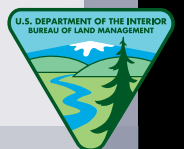
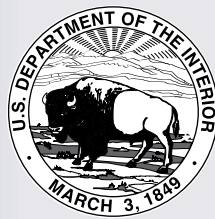


Analyses of Natural Gases, 2005–2007

D.L. Driskill
December 2008

Technical Note 427



U.S. Department of the Interior
Bureau of Land Management

BLM/NM/ST-08/007+3700

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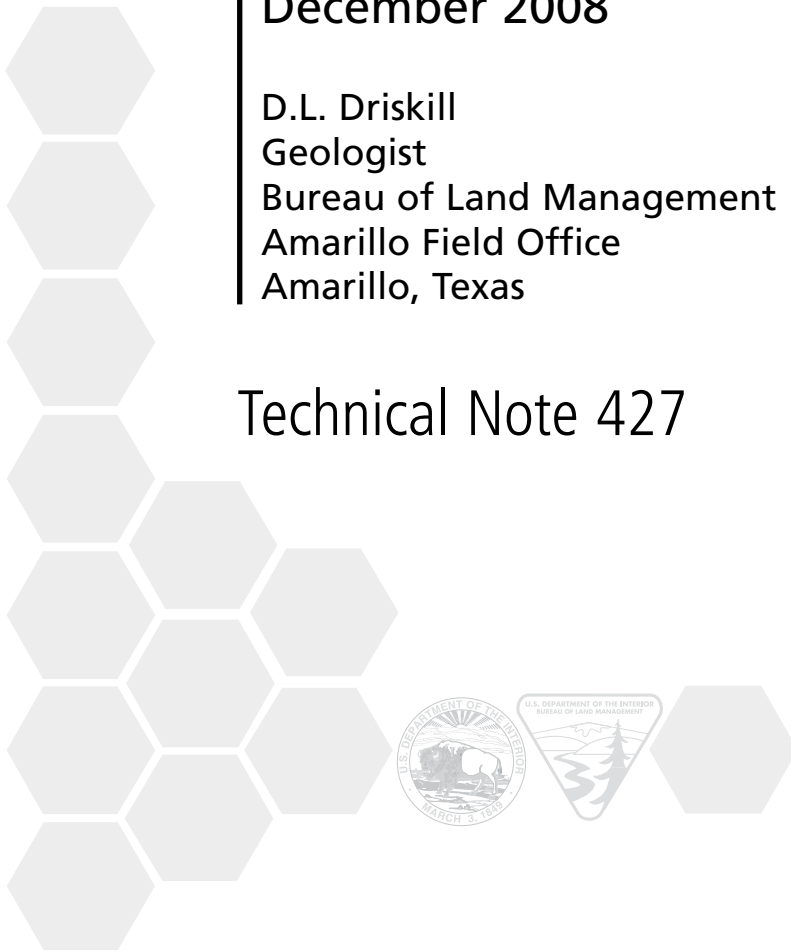
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Analyses of Natural Gases, 2005–2007

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Abstract

Technical Note 427 contains analyses and related source data for 361 natural gas samples from 11 States. Of the total samples, 231 were collected during calendar years 2005 through 2007. The analyses were done using 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 427, *Analyses of Natural Gases, 2005–2007*, contains analyses and related source data for 361 natural gas samples from 11 States. Of the total samples, 231 were collected during calendar years 2005 through 2007. The remaining 130 were collected earlier or later, but releases granting permission to publish them were received during preparation of this document. None of these analyses have been published previously in other analyses reports.

The analyses were done using 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-four publications have presented the results of 16,820 gas analyses performed through 2004. 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, 38–44) containing 11,602 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

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

all analyses published from 1986 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 2004 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 PB2006-500037. The update to this CD-ROM, which will include the 2005–2007

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 1 and 2—the main focus of this technical note—include the results of analyses and related source data for 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)
California	12	1	New Mexico	74	1,2
Colorado	58	1	Oklahoma	69	1
Kansas	77	1	Texas	23	1
Louisiana	2	1	Utah	11	1
Montana	9	1	Wyoming	20	1
Nebraska	6	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 1.²

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

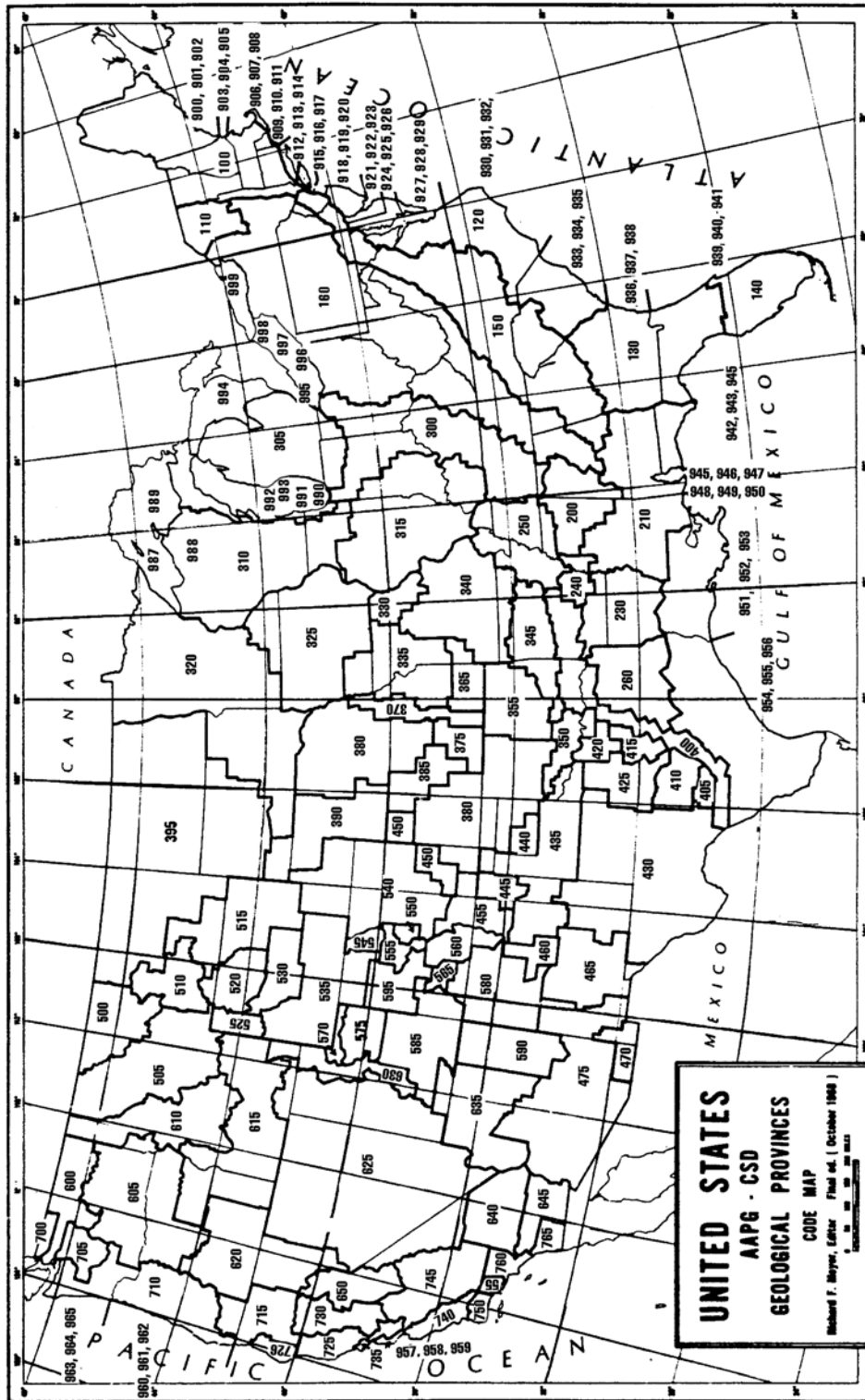


Figure 1. Geologic Provinces of the United States.

Samples from Gas and Oil Wells
in the United States

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

SAMPLE	21329	COMPONENT, MOLE PCT
STATE _____	<u>CALIFORNIA</u>	METHANE _____ <u>86.3</u>
COUNTY _____	<u>SOLANO</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>BUNKER</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>HORIGAN RAYN NO. 1</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>0409521166</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 13, T6N, R1E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>ABA ENERGY CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>020712</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>040527</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-WINTERS</u>	NITROGEN _____ <u>7.5</u>
GEOLOGIC PROVINCE CODE _____	<u>730</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.1</u>
MEASURED DEPTH _____	<u>10260</u>	ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>3200</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1,009</u>
		SPECIFIC GRAVITY _____ <u>0.637</u>
SAMPLE	21554	COMPONENT, MOLE PCT
STATE _____	<u>CALIFORNIA</u>	METHANE _____ <u>76.3</u>
COUNTY _____	<u>KERN</u>	ETHANE _____ <u>9.8</u>
FIELD _____	<u>CAL CANAL</u>	PROPANE _____ <u>5.0</u>
WELL NAME _____	<u>CHEVRON-USTAN-U.S. LA 13X-4</u>	N-BUTANE _____ <u>1.8</u>
API _____	<u>0402958507</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC 4, T29S, R22E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>SAN JOAQUIN FACILITIES MANAGEMENT, INC.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>790217</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060630</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MIOC-STEVENSON</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>745</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11897</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>2500</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>30</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>4.5</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1,225</u>
		SPECIFIC GRAVITY _____ <u>0.766</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	21562	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 71.1
COUNTY _____	KERN	ETHANE _____ 11.0
FIELD _____	CANAL	PROPANE _____ 9.0
WELL NAME _____	PIONEER CANAL 18R-3	N-BUTANE _____ 3.1
API _____	0402984059	ISOBUTANE _____ 1.4
LOCATION _____	SEC 3, T30S, R25E	N-PENTANE _____ 0.7
OWNER _____	SAN JOAQUIN FACILITIES MANAGEMENT, INC.	ISOPENTANE _____ 0.7
COMPLETED _____	890421	CYCLOPENTANE _____ --
SAMPLED _____	060700	HEXANES PLUS _____ 1.0
FORMATION _____	MIOC-FRUITVALE	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	745	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	8966	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	2200	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	10	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.395
		SPECIFIC GRAVITY _____ 0.827

SAMPLE	21567	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 67.0
COUNTY _____	KERN	ETHANE _____ 10.1
FIELD _____	CARNEROS CREEK	PROPANE _____ 8.8
WELL NAME _____	SANTA FE 11	N-BUTANE _____ 3.3
API _____	0403001479	ISOBUTANE _____ 1.5
LOCATION _____	SEC 30, T28S, R20E	N-PENTANE _____ 0.9
OWNER _____	PYRAMID OIL CO.	ISOPENTANE _____ 1.1
COMPLETED _____	931015	CYCLOPENTANE _____ --
SAMPLED _____	060831	HEXANES PLUS _____ 1.6
FORMATION _____	EOCE-POINT OF ROCKS, MIOC-PHACOIDES	NITROGEN _____ 4.7
GEOLOGIC PROVINCE CODE _____	745	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3300	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.5
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	18	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.389
		SPECIFIC GRAVITY _____ 0.862

* 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	21400	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 75.4
COUNTY _____	KERN	ETHANE _____ 2.0
FIELD _____	CYMRIC	PROPANE _____ 0.9
WELL NAME _____	MCKITTRICK DEEP 104	N-BUTANE _____ 0.3
API _____	0403003951	ISOBUTANE _____ 0.1
LOCATION _____	SEC 6, T30S, R22E	N-PENTANE _____ 0.1
OWNER _____	PLAINS EXPLORATION & PRODUCTION CO.	ISOPENTANE _____ 0.1
COMPLETED _____	950706	CYCLOPENTANE _____ --
SAMPLED _____	041117	HEXANES PLUS _____ 0.3
FORMATION _____	MIOC-ANTELOPE	NITROGEN _____ 2.1
GEOLOGIC PROVINCE CODE _____	745	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4740	ARGON _____ TRACE
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	220	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 18.7
		HELIUM _____ 0.01
		HEATING VALUE* _____ 856
		SPECIFIC GRAVITY _____ 0.779

SAMPLE	21401	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 82.7
COUNTY _____	KERN	ETHANE _____ 5.1
FIELD _____	CYMRIC	PROPANE _____ 2.0
WELL NAME _____	R.H. ANDERSON TWO 100H	N-BUTANE _____ 0.3
API _____	0403004641	ISOBUTANE _____ 0.3
LOCATION _____	SEC 20, T29S, R21E	N-PENTANE _____ TRACE
OWNER _____	PLAINS EXPLORATION & PRODUCTION CO.	ISOPENTANE _____ 0.1
COMPLETED _____	951204	CYCLOPENTANE _____ --
SAMPLED _____	041117	HEXANES PLUS _____ 0.4
FORMATION _____	MIOC-CARNEROS	NITROGEN _____ 2.5
GEOLOGIC PROVINCE CODE _____	745	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____	4593	ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	20	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	15	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 6.6
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1,018
		SPECIFIC GRAVITY _____ 0.691

* 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	21571	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	73.3
COUNTY	LOS ANGELES	ETHANE	5.4
FIELD	DEL VALLE	PROPANE	6.3
WELL NAME	NL&F 12-20	N-BUTANE	3.2
API	0403722746	ISOBUTANE	1.4
LOCATION	SEC 20, T4N, R17W	N-PENTANE	1.3
OWNER	LBTH, INC.	ISOPENTANE	1.3
COMPLETED	840126	CYCLOPENTANE	--
SAMPLED	061012	HEXANES PLUS	2.5
FORMATION	-	NITROGEN	2.0
GEOLOGIC PROVINCE CODE	760	OXYGEN	--
TRUE VERTICAL DEPTH (FT)		ARGON	--
MEASURED DEPTH		ARGON + OXYGEN	0.2
WELLHEAD PRESSURE, PSIG	25	HYDROGEN	0.0
OPEN FLOW, MCFD	5	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	3.2
		HELIUM	0.00
		HEATING VALUE*	1.369
		SPECIFIC GRAVITY	0.859

SAMPLE	21570	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	55.8
COUNTY	SAN JOAQUIN	ETHANE	0.2
FIELD	FRENCH CAMP	PROPANE	TRACE
WELL NAME	PAGNUCCI 1-34	N-BUTANE	TRACE
API	0407720667	ISOBUTANE	TRACE
LOCATION	SEC 34, T1N, R6E	N-PENTANE	0.0
OWNER	VINTAGE PRODUCTION OF CA, LLC	ISOPENTANE	0.0
COMPLETED	031112	CYCLOPENTANE	--
SAMPLED	060000	HEXANES PLUS	0.0
FORMATION	CRET-LATHROP	NITROGEN	43.7
GEOLOGIC PROVINCE CODE	730	OXYGEN	--
TRUE VERTICAL DEPTH (FT)		ARGON	--
MEASURED DEPTH	9414	ARGON + OXYGEN	TRACE
WELLHEAD PRESSURE, PSIG	3200	HYDROGEN	0.0
OPEN FLOW, MCFD	4415	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	0.2
		HELIUM	0.01
		HEATING VALUE*	569
		SPECIFIC GRAVITY	0.738

* 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	21533	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 69.9
COUNTY _____	KERN	ETHANE _____ 3.7
FIELD _____	LOST HILLS	PROPANE _____ 1.5
WELL NAME _____	33F-1-11D	N-BUTANE _____ 1.5
API _____	0403023204	ISOBUTANE _____ 1.2
LOCATION _____	SEC 33, T26S, R21E	N-PENTANE _____ 0.7
OWNER _____	CHEVRON USA, INC.	ISOPENTANE _____ 0.9
COMPLETED _____	030930	CYCLOPENTANE _____ --
SAMPLED _____	060526	HEXANES PLUS _____ 1.0
FORMATION _____	MIQC-BEL RIDGE DIATOMITE	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	745	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	2319	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	4	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 19.3
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.010
		SPECIFIC GRAVITY _____ 0.869

SAMPLE	21458	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 90.9
COUNTY _____	GLENN	ETHANE _____ 0.3
FIELD _____	WILLOWS-BEEHIVE BEND	PROPANE _____ 0.0
WELL NAME _____	SECTION 60 NO. 12	N-BUTANE _____ 0.0
API _____	0402120818	ISOBUTANE _____ 0.0
LOCATION _____	SEC 4, T19N, R2W	N-PENTANE _____ 0.0
OWNER _____	VENOCO, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	021209	CYCLOPENTANE _____ --
SAMPLED _____	050000	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-KIONE	NITROGEN _____ 8.7
GEOLOGIC PROVINCE CODE _____	730	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____	3948	ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1200	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ TRACE
		HELIUM _____ TRACE
		HEATING VALUE* _____ 928
		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	21404	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 91.0
COUNTY _____	LOS ANGELES	ETHANE _____ 0.8
FIELD _____	WILMINGTON	PROPANE _____ 0.0
WELL NAME _____	A-359	N-BUTANE _____ TRACE
API _____	0423720344	ISOBUTANE _____ TRACE
LOCATION _____	SEC 7, T5S, R12W	N-PENTANE _____ 0.0
OWNER _____	THUMS LONG BEACH CO.	ISOPENTANE _____ 0.0
COMPLETED _____	000904	CYCLOPENTANE _____ --
SAMPLED _____	041117	HEXANES PLUS _____ 0.0
FORMATION _____	MIQC-PUENTE	NITROGEN _____ 2.8
GEOLOGIC PROVINCE CODE _____	760	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ TRACE
MEASURED DEPTH _____	5811	ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.1
OPEN FLOW, MCFD _____	39	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 5.3
		HELIUM _____ 0.00
		HEATING VALUE* _____ 936
		SPECIFIC GRAVITY _____ 0.621

SAMPLE	21403	COMPONENT, MOLE PCT
STATE _____	CALIFORNIA	METHANE _____ 90.8
COUNTY _____	LOS ANGELES	ETHANE _____ 1.7
FIELD _____	WILMINGTON	PROPANE _____ 1.0
WELL NAME _____	D-725	N-BUTANE _____ 0.5
API _____	0423726289	ISOBUTANE _____ 0.4
LOCATION _____	SEC 17, T5S, R12W	N-PENTANE _____ 0.1
OWNER _____	THUMS LONG BEACH CO.	ISOPENTANE _____ 0.2
COMPLETED _____	030913	CYCLOPENTANE _____ --
SAMPLED _____	041117	HEXANES PLUS _____ 0.1
FORMATION _____	PLIO-REPETTO	NITROGEN _____ 2.9
GEOLOGIC PROVINCE CODE _____	760	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ TRACE
MEASURED DEPTH _____	6444	ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	150	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.021
		SPECIFIC GRAVITY _____ 0.626

* 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	21481	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.2</u>
COUNTY _____	<u>WASHINGTON</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>ABARR</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>CHRISTIANSON 2-12</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>0512109479</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 12, T3S, R49W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>SAND HILLS SOCIETY</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>791021</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>3.5</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2799</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1388</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.000</u>
		SPECIFIC GRAVITY _____ <u>0.59</u>

SAMPLE	21490	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>75.3</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>7.1</u>
FIELD _____	<u>ARISTOCRAT</u>	PROPANE _____ <u>6.8</u>
WELL NAME _____	<u>ARISTOCRAT 41-10C</u>	N-BUTANE _____ <u>2.6</u>
API _____	<u>0512312806</u>	ISOBUTANE _____ <u>1.5</u>
LOCATION _____	<u>SEC 10, T3N, R65W</u>	N-PENTANE _____ <u>0.9</u>
OWNER _____	<u>ENCANA OIL & GAS (USA), INC.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>040129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050630</u>	HEXANES PLUS _____ <u>1.3</u>
FORMATION _____	<u>CRET-CODELL, NIOBRARA</u>	NITROGEN _____ <u>3.0</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7094</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>210</u>	HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>120</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.330</u>
		SPECIFIC GRAVITY _____ <u>0.796</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	21459	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>76.3</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>7.3</u>
FIELD _____	<u>ARISTOCRAT NE</u>	PROPANE _____ <u>6.2</u>
WELL NAME _____	<u>OCOMA 31-19</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>0512314917</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC 31, T4N, R64W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>MERIT ENERGY CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>910306</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050610</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>CRET-SUSSEX</u>	NITROGEN _____ <u>5.8</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4518</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>585</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.196</u>
		SPECIFIC GRAVITY _____ <u>0.743</u>

SAMPLE	21469	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>48.4</u>
COUNTY _____	<u>KIOWA</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>AZTECAN</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>BLACKHOLE 24-4 #2</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>0506106751</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC 4, T17S, R45W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>CITATION OIL & GAS CORP.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>980407</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050628</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>33.9</u>
GEOLOGIC PROVINCE CODE _____	<u>450</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4964</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>2.12</u>
		HEATING VALUE* _____ <u>862</u>
		SPECIFIC GRAVITY _____ <u>0.837</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	21656	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 92.0
COUNTY _____	YUMA	ETHANE _____ 1.1
FIELD _____	BALLYNEAL	PROPANE _____ 0.5
WELL NAME _____	BLEDSOE 2-30-5-44	N-BUTANE _____ 0.1
API _____	0512509954	ISOBUTANE _____ 0.1
LOCATION _____	SEC 30, T5N, R44W	N-PENTANE _____ TRACE
OWNER _____	FOREST OIL CORP.	ISOPENTANE _____ TRACE
COMPLETED _____	060703	CYCLOPENTANE _____ --
SAMPLED _____	070814	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-NIOBRARA	NITROGEN _____ 5.5
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	2440	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	58	HYDROGEN SULFIDE** _____ TRACE
		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.14
		HEATING VALUE* _____ 976
		SPECIFIC GRAVITY _____ 0.595

SAMPLE	21541	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 67.5
COUNTY _____	ADAMS	ETHANE _____ 13.1
FIELD _____	BARREL RANCH	PROPANE _____ 9.0
WELL NAME _____	LINNEBUR 6-23	N-BUTANE _____ 3.0
API _____	0500109373	ISOBUTANE _____ 1.2
LOCATION _____	SEC 6, T3S, R60W	N-PENTANE _____ 0.9
OWNER _____	WHITING OIL & GAS CORP.	ISOPENTANE _____ 0.8
COMPLETED _____	980325	CYCLOPENTANE _____ --
SAMPLED _____	060627	HEXANES PLUS _____ 1.6
FORMATION _____	CRET-DAKOTA D, J	NITROGEN _____ 1.7
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6559	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	190	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1,418
		SPECIFIC GRAVITY _____ 0.855

* 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	21534	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>73.7</u>
COUNTY _____	<u>ADAMS</u>	ETHANE _____ <u>10.8</u>
FIELD _____	<u>BASELINE</u>	PROPANE _____ <u>6.1</u>
WELL NAME _____	<u>ABBOTT LANDS 32-7-4</u>	N-BUTANE _____ <u>2.0</u>
API _____	<u>0500107859</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC 7, T1S, R63W</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>ENERVEST OPERATING, LLC</u>	ISOPENTANE _____ <u>0.7</u>
COMPLETED _____	<u>810611</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060609</u>	HEXANES PLUS _____ <u>1.4</u>
FORMATION _____	<u>CRET-DAKOTA J</u>	NITROGEN _____ <u>1.8</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7504</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>229</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.307</u>
		SPECIFIC GRAVITY _____ <u>0.793</u>

SAMPLE	21550	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>64.0</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>14.3</u>
FIELD _____	<u>BIRD HAVEN</u>	PROPANE _____ <u>10.2</u>
WELL NAME _____	<u>SHOWERS 5-4, 32-12-10, 32-5-7, COMPOSITE</u>	N-BUTANE _____ <u>3.0</u>
API _____	<u>0512319939</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC 5&32, T7&8N R60W</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>DIVERSIFIED OPERATING CORP.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>000823</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060628</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>CRET-DAKOTA D, J</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6955</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>750</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>4.5</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.383</u>
		SPECIFIC GRAVITY _____ <u>0.874</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	21487	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 48.5
COUNTY _____	CHEYENNE	ETHANE _____ 8.3
FIELD _____	BLEDSOE RANCH	PROPANE _____ 7.7
WELL NAME _____	GRAY STATE 5 (INJECTION, BLDSO RNCH & CSTLE PK GAS)	N-BUTANE _____ 3.1
API _____	0501706717	ISOBUTANE _____ 1.0
LOCATION _____	SEC 36, T12S, R51W	N-PENTANE _____ 0.7
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.6
COMPLETED _____	880202	CYCLOPENTANE _____ --
SAMPLED _____	050630	HEXANES PLUS _____ 1.0
FORMATION _____	PENN-MORROW	NITROGEN _____ 26.2
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6206	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.9
		HELIUM _____ 1.05
		HEATING VALUE* _____ 1.061
		SPECIFIC GRAVITY _____ 0.899

SAMPLE	21486	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 46.4
COUNTY _____	CHEYENNE	ETHANE _____ 8.4
FIELD _____	BLEDSOE RANCH	PROPANE _____ 7.7
WELL NAME _____	GRAY STATE 1, 3, & 7	N-BUTANE _____ 3.3
API _____	--	ISOBUTANE _____ 1.0
LOCATION _____	SEC 36, T12S, R51W	N-PENTANE _____ 1.0
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.8
COMPLETED _____		CYCLOPENTANE _____ --
SAMPLED _____	050630	HEXANES PLUS _____ 1.7
FORMATION _____	PENN-MORROW	NITROGEN _____ 26.8
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.9
		HELIUM _____ 1.07
		HEATING VALUE* _____ 1.103
		SPECIFIC GRAVITY _____ 0.931

* 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	21475	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 23.4
COUNTY _____	CHEYENNE	ETHANE _____ 3.0
FIELD _____	BROKEN BOW	PROPANE _____ 3.4
WELL NAME _____	PFEIFER 41-5-2	N-BUTANE _____ 2.1
API _____	0501707567	ISOBUTANE _____ 0.8
LOCATION _____	SEC 5, T13S, R44W	N-PENTANE _____ 0.9
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.7
COMPLETED _____	971215	CYCLOPENTANE _____ --
SAMPLED _____	050628	HEXANES PLUS _____ 1.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 58.2
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5292	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1701	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.4
		HELIUM _____ 4.53
		HEATING VALUE* _____ 606
		SPECIFIC GRAVITY _____ 0.948

SAMPLE	21485	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 47.9
COUNTY _____	CHEYENNE	ETHANE _____ 6.9
FIELD _____	CASTLE PEAK	PROPANE _____ 6.3
WELL NAME _____	WECO-WILLIAM BATTERY	N-BUTANE _____ 2.8
API _____	0501706676	ISOBUTANE _____ 0.8
LOCATION _____	SEC 11, T13S, R51W	N-PENTANE _____ 0.9
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.7
COMPLETED _____	870901	CYCLOPENTANE _____ --
SAMPLED _____	050630	HEXANES PLUS _____ 1.4
FORMATION _____	PENN-MORROW	NITROGEN _____ 29.3
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6202	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	442	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.8
		HELIUM _____ 1.20
		HEATING VALUE* _____ 1,012
		SPECIFIC GRAVITY _____ 0.898

* 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	21536	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 36.1
COUNTY _____	CHEYENNE	ETHANE _____ 6.2
FIELD _____	CHUNKY	PROPANE _____ 6.7
WELL NAME _____	PETER 42-29 NO. 2	N-BUTANE _____ 3.7
API _____	0501707420	ISOBUTANE _____ 1.4
LOCATION _____	SEC 29, T13S, R43W	N-PENTANE _____ 1.1
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 1.0
COMPLETED _____	940428	CYCLOPENTANE _____ --
SAMPLED _____	060626	HEXANES PLUS _____ 1.7
FORMATION _____	PENN-MORROW	NITROGEN _____ 38.3
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5213	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	984	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	207	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.1
		HELIUM _____ 1.44
		HEATING VALUE* _____ 979
		SPECIFIC GRAVITY _____ 0.981

SAMPLE	21552	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 50.9
COUNTY _____	WELD	ETHANE _____ 16.3
FIELD _____	CROW	PROPANE _____ 15.8
WELL NAME _____	FEDERAL OSPREY 35-3	N-BUTANE _____ 5.2
API _____	0512320272	ISOBUTANE _____ 1.7
LOCATION _____	SEC 35, T8N, R60W	N-PENTANE _____ 1.6
OWNER _____	DIVERSIFIED OPERATING CORP.	ISOPENTANE _____ 1.2
COMPLETED _____	021201	CYCLOPENTANE _____ --
SAMPLED _____	060628	HEXANES PLUS _____ 2.5
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	160	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 4.2
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1,662
		SPECIFIC GRAVITY _____ 1.044

* 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	21542	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 71.5
COUNTY _____	ADAMS	ETHANE _____ 9.4
FIELD _____	DANSKIN	PROPANE _____ 7.3
WELL NAME _____	LINNEBUR FARMS 21-3	N-BUTANE _____ 3.2
API _____	0500108151	ISOBUTANE _____ 1.1
LOCATION _____	SEC 3, T2S, R60W	N-PENTANE _____ 0.8
OWNER _____	SOVEREIGN ENERGY, LLC.	ISOPENTANE _____ 0.9
COMPLETED _____	990211	CYCLOPENTANE _____ --
SAMPLED _____	060627	HEXANES PLUS _____ 1.6
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 2.8
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6360	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	315	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.360
		SPECIFIC GRAVITY _____ 0.828

SAMPLE	21560	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 63.5
COUNTY _____	ELBERT	ETHANE _____ 10.8
FIELD _____	DEADEYE	PROPANE _____ 11.7
WELL NAME _____	HSR-WHITEHEAD 14-9	N-BUTANE _____ 4.1
API _____	0503906630	ISOBUTANE _____ 1.1
LOCATION _____	SEC 9, T6S, R62W	N-PENTANE _____ 1.2
OWNER _____	HILCORP ENERGY CO.	ISOPENTANE _____ 1.0
COMPLETED _____	950725	CYCLOPENTANE _____ --
SAMPLED _____	060712	HEXANES PLUS _____ 2.3
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 2.2
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7405	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.493
		SPECIFIC GRAVITY _____ 0.922

* 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	21561	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 63.4
COUNTY _____	ELBERT	ETHANE _____ 10.8
FIELD _____	DEADEYE	PROPANE _____ 11.7
WELL NAME _____	HSR-WHITEHEAD 14-9	N-BUTANE _____ 4.1
API _____	0503906630	ISOBUTANE _____ 1.1
LOCATION _____	SEC.9, T6S, R62W	N-PENTANE _____ 1.2
OWNER _____	HIL CORP ENERGY CO.	ISOPENTANE _____ 0.9
COMPLETED _____	950725	CYCLOPENTANE _____ --
SAMPLED _____	060712	HEXANES PLUS _____ 2.3
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 2.2
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7405	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.493
		SPECIFIC GRAVITY _____ 0.922

SAMPLE	21535	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 23.9
COUNTY _____	CHEYENNE	ETHANE _____ 12.8
FIELD _____	DINO	PROPANE _____ 21.6
WELL NAME _____	DART 22-22 NO.1	N-BUTANE _____ 6.4
API _____	0501707261	ISOBUTANE _____ 3.9
LOCATION _____	SEC.22, T15S, R45W	N-PENTANE _____ 2.0
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 1.9
COMPLETED _____	911121	CYCLOPENTANE _____ --
SAMPLED _____	060626	HEXANES PLUS _____ 3.0
FORMATION _____	MISS-SPERGEN	NITROGEN _____ 19.9
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5512	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.1
OPEN FLOW, MCFD _____	14	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.7
		HELIUM _____ 0.69
		HEATING VALUE* _____ 1.649
		SPECIFIC GRAVITY _____ 1.239

* 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	21549	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>57.7</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>15.6</u>
FIELD _____	<u>DOLLEY</u>	PROPANE _____ <u>12.8</u>
WELL NAME _____	<u>KETTL 23-3</u>	N-BUTANE _____ <u>4.4</u>
API _____	<u>0512321025</u>	ISOBUTANE _____ <u>1.5</u>
LOCATION _____	<u>SEC 23, T6N, R61W</u>	N-PENTANE _____ <u>1.3</u>
OWNER _____	<u>DIVERSIFIED OPERATING CORP.</u>	ISOPENTANE _____ <u>1.0</u>
COMPLETED _____	<u>020905</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060628</u>	HEXANES PLUS _____ <u>2.1</u>
FORMATION _____	<u>CRET-DAKOTA D</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6756</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>175</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.567</u>
		SPECIFIC GRAVITY _____ <u>0.965</u>

SAMPLE	21539	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>41.6</u>
COUNTY _____	<u>LINCOLN</u>	ETHANE _____ <u>13.3</u>
FIELD _____	<u>FALLOW</u>	PROPANE _____ <u>16.1</u>
WELL NAME _____	<u>FALLOW 32-18 NO. 1</u>	N-BUTANE _____ <u>4.8</u>
API _____	<u>0507306262</u>	ISOBUTANE _____ <u>2.3</u>
LOCATION _____	<u>SEC 18, T10S, R54W</u>	N-PENTANE _____ <u>1.2</u>
OWNER _____	<u>CITATION OIL & GAS CORP.</u>	ISOPENTANE _____ <u>1.3</u>
COMPLETED _____	<u>921009</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060627</u>	HEXANES PLUS _____ <u>2.0</u>
FORMATION _____	<u>PENN-MARMATON</u>	NITROGEN _____ <u>16.7</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6818</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>43</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.30</u>
		HEATING VALUE* _____ <u>1.486</u>
		SPECIFIC GRAVITY _____ <u>1.045</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	21466	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 33.8
COUNTY _____	BACA	ETHANE _____ 1.1
FIELD _____	FLANK	PROPANE _____ 0.7
WELL NAME _____	COOK NMD 1-13	N-BUTANE _____ 0.3
API _____	0500906584	ISOBUTANE _____ 0.1
LOCATION _____	SEC 13, T33S, R44W	N-PENTANE _____ 0.1
OWNER _____	ENERGY ALLIANCE CO., INC.	ISOPENTANE _____ 0.1
COMPLETED _____	981029	CYCLOPENTANE _____ --
SAMPLED _____	050627	HEXANES PLUS _____ 0.2
FORMATION _____	PERM-RED CAVE	NITROGEN _____ 61.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	1654	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	580	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.92
		HEATING VALUE* _____ 415
		SPECIFIC GRAVITY _____ 0.83

SAMPLE	21472	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 34.0
COUNTY _____	CHEYENNE	ETHANE _____ 3.5
FIELD _____	FRONTERA	PROPANE _____ 3.4
WELL NAME _____	FRONTERA U 5-1	N-BUTANE _____ 1.8
API _____	0501706663	ISOBUTANE _____ 0.7
LOCATION _____	SEC 18, T15S, R41W	N-PENTANE _____ 0.8
OWNER _____	MULL DRILLING CO., INC.	ISOPENTANE _____ 0.6
COMPLETED _____	871106	CYCLOPENTANE _____ --
SAMPLED _____	050628	HEXANES PLUS _____ 1.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 50.8
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5164	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	106	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.1
		HELIUM _____ 1.74
		HEATING VALUE* _____ 695
		SPECIFIC GRAVITY _____ 0.914

* 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	21473	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 27.3
COUNTY _____	CHEYENNE	ETHANE _____ 3.7
FIELD _____	FRONTERA	PROPANE _____ 4.5
WELL NAME _____	FRONTERA UNIT 7	N-BUTANE _____ 2.8
API _____	0501706831	ISOBUTANE _____ 1.0
LOCATION _____	SEC 13, T15S, R42W	N-PENTANE _____ 0.9
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.8
COMPLETED _____	880523	CYCLOPENTANE _____ --
SAMPLED _____	050628	HEXANES PLUS _____ 1.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 53.3
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5202	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.6
		HELIUM _____ 2.40
		HEATING VALUE* _____ 724
		SPECIFIC GRAVITY _____ 0.969

SAMPLE	21445	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 95.7
COUNTY _____	LAS ANIMAS	ETHANE _____ 0.0
FIELD _____	HILL RANCH	PROPANE _____ 0.0
WELL NAME _____	HILL RANCH 4-14R	N-BUTANE _____ 0.0
API _____	0507107175	ISOBUTANE _____ 0.0
LOCATION _____	SEC 4, T35S, R67W	N-PENTANE _____ 0.0
OWNER _____	XTO ENERGY, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	011023	CYCLOPENTANE _____ --
SAMPLED _____	050412	HEXANES PLUS _____ 0.0
FORMATION _____	TERT-RATON	NITROGEN _____ 4.0
GEOLOGIC PROVINCE CODE _____	455	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	1447	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ --
WELLHEAD PRESSURE, PSIG _____	50	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	380	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.00
		HEATING VALUE* _____ 969
		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	21470	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>52.4</u>
COUNTY _____	<u>KIOWA</u>	ETHANE _____ <u>10.9</u>
FIELD _____	<u>JACE</u>	PROPANE _____ <u>8.3</u>
WELL NAME _____	<u>TUTTLE 33-35-1</u>	N-BUTANE _____ <u>2.4</u>
API _____	<u>0506106621</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC 35, T17S, R42W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>CITATION OIL & GAS CORP.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>920119</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050628</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>21.5</u>
GEOLOGIC PROVINCE CODE _____	<u>450</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5056</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.92</u>
		HEATING VALUE* _____ <u>1.123</u>
		SPECIFIC GRAVITY _____ <u>0.869</u>

SAMPLE	21599	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>86.4</u>
COUNTY _____	<u>GARFIELD</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>KOKOPELLI</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>JOLLEY 17-6</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>0504507423</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC 17, T6S, R91W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ENCANA OIL & GAS (USA), INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>000523</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070523</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-WILLIAMS FORK</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>595</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____	<u>6070</u>	ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>285</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>280</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.170</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	21594	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 47.4
COUNTY _____	ADAMS	ETHANE _____ 19.8
FIELD _____	KRAUTHEAD	PROPANE _____ 9.6
WELL NAME _____	ARNOLD ELEANOR 1	N-BUTANE _____ 6.3
API _____	0500107751	ISOBUTANE _____ 3.1
LOCATION _____	SEC. 2, T1S, R64W	N-PENTANE _____ 3.9
OWNER _____	ENERVEST OPERATING, LLC	ISOPENTANE _____ 2.9
COMPLETED _____	820128	CYCLOPENTANE _____ --
SAMPLED _____	070423	HEXANES PLUS _____ 3.3
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 0.8
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7616	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.7
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	800	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.3
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.810
		SPECIFIC GRAVITY _____ 1.121

SAMPLE	21543	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 72.7
COUNTY _____	ADAMS	ETHANE _____ 10.7
FIELD _____	LIDO	PROPANE _____ 6.8
WELL NAME _____	MCLENNAN ST. A-1	N-BUTANE _____ 2.3
API _____	0500106616	ISOBUTANE _____ 0.9
LOCATION _____	SEC 36, T1S, R60W	N-PENTANE _____ 0.7
OWNER _____	SOVEREIGN ENERGY, LLC	ISOPENTANE _____ 0.7
COMPLETED _____	730108	CYCLOPENTANE _____ --
SAMPLED _____	060627	HEXANES PLUS _____ 1.4
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 2.3
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6284	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1037	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.4
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.326
		SPECIFIC GRAVITY _____ 0.803

* 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		21471	COMPONENT, MOLE PCT	
STATE	_____	COLORADO	METHANE	_____ 25.2
COUNTY	_____	CHEYENNE	ETHANE	_____ 1.9
FIELD	_____	LONGHORN GULCH	PROPANE	_____ 1.6
WELL NAME	_____	TED 11-3-1	N-BUTANE	_____ 0.8
API	_____	0501706857	ISOBUTANE	_____ 0.4
LOCATION	_____	SEC 3, T15S, R42W	N-PENTANE	_____ 0.3
OWNER	_____	CITATION OIL & GAS CORP.	ISOPENTANE	_____ 0.3
COMPLETED	_____	930126	CYCLOPENTANE	_____ --
SAMPLED	_____	050628	HEXANES PLUS	_____ 0.4
FORMATION	_____	PENN-MORROW	NITROGEN	_____ 64.8
GEOLOGIC PROVINCE CODE	_____	450	OXYGEN	_____ --
TRUE VERTICAL DEPTH (FT)	_____	5080	ARGON	_____ --
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ 0.1
WELLHEAD PRESSURE, PSIG	_____		HYDROGEN	_____ 0.0
OPEN FLOW, MCFD	_____	1659	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 1.0
			HELIUM	_____ 3.23
			HEATING VALUE*	_____ 410
			SPECIFIC GRAVITY	_____ 0.882

SAMPLE		21478	COMPONENT, MOLE PCT	
STATE	_____	COLORADO	METHANE	_____ 92.8
COUNTY	_____	WASHINGTON	ETHANE	_____ 1.1
FIELD	_____	LONGKNIFE	PROPANE	_____ 0.7
WELL NAME	_____	BURNS 1	N-BUTANE	_____ 0.2
API	_____	0512109772	ISOBUTANE	_____ 0.2
LOCATION	_____	SEC 29, T2S, R50W	N-PENTANE	_____ 0.1
OWNER	_____	SAND HILLS SOCIETY	ISOPENTANE	_____ 0.1
COMPLETED	_____	820315	CYCLOPENTANE	_____ --
SAMPLED	_____	050629	HEXANES PLUS	_____ 0.1
FORMATION	_____	CRET-NIOBRARA	NITROGEN	_____ 4.2
GEOLOGIC PROVINCE CODE	_____	540	OXYGEN	_____ --
TRUE VERTICAL DEPTH (FT)	_____	3042	ARGON	_____ --
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ TRACE
WELLHEAD PRESSURE, PSIG	_____		HYDROGEN	_____ 0.0
OPEN FLOW, MCFD	_____	1330	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 0.5
			HELIUM	_____ 0.05
			HEATING VALUE*	_____ 999
			SPECIFIC GRAVITY	_____ 0.599

* 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	21544	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 82.3
COUNTY _____	WELD	ETHANE _____ 8.6
FIELD _____	LOST CREEK	PROPANE _____ 2.7
WELL NAME _____	HSR HOBE ST. 2-32	N-BUTANE _____ 0.7
API _____	0512318355	ISOBUTANE _____ 0.5
LOCATION _____	SEC 32, T3N, R62W	N-PENTANE _____ 0.2
OWNER _____	HILCORP ENERGY CO.	ISOPENTANE _____ 0.3
COMPLETED _____	940928	CYCLOPENTANE _____ --
SAMPLED _____	060628	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6864	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	324	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.6
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.137
		SPECIFIC GRAVITY _____ 0.699

SAMPLE	21474	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 32.8
COUNTY _____	CHEYENNE	ETHANE _____ 5.6
FIELD _____	MAYFIELD	PROPANE _____ 5.9
WELL NAME _____	N. MAYFIELD 14-17-1	N-BUTANE _____ 3.7
API _____	0501707436	ISOBUTANE _____ 1.4
LOCATION _____	SEC 17, T13S, R43W	N-PENTANE _____ 1.4
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 1.1
COMPLETED _____	940928	CYCLOPENTANE _____ --
SAMPLED _____	050628	HEXANES PLUS _____ 2.1
FORMATION _____	PENN-MORROW	NITROGEN _____ 41.8
GEOLOGIC PROVINCE CODE _____	450	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5216	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	958	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.1
		HELIUM _____ 1.91
		HEATING VALUE* _____ 949
		SPECIFIC GRAVITY _____ 0.999

* 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	21476	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 37.6
COUNTY _____	LINCOLN	ETHANE _____ 6.8
FIELD _____	METEOR	PROPANE _____ 7.3
WELL NAME _____	STATE METEOR 1-16	N-BUTANE _____ 3.4
API _____	0507306300	ISOBUTANE _____ 0.9
LOCATION _____	SEC 16, T12S, R52W	N-PENTANE _____ 1.2
OWNER _____	MULL DRILLING CO., INC.	ISOPENTANE _____ 0.9
COMPLETED _____	020123	CYCLOPENTANE _____ --
SAMPLED _____	050630	HEXANES PLUS _____ 2.2
FORMATION _____	PENN-MORROW	NITROGEN _____ 36.5
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6690	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	981	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 1.58
		HEATING VALUE* _____ 1.018
		SPECIFIC GRAVITY _____ 0.975

SAMPLE	21662	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 47.6
COUNTY _____	WELD	ETHANE _____ 19.3
FIELD _____	NORTH RIVERSIDE	PROPANE _____ 16.9
WELL NAME _____	PRONGHORN 32-8	N-BUTANE _____ 5.0
API _____	0512322052	ISOBUTANE _____ 2.1
LOCATION _____	SEC 8, T5N, R61W	N-PENTANE _____ 1.9
OWNER _____	BONANZA CREEK ENERGY OPERATING CO., LLC	ISOPENTANE _____ 1.4
COMPLETED _____	040528	CYCLOPENTANE _____ --
SAMPLED _____	070816	HEXANES PLUS _____ 2.6
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6669	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.5
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	289	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.5
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.739
		SPECIFIC GRAVITY _____ 1.071

* 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	21663	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>47.7</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>18.9</u>
FIELD _____	<u>NORTH RIVERSIDE</u>	PROPANE _____ <u>17.3</u>
WELL NAME _____	<u>PRONGHORN 14-8</u>	N-BUTANE _____ <u>5.0</u>
API _____	<u>0512323566</u>	ISOBUTANE _____ <u>2.2</u>
LOCATION _____	<u>SEC 8, T5N, R61W</u>	N-PENTANE _____ <u>1.7</u>
OWNER _____	<u>BONANZA CREEK ENERGY OPERATING CO., LLC</u>	ISOPENTANE _____ <u>1.4</u>
COMPLETED _____	<u>061217</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070816</u>	HEXANES PLUS _____ <u>2.6</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6142</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.5</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>332</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.737</u>
		SPECIFIC GRAVITY _____ <u>1.069</u>

SAMPLE	21595	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>74.7</u>
COUNTY _____	<u>DOLORES</u>	ETHANE _____ <u>2.8</u>
FIELD _____	<u>PAPOOSE CANYON</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>BREWER FEDERAL 2-17</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>0503306108</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC 17, T39N, R19W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>D. J. SIMMONS, INC.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>030603</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070427</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-HONAKER TRAIL</u>	NITROGEN _____ <u>17.5</u>
GEOLOGIC PROVINCE CODE _____	<u>585</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5344</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.3</u>
WELLHEAD PRESSURE, PSIG _____	<u>1700</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>2000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.18</u>
		HEATING VALUE* _____ <u>950</u>
		SPECIFIC GRAVITY _____ <u>0.706</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	21600	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 82.1
COUNTY _____	WELD	ETHANE _____ 8.5
FIELD _____	PEACOCK	PROPANE _____ 2.8
WELL NAME _____	LOST CREEK 5	N-BUTANE _____ 0.8
API _____	0512321441	ISOBUTANE _____ 0.6
LOCATION _____	SEC 20, T3N, R62W	N-PENTANE _____ 0.4
OWNER _____	O'BRIEN ENERGY RESOURCES	ISOPENTANE _____ 0.5
COMPLETED _____	030822	CYCLOPENTANE _____ --
SAMPLED _____	070525	HEXANES PLUS _____ 0.7
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6833	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	300	HYDROGEN _____ 0.2
OPEN FLOW, MCFD _____	90	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.6
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.170
		SPECIFIC GRAVITY _____ 0.704

SAMPLE	21538	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 28.3
COUNTY _____	KIT CARSON	ETHANE _____ 2.0
FIELD _____	PENNYPACKER	PROPANE _____ 1.5
WELL NAME _____	KIRCHOFFNER 21-35 NO. 2	N-BUTANE _____ 0.6
API _____	0506306292	ISOBUTANE _____ 0.3
LOCATION _____	SEC 35, T11S, R45W	N-PENTANE _____ 0.3
OWNER _____	CITATION OIL & GAS CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	980408	CYCLOPENTANE _____ --
SAMPLED _____	060627	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-MORROW	NITROGEN _____ 61.7
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5455	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	470	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1723	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 3.01
		HEATING VALUE* _____ 433
		SPECIFIC GRAVITY _____ 0.871

* 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	21537	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>28.3</u>
COUNTY _____	<u>KIT CARSON</u>	ETHANE _____ <u>2.0</u>
FIELD _____	<u>PENNYPACKER</u>	PROPANE _____ <u>1.5</u>
WELL NAME _____	<u>ANDERSON 23-35 NO. 1</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>0506306298</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 35, T11S, R45W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CITATION OIL & GAS CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>980713</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060627</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>61.7</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5432</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1622</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.5</u>
		HELIUM _____ <u>3.01</u>
		HEATING VALUE* _____ <u>434</u>
		SPECIFIC GRAVITY _____ <u>0.871</u>

SAMPLE	21482	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.0</u>
COUNTY _____	<u>YUMA</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>PONY EXPRESS</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>BLACH 1-24</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512506159</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 24, T1S, R48W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MOUNTAIN PETROLEUM CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>771221</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>3.8</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2576</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>572</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>993</u>
		SPECIFIC GRAVITY _____ <u>0.588</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	21604	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 73.5
COUNTY _____	ADAMS	ETHANE _____ 12.4
FIELD _____	PORTER	PROPANE _____ 5.8
WELL NAME _____	PORTER-UPRR 2	N-BUTANE _____ 1.8
API _____	0500108410	ISOBUTANE _____ 0.9
LOCATION _____	SEC 23, T2S, R63W	N-PENTANE _____ 0.6
OWNER _____	ENERVEST OPERATING, LLC.	ISOPENTANE _____ 0.7
COMPLETED _____	840803	CYCLOPENTANE _____ --
SAMPLED _____	070619	HEXANES PLUS _____ 1.2
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 1.3
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7512	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	253	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.9
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.304
		SPECIFIC GRAVITY _____ 0.785

SAMPLE	21551	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 61.1
COUNTY _____	ADAMS	ETHANE _____ 14.8
FIELD _____	QUAIL	PROPANE _____ 11.1
WELL NAME _____	STATE OF COLORADO NO. 5	N-BUTANE _____ 3.6
API _____	0500107578	ISOBUTANE _____ 1.4
LOCATION _____	SEC 36, T2S, R63W	N-PENTANE _____ 1.0
OWNER _____	MATRIX ENERGY, LLC.	ISOPENTANE _____ 1.0
COMPLETED _____	800703	CYCLOPENTANE _____ --
SAMPLED _____	060629	HEXANES PLUS _____ 1.7
FORMATION _____	CRET-DAKOTA D, J	NITROGEN _____ 1.5
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7435	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	3200	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.8
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.486
		SPECIFIC GRAVITY _____ 0.919

* 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	21477	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.7</u>
COUNTY _____	<u>WASHINGTON</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>RUSH WILLADEL</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>RUDNIK 1A</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512110198</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 24, T3S, R51W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>CENTRAL OPERATING, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>040830</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>3.3</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2992</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>200</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>996</u>
		SPECIFIC GRAVITY _____ <u>0.585</u>

SAMPLE	21669	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>68.0</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>11.4</u>
FIELD _____	<u>SCABBARD</u>	PROPANE _____ <u>7.0</u>
WELL NAME _____	<u>CHAMPLIN 367 AMOCO 1</u>	N-BUTANE _____ <u>2.5</u>
API _____	<u>0512309072</u>	ISOBUTANE _____ <u>1.0</u>
LOCATION _____	<u>SEC 5, T1N, R63W</u>	N-PENTANE _____ <u>0.9</u>
OWNER _____	<u>ENERVEST OPERATING, LLC.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>770531</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070929</u>	HEXANES PLUS _____ <u>1.1</u>
FORMATION _____	<u>CRET-DAKOTA J</u>	NITROGEN _____ <u>5.4</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7282</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.2</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>480</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1,303</u>
		SPECIFIC GRAVITY _____ <u>0.828</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		21316	COMPONENT, MOLE PCT	
STATE	_____	COLORADO	METHANE	_____ 57.7
COUNTY	_____	PROWERS	ETHANE	_____ 11.5
FIELD	_____	SIGNAL HILL	PROPANE	_____ 8.2
WELL NAME	_____	NEU NO. 1-17	N-BUTANE	_____ 2.4
API	_____	0509906328	ISOBUTANE	_____ 0.8
LOCATION	_____	SEC 17, T24S, R45W	N-PENTANE	_____ 0.5
OWNER	_____	BERRY ENERGY, INC.	ISOPENTANE	_____ 0.5
COMPLETED	_____	920902	CYCLOPENTANE	_____ --
SAMPLED	_____	040526	HEXANES PLUS	_____ 0.4
FORMATION	_____	PENN-MORROW	NITROGEN	_____ 16.5
GEOLOGIC PROVINCE CODE	_____	360	OXYGEN	_____ 0.0
TRUE VERTICAL DEPTH (FT)	_____	5050	ARGON	_____ 0.1
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ ---
WELLHEAD PRESSURE, PSIG	_____		HYDROGEN	_____ TRACE
OPEN FLOW, MCFD	_____	2035	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 0.6
			HELIUM	_____ 0.70
			HEATING VALUE*	_____ 1.160
			SPECIFIC GRAVITY	_____ 0.837

SAMPLE		21488	COMPONENT, MOLE PCT	
STATE	_____	COLORADO	METHANE	_____ 44.0
COUNTY	_____	CHEYENNE	ETHANE	_____ 12.2
FIELD	_____	SPEAKER	PROPANE	_____ 14.3
WELL NAME	_____	SPEAKER 5-13	N-BUTANE	_____ 5.5
API	_____	0501707217	ISOBUTANE	_____ 2.3
LOCATION	_____	SEC 13, T12S, R51W	N-PENTANE	_____ 2.0
OWNER	_____	CITATION OIL & GAS CORP.	ISOPENTANE	_____ 1.6
COMPLETED	_____	910718	CYCLOPENTANE	_____ --
SAMPLED	_____	050630	HEXANES PLUS	_____ 3.0
FORMATION	_____	PENN-MORROW	NITROGEN	_____ 12.1
GEOLOGIC PROVINCE CODE	_____	450	OXYGEN	_____ --
TRUE VERTICAL DEPTH (FT)	_____	6470	ARGON	_____ --
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ 0.1
WELLHEAD PRESSURE, PSIG	_____		HYDROGEN	_____ TRACE
OPEN FLOW, MCFD	_____	65	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 2.7
			HELIUM	_____ 0.30
			HEATING VALUE*	_____ 1.561
			SPECIFIC GRAVITY	_____ 1.081

* 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	21545	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>41.2</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>14.4</u>
FIELD _____	<u>SPENSON</u>	PROPANE _____ <u>19.8</u>
WELL NAME _____	<u>HSR R HUGHES 15-13</u>	N-BUTANE _____ <u>6.2</u>
API _____	<u>0512319358</u>	ISOBUTANE _____ <u>2.8</u>
LOCATION _____	<u>SEC 13, T1N, R63W</u>	N-PENTANE _____ <u>3.6</u>
OWNER _____	<u>KERR-MCGEE ROCKY MOUNTAIN CORP.</u>	ISOPENTANE _____ <u>2.8</u>
COMPLETED _____	<u>970531</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060628</u>	HEXANES PLUS _____ <u>6.6</u>
FORMATION _____	<u>CRET-DAKOTA D</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7084</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>950</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>468</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.3</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>2.036</u>
		SPECIFIC GRAVITY _____ <u>1.253</u>

SAMPLE	21480	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>95.5</u>
COUNTY _____	<u>WASHINGTON</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>SPOTTED DOG</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>CHRISTIANSON 31-12</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512110658</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 12, T3S, R50W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>VISTA RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>020426</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>2.7</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2905</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>380</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.002</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	21479	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>95.9</u>
COUNTY _____	<u>WASHINGTON</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>SPOTTED DOG</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>CHRISTIANSON 21-12</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512110694</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 12, T3S, R50W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>VISTA RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>030628</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-SMOKY HILL</u>	NITROGEN _____ <u>2.5</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2903</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>225</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>998</u>
		SPECIFIC GRAVITY _____ <u>0.579</u>

SAMPLE	21484	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.5</u>
COUNTY _____	<u>YUMA</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>TIERRA PLANO</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>HARRIS 26-2-3</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512507919</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 26, T2S, R45W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>PRIME OPERATING CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>961225</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>3.3</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2070</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>258</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>993</u>
		SPECIFIC GRAVITY _____ <u>0.586</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	21483	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>94.8</u>
COUNTY _____	<u>YUMA</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>TIERRA PLANO</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>WINGFIELD 18-17</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512508335</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 17, T2S, R45W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BERRY PETROLEUM CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>010926</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050629</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2254</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>265</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>836</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>999</u>
		SPECIFIC GRAVITY _____ <u>0.585</u>

SAMPLE	21654	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>93.9</u>
COUNTY _____	<u>YUMA</u>	ETHANE _____ <u>1.0</u>
FIELD _____	<u>VERNON</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>LAWVER 1-5</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512506806</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 5, T2S, R44W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MOUNTAIN PETROLEUM CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>820724</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070814</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>3.8</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2164</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1206</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>993</u>
		SPECIFIC GRAVITY _____ <u>0.588</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	21548	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 67.8
COUNTY _____	WELD	ETHANE _____ 11.5
FIELD _____	WAITE LAKE	PROPANE _____ 9.5
WELL NAME _____	VERA NO. 1	N-BUTANE _____ 3.5
API _____	0512309380	ISOBUTANE _____ 1.0
LOCATION _____	SEC 5, T3N, R61W	N-PENTANE _____ 1.1
OWNER _____	HILCORP ENERGY CO.	ISOPENTANE _____ 0.8
COMPLETED _____	990201	CYCLOPENTANE _____ --
SAMPLED _____	060628	HEXANES PLUS _____ 1.8
FORMATION _____	CRET-DAKOTA D	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6630	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	15	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.4
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.441
		SPECIFIC GRAVITY _____ 0.874

SAMPLE	21547	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 83.1
COUNTY _____	WELD	ETHANE _____ 8.5
FIELD _____	WAITE LAKE	PROPANE _____ 2.8
WELL NAME _____	GORDON NO. 1	N-BUTANE _____ 0.7
API _____	0512313656	ISOBUTANE _____ 0.5
LOCATION _____	SEC 5, T3N, R61W	N-PENTANE _____ 0.2
OWNER _____	HILCORP ENERGY CO.	ISOPENTANE _____ 0.3
COMPLETED _____	880203	CYCLOPENTANE _____ --
SAMPLED _____	060628	HEXANES PLUS _____ 0.6
FORMATION _____	CRET-DAKOTA J	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	540	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6625	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	218	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 2.5
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.150
		SPECIFIC GRAVITY _____ 0.691

* 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	21467	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 41.4
COUNTY _____	BACA	ETHANE _____ 2.6
FIELD _____	WALSH	PROPANE _____ 2.9
WELL NAME _____	COOK 1	N-BUTANE _____ 1.4
API _____	0500906302	ISOBUTANE _____ 0.5
LOCATION _____	SEC 27, T32S, R43W	N-PENTANE _____ 0.4
OWNER _____	SANDLIN OIL CORP.	ISOPENTANE _____ 0.4
COMPLETED _____	020423	CYCLOPENTANE _____ --
SAMPLED _____	050627	HEXANES PLUS _____ 0.7
FORMATION _____	PERM-WOLECAMP	NITROGEN _____ 48.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	2934	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1070	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.11
		HEATING VALUE* _____ 665
		SPECIFIC GRAVITY _____ 0.851

SAMPLE	21468	COMPONENT, MOLE PCT
STATE _____	COLORADO	METHANE _____ 41.2
COUNTY _____	BACA	ETHANE _____ 2.5
FIELD _____	WALSH	PROPANE _____ 2.8
WELL NAME _____	FRAZEE 1	N-BUTANE _____ 1.3
API _____	0500906622	ISOBUTANE _____ 0.5
LOCATION _____	SEC 28, T32S, R43W	N-PENTANE _____ 0.4
OWNER _____	SANDLIN OIL CORP.	ISOPENTANE _____ 0.4
COMPLETED _____	040209	CYCLOPENTANE _____ --
SAMPLED _____	050627	HEXANES PLUS _____ 0.7
FORMATION _____	PERM-WOLECAMP	NITROGEN _____ 48.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	2934	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	418	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 1.13
		HEATING VALUE* _____ 658
		SPECIFIC GRAVITY _____ 0.852

* 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	21546	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>80.3</u>
COUNTY _____	<u>WELD</u>	ETHANE _____ <u>7.5</u>
FIELD _____	<u>WATTENBERG</u>	PROPANE _____ <u>5.4</u>
WELL NAME _____	<u>KRAUSE 2</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>0512313719</u>	ISOBUTANE _____ <u>1.1</u>
LOCATION _____	<u>SEC 28, T4N, R65W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>KERR-MCGEE ROCKY MOUNTAIN CORP.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>880130</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060628</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>CRET-SUSSEX, NIOBRARA, FT HAYS</u>	NITROGEN _____ <u>1.1</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7271</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>260</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1,230</u>
		SPECIFIC GRAVITY _____ <u>0.732</u>

SAMPLE	21655	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>90.5</u>
COUNTY _____	<u>YUMA</u>	ETHANE _____ <u>1.2</u>
FIELD _____	<u>WAUNETA</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>BLEDSOE 13-6-3-43</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>0512509319</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 6, T3N, R43W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>FOREST OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>050812</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070814</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>7.1</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2288</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>959</u>
		SPECIFIC GRAVITY _____ <u>0.601</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	21582	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>84.4</u>
COUNTY _____	<u>BARBER</u>	ETHANE _____ <u>3.5</u>
FIELD _____	<u>AETNA</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>SPRIGGS E-1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1500722501</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 33, T33S, R13W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>WOOLSEY PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>980313</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>061215</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-SNYDERVILLE</u>	NITROGEN _____ <u>7.1</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3941</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>60</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>33</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.25</u>
		HEATING VALUE* _____ <u>1.059</u>
		SPECIFIC GRAVITY _____ <u>0.665</u>

SAMPLE	50614	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.5</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>7.4</u>
FIELD _____	<u>AJT</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>THOMAS 1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1518522904</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 29, T25S, R11W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>RAYMOND OIL CO. INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>940707</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>930428</u>	HEXANES PLUS _____ <u>1.5</u>
FORMATION _____	<u>ORDO-VIOLA</u>	NITROGEN _____ <u>19.2</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4080</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.33</u>
		HEATING VALUE* _____ <u>1.026</u>
		SPECIFIC GRAVITY _____ <u>0.775</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	21578	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.5</u>
COUNTY _____	<u>KIOWA</u>	ETHANE _____ <u>4.3</u>
FIELD _____	<u>ALFORD</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>TAVES 3-20</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1509721538</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 20, T30S, R18W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BEREXCO, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>040524</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>061214</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-CHEROKEE</u>	NITROGEN _____ <u>5.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>1.106</u>
		SPECIFIC GRAVITY _____ <u>0.679</u>

SAMPLE	50612	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>89.9</u>
COUNTY _____	<u>KIOWA</u>	ETHANE _____ <u>3.1</u>
FIELD _____	<u>ALLSTOTT</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>UNRUH 1-2</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>1509721475</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 2, T28S, R18W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>VINCENT OIL CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>011022</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011004</u>	HEXANES PLUS _____ <u>1.1</u>
FORMATION _____	<u>ORDO-VIOLA</u>	NITROGEN _____ <u>3.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4798</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1430</u>	HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>300</u>	HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.23</u>
		HEATING VALUE* _____ <u>1.098</u>
		SPECIFIC GRAVITY _____ <u>0.644</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	21511	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>76.0</u>
COUNTY _____	<u>SEWARD</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>ANGMAN S</u>	PROPANE _____ <u>5.4</u>
WELL NAME _____	<u>SANTA FE 1-7</u>	N-BUTANE _____ <u>2.8</u>
API _____	<u>1517521349</u>	ISOBUTANE _____ <u>1.6</u>
LOCATION _____	<u>SEC 7, T32S, R33W</u>	N-PENTANE _____ <u>1.0</u>
OWNER _____	<u>CABOT PETROLEUM CORP.</u>	ISOPENTANE _____ <u>1.3</u>
COMPLETED _____	<u>940112</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>051100</u>	HEXANES PLUS _____ <u>2.0</u>
FORMATION _____	<u>MISS-ST. LOUIS</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5676</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>222</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.21</u>
		HEATING VALUE* _____ <u>1.355</u>
		SPECIFIC GRAVITY _____ <u>0.808</u>

SAMPLE	50629	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.9</u>
COUNTY _____	<u>HARPER</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>ANTHONY</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>STEWARD 1-31</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1507721459</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 31, T33S, R6W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>UNION VALLEY PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>031107</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070430</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>3.9</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4508</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>84</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>--</u>
		HEATING VALUE* _____ <u>1.145</u>
		SPECIFIC GRAVITY _____ <u>0.682</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	21682	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.6</u>
COUNTY _____	<u>SEWARD</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>ARKALON</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>COLBURN 1-16</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1517520852</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 16, T33S, R32W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>MIDWESTERN EXPLORATION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>931013</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>080401</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2570</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>130</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>783</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.48</u>
		HEATING VALUE* _____ <u>980</u>
		SPECIFIC GRAVITY _____ <u>0.71</u>

SAMPLE	21676	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.5</u>
COUNTY _____	<u>SEWARD</u>	ETHANE _____ <u>5.2</u>
FIELD _____	<u>ARKALON</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>COLBURN 1A-21</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1517521850</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 21, T33S, R32W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OIL PRODUCERS INC. OF KANSAS</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>010818</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>080116</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-KRIDER</u>	NITROGEN _____ <u>15.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2597</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>250</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.52</u>
		HEATING VALUE* _____ <u>974</u>
		SPECIFIC GRAVITY _____ <u>0.703</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	21678	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.6</u>
COUNTY _____	<u>SEWARD</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>ARKALON N</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>COLBURN 13-91</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1517520328</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 17, T33S, R32W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OIL PRODUCERS INC. OF KANSAS</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>821102</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>080123</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-HERRINGTON, KRIDER</u>	NITROGEN _____ <u>15.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2468</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.50</u>
		HEATING VALUE* _____ <u>984</u>
		SPECIFIC GRAVITY _____ <u>0.704</u>

SAMPLE	50628	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>60.7</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>8.8</u>
FIELD _____	<u>ATKINS</u>	PROPANE _____ <u>5.5</u>
WELL NAME _____	<u>ATKINS N 1&2</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>1508121531</u>	ISOBUTANE _____ <u>1.1</u>
LOCATION _____	<u>SEC 4, T27S, R33W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>040717</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>071217</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>PFENN-MORROW</u>	NITROGEN _____ <u>19.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5108</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>--</u>
OPEN FLOW, MCFD _____	<u>56</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.33</u>
		HEATING VALUE* _____ <u>1,079</u>
		SPECIFIC GRAVITY _____ <u>0.815</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	21640	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>61.6</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.5</u>
FIELD _____	<u>BARRICK</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>BARRICKLOW 1</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>1508321463</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 4, T21S, R21W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>000816</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>36.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2296</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>335</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.20</u>
		HEATING VALUE* _____ <u>633</u>
		SPECIFIC GRAVITY _____ <u>0.704</u>

SAMPLE	21641	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>60.8</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>BARRICKLOW SE</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>COX 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321473</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 3, T21S, R22W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>020701</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>37.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2382</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>436</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.17</u>
		HEATING VALUE* _____ <u>631</u>
		SPECIFIC GRAVITY _____ <u>0.708</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	21615	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>74.0</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>8.0</u>
FIELD _____	<u>BAUMAN</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>HELMER 1</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>1518522927</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC.33, T25S, R11W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>PRATER OIL & GAS OPERATING</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>930916</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>13.2</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3987</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>200</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.23</u>
		HEATING VALUE* _____ <u>1.018</u>
		SPECIFIC GRAVITY _____ <u>0.703</u>

SAMPLE	21630	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>90.3</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>3.1</u>
FIELD _____	<u>BORDEWICK</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>FOX A1-25</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1504721513</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC.25, T26S, R19W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>MCCOY PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>051104</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>4.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.29</u>
		HEATING VALUE* _____ <u>1.034</u>
		SPECIFIC GRAVITY _____ <u>0.614</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	21617	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>77.7</u>
COUNTY _____	<u>PRATT</u>	ETHANE _____ <u>4.2</u>
FIELD _____	<u>BYERS ROAD</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>CURTIS 1</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1515121539</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 15, T26S, R14W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>GIANT HOLDING, LLC</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970512</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>12.3</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4282</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1491</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>1.46</u>
		HEATING VALUE* _____ <u>988</u>
		SPECIFIC GRAVITY _____ <u>0.677</u>

SAMPLE	21616	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>87.0</u>
COUNTY _____	<u>PRATT</u>	ETHANE _____ <u>4.0</u>
FIELD _____	<u>CARVER-ROBBINS</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>WARD 2-12</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>1515120721</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 12, T27S, R15W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>PRATER OIL & GAS OPERATING</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>800325</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>4.8</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4408</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.67</u>
		HEATING VALUE* _____ <u>1.056</u>
		SPECIFIC GRAVITY _____ <u>0.637</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	21619	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>83.7</u>
COUNTY _____	<u>PRATT</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>CARVER-ROBBINS W</u>	PROPANE _____ <u>2.4</u>
WELL NAME _____	<u>FISH & GAME 3-6</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1515121240</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 6, T27S, R15W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BEREN CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>830217</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>6.0</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4460</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.69</u>
		HEATING VALUE* _____ <u>1.078</u>
		SPECIFIC GRAVITY _____ <u>0.665</u>

SAMPLE	20840	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>89.5</u>
COUNTY _____	<u>STEVENS</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>CHRISTOPHER</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>HJV CHRISTOPHER NO. A-1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>1518922345</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 3, T33S, R39W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>000827</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010910</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-MORROW L</u>	NITROGEN _____ <u>3.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6315</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>10500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.22</u>
		HEATING VALUE* _____ <u>1.053</u>
		SPECIFIC GRAVITY _____ <u>0.627</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	21645	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>67.8</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.5</u>
FIELD _____	<u>DON</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>POVERTY HILL 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321513</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 26, T23S, R24W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>060711</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-KRIDER, FORT RILEY</u>	NITROGEN _____ <u>30.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2716</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>110</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.01</u>
		HEATING VALUE* _____ <u>700</u>
		SPECIFIC GRAVITY _____ <u>0.68</u>

SAMPLE	21639	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.7</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.5</u>
FIELD _____	<u>EAKIN NE</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>CHAFFEE 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321467</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 13, T21S, R21W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>010508</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>33.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2206</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>195</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>1.17</u>
		HEATING VALUE* _____ <u>666</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	21098	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.9</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>ELKHART W</u>	PROPANE _____ <u>4.4</u>
WELL NAME _____	<u>PENICK NO. 1-9</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>1512910541</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 9, T35S, R43W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>550810</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021120</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PFENN-WABAUNSEF</u>	NITROGEN _____ <u>13.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2958</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>500</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>8090</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>1.07</u>
		HEATING VALUE* _____ <u>1.073</u>
		SPECIFIC GRAVITY _____ <u>0.752</u>

SAMPLE	21626	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>84.8</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>2.4</u>
FIELD _____	<u>FARMINGTON</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>SEIBERT 2-5</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>1518523167</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 5, T25S, R15W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CASTELLI EXPLORATION, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>021026</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-HERINGTON</u>	NITROGEN _____ <u>10.9</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2272</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>180</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.52</u>
		HEATING VALUE* _____ <u>938</u>
		SPECIFIC GRAVITY _____ <u>0.625</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	50592	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>87.2</u>
COUNTY _____	<u>KINGMAN</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>GARLISCH SW</u>	PROPANE _____ <u>2.5</u>
WELL NAME _____	<u>WUNSCH NO. 1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1509521773</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 26, T28S, R8W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>MIDCO EXPLORATION, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>001119</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010103</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>2.8</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4130</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1203</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2776</u>	HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.18</u>
		HEATING VALUE* _____ <u>1.116</u>
		SPECIFIC GRAVITY _____ <u>0.651</u>

SAMPLE	21632	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>74.4</u>
COUNTY _____	<u>PAWNEE</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>GATTERMAN</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>GREEN 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1514521484</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 35, T23S, R18W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>030324</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-KRIDER</u>	NITROGEN _____ <u>23.6</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2261</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>40</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.99</u>
		HEATING VALUE* _____ <u>772</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	21638	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.3</u>
COUNTY _____	<u>PAWNEE</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>GIVENS</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>PRICE 2</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1514521473</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 19, T22S, R19W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>020130</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-KRIDER</u>	NITROGEN _____ <u>28.8</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2270</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>130</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.01</u>
		HEATING VALUE* _____ <u>719</u>
		SPECIFIC GRAVITY _____ <u>0.675</u>

SAMPLE	20759	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>61.4</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.1</u>
FIELD _____	<u>GREENWOOD</u>	PROPANE _____ <u>3.9</u>
WELL NAME _____	<u>INTERSTATE 2-20</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>1512920358</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 20, T34S, R45W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>970410</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-WABAUNSEE & TOPEKA</u>	NITROGEN _____ <u>25.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2783</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>85</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.57</u>
		HEATING VALUE* _____ <u>921</u>
		SPECIFIC GRAVITY _____ <u>0.769</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	21637	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.3</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>GRONER</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>LEWIS TRUST 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321509</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 1, T23S, R21W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>051109</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>28.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2530</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.04</u>
		HEATING VALUE* _____ <u>726</u>
		SPECIFIC GRAVITY _____ <u>0.676</u>

SAMPLE	21635	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.7</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>GRONER</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>LIPPOLDT 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1504721462</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 6, T23S, R20W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>020207</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-TOWANDA</u>	NITROGEN _____ <u>28.1</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2544</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.01</u>
		HEATING VALUE* _____ <u>728</u>
		SPECIFIC GRAVITY _____ <u>0.674</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	21644	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>66.2</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>HANSTON-OPPY</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>OPPY-BURKE 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321510</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 19, T22S, R22W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>051215</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>31.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2619</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.10</u>
		HEATING VALUE* _____ <u>687</u>
		SPECIFIC GRAVITY _____ <u>0.686</u>

SAMPLE	20771	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>74.2</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>MILLEMOM 1-27</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512900389</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 27, T34S, R40W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>500712</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>12.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2720</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>404</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13241</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.39</u>
		HEATING VALUE* _____ <u>1,036</u>
		SPECIFIC GRAVITY _____ <u>0.708</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	20766	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.4</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>PARKER B-2</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1512921425</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 29, T34S, R40W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960222</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2585</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>350</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.033</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>

SAMPLE	20768	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.2</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>MILLER M-1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1512900380</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 20, T34S, R40W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>510629</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2620</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>417</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>13700</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.030</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	20751	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.7</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>LOETHER A-3</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512921431</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 5, T35S, R40W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960422</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2662</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>251</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.034</u>
		SPECIFIC GRAVITY _____ <u>0.711</u>

SAMPLE	20769	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.5</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>MILLER M-2</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512921423</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 20, T34S, R40W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>960222</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2564</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>405</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.027</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	20767	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 73.4
COUNTY	MORTON	ETHANE 6.7
FIELD	HUGOTON	PROPANE 3.7
WELL NAME	WIKER A-1	N-BUTANE 1.1
API	1512900381	ISOBUTANE 0.5
LOCATION	SEC. 21, T34S, R40W	N-PENTANE 0.3
OWNER	OXY USA, INC.	ISOPENTANE 0.2
COMPLETED	510530	CYCLOPENTANE --
SAMPLED	010801	HEXANES PLUS 0.2
FORMATION	PERM-CHASE GROUP	NITROGEN 13.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2626	ARGON TRACE
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	403	HYDROGEN 0.0
OPEN FLOW, MCFD	15800	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.1
		HELIUM 0.41
		HEATING VALUE* 1.034
		SPECIFIC GRAVITY 0.714

SAMPLE	20770	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 73.2
COUNTY	MORTON	ETHANE 6.7
FIELD	HUGOTON	PROPANE 3.7
WELL NAME	EDWARDS C-2	N-BUTANE 1.1
API	1512921424	ISOBUTANE 0.4
LOCATION	SEC. 17, T34S, R40W	N-PENTANE 0.3
OWNER	OXY USA, INC.	ISOPENTANE 0.2
COMPLETED	960229	CYCLOPENTANE --
SAMPLED	010801	HEXANES PLUS 0.3
FORMATION	PERM-CHASE GROUP	NITROGEN 13.7
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2581	ARGON TRACE
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	388	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.1
		HELIUM 0.41
		HEATING VALUE* 1.032
		SPECIFIC GRAVITY 0.715

* 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	20765	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>73.5</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.7</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>PARKER B-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512900392</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 29, T34S, R40W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>510523</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2578</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>421</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>12100</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.41</u>
		HEATING VALUE* _____ <u>1.029</u>
		SPECIFIC GRAVITY _____ <u>0.712</u>

SAMPLE	20764	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.3</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.5</u>
WELL NAME _____	<u>MATERN A-3</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512921465</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 34, T34S, R41W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>970129</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</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>2356</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>191</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.45</u>
		HEATING VALUE* _____ <u>1.005</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	20763	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.8</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>5.9</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>MATERN A-1</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1512900429</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 34, T34S, R41W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>520430</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>16.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2374</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>425</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>11400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.46</u>
		HEATING VALUE* _____ <u>990</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>

SAMPLE	21095	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>65.3</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>3.1</u>
FIELD _____	<u>HUGOTON</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>NUSSER GAS UNIT A 2HL</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1505521290</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 27, T25S, R32W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>940701</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021120</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>28.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2560</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>135</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.67</u>
		HEATING VALUE* _____ <u>788</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		21092	COMPONENT, MOLE PCT	
STATE		<u>KANSAS</u>	METHANE	<u>65.0</u>
COUNTY		<u>FINNEY</u>	ETHANE	<u>2.6</u>
FIELD		<u>HUGOTON</u>	PROPANE	<u>1.3</u>
WELL NAME		<u>BEACH NO. 1-32</u>	N-BUTANE	<u>0.3</u>
API		<u>1505500517</u>	ISOBUTANE	<u>0.1</u>
LOCATION		<u>SEC. 32, T25S, R31W</u>	N-PENTANE	<u>TRACE</u>
OWNER		<u>CIMAREX ENERGY CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED		<u>560509</u>	CYCLOPENTANE	<u>--</u>
SAMPLED		<u>021120</u>	HEXANES PLUS	<u>0.1</u>
FORMATION		<u>PERM-CHASE GROUP</u>	NITROGEN	<u>29.8</u>
GEOLOGIC PROVINCE CODE		<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		<u>2636</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH			ARGON + OXYGEN	<u>---</u>
WELLHEAD PRESSURE, PSIG		<u>415</u>	HYDROGEN	<u>0.0</u>
OPEN FLOW, MCFD		<u>8983</u>	HYDROGEN SULFIDE**	<u>0.0</u>
			CARBON DIOXIDE	<u>TRACE</u>
			HELIUM	<u>0.74</u>
			HEATING VALUE*	<u>755</u>
			SPECIFIC GRAVITY	<u>0.708</u>

SAMPLE		21094	COMPONENT, MOLE PCT	
STATE		<u>KANSAS</u>	METHANE	<u>65.7</u>
COUNTY		<u>FINNEY</u>	ETHANE	<u>2.7</u>
FIELD		<u>HUGOTON</u>	PROPANE	<u>1.4</u>
WELL NAME		<u>BEACH NO. 2-2</u>	N-BUTANE	<u>0.3</u>
API		<u>1505521716</u>	ISOBUTANE	<u>0.1</u>
LOCATION		<u>SEC. 33, T25S, R31W</u>	N-PENTANE	<u>TRACE</u>
OWNER		<u>CIMAREX ENERGY CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED		<u>010320</u>	CYCLOPENTANE	<u>--</u>
SAMPLED		<u>021120</u>	HEXANES PLUS	<u>TRACE</u>
FORMATION		<u>PERM-CHASE GROUP</u>	NITROGEN	<u>28.9</u>
GEOLOGIC PROVINCE CODE		<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		<u>2641</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH			ARGON + OXYGEN	<u>---</u>
WELLHEAD PRESSURE, PSIG		<u>157</u>	HYDROGEN	<u>0.0</u>
OPEN FLOW, MCFD		<u>96</u>	HYDROGEN SULFIDE**	<u>0.0</u>
			CARBON DIOXIDE	<u>0.0</u>
			HELIUM	<u>0.76</u>
			HEATING VALUE*	<u>767</u>
			SPECIFIC GRAVITY	<u>0.706</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	20760	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>52.4</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>INTERSTATE</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>INTERSTATE F-4</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1512920455</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 20, T34S, R43W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>ANADARKO PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>801214</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-RED CAVE</u>	NITROGEN _____ <u>39.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1236</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.5</u>
OPEN FLOW, MCFD _____	<u>240</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.98</u>
		HEATING VALUE* _____ <u>707</u>
		SPECIFIC GRAVITY _____ <u>0.782</u>

SAMPLE	21647	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.3</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>JETPORT</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>JETMORE-BRADEFORD 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321486</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 18, T24S, R23W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>040501</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>27.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.99</u>
		HEATING VALUE* _____ <u>727</u>
		SPECIFIC GRAVITY _____ <u>0.67</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	21634	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.9</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>KINGRY</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>DELANEY 1-10</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321504</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 10, T23S, R21W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>060101</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-TOWANDA</u>	NITROGEN _____ <u>28.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2584</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.05</u>
		HEATING VALUE* _____ <u>723</u>
		SPECIFIC GRAVITY _____ <u>0.671</u>

SAMPLE	21614	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.4</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>1.9</u>
FIELD _____	<u>LEESBURGH</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>MCCUNE 1A</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>1518523174</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 12, T25S, R13W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>030324</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PENN-BERN</u>	NITROGEN _____ <u>23.9</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2892</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>160</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.90</u>
		HEATING VALUE* _____ <u>788</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	21613	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.4</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>1.8</u>
FIELD _____	<u>LEESBURGH</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>RUSSELL 1A</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>1518523175</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 13, T25S, R13W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>030321</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-KRIDER, TOWANDA</u>	NITROGEN _____ <u>24.9</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1991</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>360</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.95</u>
		HEATING VALUE* _____ <u>780</u>
		SPECIFIC GRAVITY _____ <u>0.672</u>

SAMPLE	21651	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>58.9</u>
COUNTY _____	<u>WICHITA</u>	ETHANE _____ <u>4.0</u>
FIELD _____	<u>LEOTI GAS AREA</u>	PROPANE _____ <u>2.8</u>
WELL NAME _____	<u>WALK 1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1520320034</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 27, T18S, R38W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>MULL DRILLING CO. INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>761103</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070813</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>31.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2808</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1650</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.71</u>
		HEATING VALUE* _____ <u>809</u>
		SPECIFIC GRAVITY _____ <u>0.762</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	21625	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>81.1</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>3.5</u>
FIELD _____	<u>MACKSVILLE</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>CRS TK NAGEL 1B</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1518510481</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 3, T24S, R15W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>610328</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>10.3</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>1.08</u>
		HEATING VALUE* _____ <u>1.003</u>
		SPECIFIC GRAVITY _____ <u>0.664</u>

SAMPLE	21653	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>34.8</u>
COUNTY _____	<u>SCOTT</u>	ETHANE _____ <u>2.2</u>
FIELD _____	<u>MANNING SW</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>WEISENBERGER K 1</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1517120580</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 10, T18S, R31W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>SLAWSON EXPLORATION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>060519</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070814</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>57.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2746</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>60</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>1.38</u>
		HEATING VALUE* _____ <u>513</u>
		SPECIFIC GRAVITY _____ <u>0.85</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	21611	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.8</u>
COUNTY _____	<u>RICE</u>	ETHANE _____ <u>7.4</u>
FIELD _____	<u>MCCLINTOCK</u>	PROPANE _____ <u>5.5</u>
WELL NAME _____	<u>FITZPATRICK JR 1</u>	N-BUTANE _____ <u>1.8</u>
API _____	<u>1515921916</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC 18, T21S, R8W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>JAY FITZPATRICK, JR.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>850105</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070716</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>11.5</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3304</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4900</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.52</u>
		HEATING VALUE* _____ <u>1.138</u>
		SPECIFIC GRAVITY _____ <u>0.76</u>
SAMPLE	21091	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.5</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>PANOMA GAS AREA</u>	PROPANE _____ <u>3.2</u>
WELL NAME _____	<u>JONES NO. M-1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505520308</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 32, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780831</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021119</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>2963</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>194</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.46</u>
		HEATING VALUE* _____ <u>963</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	21090	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.7</u>
COUNTY _____	<u>FINNEY</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>PANOMA GAS AREA</u>	PROPANE _____ <u>3.2</u>
WELL NAME _____	<u>JONES NO. P-1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>1505520316</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 33, T26S, R34W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CIMAREX ENERGY CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>780831</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021119</u>	HEXANES PLUS _____ <u>0.2</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>2903</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>235</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.47</u>
		HEATING VALUE* _____ <u>965</u>
		SPECIFIC GRAVITY _____ <u>0.711</u>

SAMPLE	21239	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>68.1</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>REICHEL</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>HOFFMAN 3</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1516520994</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 29, T16S, R17W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>820714</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>25.1</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>1.89</u>
		HEATING VALUE* _____ <u>805</u>
		SPECIFIC GRAVITY _____ <u>0.694</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	21238	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.3</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>REICHEL</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>LIPPERT 3</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1516520991</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 19, T16S, R17W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>820617</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-COTTONWOOD</u>	NITROGEN _____ <u>20.8</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2397</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>738</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>889</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.68</u>
		HEATING VALUE* _____ <u>910</u>
		SPECIFIC GRAVITY _____ <u>0.717</u>

SAMPLE	21234	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>61.5</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>3.0</u>
FIELD _____	<u>REICHEL E</u>	PROPANE _____ <u>1.3</u>
WELL NAME _____	<u>BRACK 3A</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>1516520306</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 34, T17S, R16W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>700806</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PENN-GRANITE WASH</u>	NITROGEN _____ <u>28.7</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3525</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>4850</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>2.19</u>
		HEATING VALUE* _____ <u>827</u>
		SPECIFIC GRAVITY _____ <u>0.75</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	21233	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.5</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>2.8</u>
FIELD _____	<u>REICHEL E</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>BAHR 1</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>1516521198</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 35, T17S, R16W</u>	N-PENTANE _____ <u>0.9</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>840529</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>1.7</u>
FORMATION _____	<u>PENN-LANSING</u>	NITROGEN _____ <u>24.3</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3438</u>	ARGON _____ <u>0.2</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1028</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>1.71</u>
		HEATING VALUE* _____ <u>955</u>
		SPECIFIC GRAVITY _____ <u>0.785</u>

SAMPLE	21235	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>69.2</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>3.1</u>
FIELD _____	<u>REICHEL GAS AREA</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>FOOS 1</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>1516502235</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 25, T17S, R17W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>620605</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>PENN-LANSING</u>	NITROGEN _____ <u>21.9</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3503</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1300</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>10000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.75</u>
		HEATING VALUE* _____ <u>885</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	21236	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.0</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>2.0</u>
FIELD _____	<u>REICHEL W</u>	PROPANE _____ <u>0.9</u>
WELL NAME _____	<u>LEGLEITER A1</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>1516521019</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 11, T17S, R18W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>830701</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>30.4</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>1.94</u>
		HEATING VALUE* _____ <u>735</u>
		SPECIFIC GRAVITY _____ <u>0.704</u>

SAMPLE	21237	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.4</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>2.3</u>
FIELD _____	<u>REICHEL W</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>MUTH 1</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1516521146</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 1, T17S, R18W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>840713</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>28.9</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2044</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>519</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>348</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>2.00</u>
		HEATING VALUE* _____ <u>767</u>
		SPECIFIC GRAVITY _____ <u>0.71</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	21648	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.6</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>RICHTER E</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>STOECKER 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321514</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 4, T24S, R22W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>060710</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-KRIDER U</u>	NITROGEN _____ <u>26.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2420</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>120</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.02</u>
		HEATING VALUE* _____ <u>739</u>
		SPECIFIC GRAVITY _____ <u>0.664</u>

SAMPLE	21633	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>72.4</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>SAW LOG CREEK</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>GLEASON 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321508</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 32, T23S, R21W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>060101</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>25.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2669</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.86</u>
		HEATING VALUE* _____ <u>752</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	21652	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>56.2</u>
COUNTY _____	<u>SCOTT</u>	ETHANE _____ <u>4.1</u>
FIELD _____	<u>SHALLOW WATER W</u>	PROPANE _____ <u>2.9</u>
WELL NAME _____	<u>BUCKNER 1(WAS NOT FLOWING)</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>1517120400</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 16, T20S, R33W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BEREXCO, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>900113</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070813</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>33.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2617</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>190</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.85</u>
		HEATING VALUE* _____ <u>796</u>
		SPECIFIC GRAVITY _____ <u>0.776</u>

SAMPLE	21612	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>67.4</u>
COUNTY _____	<u>STAFFORD</u>	ETHANE _____ <u>4.1</u>
FIELD _____	<u>SODEN E</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>FANSHIER 1-25</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>1518523224</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 25, T23S, R13W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>AMERICAN WARRIOR, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>040502</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-LANSING-KANSAS CITY</u>	NITROGEN _____ <u>21.3</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3590</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.86</u>
		HEATING VALUE* _____ <u>948</u>
		SPECIFIC GRAVITY _____ <u>0.744</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	21646	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>70.5</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>STELLA B.</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>BENISH 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321488</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 9, T24S, R24W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>060314</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PERM-KRIDER</u>	NITROGEN _____ <u>27.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2579</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>145</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.03</u>
		HEATING VALUE* _____ <u>730</u>
		SPECIFIC GRAVITY _____ <u>0.669</u>

SAMPLE	21240	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>68.5</u>
COUNTY _____	<u>RUSH</u>	ETHANE _____ <u>2.2</u>
FIELD _____	<u>STREMEL</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>OCHS 1</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1516530158</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 30, T16S, R16W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BEAR PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>670201</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>030819</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-SHAWNEE</u>	NITROGEN _____ <u>25.1</u>
GEOLOGIC PROVINCE CODE _____	<u>385</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3003</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1120</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>702</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.80</u>
		HEATING VALUE* _____ <u>800</u>
		SPECIFIC GRAVITY _____ <u>0.692</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	21618	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>89.0</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>4.2</u>
FIELD _____	<u>TROUSDALE NE</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>ELLEDGE BATTERY 1</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>1504720079</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 23, T26S, R16W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BEREN CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>701106</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-WABAUNSEE</u>	NITROGEN _____ <u>2.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3260</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>280</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.26</u>
		HEATING VALUE* _____ <u>1.095</u>
		SPECIFIC GRAVITY _____ <u>0.638</u>

SAMPLE	21631	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>84.0</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>3.3</u>
FIELD _____	<u>WAYNE NW</u>	PROPANE _____ <u>1.3</u>
WELL NAME _____	<u>GRYBOWSKI-MARTIN 1</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1504720342</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 18, T24S, R17W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>HOLL, F.G., CO, LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>780512</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070718</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-CHEROKEE, MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>9.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4376</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1550</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>1.14</u>
		HEATING VALUE* _____ <u>977</u>
		SPECIFIC GRAVITY _____ <u>0.634</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	21642	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>64.2</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>WIELAND</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>WIELAND 1A</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321482</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 16, T21S, R22W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>030728</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PERM-WINFIELD</u>	NITROGEN _____ <u>33.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2426</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>817</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.15</u>
		HEATING VALUE* _____ <u>664</u>
		SPECIFIC GRAVITY _____ <u>0.694</u>

SAMPLE	21643	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>63.6</u>
COUNTY _____	<u>HODGEMAN</u>	ETHANE _____ <u>0.6</u>
FIELD _____	<u>WIELAND N</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>SEFRIDGE 1A</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>1508321485</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 8, T21S, R22W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BECKER OIL CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>040601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070719</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PERM-KRIDER, WINFIELD</u>	NITROGEN _____ <u>34.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2390</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1832</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>1.14</u>
		HEATING VALUE* _____ <u>658</u>
		SPECIFIC GRAVITY _____ <u>0.697</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	21620	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>85.2</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>2.6</u>
FIELD _____	<u>WIL</u>	PROPANE _____ <u>0.9</u>
WELL NAME _____	<u>JULIAN 3-5</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>1504721471</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 5, T25S, R16W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CASTELLI EXPLORATION, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>021018</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>10.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2474</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>366</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.49</u>
		HEATING VALUE* _____ <u>952</u>
		SPECIFIC GRAVITY _____ <u>0.625</u>

SAMPLE	21622	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>85.3</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>2.6</u>
FIELD _____	<u>WIL</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>JULIAN 2-5</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>1504721464</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 5, T25S, R16W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CASTELLI EXPLORATION, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>020420</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>9.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2329</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>250</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.50</u>
		HEATING VALUE* _____ <u>958</u>
		SPECIFIC GRAVITY _____ <u>0.626</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	21623	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>88.8</u>
COUNTY _____	<u>EDWARDS</u>	ETHANE _____ <u>3.2</u>
FIELD _____	<u>WIL W</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>KEEN 1-12</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>1504721034</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 12, T25S, R17W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>820712</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>4.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4400</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.51</u>
		HEATING VALUE* _____ <u>1.033</u>
		SPECIFIC GRAVITY _____ <u>0.624</u>
SAMPLE	20762	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>71.8</u>
COUNTY _____	<u>MORTON</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>WILBURTON E</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>BARKER B 1-4</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>1512921649</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 36, T34S, R41W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>010930</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010801</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-MORROW U</u>	NITROGEN _____ <u>16.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5494</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1600</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.34</u>
		HEATING VALUE* _____ <u>999</u>
		SPECIFIC GRAVITY _____ <u>0.73</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	50591	COMPONENT, MOLE PCT
STATE _____	<u>KANSAS</u>	METHANE _____ <u>90.5</u>
COUNTY _____	<u>BARBER</u>	ETHANE _____ <u>4.2</u>
FIELD _____	<u>WOLGAMOTT</u>	PROPANE _____ <u>1.8</u>
WELL NAME _____	<u>WOLGAMOTT NO. 2-9</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>1500722680</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 9, T35S, R14W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>JACK EXPLORATION, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>011024</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>020905</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>1.7</u>
GEOLOGIC PROVINCE CODE _____	<u>375</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4898</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1669</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>--</u>
		HEATING VALUE* _____ <u>1.105</u>
		SPECIFIC GRAVITY _____ <u>0.634</u>

SAMPLE	21589	COMPONENT, MOLE PCT
STATE _____	<u>LOUISIANA</u>	METHANE _____ <u>92.4</u>
COUNTY _____	<u>BIENVILLE</u>	ETHANE _____ <u>3.4</u>
FIELD _____	<u>ALABAMA BEND</u>	PROPANE _____ <u>0.7</u>
WELL NAME _____	<u>BLACK STONE MINERALS 11-1-1</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>1701321462</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 11, T15N, R10W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>PETROCHEM OPERATING CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>050612</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070319</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>JURA-COTTON VALLEY</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>230</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10106</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.7</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.034</u>
		SPECIFIC GRAVITY _____ <u>0.614</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	21590	COMPONENT, MOLE PCT
STATE _____	<u>LOUISIANA</u>	METHANE _____ <u>91.9</u>
COUNTY _____	<u>BIENVILLE</u>	ETHANE _____ <u>3.8</u>
FIELD _____	<u>ALABAMA BEND</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>BLACK STONE MINERALS 3-16-1</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>1701321463</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 3, T15N, R10W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>PETROCHEM OPERATING CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>051102</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070319</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>JURA-COTTON VALLEY</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>230</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9884</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1475</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.7</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.042</u>
		SPECIFIC GRAVITY _____ <u>0.619</u>
SAMPLE	21453	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>81.6</u>
COUNTY _____	<u>TOOLE</u>	ETHANE _____ <u>5.5</u>
FIELD _____	<u>AMANDA</u>	PROPANE _____ <u>3.1</u>
WELL NAME _____	<u>JACOBSON 23-10</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>2510123540</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 23, T36N, R4W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>SOMONT OIL COMPANY, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>920811</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050000</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>JURA-SWIFT</u>	NITROGEN _____ <u>5.3</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2520</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>520</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>35</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.105</u>
		SPECIFIC GRAVITY _____ <u>0.696</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	21532	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>91.7</u>
COUNTY _____	<u>LIBERTY</u>	ETHANE _____ <u>0.5</u>
FIELD _____	<u>KEITHLE</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>SHOEMAKER 9-22</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>2505121732</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 22, T36N, R6E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>CROFT PETROLEUM CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>011010</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060608</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-SECOND WHITE SPECKS</u>	NITROGEN _____ <u>7.3</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2090</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>465</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>127</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.14</u>
		HEATING VALUE* _____ <u>946</u>
		SPECIFIC GRAVITY _____ <u>0.591</u>

SAMPLE	21602	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>86.6</u>
COUNTY _____	<u>GLACIER</u>	ETHANE _____ <u>2.3</u>
FIELD _____	<u>LITTLE ROCK</u>	PROPANE _____ <u>2.2</u>
WELL NAME _____	<u>AUGESTAD 2-2</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>2503522076</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 2, T36N, R6W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CROFT PETROLEUM CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>070307</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070000</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-BLACKLEAF</u>	NITROGEN _____ <u>6.0</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1996</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>115</u>	HYDROGEN _____ <u>0.2</u>
OPEN FLOW, MCFD _____	<u>153</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.37</u>
		HEATING VALUE* _____ <u>1,054</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	21597	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>93.9</u>
COUNTY _____	<u>TOOLE</u>	ETHANE _____ <u>1.4</u>
FIELD _____	<u>PHANTOM WEST</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>FEDERAL 1-1</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>2510122383</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 1, T37N, R2E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>MCR, LLC</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>820910</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070515</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-SUNBURST</u>	NITROGEN _____ <u>1.4</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2633</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>35</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>32</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.9</u>
		HELIUM _____ <u>0.08</u>
		HEATING VALUE* _____ <u>985</u>
		SPECIFIC GRAVITY _____ <u>0.598</u>

SAMPLE	21607	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>85.9</u>
COUNTY _____	<u>TOOLE</u>	ETHANE _____ <u>1.4</u>
FIELD _____	<u>POLICE COULEE</u>	PROPANE _____ <u>0.5</u>
WELL NAME _____	<u>O'LOUGHLIN 29-3</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>2510121751</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 29, T37N, R1E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>DNR OIL & GAS, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>781002</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070628</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-BOW ISLAND</u>	NITROGEN _____ <u>10.0</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1133</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.6</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>643</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.3</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>918</u>
		SPECIFIC GRAVITY _____ <u>0.628</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	21666	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>73.5</u>
COUNTY _____	<u>GLACIER</u>	ETHANE _____ <u>7.3</u>
FIELD _____	<u>REAGAN</u>	PROPANE _____ <u>5.9</u>
WELL NAME _____	<u>TRIBAL 194-15</u>	N-BUTANE _____ <u>2.1</u>
API _____	<u>2503506938</u>	ISOBUTANE _____ <u>1.0</u>
LOCATION _____	<u>SEC 15, T37N, R7W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>OMIMEX CANADA LTD.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>490825</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070827</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>CRET-BLACKLEAF</u>	NITROGEN _____ <u>8.4</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2208</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.2</u>
WELLHEAD PRESSURE, PSIG _____	<u>309</u>	HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>2245</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>1.177</u>
		SPECIFIC GRAVITY _____ <u>0.754</u>

SAMPLE	21665	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>93.9</u>
COUNTY _____	<u>LIBERTY</u>	ETHANE _____ <u>0.2</u>
FIELD _____	<u>SAGE CREEK</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>STATE 14-16</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>2505121711</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 16, T37N, R7E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>OMIMEX CANADA LTD.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>990809</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070823</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>CRET-WHITE SPECKS 2ND</u>	NITROGEN _____ <u>5.5</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1927</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>348</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>92</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>955</u>
		SPECIFIC GRAVITY _____ <u>0.579</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	21670	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>89.2</u>
COUNTY _____	<u>BLAINE</u>	ETHANE _____ <u>1.6</u>
FIELD _____	<u>SAWTOOTH MOUNTAIN</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>FEDERAL 14-31</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>2500522312</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 31, T28N, R19E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>DEVON ENERGY CORP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>830925</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>071004</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-JUDITH RIVER</u>	NITROGEN _____ <u>7.9</u>
GEOLOGIC PROVINCE CODE _____	<u>395</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1590</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>34</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>963</u>
		SPECIFIC GRAVITY _____ <u>0.608</u>

SAMPLE	21621	COMPONENT, MOLE PCT
STATE _____	<u>MONTANA</u>	METHANE _____ <u>94.5</u>
COUNTY _____	<u>HILL</u>	ETHANE _____ <u>0.2</u>
FIELD _____	<u>ST JOE ROAD</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>DUSEK 28-4-36-16</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>2504123215</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 28, T36N, R16E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>KLABZUBA OIL & GAS, INC.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>050523</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070709</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>5.0</u>
GEOLOGIC PROVINCE CODE _____	<u>500</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1973</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>717</u>	HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>105</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>961</u>
		SPECIFIC GRAVITY _____ <u>0.575</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	21657	COMPONENT, MOLE PCT
STATE	NEBRASKA	METHANE 89.2
COUNTY	CHEYENNE	ETHANE 1.4
FIELD	JURGENS	PROPANE 1.0
WELL NAME	POPPEN 8-B	N-BUTANE 0.3
API	2603322491	ISOBUTANE 0.2
LOCATION	SEC 32, T16N, R48W	N-PENTANE 0.1
OWNER	PATHEX PETROLEUM, INC.	ISOPENTANE 0.1
COMPLETED	931106	CYCLOPENTANE --
SAMPLED	070815	HEXANES PLUS 0.1
FORMATION	CRET-NIOBRARA	NITROGEN 6.7
GEOLOGIC PROVINCE CODE	540	OXYGEN --
TRUE VERTICAL DEPTH (FT)	3649	ARGON --
MEASURED DEPTH		ARGON + OXYGEN 0.1
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	494	HYDROGEN SULFIDE** TRACE
		CARBON DIOXIDE 0.5
		HELIUM 0.14
		HEATING VALUE* 988
		SPECIFIC GRAVITY 0.619
SAMPLE	21660	COMPONENT, MOLE PCT
STATE	NEBRASKA	METHANE 91.0
COUNTY	CHEYENNE	ETHANE 1.3
FIELD	MCCOURT W	PROPANE 0.9
WELL NAME	TOOF 3-4B	N-BUTANE 0.3
API	2603322443	ISOBUTANE 0.2
LOCATION	SEC 3, T16N, R48W	N-PENTANE 0.1
OWNER	PATHEX PETROLEUM, INC.	ISOPENTANE 0.1
COMPLETED	930208	CYCLOPENTANE --
SAMPLED	070815	HEXANES PLUS 0.1
FORMATION	CRET-NIOBRARA	NITROGEN 5.2
GEOLOGIC PROVINCE CODE	540	OXYGEN --
TRUE VERTICAL DEPTH (FT)	3595	ARGON --
MEASURED DEPTH		ARGON + OXYGEN 0.1
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	468	HYDROGEN SULFIDE** TRACE
		CARBON DIOXIDE 0.5
		HELIUM 0.14
		HEATING VALUE* 998
		SPECIFIC GRAVITY 0.609

* 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	21658	COMPONENT, MOLE PCT
STATE _____	<u>NEBRASKA</u>	METHANE _____ <u>89.6</u>
COUNTY _____	<u>CHEYENNE</u>	ETHANE _____ <u>1.5</u>
FIELD _____	<u>MILLER</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>MILLER FARMS 21-4A</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>2603322480</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 21, T16N, R47W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>PATHEX PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>931016</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070815</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>6.3</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3414</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>328</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.15</u>
		HEATING VALUE* _____ <u>987</u>
		SPECIFIC GRAVITY _____ <u>0.616</u>

SAMPLE	21659	COMPONENT, MOLE PCT
STATE _____	<u>NEBRASKA</u>	METHANE _____ <u>89.8</u>
COUNTY _____	<u>CHEYENNE</u>	ETHANE _____ <u>1.4</u>
FIELD _____	<u>MILLER N</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>HYDE 5-2A</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>2603322438</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 5, T16N, R47W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>PATHEX PETROLEUM, INC.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>930120</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070815</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-NIOBRARA</u>	NITROGEN _____ <u>6.3</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3402</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>442</u>	HYDROGEN SULFIDE** _____ <u>0.1</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>989</u>
		SPECIFIC GRAVITY _____ <u>0.615</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	21661	COMPONENT, MOLE PCT
STATE _____	<u>NEBRASKA</u>	METHANE _____ <u>71.1</u>
COUNTY _____	<u>KIMBALL</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>TYSON</u>	PROPANE _____ <u>8.9</u>
WELL NAME _____	<u>STATE C-1</u>	N-BUTANE _____ <u>3.6</u>
API _____	<u>2610521731</u>	ISOBUTANE _____ <u>1.1</u>
LOCATION _____	<u>SEC 16, T13N, R53W</u>	N-PENTANE _____ <u>1.0</u>
OWNER _____	<u>BEREN CORP.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>780906</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070815</u>	HEXANES PLUS _____ <u>1.6</u>
FORMATION _____	<u>CRET-DAKOTA D</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5642</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.3</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2800</u>	HYDROGEN SULFIDE** _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>2.0</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>1.365</u>
		SPECIFIC GRAVITY _____ <u>0.849</u>

SAMPLE	21569	COMPONENT, MOLE PCT
STATE _____	<u>NEBRASKA</u>	METHANE _____ <u>15.1</u>
COUNTY _____	<u>KIMBALL</u>	ETHANE _____ <u>1.8</u>
FIELD _____	<u>WILDCAT</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>COUSINS NEAR 10-33T</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>2610522596</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 33, T14N, R56W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>ADVANTAGE RESOURCES, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>050711</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>061005</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PERM-WYKERT</u>	NITROGEN _____ <u>78.9</u>
GEOLOGIC PROVINCE CODE _____	<u>540</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8226</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>5</u>	HYDROGEN _____ <u>2.3</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.58</u>
		HEATING VALUE* _____ <u>226</u>
		SPECIFIC GRAVITY _____ <u>0.891</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	21522	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.7</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>3.9</u>
FIELD _____	<u>ACME</u>	PROPANE _____ <u>1.5</u>
WELL NAME _____	<u>MILLER STATE 1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000563538</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 2, T8S, R27E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>FLK OIL CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>030224</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060309</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-PERMIAN</u>	NITROGEN _____ <u>3.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6577</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>800</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.32</u>
		HEATING VALUE* _____ <u>1.059</u>
		SPECIFIC GRAVITY _____ <u>0.63</u>

SAMPLE	50609	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.0</u>
FIELD _____	<u>ALBINO</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>SAN JUAN 32-8 UNIT 46</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3004525127</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 14, T32N, R8W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>820113</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050427</u>	HEXANES PLUS _____ <u>0.4</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>3973</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.124</u>
		SPECIFIC GRAVITY _____ <u>0.641</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	21499	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>81.1</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>9.1</u>
FIELD _____	<u>ANDERSON RANCH</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>ANDERSON RANCH UNIT 201</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3002534272</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC 14E, T16S, R32E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>980628</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050906</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>1.1</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>12231</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>298</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.235</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>
<hr/>		
SAMPLE	50606	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>82.1</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>8.2</u>
FIELD _____	<u>ANIMAS/BLANCO</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>PRIMO 1A</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>3004521827</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 6, T31N, R10W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>751216</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050429</u>	HEXANES PLUS _____ <u>1.4</u>
FORMATION _____	<u>CRET-CHACRA, MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5020</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>2.2</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.227</u>
		SPECIFIC GRAVITY _____ <u>0.731</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	21460	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>AZTEC N</u>	PROPANE _____ <u>2.0</u>
WELL NAME _____	<u>AZTEC COM 1</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3004509974</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 2, T30N, R11W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>961108</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050613</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-FRUITLAND</u>	NITROGEN _____ <u>5.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2166</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.3</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>800</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.058</u>
		SPECIFIC GRAVITY _____ <u>0.645</u>

SAMPLE	50613	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>75.3</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>10.3</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>6.5</u>
WELL NAME _____	<u>JICARILLA A-12</u>	N-BUTANE _____ <u>2.1</u>
API _____	<u>3003920396</u>	ISOBUTANE _____ <u>1.2</u>
LOCATION _____	<u>SEC 24, T26N, R4W</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.9</u>
COMPLETED _____	<u>711028</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>051201</u>	HEXANES PLUS _____ <u>1.9</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8274</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>2100</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1534</u>	HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.385</u>
		SPECIFIC GRAVITY _____ <u>0.8</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	20643	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>75.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>13.2</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>6.0</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 219E</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>3004525449</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 23, T28N, R12W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>830701</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.7</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>6114</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>964</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>947</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.273</u>
		SPECIFIC GRAVITY _____ <u>0.745</u>

SAMPLE	20622	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>8.4</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>2.4</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 178E</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004526206</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 4, T27N, R12W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>850701</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5972</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>832</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1510</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.145</u>
		SPECIFIC GRAVITY _____ <u>0.662</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	20634	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>80.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>11.0</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>4.2</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 265E</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3004526706</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 25, T28N, R12W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>860424</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>1.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6215</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1771</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.9</u>
		HELIUM _____ <u>0.12</u>
		HEATING VALUE* _____ <u>1.189</u>
		SPECIFIC GRAVITY _____ <u>0.696</u>

SAMPLE	20635	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>79.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>11.0</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>4.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 232E</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3004526338</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 26, T28N, R12W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>850607</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>CRET-DAKOTA</u>	NITROGEN _____ <u>1.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6186</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1218</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1438</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.12</u>
		HEATING VALUE* _____ <u>1.221</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	20626	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 9</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3004507006</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 32, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>921006</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</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>1208</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>120</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.0</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.026</u>
		SPECIFIC GRAVITY _____ <u>0.597</u>

SAMPLE	20628	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>93.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.7</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 41</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004507074</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 32, T28N, R12W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>950305</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</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>1276</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>194</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.046</u>
		SPECIFIC GRAVITY _____ <u>0.604</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	20621	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>91.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.8</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.7</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 61</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004506939</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 4, T27N, R12W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>920930</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</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>1395</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>280</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>3.0</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.036</u>
		SPECIFIC GRAVITY _____ <u>0.62</u>

SAMPLE	20641	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>76.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>12.7</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>5.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 216</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3004511621</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC. 14, T28N, R12W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>660215</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>CRET-GRANEROS, DAKOTA</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6104</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>2448</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>10268</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1.271</u>
		SPECIFIC GRAVITY _____ <u>0.745</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	20645	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>79.1</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>11.2</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>4.8</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 208E</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3004523898</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 15, T28N, R12W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>800430</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>CRET-GRANEROS, DAKOTA</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5971</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1344</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.11</u>
		HEATING VALUE* _____ <u>1,236</u>
		SPECIFIC GRAVITY _____ <u>0.722</u>

SAMPLE	50623	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.5</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>2.0</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.7</u>
WELL NAME _____	<u>SAN JUAN 30-5 UNIT 102</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3003923176</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 34, T30N, R5W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>840829</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070311</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE, DAKOTA</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8243</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>151</u>	HYDROGEN _____ <u>--</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1,049</u>
		SPECIFIC GRAVITY _____ <u>0.609</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	50624	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.1</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>1.9</u>
FIELD _____	<u>BASIN</u>	PROPANE _____ <u>0.7</u>
WELL NAME _____	<u>SAN JUAN 30-5 UNIT 102</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3003923176</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC 34, T30N, R5W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>840829</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070311</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>CRET-MESAVERDE, DAKOTA</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8243</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>151</u>	HYDROGEN _____ <u>--</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.063</u>
		SPECIFIC GRAVITY _____ <u>0.618</u>

SAMPLE	21650	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>81.8</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>BASIN, ICE CANYON, BLANCO</u>	PROPANE _____ <u>4.0</u>
WELL NAME _____	<u>MONA LISA 2</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3003925745</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC 14, T26N, R7W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>DUGAN PRODUCTION CORP.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>980506</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070723</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>CRET-DAKOTA, GALLUP, MESAVERDE</u>	NITROGEN _____ <u>1.9</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6770</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>145</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.197</u>
		SPECIFIC GRAVITY _____ <u>0.707</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	21418	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>BIG SINKS</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>POKER LAKER UNIT 196</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3001533164</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 29, T24S, R31E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BASS ENTERPRISES PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>040209</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050214</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PERM-WOLFCAMP</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>12954</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>2000</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>555</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1,119</u>
		SPECIFIC GRAVITY _____ <u>0.657</u>

SAMPLE	21581	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>96.2</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>BLACK RIVER NORTH</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>FOREHAND FED 25 COM 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3001524740</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 25, T23S, R26E</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>VERNON E. FAULCONER, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>931209</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070102</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>PENN-ATOKA</u>	NITROGEN _____ <u>0.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11228</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>400</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>700</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1,012</u>
		SPECIFIC GRAVITY _____ <u>0.579</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	50608	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>96.1</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>1.4</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>SAN JUAN 32-8 UNIT 46</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004525127</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 14, T32N, R8W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>820113</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050427</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>TRACE</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6330</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>2.2</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.005</u>
		SPECIFIC GRAVITY _____ <u>0.587</u>

SAMPLE	20671	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.2</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.6</u>
WELL NAME _____	<u>DAWSON LS NO. 1</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004510273</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 30, T31N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>530626</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5196</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.141</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	20650	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>80.7</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>10.5</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>STOREY B L S NO. 4</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3004509624</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC. 11, T30N, R11W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>560821</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.4</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) _____	<u>3938</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.08</u>
		HEATING VALUE* _____ <u>1,231</u>
		SPECIFIC GRAVITY _____ <u>0.708</u>

SAMPLE	20667	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>81.8</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>9.8</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>4.1</u>
WELL NAME _____	<u>FLORANCE GAS COM E 9A</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3004521882</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 13, T30N, R9W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>790526</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>CRET-MESAVERDE, PICTURED CLIFFS</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2562</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>2897</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>1,208</u>
		SPECIFIC GRAVITY _____ <u>0.7</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	50607	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>6.1</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>2.5</u>
WELL NAME _____	<u>PRIMO 1A</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3004521827</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 6, T31N, R10W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>751216</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050429</u>	HEXANES PLUS _____ <u>0.5</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>2723</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>--</u>
		CARBON DIOXIDE _____ <u>2.8</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.124</u>
		SPECIFIC GRAVITY _____ <u>0.674</u>

SAMPLE	20666	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>83.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>9.1</u>
FIELD _____	<u>BLANCO</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>FLORENCE 20A</u>	N-BUTANE _____ <u>1.0</u>
API _____	<u>3004522152</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 24, T30N, R9W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>790601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010412</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS, MESAVERDE</u>	NITROGEN _____ <u>0.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2539</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.197</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	20598	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.4</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>CHAVES CO. UNDESIGNATED</u>	PROPANE _____ <u>1.0</u>
WELL NAME _____	<u>MACHO FEDERAL COM NO. 10</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3000561648</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 7, T7S, R23E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>LIME ROCK RESOURCES</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>820729</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010227</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2903</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>--</u>
WELLHEAD PRESSURE, PSIG _____	<u>765</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1600</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.46</u>
		HEATING VALUE* _____ <u>1.011</u>
		SPECIFIC GRAVITY _____ <u>0.615</u>

SAMPLE	21521	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.2</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>FOOR RANCH</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>WR STATE 4</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3000562652</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 24, T9S, R26E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>FLK OIL CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>890123</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060309</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>ORDO-ORDOVICIAN</u>	NITROGEN _____ <u>4.1</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5938</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1000</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.19</u>
		HEATING VALUE* _____ <u>1.073</u>
		SPECIFIC GRAVITY _____ <u>0.644</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	21523	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 88.8
COUNTY	CHAVES	ETHANE 4.3
FIELD	FOOR RANCH	PROPANE 1.6
WELL NAME	STATE SE 4	N-BUTANE 0.6
API	3000563342	ISOBUTANE 0.3
LOCATION	SEC 23, T9S, R26E	N-PENTANE 0.2
OWNER	FLK OIL CO.	ISOPENTANE 0.2
COMPLETED	010412	CYCLOPENTANE --
SAMPLED	060309	HEXANES PLUS 0.4
FORMATION	PENN-PENNSYLVANIAN	NITROGEN 3.3
GEOLOGIC PROVINCE CODE	430	OXYGEN --
TRUE VERTICAL DEPTH (FT)	5794	ARGON --
MEASURED DEPTH		ARGON + OXYGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	2000	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.1
		HELIUM 0.19
		HEATING VALUE* 1.079
		SPECIFIC GRAVITY 0.634

SAMPLE	21425	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 85.8
COUNTY	CHAVES	ETHANE 4.4
FIELD	FOOR RANCH	PROPANE 1.7
WELL NAME	QUINIELA AXQ STATE 3	N-BUTANE 0.6
API	3000563618	ISOBUTANE 0.3
LOCATION	SEC 5, T10S, R26E	N-PENTANE 0.2
OWNER	YATES PETROLEUM CORP.	ISOPENTANE 0.2
COMPLETED	040412	CYCLOPENTANE --
SAMPLED	050304	HEXANES PLUS 0.3
FORMATION	SILU-SILURIAN	NITROGEN 6.1
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	5852	ARGON 0.1
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG		HYDROGEN TRACE
OPEN FLOW, MCFD	3020	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.1
		HELIUM 0.27
		HEATING VALUE* 1.046
		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	21447	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>88.6</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>INDIAN BASIN</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>FEDERAL 33 GAS COM 3</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3001532180</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 33, T21S, R23E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CHEVRON USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>040309</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050420</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-CISCO</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7281</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.0</u>
WELLHEAD PRESSURE, PSIG _____	<u>340</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>800</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.082</u>
		SPECIFIC GRAVITY _____ <u>0.639</u>
SAMPLE	20637	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.0</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>2.4</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 368</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004526878</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 26, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>880530</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>TRACE</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>1581</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>70</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>210</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.2</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.012</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	20642	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.0</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 279</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3004523603</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 23, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>790920</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>TRACE</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>1595</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>260</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.024</u>
		SPECIFIC GRAVITY _____ <u>0.593</u>

SAMPLE	20629	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>2.9</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 315</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3004524655</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 21, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>810416</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1290</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>205</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.037</u>
		SPECIFIC GRAVITY _____ <u>0.589</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	20636	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 337</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004526136</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC. 26, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>841230</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>TRACE</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>1697</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>415</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.003</u>
		SPECIFIC GRAVITY _____ <u>0.588</u>

SAMPLE	20627	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>93.6</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.6</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 354</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3004526471</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 29, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>850825</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.2</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1291</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>483</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.6</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.043</u>
		SPECIFIC GRAVITY _____ <u>0.601</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	20644	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>94.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>3.0</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 290</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>3004523821</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 15, T28N, R12W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>800121</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.1</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>1503</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>250</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>522</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.030</u>
		SPECIFIC GRAVITY _____ <u>0.595</u>

SAMPLE	20630	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.0</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 316</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004521865</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 21, T28N, R12W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>760316</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010410</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1373</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>190</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>504</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.0</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.069</u>
		SPECIFIC GRAVITY _____ <u>0.624</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	20625	COMPONENT, MOLE PCT
STATE	<u>NEW MEXICO</u>	METHANE <u>92.2</u>
COUNTY	<u>SAN JUAN</u>	ETHANE <u>3.9</u>
FIELD	<u>KUTZ W</u>	PROPANE <u>0.8</u>
WELL NAME	<u>GALLEGOS CANYON UNIT 268</u>	N-BUTANE <u>0.2</u>
API	<u>3004522239</u>	ISOBUTANE <u>0.2</u>
LOCATION	<u>SEC. 32, T28N, R12W</u>	N-PENTANE <u>0.1</u>
OWNER	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE <u>0.1</u>
COMPLETED	<u>770422</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>010410</u>	HEXANES PLUS <u>0.2</u>
FORMATION	<u>CRET-PICTURED CLIFFS</u>	NITROGEN <u>0.2</u>
GEOLOGIC PROVINCE CODE	<u>580</u>	OXYGEN <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1300</u>	ARGON <u>0.0</u>
MEASURED DEPTH	<u> </u>	ARGON + OXYGEN <u>---</u>
WELLHEAD PRESSURE, PSIG	<u>228</u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>76</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>2.1</u>
		HELIUM <u>0.02</u>
		HEATING VALUE* <u>1.049</u>
		SPECIFIC GRAVITY <u>0.615</u>

SAMPLE	20623	COMPONENT, MOLE PCT
STATE	<u>NEW MEXICO</u>	METHANE <u>90.9</u>
COUNTY	<u>SAN JUAN</u>	ETHANE <u>4.3</u>
FIELD	<u>KUTZ W</u>	PROPANE <u>0.9</u>
WELL NAME	<u>GALLEGOS CANYON UNIT 318</u>	N-BUTANE <u>0.3</u>
API	<u>3004524799</u>	ISOBUTANE <u>0.2</u>
LOCATION	<u>SEC. 28, T28N, R12W</u>	N-PENTANE <u>0.1</u>
OWNER	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE <u>0.1</u>
COMPLETED	<u>810408</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>010410</u>	HEXANES PLUS <u>0.1</u>
FORMATION	<u>CRET-PICTURED CLIFFS</u>	NITROGEN <u>0.2</u>
GEOLOGIC PROVINCE CODE	<u>580</u>	OXYGEN <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1396</u>	ARGON <u>0.0</u>
MEASURED DEPTH	<u> </u>	ARGON + OXYGEN <u>---</u>
WELLHEAD PRESSURE, PSIG	<u> </u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>40</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>3.0</u>
		HELIUM <u>0.02</u>
		HEATING VALUE* <u>1.045</u>
		SPECIFIC GRAVITY <u>0.625</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	20620	COMPONENT, MOLE PCT
STATE	<u>NEW MEXICO</u>	METHANE <u>89.6</u>
COUNTY	<u>SAN JUAN</u>	ETHANE <u>4.4</u>
FIELD	<u>KUTZ W</u>	PROPANE <u>1.0</u>
WELL NAME	<u>GALLEGOS CANYON UNIT 11</u>	N-BUTANE <u>0.3</u>
API	<u>3004513354</u>	ISOBUTANE <u>0.2</u>
LOCATION	<u>SEC. 34, T28N, R12W</u>	N-PENTANE <u>0.1</u>
OWNER	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE <u>0.1</u>
COMPLETED	<u>521028</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>010410</u>	HEXANES PLUS <u>0.2</u>
FORMATION	<u>CRET-PICTURED CLIFFS</u>	NITROGEN <u>0.2</u>
GEOLOGIC PROVINCE CODE	<u>580</u>	OXYGEN <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1490</u>	ARGON <u>0.0</u>
MEASURED DEPTH	<u></u>	ARGON + OXYGEN <u>---</u>
WELLHEAD PRESSURE, PSIG	<u>448</u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>887</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>3.8</u>
		HELIUM <u>0.02</u>
		HEATING VALUE* <u>1.045</u>
		SPECIFIC GRAVITY <u>0.639</u>
SAMPLE	20639	COMPONENT, MOLE PCT
STATE	<u>NEW MEXICO</u>	METHANE <u>88.7</u>
COUNTY	<u>SAN JUAN</u>	ETHANE <u>5.6</u>
FIELD	<u>KUTZ W</u>	PROPANE <u>1.6</u>
WELL NAME	<u>GALLEGOS CANYON UNIT 233</u>	N-BUTANE <u>0.5</u>
API	<u>3004511686</u>	ISOBUTANE <u>0.3</u>
LOCATION	<u>SEC. 27, T28N, R12W</u>	N-PENTANE <u>0.1</u>
OWNER	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE <u>0.2</u>
COMPLETED	<u>971208</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>010411</u>	HEXANES PLUS <u>0.3</u>
FORMATION	<u>CRET-PICTURED CLIFFS</u>	NITROGEN <u>0.3</u>
GEOLOGIC PROVINCE CODE	<u>580</u>	OXYGEN <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1439</u>	ARGON <u>0.0</u>
MEASURED DEPTH	<u></u>	ARGON + OXYGEN <u>---</u>
WELLHEAD PRESSURE, PSIG	<u></u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>410</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>2.5</u>
		HELIUM <u>0.03</u>
		HEATING VALUE* <u>1.088</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	20640	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>91.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>KUTZ W</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 267</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3004522235</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 23, T28N, R12W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>770329</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>3.5</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>0.8</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1630</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>375</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>337</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.3</u>
		HELIUM _____ <u>0.18</u>
		HEATING VALUE* _____ <u>994</u>
		SPECIFIC GRAVITY _____ <u>0.611</u>

SAMPLE	21606	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>90.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>4.3</u>
FIELD _____	<u>KUTZ W, PINON N</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 517</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>3004528156</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 18, T28N, R11W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>020920</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070626</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS, FRUITLAND</u>	NITROGEN _____ <u>0.9</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1548</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>811</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1,108</u>
		SPECIFIC GRAVITY _____ <u>0.637</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	21667	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>92.0</u>
COUNTY _____	<u>RIO ARRIBA</u>	ETHANE _____ <u>4.6</u>
FIELD _____	<u>LA JARA CANYON</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>JICARILLA 29-02-16-1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3003926108</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 16, T29N, R2W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BLACK HILLS GAS RESOURCES</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>031010</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070828</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>EOCE-SAN JOSE, PALE-NACIMIENTO</u>	NITROGEN _____ <u>2.6</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2814</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1086</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.030</u>
		SPECIFIC GRAVITY _____ <u>0.595</u>

SAMPLE	21456	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>72.2</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>9.1</u>
FIELD _____	<u>LOVING E</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>FATE 34-1</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3001523879</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 34, T23S, R28E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>BK EXPLORATION CORP.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>980310</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050519</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PERM-BRUSHY CANYON</u>	NITROGEN _____ <u>10.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6192</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.3</u>
WELLHEAD PRESSURE, PSIG _____	<u>200</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.139</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	20585	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.9</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>1.7</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>BARN FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3000560698</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 12, T8S, R22E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>LIME ROCK RESOURCES</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>810203</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010226</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2891</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1000</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1339</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.63</u>
		HEATING VALUE* _____ <u>999</u>
		SPECIFIC GRAVITY _____ <u>0.61</u>

SAMPLE	20582	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.8</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>2.2</u>
FIELD _____	<u>PECOS SLOPE</u>	PROPANE _____ <u>0.7</u>
WELL NAME _____	<u>LEWIS ABN FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3000562248</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 21, T8S, R23E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>LIME ROCK RESOURCES</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>850329</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010226</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>6.0</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3067</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>725</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.72</u>
		HEATING VALUE* _____ <u>985</u>
		SPECIFIC GRAVITY _____ <u>0.604</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	20597	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>89.4</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>2.5</u>
FIELD _____	<u>PECOS SLOPE W</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>MACHO FEDERAL NO. 13</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>3000561914</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 6, T7S, R23E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>LIME ROCK RESOURCES</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>830703</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010227</u>	HEXANES PLUS _____ <u>0.2</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>2947</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>760</u>	HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>3100</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.42</u>
		HEATING VALUE* _____ <u>1.018</u>
		SPECIFIC GRAVITY _____ <u>0.618</u>
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SAMPLE	20584	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>90.0</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>2.1</u>
FIELD _____	<u>PECOS SLOPE W</u>	PROPANE _____ <u>0.8</u>
WELL NAME _____	<u>ROCK FEDERAL NO. 1</u>	N-BUTANE _____ <u>0.4</u>
API _____	<u>3000560600</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 7, T8S, R23E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>LIME ROCK RESOURCES</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>800303</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010226</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PERM-ABO</u>	NITROGEN _____ <u>5.5</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3363</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>847</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>912</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.57</u>
		HEATING VALUE* _____ <u>1.005</u>
		SPECIFIC GRAVITY _____ <u>0.611</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	21598	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>74.5</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>12.1</u>
FIELD _____	<u>PINON, BASIN</u>	PROPANE _____ <u>7.0</u>
WELL NAME _____	<u>T L RHODES B 1E</u>	N-BUTANE _____ <u>2.0</u>
API _____	<u>3004526130</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC 20, T28N, R11W</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>ROBERT L. BAYLESS PRODUCERS, LLC</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>970321</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070516</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>CRET-GALLUP, DAKOTA</u>	NITROGEN _____ <u>1.3</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6212</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.308</u>
		SPECIFIC GRAVITY _____ <u>0.768</u>
SAMPLE	21664	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>95.2</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>2.8</u>
FIELD _____	<u>POTWIN</u>	PROPANE _____ <u>0.2</u>
WELL NAME _____	<u>BOWERS 1</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3004525486</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 17, T24N, R8W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>DUGAN PRODUCTION CORP.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>850621</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070809</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>CRET-PICTURED CLIFFS</u>	NITROGEN _____ <u>1.1</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>1990</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>60</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.023</u>
		SPECIFIC GRAVITY _____ <u>0.582</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	21608	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 84.9
COUNTY	RIO ARRIBA	ETHANE 5.5
FIELD	PUERTO CHIQUITO E	PROPANE 2.7
WELL NAME	E PUERTO CHIQUITO MANCOS UNIT 37	N-BUTANE 1.1
API	3003923209	ISOBUTANE 0.4
LOCATION	SEC. 8C, T26N, R1E	N-PENTANE 0.3
OWNER	BENSON-MONTIN-GREER DRILLING CORP.	ISOPENTANE 0.4
COMPLETED	850103	CYCLOPENTANE --
SAMPLED	070627	HEXANES PLUS 0.6
FORMATION	CRET-NIBRARA, MANCOS	NITROGEN 1.2
GEOLOGIC PROVINCE CODE	580	OXYGEN --
TRUE VERTICAL DEPTH (FT)	2752	ARGON --
MEASURED DEPTH		ARGON + OXYGEN 0.1
WELLHEAD PRESSURE, PSIG	45	HYDROGEN 0.0
OPEN FLOW, MCFD	27	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 2.8
		HELIUM 0.04
		HEATING VALUE* 1.132
		SPECIFIC GRAVITY 0.69

SAMPLE	20696	COMPONENT, MOLE PCT
STATE	NEW MEXICO	METHANE 72.6
COUNTY	EDDY	ETHANE 12.5
FIELD	SHUGART N	PROPANE 5.8
WELL NAME	PATON B FEDERAL NO. 1	N-BUTANE 1.9
API	3001525953	ISOBUTANE 0.7
LOCATION	SEC. 9, T18S, R31E	N-PENTANE 0.6
OWNER	ANADARKO PETROLEUM CORP.	ISOPENTANE 0.6
COMPLETED	990813	CYCLOPENTANE --
SAMPLED	010619	HEXANES PLUS 1.2
FORMATION	PERM-BONE SPRING	NITROGEN 3.4
GEOLOGIC PROVINCE CODE	430	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8090	ARGON 0.0
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	37	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.8
		HELIUM 0.04
		HEATING VALUE* 1.290
		SPECIFIC GRAVITY 0.781

* 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	20638	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>67.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>10.6</u>
FIELD _____	<u>SIMPSON</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>GALLEGOS CANYON UNIT 83E</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3004526011</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 26, T28N, R12W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>950212</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010411</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-GALLUP</u>	NITROGEN _____ <u>11.5</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	OXYGEN _____ <u>2.9</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5200</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>300</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.33</u>
		HEATING VALUE* _____ <u>1.058</u>
		SPECIFIC GRAVITY _____ <u>0.752</u>

SAMPLE	20678	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>74.2</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>10.4</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>4.8</u>
WELL NAME _____	<u>CHEVRON 12 FEDERAL NO. 1</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3002529747</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 12, T18S, R32E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>860930</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8443</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>81</u>	HYDROGEN SULFIDE** _____ <u>0.4</u>
		CARBON DIOXIDE _____ <u>3.1</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.200</u>
		SPECIFIC GRAVITY _____ <u>0.763</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	20683	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>73.9</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>12.8</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>5.6</u>
WELL NAME _____	<u>FEDERAL AM NO. 1</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>3002529087</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 8, T18S, R32E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>000611</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>2.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8258</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.9</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.269</u>
		SPECIFIC GRAVITY _____ <u>0.761</u>
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SAMPLE	20690	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>73.7</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>12.5</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>5.5</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 38</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>3002533864</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 10, T18S, R32E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>971231</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.3</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8892</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>225</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.278</u>
		SPECIFIC GRAVITY _____ <u>0.766</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	20676	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>69.9</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>11.6</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>6.6</u>
WELL NAME _____	<u>AMOCO 1 FEDERAL NO. 1</u>	N-BUTANE _____ <u>2.1</u>
API _____	<u>3002528889</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC. 1, T18S, R32E</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>841218</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.1</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8697</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.4</u>
		CARBON DIOXIDE _____ <u>3.3</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.267</u>
		SPECIFIC GRAVITY _____ <u>0.808</u>

SAMPLE	20687	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>70.3</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>13.9</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>6.5</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 36</u>	N-BUTANE _____ <u>1.9</u>
API _____	<u>3002533642</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 9, T18S, R32E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>961211</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>1.8</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8832</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>85</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.341</u>
		SPECIFIC GRAVITY _____ <u>0.805</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	20701	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>70.4</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>13.5</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>6.4</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 1</u>	N-BUTANE _____ <u>1.9</u>
API _____	<u>3002526813</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 8, T18S, R32E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.5</u>
COMPLETED _____	<u>840306</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.9</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8791</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.338</u>
		SPECIFIC GRAVITY _____ <u>0.806</u>

SAMPLE	20691	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>69.2</u>
COUNTY _____	<u>EDDY</u>	ETHANE _____ <u>13.1</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>7.1</u>
WELL NAME _____	<u>AMOCO EAST 2 STATE NO. 2</u>	N-BUTANE _____ <u>2.6</u>
API _____	<u>3002528711</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 2, T18S, R32E</u>	N-PENTANE _____ <u>0.8</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.7</u>
COMPLETED _____	<u>840823</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.4</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8568</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1.351</u>
		SPECIFIC GRAVITY _____ <u>0.819</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	20688	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>75.5</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>11.8</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>5.4</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 12</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3002530866</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 4, T18S, R32E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>900529</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8470</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>214</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1,230</u>
		SPECIFIC GRAVITY _____ <u>0.737</u>
SAMPLE	20692	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>69.0</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>13.9</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>7.3</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 24</u>	N-BUTANE _____ <u>2.4</u>
API _____	<u>3002530783</u>	ISOBUTANE _____ <u>0.9</u>
LOCATION _____	<u>SEC. 10, T18S, R32E</u>	N-PENTANE _____ <u>0.8</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.7</u>
COMPLETED _____	<u>900503</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.5</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.5</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>9012</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>214</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1,364</u>
		SPECIFIC GRAVITY _____ <u>0.819</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	20681	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>67.4</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>14.2</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>7.8</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 29</u>	N-BUTANE _____ <u>3.0</u>
API _____	<u>3002531299</u>	ISOBUTANE _____ <u>1.0</u>
LOCATION _____	<u>SEC. 10, T18S, R32E</u>	N-PENTANE _____ <u>0.9</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>1.0</u>
COMPLETED _____	<u>910917</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>3.4</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8863</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.389</u>
		SPECIFIC GRAVITY _____ <u>0.835</u>

SAMPLE	20677	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>68.9</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>13.3</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>6.8</u>
WELL NAME _____	<u>AMOCO 1 FEDERAL NO. 2</u>	N-BUTANE _____ <u>2.4</u>
API _____	<u>3002529848</u>	ISOBUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC. 1, T18S, R32E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>870416</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>2.7</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8425</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>272</u>	HYDROGEN SULFIDE** _____ <u>0.4</u>
		CARBON DIOXIDE _____ <u>2.4</u>
		HELIUM _____ <u>0.09</u>
		HEATING VALUE* _____ <u>1.304</u>
		SPECIFIC GRAVITY _____ <u>0.813</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	20689	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>64.2</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>17.5</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>9.0</u>
WELL NAME _____	<u>YOUNG DEEP UNIT NO. 30</u>	N-BUTANE _____ <u>2.6</u>
API _____	<u>3002533174</u>	ISOBUTANE _____ <u>1.0</u>
LOCATION _____	<u>SEC. 10, T18S, R32E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.6</u>
COMPLETED _____	<u>951227</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010619</u>	HEXANES PLUS _____ <u>1.3</u>
FORMATION _____	<u>PERM-BONE SPRING</u>	NITROGEN _____ <u>2.6</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8878</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>349</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.423</u>
		SPECIFIC GRAVITY _____ <u>0.849</u>

SAMPLE	20682	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>58.1</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>14.4</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>10.1</u>
WELL NAME _____	<u>FEDERAL AF NO. 1</u>	N-BUTANE _____ <u>3.0</u>
API _____	<u>3002527406</u>	ISOBUTANE _____ <u>1.2</u>
LOCATION _____	<u>SEC. 8, T18S, R32E</u>	N-PENTANE _____ <u>0.8</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>010106</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>1.0</u>
FORMATION _____	<u>PERM-DELAWARE</u>	NITROGEN _____ <u>10.5</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5008</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>14</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.347</u>
		SPECIFIC GRAVITY _____ <u>0.881</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	20685	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 60.7
COUNTY _____	LEA	ETHANE _____ 14.4
FIELD _____	YOUNG N	PROPANE _____ 9.3
WELL NAME _____	AMOCO CP FEDERAL NO. 1	N-BUTANE _____ 2.8
API _____	3002527680	ISOBUTANE _____ 1.1
LOCATION _____	SEC. 8, T18S, R32E	N-PENTANE _____ 0.8
OWNER _____	HARVEY E. YATES CO.	ISOPENTANE _____ 0.8
COMPLETED _____	890714	CYCLOPENTANE _____ --
SAMPLED _____	010618	HEXANES PLUS _____ 1.2
FORMATION _____	PERM-DELAWARE	NITROGEN _____ 8.9
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4913	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.350
		SPECIFIC GRAVITY _____ 0.865

SAMPLE	20686	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 58.7
COUNTY _____	LEA	ETHANE _____ 17.3
FIELD _____	YOUNG N	PROPANE _____ 10.5
WELL NAME _____	YOUNG 8 FEDERAL, WEST NO. 1	N-BUTANE _____ 2.8
API _____	3002530503	ISOBUTANE _____ 1.1
LOCATION _____	SEC. 8, T18S, R32E	N-PENTANE _____ 0.7
OWNER _____	HARVEY E. YATES CO.	ISOPENTANE _____ 0.7
COMPLETED _____	890307	CYCLOPENTANE _____ --
SAMPLED _____	010818	HEXANES PLUS _____ 0.9
FORMATION _____	PERM-DELAWARE	NITROGEN _____ 7.2
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5020	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	150	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.392
		SPECIFIC GRAVITY _____ 0.875

* 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	20680	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>55.1</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>19.6</u>
FIELD _____	<u>YOUNG N</u>	PROPANE _____ <u>12.7</u>
WELL NAME _____	<u>SHOOT 12 FEDERAL NO. 3</u>	N-BUTANE _____ <u>3.0</u>
API _____	<u>3002531101</u>	ISOBUTANE _____ <u>1.3</u>
LOCATION _____	<u>SEC. 12, T18S, R32E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>HARVEY E. YATES CO.</u>	ISOPENTANE _____ <u>0.8</u>
COMPLETED _____	<u>910112</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010618</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>PERM-DELAWARE</u>	NITROGEN _____ <u>5.8</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4939</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>46</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>1.464</u>
		SPECIFIC GRAVITY _____ <u>0.907</u>

SAMPLE	50610	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>53.0</u>
COUNTY _____	<u>LINCOLN</u>	ETHANE _____ <u>4.4</u>
FIELD _____	<u>AGRA W</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>HOLMAN 3A-26</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>3508123739</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 26, T17N, R3E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>BAY PETROLEUM CORP.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>050610</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050822</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>36.1</u>
GEOLOGIC PROVINCE CODE _____	<u>355</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4226</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>--</u>
OPEN FLOW, MCFD _____	<u>30</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>TRACE</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____
		SPECIFIC GRAVITY _____

* 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	50611	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 76.0
COUNTY _____	LINCOLN	ETHANE _____ 9.3
FIELD _____	AGRA W	PROPANE _____ 4.6
WELL NAME _____	HOLMAN 2-26	N-BUTANE _____ 1.6
API _____	3508123643	ISOBUTANE _____ 0.5
LOCATION _____	SEC 26, T17N, R3E	N-PENTANE _____ 0.5
OWNER _____	BAY PETROLEUM CORP.	ISOPENTANE _____ 0.3
COMPLETED _____	010520	CYCLOPENTANE _____ --
SAMPLED _____	050720	HEXANES PLUS _____ 0.7
FORMATION _____	MISS-MISSISSIPPIAN	NITROGEN _____ 6.4
GEOLOGIC PROVINCE CODE _____	355	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	4224	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ --
OPEN FLOW, MCFD _____	25	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.00
		HEATING VALUE* _____
		SPECIFIC GRAVITY _____

SAMPLE	21508	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 84.4
COUNTY _____	HUGHES	ETHANE _____ 6.5
FIELD _____	ALABAMA	PROPANE _____ 2.9
WELL NAME _____	RAINBOLT 1-3	N-BUTANE _____ 0.8
API _____	3506321134	ISOBUTANE _____ 0.4
LOCATION _____	SEC 3, T9N, R11E	N-PENTANE _____ 0.3
OWNER _____	CROWN ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	801024	CYCLOPENTANE _____ --
SAMPLED _____	051104	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-BARTLESVILLE	NITROGEN _____ 3.6
GEOLOGIC PROVINCE CODE _____	355	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	1675	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	120	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	55	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.123
		SPECIFIC GRAVITY _____ 0.667

* 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	21507	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 83.4
COUNTY _____	HUGHES	ETHANE _____ 7.2
FIELD _____	ALABAMA S	PROPANE _____ 3.1
WELL NAME _____	HAMMOND 2-9	N-BUTANE _____ 0.8
API _____	3506321147	ISOBUTANE _____ 0.3
LOCATION _____	SEC 9, T9N, R11E	N-PENTANE _____ 0.2
OWNER _____	CROWN ENERGY CO.	ISOPENTANE _____ 0.2
COMPLETED _____	801215	CYCLOPENTANE _____ --
SAMPLED _____	051104	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-RED FORK, BARTLESVILLE	NITROGEN _____ 4.1
GEOLOGIC PROVINCE CODE _____	355	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	1605	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	30	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	8	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.118
		SPECIFIC GRAVITY _____ 0.67

SAMPLE	21518	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 74.7
COUNTY _____	GRADY	ETHANE _____ 9.5
FIELD _____	ALEX NW	PROPANE _____ 6.9
WELL NAME _____	BURTON 1-11	N-BUTANE _____ 2.8
API _____	3505123174	ISOBUTANE _____ 1.4
LOCATION _____	SEC 11, T5N, R6W	N-PENTANE _____ 1.0
OWNER _____	WARD PETROLEUM CORP.	ISOPENTANE _____ 0.7
COMPLETED _____	040709	CYCLOPENTANE _____ --
SAMPLED _____	060302	HEXANES PLUS _____ 1.4
FORMATION _____	ORDO-BROMIDE 1 & 2	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____	17092	ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	4000	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1000	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.368
		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	21517	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 92.7
COUNTY _____	KINGFISHER	ETHANE _____ 3.5
FIELD _____	ALTONA	PROPANE _____ 1.5
WELL NAME _____	JUSTICE 9A	N-BUTANE _____ 0.4
API _____	3507324394	ISOBUTANE _____ 0.3
LOCATION _____	SEC 9, T15N, R9W	N-PENTANE _____ 0.2
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	971224	CYCLOPENTANE _____ --
SAMPLED _____	060130	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-INOLA, ATOKA, MORROW, MISS-CHESTER	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	8826	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	23	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	26	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.095
		SPECIFIC GRAVITY _____ 0.618

SAMPLE	21514	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 90.9
COUNTY _____	KINGFISHER	ETHANE _____ 2.8
FIELD _____	ALTONA	PROPANE _____ 1.3
WELL NAME _____	GALILEO 1-20	N-BUTANE _____ 0.4
API _____	3507324475	ISOBUTANE _____ 0.2
LOCATION _____	SEC 20, T15N, R9W	N-PENTANE _____ 0.1
OWNER _____	RANGE PRODUCTION CO.	ISOPENTANE _____ 0.2
COMPLETED _____	040816	CYCLOPENTANE _____ --
SAMPLED _____	060123	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-MORROW	NITROGEN _____ 3.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	9003	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	600	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.048
		SPECIFIC GRAVITY _____ 0.62

* 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	21515	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 90.3
COUNTY _____	KINGFISHER	ETHANE _____ 4.2
FIELD _____	ALTONA	PROPANE _____ 1.9
WELL NAME _____	BETTY 1-28	N-BUTANE _____ 0.6
API _____	3507324288	ISOBUTANE _____ 0.2
LOCATION _____	SEC 28, T16N, R9W	N-PENTANE _____ 0.2
OWNER _____	KAISER-FRANCIS OIL CO.	ISOPENTANE _____ 0.2
COMPLETED _____	010623	CYCLOPENTANE _____ --
SAMPLED _____	060131	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-RED FORK, MISS-CHESTER	NITROGEN _____ 1.6
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	8556	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	100	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.095
		SPECIFIC GRAVITY _____ 0.631

SAMPLE	21573	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 85.5
COUNTY _____	GRADY	ETHANE _____ 6.4
FIELD _____	AMBER NE	PROPANE _____ 3.3
WELL NAME _____	CAMPBELL FARMS 1-25	N-BUTANE _____ 1.2
API _____	3505123097	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 25, T9N, R6W	N-PENTANE _____ 0.5
OWNER _____	LINN ENERGY, LLC	ISOPENTANE _____ 0.4
COMPLETED _____	031117	CYCLOPENTANE _____ --
SAMPLED _____	061024	HEXANES PLUS _____ 0.9
FORMATION _____	ORDO-BROMIDE	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	11960	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	450	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	116	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.196
		SPECIFIC GRAVITY _____ 0.688

* 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	21525	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>97.2</u>
COUNTY _____	<u>CARTER</u>	ETHANE _____ <u>0.9</u>
FIELD _____	<u>ARDMORE E</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>CITY OF ARDMORE 1-3</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3501922184</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 3, T5S, R2E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>KAISER-FRANCIS OIL CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>811113</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060328</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>MISS-GODDARD</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>16401</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>6362</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1730</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.2</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.001</u>
		SPECIFIC GRAVITY _____ <u>0.573</u>

SAMPLE	21566	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>83.7</u>
COUNTY _____	<u>CREEK</u>	ETHANE _____ <u>7.4</u>
FIELD _____	<u>BIG POND</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>JOHN JOHN 2 & 3</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3503727669</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 32, T15N, R8E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>TUSCANY OIL & GAS, LLC</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>870225</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060915</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-PRUE</u>	NITROGEN _____ <u>2.6</u>
GEOLOGIC PROVINCE CODE _____	<u>355</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2477</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>600</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>250</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>1.161</u>
		SPECIFIC GRAVITY _____ <u>0.68</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 21563		COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 79.8
COUNTY _____	OKFUSKEE	ETHANE _____ 6.6
FIELD _____	BIGHAM SW	PROPANE _____ 3.6
WELL NAME _____	MATTHEW 1	N-BUTANE _____ 0.9
API _____	3510722273	ISOBUTANE _____ 0.4
LOCATION _____	SEC 3, T10N, R10E	N-PENTANE _____ 0.3
OWNER _____	KENDOL EXPLORATION, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	860523	CYCLOPENTANE _____ --
SAMPLED _____	060700	HEXANES PLUS _____ 0.4
FORMATION _____	PENN-SKINNER	NITROGEN _____ 7.3
GEOLOGIC PROVINCE CODE _____	355	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	1802	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	50	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	70	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.15
		HEATING VALUE* _____ 1.100
		SPECIFIC GRAVITY _____ 0.692

SAMPLE 21524		COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 58.7
COUNTY _____	NOBLE	ETHANE _____ 15.0
FIELD _____	BILLINGS	PROPANE _____ 10.2
WELL NAME _____	BILLINGS 9-15	N-BUTANE _____ 2.9
API _____	3510323850	ISOBUTANE _____ 1.2
LOCATION _____	SEC 15, T23N, R2W	N-PENTANE _____ 0.7
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.5
COMPLETED _____	041213	CYCLOPENTANE _____ --
SAMPLED _____	060321	HEXANES PLUS _____ 1.0
FORMATION _____	PENN-HASKELL, TONKAWA	NITROGEN _____ 9.4
GEOLOGIC PROVINCE CODE _____	355	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	2741	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	200	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	253	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.349
		SPECIFIC GRAVITY _____ 0.874

* 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	21583	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>96.4</u>
COUNTY _____	<u>LE FLORE</u>	ETHANE _____ <u>0.7</u>
FIELD _____	<u>BOKOSHE S</u>	PROPANE _____ <u>TRACE</u>
WELL NAME _____	<u>GUNTER 3</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>3507920946</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 6, T7N, R24E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>950601</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070220</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PENN-HARTSHORNE</u>	NITROGEN _____ <u>2.5</u>
GEOLOGIC PROVINCE CODE _____	<u>345</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>--</u>
MEASURED DEPTH _____	<u>2930</u>	ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>131</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>100</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>988</u>
		SPECIFIC GRAVITY _____ <u>0.571</u>

SAMPLE	21584	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>82.8</u>
COUNTY _____	<u>BEAVER</u>	ETHANE _____ <u>5.2</u>
FIELD _____	<u>BOYD S</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>HANLON 1-26</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3500722778</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 26, T3N, R20E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>KAISER FRANCIS OIL CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>840622</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070313</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>4.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7043</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>573</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>865</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>1,131</u>
		SPECIFIC GRAVITY _____ <u>0.689</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	21588	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>81.3</u>
COUNTY _____	<u>GRADY</u>	ETHANE _____ <u>9.5</u>
FIELD _____	<u>BRADLEY</u>	PROPANE _____ <u>4.1</u>
WELL NAME _____	<u>TOM B 4</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3505122987</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35. T5N. R5W</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>MERIT ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>010801</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070313</u>	HEXANES PLUS _____ <u>0.9</u>
FORMATION _____	<u>ORDO-VIOLA</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>13160</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>115</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.242</u>
		SPECIFIC GRAVITY _____ <u>0.716</u>
SAMPLE	21587	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>85.8</u>
COUNTY _____	<u>STEPHENS</u>	ETHANE _____ <u>7.3</u>
FIELD _____	<u>BRAY SE</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>LUBELL B1</u>	N-BUTANE _____ <u>0.9</u>
API _____	<u>3513730064</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 30. T2N. R5W</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>MERIT ENERGY CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>660303</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070313</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-SPRINGER</u>	NITROGEN _____ <u>0.6</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>14505</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>362</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.178</u>
		SPECIFIC GRAVITY _____ <u>0.675</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	21579	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>96.2</u>
COUNTY _____	<u>PITTSBURG</u>	ETHANE _____ <u>2.1</u>
FIELD _____	<u>BROOKEN</u>	PROPANE _____ <u>0.3</u>
WELL NAME _____	<u>AHERN-COBLENTZ 1-10</u>	N-BUTANE _____ <u>TRACE</u>
API _____	<u>3512160088</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 10, T7N, R18E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>611108</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>061218</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>PENN-DIRTY CREEK</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>345</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>4496</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>92</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>180</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.8</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.020</u>
		SPECIFIC GRAVITY _____ <u>0.577</u>

SAMPLE	21580	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>96.1</u>
COUNTY _____	<u>HASKELL</u>	ETHANE _____ <u>0.8</u>
FIELD _____	<u>BROOKEN</u>	PROPANE _____ <u>0.1</u>
WELL NAME _____	<u>WAGNON CREEK 1</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>3506120484</u>	ISOBUTANE _____ <u>0.0</u>
LOCATION _____	<u>SEC 25, T9N, R18E</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>HANNA OIL & GAS CO.</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>811127</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>061221</u>	HEXANES PLUS _____ <u>0.0</u>
FORMATION _____	<u>DEVO-HUNTON</u>	NITROGEN _____ <u>1.6</u>
GEOLOGIC PROVINCE CODE _____	<u>345</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>5538</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>415</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>25</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.08</u>
		HEATING VALUE* _____ <u>987</u>
		SPECIFIC GRAVITY _____ <u>0.578</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	21673	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 80.2
COUNTY _____	GARFIELD	ETHANE _____ 9.1
FIELD _____	BROWN MIDDLE	PROPANE _____ 4.4
WELL NAME _____	FICKEN 1	N-BUTANE _____ 1.3
API _____	3504722316	ISOBUTANE _____ 0.4
LOCATION _____	SEC 28, T20N, R4W	N-PENTANE _____ 0.4
OWNER _____	HAMMER OIL PROPERTIES, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	801013	CYCLOPENTANE _____ --
SAMPLED _____	071025	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-OSWEGO, MISS-MISSISSIPPIAN	NITROGEN _____ 3.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6074	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	1040	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.185
		SPECIFIC GRAVITY _____ 0.704

SAMPLE	21429	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 89.9
COUNTY _____	MAJOR	ETHANE _____ 2.9
FIELD _____	CAMPBELL	PROPANE _____ 1.1
WELL NAME _____	HIBBS 1-11	N-BUTANE _____ 0.5
API _____	3509324342	ISOBUTANE _____ 0.2
LOCATION _____	SEC 11, T23N, R16W	N-PENTANE _____ 0.2
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	040129	CYCLOPENTANE _____ --
SAMPLED _____	050329	HEXANES PLUS _____ 0.3
FORMATION _____	MISS-CHESTER, MERAMEC	NITROGEN _____ 4.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7186	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	100	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	409	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.041
		SPECIFIC GRAVITY _____ 0.625

* 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	21434	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>42.4</u>
COUNTY _____	<u>BEAVER</u>	ETHANE _____ <u>11.6</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>15.8</u>
WELL NAME _____	<u>CAMRICK CENTRAL TANK BATTERY</u>	N-BUTANE _____ <u>7.4</u>
API _____	<u>--</u>	ISOBUTANE _____ <u>3.5</u>
LOCATION _____	<u>SEC 27, T1N, R20E</u>	N-PENTANE _____ <u>2.3</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>1.5</u>
COMPLETED _____		CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050329</u>	HEXANES PLUS _____ <u>3.1</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>2.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>970</u>	HYDROGEN _____ <u>9.7</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.0</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>1.721</u>
		SPECIFIC GRAVITY _____ <u>1.032</u>

SAMPLE	20748	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>80.6</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>7.6</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>5.7</u>
WELL NAME _____	<u>COX ROBINSON NO. 1</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>3513935592</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 23, T2N, R19E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>560718</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010730</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>1.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6607</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>17500</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.16</u>
		HEATING VALUE* _____ <u>1.232</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	20755	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>82.0</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>4.7</u>
WELL NAME _____	<u>IDA MARIE ROGERS NO. 1-3</u>	N-BUTANE _____ <u>1.7</u>
API _____	<u>3513935684</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 3, T1N, R18E</u>	N-PENTANE _____ <u>0.7</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>611020</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.8</u>
FORMATION _____	<u>PFENN-MORROW</u>	NITROGEN _____ <u>1.9</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6367</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.1</u>
OPEN FLOW, MCFD _____	<u>5876</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.19</u>
		HEATING VALUE* _____ <u>1.222</u>
		SPECIFIC GRAVITY _____ <u>0.714</u>
SAMPLE	20754	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>95.8</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>2.1</u>
FIELD _____	<u>CAMRICK</u>	PROPANE _____ <u>0.6</u>
WELL NAME _____	<u>YELL NO. 1</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3513920614</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 27, T1N, R18E</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>SAMSON RESOURCES CO.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>740608</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010731</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-MORROW L</u>	NITROGEN _____ <u>0.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7088</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1650</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>1.038</u>
		SPECIFIC GRAVITY _____ <u>0.585</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	20713	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 88.2
COUNTY	CUSTER	ETHANE 6.9
FIELD	CANUTE N	PROPANE 2.3
WELL NAME	JIMMY DEAN NO. 1-23	N-BUTANE 0.4
API	3503921387	ISOBUTANE 0.4
LOCATION	SEC. 23, T12N, R20W	N-PENTANE 0.1
OWNER	LINN ENERGY, LLC	ISOPENTANE 0.2
COMPLETED	901001	CYCLOPENTANE --
SAMPLED	010709	HEXANES PLUS 0.3
FORMATION	PENN-RED FORK	NITROGEN 0.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	14180	ARGON 0.0
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	8000	HYDROGEN 0.0
OPEN FLOW, MCFD	1410	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 1.0
		HELIUM 0.03
		HEATING VALUE* 1.121
		SPECIFIC GRAVITY 0.643

SAMPLE	21426	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 86.9
COUNTY	ROGER MILLS	ETHANE 6.1
FIELD	CARPENTER	PROPANE 2.1
WELL NAME	HALL 1-2	N-BUTANE 0.6
API	3512922529	ISOBUTANE 0.4
LOCATION	SEC 2, T11N, R23W	N-PENTANE 0.2
OWNER	ST. MARY LAND & EXPLORATION CO.	ISOPENTANE 0.2
COMPLETED	040204	CYCLOPENTANE --
SAMPLED	050311	HEXANES PLUS 0.3
FORMATION	PENN-MARMATON, CHEROKEE	NITROGEN 2.3
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	14348	ARGON 0.2
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	1500	HYDROGEN 0.0
OPEN FLOW, MCFD	400	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.7
		HELIUM 0.03
		HEATING VALUE* 1.102
		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	20712	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 88.3
COUNTY _____	CUSTER	ETHANE _____ 7.0
FIELD _____	CARPENTER NE	PROPANE _____ 2.0
WELL NAME _____	MALSON NO. 1-5	N-BUTANE _____ 0.4
API _____	3503921711	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 5, T12N, R20W	N-PENTANE _____ 0.1
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.1
COMPLETED _____	971002	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-DESMOINESIAN L	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	13304	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	7000	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	3111	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.113
		SPECIFIC GRAVITY _____ 0.64

SAMPLE	20703	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 86.0
COUNTY _____	CUSTER	ETHANE _____ 7.7
FIELD _____	CARPENTER NE	PROPANE _____ 3.1
WELL NAME _____	MOUSE NO. 1-32	N-BUTANE _____ 0.6
API _____	3503920713	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 32, T13N, R19W	N-PENTANE _____ 0.2
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.3
COMPLETED _____	821121	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-RED FORK	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12882	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	5764	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	550	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.151
		SPECIFIC GRAVITY _____ 0.663

* 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	21452	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>90.3</u>
COUNTY _____	<u>GRADY</u>	ETHANE _____ <u>4.1</u>
FIELD _____	<u>CHITWOOD SOUTH</u>	PROPANE _____ <u>1.1</u>
WELL NAME _____	<u>MACK FARMS 1-19</u>	N-BUTANE _____ <u>0.2</u>
API _____	<u>3505123158</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 19, T4N, R6W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>040317</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050509</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>PENN-SPRINGER U</u>	NITROGEN _____ <u>3.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>14930</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>700</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>731</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.027</u>
		SPECIFIC GRAVITY _____ <u>0.611</u>

SAMPLE	21438	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>88.6</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>4.1</u>
FIELD _____	<u>DOMBEY W</u>	PROPANE _____ <u>2.3</u>
WELL NAME _____	<u>ROLLINS 1-2</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3513921118</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC 2, T4N, R19E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>790510</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050329</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>MISS-CHESTER</u>	NITROGEN _____ <u>2.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6660</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>115</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.18</u>
		HEATING VALUE* _____ <u>1.116</u>
		SPECIFIC GRAVITY _____ <u>0.649</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		21437	COMPONENT, MOLE PCT	
STATE	_____	<u>OKLAHOMA</u>	METHANE	_____ <u>87.1</u>
COUNTY	_____	<u>TEXAS</u>	ETHANE	_____ <u>4.4</u>
FIELD	_____	<u>DOMBEY W</u>	PROPANE	_____ <u>2.8</u>
WELL NAME	_____	<u>FLYNT 1-2 (LOWER)</u>	N-BUTANE	_____ <u>1.0</u>
API	_____	<u>3513923732</u>	ISOBUTANE	_____ <u>0.5</u>
LOCATION	_____	<u>SEC 2, T4N, R19E</u>	N-PENTANE	_____ <u>0.4</u>
OWNER	_____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE	_____ <u>0.3</u>
COMPLETED	_____	<u>040203</u>	CYCLOPENTANE	_____ <u>--</u>
SAMPLED	_____	<u>050329</u>	HEXANES PLUS	_____ <u>0.6</u>
FORMATION	_____	<u>MISS-CHESTER</u>	NITROGEN	_____ <u>2.7</u>
GEOLOGIC PROVINCE CODE	_____	<u>360</u>	OXYGEN	_____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	_____	<u>6628</u>	ARGON	_____ <u>0.0</u>
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ <u>---</u>
WELLHEAD PRESSURE, PSIG	_____	<u>78</u>	HYDROGEN	_____ <u>0.0</u>
OPEN FLOW, MCFD	_____		HYDROGEN SULFIDE**	_____ <u>0.0</u>
			CARBON DIOXIDE	_____ <u>0.2</u>
			HELIUM	_____ <u>0.19</u>
			HEATING VALUE*	_____ <u>1.129</u>
			SPECIFIC GRAVITY	_____ <u>0.662</u>

SAMPLE		21435	COMPONENT, MOLE PCT	
STATE	_____	<u>OKLAHOMA</u>	METHANE	_____ <u>86.3</u>
COUNTY	_____	<u>TEXAS</u>	ETHANE	_____ <u>4.6</u>
FIELD	_____	<u>DOMBEY W</u>	PROPANE	_____ <u>3.1</u>
WELL NAME	_____	<u>MENG 1-11</u>	N-BUTANE	_____ <u>1.1</u>
API	_____	<u>3513923371</u>	ISOBUTANE	_____ <u>0.5</u>
LOCATION	_____	<u>SEC 11, T4N, R19E</u>	N-PENTANE	_____ <u>0.4</u>
OWNER	_____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE	_____ <u>0.3</u>
COMPLETED	_____	<u>011218</u>	CYCLOPENTANE	_____ <u>--</u>
SAMPLED	_____	<u>050329</u>	HEXANES PLUS	_____ <u>0.6</u>
FORMATION	_____	<u>MISS-CHESTER</u>	NITROGEN	_____ <u>2.8</u>
GEOLOGIC PROVINCE CODE	_____	<u>360</u>	OXYGEN	_____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	_____	<u>6646</u>	ARGON	_____ <u>0.0</u>
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ <u>---</u>
WELLHEAD PRESSURE, PSIG	_____	<u>80</u>	HYDROGEN	_____ <u>0.0</u>
OPEN FLOW, MCFD	_____		HYDROGEN SULFIDE**	_____ <u>0.0</u>
			CARBON DIOXIDE	_____ <u>0.2</u>
			HELIUM	_____ <u>0.19</u>
			HEATING VALUE*	_____ <u>1.140</u>
			SPECIFIC GRAVITY	_____ <u>0.669</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	21436	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>81.6</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>5.3</u>
FIELD _____	<u>DOMBEY W</u>	PROPANE _____ <u>3.4</u>
WELL NAME _____	<u>MYERS 1-13</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513922596</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 13, T4N, R19E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>951115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050329</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>MISS-CHESTER, PENN-LANSING-KC</u>	NITROGEN _____ <u>6.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>80</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.26</u>
		HEATING VALUE* _____ <u>1.121</u>
		SPECIFIC GRAVITY _____ <u>0.693</u>

SAMPLE	21439	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>85.5</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>4.8</u>
FIELD _____	<u>DOMBEY W</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>PAUL MENDENHALL 1-11</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3513921225</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 11, T4N, R19E</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>791107</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050329</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-KEYES, MISS-MISSISSIPPIAN</u>	NITROGEN _____ <u>2.5</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6720</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>78</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.19</u>
		HEATING VALUE* _____ <u>1.162</u>
		SPECIFIC GRAVITY _____ <u>0.681</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	21432	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 86.4
COUNTY _____	TEXAS	ETHANE _____ 4.6
FIELD _____	DOMBEY W	PROPANE _____ 3.1
WELL NAME _____	MYERS WD 1-2	N-BUTANE _____ 1.0
API _____	3513921811	ISOBUTANE _____ 0.5
LOCATION _____	SEC 2, T4N, R19E	N-PENTANE _____ 0.4
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	831221	CYCLOPENTANE _____ --
SAMPLED _____	050329	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-MORROW	NITROGEN _____ 2.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	6555	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	80	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.19
		HEATING VALUE* _____ 1.137
		SPECIFIC GRAVITY _____ 0.667

SAMPLE	21433	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 76.0
COUNTY _____	TEXAS	ETHANE _____ 6.2
FIELD _____	DOMBEY W	PROPANE _____ 3.3
WELL NAME _____	FLYNT 1-2 (UPPER)	N-BUTANE _____ 1.1
API _____	3513923732	ISOBUTANE _____ 0.5
LOCATION _____	SEC 2, T4N, R19E	N-PENTANE _____ 0.4
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	040203	CYCLOPENTANE _____ --
SAMPLED _____	050329	HEXANES PLUS _____ 0.6
FORMATION _____	PENN-TORONTO	NITROGEN _____ 11.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4457	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	123	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.33
		HEATING VALUE* _____ 1.065
		SPECIFIC GRAVITY _____ 0.711

* 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	20738	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>78.2</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>8.3</u>
FIELD _____	<u>GOODWELL SE</u>	PROPANE _____ <u>4.3</u>
WELL NAME _____	<u>MITCHELL NO. 35-1</u>	N-BUTANE _____ <u>1.5</u>
API _____	<u>3513922108</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35, T1N, R12E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>860628</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010730</u>	HEXANES PLUS _____ <u>0.6</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>5.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6785</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1500</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>4650</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.22</u>
		HEATING VALUE* _____ <u>1,174</u>
		SPECIFIC GRAVITY _____ <u>0.718</u>

SAMPLE	20886	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>74.3</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.6</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>HAZE NO. 1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513900463</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 35, T1N, R13E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>440810</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>12.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2930</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____	<u>2930</u>	ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.44</u>
		HEATING VALUE* _____ <u>1,048</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	20885	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>73.4</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.4</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.6</u>
WELL NAME _____	<u>JAKE NO. 1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513900467</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 33, T1N, R13E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>460402</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2930</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____	<u>2971</u>	ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.46</u>
		HEATING VALUE* _____ <u>1.027</u>
		SPECIFIC GRAVITY _____ <u>0.713</u>
SAMPLE	20884	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>73.7</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.5</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.7</u>
WELL NAME _____	<u>RIFFE NO. B-1</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513901785</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC. 32, T1N, R13E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>480109</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>13.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2932</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____	<u>2975</u>	ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.47</u>
		HEATING VALUE* _____ <u>1.037</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	20888	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	70.0
COUNTY	TEXAS	ETHANE	6.4
FIELD	GUYMON-HUGOTON	PROPANE	3.8
WELL NAME	ORV NO. 2	N-BUTANE	1.1
API	3513921307	ISOBUTANE	0.5
LOCATION	SEC. 31, T2N, R12E	N-PENTANE	0.3
OWNER	CONOCOPHILLIPS CO.	ISOPENTANE	0.2
COMPLETED	800520	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	16.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2695	ARGON	0.1
MEASURED DEPTH	2906	ARGON + OXYGEN	---
WELLHEAD PRESSURE, PSIG		HYDROGEN	0.0
OPEN FLOW, MCFD	43	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	0.1
		HELIUM	0.61
		HEATING VALUE*	997
		SPECIFIC GRAVITY	0.727
SAMPLE	20890	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	65.5
COUNTY	TEXAS	ETHANE	5.8
FIELD	GUYMON-HUGOTON	PROPANE	3.7
WELL NAME	STONEBRAKER NO. AA-1	N-BUTANE	1.1
API	3513900683	ISOBUTANE	0.5
LOCATION	SEC. 10, T2N, R12E	N-PENTANE	0.3
OWNER	OXY USA, INC.	ISOPENTANE	0.2
COMPLETED	521128	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	21.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2708	ARGON	0.1
MEASURED DEPTH		ARGON + OXYGEN	---
WELLHEAD PRESSURE, PSIG		HYDROGEN	0.0
OPEN FLOW, MCFD	15800	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	0.1
		HELIUM	0.68
		HEATING VALUE*	944
		SPECIFIC GRAVITY	0.746

* 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	20889	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>64.7</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>STONEBRAKER NO. Y-1</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3513900092</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 9, T2N, R12E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>530201</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>22.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2664</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>--</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>26600</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.73</u>
		HEATING VALUE* _____ <u>938</u>
		SPECIFIC GRAVITY _____ <u>0.75</u>

SAMPLE	20881	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>68.0</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>6.2</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>BERGNER NO. 1-B</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3513901879</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 33, T1N, R11E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>550531</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>18.6</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2763</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>--</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>9225</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.79</u>
		HEATING VALUE* _____ <u>982</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	20880	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	66.4
COUNTY	TEXAS	ETHANE	6.1
FIELD	GUYMON-HUGOTON	PROPANE	3.9
WELL NAME	BERGNER NO. 1	N-BUTANE	1.2
API	3513900527	ISOBUTANE	0.5
LOCATION	SEC. 32, T1N, R11E	N-PENTANE	0.3
OWNER	CONOCOPHILLIPS CO.	ISOPENTANE	0.2
COMPLETED	541014	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	20.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2720	ARGON	0.1
MEASURED DEPTH	2837	ARGON + OXYGEN	---
WELLHEAD PRESSURE, PSIG		HYDROGEN	0.0
OPEN FLOW, MCFD	2162	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	0.1
		HELIUM	0.93
		HEATING VALUE*	966
		SPECIFIC GRAVITY	0.743
SAMPLE	20675	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	59.6
COUNTY	TEXAS	ETHANE	5.5
FIELD	GUYMON-HUGOTON	PROPANE	3.8
WELL NAME	STONEBRAKER NO. W-1	N-BUTANE	1.2
API	3513900888	ISOBUTANE	0.5
LOCATION	SEC. 30, T3N, R12E	N-PENTANE	0.3
OWNER	OXY USA, INC.	ISOPENTANE	0.2
COMPLETED	521113	CYCLOPENTANE	--
SAMPLED	010511	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	27.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2656	ARGON	0.1
MEASURED DEPTH		ARGON + OXYGEN	---
WELLHEAD PRESSURE, PSIG	393	HYDROGEN	0.0
OPEN FLOW, MCFD	6400	HYDROGEN SULFIDE**	0.0
		CARBON DIOXIDE	0.1
		HELIUM	1.06
		HEATING VALUE*	878
		SPECIFIC GRAVITY	0.766

* 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	20877	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>59.3</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>5.4</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.9</u>
WELL NAME _____	<u>CLARK NO. 1</u>	N-BUTANE _____ <u>1.3</u>
API _____	<u>3513921191</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 36 T1N R10E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>FIRST NATIONAL OIL, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>800122</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-CHASE GROUP</u>	NITROGEN _____ <u>26.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>2630</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>154</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.4</u>
		HELIUM _____ <u>1.46</u>
		HEATING VALUE* _____ <u>887</u>
		SPECIFIC GRAVITY _____ <u>0.77</u>
<hr/>		
SAMPLE	20891	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>58.9</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>4.7</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>3.8</u>
WELL NAME _____	<u>STONEBRAKER NO. M-2</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3513920812</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 1 T2N R12E</u>	N-PENTANE _____ <u>0.3</u>
OWNER _____	<u>OXY USA, INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>760119</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PERM-COUNCIL GROVE</u>	NITROGEN _____ <u>28.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3020</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>360</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.73</u>
		HEATING VALUE* _____ <u>877</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	20887	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>89.2</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>5.6</u>
FIELD _____	<u>GUYMON-HUGOTON</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>CECIL NO. 1-32</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3513922503</u>	ISOBUTANE _____ <u>0.2</u>
LOCATION _____	<u>SEC. 32, T2N, R12E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>CABOT OIL & GAS CORP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>940418</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>011030</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>1.2</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6149</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>288</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1337</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>1.113</u>
		SPECIFIC GRAVITY _____ <u>0.636</u>

SAMPLE	20704	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>84.7</u>
COUNTY _____	<u>CUSTER</u>	ETHANE _____ <u>8.8</u>
FIELD _____	<u>HAMMON E</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>USA WOLLMAN NO. 1-18</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3503921025</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 18, T13N, R19W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>EL PASO PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>840726</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010709</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-RED FORK</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>12952</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>6704</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>824</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.163</u>
		SPECIFIC GRAVITY _____ <u>0.671</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	20706	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 85.5
COUNTY _____	CUSTER	ETHANE _____ 8.0
FIELD _____	HAMMON E	PROPANE _____ 3.0
WELL NAME _____	LONG NO. 1-2	N-BUTANE _____ 0.7
API _____	3503920739	ISOBUTANE _____ 0.5
LOCATION _____	SEC. 2, T13N, R20W	N-PENTANE _____ 0.2
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.3
COMPLETED _____	820603	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-RED FORK	NITROGEN _____ 0.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	12662	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	5134	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	815	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.160
		SPECIFIC GRAVITY _____ 0.67

SAMPLE	21430	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 88.7
COUNTY _____	CADDO	ETHANE _____ 3.5
FIELD _____	LOOKEBA E	PROPANE _____ 0.8
WELL NAME _____	HAMPTON 1-1	N-BUTANE _____ 0.1
API _____	3501522744	ISOBUTANE _____ 0.1
LOCATION _____	SEC 1, T11N, R11W	N-PENTANE _____ TRACE
OWNER _____	CHESAPEAKE OPERATING, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	040327	CYCLOPENTANE _____ --
SAMPLED _____	050401	HEXANES PLUS _____ TRACE
FORMATION _____	PENN-MORROW	NITROGEN _____ 5.3
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.5
TRUE VERTICAL DEPTH (FT) _____	12558	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	1000	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	500	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.9
		HELIUM _____ 0.00
		HEATING VALUE* _____ 991
		SPECIFIC GRAVITY _____ 0.617

* 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	21451	COMPONENT, MOLE PCT
STATE	<u>OKLAHOMA</u>	METHANE <u>82.1</u>
COUNTY	<u>STEPHENS</u>	ETHANE <u>6.8</u>
FIELD	<u>MARLOW DISTRICT</u>	PROPANE <u>3.6</u>
WELL NAME	<u>YOUNG 2-13</u>	N-BUTANE <u>1.2</u>
API	<u>3513725998</u>	ISOBUTANE <u>0.6</u>
LOCATION	<u>SEC 13, T2N, R8W</u>	N-PENTANE <u>0.4</u>
OWNER	<u>CHESAPEAKE OPERATING, INC.</u>	ISOPENTANE <u>0.3</u>
COMPLETED	<u>040411</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>050509</u>	HEXANES PLUS <u>0.5</u>
FORMATION	<u>PENN-HOXBAR L, DEESE</u>	NITROGEN <u>4.1</u>
GEOLOGIC PROVINCE CODE	<u>350</u>	OXYGEN <u>--</u>
TRUE VERTICAL DEPTH (FT)	<u>13716</u>	ARGON <u>--</u>
MEASURED DEPTH	<u> </u>	ARGON + OXYGEN <u>0.1</u>
WELLHEAD PRESSURE, PSIG	<u>1000</u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>2485</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>0.3</u>
		HELIUM <u>0.02</u>
		HEATING VALUE* <u>1.150</u>
		SPECIFIC GRAVITY <u>0.693</u>
SAMPLE	21444	COMPONENT, MOLE PCT
STATE	<u>OKLAHOMA</u>	METHANE <u>92.3</u>
COUNTY	<u>GRADY</u>	ETHANE <u>2.8</u>
FIELD	<u>MINCO E</u>	PROPANE <u>1.0</u>
WELL NAME	<u>ELAINE 1-18</u>	N-BUTANE <u>0.3</u>
API	<u>3505121826</u>	ISOBUTANE <u>0.1</u>
LOCATION	<u>SEC 18, T10N, R6W</u>	N-PENTANE <u>0.1</u>
OWNER	<u>OKLAND OIL CO.</u>	ISOPENTANE <u>0.1</u>
COMPLETED	<u>040412</u>	CYCLOPENTANE <u>--</u>
SAMPLED	<u>050407</u>	HEXANES PLUS <u>0.2</u>
FORMATION	<u>PENN-COTTAGE GROVE</u>	NITROGEN <u>2.6</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN <u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8348</u>	ARGON <u>0.0</u>
MEASURED DEPTH	<u> </u>	ARGON + OXYGEN <u>---</u>
WELLHEAD PRESSURE, PSIG	<u>1320</u>	HYDROGEN <u>0.0</u>
OPEN FLOW, MCFD	<u>976</u>	HYDROGEN SULFIDE** <u>0.0</u>
		CARBON DIOXIDE <u>0.3</u>
		HELIUM <u>0.07</u>
		HEATING VALUE* <u>1.043</u>
		SPECIFIC GRAVITY <u>0.606</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	21431	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>84.4</u>
COUNTY _____	<u>BEAVER</u>	ETHANE _____ <u>6.8</u>
FIELD _____	<u>MOCANE-LAVERNE GAS AREA</u>	PROPANE _____ <u>4.2</u>
WELL NAME _____	<u>ALEXANDER 1-21</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>3500720144</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC 21, T2N, R27E</u>	N-PENTANE _____ <u>0.5</u>
OWNER _____	<u>CHAPARRAL ENERGY LLC</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>670513</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050329</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>0.7</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>7908</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>146</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1,202</u>
		SPECIFIC GRAVITY _____ <u>0.693</u>
<hr/>		
SAMPLE	20709	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>79.7</u>
COUNTY _____	<u>CUSTER</u>	ETHANE _____ <u>10.5</u>
FIELD _____	<u>MOOREWOOD NE</u>	PROPANE _____ <u>5.0</u>
WELL NAME _____	<u>KENNY NO. 3</u>	N-BUTANE _____ <u>1.4</u>
API _____	<u>3503921166</u>	ISOBUTANE _____ <u>0.6</u>
LOCATION _____	<u>SEC. 15, T15N, R20W</u>	N-PENTANE _____ <u>0.4</u>
OWNER _____	<u>EL PASO PRODUCTION CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>851029</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010709</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-CHEROKEE</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11252</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>5292</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>1750</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.0</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1,246</u>
		SPECIFIC GRAVITY _____ <u>0.723</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	20711	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 79.8
COUNTY _____	CUSTER	ETHANE _____ 10.5
FIELD _____	MOOREWOOD NE	PROPANE _____ 5.1
WELL NAME _____	HUTCHESON NO. 22-1	N-BUTANE _____ 1.4
API _____	3503921131	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 22, T15N, R20W	N-PENTANE _____ 0.4
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.4
COMPLETED _____	850129	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-PRUE	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11275	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	2097	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	2504	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.0
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.243
		SPECIFIC GRAVITY _____ 0.721

SAMPLE	20710	COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 80.0
COUNTY _____	CUSTER	ETHANE _____ 10.4
FIELD _____	MOOREWOOD NE	PROPANE _____ 5.1
WELL NAME _____	HUTCHESON NO. 22-4	N-BUTANE _____ 1.4
API _____	3503921733	ISOBUTANE _____ 0.6
LOCATION _____	SEC. 22, T15N, R20W	N-PENTANE _____ 0.3
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.3
COMPLETED _____	980130	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-RED FORK	NITROGEN _____ 0.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11224	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	2650	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1000	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.9
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.239
		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 20708		COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 78.0
COUNTY _____	CUSTER	ETHANE _____ 11.3
FIELD _____	MOOREWOOD NE	PROPANE _____ 6.3
WELL NAME _____	BEESON NO. 1-21	N-BUTANE _____ 1.3
API _____	3503920565	ISOBUTANE _____ 0.8
LOCATION _____	SEC. 21, T15N, R20W	N-PENTANE _____ 0.3
OWNER _____	EL PASO PRODUCTION CO.	ISOPENTANE _____ 0.3
COMPLETED _____	820225	CYCLOPENTANE _____ --
SAMPLED _____	010709	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-SKINNER	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11225	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	3764	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	3047	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.9
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.256
		SPECIFIC GRAVITY _____ 0.729

SAMPLE 20717		COMPONENT, MOLE PCT
STATE _____	OKLAHOMA	METHANE _____ 93.5
COUNTY _____	DEWEY	ETHANE _____ 1.2
FIELD _____	PUTNAM	PROPANE _____ 0.3
WELL NAME _____	SQUIRES NO. 1	N-BUTANE _____ 0.1
API _____	3504321287	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 21, T18N, R17W	N-PENTANE _____ 0.1
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.1
COMPLETED _____	811126	CYCLOPENTANE _____ --
SAMPLED _____	010710	HEXANES PLUS _____ 0.2
FORMATION _____	MISS-MISSISSIPPIAN	NITROGEN _____ 0.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11870	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	3620	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	770	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.6
		HELIUM _____ 0.03
		HEATING VALUE* _____ 996
		SPECIFIC GRAVITY _____ 0.611

* 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	20716	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 86.4
COUNTY	DEWEY	ETHANE 6.2
FIELD	PUTNAM	PROPANE 3.1
WELL NAME	ALLEN ESTATE UNIT NO. 1	N-BUTANE 1.1
API	3504320652	ISOBUTANE 0.5
LOCATION	SEC. 7, T18N, R16W	N-PENTANE 0.3
OWNER	CHAPARRAL ENERGY LLC	ISOPENTANE 0.3
COMPLETED	760714	CYCLOPENTANE --
SAMPLED	010710	HEXANES PLUS 0.5
FORMATION	PENN-MORROW	NITROGEN 0.5
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	9548	ARGON 0.0
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	3387	HYDROGEN 0.0
OPEN FLOW, MCFD	2338	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 1.0
		HELIUM 0.05
		HEATING VALUE* 1.166
		SPECIFIC GRAVITY 0.674

SAMPLE	21058	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 97.0
COUNTY	ROGER MILLS	ETHANE 0.6
FIELD	REYDON	PROPANE TRACE
WELL NAME	PETERSEN NO. 2-17	N-BUTANE TRACE
API	3512921915	ISOBUTANE TRACE
LOCATION	SEC. 17, T13N, R26W	N-PENTANE 0.0
OWNER	BURLINGTON RESOURCES OIL & GAS CO., LP	ISOPENTANE 0.0
COMPLETED	950917	CYCLOPENTANE --
SAMPLED	021029	HEXANES PLUS TRACE
FORMATION	PENN-MORROW	NITROGEN 0.2
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	15641	ARGON 0.0
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	7230	HYDROGEN 0.0
OPEN FLOW, MCFD	1000	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 2.1
		HELIUM 0.02
		HEATING VALUE* 995
		SPECIFIC GRAVITY 0.579

* 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	21421	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>89.1</u>
COUNTY _____	<u>STEPHENS</u>	ETHANE _____ <u>4.2</u>
FIELD _____	<u>STAGE STAND</u>	PROPANE _____ <u>1.9</u>
WELL NAME _____	<u>HIAVATY 2-15A</u>	N-BUTANE _____ <u>0.7</u>
API _____	<u>3513725973</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 15, T1N, R8W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ZINKE & TRUMBO, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>031221</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050301</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CAMO-ARBUCKLE U</u>	NITROGEN _____ <u>2.9</u>
GEOLOGIC PROVINCE CODE _____	<u>350</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8460</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____	<u>8460</u>	ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>2100</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2319</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.2</u>
		HELIUM _____ <u>0.03</u>
		HEATING VALUE* _____ <u>1.087</u>
		SPECIFIC GRAVITY _____ <u>0.636</u>

SAMPLE	21067	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>84.9</u>
COUNTY _____	<u>ROGER MILLS</u>	ETHANE _____ <u>8.0</u>
FIELD _____	<u>STRONG CITY</u>	PROPANE _____ <u>3.3</u>
WELL NAME _____	<u>USA NO. 5-31</u>	N-BUTANE _____ <u>0.8</u>
API _____	<u>3512922320</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 31, T15N, R22W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO., LP</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>010918</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021029</u>	HEXANES PLUS _____ <u>0.5</u>
FORMATION _____	<u>PENN-DESMOINESIAN</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11484</u>	ARGON _____ <u>TRACE</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>4068</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.1</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.168</u>
		SPECIFIC GRAVITY _____ <u>0.676</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	21065	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>89.5</u>
COUNTY _____	<u>ROGER MILLS</u>	ETHANE _____ <u>6.0</u>
FIELD _____	<u>STRONG CITY</u>	PROPANE _____ <u>1.7</u>
WELL NAME _____	<u>ROBERTS RANCH NO. 1-18</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3512921523</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T14N, R22W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO., LP</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>900922</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021029</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>PENN-RED FORK</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>12411</u>	ARGON _____ <u>0.1</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>2400</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.095</u>
		SPECIFIC GRAVITY _____ <u>0.634</u>

SAMPLE	21066	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>90.0</u>
COUNTY _____	<u>ROGER MILLS</u>	ETHANE _____ <u>5.8</u>
FIELD _____	<u>STRONG CITY</u>	PROPANE _____ <u>1.6</u>
WELL NAME _____	<u>ROBERTS RANCH NO. 3-18</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>3512921647</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 18, T14N, R22W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>BURLINGTON RESOURCES OIL & GAS CO., LP</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>990714</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021029</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>PENN-RED FORK</u>	NITROGEN _____ <u>0.3</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>12330</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>592</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.04</u>
		HEATING VALUE* _____ <u>1.089</u>
		SPECIFIC GRAVITY _____ <u>0.629</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	21419	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>64.6</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>7.3</u>
FIELD _____	<u>STURGIS E</u>	PROPANE _____ <u>4.1</u>
WELL NAME _____	<u>STATE D5</u>	N-BUTANE _____ <u>1.1</u>
API _____	<u>3513923750</u>	ISOBUTANE _____ <u>0.4</u>
LOCATION _____	<u>SEC.30, T5N, R10E</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>RUPE OIL COMPANY, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>040115</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050215</u>	HEXANES PLUS _____ <u>0.4</u>
FORMATION _____	<u>PENN-ATOKA</u>	NITROGEN _____ <u>20.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3979</u>	ARGON _____ <u>0.4</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>380</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2114</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.1</u>
		HELIUM _____ <u>0.62</u>
		HEATING VALUE* _____ <u>967</u>
		SPECIFIC GRAVITY _____ <u>0.753</u>
<hr/>		
SAMPLE	20739	COMPONENT, MOLE PCT
STATE _____	<u>OKLAHOMA</u>	METHANE _____ <u>77.2</u>
COUNTY _____	<u>TEXAS</u>	ETHANE _____ <u>8.1</u>
FIELD _____	<u>TEXHOMA E</u>	PROPANE _____ <u>4.5</u>
WELL NAME _____	<u>WAUGH NO. 3</u>	N-BUTANE _____ <u>1.6</u>
API _____	<u>3513922416</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC. 31, T1N, R13E</u>	N-PENTANE _____ <u>0.6</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	ISOPENTANE _____ <u>0.4</u>
COMPLETED _____	<u>921201</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>010730</u>	HEXANES PLUS _____ <u>0.7</u>
FORMATION _____	<u>PENN-MORROW</u>	NITROGEN _____ <u>5.8</u>
GEOLOGIC PROVINCE CODE _____	<u>360</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>6763</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>247</u>	HYDROGEN _____ <u>TRACE</u>
OPEN FLOW, MCFD _____	<u>163</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.22</u>
		HEATING VALUE* _____ <u>1,185</u>
		SPECIFIC GRAVITY _____ <u>0.732</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	21526	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 88.8
COUNTY	PECOS	ETHANE 5.7
FIELD	ABELL	PROPANE 2.5
WELL NAME	TENNECO-AARESTAD 1	N-BUTANE 0.8
API	4237135177	ISOBUTANE 0.3
LOCATION	SEC 30, BLK 9, H&GN SUR	N-PENTANE 0.2
OWNER	OLSEN ENERGY, INC.	ISOPENTANE 0.2
COMPLETED	850127	CYCLOPENTANE --
SAMPLED	060406	HEXANES PLUS 0.4
FORMATION	PERM-CLEARFORK	NITROGEN 0.9
GEOLOGIC PROVINCE CODE	430	OXYGEN --
TRUE VERTICAL DEPTH (FT)	3767	ARGON --
MEASURED DEPTH		ARGON + OXYGEN TRACE
WELLHEAD PRESSURE, PSIG	1497	HYDROGEN 0.0
OPEN FLOW, MCFD	1875	HYDROGEN SULFIDE** TRACE
		CARBON DIOXIDE 0.2
		HELIUM 0.03
		HEATING VALUE* 1.131
		SPECIFIC GRAVITY 0.644
SAMPLE	21502	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 83.3
COUNTY	PECOS	ETHANE 6.9
FIELD	ABELL	PROPANE 3.9
WELL NAME	WAGNER 1	N-BUTANE 1.3
API	4237103888	ISOBUTANE 0.4
LOCATION	SEC 23, BLK 9, H&GN SUR	N-PENTANE 0.5
OWNER	JOHN M. CLARK, INC.	ISOPENTANE 0.2
COMPLETED	850207	CYCLOPENTANE --
SAMPLED	050914	HEXANES PLUS 0.7
FORMATION	ORDO-WADDELL	NITROGEN 2.6
GEOLOGIC PROVINCE CODE	430	OXYGEN --
TRUE VERTICAL DEPTH (FT)	5738	ARGON --
MEASURED DEPTH		ARGON + OXYGEN TRACE
WELLHEAD PRESSURE, PSIG	185	HYDROGEN 0.0
OPEN FLOW, MCFD		HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.2
		HELIUM 0.03
		HEATING VALUE* 1.178
		SPECIFIC GRAVITY 0.692

* 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	21519	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 85.8
COUNTY _____	CRANE	ETHANE _____ 6.2
FIELD _____	ABELL E	PROPANE _____ 3.0
WELL NAME _____	TUCKER-A-1U	N-BUTANE _____ 0.9
API _____	4210330503	ISOBUTANE _____ 0.4
LOCATION _____	SEC 21, BLK 1, H&TC SUR	N-PENTANE _____ 0.3
OWNER _____	INCLINE ENERGY	ISOPENTANE _____ 0.2
COMPLETED _____	720126	CYCLOPENTANE _____ --
SAMPLED _____	060308	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-GLORIETA	NITROGEN _____ 2.5
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3317	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	200	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	50	HYDROGEN SULFIDE** _____ TRACE
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.138
		SPECIFIC GRAVITY _____ 0.664

SAMPLE	21496	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 80.4
COUNTY _____	CRANE	ETHANE _____ 4.7
FIELD _____	ABELL NW	PROPANE _____ 2.0
WELL NAME _____	GRISHAM 27-1	N-BUTANE _____ 0.7
API _____	4210334722	ISOBUTANE _____ 0.3
LOCATION _____	SEC 27, BLK 1, H&TC SUR	N-PENTANE _____ 0.2
OWNER _____	EOG RESOURCES, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	000418	CYCLOPENTANE _____ --
SAMPLED _____	050823	HEXANES PLUS _____ 0.4
FORMATION _____	PERM-CLEAR FORK	NITROGEN _____ 10.3
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3400	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	800	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	200	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.013
		SPECIFIC GRAVITY _____ 0.677

* 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	21516	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 75.3
COUNTY _____	WHEELER	ETHANE _____ 3.7
FIELD _____	ALLEN-ENGLER	PROPANE _____ 2.6
WELL NAME _____	PATTERSON 45-8	N-BUTANE _____ 0.7
API _____	4248331619	ISOBUTANE _____ 0.4
LOCATION _____	SEC 45, BLK A5, H&GN SUR	N-PENTANE _____ 0.2
OWNER _____	PABLO ENERGY, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	021002	CYCLOPENTANE _____ --
SAMPLED _____	060201	HEXANES PLUS _____ 0.3
FORMATION _____	PERM-BROWN DOLOMITE	NITROGEN _____ 16.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	4068	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	40	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.51
		HEATING VALUE* _____ 956
		SPECIFIC GRAVITY _____ 0.691

SAMPLE	21504	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 20.5
COUNTY _____	UPTON	ETHANE _____ 22.2
FIELD _____	AMACKER-TIPPETT SW	PROPANE _____ 29.8
WELL NAME _____	HALFF ESTATE 20-5	N-BUTANE _____ 7.0
API _____	4246134181	ISOBUTANE _____ 3.6
LOCATION _____	SEC 20, BLK Y, GC&SF SUR	N-PENTANE _____ 2.8
OWNER _____	EOG RESOURCES, INC.	ISOPENTANE _____ 2.5
COMPLETED _____	011001	CYCLOPENTANE _____ --
SAMPLED _____	051010	HEXANES PLUS _____ 4.0
FORMATION _____	PERM-WOLECAMP	NITROGEN _____ 1.7
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	8750	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	25	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 5.9
		HELIUM _____ 0.01
		HEATING VALUE* _____ 2.102
		SPECIFIC GRAVITY _____ 1.368

* 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	21497	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 73.3
COUNTY _____	UPTON	ETHANE _____ 12.0
FIELD _____	AMACKER-TIPPETT W	PROPANE _____ 6.8
WELL NAME _____	AMACKER V T 64 2	N-BUTANE _____ 2.0
API _____	4246132851	ISOBUTANE _____ 0.7
LOCATION _____	SEC 64, BLK Y, TC RR SUR	N-PENTANE _____ 0.6
OWNER _____	HUNT OIL CO	ISOPENTANE _____ 0.5
COMPLETED _____	050329	CYCLOPENTANE _____ --
SAMPLED _____	050830	HEXANES PLUS _____ 0.9
FORMATION _____	PENN-STRAWN	NITROGEN _____ 3.2
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	10166	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	540	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	400	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1,299
		SPECIFIC GRAVITY _____ 0.772

SAMPLE	21500	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 78.5
COUNTY _____	ECTOR	ETHANE _____ 8.7
FIELD _____	ANDECTOR	PROPANE _____ 4.4
WELL NAME _____	EMBAR 59	N-BUTANE _____ 1.3
API _____	4213535329	ISOBUTANE _____ 0.6
LOCATION _____	SEC 17, BLK 44, T&P SUR	N-PENTANE _____ 0.4
OWNER _____	CONOCOPHILLIPS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	951110	CYCLOPENTANE _____ --
SAMPLED _____	050914	HEXANES PLUS _____ 0.6
FORMATION _____	PERM-GRAYBURG	NITROGEN _____ 4.8
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3854	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	250	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	116	HYDROGEN SULFIDE** _____ 0.1
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1,183
		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	21501	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 76.1
COUNTY _____	ECTOR	ETHANE _____ 8.8
FIELD _____	ANDECTOR	PROPANE _____ 4.6
WELL NAME _____	FRANK B 2	N-BUTANE _____ 1.3
API _____	4213503102	ISOBUTANE _____ 0.5
LOCATION _____	SEC 6, BLK 44, T&P SUR	N-PENTANE _____ 0.3
OWNER _____	CONOCOPHILLIPS CO.	ISOPENTANE _____ 0.2
COMPLETED _____	940906	CYCLOPENTANE _____ --
SAMPLED _____	050914	HEXANES PLUS _____ 0.4
FORMATION _____	ORDO-MCKEE	NITROGEN _____ 7.4
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7840	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.2
WELLHEAD PRESSURE, PSIG _____	300	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	68	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.138
		SPECIFIC GRAVITY _____ 0.719

SAMPLE	21509	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 74.5
COUNTY _____	IRION	ETHANE _____ 11.4
FIELD _____	ANDREW A	PROPANE _____ 5.5
WELL NAME _____	BURNEY 3086 NO. 1	N-BUTANE _____ 1.5
API _____	4223531362	ISOBUTANE _____ 0.7
LOCATION _____	SEC 3086, BLK 28, H&T SUR	N-PENTANE _____ 0.5
OWNER _____	MEADCO PROPERTIES	ISOPENTANE _____ 0.5
COMPLETED _____	790426	CYCLOPENTANE _____ --
SAMPLED _____	051115	HEXANES PLUS _____ 0.8
FORMATION _____	PENN-CANYON	NITROGEN _____ 4.0
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7340	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	300	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	60	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.5
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.247
		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	21528	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 77.6
COUNTY _____	SHERMAN	ETHANE _____ 7.1
FIELD _____	ANVIL	PROPANE _____ 4.1
WELL NAME _____	HANDLIN 3	N-BUTANE _____ 1.5
API _____	4242130731	ISOBUTANE _____ 0.5
LOCATION _____	SEC 84, BLK 1C, GH&H SUR	N-PENTANE _____ 0.6
OWNER _____	CONOCOPHILLIPS CO.	ISOPENTANE _____ 0.4
COMPLETED _____	000127	CYCLOPENTANE _____ --
SAMPLED _____	060525	HEXANES PLUS _____ 0.9
FORMATION _____	PENN-MORROW	NITROGEN _____ 6.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6638	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	161	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.18
		HEATING VALUE* _____ 1.162
		SPECIFIC GRAVITY _____ 0.728

SAMPLE	21530	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 31.3
COUNTY _____	HOWARD	ETHANE _____ 12.6
FIELD _____	BC	PROPANE _____ 24.6
WELL NAME _____	NEWTON 1	N-BUTANE _____ 8.0
API _____	4222734182	ISOBUTANE _____ 4.0
LOCATION _____	SEC 12, BLK 33, T&P SUR	N-PENTANE _____ 5.4
OWNER _____	ENDEAVOR ENERGY RESOURCES, L.P.	ISOPENTANE _____ 4.5
COMPLETED _____	870930	CYCLOPENTANE _____ --
SAMPLED _____	060523	HEXANES PLUS _____ 8.5
FORMATION _____	PENN-CANYON B & C	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	430	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	9050	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.01
		HEATING VALUE* _____ 2.353
		SPECIFIC GRAVITY _____ 1.433

* 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	21675	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 85.7
COUNTY	LIPSCOMB	ETHANE 6.7
FIELD	BROWN	PROPANE 3.4
WELL NAME	BROWN 2-987	N-BUTANE 1.0
API	4229532186	ISOBUTANE 0.4
LOCATION	SEC 987, BLK 43, H&TC SUR	N-PENTANE 0.2
OWNER	BRACKEN OPERATING, LLC	ISOPENTANE 0.2
COMPLETED	940714	CYCLOPENTANE --
SAMPLED	071100	HEXANES PLUS 0.3
FORMATION	PENN-TONKAWA	NITROGEN 1.5
GEOLOGIC PROVINCE CODE	360	OXYGEN --
TRUE VERTICAL DEPTH (FT)	6524	ARGON --
MEASURED DEPTH		ARGON + OXYGEN 0.1
WELLHEAD PRESSURE, PSIG	1015	HYDROGEN 0.0
OPEN FLOW, MCFD	825	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.4
		HELIUM 0.11
		HEATING VALUE* 1.149
		SPECIFIC GRAVITY 0.665

SAMPLE	21510	COMPONENT, MOLE PCT
STATE	TEXAS	METHANE 89.2
COUNTY	CROCKETT	ETHANE 3.3
FIELD	HUNT-BAGGETT	PROPANE 2.5
WELL NAME	BAGGETT E.G. 2402	N-BUTANE 0.8
API	4210536809	ISOBUTANE 0.2
LOCATION	SEC 24, BLK F, GC&SF SUR	N-PENTANE 0.1
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.1
COMPLETED	950323	CYCLOPENTANE --
SAMPLED	051117	HEXANES PLUS 0.2
FORMATION	PERM-CLEAR FORK, PENN-STRAWN	NITROGEN 2.8
GEOLOGIC PROVINCE CODE	430	OXYGEN --
TRUE VERTICAL DEPTH (FT)	9423	ARGON --
MEASURED DEPTH		ARGON + OXYGEN TRACE
WELLHEAD PRESSURE, PSIG	210	HYDROGEN 0.0
OPEN FLOW, MCFD	60	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.8
		HELIUM 0.07
		HEATING VALUE* 1.074
		SPECIFIC GRAVITY 0.636

* 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	21022	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 88.5
COUNTY _____	DENTON	ETHANE _____ 6.6
FIELD _____	NEWARK E	PROPANE _____ 1.7
WELL NAME _____	CLYDE NICHOLSON NO. 2	N-BUTANE _____ 0.4
API _____	4212131183	ISOBUTANE _____ 0.4
LOCATION _____	CARMEL MANCHACA SURVEY	N-PENTANE _____ 0.1
OWNER _____	WAYNE HARPER	ISOPENTANE _____ 0.1
COMPLETED _____	020418	CYCLOPENTANE _____ --
SAMPLED _____	020723	HEXANES PLUS _____ 0.1
FORMATION _____	MISS-BARNETT SHALE	NITROGEN _____ 0.7
GEOLOGIC PROVINCE CODE _____	420	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8508	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	2000	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1300	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.4
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.094
		SPECIFIC GRAVITY _____ 0.636

SAMPLE	21677	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 78.2
COUNTY _____	EASTLAND	ETHANE _____ 10.4
FIELD _____	NORTH RIDGE	PROPANE _____ 3.7
WELL NAME _____	J W BARNES 5	N-BUTANE _____ 0.8
API _____	4213330161	ISOBUTANE _____ 0.3
LOCATION _____	JOHN P ROHUS SUR, A-415	N-PENTANE _____ 0.2
OWNER _____	NORTH RIDGE CORP.	ISOPENTANE _____ 0.1
COMPLETED _____	050131	CYCLOPENTANE _____ --
SAMPLED _____	080201	HEXANES PLUS _____ 0.2
FORMATION _____	PENN-DUFFER	NITROGEN _____ 5.5
GEOLOGIC PROVINCE CODE _____	425	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3830	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	20	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.3
		HELIUM _____ 0.25
		HEATING VALUE* _____ 1.127
		SPECIFIC GRAVITY _____ 0.692

* 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	21423	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 84.6
COUNTY _____	OCHILTREE	ETHANE _____ 7.9
FIELD _____	PAN PETRO	PROPANE _____ 2.5
WELL NAME _____	LESLIE 1-222	N-BUTANE _____ 0.6
API _____	4235732330	ISOBUTANE _____ 0.2
LOCATION _____	SEC 222, BLK 43, H&TC SUR	N-PENTANE _____ 0.2
OWNER _____	COURSON OIL & GAS, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	040427	CYCLOPENTANE _____ --
SAMPLED _____	050302	HEXANES PLUS _____ 0.3
FORMATION _____	PENN-NOVI	NITROGEN _____ 2.9
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8677	ARGON _____ TRACE
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	2150	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1005	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.6
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.111
		SPECIFIC GRAVITY _____ 0.658

SAMPLE	21446	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 54.3
COUNTY _____	COOKE	ETHANE _____ 1.0
FIELD _____	RADIE	PROPANE _____ 0.0
WELL NAME _____	STRAUSS WI-2	N-BUTANE _____ 0.1
API _____	4209733248	ISOBUTANE _____ TRACE
LOCATION _____	N. TREVINO SURVEY, A-1021	N-PENTANE _____ TRACE
OWNER _____	HEP OIL CO., LTD	ISOPENTANE _____ TRACE
COMPLETED _____	951120	CYCLOPENTANE _____ --
SAMPLED _____	050414	HEXANES PLUS _____ TRACE
FORMATION _____	ORDO-ELLENBURGER	NITROGEN _____ 43.9
GEOLOGIC PROVINCE CODE _____	350	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2168	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	575	HYDROGEN _____ 0.2
OPEN FLOW, MCFD _____	1430	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ TRACE
		HELIUM _____ 0.33
		HEATING VALUE* _____ 574
		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	21442	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 56.1
COUNTY _____	SHERMAN	ETHANE _____ 5.1
FIELD _____	TEXAS HUGOTON	PROPANE _____ 4.5
WELL NAME _____	STROTHER 1-74	N-BUTANE _____ 1.4
API _____	4242130064	ISOBUTANE _____ 0.7
LOCATION _____	SEC 74, BLK 1T, T&NO SUR	N-PENTANE _____ 0.4
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	770707	CYCLOPENTANE _____ --
SAMPLED _____	050412	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-HERINGTON	NITROGEN _____ 29.7
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2752	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	13	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.13
		HEATING VALUE* _____ 890
		SPECIFIC GRAVITY _____ 0.797

SAMPLE	21440	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 61.0
COUNTY _____	SHERMAN	ETHANE _____ 5.2
FIELD _____	TEXAS HUGOTON	PROPANE _____ 4.1
WELL NAME _____	ROSS 1-72	N-BUTANE _____ 1.3
API _____	4242130065	ISOBUTANE _____ 0.6
LOCATION _____	SEC 72, BLK 1T, T&NO SUR	N-PENTANE _____ 0.4
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	770709	CYCLOPENTANE _____ --
SAMPLED _____	050412	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-HERINGTON, KRIDER	NITROGEN _____ 25.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2756	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	12	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.08
		HEATING VALUE* _____ 925
		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	21443	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 57.8
COUNTY _____	SHERMAN	ETHANE _____ 5.2
FIELD _____	TEXAS HUGOTON	PROPANE _____ 4.3
WELL NAME _____	BILLINGTON-ETHERIDGE 1-108	N-BUTANE _____ 1.4
API _____	4242130052	ISOBUTANE _____ 0.7
LOCATION _____	SEC 108, BLK 1T, T&NO SUR	N-PENTANE _____ 0.3
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	761218	CYCLOPENTANE _____ --
SAMPLED _____	050412	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-KRIDER	NITROGEN _____ 28.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2725	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	16	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.08
		HEATING VALUE* _____ 896
		SPECIFIC GRAVITY _____ 0.787

SAMPLE	21441	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 59.7
COUNTY _____	SHERMAN	ETHANE _____ 5.1
FIELD _____	TEXAS HUGOTON	PROPANE _____ 4.2
WELL NAME _____	MILES 2-R	N-BUTANE _____ 1.4
API _____	4242130414	ISOBUTANE _____ 0.7
LOCATION _____	SEC 38, BLK 1T, T&NO SUR	N-PENTANE _____ 0.4
OWNER _____	CHAPARRAL ENERGY LLC	ISOPENTANE _____ 0.3
COMPLETED _____	880501	CYCLOPENTANE _____ --
SAMPLED _____	050412	HEXANES PLUS _____ 0.5
FORMATION _____	PERM-KRIDER	NITROGEN _____ 26.4
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	2720	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	10	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 1.20
		HEATING VALUE* _____ 920
		SPECIFIC GRAVITY _____ 0.781

* 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	21424	COMPONENT, MOLE PCT
STATE _____	TEXAS	METHANE _____ 91.9
COUNTY _____	HEMPHILL	ETHANE _____ 3.3
FIELD _____	URSCHEL RANCH	PROPANE _____ 0.6
WELL NAME _____	URSCHEL 1-60	N-BUTANE _____ 0.1
API _____	4221132287	ISOBUTANE _____ 0.1
LOCATION _____	SEC 60, BLK 1, G&M SUR	N-PENTANE _____ TRACE
OWNER _____	BRACKEN OPERATING, LLC	ISOPENTANE _____ 0.1
COMPLETED _____	040123	CYCLOPENTANE _____ --
SAMPLED _____	050309	HEXANES PLUS _____ 0.1
FORMATION _____	PFENN-MORROW	NITROGEN _____ 2.5
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	11634	ARGON _____ 0.1
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	6450	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	2915	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.017
		SPECIFIC GRAVITY _____ 0.605
SAMPLE	21416	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 63.5
COUNTY _____	GRAND	ETHANE _____ 17.1
FIELD _____	BIG FLAT	PROPANE _____ 10.4
WELL NAME _____	KANE SPRINGS FEDERAL 25-19-34-1	N-BUTANE _____ 2.6
API _____	4301931334	ISOBUTANE _____ 1.1
LOCATION _____	SEC. 34, T25S, R19E	N-PENTANE _____ 0.5
OWNER _____	INTREPID OIL & GAS, LLC	ISOPENTANE _____ 0.4
COMPLETED _____	930521	CYCLOPENTANE _____ --
SAMPLED _____	050131	HEXANES PLUS _____ 0.6
FORMATION _____	PFENN-CANE CREEK	NITROGEN _____ 3.6
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	7985	ARGON _____ 0.1
MEASURED DEPTH _____	7985	ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	30	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	328	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.0
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.394
		SPECIFIC GRAVITY _____ 0.838

* 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	21457	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 57.7
COUNTY _____	SAN JUAN	ETHANE _____ 15.9
FIELD _____	CAJON LAKE	PROPANE _____ 7.0
WELL NAME _____	SANDIA FED 9-44	N-BUTANE _____ 0.9
API _____	4303731371	ISOBUTANE _____ 0.4
LOCATION _____	SEC 9, T39S, R26E	N-PENTANE _____ TRACE
OWNER _____	MAX CULLUM	ISOPENTANE _____ 0.1
COMPLETED _____	981015	CYCLOPENTANE _____ --
SAMPLED _____	050519	HEXANES PLUS _____ 0.1
FORMATION _____	PENN-ISMAV	NITROGEN _____ 14.8
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____	6240	ARGON + OXYGEN _____ 2.7
WELLHEAD PRESSURE, PSIG _____	17	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	25	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.096
		SPECIFIC GRAVITY _____ 0.808

SAMPLE	21308	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 82.3
COUNTY _____	DUCHESNE	ETHANE _____ 6.8
FIELD _____	CEDAR RIM	PROPANE _____ 2.7
WELL NAME _____	UTE FEE 2-33C6	N-BUTANE _____ 0.9
API _____	4301331123	ISOBUTANE _____ 0.4
LOCATION _____	SEC 33, T3S, R6W	N-PENTANE _____ 0.3
OWNER _____	EL PASO PRODUCTION OIL & GAS CO.	ISOPENTANE _____ 0.3
COMPLETED _____	851223	CYCLOPENTANE _____ --
SAMPLED _____	040428	HEXANES PLUS _____ 0.7
FORMATION _____	EOCE-WASATCH	NITROGEN _____ 4.5
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	8765	ARGON _____ 0.3
MEASURED DEPTH _____		ARGON + OXYGEN _____ --
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	130	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.121
		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	21505	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 74.9
COUNTY _____	SAN JUAN	ETHANE _____ 11.4
FIELD _____	LITTLE NANCY	PROPANE _____ 5.1
WELL NAME _____	NANCY FEDERAL 3-11	N-BUTANE _____ 1.6
API _____	4303730902	ISOBUTANE _____ 0.7
LOCATION _____	SEC 3, T38S, R25E	N-PENTANE _____ 0.7
OWNER _____	D. J. SIMMONS, INC.	ISOPENTANE _____ 0.6
COMPLETED _____	840506	CYCLOPENTANE _____ --
SAMPLED _____	051025	HEXANES PLUS _____ 1.2
FORMATION _____	PENN-ISMAV	NITROGEN _____ 3.7
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5410	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	520	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	50	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.273
		SPECIFIC GRAVITY _____ 0.762

SAMPLE	21455	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 57.1
COUNTY _____	SAN JUAN	ETHANE _____ 14.3
FIELD _____	MONUMENT	PROPANE _____ 9.8
WELL NAME _____	MONUMENT 8N-2	N-BUTANE _____ 4.3
API _____	4303731509	ISOBUTANE _____ 2.0
LOCATION _____	SEC 8, T40S, R25E	N-PENTANE _____ 1.9
OWNER _____	RIM SOUTHWEST CORP.	ISOPENTANE _____ 1.2
COMPLETED _____	900514	CYCLOPENTANE _____ --
SAMPLED _____	050526	HEXANES PLUS _____ 2.8
FORMATION _____	PENN-ISMAV, DESERT CREEK	NITROGEN _____ 5.9
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6080	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.6
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	22	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.12
		HEATING VALUE* _____ 1.541
		SPECIFIC GRAVITY _____ 0.966

* 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	21555	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 90.2
COUNTY _____	UINTAH	ETHANE _____ 3.8
FIELD _____	PARIETTE BENCH	PROPANE _____ 2.3
WELL NAME _____	PARIETTE BENCH FEDERAL 32-6-9-19	N-BUTANE _____ 0.6
API _____	4304731554	ISOBUTANE _____ 0.4
LOCATION _____	SEC 6, T9S, R19E	N-PENTANE _____ 0.2
OWNER _____	NEWFIELD PRODUCTION CO.	ISOPENTANE _____ 0.2
COMPLETED _____	841219	CYCLOPENTANE _____ --
SAMPLED _____	060620	HEXANES PLUS _____ 0.3
FORMATION _____	EOCE-GREEN RIVER	NITROGEN _____ 1.7
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	5596	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	38	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.03
		HEATING VALUE* _____ 1.102
		SPECIFIC GRAVITY _____ 0.633

SAMPLE	21415	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 52.7
COUNTY _____	GRAND	ETHANE _____ 18.4
FIELD _____	PARK ROAD	PROPANE _____ 13.8
WELL NAME _____	KANE SPRINGS FEDERAL 19-1A	N-BUTANE _____ 4.0
API _____	4301931324	ISOBUTANE _____ 1.5
LOCATION _____	SEC. 19, T26S, R20E	N-PENTANE _____ 0.9
OWNER _____	INTREPID OIL & GAS, LLC	ISOPENTANE _____ 0.7
COMPLETED _____	911113	CYCLOPENTANE _____ --
SAMPLED _____	050131	HEXANES PLUS _____ 1.1
FORMATION _____	PENN-CANE CREEK	NITROGEN _____ 6.6
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9825	ARGON _____ 0.3
MEASURED DEPTH _____	9825	ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____	25	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	25	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.16
		HEATING VALUE* _____ 1.500
		SPECIFIC GRAVITY _____ 0.942

* 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	21649	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 82.3
COUNTY _____	CARBON	ETHANE _____ 5.7
FIELD _____	PETERS POINT	PROPANE _____ 2.0
WELL NAME _____	PETERS POINT UNIT FEDERAL 16-35	N-BUTANE _____ 0.5
API _____	4300730965	ISOBUTANE _____ 0.4
LOCATION _____	SEC 35, T12S, R16E	N-PENTANE _____ 0.1
OWNER _____	BILL BARRETT CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	051213	CYCLOPENTANE _____ --
SAMPLED _____	070803	HEXANES PLUS _____ 0.3
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 7.4
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7673	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.8
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	1862	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.039
		SPECIFIC GRAVITY _____ 0.667
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SAMPLE	21454	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 64.7
COUNTY _____	SAN JUAN	ETHANE _____ 15.3
FIELD _____	RUNWAY	PROPANE _____ 8.3
WELL NAME _____	RUNWAY 10C-5A	N-BUTANE _____ 2.4
API _____	4303731597	ISOBUTANE _____ 1.1
LOCATION _____	SEC 10, T40S, R25E	N-PENTANE _____ 0.8
OWNER _____	RIM SOUTHWEST CORP.	ISOPENTANE _____ 0.6
COMPLETED _____	910318	CYCLOPENTANE _____ --
SAMPLED _____	050525	HEXANES PLUS _____ 1.2
FORMATION _____	PENN-ISMAV, DESERT CREEK	NITROGEN _____ 5.0
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6164	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.3
WELLHEAD PRESSURE, PSIG _____	30	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.365
		SPECIFIC GRAVITY _____ 0.84

* 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	21489	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 83.9
COUNTY _____	UINTAH	ETHANE _____ 6.2
FIELD _____	UTELAND BUTTE	PROPANE _____ 3.0
WELL NAME _____	STATE 1-16-10-18	N-BUTANE _____ 0.9
API _____	4304733807	ISOBUTANE _____ 0.4
LOCATION _____	SEC 16, T10S, R18E	N-PENTANE _____ 0.4
OWNER _____	PENDRAGON ENERGY PARTNERS, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	010511	CYCLOPENTANE _____ --
SAMPLED _____	050619	HEXANES PLUS _____ 0.6
FORMATION _____	EOCE-GREEN RIVER	NITROGEN _____ 4.1
GEOLOGIC PROVINCE CODE _____	575	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.05
		HEATING VALUE* _____ 1.129
		SPECIFIC GRAVITY _____ 0.677

SAMPLE	21448	COMPONENT, MOLE PCT
STATE _____	UTAH	METHANE _____ 76.7
COUNTY _____	SAN JUAN	ETHANE _____ 10.7
FIELD _____	WILD STALLION	PROPANE _____ 4.8
WELL NAME _____	WILD STALLION UNIT 1	N-BUTANE _____ 1.3
API _____	4303731426	ISOBUTANE _____ 0.6
LOCATION _____	SEC 33, T36S, R23E	N-PENTANE _____ 0.4
OWNER _____	D.J. SIMMONS COMPANY	ISOPENTANE _____ 0.3
COMPLETED _____	880812	CYCLOPENTANE _____ --
SAMPLED _____	050428	HEXANES PLUS _____ 0.5
FORMATION _____	PENN-ISMAV	NITROGEN _____ 4.5
GEOLOGIC PROVINCE CODE _____	585	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	6308	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	250	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	65	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.199
		SPECIFIC GRAVITY _____ 0.725

* 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		21591	COMPONENT, MOLE PCT	
STATE	_____	WYOMING	METHANE	_____ 84.3
COUNTY	_____	SWEETWATER	ETHANE	_____ 8.0
FIELD	_____	ARCH	PROPANE	_____ 2.8
WELL NAME	_____	ARCH UNIT 62	N-BUTANE	_____ 0.6
API	_____	4903705590	ISOBUTANE	_____ 0.4
LOCATION	_____	SEC. 15, T19N, R99W	N-PENTANE	_____ 0.3
OWNER	_____	ANADARKO E&P CO., LP.	ISOPENTANE	_____ 0.3
COMPLETED	_____	620902	CYCLOPENTANE	_____ --
SAMPLED	_____	070409	HEXANES PLUS	_____ 0.6
FORMATION	_____	CRET-ALMOND	NITROGEN	_____ 0.2
GEOLOGIC PROVINCE CODE	_____	535	OXYGEN	_____ --
TRUE VERTICAL DEPTH (FT)	_____	4352	ARGON	_____ --
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ TRACE
WELLHEAD PRESSURE, PSIG	_____	300	HYDROGEN	_____ 0.0
OPEN FLOW, MCFD	_____	140	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 2.4
			HELIUM	_____ 0.00
			HEATING VALUE*	_____ 1.151
			SPECIFIC GRAVITY	_____ 0.685

SAMPLE		21498	COMPONENT, MOLE PCT	
STATE	_____	WYOMING	METHANE	_____ 89.9
COUNTY	_____	FREMONT	ETHANE	_____ 4.4
FIELD	_____	BEAVER CREEK	PROPANE	_____ 1.9
WELL NAME	_____	BEAVER CREEK UNIT 196	N-BUTANE	_____ 0.6
API	_____	4901322094	ISOBUTANE	_____ 0.3
LOCATION	_____	SEC. 22, T34N, R96W	N-PENTANE	_____ 0.2
OWNER	_____	DEVON ENERGY PRODUCTION	ISOPENTANE	_____ 0.2
COMPLETED	_____	040313	CYCLOPENTANE	_____ --
SAMPLED	_____	050902	HEXANES PLUS	_____ 0.3
FORMATION	_____	CRET-SHANNON	NITROGEN	_____ 2.1
GEOLOGIC PROVINCE CODE	_____	530	OXYGEN	_____ --
TRUE VERTICAL DEPTH (FT)	_____	5700	ARGON	_____ --
MEASURED DEPTH	_____		ARGON + OXYGEN	_____ 0.1
WELLHEAD PRESSURE, PSIG	_____	325	HYDROGEN	_____ 0.0
OPEN FLOW, MCFD	_____	385	HYDROGEN SULFIDE**	_____ 0.0
			CARBON DIOXIDE	_____ 0.0
			HELIUM	_____ 0.02
			HEATING VALUE*	_____ 1.096
			SPECIFIC GRAVITY	_____ 0.631

* 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	21463	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 80.3
COUNTY _____	SUBLETTE	ETHANE _____ 8.2
FIELD _____	BIG PINEY	PROPANE _____ 4.1
WELL NAME _____	S 72-28	N-BUTANE _____ 0.9
API _____	4903523213	ISOBUTANE _____ 0.5
LOCATION _____	SEC 28, T30N, R113W	N-PENTANE _____ 0.3
OWNER _____	EOG RESOURCES, INC.	ISOPENTANE _____ 0.4
COMPLETED _____	041014	CYCLOPENTANE _____ --
SAMPLED _____	050616	HEXANES PLUS _____ 0.4
FORMATION _____	PALE-TRANSITION ZONE	NITROGEN _____ 3.5
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	3416	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	571	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.10
		HEATING VALUE* _____ 1.151
		SPECIFIC GRAVITY _____ 0.702

SAMPLE	21047	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 89.3
COUNTY _____	LINCOLN	ETHANE _____ 5.7
FIELD _____	BIRD CANYON	PROPANE _____ 2.4
WELL NAME _____	HAUN FEDERAL NO. 20-5	N-BUTANE _____ 0.6
API _____	4902320553	ISOBUTANE _____ 0.4
LOCATION _____	SEC. 5, T26N, R111W	N-PENTANE _____ 0.1
OWNER _____	ENCANA OIL & GAS (USA), INC.	ISOPENTANE _____ 0.2
COMPLETED _____	000821	CYCLOPENTANE _____ --
SAMPLED _____	021010	HEXANES PLUS _____ 0.4
FORMATION _____	CRET-BEAR RIVER & DAKOTA	NITROGEN _____ 0.5
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	9031	ARGON _____ 0.0
MEASURED DEPTH _____		ARGON + OXYGEN _____ ---
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____	184	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.4
		HELIUM _____ 0.04
		HEATING VALUE* _____ 1.129
		SPECIFIC GRAVITY _____ 0.64

* 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	21046	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>84.6</u>
COUNTY _____	<u>SWEETWATER</u>	ETHANE _____ <u>6.9</u>
FIELD _____	<u>BLUE FOREST</u>	PROPANE _____ <u>4.3</u>
WELL NAME _____	<u>FEDERAL NO. 12-4</u>	N-BUTANE _____ <u>1.2</u>
API _____	<u>4903723536</u>	ISOBUTANE _____ <u>0.7</u>
LOCATION _____	<u>SEC. 4, T24N, R110W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>ENCANA OIL & GAS (USA), INC.</u>	ISOPENTANE _____ <u>0.3</u>
COMPLETED _____	<u>950907</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021010</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MUDDY</u>	NITROGEN _____ <u>0.9</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11326</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>183</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.06</u>
		HEATING VALUE* _____ <u>1.183</u>
		SPECIFIC GRAVITY _____ <u>0.683</u>

SAMPLE	21491	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>93.6</u>
COUNTY _____	<u>SWEETWATER</u>	ETHANE _____ <u>1.8</u>
FIELD _____	<u>BRADY</u>	PROPANE _____ <u>0.4</u>
WELL NAME _____	<u>NORTH COOPER RIDGE UNIT 9-4</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>4903725607</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC. 9, T17N, R100W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>ANADARKO E&P CO. LP</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>031012</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>050718</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-ALMOND COAL</u>	NITROGEN _____ <u>2.7</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>3201</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>800</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>211</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.9</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.010</u>
		SPECIFIC GRAVITY _____ <u>0.596</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	21577	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 93.5
COUNTY _____	SWEETWATER	ETHANE _____ 2.5
FIELD _____	CEDAR BREAKS	PROPANE _____ 0.4
WELL NAME _____	CEDAR CHEST UNIT 7-5	N-BUTANE _____ 0.1
API _____	4903724260	ISOBUTANE _____ 0.1
LOCATION _____	SEC 5, T13N, R94W	N-PENTANE _____ TRACE
OWNER _____	EOG RESOURCES, INC.	ISOPENTANE _____ TRACE
COMPLETED _____	000715	CYCLOPENTANE _____ --
SAMPLED _____	061116	HEXANES PLUS _____ TRACE
FORMATION _____	CRET-ALMOND	NITROGEN _____ 0.2
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	12470	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1500	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	5034	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.1
		HELIUM _____ 0.00
		HEATING VALUE* _____ 1.009
		SPECIFIC GRAVITY _____ 0.605
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SAMPLE	21531	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 77.9
COUNTY _____	SWEETWATER	ETHANE _____ 8.8
FIELD _____	FREWEN	PROPANE _____ 5.3
WELL NAME _____	FREWEN UNIT 16	N-BUTANE _____ 1.2
API _____	4903724438	ISOBUTANE _____ 1.3
LOCATION _____	SEC 16, T19N, R94W	N-PENTANE _____ 0.3
OWNER _____	BP AMERICA PRODUCTION CO.	ISOPENTANE _____ 0.4
COMPLETED _____	001214	CYCLOPENTANE _____ --
SAMPLED _____	060530	HEXANES PLUS _____ 0.5
FORMATION _____	CRET-MESAVERDE	NITROGEN _____ 0.6
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	9926	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____	1800	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	180	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.6
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.214
		SPECIFIC GRAVITY _____ 0.748

* 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	21044	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>92.9</u>
COUNTY _____	<u>SWEETWATER</u>	ETHANE _____ <u>4.6</u>
FIELD _____	<u>MESA</u>	PROPANE _____ <u>0.9</u>
WELL NAME _____	<u>MESA FEDERAL NO. 10-30</u>	N-BUTANE _____ <u>0.1</u>
API _____	<u>4903723307</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC. 30, T24N, R110W</u>	N-PENTANE _____ <u>TRACE</u>
OWNER _____	<u>ENCANA OIL & GAS (USA), INC.</u>	ISOPENTANE _____ <u>TRACE</u>
COMPLETED _____	<u>940717</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>021010</u>	HEXANES PLUS _____ <u>0.1</u>
FORMATION _____	<u>CRET-FRONTIER</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>0.0</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10230</u>	ARGON _____ <u>0.0</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>---</u>
WELLHEAD PRESSURE, PSIG _____	<u>1210</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>2815</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.7</u>
		HELIUM _____ <u>0.02</u>
		HEATING VALUE* _____ <u>1.063</u>
		SPECIFIC GRAVITY _____ <u>0.602</u>
SAMPLE	21668	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>84.2</u>
COUNTY _____	<u>LINCOLN</u>	ETHANE _____ <u>9.7</u>
FIELD _____	<u>OPAL</u>	PROPANE _____ <u>3.0</u>
WELL NAME _____	<u>OPAL 4-21</u>	N-BUTANE _____ <u>0.6</u>
API _____	<u>4902305070</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 21, T22N, R112W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>EOG RESOURCES, INC.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>021221</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070913</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-FRONTIER</u>	NITROGEN _____ <u>0.9</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>10749</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>1800</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>150</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.01</u>
		HEATING VALUE* _____ <u>1.156</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	50625	COMPONENT, MOLE PCT
STATE	WYOMING	METHANE 80.0
COUNTY	LINCOLN	ETHANE 11.4
FIELD	OPAL BENCH	PROPANE 4.0
WELL NAME	OPAL BENCH UNIT 27-1	N-BUTANE 0.8
API	4902321358	ISOBUTANE 0.9
LOCATION	SEC 27, T22N, R113W	N-PENTANE 0.2
OWNER	CHEVRON USA, INC.	ISOPENTANE 0.3
COMPLETED	970907	CYCLOPENTANE --
SAMPLED	061200	HEXANES PLUS 0.3
FORMATION	CRET-DAKOTA	NITROGEN 1.2
GEOLOGIC PROVINCE CODE	535	OXYGEN --
TRUE VERTICAL DEPTH (FT)	12132	ARGON --
MEASURED DEPTH		ARGON + OXYGEN ---
WELLHEAD PRESSURE, PSIG	540	HYDROGEN --
OPEN FLOW, MCFD	810	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 0.8
		HELIUM 0.00
		HEATING VALUE* 1.211
		SPECIFIC GRAVITY 0.706

SAMPLE	21609	COMPONENT, MOLE PCT
STATE	WYOMING	METHANE 87.8
COUNTY	PARK	ETHANE 7.2
FIELD	OREGON BASIN SE	PROPANE 1.4
WELL NAME	BADGER CREEK USA 5277 2-24	N-BUTANE 0.3
API	4902921289	ISOBUTANE 0.4
LOCATION	SEC 24, T50N, R100W	N-PENTANE 0.1
OWNER	SAGA PETROLEUM, LLC.	ISOPENTANE 0.1
COMPLETED	840126	CYCLOPENTANE --
SAMPLED	070701	HEXANES PLUS 0.2
FORMATION	CRET-FRONTIER	NITROGEN 1.1
GEOLOGIC PROVINCE CODE	520	OXYGEN --
TRUE VERTICAL DEPTH (FT)	4956	ARGON --
MEASURED DEPTH		ARGON + OXYGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN 0.0
OPEN FLOW, MCFD	120	HYDROGEN SULFIDE** 0.0
		CARBON DIOXIDE 1.3
		HELIUM 0.02
		HEATING VALUE* 1.092
		SPECIFIC GRAVITY 0.639

* 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	21574	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 18.2
COUNTY _____	SUBLETTE	ETHANE _____ TRACE
FIELD _____	RILEY RIDGE UNIT	PROPANE _____ 0.0
WELL NAME _____	RILEY RIDGE FEDERAL 10-14	N-BUTANE _____ 0.0
API _____	4903520603	ISOBUTANE _____ TRACE
LOCATION _____	SEC 10, T29N, R114W	N-PENTANE _____ 0.0
OWNER _____	WOLD OIL PROPERTIES	ISOPENTANE _____ 0.0
COMPLETED _____	810630	CYCLOPENTANE _____ --
SAMPLED _____	061026	HEXANES PLUS _____ TRACE
FORMATION _____	MISS-MADISON	NITROGEN _____ 10.8
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	15337	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	530	HYDROGEN _____ TRACE
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ 4.8
		CARBON DIOXIDE _____ 65.6
		HELIUM _____ 0.48
		HEATING VALUE* _____ 216
		SPECIFIC GRAVITY _____ 1.261

SAMPLE	21576	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 20.2
COUNTY _____	SUBLETTE	ETHANE _____ TRACE
FIELD _____	RILEY RIDGE UNIT	PROPANE _____ 0.0
WELL NAME _____	RILEY RIDGE FEDERAL 8-24 (END OF FLOW)	N-BUTANE _____ 0.0
API _____	4903520537	ISOBUTANE _____ TRACE
LOCATION _____	SEC 8, T29N, R114W	N-PENTANE _____ 0.0
OWNER _____	WOLD OIL PROPERTIES	ISOPENTANE _____ 0.0
COMPLETED _____	800924	CYCLOPENTANE _____ --
SAMPLED _____	060820	HEXANES PLUS _____ TRACE
FORMATION _____	MISS-MADISON	NITROGEN _____ 7.1
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	15120	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.3
OPEN FLOW, MCFD _____	12300	HYDROGEN SULFIDE** _____ 5.2
		CARBON DIOXIDE _____ 66.7
		HELIUM _____ 0.49
		HEATING VALUE* _____ 239
		SPECIFIC GRAVITY _____ 1.257

* 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	21575	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>20.7</u>
COUNTY _____	<u>SUBLETTE</u>	ETHANE _____ <u>TRACE</u>
FIELD _____	<u>RILEY RIDGE UNIT</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>RILEY RIDGE FEDERAL 8-24 (1ST SAMPLE)</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>4903520537</u>	ISOBUTANE _____ <u>TRACE</u>
LOCATION _____	<u>SEC 8, T29N, R114W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>WOLD OIL PROPERTIES</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>800924</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060820</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>MISS-MADISON</u>	NITROGEN _____ <u>7.3</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>15120</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ <u>2.5</u>
OPEN FLOW, MCFD _____	<u>12300</u>	HYDROGEN SULFIDE** _____ <u>0.7</u>
		CARBON DIOXIDE _____ <u>68.3</u>
		HELIUM _____ <u>0.50</u>
		HEATING VALUE* _____ <u>223</u>
		SPECIFIC GRAVITY _____ <u>1.234</u>

SAMPLE	21568	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>17.2</u>
COUNTY _____	<u>SUBLETTE</u>	ETHANE _____ <u>TRACE</u>
FIELD _____	<u>RILEY RIDGE UNIT</u>	PROPANE _____ <u>0.0</u>
WELL NAME _____	<u>RILEY RIDGE FEDERAL 10-14</u>	N-BUTANE _____ <u>0.0</u>
API _____	<u>4903520603</u>	ISOBUTANE _____ <u>0.1</u>
LOCATION _____	<u>SEC 10, T29N, R114W</u>	N-PENTANE _____ <u>0.0</u>
OWNER _____	<u>WOLD OIL PROPERTIES</u>	ISOPENTANE _____ <u>0.0</u>
COMPLETED _____	<u>810630</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>060924</u>	HEXANES PLUS _____ <u>TRACE</u>
FORMATION _____	<u>MISS-MADISON</u>	NITROGEN _____ <u>7.3</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>15762</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>0.1</u>
WELLHEAD PRESSURE, PSIG _____	<u>660</u>	HYDROGEN _____ <u>0.2</u>
OPEN FLOW, MCFD _____		HYDROGEN SULFIDE** _____ <u>1.3</u>
		CARBON DIOXIDE _____ <u>73.3</u>
		HELIUM _____ <u>0.53</u>
		HEATING VALUE* _____ <u>188</u>
		SPECIFIC GRAVITY _____ <u>1.3</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	21629	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>88.3</u>
COUNTY _____	<u>CARBON</u>	ETHANE _____ <u>5.6</u>
FIELD _____	<u>ROBBERS GULCH</u>	PROPANE _____ <u>1.4</u>
WELL NAME _____	<u>HANGOUT RIDGE 5-25-14-93</u>	N-BUTANE _____ <u>0.3</u>
API _____	<u>4900722633</u>	ISOBUTANE _____ <u>0.3</u>
LOCATION _____	<u>SEC 25, T14N, R93W</u>	N-PENTANE _____ <u>0.1</u>
OWNER _____	<u>DEVON ENERGY PRODUCTION CO., LP.</u>	ISOPENTANE _____ <u>0.1</u>
COMPLETED _____	<u>051122</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.2</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>0.4</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>11048</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>800</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>1050</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>3.3</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.065</u>
		SPECIFIC GRAVITY _____ <u>0.646</u>

SAMPLE	21636	COMPONENT, MOLE PCT
STATE _____	<u>WYOMING</u>	METHANE _____ <u>83.2</u>
COUNTY _____	<u>CARBON</u>	ETHANE _____ <u>6.1</u>
FIELD _____	<u>ROBBERS GULCH</u>	PROPANE _____ <u>2.1</u>
WELL NAME _____	<u>ROBBERS GULCH 5-23-14-92</u>	N-BUTANE _____ <u>0.5</u>
API _____	<u>4900722348</u>	ISOBUTANE _____ <u>0.5</u>
LOCATION _____	<u>SEC 23, T14N, R92W</u>	N-PENTANE _____ <u>0.2</u>
OWNER _____	<u>DEVON ENERGY PRODUCTION CO., LP.</u>	ISOPENTANE _____ <u>0.2</u>
COMPLETED _____	<u>031003</u>	CYCLOPENTANE _____ <u>--</u>
SAMPLED _____	<u>070717</u>	HEXANES PLUS _____ <u>0.3</u>
FORMATION _____	<u>CRET-MESAVERDE</u>	NITROGEN _____ <u>4.0</u>
GEOLOGIC PROVINCE CODE _____	<u>535</u>	OXYGEN _____ <u>--</u>
TRUE VERTICAL DEPTH (FT) _____	<u>8818</u>	ARGON _____ <u>--</u>
MEASURED DEPTH _____		ARGON + OXYGEN _____ <u>TRACE</u>
WELLHEAD PRESSURE, PSIG _____	<u>650</u>	HYDROGEN _____ <u>0.0</u>
OPEN FLOW, MCFD _____	<u>360</u>	HYDROGEN SULFIDE** _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>2.9</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>1.064</u>
		SPECIFIC GRAVITY _____ <u>0.677</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	21610	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 88.8
COUNTY _____	LINCOLN	ETHANE _____ 5.9
FIELD _____	ROCKING CHAIR	PROPANE _____ 2.2
WELL NAME _____	HYRUM DITCH 11X-26	N-BUTANE _____ 0.5
API _____	4902320342	ISOBUTANE _____ 0.4
LOCATION _____	SEC 26, T26N, R113W	N-PENTANE _____ 0.1
OWNER _____	XTO ENERGY, INC.	ISOPENTANE _____ 0.2
COMPLETED _____	791127	CYCLOPENTANE _____ --
SAMPLED _____	070710	HEXANES PLUS _____ 0.2
FORMATION _____	CRET-FRONTIER U 1 & 2	NITROGEN _____ 1.3
GEOLOGIC PROVINCE CODE _____	535	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	7971	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____	900	HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	62	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.02
		HEATING VALUE* _____ 1.112
		SPECIFIC GRAVITY _____ 0.637

SAMPLE	21529	COMPONENT, MOLE PCT
STATE _____	WYOMING	METHANE _____ 94.7
COUNTY _____	CAMPBELL	ETHANE _____ TRACE
FIELD _____	WAGENSEN	PROPANE _____ 0.0
WELL NAME _____	EAGLE 31-30 (FIELD COMPOSITE)	N-BUTANE _____ 0.0
API _____	4900539756	ISOBUTANE _____ 0.0
LOCATION _____	SEC 30, T46N, R71W	N-PENTANE _____ 0.0
OWNER _____	DUNCAN OIL, INC.	ISOPENTANE _____ 0.0
COMPLETED _____	000605	CYCLOPENTANE _____ --
SAMPLED _____	060523	HEXANES PLUS _____ 0.0
FORMATION _____	PALE-WYODAK COAL	NITROGEN _____ 1.4
GEOLOGIC PROVINCE CODE _____	515	OXYGEN _____ --
TRUE VERTICAL DEPTH (FT) _____	388	ARGON _____ --
MEASURED DEPTH _____		ARGON + OXYGEN _____ 0.1
WELLHEAD PRESSURE, PSIG _____		HYDROGEN _____ 0.0
OPEN FLOW, MCFD _____	19	HYDROGEN SULFIDE** _____ 0.0
		CARBON DIOXIDE _____ 3.9
		HELIUM _____ 0.00
		HEATING VALUE* _____ 959
		SPECIFIC GRAVITY _____ 0.598

* 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

Samples from Natural Gas Pipelines
in the United States

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21123	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>85.4</u>
COUNTY _____	<u>SAN JUAN</u>	ETHANE _____ <u>7.1</u>
FIELD _____		PROPANE _____ <u>3.3</u>
PLANT _____	<u>SAN JUAN GAS PLANT</u>	N-BUTANE _____ <u>0.9</u>
LOCATION _____	<u>TOTAL INLET-SAN JUAN</u>	ISOBUTANE _____ <u>0.6</u>
OWNER _____	<u>CONOCOPHILLIPS CO.</u>	N-PENTANE _____ <u>0.2</u>
SAMPLED _____	<u>021204</u>	ISOPENTANE _____ <u>0.3</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	HEXANES PLUS _____ <u>0.4</u>
PRESSURE, PSIG _____	<u>888</u>	NITROGEN _____ <u>0.3</u>
FLOW, MCFD _____	<u>522000</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.0</u>
		ARGON + OXYGEN _____ <u>---</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.4</u>
		HELIUM _____ <u>0.05</u>
		HEATING VALUE* _____ <u>1,162</u>
		SPECIFIC GRAVITY _____ <u>0.676</u>

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

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