <u>8.6</u>
FIELD _____	<u>RINGWOOD</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>FISHER NO. 6</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3509323677</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 3, T20N, R10W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>ONEOK RESOURCES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>920625</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001023</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>CAMO-ARBUCKLE</u>	NITROGEN _____ <u>1.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9291</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1,222</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20410	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 73.6
COUNTY _____	MAJOR	ETHANE _____ 11.7
FIELD _____	RINGWOOD	PROPANE _____ 5.8
WELL NAME _____	FISHER NO. 4	N-BUTANE _____ 2.5
API _____	3509320854	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 3, T20N, R10W	N-PENTANE _____ 1.2
OWNER _____	ONEOK RESOURCES CO.	ISOPENTANE _____ 0.7
COMPLETED _____	740321	CYCLOPENTANE _____ --
SAMPLED _____	001023	HEXANES PLUS _____ 1.9
FORMATION _____	DEVO-HUNTON	NITROGEN _____ 1.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8086	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4835	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.372
		SPECIFIC GRAVITY _____ 0.811

SAMPLE	20411	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 60.7
COUNTY _____	MAJOR	ETHANE _____ 16.8
FIELD _____	AMES SE	PROPANE _____ 10.1
WELL NAME _____	COLLEY NO. 2	N-BUTANE _____ 4.0
API _____	3509320578	ISOBUTANE _____ 1.3
LOCATION _____	SEC. 10, T20N, R10W	N-PENTANE _____ 1.6
OWNER _____	ONEOK RESOURCES CO.	ISOPENTANE _____ 0.9
COMPLETED _____	710917	CYCLOPENTANE _____ --
SAMPLED _____	001023	HEXANES PLUS _____ 3.2
FORMATION _____	DEVO-HUNTON	NITROGEN _____ 1.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.0
MEASURED DEPTH _____	8344	HYDROGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.10
		HEATING VALUE* _____ 1.587
		SPECIFIC GRAVITY _____ 0.949

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20412	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>83.2</u>
COUNTY _____	<u>MAJOR</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>RINGWOOD</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>FISHER NO. 1</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3509320171</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 3, T20N, R10W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>ONEOK RESOURCES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>800508</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001023</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN LIME</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7748</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>380</u>	CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.212</u>
		SPECIFIC GRAVITY _____ <u>0.705</u>

SAMPLE	20451	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>74.9</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>LONG NO. B1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513900489</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 12, T4N, R15E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCO, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>460425</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>001108</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>12.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2800</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>30919</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.36</u>
		HEATING VALUE* _____ <u>1.050</u>
		SPECIFIC GRAVITY _____ <u>0.712</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20450	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 74.8
COUNTY _____	TEXAS	ETHANE _____ 6.7
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.7
WELL NAME _____	TARVER NO. 1	N-BUTANE _____ 1.1
API _____	3513900488	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 2, T4N, R15E	N-PENTANE _____ 0.3
OWNER _____	CONOCO INC.	ISOPENTANE _____ 0.2
COMPLETED _____	451130	CYCLOPENTANE _____ --
SAMPLED _____	001108	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 12.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2775	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	383	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	31909	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.36
		HEATING VALUE* _____ 1.051
		SPECIFIC GRAVITY _____ 0.713

SAMPLE	20740	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 73.8
COUNTY _____	TEXAS	ETHANE _____ 6.6
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.7
WELL NAME _____	TILGHMAN NO. 1	N-BUTANE _____ 1.1
API _____	3513900567	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 28, T1N, R13E	N-PENTANE _____ 0.3
OWNER _____	XTO ENERGY INC.	ISOPENTANE _____ 0.2
COMPLETED _____	480520	CYCLOPENTANE _____ --
SAMPLED _____	010730	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 13.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2888	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	37	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	23	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.46
		HEATING VALUE* _____ 1.041
		SPECIFIC GRAVITY _____ 0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20741	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 72.8
COUNTY _____	TEXAS	ETHANE _____ 6.4
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.6
WELL NAME _____	BURROWS GAS UNIT NO. D-1	N-BUTANE _____ 1.1
API _____	351390056000	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 20, T1N, R13E	N-PENTANE _____ 0.3
OWNER _____	XTO ENERGY, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	500116	CYCLOPENTANE _____ --
SAMPLED _____	010730	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 14.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2756	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	36	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	40	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.49
		HEATING VALUE* _____ 1.025
		SPECIFIC GRAVITY _____ 0.716

SAMPLE	20882	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 71.2
COUNTY _____	TEXAS	ETHANE _____ 6.3
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.6
WELL NAME _____	STATE NO. 1-36	N-BUTANE _____ 1.1
API _____	3513921142	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 36, T1N, R12E	N-PENTANE _____ 0.2
OWNER _____	CRAWLEY PETROLEUM CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	781022	CYCLOPENTANE _____ --
SAMPLED _____	011030	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 16.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2955	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	245	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.57
		HEATING VALUE* _____ 1.002
		SPECIFIC GRAVITY _____ 0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20673	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 62.1
COUNTY _____	TEXAS	ETHANE _____ 5.4
FIELD _____	GUYMON-HUGOTON	PROPANE _____ 3.5
WELL NAME _____	BUZZARD NO. G-1	N-BUTANE _____ 1.1
API _____	3513901074	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 20, T4N, R12E	N-PENTANE _____ 0.2
OWNER _____	DONALD W. JACKSON	ISOPENTANE _____ 0.2
COMPLETED _____	521106	CYCLOPENTANE _____ --
SAMPLED _____	010511	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-CHASE GROUP	NITROGEN _____ 26.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2479	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	324	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	2020	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.68
		HEATING VALUE* _____ 885
		SPECIFIC GRAVITY _____ 0.754

SAMPLE	20015	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.2
COUNTY _____	TEXAS	ETHANE _____ 5.0
FIELD _____	HOOKER N	PROPANE _____ 1.7
WELL NAME _____	ALEX HILL NO. 34A	N-BUTANE _____ 0.4
API _____	3513922835	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 34, T6N, R17ECM	N-PENTANE _____ TRACE
OWNER _____	RICKS EXPLORATION, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	980207	CYCLOPENTANE _____ --
SAMPLED _____	981201	HEXANES PLUS _____ TRACE
FORMATION _____	PERM-COUNCIL GROVE	NITROGEN _____ 13.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.5
TRUE VERTICAL DEPTH (FT) _____	3162	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	600	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1600	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.34
		HEATING VALUE* _____ 952
		SPECIFIC GRAVITY _____ 0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20752	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>94.4</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>2.8</u>
FIELD _____	<u>RANGE SW</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>STEFFEN UNIT NO. 2</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3513921220</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 19, T1N, R18E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>XTO ENERGY, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>790723</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7069</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>150</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>92</u>	CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.062</u>
		SPECIFIC GRAVITY _____ <u>0.598</u>

SAMPLE	20749	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>77.8</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>6.7</u>
WELL NAME _____	<u>JOE MORRIS NO. 1-B</u>	N-BUTANE _____ <u>2.3</u>
API _____	<u>3513935526</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 30, T2N, R19E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>560111</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010730</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>1.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6542</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>1430</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13300</u>	CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>1.285</u>
		SPECIFIC GRAVITY _____ <u>0.757</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20756	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 80.7
COUNTY _____	TEXAS	ETHANE _____ 6.9
FIELD _____	CAMRICK	PROPANE _____ 5.1
WELL NAME _____	GRAVES NO. B-1	N-BUTANE _____ 1.8
API _____	3513900002	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 26, T2N, R18E	N-PENTANE _____ 0.7
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	551214	CYCLOPENTANE _____ --
SAMPLED _____	010731	HEXANES PLUS _____ 1.0
FORMATION _____	PENN-MORROW	NITROGEN _____ 2.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6457	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1065	CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.20
		HEATING VALUE* _____ 1.231
		SPECIFIC GRAVITY _____ 0.727

SAMPLE	20883	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.9
COUNTY _____	TEXAS	ETHANE _____ 8.0
FIELD _____	TEXHOMA N	PROPANE _____ 4.2
WELL NAME _____	SERIGHT NO. 1-36	N-BUTANE _____ 1.5
API _____	3513921971	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 36, T1N, R12E	N-PENTANE _____ 0.6
OWNER _____	H & L OPERATING CO., LLP	ISOPENTANE _____ 0.3
COMPLETED _____	850221	CYCLOPENTANE _____ --
SAMPLED _____	011030	HEXANES PLUS _____ 0.7
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6743	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	160	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	456	CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.20
		HEATING VALUE* _____ 1.176
		SPECIFIC GRAVITY _____ 0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20753	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 91.0
COUNTY _____	TEXAS	ETHANE _____ 2.6
FIELD _____	CAMRICK	PROPANE _____ 1.1
WELL NAME _____	MURRAY NO. 1	N-BUTANE _____ 0.2
API _____	3513921400	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 34, T1N, R18E	N-PENTANE _____ TRACE
OWNER _____	SPESS OIL CO.	ISOPENTANE _____ TRACE
COMPLETED _____	801030	CYCLOPENTANE _____ --
SAMPLED _____	010731	HEXANES PLUS _____ TRACE
FORMATION _____	PENN-MORROW	NITROGEN _____ 4.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6690	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	825	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1100	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.31
		HEATING VALUE* _____ 1.006
		SPECIFIC GRAVITY _____ 0.603

SAMPLE	50583	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 67.3
COUNTY _____	TEXAS	ETHANE _____ 7.7
FIELD _____	GUYMON S	PROPANE _____ 4.9
WELL NAME _____	ELLIOTT NO. 2-2	N-BUTANE _____ 1.5
API _____	3513923074	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 2, T2N, R15ECM	N-PENTANE _____ 0.5
OWNER _____	REPUBLIC ENERGY, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	000114	CYCLOPENTANE _____ --
SAMPLED _____	000117	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-TORONTO	NITROGEN _____ 16.2
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4332	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	3010	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.26
		HEATING VALUE* _____ 1.076
		SPECIFIC GRAVITY _____ 0.773

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	50584	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>69.4</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>7.4</u>
FIELD _____	<u>TEXHOMA N</u>	PROPANE _____ <u>4.4</u>
WELL NAME _____	<u>OAKES 25 NO. 1</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3513923078</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 25, T2N, R12ECM</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>EOG RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>991213</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>991229</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-TORONTO</u>	NITROGEN _____ <u>15.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4414</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ <u>--</u>
OPEN FLOW, MCFD _____	<u>1050</u>	CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.33</u>
		HEATING VALUE* _____ <u>1.052</u>
		SPECIFIC GRAVITY _____ <u>0.75</u>

SAMPLE	20027	COMPONENT, MOLE PCT
STATE _____	<u>OREGON</u>	METHANE _____ <u>42.8</u>
COUNTY _____	<u>COLUMBIA</u>	ETHANE _____ <u>0.0</u>
FIELD _____	<u>MIST</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>LONGVIEW FIBRE (APATOSAUR)NO 33-22-75</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>3600900338</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 22, T7N, R5W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>ENERFIN RESOURCES</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>990210</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>990422</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>EOCE-CLARK, WILSON</u>	NITROGEN _____ <u>57.0</u>
GEOLOGIC PROVINCE CODE _____	<u>710</u>	OXYGEN _____ <u>0.2</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3011</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		HYDROGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>662</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>4.34</u>
		SPECIFIC GRAVITY _____ <u>0.791</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20702	COMPONENT, MOLE PCT
STATE _____	PENNSYLVANIA	METHANE _____ 94.0
COUNTY _____	INDIANA	ETHANE _____ 3.0
FIELD _____	CHERRY HILL	PROPANE _____ 0.5
WELL NAME _____	TRACT 67 (ENGLE) NO. 2	N-BUTANE _____ 0.1
API _____	3706332245	ISOBUTANE _____ 0.1
LOCATION _____	SEC B, BRUSH VALLEY 7.5 QUAD, CHRY HILL TWP	N-PENTANE _____ TRACE
OWNER _____	SK OPERATING, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	990331	CYCLOPENTANE _____ --
SAMPLED _____	010700	HEXANES PLUS _____ TRACE
FORMATION _____	DEVO-WRRN, SPCL BL TN, BRED	NITROGEN _____ 2.0
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3085	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	990	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1342	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.026
		SPECIFIC GRAVITY _____ 0.585

SAMPLE	20028	COMPONENT, MOLE PCT
STATE _____	PENNSYLVANIA	METHANE _____ 92.7
COUNTY _____	LAWRENCE	ETHANE _____ 2.9
FIELD _____	MERCER	PROPANE _____ 0.3
WELL NAME _____	BYLER NO. 24	N-BUTANE _____ 0.1
API _____	3707320183	ISOBUTANE _____ TRACE
LOCATION _____	SEC B, NEW CASTLE NORTH 7.5 QUAD	N-PENTANE _____ 0.0
OWNER _____	ATLAS RESOURCES, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	980308	CYCLOPENTANE _____ --
SAMPLED _____	990419	HEXANES PLUS _____ 0.0
FORMATION _____	SILU-MEDINA, WHIRLPOOL	NITROGEN _____ 3.5
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ 0.4
TRUE VERTICAL DEPTH (FT) _____	5988	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	810	CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.002
		SPECIFIC GRAVITY _____ 0.59

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20029	COMPONENT, MOLE PCT
STATE _____	TENNESSEE	METHANE _____ 79.4
COUNTY _____	CAMPBELL	ETHANE _____ 8.3
FIELD _____	JELICO MOUNTAIN	PROPANE _____ 4.2
WELL NAME _____	ROBERT SHARP NO. 1	N-BUTANE _____ 1.3
API _____	4101320178	ISOBUTANE _____ 0.4
LOCATION _____	4-A-65E	N-PENTANE _____ 0.2
OWNER _____	MILLER PETROLEUM INC.	ISOPENTANE _____ 0.2
COMPLETED _____	981019	CYCLOPENTANE _____ --
SAMPLED _____	990511	HEXANES PLUS _____ 0.3
FORMATION _____	MISS-MONTEAGLE	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	160	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	1824	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.3
WELLHEAD PRESSURE, PSIG _____	300	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	300	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.26
		HEATING VALUE* _____ 1.154
		SPECIFIC GRAVITY _____ 0.698

SAMPLE	50577	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 54.4
COUNTY _____	CLAY	ETHANE _____ 1.8
FIELD _____	BARBARA M	PROPANE _____ 1.1
WELL NAME _____	MCCORMICK ED GRAF NO. 1	N-BUTANE _____ 0.6
API _____	4207733802	ISOBUTANE _____ 0.3
LOCATION _____	BLK 64, PCSL SUR. A-374	N-PENTANE _____ 0.1
OWNER _____	PRODUCERS OPERATING CO. INC.	ISOPENTANE _____ 0.2
COMPLETED _____	970731	CYCLOPENTANE _____ --
SAMPLED _____	981030	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-CISCO	NITROGEN _____ 40.1
GEOLOGIC PROVINCE CODE _____	420	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	1519	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ --
WELLHEAD PRESSURE, PSIG _____	400	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	412	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.29
		HEATING VALUE* _____ 660
		SPECIFIC GRAVITY _____ 0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20013	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 95.0
COUNTY _____	CROCKETT	ETHANE _____ 1.5
FIELD _____	OZONA SW	PROPANE _____ 0.3
WELL NAME _____	BEAN, VADA NO. 8-A	N-BUTANE _____ 0.1
API _____	4210537930	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 14, BLK M, GC&SF SUR, A-4607	N-PENTANE _____ TRACE
OWNER _____	HARRISON INTERESTS LIMITED	ISOPENTANE _____ TRACE
COMPLETED _____	980212	CYCLOPENTANE _____ --
SAMPLED _____	980928	HEXANES PLUS _____ TRACE
FORMATION _____	DEVO-DEVONIAN, PENN-STRAWN	NITROGEN _____ 0.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9444	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1089	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	4300	CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.004
		SPECIFIC GRAVITY _____ 0.592

SAMPLE	20919	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 96.3
COUNTY _____	CULBERSON	ETHANE _____ 2.1
FIELD _____	FORD	PROPANE _____ 0.3
WELL NAME _____	TEXAS PACIFIC LAND TRUST 23-1	N-BUTANE _____ 0.1
API _____	4210932199	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 23, BLK 58, T1, T&PRR SUR, A-2650	N-PENTANE _____ TRACE
OWNER _____	CONOCO, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	001012	CYCLOPENTANE _____ --
SAMPLED _____	011101	HEXANES PLUS _____ TRACE
FORMATION _____	PERM-WOLFECAMP M	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12052	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	520	CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.025
		SPECIFIC GRAVITY _____ 0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20789	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 95.4
COUNTY _____	HEMPHILL	ETHANE _____ 0.9
FIELD _____	MENDOTA SE	PROPANE _____ 0.1
WELL NAME _____	ROSS AA No. 9-71	N-BUTANE _____ TRACE
API _____	4221132431	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 71, BLK A-2, H&GN SUR, A-122	N-PENTANE _____ 0.0
OWNER _____	CHEVRON U.S.A., INC.	ISOPENTANE _____ 0.0
COMPLETED _____	001121	CYCLOPENTANE _____ --
SAMPLED _____	010814	HEXANES PLUS _____ 0.0
FORMATION _____	PENN-MORROW U	NITROGEN _____ 1.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13277	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4225	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6714	CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 985
		SPECIFIC GRAVITY _____ 0.58

SAMPLE	20014	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 45.5
COUNTY _____	LOVING	ETHANE _____ 0.0
FIELD _____	VERMEJO	PROPANE _____ 0.0
WELL NAME _____	GRAYLING GAS UNIT NO. 1	N-BUTANE _____ 0.0
API _____	4230130060	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 68, BLK 1, W&NW SUR, A-920	N-PENTANE _____ 0.0
OWNER _____	FOREST OIL CORP.	ISOPENTANE _____ 0.0
COMPLETED _____	980204	CYCLOPENTANE _____ --
SAMPLED _____	981013	HEXANES PLUS _____ 0.0
FORMATION _____	ORDO-ELLENBURGER	NITROGEN _____ 1.1
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	21004	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3140	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	50491	CARBON DIOXIDE _____ 53.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 461
		SPECIFIC GRAVITY _____ 1.078

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20772	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 71.6
COUNTY _____	POTTER	ETHANE _____ 5.3
FIELD _____	TECOVAS CREEK	PROPANE _____ 3.0
WELL NAME _____	MARSH RANCH 13-14, SEPARATOR, 2 INCH OF	N-BUTANE _____ 1.0
API _____	4237531630	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 14, BLK 21W, EL&RR SUR	N-PENTANE _____ 0.3
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	010523	CYCLOPENTANE _____ --
SAMPLED _____	010808	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 14.8
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.92
		HEATING VALUE* _____ 990
		SPECIFIC GRAVITY _____ 0.729

SAMPLE	20737	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 71.5
COUNTY _____	POTTER	ETHANE _____ 4.9
FIELD _____	TECOVAS CREEK	PROPANE _____ 2.6
WELL NAME _____	MARSH RANCH NO. 13-14, SEPARATOR GAS	N-BUTANE _____ 1.0
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, EL&RR SUR	N-PENTANE _____ 0.3
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	010523	CYCLOPENTANE _____ --
SAMPLED _____	010720	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.6
		HELIUM _____ 1.00
		HEATING VALUE* _____ 970
		SPECIFIC GRAVITY _____ 0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20773	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 71.9
COUNTY _____	POTTER	ETHANE _____ 5.0
FIELD _____	TECOVAS CREEK	PROPANE _____ 2.7
WELL NAME _____	MARSH RANCH 13-14, CASING ANULLUS	N-BUTANE _____ 1.0
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, FL&RR SUR	N-PENTANE _____ 0.3
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	010523	CYCLOPENTANE _____ -
SAMPLED _____	010808	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.3
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.7
		HELIUM _____ 1.03
		HEATING VALUE* _____ 969
		SPECIFIC GRAVITY _____ 0.72

SAMPLE	20672	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 72.0
COUNTY _____	POTTER	ETHANE _____ 4.7
FIELD _____	TECOVAS CREEK	PROPANE _____ 2.4
WELL NAME _____	MARSH RANCH NO. 13-14	N-BUTANE _____ 0.8
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, FL&RR SUR	N-PENTANE _____ 0.2
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	001025	CYCLOPENTANE _____ -
SAMPLED _____	010424	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3602	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	8	CARBON DIOXIDE _____ 2.0
		HELIUM _____ 1.04
		HEATING VALUE* _____ 949
		SPECIFIC GRAVITY _____ 0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20790	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 73.1
COUNTY _____	POTTER	ETHANE _____ 4.8
FIELD _____	TECOVAS CREEK	PROPANE _____ 2.4
WELL NAME _____	MARSH RANCH 13-14, GAS SEPARATOR	N-BUTANE _____ 0.8
API _____	4237531630	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 14, BLK 21W, FL&RR SUR	N-PENTANE _____ 0.2
OWNER _____	SUNLIGHT EXPLORATION, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	010523	CYCLOPENTANE _____ --
SAMPLED _____	010824	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 15.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4991	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	200	CARBON DIOXIDE _____ 1.1
		HELIUM _____ 1.05
		HEATING VALUE* _____ 949
		SPECIFIC GRAVITY _____ 0.702

SAMPLE	20610	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 64.3
COUNTY _____	POTTER	ETHANE _____ 3.6
FIELD _____	BIVINS RANCH	PROPANE _____ 1.4
WELL NAME _____	BIVINS RANCH 1-212	N-BUTANE _____ 0.4
API _____	4237531359	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & F, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	900815	CYCLOPENTANE _____ --
SAMPLED _____	010405	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 24.4
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3467	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 3.9
		HELIUM _____ 1.49
		HEATING VALUE* _____ 783
		SPECIFIC GRAVITY _____ 0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20841	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 64.2
COUNTY _____	POTTER	ETHANE _____ 3.6
FIELD _____	BIVINS RANCH	PROPANE _____ 1.4
WELL NAME _____	BIVINS RANCH 1-212	N-BUTANE _____ 0.4
API _____	4237531359	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & F, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	900615	CYCLOPENTANE _____ --
SAMPLED _____	010913	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 24.5
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3467	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 3.7
		HELIUM _____ 1.50
		HEATING VALUE* _____ 783
		SPECIFIC GRAVITY _____ 0.733

SAMPLE	20842	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 62.5
COUNTY _____	POTTER	ETHANE _____ 3.9
FIELD _____	BIVINS RANCH	PROPANE _____ 1.8
WELL NAME _____	BIVINS RANCH 1A-212	N-BUTANE _____ 0.5
API _____	4237531628	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & F, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	010103	CYCLOPENTANE _____ --
SAMPLED _____	010913	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 28.2
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.2
MEASURED DEPTH _____	5170	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	18	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	43	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 1.83
		HEATING VALUE* _____ 786
		SPECIFIC GRAVITY _____ 0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20609	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 62.5
COUNTY _____	POTTER	ETHANE _____ 3.9
FIELD _____	BIVINS RANCH	PROPANE _____ 1.8
WELL NAME _____	BIVINS RANCH 1A-212	N-BUTANE _____ 0.5
API _____	4237531628	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & E, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	010103	CYCLOPENTANE _____ --
SAMPLED _____	010404	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 28.4
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	5170	HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	583	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	43	CARBON DIOXIDE _____ 0.4
		HELIUM _____ 1.87
		HEATING VALUE* _____ 785
		SPECIFIC GRAVITY _____ 0.722

SAMPLE	20523	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 62.0
COUNTY _____	POTTER	ETHANE _____ 3.9
FIELD _____	BIVINS RANCH	PROPANE _____ 1.8
WELL NAME _____	BIVINS RANCH 1A-212	N-BUTANE _____ 0.5
API _____	4237531628	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 212, BLK 2, AB&M SUR	N-PENTANE _____ 0.1
OWNER _____	SAND RIVER O & E, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	001128	CYCLOPENTANE _____ --
SAMPLED _____	001219	HEXANES PLUS _____ 0.1
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 28.7
GEOLOGIC PROVINCE CODE _____	440	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3585	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	18	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	43	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 1.89
		HEATING VALUE* _____ 781
		SPECIFIC GRAVITY _____ 0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20026	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 97.8
COUNTY _____	REEVES	ETHANE _____ 0.6
FIELD _____	MI VIDA	PROPANE _____ 0.1
WELL NAME _____	HUMPHREY UNIT NO. 2	N-BUTANE _____ TRACE
API _____	4238932137	ISOBUTANE _____ 0.0
LOCATION _____	SEC. 4, BLK 4, H&GN SUR, A-5273	N-PENTANE _____ TRACE
OWNER _____	TITAN RESOURCES I, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	980605	CYCLOPENTANE _____ --
SAMPLED _____	990300	HEXANES PLUS _____ 0.0
FORMATION _____	PENN-ATOKA	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	14492	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	9300	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	6969	CARBON DIOXIDE _____ 1.3
		HELIUM _____ TRACE
		HEATING VALUE* _____ 1,004
		SPECIFIC GRAVITY _____ 0.572

SAMPLE	20002	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 90.3
COUNTY _____	REEVES	ETHANE _____ 0.9
FIELD _____	NINE MILE DRAW	PROPANE _____ 0.1
WELL NAME _____	NINE MILE DRAW 135507 NO. 1	N-BUTANE _____ 0.0
API _____	4238932104	ISOBUTANE _____ TRACE
LOCATION _____	SEC. 13, BLK 55, T7, T&P SUR, A-135	N-PENTANE _____ 0.0
OWNER _____	BURLINGTON RESOURCES OIL & GAS CO.	ISOPENTANE _____ 0.0
COMPLETED _____	970218	CYCLOPENTANE _____ 0.0
SAMPLED _____	971001	HEXANES PLUS _____ 0.0
FORMATION _____	SILU-FUSSELMAN, ORDO-MONTOYA	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	14358	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	4671	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1696	CARBON DIOXIDE _____ 8.1
		HELIUM _____ 0.01
		HEATING VALUE* _____ 934
		SPECIFIC GRAVITY _____ 0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20009	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 72.2
COUNTY _____	STEPHENS	ETHANE _____ 7.6
FIELD _____	WINSLOW	PROPANE _____ 4.8
WELL NAME _____	GREEN NO. 1	N-BUTANE _____ 1.2
API _____	4242935658	ISOBUTANE _____ 0.4
LOCATION _____	P. SAMPSON SUR A-161	N-PENTANE _____ 0.3
OWNER _____	TEXAS UNITED GEOPRODUCTION, INC.	ISOPENTANE _____ 0.3
COMPLETED _____	970917	CYCLOPENTANE _____ --
SAMPLED _____	980525	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-CADDO	NITROGEN _____ 12.4
GEOLOGIC PROVINCE CODE _____	425	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	3448	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1280	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	3060	CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.23
		HEATING VALUE* _____ 1.085
		SPECIFIC GRAVITY _____ 0.736

SAMPLE	20024	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 81.4
COUNTY _____	TERRELL	ETHANE _____ 8.8
FIELD _____	K.M.	PROPANE _____ 4.8
WELL NAME _____	MITCHELL STATE 10 NO. 4	N-BUTANE _____ 1.6
API _____	4244330781	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 10, BLK 1, CCSD&RGNG SUR A-1677	N-PENTANE _____ 0.3
OWNER _____	ENRON OIL & GAS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	980712	CYCLOPENTANE _____ --
SAMPLED _____	990206	HEXANES PLUS _____ 0.8
FORMATION _____	PERM-WOLFCAMP	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.2
TRUE VERTICAL DEPTH (FT) _____	11462	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	4800	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	10900	CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.245
		SPECIFIC GRAVITY _____ 0.718

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	20023	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 78.5
COUNTY _____	WHEELER	ETHANE _____ 11.9
FIELD _____	MILLS RANCH	PROPANE _____ 5.4
WELL NAME _____	BRYANT NO. 2-44	N-BUTANE _____ 1.3
API _____	4248331513	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 44, BLK A-7, H&GN SUR. A-738	N-PENTANE _____ 0.1
OWNER _____	CHEVRON USA, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	980505	CYCLOPENTANE _____ --
SAMPLED _____	990127	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-GRANITE WASH	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ TRACE
TRUE VERTICAL DEPTH (FT) _____	12094	ARGON _____ 0.0
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1200	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	1200	CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.237
		SPECIFIC GRAVITY _____ 0.719
<hr/>		
SAMPLE	20836	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 34.0
COUNTY _____	SAN JUAN	ETHANE _____ 3.6
FIELD _____	HOOK AND LADDER	PROPANE _____ 1.6
WELL NAME _____	HUSKY FEDERAL NO. 15-25	N-BUTANE _____ 0.7
API _____	4303730317	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 25, T29S, R23E	N-PENTANE _____ 0.2
OWNER _____	TOM BROWN, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	770412	CYCLOPENTANE _____ --
SAMPLED _____	010829	HEXANES PLUS _____ 0.3
FORMATION _____	MISS-LEADVILLE	NITROGEN _____ 36.4
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9080	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	3171	HYDROGEN SULFIDE** _____ 0.2
OPEN FLOW, MCFD _____	5000	CARBON DIOXIDE _____ 20.9
		HELIUM _____ 1.28
		HEATING VALUE* _____ 518
		SPECIFIC GRAVITY _____ 0.969

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	50578	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 91.4
COUNTY _____	UINTAH	ETHANE _____ 3.9
FIELD _____	WONSITS VALLEY	PROPANE _____ 1.3
WELL NAME _____	WONSITS VALLEY FED. NO. 14	N-BUTANE _____ 0.4
API _____	4304733070	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T8S, R21E	N-PENTANE _____ 0.2
OWNER _____	CHEVERON USA	ISOPENTANE _____ 0.2
COMPLETED _____	980518	CYCLOPENTANE _____ --
SAMPLED _____	990120	HEXANES PLUS _____ 1.6
FORMATION _____	EOCE-WASATCH	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7600	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ --
WELLHEAD PRESSURE, PSIG _____	273	HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	1170	CARBON DIOXIDE _____ 0.2
		HELIUM _____ --
		HEATING VALUE* _____ 1.148
		SPECIFIC GRAVITY _____ 0.646

SAMPLE	20020	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 79.9
COUNTY _____	LINCOLN	ETHANE _____ 12.0
FIELD _____	EMIGRANT SPRINGS	PROPANE _____ 4.3
WELL NAME _____	COUNTY LINE NO. 11-19	N-BUTANE _____ 0.7
API _____	4902321259	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 19, T23N, R111W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	981229	CYCLOPENTANE _____ --
SAMPLED _____	980126	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-FRONTIER	NITROGEN _____ 1.0
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ 0.1
TRUE VERTICAL DEPTH (FT) _____	10496	ARGON _____ TRACE
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	640	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	490	CARBON DIOXIDE _____ 0.6
		HELIUM _____ TRACE
		HEATING VALUE* _____ 1.220
		SPECIFIC GRAVITY _____ 0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

SAMPLE	2010	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 89.8
COUNTY _____	PARK	ETHANE _____ 5.3
FIELD _____	OREGON BASIN NORTH	PROPANE _____ 1.8
WELL NAME _____	PAULINE NO. 7	N-BUTANE _____ 0.5
API _____	4902905708	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 5, T51N, R100W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	970728	CYCLOPENTANE _____ --
SAMPLED _____	980610	HEXANES PLUS _____ 0.2
FORMATION _____	TRIA-CHUGWATER	NITROGEN _____ 1.7
GEOLOGIC PROVINCE CODE _____	520	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2408	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	450	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	850	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.101
		SPECIFIC GRAVITY _____ 0.629

SAMPLE	2011	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 90.0
COUNTY _____	PARK	ETHANE _____ 4.7
FIELD _____	OREGON BASIN SOUTH	PROPANE _____ 1.4
WELL NAME _____	LADY NO. 24	N-BUTANE _____ 0.4
API _____	4902906866	ISOBUTANE _____ 0.2
LOCATION _____	SEC. 31, T51N, R100W	N-PENTANE _____ 0.1
OWNER _____	MARATHON OIL CO.	ISOPENTANE _____ 0.1
COMPLETED _____	970321	CYCLOPENTANE _____ --
SAMPLED _____	980610	HEXANES PLUS _____ 0.2
FORMATION _____	TRIA-CHUGWATER	NITROGEN _____ 2.7
GEOLOGIC PROVINCE CODE _____	520	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2868	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	450	HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____	325	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.074
		SPECIFIC GRAVITY _____ 0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 80 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
 ** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

T a b l e 2

*Samples from Natural Gas Pipelines
in the United States*

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	20006	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>98.9</u>
COUNTY _____	<u>LAS ANIMAS</u>	ETHANE _____ <u>0.0</u>
FIELD _____	<u>SPANISH PEAK</u>	PROPANE _____ <u>0.0</u>
PLANT _____	<u>EVERGREEN COMP. STATION</u>	N-BUTANE _____ <u>0.0</u>
LOCATION _____	<u>24" INLET</u>	ISOBUTANE _____ <u>0.0</u>
OWNER _____	<u>EVERGREEN OPERATING CORP.</u>	N-PENTANE _____ <u>0.0</u>
SAMPLED _____	<u>980317</u>	ISOPENTANE _____ <u>0.0</u>
FORMATION _____	<u>TERT-RATON.CRET-VERMEJO</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>455</u>	HEXANES PLUS _____ <u>0.0</u>
PRESSURE, PSIG _____	<u>20</u>	NITROGEN _____ <u>0.4</u>
FLOW, MCFD _____	<u>28000</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>TRACE</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>TRACE</u>
		HEATING VALUE* _____ <u>1.002</u>
		SPECIFIC GRAVITY _____ <u>0.563</u>

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

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