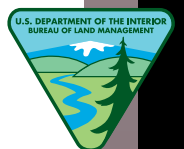
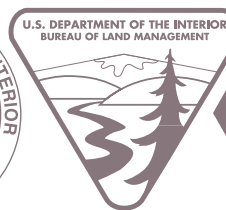
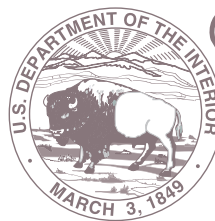


Technical Note 418

Analyses of Natural Gases, 2002–2004

**By B. D. Gage and D.L. Driskill
December 2005**

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



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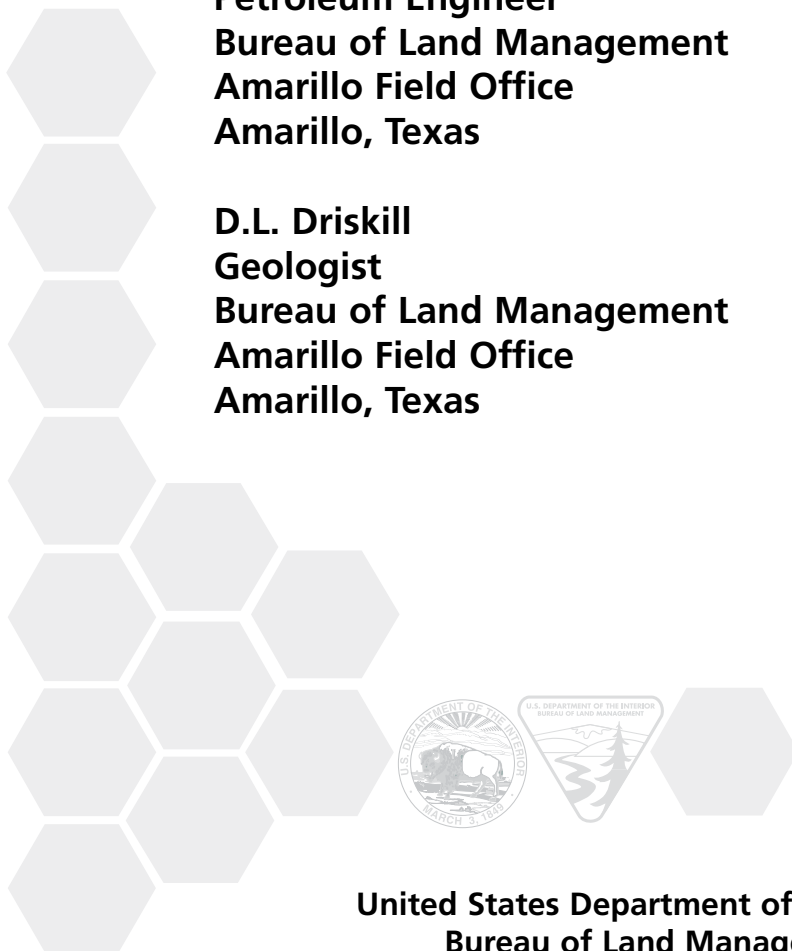
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Abstract

Technical Note 418 contains analyses and related source data for 451 natural gas samples from 15 States. Of the total samples, 381 were collected during calendar years 2002 through 2004. 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 418, *Analyses of Natural Gases, 2002–2004*, contains analyses and related source data for 451 natural gas samples from 15 States. Of the total samples, 381 were collected during calendar years 2002 through 2004. The remaining 70 were collected earlier, but releases granting permission to publish them were received at a later date. None of these analyses have been published previously in other analyses reports.

The analyses were 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-three publications have presented the results of 16,369 gas analyses performed through 2001. 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, 38–43) containing 11,151 analyses of samples collected since 1960.

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

Three other compilations of analyses have been published (25, 31, 37) by the USBM. The first of these was published in 1982 and contained analyses performed prior to 1981. The 1982 publication contains 12,554 analyses of gas samples from gas and oil wells and natural gas pipelines in 39 States and 24 foreign countries and includes the analyses from the 1976 publication (25). The second of these compilations was published in 1987 and contains 14,242 analyses performed prior to 1986. The samples were taken from gas and oil wells and natural gas pipelines in 40 States and 24 foreign countries (31). In 1991, a compilation of analyses was completed as a supplement to the 1987 publication and contains all analyses published from 1986 through 1990. The 1991 publication

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

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 2001 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 PB2004-500040. The update to this CD-ROM, which will include the 2002–2004 analyses, should be available

for purchase around the time this report is published.

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

Tables

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

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

Source	Number of Samples	Table(s)	Source	Number of Samples	Table(s)
Alabama	1	1	North Dakota	1	1
Arkansas	1	1	Oklahoma	24	1
California	13	1	Pennsylvania	6	1
Colorado	122	1,2	Texas	14	1
Kansas	116	1	Utah	60	1
Louisiana	2	1	West Virginia	5	1
Mississippi	3	1	Wyoming	31	1
New Mexico	52	1,2			

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

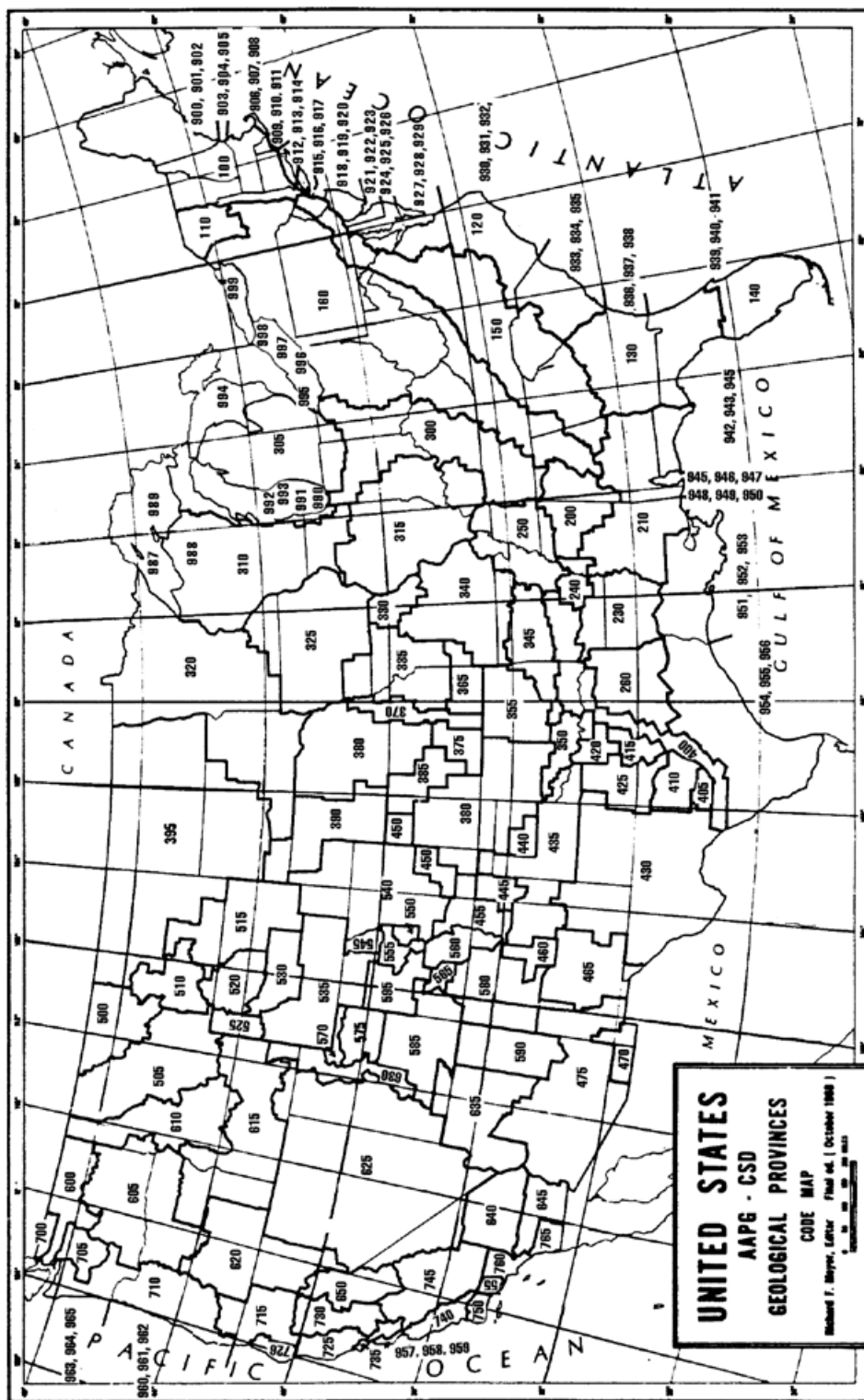


Figure 1. Geologic Provinces of the United States.

T a b l e 1

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

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

SAMPLE	21330	COMPONENT, MOLE PCT	
STATE	ALABAMA	METHANE	98.0
COUNTY	TUSCALOOSA	ETHANE	TRACE
FIELD	CEDAR COVE COAL DEGAS	PROPANE	0.0
WELL NAME	GSPC-02-22-08-08-12-2873	N-BUTANE	0.0
API	0112524212	ISOBUTANE	0.0
LOCATION	SEC 8, T22S, R8W	N-PENTANE	0.0
OWNER	ENERGEN RESOURCES CORP.	ISOPENTANE	0.0
COMPLETED	021216	CYCLOPENTANE	--
SAMPLED	040614	HEXANES PLUS	0.0
FORMATION	PENN-POTTSVILLE COAL	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	200	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2863	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	220	CARBON DIOXIDE	0.2
		HELIUM	0.01
		HEATING VALUE*	993
		SPECIFIC GRAVITY	0.563

SAMPLE	20920	COMPONENT, MOLE PCT	
STATE	ARKANSAS	METHANE	97.8
COUNTY	SEBASTIAN	ETHANE	1.4
FIELD	BOONEVILLE	PROPANE	0.1
WELL NAME	STINEBUCK WILLIAMS NO. 1	N-BUTANE	0.0
API	0313110872	ISOBUTANE	0.0
LOCATION	SEC. 13, T6N, R29W	N-PENTANE	0.0
OWNER	HOUSTON EXPLORATION CO.	ISOPENTANE	0.0
COMPLETED	001018	CYCLOPENTANE	--
SAMPLED	020219	HEXANES PLUS	0.0
FORMATION	PENN-BASHAM	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	345	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2162	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.2
WELLHEAD PRESSURE, PSIG	170	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	110	CARBON DIOXIDE	0.1
		HELIUM	0.05
		HEATING VALUE*	1,017
		SPECIFIC GRAVITY	0.563

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

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

SAMPLE	21142	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	90.5
COUNTY	GLENN	ETHANE	0.2
FIELD	AFTON	PROPANE	0.0
WELL NAME	LANAI NO. 3-3	N-BUTANE	0.0
API	0402120734	ISOBUTANE	0.0
LOCATION	SEC. 3, T18N, R1W	N-PENTANE	0.0
OWNER	ROYALE ENERGY, INC.	ISOPENTANE	0.0
COMPLETED	000615	CYCLOPENTANE	--
SAMPLED	030418	HEXANES PLUS	0.0
FORMATION	CRET-FORBES	NITROGEN	9.3
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6106	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	650	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	TRACE
		HELIUM	TRACE
		HEATING VALUE*	919
		SPECIFIC GRAVITY	0.593

SAMPLE	21141	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	76.5
COUNTY	GLENN	ETHANE	0.0
FIELD	AFTON	PROPANE	0.0
WELL NAME	ANACAPA NO. 3-4	N-BUTANE	0.0
API	0402120815	ISOBUTANE	0.0
LOCATION	SEC. 3, T18N, R1W	N-PENTANE	0.0
OWNER	ROYALE ENERGY, INC.	ISOPENTANE	0.0
COMPLETED	021201	CYCLOPENTANE	--
SAMPLED	030418	HEXANES PLUS	0.0
FORMATION	CRET-KIONE	NITROGEN	23.3
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2760	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1050	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.01
		HEATING VALUE*	774
		SPECIFIC GRAVITY	0.652

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

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

SAMPLE	21386	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	86.6
COUNTY	MADERA	ETHANE	0.3
FIELD	ASH SLOUGH	PROPANE	0.1
WELL NAME	RODUNER NO. 1-32	N-BUTANE	TRACE
API	0403920078	ISOBUTANE	TRACE
LOCATION	SEC. 32, T10S, R14E	N-PENTANE	TRACE
OWNER	VERN JONES OIL & GAS CORP.	ISOPENTANE	TRACE
COMPLETED	950818	CYCLOPENTANE	--
SAMPLED	040800	HEXANES PLUS	TRACE
FORMATION	CRET-BLEWETT	NITROGEN	12.9
GEOLOGIC PROVINCE CODE	745	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.0
MEASURED DEPTH	5594	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	0.1
		HELIUM	0.01
		HEATING VALUE*	886
		SPECIFIC GRAVITY	0.611

SAMPLE	21219	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	83.7
COUNTY	KERN	ETHANE	1.1
FIELD	BUENA VISTA	PROPANE	0.3
WELL NAME	954-35B	N-BUTANE	0.1
API	0403018688	ISOBUTANE	0.1
LOCATION	SEC. 35, T31S, R23E	N-PENTANE	TRACE
OWNER	OCCIDENTAL OF ELK HILLS, INC.	ISOPENTANE	TRACE
COMPLETED	020400	CYCLOPENTANE	--
SAMPLED	030716	HEXANES PLUS	0.1
FORMATION	MIQC-PHACOIDES	NITROGEN	8.9
GEOLOGIC PROVINCE CODE	745	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH	17722	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	11700	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	14000	CARBON DIOXIDE	5.7
		HELIUM	0.01
		HEATING VALUE*	886
		SPECIFIC GRAVITY	0.66

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

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

SAMPLE	21220	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	85.1
COUNTY	KERN	ETHANE	1.1
FIELD	BUENA VISTA	PROPANE	0.3
WELL NAME	954-35B	N-BUTANE	0.1
API	0403018688	ISOBUTANE	0.1
LOCATION	SEC. 35, T31S, R23E	N-PENTANE	TRACE
OWNER	OCCIDENTAL OF ELK HILLS, INC.	ISOPENTANE	TRACE
COMPLETED	020400	CYCLOPENTANE	--
SAMPLED	030716	HEXANES PLUS	0.1
FORMATION	MIOC-PHACOIDES	NITROGEN	7.3
GEOLOGIC PROVINCE CODE	745	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	17722	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	11700	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	14000	CARBON DIOXIDE	5.8
		HELIUM	0.01
		HEATING VALUE*	901
		SPECIFIC GRAVITY	0.655

SAMPLE	21146	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	78.2
COUNTY	KERN	ETHANE	7.8
FIELD	ELK HILLS	PROPANE	4.9
WELL NAME	387H-34S-RD3	N-BUTANE	1.7
API	0402981953	ISOBUTANE	0.8
LOCATION	SEC. 34, T30S, R24E	N-PENTANE	0.5
OWNER	OCCIDENTAL OF ELK HILLS, INC.	ISOPENTANE	0.5
COMPLETED	020823	CYCLOPENTANE	--
SAMPLED	030425	HEXANES PLUS	1.1
FORMATION	MIOC-STEVENS	NITROGEN	3.4
GEOLOGIC PROVINCE CODE	745	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6269	ARGON	0.1
MEASURED DEPTH	8325	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	150	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	155	CARBON DIOXIDE	0.9
		HELIUM	0.07
		HEATING VALUE*	1,230
		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	21331	COMPONENT, MOLE PCT
STATE	CALIFORNIA	METHANE
COUNTY	KERN	ETHANE
FIELD	ELK HILLS	PROPANE
WELL NAME	24Z NO. 355	N-BUTANE
API	0402950776	ISOBUTANE
LOCATION	SEC. 24, T30S, R22E	N-PENTANE
OWNER	OCCIDENTAL OF ELK HILLS, INC.	ISOPENTANE
COMPLETED	010000	CYCLOPENTANE
SAMPLED	040624	HEXANES PLUS
FORMATION	MIOC-STEVENS (24Z SAND)	NITROGEN
GEOLOGIC PROVINCE CODE	745	OXYGEN
TRUE VERTICAL DEPTH (FT)	5025	ARGON
MEASURED DEPTH		HYDROGEN
WELLHEAD PRESSURE, PSIG	620	HYDROGEN SULFIDE**
OPEN FLOW, MCFD	7300	CARBON DIOXIDE
		HELIUM
		HEATING VALUE*
		SPECIFIC GRAVITY
<hr/>		
SAMPLE	21396	COMPONENT, MOLE PCT
STATE	CALIFORNIA	METHANE
COUNTY	KERN	ETHANE
FIELD	LOST HILLS	PROPANE
WELL NAME	BANKLINE, ET AL, BK7135W	N-BUTANE
API	0403022324	ISOBUTANE
LOCATION	SEC. 19, T26S, R21E	N-PENTANE
OWNER	AERA ENERGY, LLC	ISOPENTANE
COMPLETED	030531	CYCLOPENTANE
SAMPLED	041102	HEXANES PLUS
FORMATION	MIOC-WILLIAMS	NITROGEN
GEOLOGIC PROVINCE CODE	745	OXYGEN
TRUE VERTICAL DEPTH (FT)	2090	ARGON
MEASURED DEPTH	4835	HYDROGEN
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**
OPEN FLOW, MCFD	250	CARBON DIOXIDE
		HELIUM
		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	21302	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	89.4
COUNTY	SOLOANO	ETHANE	1.5
FIELD	RIO VISTA	PROPANE	0.5
WELL NAME	RIO VISTA GAS UNIT NO. 244	N-BUTANE	0.1
API	0409520049	ISOBUTANE	0.1
LOCATION	SEC. 2, T3N, R2E	N-PENTANE	TRACE
OWNER	CALPINE NATURAL GAS LP	ISOPENTANE	TRACE
COMPLETED	020718	CYCLOPENTANE	--
SAMPLED	040414	HEXANES PLUS	0.2
FORMATION	EOCE-CAPAY	NITROGEN	7.9
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5520	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	510	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	70	CARBON DIOXIDE	0.2
		HELIUM	0.01
		HEATING VALUE*	963
		SPECIFIC GRAVITY	0.61

SAMPLE	21303	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	91.5
COUNTY	SACRAMENTO	ETHANE	2.8
FIELD	RIO VISTA	PROPANE	0.8
WELL NAME	RIO VISTA GAS UNIT NO. 237	N-BUTANE	0.2
API	0406720367	ISOBUTANE	0.2
LOCATION	SEC. 30, T4N, R3E	N-PENTANE	TRACE
OWNER	CALPINE NATURAL GAS LP	ISOPENTANE	0.1
COMPLETED	020213	CYCLOPENTANE	--
SAMPLED	040414	HEXANES PLUS	0.1
FORMATION	EOCE-DOMENGINE	NITROGEN	3.3
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4385	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	500	CARBON DIOXIDE	1.0
		HELIUM	0.02
		HEATING VALUE*	1,018
		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	21309	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	94.5
COUNTY	SUTTER	ETHANE	0.2
FIELD	SUTTER BUTTES	PROPANE	0.0
WELL NAME	COMMUNITY 1 29-2	N-BUTANE	0.0
API	0410120575	ISOBUTANE	0.0
LOCATION	SEC. 29, T16N, R1E	N-PENTANE	0.0
OWNER	TRI UNION DEVELOPMENT CORP.	ISOPENTANE	0.0
COMPLETED	020228	CYCLOPENTANE	--
SAMPLED	040507	HEXANES PLUS	0.0
FORMATION	CRET-FORBES	NITROGEN	5.2
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4508	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	130	CARBON DIOXIDE	0.1
		HELIUM	TRACE
		HEATING VALUE*	961
		SPECIFIC GRAVITY	0.577

SAMPLE	21281	COMPONENT, MOLE PCT	
STATE	CALIFORNIA	METHANE	84.2
COUNTY	YOLO	ETHANE	TRACE
FIELD	TODHUNTERS LAKE	PROPANE	0.0
WELL NAME	IOC NO. 18	N-BUTANE	TRACE
API	0411321176	ISOBUTANE	0.0
LOCATION	SEC. 33, T9N, R3E	N-PENTANE	0.0
OWNER	EQUITY OIL CO.	ISOPENTANE	0.0
COMPLETED	030320	CYCLOPENTANE	--
SAMPLED	030922	HEXANES PLUS	0.1
FORMATION	CRET-MOKELUMNE RIVER	NITROGEN	15.4
GEOLOGIC PROVINCE CODE	730	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	3394	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1240	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	400	CARBON DIOXIDE	0.1
		HELIUM	0.10
		HEATING VALUE*	857
		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	21280	COMPONENT, MOLE PCT	
STATE	<u>CALIFORNIA</u>	METHANE	<u>81.2</u>
COUNTY	<u>KERN</u>	ETHANE	<u>5.0</u>
FIELD	<u>WHEELER RIDGE</u>	PROPANE	<u>2.7</u>
WELL NAME	<u>KCL NO. D 74-29</u>	N-BUTANE	<u>0.9</u>
API	<u>0402920804</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 29, T11N, R20W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>VINTAGE PETROLEUM, INC.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>990101</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030926</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>MIOC-MIOCENE, OLIG-OLIGOCENE</u>	NITROGEN	<u>7.8</u>
GEOLOGIC PROVINCE CODE	<u>745</u>	OXYGEN	<u>0.5</u>
TRUE VERTICAL DEPTH (FT)	<u>7345</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.14</u>
		HEATING VALUE*	<u>1.073</u>
		SPECIFIC GRAVITY	<u>0.685</u>

SAMPLE	21365	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>93.9</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.0</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.2</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 6</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306005</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 21, T44N, R16W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>680325</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040825</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>4.4</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6514</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>2250</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>5200</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.09</u>
		HEATING VALUE*	<u>989</u>
		SPECIFIC GRAVITY	<u>0.587</u>

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

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

SAMPLE	20830	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	94.4
COUNTY	SAN MIGUEL	ETHANE	1.0
FIELD	ANDY'S MESA	PROPANE	0.2
WELL NAME	ANDY'S MESA FEDERAL 13	N-BUTANE	0.1
API	0511306070	ISOBUTANE	0.1
LOCATION	SEC. 20, T44N, R16W	N-PENTANE	TRACE
OWNER	TOM BROWN, INC.	ISOPENTANE	TRACE
COMPLETED	001211	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	0.1
FORMATION	PERM-CUTLER	NITROGEN	4.1
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8792	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1575	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1527	CARBON DIOXIDE	TRACE
		HELIUM	0.09
		HEATING VALUE*	987
		SPECIFIC GRAVITY	0.582

SAMPLE	21354	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	91.5
COUNTY	SAN MIGUEL	ETHANE	2.1
FIELD	ANDY'S MESA	PROPANE	0.5
WELL NAME	ANDY'S MESA FEDERAL 11-F34	N-BUTANE	0.2
API	0511306027	ISOBUTANE	0.1
LOCATION	SEC. 34, T44N, R16W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	780928	CYCLOPENTANE	--
SAMPLED	040823	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER	NITROGEN	5.1
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4155	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	TRACE
		HELIUM	0.10
		HEATING VALUE*	1,001
		SPECIFIC GRAVITY	0.602

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

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

SAMPLE	21377	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>87.5</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.8</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.6</u>
WELL NAME	<u>FOSSIL FEDERAL 1-20</u>	N-BUTANE	<u>0.3</u>
API	<u>0511306101</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC 20, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>CABOT OIL & GAS CORP.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>031030</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040826</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>8.7</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT) .....	.....	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD .....	.....	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.11</u>
		HEATING VALUE*	<u>979</u>
		SPECIFIC GRAVITY	<u>0.627</u>

SAMPLE	21360	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>88.9</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.7</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.3</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 27</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306102</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC 28, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>021117</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040825</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>8.4</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6920</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3859</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.13</u>
		HEATING VALUE*	<u>959</u>
		SPECIFIC GRAVITY	<u>0.61</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	20827	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 90.5
COUNTY	SAN MIGUEL	ETHANE 1.8
FIELD	ANDY'S MESA	PROPANE 0.4
WELL NAME	ANDY'S MESA UNIT FEDERAL 16	N-BUTANE 0.1
API	0511306071	ISOBUTANE 0.1
LOCATION	SEC. 28, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.1
COMPLETED	000717	CYCLOPENTANE --
SAMPLED	010829	HEXANES PLUS 0.1
FORMATION	PERM-CUTLER	NITROGEN 6.6
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	7240	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	1252	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	910	CARBON DIOXIDE TRACE
		HELIUM 0.14
		HEATING VALUE* 978
		SPECIFIC GRAVITY 0.603

SAMPLE	21363	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 88.0
COUNTY	SAN MIGUEL	ETHANE 1.9
FIELD	ANDY'S MESA	PROPANE 0.3
WELL NAME	ANDY'S MESA FEDERAL 19	N-BUTANE 0.1
API	0511306085	ISOBUTANE 0.1
LOCATION	SEC. 29, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE TRACE
COMPLETED	020729	CYCLOPENTANE --
SAMPLED	040825	HEXANES PLUS 0.2
FORMATION	PERM-CUTLER	NITROGEN 9.1
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6920	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2330	CARBON DIOXIDE TRACE
		HELIUM 0.14
		HEATING VALUE* 952
		SPECIFIC GRAVITY 0.613

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

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

SAMPLE	21357	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>88.1</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.9</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.4</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 25</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306097</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC.28, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>020816</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>8.9</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5584</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3950</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.15</u>
		HEATING VALUE*	<u>955</u>
		SPECIFIC GRAVITY	<u>0.613</u>

SAMPLE	21356	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>87.1</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>2.4</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.6</u>
WELL NAME	<u>ANDY'S MESA 33</u>	N-BUTANE	<u>0.3</u>
API	<u>0511306117</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC.28, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>030628</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>8.6</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>7242</u>	ARGON	<u>0.1</u>
MEASURED DEPTH	<u>8004</u>	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>4350</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.15</u>
		HEATING VALUE*	<u>984</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	20826	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	87.2
COUNTY	SAN MIGUEL	ETHANE	2.2
FIELD	ANDY'S MESA	PROPANE	0.4
WELL NAME	ANDY'S MESA UNIT 1	N-BUTANE	0.1
API	0511305080	ISOBUTANE	0.1
LOCATION	SEC. 34, T44N, R16W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	670309	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	0.1
FORMATION	PERM-CUTLER	NITROGEN	9.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8442	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1221	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3075	CARBON DIOXIDE	TRACE
		HELIUM	0.18
		HEATING VALUE*	951
		SPECIFIC GRAVITY	0.616

SAMPLE	21366	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	87.5
COUNTY	SAN MIGUEL	ETHANE	1.1
FIELD	ANDY'S MESA	PROPANE	0.2
WELL NAME	ANDY'S MESA FEDERAL 13	N-BUTANE	0.1
API	0511306070	ISOBUTANE	0.1
LOCATION	SEC. 20, T44N, R16W	N-PENTANE	TRACE
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	001211	CYCLOPENTANE	--
SAMPLED	040825	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER	NITROGEN	10.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6372	ARGON	TRACE
MEASURED DEPTH	8887	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1527	CARBON DIOXIDE	TRACE
		HELIUM	0.22
		HEATING VALUE*	930
		SPECIFIC GRAVITY	0.614

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

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

SAMPLE	21364	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>93.4</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.9</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.5</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 32</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306112</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC.29, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>031024</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040825</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PERM-CUTLER, PENN-HONAKER TRAIL</u>	NITROGEN	<u>3.2</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5389</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>6424</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.05</u>
		HEATING VALUE*	<u>1,023</u>
		SPECIFIC GRAVITY	<u>0.598</u>

SAMPLE	21367	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>94.0</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.0</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.2</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 29</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306122</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC.20, T44N, R16W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>031016</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040825</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PERM-CUTLER, PENN-HONAKER TRAIL</u>	NITROGEN	<u>4.1</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5354</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH	<u>8472</u>	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1250</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>4036</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.07</u>
		HEATING VALUE*	<u>993</u>
		SPECIFIC GRAVITY	<u>0.587</u>

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

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

SAMPLE	21359	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 91.5
COUNTY	SAN MIGUEL	ETHANE 2.3
FIELD	ANDY'S MESA	PROPANE 0.6
WELL NAME	ANDY'S MESA FEDERAL 20	N-BUTANE 0.2
API	0511306084	ISOBUTANE 0.2
LOCATION	SEC 28, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.1
COMPLETED	020615	CYCLOPENTANE --
SAMPLED	040824	HEXANES PLUS 0.4
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN 4.5
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6340	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2250	CARBON DIOXIDE TRACE
		HELIUM 0.08
		HEATING VALUE* 1.022
		SPECIFIC GRAVITY 0.609

SAMPLE	21358	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 90.6
COUNTY	SAN MIGUEL	ETHANE 2.6
FIELD	ANDY'S MESA	PROPANE 0.6
WELL NAME	ANDY'S MESA 40	N-BUTANE 0.3
API	0511306128	ISOBUTANE 0.2
LOCATION	SEC 28, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.1
COMPLETED	040526	CYCLOPENTANE --
SAMPLED	040824	HEXANES PLUS 0.6
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN 4.7
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6069	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	7342	CARBON DIOXIDE 0.1
		HELIUM 0.09
		HEATING VALUE* 1.032
		SPECIFIC GRAVITY 0.619

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

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

SAMPLE	21352	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>90.5</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>2.0</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.5</u>
WELL NAME	<u>ANDY'S MESA 36</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306124</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 34, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>031229</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PERM-CUTLER, PENN-HONAKER TRAIL</u>	NITROGEN	<u>6.0</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6508</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>950</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>885</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.10</u>
		HEATING VALUE*	<u>997</u>
		SPECIFIC GRAVITY	<u>0.609</u>

SAMPLE	21353	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>89.2</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>3.2</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.8</u>
WELL NAME	<u>ANDY'S MESA 59</u>	N-BUTANE	<u>0.3</u>
API	<u>0511306135</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 34, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>040731</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PERM-CUTLER, PENN-HONAKER TRAIL</u>	NITROGEN	<u>5.3</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5032</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>2475</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.10</u>
		HEATING VALUE*	<u>1,031</u>
		SPECIFIC GRAVITY	<u>0.623</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	21355	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	88.2
COUNTY	SAN MIGUEL	ETHANE	1.9
FIELD	ANDY'S MESA	PROPANE	0.4
WELL NAME	ANDY'S MESA 55	N-BUTANE	0.2
API	0511306141	ISOBUTANE	0.1
LOCATION	SEC. 34, T44N, R16W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	040714	CYCLOPENTANE	--
SAMPLED	040823	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN	8.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5480	ARGON	TRACE
MEASURED DEPTH	8556	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1248	CARBON DIOXIDE	TRACE
		HELIUM	0.16
		HEATING VALUE*	963
		SPECIFIC GRAVITY	0.615

SAMPLE	21351	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	84.6
COUNTY	SAN MIGUEL	ETHANE	2.1
FIELD	ANDY'S MESA	PROPANE	0.4
WELL NAME	ANDY'S MESA 34	N-BUTANE	0.1
API	0511306111	ISOBUTANE	0.1
LOCATION	SEC. 34, T44N, R16W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	031108	CYCLOPENTANE	--
SAMPLED	040823	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN	12.2
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5031	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	960	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3889	CARBON DIOXIDE	TRACE
		HELIUM	0.20
		HEATING VALUE*	924
		SPECIFIC GRAVITY	0.628

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

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

SAMPLE	21350	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>79.4</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.6</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.3</u>
WELL NAME	<u>ANDY'S MESA 58</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306139</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 34, T44N, R16W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>040710</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-CUTLER, PENN-HONAKER TRAIL</u>	NITROGEN	<u>18.1</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		ARGON	<u>TRACE</u>
MEASURED DEPTH	<u>7218</u>	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1170</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.27</u>
		HEATING VALUE*	<u>855</u>
		SPECIFIC GRAVITY	<u>0.646</u>

SAMPLE	20829	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>94.7</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.0</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.2</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 14</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306077</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 21, T44N, R16W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>TRACE</u>
COMPLETED	<u>001211</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010829</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PENN-HONAKER TRAIL</u>	NITROGEN	<u>3.7</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8764</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1750</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1372</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.07</u>
		HEATING VALUE*	<u>992</u>
		SPECIFIC GRAVITY	<u>0.581</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	21362	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 90.1
COUNTY	SAN MIGUEL	ETHANE 2.7
FIELD	ANDY'S MESA	PROPANE 0.7
WELL NAME	ANDY'S MESA FEDERAL 24	N-BUTANE 0.3
API	0511306100	ISOBUTANE 0.2
LOCATION	SEC 29, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.1
COMPLETED	031114	CYCLOPENTANE --
SAMPLED	040825	HEXANES PLUS 0.4
FORMATION	PENN-HONAKER TRAIL	NITROGEN 5.2
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	7216	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	3870	CARBON DIOXIDE TRACE
		HELIUM 0.10
		HEATING VALUE* 1,020
		SPECIFIC GRAVITY 0.616

SAMPLE	21361	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 90.2
COUNTY	SAN MIGUEL	ETHANE 1.5
FIELD	ANDY'S MESA	PROPANE 0.3
WELL NAME	ANDY'S MESA FEDERAL 39	N-BUTANE 0.1
API	0511306130	ISOBUTANE 0.1
LOCATION	SEC 28, T44N, R16W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.1
COMPLETED	040619	CYCLOPENTANE --
SAMPLED	040825	HEXANES PLUS 0.3
FORMATION	PENN-HONAKER TRAIL	NITROGEN 7.1
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE TRACE
		HELIUM 0.14
		HEATING VALUE* 975
		SPECIFIC GRAVITY 0.606

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

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

SAMPLE	20828	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>95.1</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.4</u>
FIELD	<u>ANDY'S MESA</u>	PROPANE	<u>0.3</u>
WELL NAME	<u>ANDY'S MESA FEDERAL 17</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306079</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 28, T44N, R16W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>001228</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010829</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PENN-ISMAY</u>	NITROGEN	<u>2.7</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8242</u>	ARGON	<u>0.0</u>
MEASURED DEPTH	<u>8956</u>	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1960</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1493</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.05</u>
		HEATING VALUE*	<u>1,009</u>
		SPECIFIC GRAVITY	<u>0.582</u>

SAMPLE	20960	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>42.7</u>
COUNTY	<u>MESA</u>	ETHANE	<u>1.6</u>
FIELD	<u>BAR X</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>GOVERNMENT NO. 3</u>	N-BUTANE	<u>0.3</u>
API	<u>0507708367</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 1, T9S, R104W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>CRESCENDO ENERGY</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>810501</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020617</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>JURA-ENTRADA</u>	NITROGEN	<u>28.4</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3065</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>8377</u>	CARBON DIOXIDE	<u>24.5</u>
		HELIUM	<u>0.93</u>
		HEATING VALUE*	<u>519</u>
		SPECIFIC GRAVITY	<u>0.938</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	20984	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	42.5
COUNTY	MESA	ETHANE	1.6
FIELD	BAR X	PROPANE	0.7
WELL NAME	GOVERNMENT NO. 1	N-BUTANE	0.3
API	0507708173	ISOBUTANE	0.3
LOCATION	SEC. 1, T9S, R104W	N-PENTANE	0.1
OWNER	CRESCENDO ENERGY	ISOPENTANE	0.2
COMPLETED	791101	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.1
FORMATION	JURA-ENTRADA	NITROGEN	28.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3073	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2700	CARBON DIOXIDE	24.8
		HELIUM	0.93
		HEATING VALUE*	516
		SPECIFIC GRAVITY	0.941

SAMPLE	20985	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	42.9
COUNTY	MESA	ETHANE	1.6
FIELD	BAR X	PROPANE	0.7
WELL NAME	GOVERNMENT NO. 2-A	N-BUTANE	0.3
API	0507708182	ISOBUTANE	0.3
LOCATION	SEC. 35, T8S, R104W	N-PENTANE	0.1
OWNER	CRESCENDO ENERGY	ISOPENTANE	0.2
COMPLETED	790701	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.1
FORMATION	JURA-ENTRADA	NITROGEN	28.4
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3102	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	15500	CARBON DIOXIDE	24.1
		HELIUM	0.94
		HEATING VALUE*	521
		SPECIFIC GRAVITY	0.935

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

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

SAMPLE	20953	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>88.6</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>4.6</u>
FIELD	<u>BIRDLE</u>	PROPANE	<u>1.5</u>
WELL NAME	<u>FEDERAL NO. 5-3</u>	N-BUTANE	<u>0.4</u>
API	<u>0504506150</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 5, T8S, R104W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>851108</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020617</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>2.3</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3773</u>	ARGON	<u>0.0</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>113</u>	CARBON DIOXIDE	<u>1.1</u>
		HELIUM	<u>0.20</u>
		HEATING VALUE*	<u>1,078</u>
		SPECIFIC GRAVITY	<u>0.64</u>

SAMPLE	20983	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>79.8</u>
COUNTY	<u>MESA</u>	ETHANE	<u>6.2</u>
FIELD	<u>BRIDLE</u>	PROPANE	<u>3.3</u>
WELL NAME	<u>FEDERAL NO. 41-19</u>	N-BUTANE	<u>1.1</u>
API	<u>0507708287</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 19, T8S, R104W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>LINN BROTHERS OIL & GAS CORP.</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>800709</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020619</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>6.7</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3092</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>953</u>	CARBON DIOXIDE	<u>0.7</u>
		HELIUM	<u>0.35</u>
		HEATING VALUE*	<u>1,109</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	20947	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	74.0
COUNTY	GARFIELD	ETHANE	4.3
FIELD	BRIDLE	PROPANE	1.8
WELL NAME	FEDERAL NO. 4-10	N-BUTANE	0.6
API	0504506875	ISOBUTANE	0.4
LOCATION	SEC. 10, T8S, R104W	N-PENTANE	0.3
OWNER	NATIONAL FUEL CORP.	ISOPENTANE	0.3
COMPLETED	940907	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA	NITROGEN	7.9
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3124	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	150	CARBON DIOXIDE	9.3
		HELIUM	0.42
		HEATING VALUE*	954
		SPECIFIC GRAVITY	0.752

SAMPLE	20946	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	71.2
COUNTY	GARFIELD	ETHANE	3.9
FIELD	BRIDLE	PROPANE	1.7
WELL NAME	FEDERAL NO. 14-2	N-BUTANE	0.6
API	0504506874	ISOBUTANE	0.4
LOCATION	SEC. 2, T8S, R104W	N-PENTANE	0.2
OWNER	NATIONAL FUEL CORP.	ISOPENTANE	0.3
COMPLETED	940919	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA	NITROGEN	11.1
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3454	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	210	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	115	CARBON DIOXIDE	9.7
		HELIUM	0.56
		HEATING VALUE*	903
		SPECIFIC GRAVITY	0.761

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

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

SAMPLE	20952	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	79.8
COUNTY	GARFIELD	ETHANE	4.4
FIELD	BRIDLE	PROPANE	1.7
WELL NAME	FEDERAL NO. 22-9	N-BUTANE	0.6
API	0504506136	ISOBUTANE	0.4
LOCATION	SEC. 9, T8S, R104W	N-PENTANE	0.3
OWNER	NATIONAL FUEL CORP.	ISOPENTANE	0.3
COMPLETED	780109	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN	7.3
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3328	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	110	CARBON DIOXIDE	4.3
		HELIUM	0.42
		HEATING VALUE*	1,008
		SPECIFIC GRAVITY	0.699

SAMPLE	20948	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	76.7
COUNTY	GARFIELD	ETHANE	3.9
FIELD	BRIDLE	PROPANE	1.6
WELL NAME	FEDERAL NO. 43-3	N-BUTANE	0.5
API	0504506129	ISOBUTANE	0.4
LOCATION	SEC. 3, T8S, R104W	N-PENTANE	0.2
OWNER	NATIONAL FUEL CORP.	ISOPENTANE	0.2
COMPLETED	771220	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.4
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN	8.0
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3254	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	115	CARBON DIOXIDE	7.5
		HELIUM	0.44
		HEATING VALUE*	950
		SPECIFIC GRAVITY	0.723

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

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

SAMPLE	20951	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 74.5
COUNTY	GARFIELD	ETHANE 4.3
FIELD	BRIDLE	PROPANE 1.8
WELL NAME	FEDERAL NO. 2-9	N-BUTANE 0.6
API	0504506091	ISOBUTANE 0.4
LOCATION	SEC. 9, T8S, R104W	N-PENTANE 0.2
OWNER	NATIONAL FUEL CORP.	ISOPENTANE 0.3
COMPLETED	761003	CYCLOPENTANE --
SAMPLED	020617	HEXANES PLUS 0.5
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN 8.0
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3140	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	205	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	90	CARBON DIOXIDE 8.9
		HELIUM 0.44
		HEATING VALUE* 954
		SPECIFIC GRAVITY 0.747

SAMPLE	20950	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 78.1
COUNTY	GARFIELD	ETHANE 4.0
FIELD	BRIDLE	PROPANE 1.5
WELL NAME	FEDERAL NO. 1-9	N-BUTANE 0.5
API	0504506087	ISOBUTANE 0.4
LOCATION	SEC. 9, T8S, R104W	N-PENTANE 0.2
OWNER	NATIONAL FUEL CORP.	ISOPENTANE 0.2
COMPLETED	760315	CYCLOPENTANE --
SAMPLED	020617	HEXANES PLUS 0.4
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN 8.5
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2952	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	220	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	140	CARBON DIOXIDE 5.6
		HELIUM 0.46
		HEATING VALUE* 968
		SPECIFIC GRAVITY 0.708

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

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

SAMPLE	21317	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>93.9</u>
COUNTY	<u>YUMA</u>	ETHANE	<u>1.1</u>
FIELD	<u>BUFFALO GRASS</u>	PROPANE	<u>0.5</u>
WELL NAME	<u>DAY 8-23</u>	N-BUTANE	<u>0.2</u>
API	<u>0512508690</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC 23, T4N, R47W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>J-W OPERATING CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>030417</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040526</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>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2701</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1712</u>	CARBON DIOXIDE	<u>0.5</u>
		HELIUM	<u>0.07</u>
		HEATING VALUE*	<u>999</u>
		SPECIFIC GRAVITY	<u>0.59</u>

SAMPLE	20963	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>70.9</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>4.0</u>
FIELD	<u>CARBONERA</u>	PROPANE	<u>1.6</u>
WELL NAME	<u>FEDERAL NO. 27-8</u>	N-BUTANE	<u>0.5</u>
API	<u>0504506106</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 27, T7S, R104W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>770326</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>8.0</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3789</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1405</u>	CARBON DIOXIDE	<u>13.3</u>
		HELIUM	<u>0.44</u>
		HEATING VALUE*	<u>898</u>
		SPECIFIC GRAVITY	<u>0.781</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	21323	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 65.2
COUNTY	MORGAN	ETHANE 8.5
FIELD	COLE	PROPANE 10.1
WELL NAME	J. FARNIK NO. 34-9	N-BUTANE 4.3
API	0508707839	ISOBUTANE 1.1
LOCATION	SEC. 9, T6N, R58W	N-PENTANE 1.3
OWNER	HYNDREX RESOURCES	ISOPENTANE 1.0
COMPLETED	841110	CYCLOPENTANE --
SAMPLED	040527	HEXANES PLUS 2.3
FORMATION	CRET-DAKOTA D	NITROGEN 4.2
GEOLOGIC PROVINCE CODE	540	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6356	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	46	CARBON DIOXIDE 1.8
		HELIUM 0.13
		HEATING VALUE* 1.446
		SPECIFIC GRAVITY 0.907

SAMPLE	20997	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 96.5
COUNTY	RIO BLANCO	ETHANE 1.0
FIELD	CORRAL CREEK	PROPANE 0.2
WELL NAME	CORRAL CREEK FEDERAL D.NO. 4507	N-BUTANE TRACE
API	0510308441	ISOBUTANE TRACE
LOCATION	SEC. 36, T1S, R100W	N-PENTANE TRACE
OWNER	ENCANA OIL & GAS (USA) INC.	ISOPENTANE TRACE
COMPLETED	811203	CYCLOPENTANE --
SAMPLED	020729	HEXANES PLUS TRACE
FORMATION	CRET-DAKOTA	NITROGEN 0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	11652	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	1119	CARBON DIOXIDE 1.9
		HELIUM 0.01
		HEATING VALUE* 1.003
		SPECIFIC GRAVITY 0.582

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

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

SAMPLE	20996	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>92.2</u>
COUNTY	<u>RIO BLANCO</u>	ETHANE	<u>3.9</u>
FIELD	<u>CORRAL CREEK</u>	PROPANE	<u>1.2</u>
WELL NAME	<u>CORRAL CREEK FEDERAL B NO. 4509</u>	N-BUTANE	<u>0.3</u>
API	<u>0510308385</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 31, T1S, R99W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>ENCANA OIL & GAS (USA) INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>000415</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020729</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-MANCOS B</u>	NITROGEN	<u>0.2</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8986</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>947</u>	CARBON DIOXIDE	<u>1.5</u>
		HELIUM	<u>0.01</u>
		HEATING VALUE*	<u>1.072</u>
		SPECIFIC GRAVITY	<u>0.618</u>
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SAMPLE	20995	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>82.1</u>
COUNTY	<u>RIO BLANCO</u>	ETHANE	<u>9.6</u>
FIELD	<u>CORRAL CREEK</u>	PROPANE	<u>4.5</u>
WELL NAME	<u>SAGEBRUSH HILLS NO. 4502</u>	N-BUTANE	<u>1.1</u>
API	<u>0510308082</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 30, T1S, R99W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>ENCANA OIL & GAS (USA) INC.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>000518</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020729</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>CRET-SEGO</u>	NITROGEN	<u>0.4</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>7264</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>961</u>	CARBON DIOXIDE	<u>0.8</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1.208</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	21372	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	95.8
COUNTY	SAN MIGUEL	ETHANE	0.6
FIELD	DOUBLE EAGLE	PROPANE	0.1
WELL NAME	FOSSIL FEDERAL 2-18	N-BUTANE	TRACE
API	0511306099	ISOBUTANE	TRACE
LOCATION	SEC. 18, T44N, R16W	N-PENTANE	0.0
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	TRACE
COMPLETED	020907	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	TRACE
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN	3.2
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5884	ARGON	0.0
MEASURED DEPTH	9380	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1140	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	875	CARBON DIOXIDE	0.1
		HELIUM	0.03
		HEATING VALUE*	985
		SPECIFIC GRAVITY	0.574

SAMPLE	21373	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	94.1
COUNTY	SAN MIGUEL	ETHANE	1.1
FIELD	DOUBLE EAGLE	PROPANE	0.2
WELL NAME	FOSSIL FEDERAL 4-20D	N-BUTANE	0.1
API	0511306108	ISOBUTANE	0.1
LOCATION	SEC. 20, T44N, R16W	N-PENTANE	TRACE
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	021120	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER, PENN-HONAKER TRAIL	NITROGEN	4.0
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5765	ARGON	TRACE
MEASURED DEPTH	9730	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2647	CARBON DIOXIDE	0.1
		HELIUM	0.07
		HEATING VALUE*	995
		SPECIFIC GRAVITY	0.586

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

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

SAMPLE	21368	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	95.6
COUNTY	SAN MIGUEL	ETHANE	1.1
FIELD	DOUBLE EAGLE	PROPANE	0.3
WELL NAME	FOSSIL FEDERAL 1-18	N-BUTANE	0.1
API	0511306096	ISOBUTANE	0.1
LOCATION	SEC 18, T44N, R16W	N-PENTANE	TRACE
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	021129	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	0.1
FORMATION	PENN-HONAKER TRAIL	NITROGEN	2.3
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8045	ARGON	TRACE
MEASURED DEPTH	9715	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	19789	CARBON DIOXIDE	0.4
		HELIUM	0.03
		HEATING VALUE*	1.007
		SPECIFIC GRAVITY	0.581

SAMPLE	21370	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	94.2
COUNTY	SAN MIGUEL	ETHANE	1.2
FIELD	DOUBLE EAGLE	PROPANE	0.3
WELL NAME	FOSSIL FEDERAL 1-19	N-BUTANE	0.1
API	0511306083	ISOBUTANE	0.1
LOCATION	SEC 18, T44N, R16W	N-PENTANE	0.1
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	011206	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	0.2
FORMATION	PENN-HONAKER TRAIL	NITROGEN	3.3
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7736	ARGON	TRACE
MEASURED DEPTH	9858	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	6063	CARBON DIOXIDE	0.4
		HELIUM	0.05
		HEATING VALUE*	1.004
		SPECIFIC GRAVITY	0.59

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

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

SAMPLE	21369	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 86.5
COUNTY	SAN MIGUEL	ETHANE 3.4
FIELD	DOUBLE EAGLE	PROPANE 1.4
WELL NAME	FOSSIL FEDERAL 4-19	N-BUTANE 0.6
API	0511306119	ISOBUTANE 0.5
LOCATION	SEC. 18, T44N, R16W	N-PENTANE 0.2
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE 0.3
COMPLETED	031015	CYCLOPENTANE --
SAMPLED	040826	HEXANES PLUS 0.5
FORMATION	PENN-HONAKER TRAIL	NITROGEN 6.4
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8204	ARGON 0.1
MEASURED DEPTH	9950	HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	6147	CARBON DIOXIDE 0.0
		HELIUM 0.10
		HEATING VALUE* 1,051
		SPECIFIC GRAVITY 0.648

SAMPLE	21376	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 90.2
COUNTY	SAN MIGUEL	ETHANE 1.1
FIELD	DOUBLE EAGLE	PROPANE 0.3
WELL NAME	FOSSIL FEDERAL 8	N-BUTANE 0.2
API	0511306074	ISOBUTANE 0.1
LOCATION	SEC. 13, T44N, R17W	N-PENTANE 0.1
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE 0.1
COMPLETED	031128	CYCLOPENTANE --
SAMPLED	040826	HEXANES PLUS 0.3
FORMATION	PENN-HONAKER TRAIL	NITROGEN 7.3
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8316	ARGON TRACE
MEASURED DEPTH	10210	HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	891	CARBON DIOXIDE 0.2
		HELIUM 0.10
		HEATING VALUE* 973
		SPECIFIC GRAVITY 0.61

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

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

SAMPLE	21371	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>81.7</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>2.3</u>
FIELD	<u>DOUBLE EAGLE</u>	PROPANE	<u>0.6</u>
WELL NAME	<u>FOSSIL FEDERAL 2-19</u>	N-BUTANE	<u>0.3</u>
API	<u>0511306073</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC 19, T44N, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>CABOT OIL & GAS CORP.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>010829</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040826</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>PENN-HONAKER TRAIL</u>	NITROGEN	<u>13.5</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8370</u>	ARGON	<u>0.1</u>
MEASURED DEPTH	<u>9525</u>	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3071</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.17</u>
		HEATING VALUE*	<u>946</u>
		SPECIFIC GRAVITY	<u>0.657</u>

SAMPLE	21375	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>84.9</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.3</u>
FIELD	<u>DOUBLE EAGLE</u>	PROPANE	<u>0.3</u>
WELL NAME	<u>FOSSIL FEDERAL 1-13</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306091</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC 13, T44N, R17W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>CABOT OIL & GAS CORP.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>021030</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040826</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PENN-HONAKER TRAIL</u>	NITROGEN	<u>12.2</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8267</u>	ARGON	<u>0.1</u>
MEASURED DEPTH	<u>9918</u>	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1950</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>8400</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.19</u>
		HEATING VALUE*	<u>927</u>
		SPECIFIC GRAVITY	<u>0.631</u>

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

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

SAMPLE	21374	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	97.3
COUNTY	SAN MIGUEL	ETHANE	0.6
FIELD	DOUBLE EAGLE	PROPANE	0.1
WELL NAME	FOSSIL FEDERAL 3-13	N-BUTANE	0.1
API	0511306092	ISOBUTANE	0.1
LOCATION	SEC. 13, T44N, R17W	N-PENTANE	TRACE
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	TRACE
COMPLETED	040530	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	0.1
FORMATION	PENN-HONAKER TRAIL, ISMAY	NITROGEN	1.3
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH	9615	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	2200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5456	CARBON DIOXIDE	0.3
		HELIUM	0.02
		HEATING VALUE*	1,013
		SPECIFIC GRAVITY	0.573

SAMPLE	20982	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	74.9
COUNTY	GARFIELD	ETHANE	4.3
FIELD	DOUGLAS PASS	PROPANE	2.0
WELL NAME	FEDERAL NO. 15-10	N-BUTANE	0.7
API	0504506430	ISOBUTANE	0.4
LOCATION	SEC. 10, T6S, R103W	N-PENTANE	0.2
OWNER	TOM BROWN, INC.	ISOPENTANE	0.2
COMPLETED	830226	CYCLOPENTANE	--
SAMPLED	020619	HEXANES PLUS	0.3
FORMATION	JURA-MORRISON	NITROGEN	15.0
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5794	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2190	CARBON DIOXIDE	1.3
		HELIUM	0.61
		HEATING VALUE*	952
		SPECIFIC GRAVITY	0.698

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

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

SAMPLE	20989	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>87.2</u>
COUNTY	<u>RIO BLANCO</u>	ETHANE	<u>6.7</u>
FIELD	<u>GILSONITE DRAW</u>	PROPANE	<u>2.9</u>
WELL NAME	<u>FEDERAL NO. 24-13 (WAS NOT FLOWING)</u>	N-BUTANE	<u>0.8</u>
API	<u>0510310030</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 24, T1S, R104W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>000726</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020729</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>CRET-CASTLEGATE</u>	NITROGEN	<u>0.3</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3668</u>	ARGON	<u>0.0</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.1</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1325</u>	CARBON DIOXIDE	<u>0.4</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1.162</u>
		SPECIFIC GRAVITY	<u>0.659</u>
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SAMPLE	20832	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>80.2</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.4</u>
FIELD	<u>HAMILTON CREEK</u>	PROPANE	<u>0.4</u>
WELL NAME	<u>USA 1-35H</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306048</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 35, T45N, R15W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>850520</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010829</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>17.0</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2589</u>	ARGON	<u>0.0</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>512</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>212</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.40</u>
		HEATING VALUE*	<u>870</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	20833	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>78.8</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.4</u>
FIELD	<u>HAMIL TON CREEK</u>	PROPANE	<u>0.4</u>
WELL NAME	<u>SHELL STATE 2-36H</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306054</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 36, T45N, R15W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>860512</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010829</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>18.3</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2579</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>690</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>800</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.43</u>
		HEATING VALUE*	<u>857</u>
		SPECIFIC GRAVITY	<u>0.65</u>

SAMPLE	21348	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>77.8</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>1.3</u>
FIELD	<u>HAMIL TON CREEK</u>	PROPANE	<u>0.4</u>
WELL NAME	<u>SHELL STATE 1-36C</u>	N-BUTANE	<u>0.2</u>
API	<u>0511306047</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 36, T45N, R15W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>840125</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PERM-CUTLER</u>	NITROGEN	<u>19.2</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2536</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>475</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.44</u>
		HEATING VALUE*	<u>851</u>
		SPECIFIC GRAVITY	<u>0.657</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	20831	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	73.1
COUNTY	SAN MIGUEL	ETHANE	1.5
FIELD	HAMILTON CREEK	PROPANE	0.4
WELL NAME	HAMILTON CREEK 25-41	N-BUTANE	0.2
API	0511306063	ISOBUTANE	0.2
LOCATION	SEC. 25, T45N, R15W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	981106	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	0.2
FORMATION	PERM-CUTLER	NITROGEN	23.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2640	ARGON	TRACE
MEASURED DEPTH	3250	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	280	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	180	CARBON DIOXIDE	0.0
		HELIUM	0.54
		HEATING VALUE*	807
		SPECIFIC GRAVITY	0.675

SAMPLE	20835	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	95.0
COUNTY	SAN MIGUEL	ETHANE	1.1
FIELD	HAMILTON CREEK	PROPANE	0.3
WELL NAME	USA 1-30H	N-BUTANE	0.2
API	0511306050	ISOBUTANE	0.2
LOCATION	SEC. 30, T45N, R14W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	941025	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	0.2
FORMATION	PENN-HERMOSA	NITROGEN	2.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8046	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	600	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	400	CARBON DIOXIDE	0.1
		HELIUM	0.04
		HEATING VALUE*	1,021
		SPECIFIC GRAVITY	0.589

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

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

SAMPLE	21347	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>95.5</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>0.8</u>
FIELD	<u>HAMILTON CREEK</u>	PROPANE	<u>0.2</u>
WELL NAME	<u>STATE 1-36H</u>	N-BUTANE	<u>0.1</u>
API	<u>0511306047</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC.36, T45N, R15W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>840125</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PENN-HERMOSA</u>	NITROGEN	<u>2.8</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>8430</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>5245</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.05</u>
		HEATING VALUE*	<u>1,006</u>
		SPECIFIC GRAVITY	<u>0.582</u>

SAMPLE	21349	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>88.3</u>
COUNTY	<u>SAN MIGUEL</u>	ETHANE	<u>2.1</u>
FIELD	<u>HAMILTON CREEK</u>	PROPANE	<u>1.0</u>
WELL NAME	<u>HAMILTON CREEK 36-41</u>	N-BUTANE	<u>0.5</u>
API	<u>0511306123</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC.36, T45N, R15W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>031016</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040823</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PENN-HERMOSA</u>	NITROGEN	<u>6.2</u>
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>7554</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>636</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.10</u>
		HEATING VALUE*	<u>1,033</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	20834	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	98.7
COUNTY	SAN MIGUEL	ETHANE	0.4
FIELD	HAMILTON CREEK	PROPANE	TRACE
WELL NAME	SHELL STATE 1-36H	N-BUTANE	TRACE
API	0511306047	ISOBUTANE	TRACE
LOCATION	SEC. 36, T45N, R15W	N-PENTANE	0.0
OWNER	TOM BROWN, INC.	ISOPENTANE	TRACE
COMPLETED	840125	CYCLOPENTANE	--
SAMPLED	010829	HEXANES PLUS	TRACE
FORMATION	PENN-HERMOSA U	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8477	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5245	CARBON DIOXIDE	0.1
		HELIUM	0.02
		HEATING VALUE*	1,008
		SPECIFIC GRAVITY	0.561

SAMPLE	21324	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	87.8
COUNTY	WASHINGTON	ETHANE	3.2
FIELD	LOBO	PROPANE	1.5
WELL NAME	MILLER-REDIESS A-1	N-BUTANE	1.1
API	0512107241	ISOBUTANE	0.9
LOCATION	SEC 23, T3N, R54W	N-PENTANE	0.8
OWNER	PATRICK A. DOHENY	ISOPENTANE	1.3
COMPLETED	831015	CYCLOPENTANE	--
SAMPLED	040527	HEXANES PLUS	1.4
FORMATION	CRET-DAKOTA D & J	NITROGEN	1.9
GEOLOGIC PROVINCE CODE	540	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4809	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	80	CARBON DIOXIDE	TRACE
		HELIUM	0.08
		HEATING VALUE*	1,198
		SPECIFIC GRAVITY	0.695

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

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

SAMPLE	20988	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	81.1
COUNTY	<u>RIO BLANCO</u>	ETHANE	6.0
FIELD	<u>LOWER HORSE DRAW</u>	PROPANE	5.0
WELL NAME	<u>GOVERNMENT NO. 1-3</u>	N-BUTANE	2.1
API	<u>0510307927</u>	ISOBUTANE	1.3
LOCATION	<u>SEC 1, T2S, R103W</u>	N-PENTANE	0.6
OWNER	<u>GREAT NORTHERN GAS CO.</u>	ISOPENTANE	0.8
COMPLETED	<u>770215</u>	CYCLOPENTANE	--
SAMPLED	<u>020729</u>	HEXANES PLUS	1.3
FORMATION	<u>CRET-EMERY</u>	NITROGEN	1.5
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	<u>3008</u>	ARGON	TRACE
MEASURED DEPTH .....	.....	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	<u>268</u>	CARBON DIOXIDE	0.1
		HELIUM	0.10
		HEATING VALUE*	1,282
		SPECIFIC GRAVITY	0.747

SAMPLE	21346	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	71.3
COUNTY	<u>SAN MIGUEL</u>	ETHANE	3.5
FIELD	<u>MCINTYRE CANYON</u>	PROPANE	1.6
WELL NAME	<u>MCINTYRE CANYON 17-21</u>	N-BUTANE	0.6
API	<u>0511306080</u>	ISOBUTANE	0.6
LOCATION	<u>SEC 17, T44N, R19W</u>	N-PENTANE	0.2
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	0.3
COMPLETED	<u>010619</u>	CYCLOPENTANE	--
SAMPLED	<u>040823</u>	HEXANES PLUS	0.3
FORMATION	<u>MISS-LEADVILLE</u>	NITROGEN	11.8
GEOLOGIC PROVINCE CODE	<u>585</u>	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	<u>8398</u>	ARGON	0.1
MEASURED DEPTH .....	.....	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	0.1
OPEN FLOW, MCFD	<u>2700</u>	CARBON DIOXIDE	8.7
		HELIUM	0.95
		HEATING VALUE*	897
		SPECIFIC GRAVITY	0.75

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

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

SAMPLE	21318	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	76.1
COUNTY	LOGAN	ETHANE	4.9
FIELD	MINTO N.	PROPANE	5.7
WELL NAME	NORTH MINTO UNIT 6	N-BUTANE	2.4
API	0507509258	ISOBUTANE	0.9
LOCATION	SEC 26, T9N, R53W	N-PENTANE	0.7
OWNER	TIMKA RESOURCES, LTD.	ISOPENTANE	0.7
COMPLETED	930512	CYCLOPENTANE	--
SAMPLED	040527	HEXANES PLUS	1.9
FORMATION	CRET-DAKOTA J.	NITROGEN	5.7
GEOLOGIC PROVINCE CODE	540	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4876	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	55	CARBON DIOXIDE	0.7
		HELIUM	0.30
		HEATING VALUE*	1,256
		SPECIFIC GRAVITY	0.783

SAMPLE	21321	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	63.0
COUNTY	WELD	ETHANE	10.6
FIELD	OASIS	PROPANE	12.2
WELL NAME	HOOZEE-B, IOLIN NO. 1	N-BUTANE	4.8
API	0512310341	ISOBUTANE	1.4
LOCATION	SEC 33, T7N, R56W	N-PENTANE	1.5
OWNER	WESTERN OPERATING CO.	ISOPENTANE	1.1
COMPLETED	810807	CYCLOPENTANE	--
SAMPLED	040527	HEXANES PLUS	2.0
FORMATION	CRET-DAKOTA D.	NITROGEN	2.1
GEOLOGIC PROVINCE CODE	540	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5795	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	15	CARBON DIOXIDE	1.2
		HELIUM	0.14
		HEATING VALUE*	1,535
		SPECIFIC GRAVITY	0.932

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

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

SAMPLE	20991	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>90.5</u>
COUNTY	<u>RIO BLANCO</u>	ETHANE	<u>4.8</u>
FIELD	<u>PARK MOUNTAIN</u>	PROPANE	<u>1.5</u>
WELL NAME	<u>PARK MOUNTAIN FEDERAL NO. 9030</u>	N-BUTANE	<u>0.4</u>
API	<u>0510309992</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 6, T3S, R103W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>ENCANA OIL & GAS (USA) INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>991214</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020729</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>0.7</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6958</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1600</u>	CARBON DIOXIDE	<u>1.1</u>
		HELIUM	<u>0.02</u>
		HEATING VALUE*	<u>1,089</u>
		SPECIFIC GRAVITY	<u>0.629</u>

SAMPLE	20992	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>90.6</u>
COUNTY	<u>RIO BLANCO</u>	ETHANE	<u>4.9</u>
FIELD	<u>PARK MOUNTAIN</u>	PROPANE	<u>1.6</u>
WELL NAME	<u>PARK MOUNTAIN FEDERAL NO. 9026</u>	N-BUTANE	<u>0.4</u>
API	<u>0510310000</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 7, T3S, R103W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>ENCANA OIL & GAS (USA) INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>000317</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020729</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>0.6</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6806</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>600</u>	CARBON DIOXIDE	<u>1.0</u>
		HELIUM	<u>0.02</u>
		HEATING VALUE*	<u>1,095</u>
		SPECIFIC GRAVITY	<u>0.63</u>

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

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

SAMPLE	20990	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE
COUNTY	RIO BLANCO	ETHANE
FIELD	PARK MOUNTAIN	PROPANE
WELL NAME	PARK MOUNTAIN NO. 13-8	N-BUTANE
API	0510309773	ISOBUTANE
LOCATION	SEC. 8, T3S, R103W	N-PENTANE
OWNER	CLX ENERGY, INC.	ISOPENTANE
COMPLETED	960429	CYCLOPENTANE
SAMPLED	020729	HEXANES PLUS
FORMATION	CRET-DAKOTA	NITROGEN
GEOLOGIC PROVINCE CODE	595	OXYGEN
TRUE VERTICAL DEPTH (FT)	6512	ARGON
MEASURED DEPTH		HYDROGEN
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**
OPEN FLOW, MCFD	1119	CARBON DIOXIDE
		HELIUM
		HEATING VALUE*
		SPECIFIC GRAVITY
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SAMPLE	20993	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE
COUNTY	RIO BLANCO	ETHANE
FIELD	PARK MOUNTAIN	PROPANE
WELL NAME	PARK MOUNTAIN FEDERAL NO. 9011	N-BUTANE
API	0510309775	ISOBUTANE
LOCATION	SEC. 5, T3S, R103W	N-PENTANE
OWNER	ENCANA OIL & GAS (USA) INC.	ISOPENTANE
COMPLETED	970326	CYCLOPENTANE
SAMPLED	020729	HEXANES PLUS
FORMATION	CRET-DAKOTA, BUCKHORN	NITROGEN
GEOLOGIC PROVINCE CODE	595	OXYGEN
TRUE VERTICAL DEPTH (FT)	6978	ARGON
MEASURED DEPTH		HYDROGEN
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**
OPEN FLOW, MCFD	1210	CARBON DIOXIDE
		HELIUM
		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	20808	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>92.6</u>
COUNTY	<u>MESA</u>	ETHANE	<u>3.4</u>
FIELD	<u>PLATEAU</u>	PROPANE	<u>1.0</u>
WELL NAME	<u>FEDERAL 21-2</u>	N-BUTANE	<u>0.2</u>
API	<u>0507708105</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 21, T10S, R96W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>770909</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010828</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>CRET-MESAVERDE</u>	NITROGEN	<u>0.2</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3541</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1647</u>	CARBON DIOXIDE	<u>2.1</u>
		HELIUM	<u>0.01</u>
		HEATING VALUE*	<u>1,050</u>
		SPECIFIC GRAVITY	<u>0.614</u>

SAMPLE	20807	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>92.0</u>
COUNTY	<u>MESA</u>	ETHANE	<u>4.2</u>
FIELD	<u>PLATEAU</u>	PROPANE	<u>1.3</u>
WELL NAME	<u>MORAN 27-2</u>	N-BUTANE	<u>0.3</u>
API	<u>0507708042</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 27, T10S, R96W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>740311</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010828</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>CRET-MESAVERDE</u>	NITROGEN	<u>0.3</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2963</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>1.2</u>
		HELIUM	<u>0.01</u>
		HEATING VALUE*	<u>1,075</u>
		SPECIFIC GRAVITY	<u>0.617</u>

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

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

SAMPLE	20956	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	86.2
COUNTY	GARFIELD	ETHANE	5.2
FIELD	PRAIRIE CANYON	PROPANE	2.0
WELL NAME	FEDERAL NO. 31-3	N-BUTANE	0.6
API	0504506161	ISOBUTANE	0.4
LOCATION	SEC. 31, T7S, R104W	N-PENTANE	0.2
OWNER	PURE RESOURCES	ISOPENTANE	0.3
COMPLETED	780524	CYCLOPENTANE	--
SAMPLED	020618	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA	NITROGEN	2.8
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3962	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2116	CARBON DIOXIDE	1.6
		HELIUM	0.23
		HEATING VALUE*	1,092
		SPECIFIC GRAVITY	0.661

SAMPLE	20959	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	84.6
COUNTY	GARFIELD	ETHANE	6.1
FIELD	PRAIRIE CANYON	PROPANE	2.5
WELL NAME	FEDERAL NO. 24-7	N-BUTANE	0.7
API	0504506562	ISOBUTANE	0.4
LOCATION	SEC. 24, T7S, R105W	N-PENTANE	0.3
OWNER	LONE MOUNTAIN PRODUCTION CO.	ISOPENTANE	0.3
COMPLETED	880712	CYCLOPENTANE	--
SAMPLED	020618	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5468	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	975	CARBON DIOXIDE	1.4
		HELIUM	0.29
		HEATING VALUE*	1,106
		SPECIFIC GRAVITY	0.67

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

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

SAMPLE	21319	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>77.7</u>
COUNTY	<u>LOGAN</u>	ETHANE	<u>7.5</u>
FIELD	<u>RAMEY</u>	PROPANE	<u>5.0</u>
WELL NAME	<u>LAND PARTNERSHIP 13-7</u>	N-BUTANE	<u>1.8</u>
API	<u>0507509288</u>	ISOBUTANE	<u>0.7</u>
LOCATION	<u>SEC 7, T10N, R53W</u>	N-PENTANE	<u>0.5</u>
OWNER	<u>ENPROP, INC.</u>	ISOPENTANE	<u>0.5</u>
COMPLETED	<u>941108</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040527</u>	HEXANES PLUS	<u>1.0</u>
FORMATION	<u>CRET-DAKOTA J</u>	NITROGEN	<u>3.3</u>
GEOLOGIC PROVINCE CODE	<u>540</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5027</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>400</u>	CARBON DIOXIDE	<u>1.7</u>
		HELIUM	<u>0.12</u>
		HEATING VALUE*	<u>1,218</u>
		SPECIFIC GRAVITY	<u>0.751</u>

SAMPLE	20799	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>89.1</u>
COUNTY	<u>MESA</u>	ETHANE	<u>5.7</u>
FIELD	<u>SHIRE GULCH</u>	PROPANE	<u>1.8</u>
WELL NAME	<u>FEDERAL 36-1</u>	N-BUTANE	<u>0.5</u>
API	<u>0507708134</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 36, T9S, R97W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>790301</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010827</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-CORCORAN</u>	NITROGEN	<u>0.4</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3141</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>440</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1775</u>	CARBON DIOXIDE	<u>1.6</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1,101</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	20794	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>90.1</u>
COUNTY	<u>MESA</u>	ETHANE	<u>5.8</u>
FIELD	<u>SHIRE GULCH</u>	PROPANE	<u>1.6</u>
WELL NAME	<u>FEDERAL 36-2</u>	N-BUTANE	<u>0.4</u>
API	<u>0507708157</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 36, T9S, R97W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>790510</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010827</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>CRET-COZZETTE</u>	NITROGEN	<u>0.3</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3091</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>360</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1573</u>	CARBON DIOXIDE	<u>0.8</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1,104</u>
		SPECIFIC GRAVITY	<u>0.629</u>

SAMPLE	20798	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>89.2</u>
COUNTY	<u>MESA</u>	ETHANE	<u>5.8</u>
FIELD	<u>SHIRE GULCH</u>	PROPANE	<u>1.9</u>
WELL NAME	<u>FEDERAL 25-1</u>	N-BUTANE	<u>0.5</u>
API	<u>0507708174</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 25, T9S, R97W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>790723</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>010827</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-COZZETTE</u>	NITROGEN	<u>0.4</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3156</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>340</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>662</u>	CARBON DIOXIDE	<u>1.3</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1,107</u>
		SPECIFIC GRAVITY	<u>0.639</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	20797	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 88.8
COUNTY	MESA	ETHANE 6.3
FIELD	SHIRE GULCH	PROPANE 1.9
WELL NAME	FEDERAL 36-4	N-BUTANE 0.5
API	0507708255	ISOBUTANE 0.3
LOCATION	SEC. 36, T9S, R97W	N-PENTANE 0.1
OWNER	TOM BROWN, INC.	ISOPENTANE 0.2
COMPLETED	940902	CYCLOPENTANE --
SAMPLED	010827	HEXANES PLUS 0.3
FORMATION	CRET-COZZETTE	NITROGEN 0.3
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3079	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	340	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	260	CARBON DIOXIDE 1.1
		HELIUM 0.04
		HEATING VALUE* 1.112
		SPECIFIC GRAVITY 0.64
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SAMPLE	20965	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 78.6
COUNTY	GARFIELD	ETHANE 4.1
FIELD	SOUTH CANYON	PROPANE 1.6
WELL NAME	FEDERAL NO. 2-18	N-BUTANE 0.5
API	0504506028	ISOBUTANE 0.3
LOCATION	SEC. 18, T7S, R103W	N-PENTANE 0.2
OWNER	PURE RESOURCES	ISOPENTANE 0.2
COMPLETED	730112	CYCLOPENTANE --
SAMPLED	020618	HEXANES PLUS 0.3
FORMATION	CRET-BUCKHORN	NITROGEN 9.9
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4034	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	231	CARBON DIOXIDE 3.8
		HELIUM 0.51
		HEATING VALUE* 962
		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	20955	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 87.8
COUNTY	GARFIELD	ETHANE 4.2
FIELD	SOUTH CANYON	PROPANE 1.4
WELL NAME	LEWIS USA NO. 36-1	N-BUTANE 0.4
API	0504506164	ISOBUTANE 0.3
LOCATION	SEC. 36, T7S, R105W	N-PENTANE 0.2
OWNER	PURE RESOURCES	ISOPENTANE 0.2
COMPLETED	800201	CYCLOPENTANE --
SAMPLED	020618	HEXANES PLUS 0.3
FORMATION	CRET-DAKOTA	NITROGEN 3.9
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4067	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	184	CARBON DIOXIDE 1.2
		HELIUM 0.26
		HEATING VALUE* 1.048
		SPECIFIC GRAVITY 0.638

SAMPLE	20958	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 84.7
COUNTY	GARFIELD	ETHANE 4.9
FIELD	SOUTH CANYON	PROPANE 1.7
WELL NAME	FEDERAL NO. 1-17	N-BUTANE 0.5
API	0504506026	ISOBUTANE 0.3
LOCATION	SEC. 17, T7S, R104W	N-PENTANE 0.2
OWNER	PURE RESOURCES	ISOPENTANE 0.2
COMPLETED	731127	CYCLOPENTANE --
SAMPLED	020618	HEXANES PLUS 0.3
FORMATION	CRET-DAKOTA	NITROGEN 4.4
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4885	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2127	CARBON DIOXIDE 2.3
		HELIUM 0.34
		HEATING VALUE* 1.047
		SPECIFIC GRAVITY 0.662

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

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

SAMPLE	20962	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>76.0</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>4.5</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.7</u>
WELL NAME	<u>FEDERAL NO. 33-8</u>	N-BUTANE	<u>0.5</u>
API	<u>0504506754</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 33, T7S, R104W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>910821</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>6.1</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3650</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>740</u>	CARBON DIOXIDE	<u>9.7</u>
		HELIUM	<u>0.36</u>
		HEATING VALUE*	<u>955</u>
		SPECIFIC GRAVITY	<u>0.739</u>
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SAMPLE	20979	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>72.9</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>3.2</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.0</u>
WELL NAME	<u>FEDERAL NO. 11-7</u>	N-BUTANE	<u>0.3</u>
API	<u>0504506984</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 11, T7S, R104W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>951007</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020619</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>8.6</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5471</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>420</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>291</u>	CARBON DIOXIDE	<u>12.8</u>
		HELIUM	<u>0.47</u>
		HEATING VALUE*	<u>858</u>
		SPECIFIC GRAVITY	<u>0.754</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	20974	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 70.0
COUNTY	GARFIELD	ETHANE 3.4
FIELD	SOUTH CANYON	PROPANE 1.3
WELL NAME	FEDERAL NO. 1	N-BUTANE 0.4
API	0504506171	ISOBUTANE 0.3
LOCATION	SEC. 35, T7S, R104W	N-PENTANE 0.2
OWNER	NATIONAL FUEL CORP.	ISOPENTANE 0.2
COMPLETED	781129	CYCLOPENTANE --
SAMPLED	020619	HEXANES PLUS 0.4
FORMATION	CRET-DAKOTA	NITROGEN 9.8
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3567	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	45	CARBON DIOXIDE 13.4
		HELIUM 0.49
		HEATING VALUE* 861
		SPECIFIC GRAVITY 0.78
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SAMPLE	20971	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 80.4
COUNTY	GARFIELD	ETHANE 4.5
FIELD	SOUTH CANYON	PROPANE 1.9
WELL NAME	FEDERAL NO. 18-12	N-BUTANE 0.6
API	0504506636	ISOBUTANE 0.3
LOCATION	SEC. 18, T7S, R103W	N-PENTANE 0.2
OWNER	LONE MOUNTAIN PRODUCTION CO.	ISOPENTANE 0.2
COMPLETED	900616	CYCLOPENTANE --
SAMPLED	020618	HEXANES PLUS 0.3
FORMATION	CRET-DAKOTA	NITROGEN 9.3
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4350	ARGON TRACE
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	258	CARBON DIOXIDE 1.8
		HELIUM 0.49
		HEATING VALUE* 1,001
		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	20957	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>79.7</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>7.5</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>3.3</u>
WELL NAME	<u>FULLER USA NO. 13-16</u>	N-BUTANE	<u>1.0</u>
API	<u>0504506414</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 13, T7S, R105W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>PURE RESOURCES</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>820811</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>4.8</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4713</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>726</u>	CARBON DIOXIDE	<u>1.4</u>
		HELIUM	<u>0.49</u>
		HEATING VALUE*	<u>1,127</u>
		SPECIFIC GRAVITY	<u>0.703</u>

SAMPLE	20949	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>66.0</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>3.7</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.7</u>
WELL NAME	<u>FEDERAL NO. 27-11</u>	N-BUTANE	<u>0.7</u>
API	<u>0504506107</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 27, T7S, R104W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>PURE RESOURCES</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>770626</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020617</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>9.4</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3705</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3207</u>	CARBON DIOXIDE	<u>16.2</u>
		HELIUM	<u>0.50</u>
		HEATING VALUE*	<u>872</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	20970	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>77.2</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>5.5</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>2.9</u>
WELL NAME	<u>FEDERAL NO. 3-32</u>	N-BUTANE	<u>1.0</u>
API	<u>0504506029</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 32, T6S, R103W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>730503</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>7.5</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4264</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1925</u>	CARBON DIOXIDE	<u>3.5</u>
		HELIUM	<u>0.50</u>
		HEATING VALUE*	<u>1,058</u>
		SPECIFIC GRAVITY	<u>0.722</u>

SAMPLE	20980	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>67.5</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>3.1</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.1</u>
WELL NAME	<u>FEDERAL NO. 1-12</u>	N-BUTANE	<u>0.4</u>
API	<u>0504506105</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 12, T7S, R104W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>770801</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020619</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>11.0</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5540</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>68</u>	CARBON DIOXIDE	<u>15.3</u>
		HELIUM	<u>0.57</u>
		HEATING VALUE*	<u>810</u>
		SPECIFIC GRAVITY	<u>0.791</u>

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

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

SAMPLE	20968	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>59.7</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>2.5</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>0.9</u>
WELL NAME	<u>FEDERAL NO. 1-31</u>	N-BUTANE	<u>0.3</u>
API	<u>0504506031</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 31, T6S, R103W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>730827</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>11.3</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4910</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>328</u>	CARBON DIOXIDE	<u>24.2</u>
		HELIUM	<u>0.58</u>
		HEATING VALUE*	<u>700</u>
		SPECIFIC GRAVITY	<u>0.867</u>

SAMPLE	20976	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>60.4</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>2.8</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.1</u>
WELL NAME	<u>YOUNG CATTLE CO. NO. 24-12</u>	N-BUTANE	<u>0.4</u>
API	<u>0504506346</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 24, T6S, R104W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>TOM BROWN, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>810829</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020619</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-DAKOTA</u>	NITROGEN	<u>11.6</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4523</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1247</u>	CARBON DIOXIDE	<u>22.4</u>
		HELIUM	<u>0.59</u>
		HEATING VALUE*	<u>730</u>
		SPECIFIC GRAVITY	<u>0.86</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	20978	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	62.3
COUNTY	GARFIELD	ETHANE	2.9
FIELD	SOUTH CANYON	PROPANE	1.1
WELL NAME	YOUNG CATTLE NO. 12-B	N-BUTANE	0.3
API	0504506214	ISOBUTANE	0.2
LOCATION	SEC. 12, T6S, R104W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	791121	CYCLOPENTANE	--
SAMPLED	020619	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA	NITROGEN	11.7
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5251	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2247	CARBON DIOXIDE	20.3
		HELIUM	0.62
		HEATING VALUE*	749
		SPECIFIC GRAVITY	0.84

SAMPLE	20966	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	64.3
COUNTY	GARFIELD	ETHANE	2.9
FIELD	SOUTH CANYON	PROPANE	1.1
WELL NAME	SOUTH CANYON FEDERAL NO. 3	N-BUTANE	0.4
API	0504505062	ISOBUTANE	0.2
LOCATION	SEC. 7, T7S, R103W	N-PENTANE	0.1
OWNER	TOM BROWN, INC.	ISOPENTANE	0.1
COMPLETED	580113	CYCLOPENTANE	--
SAMPLED	020618	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA	NITROGEN	12.1
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3840	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	857	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1430	CARBON DIOXIDE	17.8
		HELIUM	0.62
		HEATING VALUE*	771
		SPECIFIC GRAVITY	0.818

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

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

SAMPLE	20975	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 64.2
COUNTY	GARFIELD	ETHANE 3.1
FIELD	SOUTH CANYON	PROPANE 1.4
WELL NAME	SOUTH CANYON FEDERAL NO. 2	N-BUTANE 0.5
API	0504505086	ISOBUTANE 0.3
LOCATION	SEC. 35, T6S, R104W	N-PENTANE 0.2
OWNER	TOM BROWN, INC.	ISOPENTANE 0.2
COMPLETED	570502	CYCLOPENTANE --
SAMPLED	020619	HEXANES PLUS 0.4
FORMATION	CRET-DAKOTA	NITROGEN 13.5
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	4039	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	736	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	2100	CARBON DIOXIDE 15.4
		HELIUM 0.66
		HEATING VALUE* 803
		SPECIFIC GRAVITY 0.815
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SAMPLE	20961	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 84.8
COUNTY	GARFIELD	ETHANE 4.4
FIELD	SOUTH CANYON	PROPANE 1.6
WELL NAME	FEDERAL NO. 33-14	N-BUTANE 0.5
API	0504507694	ISOBUTANE 0.3
LOCATION	SEC. 33, T7S, R104W	N-PENTANE 0.2
OWNER	LONE MOUNTAIN PRODUCTION CO.	ISOPENTANE 0.2
COMPLETED	010309	CYCLOPENTANE --
SAMPLED	020618	HEXANES PLUS 0.4
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN 4.2
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3621	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	753	CARBON DIOXIDE 3.1
		HELIUM 0.29
		HEATING VALUE* 1,038
		SPECIFIC GRAVITY 0.666

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

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

SAMPLE	20954	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>77.9</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>5.6</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>2.6</u>
WELL NAME	<u>FEDERAL NO. 6-13</u>	N-BUTANE	<u>1.0</u>
API	<u>0504506159</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 6, T8S, R104W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>PURE RESOURCES</u>	ISOPENTANE	<u>0.5</u>
COMPLETED	<u>790519</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>CRET-DAKOTA, JURA-MORRISON</u>	NITROGEN	<u>9.2</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3724</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3752</u>	CARBON DIOXIDE	<u>1.1</u>
		HELIUM	<u>0.47</u>
		HEATING VALUE*	<u>1,073</u>
		SPECIFIC GRAVITY	<u>0.71</u>

SAMPLE	20964	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>69.4</u>
COUNTY	<u>GARFIELD</u>	ETHANE	<u>3.5</u>
FIELD	<u>SOUTH CANYON</u>	PROPANE	<u>1.5</u>
WELL NAME	<u>FEDERAL NO. 26-4</u>	N-BUTANE	<u>0.6</u>
API	<u>0504506753</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 26, T7S, R104W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>LONE MOUNTAIN PRODUCTION CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>910826</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020618</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>CRET-DAKOTA, JURA-MORRISON</u>	NITROGEN	<u>8.9</u>
GEOLOGIC PROVINCE CODE	<u>595</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3808</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>526</u>	CARBON DIOXIDE	<u>14.3</u>
		HELIUM	<u>0.49</u>
		HEATING VALUE*	<u>878</u>
		SPECIFIC GRAVITY	<u>0.794</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	20945	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	83.3
COUNTY	MESA	ETHANE	4.4
FIELD	SOUTH CANYON	PROPANE	1.6
WELL NAME	FEDERAL NO. 33-19	N-BUTANE	0.6
API	0507708372	ISOBUTANE	0.4
LOCATION	SEC. 19, T8S, R104W	N-PENTANE	0.2
OWNER	LINN BROTHERS OIL & GAS CORP.	ISOPENTANE	0.2
COMPLETED	811120	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.3
FORMATION	JURA-MORRISON	NITROGEN	8.0
GEOLOGIC PROVINCE CODE	595	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3228	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	840	CARBON DIOXIDE	0.5
		HELIUM	0.47
		HEATING VALUE*	1,023
		SPECIFIC GRAVITY	0.656
<hr/>			
SAMPLE	20908	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	60.3
COUNTY	BACA	ETHANE	5.6
FIELD	STONINGTON	PROPANE	3.5
WELL NAME	MURRAY B-1	N-BUTANE	1.1
API	0500906131	ISOBUTANE	0.4
LOCATION	SEC. 5, T32S, R42W	N-PENTANE	0.3
OWNER	SAWTOOTH ENERGY PARTNERS, L.L.C.	ISOPENTANE	0.2
COMPLETED	760613	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.2
FORMATION	PENN-TOPEKA	NITROGEN	27.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3194	ARGON	0.1
MEASURED DEPTH	3259	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	180	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	565	CARBON DIOXIDE	0.1
		HELIUM	0.75
		HEATING VALUE*	873
		SPECIFIC GRAVITY	0.762

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

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

SAMPLE	20907	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	54.1
COUNTY	BACA	ETHANE	6.4
FIELD	STONINGTON	PROPANE	4.0
WELL NAME	BRYAN NO. 1-18	N-BUTANE	1.3
API	0500906430	ISOBUTANE	0.5
LOCATION	SEC. 18, T31S, R41W	N-PENTANE	0.3
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.2
COMPLETED	850329	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.3
FORMATION	PENN-TOPEKA	NITROGEN	31.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3220	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	756	CARBON DIOXIDE	0.1
		HELIUM	0.86
		HEATING VALUE*	854
		SPECIFIC GRAVITY	0.796

SAMPLE	20913	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	44.5
COUNTY	BACA	ETHANE	6.4
FIELD	STONINGTON	PROPANE	4.5
WELL NAME	STATE NO. 267-S2	N-BUTANE	1.5
API	0500906175	ISOBUTANE	0.6
LOCATION	SEC. 17, T31S, R42W	N-PENTANE	0.4
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.3
COMPLETED	770727	CYCLOPENTANE	--
SAMPLED	011101	HEXANES PLUS	0.3
FORMATION	PENN-TOPEKA	NITROGEN	40.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3254	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	472	CARBON DIOXIDE	0.1
		HELIUM	1.02
		HEATING VALUE*	788
		SPECIFIC GRAVITY	0.844

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

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

SAMPLE	21315	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>68.5</u>
COUNTY	<u>PROWERS</u>	ETHANE	<u>7.2</u>
FIELD	<u>TABLETOP</u>	PROPANE	<u>3.1</u>
WELL NAME	<u>ELLENBERGER NO. 1</u>	N-BUTANE	<u>0.7</u>
API	<u>0509906138</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC 18, T25S, R47W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>HORSESHOE OPERATING, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>801216</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040526</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>PENN-MORROW</u>	NITROGEN	<u>18.3</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5242</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1988</u>	CARBON DIOXIDE	<u>0.4</u>
		HELIUM	<u>0.55</u>
		HEATING VALUE*	<u>969</u>
		SPECIFIC GRAVITY	<u>0.73</u>

SAMPLE	21322	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>47.8</u>
COUNTY	<u>WELD</u>	ETHANE	<u>17.6</u>
FIELD	<u>TERRACE</u>	PROPANE	<u>18.7</u>
WELL NAME	<u>NELSON RANCHES A1-7</u>	N-BUTANE	<u>5.6</u>
API	<u>0512319651</u>	ISOBUTANE	<u>1.9</u>
LOCATION	<u>SEC 20, T10N, R58W</u>	N-PENTANE	<u>2.4</u>
OWNER	<u>ANTELOPE ENERGY CO.</u>	ISOPENTANE	<u>1.7</u>
COMPLETED	<u>980911</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>040527</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>CRET-DAKOTA D</u>	NITROGEN	<u>0.5</u>
GEOLOGIC PROVINCE CODE	<u>540</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6658</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>365</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>150</u>	CARBON DIOXIDE	<u>3.3</u>
		HELIUM	<u>0.15</u>
		HEATING VALUE*	<u>1,694</u>
		SPECIFIC GRAVITY	<u>1.05</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	20994	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 86.4
COUNTY	RIO BLANCO	ETHANE 3.2
FIELD	TEXAS MOUNTAIN	PROPANE 0.8
WELL NAME	MISSOURI CREEK 28 NO. 851	N-BUTANE 0.3
API	0510306059	ISOBUTANE 0.2
LOCATION	SEC. 28, T3S, R103W	N-PENTANE 0.1
OWNER	ENCANA OIL & GAS (USA) INC.	ISOPENTANE 0.2
COMPLETED	601122	CYCLOPENTANE --
SAMPLED	020729	HEXANES PLUS 0.5
FORMATION	JURA-SALT WASH	NITROGEN 7.0
GEOLOGIC PROVINCE CODE	595	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6563	ARGON TRACE
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	414	CARBON DIOXIDE 0.7
		HELIUM 0.41
		HEATING VALUE* 1.006
		SPECIFIC GRAVITY 0.638

SAMPLE	20899	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 50.4
COUNTY	BACA	ETHANE 6.4
FIELD	VILAS	PROPANE 5.9
WELL NAME	COPE-FEDERAL NO. 1-16	N-BUTANE 2.9
API	0500906034	ISOBUTANE 0.9
LOCATION	SEC. 16, T31S, R44W	N-PENTANE 1.1
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE 0.8
COMPLETED	700129	CYCLOPENTANE --
SAMPLED	011031	HEXANES PLUS 1.2
FORMATION	PENN-TOPEKA	NITROGEN 29.3
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3329	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	3400	CARBON DIOXIDE 0.2
		HELIUM 0.80
		HEATING VALUE* 1.030
		SPECIFIC GRAVITY 0.883

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

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

SAMPLE	20895	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>54.6</u>
COUNTY	<u>BACA</u>	ETHANE	<u>5.7</u>
FIELD	<u>VILAS</u>	PROPANE	<u>4.1</u>
WELL NAME	<u>OLIVER NO. 1-18</u>	N-BUTANE	<u>1.6</u>
API	<u>0500905303</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 18, T31S, R44W</u>	N-PENTANE	<u>0.5</u>
OWNER	<u>SAWTOOTH ENERGY PARTNERS LLC</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>660502</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>011031</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>30.7</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3368</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>7000</u>	CARBON DIOXIDE	<u>0.3</u>
		HELIUM	<u>0.84</u>
		HEATING VALUE*	<u>894</u>
		SPECIFIC GRAVITY	<u>0.812</u>

SAMPLE	20893	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>53.3</u>
COUNTY	<u>BACA</u>	ETHANE	<u>6.1</u>
FIELD	<u>VILAS</u>	PROPANE	<u>4.4</u>
WELL NAME	<u>LOFLIN-FEDERAL NO. 1-21</u>	N-BUTANE	<u>1.7</u>
API	<u>0500906035</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 21, T31S, R44W</u>	N-PENTANE	<u>0.6</u>
OWNER	<u>SAWTOOTH ENERGY PARTNERS LLC</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>700129</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>011031</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>31.0</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3351</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>2400</u>	CARBON DIOXIDE	<u>0.5</u>
		HELIUM	<u>0.85</u>
		HEATING VALUE*	<u>901</u>
		SPECIFIC GRAVITY	<u>0.822</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	20894	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 50.6
COUNTY	BACA	ETHANE 5.1
FIELD	VILAS	PROPANE 3.9
WELL NAME	ROLLINS-RUTHERFORD NO. 1-A	N-BUTANE 1.8
API	0500906200	ISOBUTANE 0.6
LOCATION	SEC. 20, T31S, R44W	N-PENTANE 0.6
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE 0.5
COMPLETED	791217	CYCLOPENTANE --
SAMPLED	011031	HEXANES PLUS 0.8
FORMATION	PENN-TOPEKA	NITROGEN 35.0
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3330	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	319	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	779	CARBON DIOXIDE 0.2
		HELIUM 0.86
		HEATING VALUE* 858
		SPECIFIC GRAVITY 0.834

SAMPLE	20898	COMPONENT, MOLE PCT
STATE	COLORADO	METHANE 54.3
COUNTY	BACA	ETHANE 5.9
FIELD	VILAS	PROPANE 4.1
WELL NAME	LOELIN NO. 1-8	N-BUTANE 1.5
API	0500906322	ISOBUTANE 0.5
LOCATION	SEC. 8, T31S, R44W	N-PENTANE 0.5
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE 0.3
COMPLETED	811014	CYCLOPENTANE --
SAMPLED	011031	HEXANES PLUS 0.6
FORMATION	PENN-TOPEKA	NITROGEN 31.1
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3288	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	383	CARBON DIOXIDE 0.3
		HELIUM 0.86
		HEATING VALUE* 885
		SPECIFIC GRAVITY 0.81

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

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

SAMPLE	20900	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	51.3
COUNTY	BACA	ETHANE	5.7
FIELD	VILAS	PROPANE	4.5
WELL NAME	FEDERAL NO. 2-16X	N-BUTANE	2.0
API	0500906525	ISOBUTANE	0.6
LOCATION	SEC. 16, T31S, R44W	N-PENTANE	0.7
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.5
COMPLETED	930627	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.8
FORMATION	PENN-TOPEKA	NITROGEN	32.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3340	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	500	CARBON DIOXIDE	0.2
		HELIUM	0.87
		HEATING VALUE*	911
		SPECIFIC GRAVITY	0.842
SAMPLE	20896	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	54.1
COUNTY	BACA	ETHANE	5.5
FIELD	VILAS	PROPANE	4.0
WELL NAME	STROBEL NO. 2-19	N-BUTANE	1.6
API	0500906222	ISOBUTANE	0.5
LOCATION	SEC. 19, T31S, R44W	N-PENTANE	0.6
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.4
COMPLETED	790601	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.7
FORMATION	PENN-TOPEKA	NITROGEN	31.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3307	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	750	CARBON DIOXIDE	0.4
		HELIUM	0.87
		HEATING VALUE*	886
		SPECIFIC GRAVITY	0.816

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

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

SAMPLE	20892	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	55.3
COUNTY	BACA	ETHANE	5.5
FIELD	VILAS	PROPANE	3.9
WELL NAME	BROWN 1-13	N-BUTANE	1.4
API	0500905317	ISOBUTANE	0.5
LOCATION	SEC. 13, T31S, R45W	N-PENTANE	0.4
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.3
COMPLETED	660822	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.5
FORMATION	PENN-TOPEKA	NITROGEN	30.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3308	ARGON	0.1
MEASURED DEPTH	3455	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	TRACE
OPEN FLOW, MCFD	8500	CARBON DIOXIDE	0.3
		HELIUM	0.88
		HEATING VALUE*	866
		SPECIFIC GRAVITY	0.798

SAMPLE	20901	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	49.9
COUNTY	BACA	ETHANE	6.0
FIELD	VILAS	PROPANE	4.8
WELL NAME	STATE NO. 1-15	N-BUTANE	2.1
API	0500906047	ISOBUTANE	0.7
LOCATION	SEC. 15, T31S, R44W	N-PENTANE	0.7
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.5
COMPLETED	720221	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.8
FORMATION	PENN-TOPEKA	NITROGEN	33.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3379	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	489	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1750	CARBON DIOXIDE	0.2
		HELIUM	0.90
		HEATING VALUE*	910
		SPECIFIC GRAVITY	0.85

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

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

SAMPLE	20905	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>52.8</u>
COUNTY	<u>BACA</u>	ETHANE	<u>5.8</u>
FIELD	<u>VILAS</u>	PROPANE	<u>3.9</u>
WELL NAME	<u>THOMPSON NO. 1-25</u>	N-BUTANE	<u>1.3</u>
API	<u>0500906164</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 25, T31S, R44W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>SAWTOOTH ENERGY PARTNERS LLC</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>770403</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>011031</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>33.6</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3304</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>802</u>	CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.91</u>
		HEATING VALUE*	<u>830</u>
		SPECIFIC GRAVITY	<u>0.802</u>

SAMPLE	20897	COMPONENT, MOLE PCT	
STATE	<u>COLORADO</u>	METHANE	<u>53.4</u>
COUNTY	<u>BACA</u>	ETHANE	<u>5.8</u>
FIELD	<u>VILAS</u>	PROPANE	<u>3.9</u>
WELL NAME	<u>FREIGHBERGER NO. 1-7</u>	N-BUTANE	<u>1.3</u>
API	<u>0500906163</u>	ISOBUTANE	<u>0.5</u>
LOCATION	<u>SEC. 7, T31S, R44W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>SAWTOOTH ENERGY PARTNERS LLC</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>770309</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>011031</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>33.0</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>3299</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1346</u>	CARBON DIOXIDE	<u>0.3</u>
		HELIUM	<u>0.95</u>
		HEATING VALUE*	<u>837</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	20903	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	45.5
COUNTY	BACA	ETHANE	6.3
FIELD	VILAS	PROPANE	5.4
WELL NAME	THOMPSON-PORTER NO. 1-10	N-BUTANE	2.5
API	0500906081	ISOBUTANE	0.8
LOCATION	SEC. 10, T31S, R44W	N-PENTANE	0.9
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.6
COMPLETED	740710	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	1.0
FORMATION	PENN-TOPEKA	NITROGEN	35.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3350	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4650	CARBON DIOXIDE	0.3
		HELIUM	0.96
		HEATING VALUE*	925
		SPECIFIC GRAVITY	0.885

SAMPLE	20902	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	46.3
COUNTY	BACA	ETHANE	6.1
FIELD	VILAS	PROPANE	4.7
WELL NAME	HARTMETZ NO. 1-9	N-BUTANE	1.9
API	0500906158	ISOBUTANE	0.6
LOCATION	SEC. 9, T31S, R44W	N-PENTANE	0.6
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.4
COMPLETED	770407	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.6
FORMATION	PENN-TOPEKA	NITROGEN	37.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3351	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.1
OPEN FLOW, MCFD	500	CARBON DIOXIDE	0.2
		HELIUM	1.01
		HEATING VALUE*	850
		SPECIFIC GRAVITY	0.854

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

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

SAMPLE	20904	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	45.0
COUNTY	BACA	ETHANE	6.0
FIELD	VILAS	PROPANE	4.2
WELL NAME	PORTER NO. 1-11	N-BUTANE	1.5
API	0500906184	ISOBUTANE	0.5
LOCATION	SEC. 11, T31S, R44W	N-PENTANE	0.4
OWNER	SAWTOOTH ENERGY PARTNERS LLC	ISOPENTANE	0.3
COMPLETED	771229	CYCLOPENTANE	--
SAMPLED	011031	HEXANES PLUS	0.4
FORMATION	PENN-TOPEKA	NITROGEN	40.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3364	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	150	CARBON DIOXIDE	0.2
		HELIUM	1.08
		HEATING VALUE*	784
		SPECIFIC GRAVITY	0.842

SAMPLE	21314	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	46.5
COUNTY	BACA	ETHANE	3.0
FIELD	WALSH	PROPANE	3.0
WELL NAME	COOK 1-5	N-BUTANE	1.3
API	0500905117	ISOBUTANE	0.5
LOCATION	SEC. 5, T33S, R43W	N-PENTANE	0.4
OWNER	TINDALI OPERATING CO.	ISOPENTANE	0.4
COMPLETED	631202	CYCLOPENTANE	--
SAMPLED	040525	HEXANES PLUS	1.0
FORMATION	PENN-WABAUNSEE	NITROGEN	42.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3180	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2060	CARBON DIOXIDE	0.1
		HELIUM	0.94
		HEATING VALUE*	736
		SPECIFIC GRAVITY	0.837

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

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

SAMPLE	21320	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	69.3
COUNTY	WELD	ETHANE	6.9
FIELD	WHITE BUTTE	PROPANE	9.5
WELL NAME	MAIS NO. 1-35	N-BUTANE	3.8
API	0512319817	ISOBUTANE	1.1
LOCATION	SEC 35, T8N, R56W	N-PENTANE	1.0
OWNER	KEITH F. WALKER OIL & GAS CO.	ISOPENTANE	0.8
COMPLETED	000421	CYCLOPENTANE	--
SAMPLED	040527	HEXANES PLUS	1.9
FORMATION	CRET-DAKOTA D	NITROGEN	3.8
GEOLOGIC PROVINCE CODE	540	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5670	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	900	CARBON DIOXIDE	1.8
		HELIUM	0.13
		HEATING VALUE*	1,384
		SPECIFIC GRAVITY	0.864

SAMPLE	50597	COMPONENT, MOLE PCT	
STATE	COLORADO	METHANE	46.2
COUNTY	CHEYENNE	ETHANE	7.0
FIELD	WILD SAGE BRUSH	PROPANE	4.7
WELL NAME	SCHEIMER NO. 1-24	N-BUTANE	1.5
API	0501707618	ISOBUTANE	0.6
LOCATION	SEC 24, T16S, R46W	N-PENTANE	0.4
OWNER	MONUMENT GAS MARKETING, INC.	ISOPENTANE	0.4
COMPLETED	020730	CYCLOPENTANE	--
SAMPLED	020827	HEXANES PLUS	0.6
FORMATION	PENN-MORROW	NITROGEN	35.3
GEOLOGIC PROVINCE CODE	450	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5044	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4130	CARBON DIOXIDE	0.8
		HELIUM	2.51
		HEATING VALUE*	839
		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	21185	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>93.8</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>2.8</u>
FIELD	<u>AETNA</u>	PROPANE	<u>1.0</u>
WELL NAME	<u>HULLETT NO. 1-14</u>	N-BUTANE	<u>0.3</u>
API	<u>1503321153</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 14, T32S, R19W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>AMERICAN WARRIOR, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>001116</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030522</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>ORDO-VIOLA</u>	NITROGEN	<u>1.0</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5932</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.09</u>
		HEATING VALUE*	<u>1,065</u>
		SPECIFIC GRAVITY	<u>0.604</u>

SAMPLE	21212	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>79.5</u>
COUNTY	<u>BARBER</u>	ETHANE	<u>8.7</u>
FIELD	<u>AETNA GAS AREA</u>	PROPANE	<u>4.8</u>
WELL NAME	<u>SPRIGGS B1</u>	N-BUTANE	<u>1.5</u>
API	<u>1500722214</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 32, T33S, R13W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>WOOLSEY PETROLEUM CORP.</u>	ISOPENTANE	<u>0.4</u>
COMPLETED	<u>881224</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030612</u>	HEXANES PLUS	<u>0.7</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>4924</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1231</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1000</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.15</u>
		HEATING VALUE*	<u>1,218</u>
		SPECIFIC GRAVITY	<u>0.719</u>

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

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

SAMPLE	21160	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.0
COUNTY	KIOWA	ETHANE	5.5
FIELD	ALEFORD	PROPANE	2.9
WELL NAME	PAXTON 1	N-BUTANE	1.1
API	1509721432	ISOBUTANE	0.5
LOCATION	SEC. 33, T30S, R18W	N-PENTANE	0.3
OWNER	OIL PRODUCERS INC., OF KANSAS	ISOPENTANE	0.3
COMPLETED	980811	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.6
FORMATION	PENN-MARMATON,CHRK, MISS-MSSP	NITROGEN	2.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5034	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.13
		HEATING VALUE*	1,146
		SPECIFIC GRAVITY	0.669

SAMPLE	21196	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	77.9
COUNTY	BARBER	ETHANE	8.2
FIELD	ANTRIM,S	PROPANE	5.8
WELL NAME	VICKERY 1A	N-BUTANE	1.8
API	1500721562	ISOBUTANE	0.7
LOCATION	SEC. 31, T32S, R10W	N-PENTANE	0.5
OWNER	R & B OIL & GAS CO.	ISOPENTANE	0.4
COMPLETED	830427	CYCLOPENTANE	--
SAMPLED	030610	HEXANES PLUS	1.1
FORMATION	PENN-CHEROKEE	NITROGEN	3.4
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4462	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1599	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	997	CARBON DIOXIDE	0.1
		HELIUM	0.12
		HEATING VALUE*	1,247
		SPECIFIC GRAVITY	0.744

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

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

SAMPLE	21151	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.2
COUNTY	COMANCHE	ETHANE	3.2
FIELD	BELCHER SE	PROPANE	1.2
WELL NAME	BOOTH NO. 1-23	N-BUTANE	0.4
API	1503320640	ISOBUTANE	0.2
LOCATION	SEC. 23, T32S, R17W	N-PENTANE	0.1
OWNER	MIDCO EXPLORATION, INC.	ISOPENTANE	0.1
COMPLETED	840930	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5132	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	720	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	35	CARBON DIOXIDE	0.1
		HELIUM	0.10
		HEATING VALUE*	1,069
		SPECIFIC GRAVITY	0.605

SAMPLE	21174	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.1
COUNTY	COMANCHE	ETHANE	6.6
FIELD	BIRD	PROPANE	3.6
WELL NAME	LENERTZ 2	N-BUTANE	1.2
API	1503321086	ISOBUTANE	0.5
LOCATION	SEC. 13, T32S, R19W	N-PENTANE	0.4
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.3
COMPLETED	000823	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.9
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	13.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.4
		HELIUM	0.56
		HEATING VALUE*	1,065
		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	21183	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 78.1
COUNTY	COMANCHE	ETHANE 7.9
FIELD	BIRD	PROPANE 3.9
WELL NAME	BIRD 3-28	N-BUTANE 1.6
API	1503321341	ISOBUTANE 0.6
LOCATION	SEC. 28, T32S, R19W	N-PENTANE 0.5
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE 0.4
COMPLETED	030116	CYCLOPENTANE --
SAMPLED	030522	HEXANES PLUS 0.8
FORMATION	ORDO-VIOLA	NITROGEN 5.7
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE 0.2
		HELIUM 0.24
		HEATING VALUE* 1,174
		SPECIFIC GRAVITY 0.723
SAMPLE	21163	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 85.7
COUNTY	COMANCHE	ETHANE 4.3
FIELD	BIRD E	PROPANE 3.5
WELL NAME	KERSTETTER 2-33	N-BUTANE 1.3
API	1503320450	ISOBUTANE 0.4
LOCATION	SEC. 33, T32S, R19W	N-PENTANE 0.4
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE 0.3
COMPLETED	000429	CYCLOPENTANE --
SAMPLED	030521	HEXANES PLUS 1.0
FORMATION	PENN-PAWNEE	NITROGEN 2.8
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE 0.1
		HELIUM 0.13
		HEATING VALUE* 1,165
		SPECIFIC GRAVITY 0.684

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

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

SAMPLE	21181	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	92.0
COUNTY	COMANCHE	ETHANE	2.9
FIELD	BIRD E	PROPANE	1.3
WELL NAME	RICH 23-14	N-BUTANE	0.5
API	1503321042	ISOBUTANE	0.2
LOCATION	SEC. 23, T32S, R19W	N-PENTANE	0.2
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.2
COMPLETED	000215	CYCLOPENTANE	--
SAMPLED	030522	HEXANES PLUS	0.6
FORMATION	ORDO-VIOLA	NITROGEN	1.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5808	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	250	CARBON DIOXIDE	0.3
		HELIUM	0.12
		HEATING VALUE*	1,081
		SPECIFIC GRAVITY	0.622

SAMPLE	21179	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	87.8
COUNTY	COMANCHE	ETHANE	3.9
FIELD	BIRD NE	PROPANE	3.6
WELL NAME	LYON 1	N-BUTANE	1.1
API	1503320980	ISOBUTANE	0.4
LOCATION	SEC. 21, T32S, R19W	N-PENTANE	0.3
OWNER	OIL PRODUCERS INC. OF KANSAS	ISOPENTANE	0.3
COMPLETED	990117	CYCLOPENTANE	--
SAMPLED	030522	HEXANES PLUS	0.7
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5120	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	747	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	0.1
		HELIUM	0.11
		HEATING VALUE*	1,152
		SPECIFIC GRAVITY	0.665

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

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

SAMPLE	21243	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.1
COUNTY	EDWARDS	ETHANE	3.1
FIELD	BORDEWICK E	PROPANE	1.1
WELL NAME	TAYLOR 1	N-BUTANE	0.4
API	1504720888	ISOBUTANE	0.2
LOCATION	SEC. 24, T26S, R18W	N-PENTANE	0.1
OWNER	KODIAK PETROLEUM, INC.	ISOPENTANE	0.1
COMPLETED	811028	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	4.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4558	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	166	CARBON DIOXIDE	0.2
		HELIUM	0.50
		HEATING VALUE*	1,031
		SPECIFIC GRAVITY	0.622

SAMPLE	21210	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	79.4
COUNTY	BARBER	ETHANE	6.4
FIELD	BROOKS-YOUNGER N	PROPANE	3.1
WELL NAME	LENKNER 1	N-BUTANE	0.9
API	1500721781	ISOBUTANE	0.4
LOCATION	SEC. 15, T32S, R13W	N-PENTANE	0.3
OWNER	PRATT WELL SERVICE, INC.	ISOPENTANE	0.2
COMPLETED	840523	CYCLOPENTANE	--
SAMPLED	030612	HEXANES PLUS	0.5
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	8.5
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4435	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1617	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	210	CARBON DIOXIDE	0.1
		HELIUM	0.26
		HEATING VALUE*	1,078
		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	50586	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.0
COUNTY	COMANCHE	ETHANE	2.5
FIELD	BUTTERMILK E	PROPANE	0.8
WELL NAME	COLE NO. 1	N-BUTANE	0.3
API	1503321078	ISOBUTANE	0.1
LOCATION	SEC. 9, T34S, R18W	N-PENTANE	0.1
OWNER	CRAWFORD OIL & GAS, INC.	ISOPENTANE	0.1
COMPLETED	000412	CYCLOPENTANE	--
SAMPLED	000400	HEXANES PLUS	0.6
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	2.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	--
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.09
		HEATING VALUE*	1.066
		SPECIFIC GRAVITY	0.613

SAMPLE	21258	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.1
COUNTY	PAWNEE	ETHANE	3.6
FIELD	CARPENTER	PROPANE	1.5
WELL NAME	HAWES 1B	N-BUTANE	0.6
API	1514520205	ISOBUTANE	0.3
LOCATION	SEC. 29, T23S, R16W	N-PENTANE	0.2
OWNER	RENEGADE RESOURCES CORP.	ISOPENTANE	0.2
COMPLETED	710622	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.7
FORMATION	PENN-CHEROKEE	NITROGEN	4.2
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4156	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3650	CARBON DIOXIDE	0.1
		HELIUM	0.51
		HEATING VALUE*	1.068
		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	21254	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	82.4
COUNTY	PAWNEE	ETHANE	2.3
FIELD	CARPENTER	PROPANE	0.8
WELL NAME	PARAMORE 1	N-BUTANE	0.2
API	1514500147	ISOBUTANE	0.1
LOCATION	SEC. 11, T23S, R17W	N-PENTANE	0.1
OWNER	HERMAN L. LOEB	ISOPENTANE	0.1
COMPLETED	660127	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.2
FORMATION	MISS-CONGLOMERATE	NITROGEN	12.9
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4083	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1055	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2500	CARBON DIOXIDE	0.1
		HELIUM	0.73
		HEATING VALUE*	923
		SPECIFIC GRAVITY	0.637

SAMPLE	21257	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.5
COUNTY	PAWNEE	ETHANE	3.4
FIELD	CARPENTER	PROPANE	1.4
WELL NAME	ROW 1	N-BUTANE	0.5
API	1514520222	ISOBUTANE	0.2
LOCATION	SEC. 30, T23S, R16W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED	710728	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	4.8
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4192	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1326	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2111	CARBON DIOXIDE	0.1
		HELIUM	0.60
		HEATING VALUE*	1,037
		SPECIFIC GRAVITY	0.624

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

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

SAMPLE	21256	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>87.4</u>
COUNTY	<u>PAWNEE</u>	ETHANE	<u>3.6</u>
FIELD	<u>CARPENTER</u>	PROPANE	<u>1.6</u>
WELL NAME	<u>BRADLEY 1</u>	N-BUTANE	<u>0.6</u>
API	<u>1514520146</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 29, T23S, R16W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>AMERICAN WARRIOR, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>700812</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030820</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>ORDO-VIOLA</u>	NITROGEN	<u>5.0</u>
GEOLOGIC PROVINCE CODE	<u>385</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4257</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.64</u>
		HEATING VALUE*	<u>1,052</u>
		SPECIFIC GRAVITY	<u>0.637</u>
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SAMPLE	21241	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>72.9</u>
COUNTY	<u>BARTON</u>	ETHANE	<u>1.8</u>
FIELD	<u>CHASE-SILICA</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>GRANT 1</u>	N-BUTANE	<u>0.5</u>
API	<u>1500920798</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 20, T20S, R11W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>BEAR PETROLEUM CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>740331</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030819</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PERM-CHASE GROUP</u>	NITROGEN	<u>21.6</u>
GEOLOGIC PROVINCE CODE	<u>385</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1544</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>429</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>97</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>1.04</u>
		HEATING VALUE*	<u>860</u>
		SPECIFIC GRAVITY	<u>0.69</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	21259	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.7
COUNTY	EDWARDS	ETHANE	3.3
FIELD	CLW.F	PROPANE	1.2
WELL NAME	NEFF A-1	N-BUTANE	0.4
API	1504720386	ISOBUTANE	0.2
LOCATION	SEC. 26, T25S, R18W	N-PENTANE	0.1
OWNER	PINTAIL PETROLEUM LIMITED	ISOPENTANE	0.1
COMPLETED	780830	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	4.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4597	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1258	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	453	CARBON DIOXIDE	0.2
		HELIUM	0.45
		HEATING VALUE*	1,035
		SPECIFIC GRAVITY	0.625

SAMPLE	50593	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.6
COUNTY	COMANCHE	ETHANE	3.8
FIELD	COLDWATER TOWNSITE	PROPANE	2.2
WELL NAME	WILLBANKS NO. 1-9	N-BUTANE	0.9
API	1503321275	ISOBUTANE	0.3
LOCATION	SEC. 9, T32S, R18W	N-PENTANE	0.3
OWNER	IMPERIAL OIL PROPERTIES, INC.	ISOPENTANE	0.2
COMPLETED	020226	CYCLOPENTANE	--
SAMPLED	020107	HEXANES PLUS	0.3
FORMATION	PENN-CHEROKEE	NITROGEN	7.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5133	ARGON	--
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1200	HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD	250	CARBON DIOXIDE	0.1
		HELIUM	0.14
		HEATING VALUE*	1,052
		SPECIFIC GRAVITY	0.659

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

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

SAMPLE	21175	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	71.5
COUNTY	COMANCHE	ETHANE	10.1
FIELD	COLDWATER TOWNSITE	PROPANE	5.3
WELL NAME	LAKE NO. 4	N-BUTANE	2.0
API	1503321216	ISOBUTANE	0.7
LOCATION	SEC. 13, T32S, R19W	N-PENTANE	0.7
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.5
COMPLETED	010502	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.7
FORMATION	ORDO-VIOLA	NITROGEN	7.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.5
		HELIUM	0.22
		HEATING VALUE*	1,204
		SPECIFIC GRAVITY	0.769

SAMPLE	21156	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	94.1
COUNTY	COMANCHE	ETHANE	2.6
FIELD	COLLIER FLATS	PROPANE	1.0
WELL NAME	BAKER FARMS A1	N-BUTANE	0.3
API	1503320987	ISOBUTANE	0.1
LOCATION	SEC. 24, T33S, R20W	N-PENTANE	0.1
OWNER	PICKRELL DRILLING CO., INC.	ISOPENTANE	0.1
COMPLETED	990215	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.2
FORMATION	PENN-CHEROKEE	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5192	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1023	CARBON DIOXIDE	0.3
		HELIUM	0.09
		HEATING VALUE*	1,058
		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	21157	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	91.2
COUNTY	COMANCHE	ETHANE	3.3
FIELD	COLLIER FLATS E	PROPANE	1.6
WELL NAME	CHRISTOPHER NO. A-1	N-BUTANE	0.6
API	1503321085	ISOBUTANE	0.2
LOCATION	SEC. 32, T33S, R19W	N-PENTANE	0.2
OWNER	DAYSTAR PETROLEUM, INC.	ISOPENTANE	0.2
COMPLETED	000708	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.6
FORMATION	ORDO-VIOLA	NITROGEN	1.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6123	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	400	CARBON DIOXIDE	0.4
		HELIUM	0.10
		HEATING VALUE*	1,089
		SPECIFIC GRAVITY	0.629

SAMPLE	21170	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.5
COUNTY	COMANCHE	ETHANE	4.0
FIELD	COLTER	PROPANE	3.2
WELL NAME	PHILLIPS NO. 1-7	N-BUTANE	1.5
API	1503320905	ISOBUTANE	0.5
LOCATION	SEC. 1, T33S, R19W	N-PENTANE	0.4
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.4
COMPLETED	971114	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.9
FORMATION	PENN-LNSG DRUM SWOPE MRMN	NITROGEN	4.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4982	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	600	CARBON DIOXIDE	0.1
		HELIUM	0.19
		HEATING VALUE*	1,147
		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	21171	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>87.3</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>4.0</u>
FIELD	<u>COLTER</u>	PROPANE	<u>2.8</u>
WELL NAME	<u>COLTER NO. A-1</u>	N-BUTANE	<u>1.1</u>
API	<u>1503320776</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 36, T32S, R19W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>GARY SAMUEL, JR. & ASSOCIATES</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>900310</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030521</u>	HEXANES PLUS	<u>0.8</u>
FORMATION	<u>PENN-MARMATON, MISS-MISSISSIPPIAN</u>	NITROGEN	<u>2.9</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5072</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>425</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.15</u>
		HEATING VALUE*	<u>1,131</u>
		SPECIFIC GRAVITY	<u>0.664</u>

SAMPLE	21178	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>84.3</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>5.3</u>
FIELD	<u>COLTER</u>	PROPANE	<u>2.1</u>
WELL NAME	<u>CARY NO. 36-16</u>	N-BUTANE	<u>0.7</u>
API	<u>1503320966</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 36, T32S, R19W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>GARY SAMUEL, JR. & ASSOCIATES</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>980827</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030521</u>	HEXANES PLUS	<u>0.2</u>
FORMATION	<u>PENN-PAWNEE</u>	NITROGEN	<u>6.2</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.28</u>
		HEATING VALUE*	<u>1,060</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	21166	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.5
COUNTY	COMANCHE	ETHANE	3.9
FIELD	COLTER S.	PROPANE	2.9
WELL NAME	COLTER NO. 1	N-BUTANE	1.3
API	1503321067	ISOBUTANE	0.4
LOCATION	SEC. 11, T33S, R19W	N-PENTANE	0.5
OWNER	LARIO OIL & GAS CO.	ISOPENTANE	0.4
COMPLETED	000421	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	1.3
FORMATION	PENN-FORT SCOTT	NITROGEN	2.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5188	ARGON	0.2
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	593	CARBON DIOXIDE	0.1
		HELIUM	0.15
		HEATING VALUE*	1,168
		SPECIFIC GRAVITY	0.685

SAMPLE	21167	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.3
COUNTY	COMANCHE	ETHANE	4.0
FIELD	COLTER S.	PROPANE	3.0
WELL NAME	KANISS NO. 1	N-BUTANE	1.3
API	1503320735	ISOBUTANE	0.4
LOCATION	SEC. 12, T33S, R19W	N-PENTANE	0.4
OWNER	LARIO OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	881115	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	1.1
FORMATION	PENN-FORT SCOTT	NITROGEN	2.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5188	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	264	CARBON DIOXIDE	0.1
		HELIUM	0.15
		HEATING VALUE*	1,158
		SPECIFIC GRAVITY	0.68

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

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

SAMPLE	21164	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.5
COUNTY	COMANCHE	ETHANE	2.8
FIELD	COLTER W.	PROPANE	1.0
WELL NAME	JELLISON 10-2	N-BUTANE	0.4
API	1503321092	ISOBUTANE	0.2
LOCATION	SEC. 10, T33S, R19W	N-PENTANE	0.1
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.1
COMPLETED	000624	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.4
FORMATION	PENN-CHEROKEE	NITROGEN	1.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5215	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.10
		HEATING VALUE*	1.067
		SPECIFIC GRAVITY	0.607

SAMPLE	21162	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	90.0
COUNTY	COMANCHE	ETHANE	3.3
FIELD	COLTER W.	PROPANE	1.9
WELL NAME	HERD 34-14	N-BUTANE	0.8
API	1503320921	ISOBUTANE	0.3
LOCATION	SEC. 34, T32S, R19W	N-PENTANE	0.3
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.3
COMPLETED	01722	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	1.0
FORMATION	PENN-MARMATON	NITROGEN	1.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4932	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	0.2
		HELIUM	0.11
		HEATING VALUE*	1.121
		SPECIFIC GRAVITY	0.648

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

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

SAMPLE	21165	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.9
COUNTY	COMANCHE	ETHANE	2.7
FIELD	COLTER W.	PROPANE	1.0
WELL NAME	WEBSTER 3-10	N-BUTANE	0.3
API	1503321050	ISOBUTANE	0.1
LOCATION	SEC. 3, T33S, R19W	N-PENTANE	0.1
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.1
COMPLETED	000301	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5261	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1129	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	608	CARBON DIOXIDE	0.2
		HELIUM	0.09
		HEATING VALUE*	1.062
		SPECIFIC GRAVITY	0.602

SAMPLE	21180	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.9
COUNTY	COMANCHE	ETHANE	2.7
FIELD	COLTER W.	PROPANE	1.0
WELL NAME	BIRD 2-28	N-BUTANE	0.3
API	1503321317	ISOBUTANE	0.1
LOCATION	SEC. 28, T32S, R19W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED		CYCLOPENTANE	--
SAMPLED	030522	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.3
		HELIUM	0.09
		HEATING VALUE*	1.061
		SPECIFIC GRAVITY	0.601

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

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

SAMPLE	21161	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>89.0</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>4.7</u>
FIELD	<u>COLTER W</u>	PROPANE	<u>2.3</u>
WELL NAME	<u>NEILSON 1-33</u>	N-BUTANE	<u>0.8</u>
API	<u>1503320924</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 33, T32S, R19W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>AMERICAN WARRIOR, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>970219</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030521</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>1.4</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5272</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>500</u>	CARBON DIOXIDE	<u>0.4</u>
		HELIUM	<u>0.11</u>
		HEATING VALUE*	<u>1,118</u>
		SPECIFIC GRAVITY	<u>0.644</u>

SAMPLE	21182	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>90.7</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>3.3</u>
FIELD	<u>COLTER W</u>	PROPANE	<u>1.8</u>
WELL NAME	<u>WEBSTER 3-4</u>	N-BUTANE	<u>0.7</u>
API	<u>1503320975</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 3, T33S, R19W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>GARY SAMUEL, JR. & ASSOCIATES</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>981117</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030522</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>PENN-PAWNEE, MISS-MISSISSIPPIAN</u>	NITROGEN	<u>1.6</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.11</u>
		HEATING VALUE*	<u>1,107</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	21097	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>42.4</u>
COUNTY	<u>MORTON</u>	ETHANE	<u>1.1</u>
FIELD	<u>ELKHART W.</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>MOORE C-3</u>	N-BUTANE	<u>0.4</u>
API	<u>1512920513</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 8, T35S, R43W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>R.M. NAIRN</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>810618</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>021120</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>PERM-RED CAVE</u>	NITROGEN	<u>52.6</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>1326</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>147</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>1.31</u>
		HEATING VALUE*	<u>534</u>
		SPECIFIC GRAVITY	<u>0.812</u>

SAMPLE	21211	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>86.7</u>
COUNTY	<u>BARBER</u>	ETHANE	<u>5.8</u>
FIELD	<u>ELSEA</u>	PROPANE	<u>2.9</u>
WELL NAME	<u>ELSEA 1-B 1D</u>	N-BUTANE	<u>1.0</u>
API	<u>1500701358</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 34, T32S, R14W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>REX MONAHAN CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>570807</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030612</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>1.6</u>
GEOLOGIC PROVINCE CODE	<u>375</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4733</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1418</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>14000</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.11</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	50601	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>84.6</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>2.6</u>
FIELD	<u>ENLOW</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>MILLER NO. 6-13</u>	N-BUTANE	<u>0.1</u>
API	<u>1504721474</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 13, T24S, R17W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>TRACE</u>
COMPLETED	<u>021216</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030409</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-FORT RILEY</u>	NITROGEN	<u>11.2</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2350</u>	ARGON	<u>--</u>
MEASURED DEPTH		HYDROGEN	<u>--</u>
WELLHEAD PRESSURE, PSIG	<u>240</u>	HYDROGEN SULFIDE**	<u>--</u>
OPEN FLOW, MCFD	<u>1104</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.57</u>
		HEATING VALUE*	<u>929</u>
		SPECIFIC GRAVITY	<u>0.624</u>

SAMPLE	21264	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>88.0</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>3.5</u>
FIELD	<u>ENLOW</u>	PROPANE	<u>1.5</u>
WELL NAME	<u>DONOVAN 2-16</u>	N-BUTANE	<u>0.5</u>
API	<u>1504721228</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 16, T24S, R16W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>841215</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030821</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>MISS-KINDERHOOK</u>	NITROGEN	<u>5.0</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4281</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>252</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>3056</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.43</u>
		HEATING VALUE*	<u>1,048</u>
		SPECIFIC GRAVITY	<u>0.633</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	21260	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.6
COUNTY	STAFFORD	ETHANE	3.8
FIELD	FARMINGTON	PROPANE	1.7
WELL NAME	YOUNG 3-19	N-BUTANE	0.6
API	1518523107	ISOBUTANE	0.3
LOCATION	SEC. 19, T24S, R15W	N-PENTANE	0.2
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.2
COMPLETED	001229	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.6
FORMATION	MISS-KINDERHOOK	NITROGEN	3.5
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4233	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	90	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	64	CARBON DIOXIDE	0.1
		HELIUM	0.42
		HEATING VALUE*	1,080
		SPECIFIC GRAVITY	0.639

SAMPLE	21249	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.9
COUNTY	STAFFORD	ETHANE	3.9
FIELD	FARMINGTON W	PROPANE	1.7
WELL NAME	SIEBERT 1	N-BUTANE	0.6
API	1518520181	ISOBUTANE	0.3
LOCATION	SEC. 32, T24S, R15W	N-PENTANE	0.2
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.2
COMPLETED	690819	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.5
FORMATION	MISS-CONGLOMERATE	NITROGEN	3.1
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4184	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	540	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	734	CARBON DIOXIDE	0.1
		HELIUM	0.37
		HEATING VALUE*	1,081
		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	21265	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	90.8
COUNTY	EDWARDS	ETHANE	3.2
FIELD	FATZER	PROPANE	1.2
WELL NAME	NEWSOM 1-14	N-BUTANE	0.4
API	1504720253	ISOBUTANE	0.2
LOCATION	SEC. 14, T26S, R17W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	770714	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4527	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	255	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1800	CARBON DIOXIDE	0.2
		HELIUM	0.34
		HEATING VALUE*	1.052
		SPECIFIC GRAVITY	0.616

SAMPLE	21245	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.9
COUNTY	EDWARDS	ETHANE	3.2
FIELD	FELLSBURG	PROPANE	1.2
WELL NAME	PARKER ESTATE 1	N-BUTANE	0.4
API	1504720247	ISOBUTANE	0.2
LOCATION	SEC. 4, T26S, R17W	N-PENTANE	0.1
OWNER	MURFIN DRILLING CO.	ISOPENTANE	0.1
COMPLETED	770608	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	3.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4543	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1518	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	760	CARBON DIOXIDE	0.2
		HELIUM	0.47
		HEATING VALUE*	1.045
		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	21274	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	83.4
COUNTY	EDWARDS	ETHANE	3.3
FIELD	GARFIELD.SW	PROPANE	1.3
WELL NAME	HOAR 2-6	N-BUTANE	0.4
API	1504720365	ISOBUTANE	0.2
LOCATION	SEC. 6, T24S, R17W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	780512	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	9.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4409	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2500	CARBON DIOXIDE	0.1
		HELIUM	0.97
		HEATING VALUE*	985
		SPECIFIC GRAVITY	0.644

SAMPLE	21273	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	83.4
COUNTY	PAWNEE	ETHANE	3.3
FIELD	GARFIELD.SW	PROPANE	1.3
WELL NAME	CITY OF GARFIELD 1	N-BUTANE	0.4
API	1514520498	ISOBUTANE	0.2
LOCATION	SEC. 31, T23S, R17W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	780203	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN, KINDERHOOK	NITROGEN	9.6
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4363	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	140	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2180	CARBON DIOXIDE	0.2
		HELIUM	0.95
		HEATING VALUE*	983
		SPECIFIC GRAVITY	0.643

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

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

SAMPLE	20226	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>65.0</u>
COUNTY	<u>MORTON</u>	ETHANE	<u>6.3</u>
FIELD	<u>GREENWOOD</u>	PROPANE	<u>3.9</u>
WELL NAME	<u>USA BROWN 1</u>	N-BUTANE	<u>1.2</u>
API	<u>1512910598</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 6, T33S, R43W</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>KAISER-FRANCIS OIL CO.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>540414</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>000511</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>21.3</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.1</u>
TRUE VERTICAL DEPTH (FT)	<u>3092</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>440</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>8829</u>	CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.52</u>
		HEATING VALUE*	<u>977</u>
		SPECIFIC GRAVITY	<u>0.76</u>

SAMPLE	21096	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>66.8</u>
COUNTY	<u>MORTON</u>	ETHANE	<u>5.6</u>
FIELD	<u>GREENWOOD</u>	PROPANE	<u>3.6</u>
WELL NAME	<u>TUCKER NO. C-1</u>	N-BUTANE	<u>1.1</u>
API	<u>1512910375</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 14, T34S, R42W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>OXY USA, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>010517</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>021120</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PENN-TOPEKA</u>	NITROGEN	<u>20.8</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)		ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.55</u>
		HEATING VALUE*	<u>961</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	21099	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	63.2
COUNTY	MORTON	ETHANE	6.5
FIELD	GREENWOOD	PROPANE	5.0
WELL NAME	INGLE NO. 1	N-BUTANE	2.0
API	1512910229	ISOBUTANE	0.6
LOCATION	SEC. 11, T34S, R42W	N-PENTANE	0.7
OWNER	MM RESOURCES	ISOPENTANE	0.5
COMPLETED	560328	CYCLOPENTANE	--
SAMPLED	021120	HEXANES PLUS	2.0
FORMATION	PENN-WABAUNSEE	NITROGEN	18.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3193	ARGON	0.2
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	42141	CARBON DIOXIDE	0.1
		HELIUM	0.52
		HEATING VALUE*	1.109
		SPECIFIC GRAVITY	0.821

SAMPLE	21250	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	81.5
COUNTY	STAFFORD	ETHANE	4.2
FIELD	GRUNDER	PROPANE	2.4
WELL NAME	BARSTOW B2	N-BUTANE	1.0
API	1518522382	ISOBUTANE	0.5
LOCATION	SEC. 3, T25S, R15W	N-PENTANE	0.3
OWNER	GOULD OIL INC.	ISOPENTANE	0.2
COMPLETED	870616	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.7
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	8.1
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4208	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	121.1	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	60	CARBON DIOXIDE	0.2
		HELIUM	0.83
		HEATING VALUE*	1.062
		SPECIFIC GRAVITY	0.678

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

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

SAMPLE	21193	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.5
COUNTY	BARBER	ETHANE	3.2
FIELD	HARDING	PROPANE	1.4
WELL NAME	ROLF L 1A	N-BUTANE	0.4
API	1500720394	ISOBUTANE	0.2
LOCATION	SEC. 3, T30S, R11W	N-PENTANE	0.1
OWNER	WOOLSEY PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	760512	CYCLOPENTANE	--
SAMPLED	030610	HEXANES PLUS	0.1
FORMATION	PENN-INDIAN CAVE	NITROGEN	7.5
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2731	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	778	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	6932	CARBON DIOXIDE	0.2
		HELIUM	0.29
		HEATING VALUE*	998
		SPECIFIC GRAVITY	0.629

SAMPLE	21192	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.5
COUNTY	BARBER	ETHANE	4.0
FIELD	HARDING	PROPANE	2.0
WELL NAME	MARTIN NO. 1	N-BUTANE	0.7
API	1500722491	ISOBUTANE	0.3
LOCATION	SEC. 1, T30S, R12W	N-PENTANE	0.2
OWNER	MCGINNESS OIL CO.	ISOPENTANE	0.2
COMPLETED	960228	CYCLOPENTANE	--
SAMPLED	030610	HEXANES PLUS	0.3
FORMATION	PENN-TARKIO	NITROGEN	6.9
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2947	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1004	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	275	CARBON DIOXIDE	0.6
		HELIUM	0.25
		HEATING VALUE*	1,039
		SPECIFIC GRAVITY	0.656

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

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

SAMPLE	21202	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.8
COUNTY	BARBER	ETHANE	4.6
FIELD	HARDTNER	PROPANE	2.1
WELL NAME	HELEN WILEY 2	N-BUTANE	0.8
API	1500721505	ISOBUTANE	0.3
LOCATION	SEC. 27, T34S, R12W	N-PENTANE	0.3
OWNER	MOLZ OIL CO., INC.	ISOPENTANE	0.2
COMPLETED	830428	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.4
FORMATION	-	NITROGEN	1.4
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.09
		HEATING VALUE*	1.115
		SPECIFIC GRAVITY	0.637

SAMPLE	21204	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	92.0
COUNTY	BARBER	ETHANE	3.7
FIELD	HARDTNER W	PROPANE	1.5
WELL NAME	PIERSON NO. 1	N-BUTANE	0.5
API	1500720522	ISOBUTANE	0.2
LOCATION	SEC. 10, T35S, R13W	N-PENTANE	0.2
OWNER	BEREXCO, INC.	ISOPENTANE	0.1
COMPLETED	771000	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.3
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4918	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1809	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2342	CARBON DIOXIDE	0.1
		HELIUM	0.09
		HEATING VALUE*	1.085
		SPECIFIC GRAVITY	0.616

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

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

SAMPLE	21224	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>74.6</u>
COUNTY	<u>BARTON</u>	ETHANE	<u>1.6</u>
FIELD	<u>HEIZER SW</u>	PROPANE	<u>0.4</u>
WELL NAME	<u>ALDRICH 2</u>	N-BUTANE	<u>0.1</u>
API	<u>1500900741</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 29, T19S, R14W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>LEBSACK OIL PRODUCTION, INC.</u>	ISOPENTANE	<u>TRACE</u>
COMPLETED	<u>020128</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030818</u>	HEXANES PLUS	<u>TRACE</u>
FORMATION	<u>PERM-CHASE GROUP</u>	NITROGEN	<u>22.1</u>
GEOLOGIC PROVINCE CODE	<u>385</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT) .....	.....	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD .....	.....	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>1.05</u>
		HEATING VALUE*	<u>799</u>
		SPECIFIC GRAVITY	<u>0.655</u>

SAMPLE	21225	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>69.9</u>
COUNTY	<u>BARTON</u>	ETHANE	<u>1.8</u>
FIELD	<u>HEIZER SW</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>ALDRICH 1</u>	N-BUTANE	<u>0.2</u>
API	<u>1500924718</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 29, T19S, R14W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>LEBSACK OIL PRODUCTION, INC.</u>	ISOPENTANE	<u>TRACE</u>
COMPLETED	<u>011201</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030818</u>	HEXANES PLUS	<u>TRACE</u>
FORMATION	<u>PERM-CHASE GROUP</u>	NITROGEN	<u>26.0</u>
GEOLOGIC PROVINCE CODE	<u>385</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT) .....	.....	ARGON	<u>TRACE</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG .....	.....	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD .....	.....	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>1.23</u>
		HEATING VALUE*	<u>769</u>
		SPECIFIC GRAVITY	<u>0.678</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	21227	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	71.5
COUNTY	BARTON	ETHANE	2.0
FIELD	HOMESTEAD N	PROPANE	0.8
WELL NAME	TINDALL-LARSON 1	N-BUTANE	0.2
API	1500921138	ISOBUTANE	0.1
LOCATION	SEC. 15, T18S, R13W	N-PENTANE	0.1
OWNER	CAMBRIA CORP.	ISOPENTANE	0.1
COMPLETED	000516	CYCLOPENTANE	--
SAMPLED	030818	HEXANES PLUS	TRACE
FORMATION	PERM-PERMIAN	NITROGEN	24.0
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.0
		HELIUM	1.24
		HEATING VALUE*	796
		SPECIFIC GRAVITY	0.673

SAMPLE	21228	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	71.9
COUNTY	BARTON	ETHANE	2.1
FIELD	HOMESTEAD NE	PROPANE	0.8
WELL NAME	RUSCO A1	N-BUTANE	0.2
API	1500921552	ISOBUTANE	0.1
LOCATION	SEC. 14, T18S, R13W	N-PENTANE	0.1
OWNER	CAMBRIA CORP.	ISOPENTANE	0.1
COMPLETED	001027	CYCLOPENTANE	--
SAMPLED	030818	HEXANES PLUS	0.1
FORMATION	PERM-PERMIAN	NITROGEN	23.4
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.0
		HELIUM	1.18
		HEATING VALUE*	806
		SPECIFIC GRAVITY	0.673

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

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

SAMPLE	21089	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	67.4
COUNTY	FINNEY	ETHANE	3.6
FIELD	HUGOTON	PROPANE	2.1
WELL NAME	LIGHTNER NO. 2-1	N-BUTANE	0.7
API	1505521770	ISOBUTANE	0.3
LOCATION	SEC. 2, T26S, R32W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED	020315	CYCLOPENTANE	--
SAMPLED	021119	HEXANES PLUS	0.1
FORMATION	PERM-CHASE GROUP	NITROGEN	24.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.63
		HEATING VALUE*	850
		SPECIFIC GRAVITY	0.716
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SAMPLE	20921	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	69.2
COUNTY	PRATT	ETHANE	3.2
FIELD	IUKA-CARML	PROPANE	2.7
WELL NAME	LUDERS NO. 7	N-BUTANE	1.2
API	1515122163	ISOBUTANE	0.6
LOCATION	SEC 7, T27S, R12W	N-PENTANE	0.4
OWNER	PRATT WELL SERVICE, INC.	ISOPENTANE	0.3
COMPLETED	980726	CYCLOPENTANE	--
SAMPLED	020325	HEXANES PLUS	0.6
FORMATION	PENN-LANGDON	NITROGEN	21.2
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2754	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	663	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1279	CARBON DIOXIDE	0.1
		HELIUM	0.52
		HEATING VALUE*	939
		SPECIFIC GRAVITY	0.736

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

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

SAMPLE	21168	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.1
COUNTY	COMANCHE	ETHANE	3.5
FIELD	KEIGHLEY NW	PROPANE	1.6
WELL NAME	WAGNON NO. 1-9	N-BUTANE	0.7
API	1503321025	ISOBUTANE	0.3
LOCATION	SEC. 9, T33S, R18W	N-PENTANE	0.2
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.2
COMPLETED	990914	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.9
FORMATION	PENN-KANSAS CITY	NITROGEN	4.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.18
		HEATING VALUE*	1,087
		SPECIFIC GRAVITY	0.649

SAMPLE	21169	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.2
COUNTY	COMANCHE	ETHANE	3.3
FIELD	KEIGHLEY NW	PROPANE	1.1
WELL NAME	BEELEY NO. 1	N-BUTANE	0.6
API	1503321040	ISOBUTANE	0.3
LOCATION	SEC. 10, T33S, R18W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.2
COMPLETED	991208	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.9
FORMATION	PENN-PAWNEE	NITROGEN	3.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.2
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.19
		HEATING VALUE*	1,072
		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	21153	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>83.4</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>4.4</u>
FIELD	<u>KIOWA BOW</u>	PROPANE	<u>1.8</u>
WELL NAME	<u>RANDALL NO. 1-27</u>	N-BUTANE	<u>0.6</u>
API	<u>1503321210</u>	ISOBUTANE	<u>0.4</u>
LOCATION	<u>SEC. 27, T31S, R20W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>AMERICAN WARRIOR, INC.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>010427</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030520</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>8.4</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5293</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.27</u>
		HEATING VALUE*	<u>1.027</u>
		SPECIFIC GRAVITY	<u>0.656</u>
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SAMPLE	50590	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>75.7</u>
COUNTY	<u>BARBER</u>	ETHANE	<u>6.8</u>
FIELD	<u>LEM</u>	PROPANE	<u>2.9</u>
WELL NAME	<u>LEMON-TRUST NO. 1-16</u>	N-BUTANE	<u>0.9</u>
API	<u>1500722708</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 16, T30S, R13W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>020717</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>020812</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>ORDO-VIOLA</u>	NITROGEN	<u>11.2</u>
GEOLOGIC PROVINCE CODE	<u>375</u>	OXYGEN	<u>0.1</u>
TRUE VERTICAL DEPTH (FT)	<u>4496</u>	ARGON	<u>--</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>--</u>
OPEN FLOW, MCFD	<u>1023</u>	CARBON DIOXIDE	<u>0.5</u>
		HELIUM	<u>0.89</u>
		HEATING VALUE*	<u>1.037</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	21159	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	91.3
COUNTY	COMANCHE	ETHANE	3.0
FIELD	LEMON RANCH SE	PROPANE	1.6
WELL NAME	HACKNEY NO. 1	N-BUTANE	0.6
API	1503320585	ISOBUTANE	0.2
LOCATION	SEC. 17, T34S, R19W	N-PENTANE	0.2
OWNER	GARY SAMUEL, JR. & ASSOCIATES	ISOPENTANE	0.2
COMPLETED	830328	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.6
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	2.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5250	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	310	CARBON DIOXIDE	0.2
		HELIUM	0.11
		HEATING VALUE*	1.085
		SPECIFIC GRAVITY	0.627

SAMPLE	21158	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.1
COUNTY	COMANCHE	ETHANE	4.9
FIELD	LEMON RANCH SE	PROPANE	4.2
WELL NAME	RANSOM NO. 18-1	N-BUTANE	1.5
API	1503321268	ISOBUTANE	0.5
LOCATION	SEC. 18, T34S, R19W	N-PENTANE	0.5
OWNER	DAYSTAR PETROLEUM, INC.	ISOPENTANE	0.4
COMPLETED	020102	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	1.3
FORMATION	PENN-PAWNEE	NITROGEN	2.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5088	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	500	CARBON DIOXIDE	0.1
		HELIUM	0.12
		HEATING VALUE*	1.200
		SPECIFIC GRAVITY	0.705

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

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

SAMPLE	21191	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>80.7</u>
COUNTY	<u>BARBER</u>	ETHANE	<u>6.8</u>
FIELD	<u>MACADOO S.</u>	PROPANE	<u>3.0</u>
WELL NAME	<u>MCKENZIE 2</u>	N-BUTANE	<u>1.0</u>
API	<u>1500721492</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 14, T30S, R14W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>WOOLSEY PETROLEUM CORP.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>950718</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030610</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>6.2</u>
GEOLOGIC PROVINCE CODE	<u>375</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4674</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1542</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>400</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.82</u>
		HEATING VALUE*	<u>1,099</u>
		SPECIFIC GRAVITY	<u>0.68</u>

SAMPLE	21262	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>84.2</u>
COUNTY	<u>STAFFORD</u>	ETHANE	<u>2.2</u>
FIELD	<u>MACKSVILLE</u>	PROPANE	<u>0.7</u>
WELL NAME	<u>WALKER 1</u>	N-BUTANE	<u>0.2</u>
API	<u>1518520274</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 10, T24S, R15W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>940520</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030821</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>PERM-HERINGTON, KRIDER, WINFIELD</u>	NITROGEN	<u>11.9</u>
GEOLOGIC PROVINCE CODE	<u>385</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>2046</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>342</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>40</u>	CARBON DIOXIDE	<u>0.0</u>
		HELIUM	<u>0.53</u>
		HEATING VALUE*	<u>926</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	21251	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	85.6
COUNTY	PAWNEE	ETHANE	3.8
FIELD	MACKSVILLE	PROPANE	1.8
WELL NAME	EICKMEYER 1	N-BUTANE	0.6
API	1514500470	ISOBUTANE	0.3
LOCATION	SEC. 34, T23S, R15W	N-PENTANE	0.2
OWNER	PINTAIL PETROLEUM LIMITED	ISOPENTANE	0.2
COMPLETED	880714	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.6
FORMATION	ORDO-VIOLA	NITROGEN	5.7
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4110	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	570	CARBON DIOXIDE	0.3
		HELIUM	0.89
		HEATING VALUE*	1,051
		SPECIFIC GRAVITY	0.648

SAMPLE	21223	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	64.5
COUNTY	EDWARDS	ETHANE	4.9
FIELD	MARTIN N	PROPANE	2.3
WELL NAME	SPEIRS A1-30	N-BUTANE	0.7
API	1504721441	ISOBUTANE	0.4
LOCATION	SEC. 30, T26S, R20W	N-PENTANE	0.2
OWNER	MCCOY PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	020419	CYCLOPENTANE	--
SAMPLED	030818	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	24.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4785	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1521	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	2.24
		HEATING VALUE*	859
		SPECIFIC GRAVITY	0.722

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

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

SAMPLE	21269	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.4
COUNTY	EDWARDS	ETHANE	2.1
FIELD	MASSEY	PROPANE	0.7
WELL NAME	SCHARTZ 9-12	N-BUTANE	0.1
API	1504721418	ISOBUTANE	0.1
LOCATION	SEC. 12, T24S, R17W	N-PENTANE	TRACE
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	TRACE
COMPLETED	020428	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.1
FORMATION	PERM-FORT RILEY	NITROGEN	11.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2384	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	440	CARBON DIOXIDE	0.1
		HELIUM	0.59
		HEATING VALUE*	923
		SPECIFIC GRAVITY	0.624

SAMPLE	21271	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.5
COUNTY	EDWARDS	ETHANE	3.6
FIELD	MCCARTHY NE	PROPANE	1.6
WELL NAME	NEWSOM 1-21	N-BUTANE	0.6
API	1504720161	ISOBUTANE	0.3
LOCATION	SEC. 21, T24S, R17W	N-PENTANE	0.2
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.2
COMPLETED	750225	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.7
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	5.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4369	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	120	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1900	CARBON DIOXIDE	0.2
		HELIUM	0.59
		HEATING VALUE*	1,057
		SPECIFIC GRAVITY	0.647

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

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

SAMPLE	21198	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>74.4</u>
COUNTY	<u>BARBER</u>	ETHANE	<u>7.6</u>
FIELD	<u>MEDICINE RIVER</u>	PROPANE	<u>4.5</u>
WELL NAME	<u>ADAMS NO. 1</u>	N-BUTANE	<u>1.3</u>
API	<u>1500720468</u>	ISOBUTANE	<u>0.6</u>
LOCATION	<u>SEC. 33, T31S, R12W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>ABERCROMBIE ENERGY, LLC</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>770419</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030610</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>10.0</u>
GEOLOGIC PROVINCE CODE	<u>375</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4230</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>1400</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>5000</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.30</u>
		HEATING VALUE*	<u>1,111</u>
		SPECIFIC GRAVITY	<u>0.727</u>

SAMPLE	21244	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>89.7</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>3.1</u>
FIELD	<u>MULL W</u>	PROPANE	<u>1.1</u>
WELL NAME	<u>VOEGELI 1A</u>	N-BUTANE	<u>0.4</u>
API	<u>1504720356</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 29, T26S, R17W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>PINTAIL PETROLEUM LIMITED</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>780505</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030820</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>4.3</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4550</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>1533</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>179</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.36</u>
		HEATING VALUE*	<u>1,039</u>
		SPECIFIC GRAVITY	<u>0.621</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	50600	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	80.8
COUNTY	EDWARDS	ETHANE	2.0
FIELD	MUNDHENKE	PROPANE	0.8
WELL NAME	BOWMAN NO. 1-33	N-BUTANE	0.2
API	1504721472	ISOBUTANE	0.1
LOCATION	SEC. 33, T24S, R17W	N-PENTANE	TRACE
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	TRACE
COMPLETED	021210	CYCLOPENTANE	--
SAMPLED	030410	HEXANES PLUS	0.1
FORMATION	PERM-COTTONWOOD	NITROGEN	15.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2790	ARGON	--
MEASURED DEPTH		HYDROGEN	--
WELLHEAD PRESSURE, PSIG	770	HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD	2210	CARBON DIOXIDE	TRACE
		HELIUM	0.53
		HEATING VALUE*	886
		SPECIFIC GRAVITY	0.642

SAMPLE	21272	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.5
COUNTY	EDWARDS	ETHANE	3.1
FIELD	MUNDHENKE	PROPANE	1.2
WELL NAME	MUNDHENKE 1	N-BUTANE	0.4
API	1504720299	ISOBUTANE	0.2
LOCATION	SEC. 30, T24S, R17W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	920207	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	7.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4477	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	360	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2200	CARBON DIOXIDE	0.1
		HELIUM	0.77
		HEATING VALUE*	1,008
		SPECIFIC GRAVITY	0.63

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

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

SAMPLE	50595	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 72.8
COUNTY	COMANCHE	ETHANE 6.2
FIELD	NESCATUNGA	PROPANE 7.2
WELL NAME	BERGNER/ACRES UNIT NO. 1	N-BUTANE 3.2
API	1503321079	ISOBUTANE 1.2
LOCATION	SEC. 16, T32S, R18W	N-PENTANE 0.9
OWNER	IMPERIAL OIL PROPERTIES, INC.	ISOPENTANE 0.8
COMPLETED	000412	CYCLOPENTANE --
SAMPLED	000409	HEXANES PLUS 2.3
FORMATION	PENN-ALTAMONT	NITROGEN 5.1
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON --
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** --
OPEN FLOW, MCFD		CARBON DIOXIDE 0.2
		HELIUM 0.12
		HEATING VALUE* 1.354
		SPECIFIC GRAVITY 0.833

SAMPLE	50596	COMPONENT, MOLE PCT
STATE	KANSAS	METHANE 84.7
COUNTY	COMANCHE	ETHANE 4.3
FIELD	NESCATUNGA	PROPANE 2.8
WELL NAME	BERGNER/ACRES UNIT NO. 1	N-BUTANE 1.1
API	1503321079	ISOBUTANE 0.4
LOCATION	SEC. 16, T32S, R18W	N-PENTANE 0.4
OWNER	IMPERIAL OIL PROPERTIES, INC.	ISOPENTANE 0.3
COMPLETED	000412	CYCLOPENTANE --
SAMPLED	000410	HEXANES PLUS 1.4
FORMATION	PENN-PAWNEE	NITROGEN 4.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)		ARGON --
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** --
OPEN FLOW, MCFD		CARBON DIOXIDE 0.1
		HELIUM 0.15
		HEATING VALUE* 1.150
		SPECIFIC GRAVITY 0.693

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

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

SAMPLE	50594	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	79.7
COUNTY	COMANCHE	ETHANE	4.7
FIELD	NESCATUNGA	PROPANE	3.1
WELL NAME	BERGNER/ACRES UNIT NO. 1	N-BUTANE	1.0
API	1503321079	ISOBUTANE	0.4
LOCATION	SEC 16, T32S, R18W	N-PENTANE	0.3
OWNER	IMPERIAL OIL PROPERTIES, INC.	ISOPENTANE	0.3
COMPLETED	000412	CYCLOPENTANE	--
SAMPLED	000408	HEXANES PLUS	1.0
FORMATION	PENN-SWOPE	NITROGEN	8.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	--
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD		CARBON DIOXIDE	0.6
		HELIUM	0.21
		HEATING VALUE*	1,083
		SPECIFIC GRAVITY	0.704

SAMPLE	21184	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	85.0
COUNTY	COMANCHE	ETHANE	4.2
FIELD	NESCATUNGA SW	PROPANE	2.9
WELL NAME	DALE NO. 1	N-BUTANE	1.1
API	1503320628	ISOBUTANE	0.4
LOCATION	SEC 34, T32S, R18W	N-PENTANE	0.3
OWNER	MIDCO EXPLORATION, INC.	ISOPENTANE	0.3
COMPLETED	011108	CYCLOPENTANE	--
SAMPLED	030522	HEXANES PLUS	0.8
FORMATION	PENN-SWOPE, PWNE, MISS-CSTR	NITROGEN	4.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5110	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	720	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	125	CARBON DIOXIDE	TRACE
		HELIUM	0.19
		HEATING VALUE*	1,118
		SPECIFIC GRAVITY	0.674

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

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

SAMPLE	50587	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 69.2
COUNTY _____	KIOWA	ETHANE _____ 4.9
FIELD _____	NICHOLS	PROPANE _____ 5.9
WELL NAME _____	DARGEL NO. 1	N-BUTANE _____ 4.7
API _____	1509721481	ISOBUTANE _____ 1.6
LOCATION _____	SEC. 9, T29S, R18W	N-PENTANE _____ 2.1
OWNER _____	ROBERTS RESOURCES, INC.	ISOPENTANE _____ 1.9
COMPLETED _____	020425	CYCLOPENTANE _____ --
SAMPLED _____	020227	HEXANES PLUS _____ 3.7
FORMATION _____	PENN-ALTAMONT	NITROGEN _____ 5.8
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4792	ARGON _____ --
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____	1612	HYDROGEN SULFIDE** _____ --
OPEN FLOW, MCFD _____	4000	CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.15
		HEATING VALUE* _____ 1.501
		SPECIFIC GRAVITY _____ 0.932
SAMPLE	21176	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 93.7
COUNTY _____	COMANCHE	ETHANE _____ 2.7
FIELD _____	NOT GIVEN	PROPANE _____ 1.0
WELL NAME _____	LAKE NO. 2	N-BUTANE _____ 0.3
API _____	1503321173	ISOBUTANE _____ 0.1
LOCATION _____	SEC. 14, T32S, R19W	N-PENTANE _____ 0.1
OWNER _____	AMERICAN WARRIOR, INC.	ISOPENTANE _____ 0.1
COMPLETED _____	010213	CYCLOPENTANE _____ --
SAMPLED _____	030521	HEXANES PLUS _____ 0.4
FORMATION _____	MISS-MISSISSIPPIAN	NITROGEN _____ 1.1
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	5260	ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.067
		SPECIFIC GRAVITY _____ 0.605

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

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

SAMPLE	21177	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	93.1
COUNTY	COMANCHE	ETHANE	2.8
FIELD	NOT GIVEN	PROPANE	1.0
WELL NAME	LAKE NO. 3	N-BUTANE	0.3
API	1503321181	ISOBUTANE	0.2
LOCATION	SEC. 14, T32S, R19W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED	010219	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.7
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5182	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.09
		HEATING VALUE*	1,076
		SPECIFIC GRAVITY	0.614

SAMPLE	21231	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	68.8
COUNTY	BARTON	ETHANE	2.3
FIELD	OTIS-ALBERT	PROPANE	0.9
WELL NAME	BAHR 1	N-BUTANE	0.3
API	1500914165	ISOBUTANE	0.2
LOCATION	SEC. 27, T18S, R15W	N-PENTANE	0.1
OWNER	BEREN CORP.	ISOPENTANE	0.1
COMPLETED	400730	CYCLOPENTANE	--
SAMPLED	030819	HEXANES PLUS	0.1
FORMATION	PERM-CHASE GROUP	NITROGEN	25.7
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1783	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.0
		HELIUM	1.58
		HEATING VALUE*	786
		SPECIFIC GRAVITY	0.686

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

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

SAMPLE	21232	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	66.7
COUNTY	BARTON	ETHANE	2.0
FIELD	OTIS-ALBERT	PROPANE	0.8
WELL NAME	VERNON 1	N-BUTANE	0.3
API	1500930882	ISOBUTANE	0.2
LOCATION	SEC. 19, T18S, R15W	N-PENTANE	0.1
OWNER	BEREN CORP.	ISOPENTANE	0.1
COMPLETED	990603	CYCLOPENTANE	--
SAMPLED	030819	HEXANES PLUS	0.1
FORMATION	PERM-CHASE, PENN-KANSAS CITY	NITROGEN	28.1
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3453	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.0
		HELIUM	1.56
		HEATING VALUE*	755
		SPECIFIC GRAVITY	0.693

SAMPLE	21189	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.0
COUNTY	BARBER	ETHANE	5.0
FIELD	PERRY RANCH	PROPANE	2.4
WELL NAME	RUSK A1	N-BUTANE	0.9
API	1500720359	ISOBUTANE	0.4
LOCATION	SEC. 6, T32S, R15W	N-PENTANE	0.3
OWNER	WOOLSEY PETROLEUM CORP.	ISOPENTANE	0.3
COMPLETED	760519	CYCLOPENTANE	--
SAMPLED	030609	HEXANES PLUS	0.8
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.5
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4900	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1137	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	775	CARBON DIOXIDE	0.2
		HELIUM	0.15
		HEATING VALUE*	1,140
		SPECIFIC GRAVITY	0.657

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

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

SAMPLE	21152	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	85.7
COUNTY	COMANCHE	ETHANE	4.0
FIELD	PIPELINE NW	PROPANE	1.5
WELL NAME	JUDITH NO. 1	N-BUTANE	0.5
API	1503321187	ISOBUTANE	0.5
LOCATION	SEC. 26, T31S, R20W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.2
COMPLETED	010423	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	6.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5070	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.31
		HEATING VALUE*	1.034
		SPECIFIC GRAVITY	0.643

SAMPLE	21155	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.5
COUNTY	COMANCHE	ETHANE	3.8
FIELD	PIPELINE SW	PROPANE	1.6
WELL NAME	THIES NO. 1	N-BUTANE	0.5
API	1503321202	ISOBUTANE	0.2
LOCATION	SEC. 1, T32S, R20W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED	010323	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	3.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5212	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	535	CARBON DIOXIDE	0.1
		HELIUM	0.17
		HEATING VALUE*	1.064
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	50589	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	67.0
COUNTY	FORD	ETHANE	3.5
FIELD	PLEASANT VALLEY	PROPANE	2.1
WELL NAME	VICE NO. 1-14X	N-BUTANE	0.7
API	1505720563	ISOBUTANE	0.4
LOCATION	SEC. 14, T28S, R21W	N-PENTANE	0.2
OWNER	ROBERTS RESOURCES, INC.	ISOPENTANE	0.2
COMPLETED	021004	CYCLOPENTANE	--
SAMPLED	021021	HEXANES PLUS	0.3
FORMATION	PENN-LANSING	NITROGEN	24.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	--
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.5
		HELIUM	0.49
		HEATING VALUE*	860
		SPECIFIC GRAVITY	0.727

SAMPLE	50588	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	83.4
COUNTY	FORD	ETHANE	5.1
FIELD	PLEASANT VALLEY	PROPANE	2.0
WELL NAME	KIRKPATRICK NO. 1-11	N-BUTANE	0.7
API	1505720562	ISOBUTANE	0.4
LOCATION	SEC. 11, T28S, R21W	N-PENTANE	0.2
OWNER	ROBERTS RESOURCES, INC.	ISOPENTANE	0.2
COMPLETED	020605	CYCLOPENTANE	--
SAMPLED	021021	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	7.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4996	ARGON	--
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	489	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	660	CARBON DIOXIDE	0.2
		HELIUM	0.40
		HEATING VALUE*	1,051
		SPECIFIC GRAVITY	0.656

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

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

SAMPLE	21172	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	80.8
COUNTY	COMANCHE	ETHANE	5.1
FIELD	PROTECTION	PROPANE	2.2
WELL NAME	KERSTETTER 1-29	N-BUTANE	0.8
API	1503320976	ISOBUTANE	0.3
LOCATION	SEC. 29, T32S, R19W	N-PENTANE	0.2
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.2
COMPLETED	990105	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.4
FORMATION	ORDO-VIOLA	NITROGEN	9.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5804	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.39
		HEATING VALUE*	1,031
		SPECIFIC GRAVITY	0.671

SAMPLE	21154	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	91.3
COUNTY	COMANCHE	ETHANE	3.3
FIELD	PROTECTION NW	PROPANE	1.3
WELL NAME	HOLLER NO. 14-1	N-BUTANE	0.4
API	1503321135	ISOBUTANE	0.2
LOCATION	SEC. 14, T32S, R20W	N-PENTANE	0.1
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.1
COMPLETED	001116	CYCLOPENTANE	--
SAMPLED	030520	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	2.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5149	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.16
		HEATING VALUE*	1,058
		SPECIFIC GRAVITY	0.614

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

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

SAMPLE	21229	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.0
COUNTY	BARTON	ETHANE	2.2
FIELD	REDWING	PROPANE	0.8
WELL NAME	TINDALL 1B	N-BUTANE	0.2
API	1500920755	ISOBUTANE	0.1
LOCATION	SEC. 13, T18S, R13W	N-PENTANE	0.1
OWNER	KODIAK PETROLEUM, INC.	ISOPENTANE	0.1
COMPLETED	760203	CYCLOPENTANE	--
SAMPLED	030818	HEXANES PLUS	TRACE
FORMATION	PERM-TOWANDA	NITROGEN	23.1
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1654	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1740	CARBON DIOXIDE	0.2
		HELIUM	1.11
		HEATING VALUE*	807
		SPECIFIC GRAVITY	0.674

SAMPLE	21230	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	72.3
COUNTY	BARTON	ETHANE	2.3
FIELD	REDWING SW	PROPANE	0.9
WELL NAME	TINDALL 2B	N-BUTANE	0.3
API	1500924657	ISOBUTANE	0.1
LOCATION	SEC. 13, T18S, R13W	N-PENTANE	0.1
OWNER	KODIAK PETROLEUM, INC.	ISOPENTANE	0.1
COMPLETED	991208	CYCLOPENTANE	--
SAMPLED	030818	HEXANES PLUS	TRACE
FORMATION	PERM-WINFIELD	NITROGEN	23.0
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1658	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	370	CARBON DIOXIDE	TRACE
		HELIUM	1.09
		HEATING VALUE*	810
		SPECIFIC GRAVITY	0.672

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

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

SAMPLE	21246	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	65.9
COUNTY	EDWARDS	ETHANE	4.9
FIELD	SALSER	PROPANE	6.8
WELL NAME	GRIZZELL-WOOD 2	N-BUTANE	3.8
API	1504720851	ISOBUTANE	1.7
LOCATION	SEC. 14, T26S, R16W	N-PENTANE	1.1
OWNER	BEREN CORP.	ISOPENTANE	0.9
COMPLETED	811119	CYCLOPENTANE	--
SAMPLED	030820	HEXANES PLUS	0.9
FORMATION	PENN-LANSING-KANSAS CITY	NITROGEN	13.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4060	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.33
		HEATING VALUE*	1,228
		SPECIFIC GRAVITY	0.84

SAMPLE	21205	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.9
COUNTY	BARBER	ETHANE	3.4
FIELD	SALT FORK	PROPANE	1.3
WELL NAME	Z-BAR RANCH 1-16	N-BUTANE	0.4
API	1500722554	ISOBUTANE	0.2
LOCATION	SEC. 16, T35S, R15W	N-PENTANE	0.1
OWNER	CLEARY PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	980403	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.3
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	3.7
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.4
TRUE VERTICAL DEPTH (FT)	5074	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	569	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1150	CARBON DIOXIDE	0.1
		HELIUM	0.07
		HEATING VALUE*	1,050
		SPECIFIC GRAVITY	0.623

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

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

SAMPLE	21206	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	91.4
COUNTY	BARBER	ETHANE	4.0
FIELD	SALT FORK	PROPANE	1.8
WELL NAME	Z-BAR 10-4	N-BUTANE	0.7
API	1500722608	ISOBUTANE	0.3
LOCATION	SEC. 10, T35S, R15W	N-PENTANE	0.2
OWNER	REDLAND RESOURCES, INC.	ISOPENTANE	0.2
COMPLETED	000110	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.5
FORMATION	PENN-OSWG, CHRK, MISS-MSSP	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5004	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	10	CARBON DIOXIDE	0.1
		HELIUM	0.06
		HEATING VALUE*	1.113
		SPECIFIC GRAVITY	0.629

SAMPLE	21190	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	90.5
COUNTY	BARBER	ETHANE	3.9
FIELD	SCHUETTE	PROPANE	1.7
WELL NAME	RUSK 1E	N-BUTANE	0.6
API	1500721002	ISOBUTANE	0.3
LOCATION	SEC. 31, T31S, R15W	N-PENTANE	0.2
OWNER	WOOLSEY PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	810102	CYCLOPENTANE	--
SAMPLED	030609	HEXANES PLUS	0.6
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4968	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	157.1	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	340	CARBON DIOXIDE	0.1
		HELIUM	0.16
		HEATING VALUE*	1.099
		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	21203	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	89.0
COUNTY	BARBER	ETHANE	5.2
FIELD	STRANATHAN	PROPANE	2.5
WELL NAME	MOLZ FARM CORP. 1	N-BUTANE	0.9
API	1500721597	ISOBUTANE	0.4
LOCATION	SEC. 26, T34S, R12W	N-PENTANE	0.3
OWNER	MOLZ OIL CO., INC.	ISOPENTANE	0.2
COMPLETED	830523	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4762	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1151	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	166	CARBON DIOXIDE	0.1
		HELIUM	0.08
		HEATING VALUE*	1.132
		SPECIFIC GRAVITY	0.645

SAMPLE	21201	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	87.6
COUNTY	BARBER	ETHANE	5.5
FIELD	STRANATHAN	PROPANE	2.8
WELL NAME	HICKLE 1	N-BUTANE	1.1
API	1500720148	ISOBUTANE	0.4
LOCATION	SEC. 25, T34S, R12W	N-PENTANE	0.4
OWNER	MOLZ OIL CO., INC.	ISOPENTANE	0.3
COMPLETED	000711	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.5
FORMATION	PENN-PAWNEE	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4629	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1426	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	400	CARBON DIOXIDE	0.1
		HELIUM	0.09
		HEATING VALUE*	1.155
		SPECIFIC GRAVITY	0.661

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

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

SAMPLE	21199	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	85.7
COUNTY	BARBER	ETHANE	3.9
FIELD	TONI-MIKE NE	PROPANE	2.2
WELL NAME	ASH 2-35	N-BUTANE	0.7
API	1500721955	ISOBUTANE	0.3
LOCATION	SEC. 35, T32S, R12W	N-PENTANE	0.2
OWNER	TRANS PACIFIC OIL CORP.	ISOPENTANE	0.2
COMPLETED	870809	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.3
FORMATION	PENN-ELGIN	NITROGEN	5.9
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3467	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1069	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	150	CARBON DIOXIDE	0.2
		HELIUM	0.23
		HEATING VALUE*	1,059
		SPECIFIC GRAVITY	0.651

SAMPLE	21200	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	85.9
COUNTY	BARBER	ETHANE	3.9
FIELD	TONI-MIKE NE	PROPANE	2.2
WELL NAME	RANDEL A1	N-BUTANE	0.7
API	1500721606	ISOBUTANE	0.3
LOCATION	SEC. 26, T32S, R12W	N-PENTANE	0.2
OWNER	WOOLSEY PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	840312	CYCLOPENTANE	--
SAMPLED	030611	HEXANES PLUS	0.3
FORMATION	PENN-SNYDERVILLE	NITROGEN	5.8
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3552	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1442	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	720	CARBON DIOXIDE	0.1
		HELIUM	0.23
		HEATING VALUE*	1,060
		SPECIFIC GRAVITY	0.649

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

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

SAMPLE	21173	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	61.0
COUNTY	COMANCHE	ETHANE	6.0
FIELD	UNNAMED	PROPANE	3.6
WELL NAME	BARNES 1-12	N-BUTANE	1.3
API	1503321113	ISOBUTANE	0.5
LOCATION	SEC. 12, T32S, R19W	N-PENTANE	0.4
OWNER	AMERICAN WARRIOR, INC.	ISOPENTANE	0.3
COMPLETED	000821	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.6
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	24.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.99
		HEATING VALUE*	932
		SPECIFIC GRAVITY	0.774

SAMPLE	21242	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	67.1
COUNTY	STAFFORD	ETHANE	10.1
FIELD	VOGEL NE	PROPANE	6.0
WELL NAME	PAULSEN 1-35	N-BUTANE	2.0
API	1518521957	ISOBUTANE	0.7
LOCATION	SEC. 35, T24S, R11W	N-PENTANE	0.6
OWNER	HESSE PETROLEUM CO.	ISOPENTANE	0.4
COMPLETED	840319	CYCLOPENTANE	--
SAMPLED	030819	HEXANES PLUS	0.8
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	11.6
GEOLOGIC PROVINCE CODE	385	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.70
		HEATING VALUE*	1,172
		SPECIFIC GRAVITY	0.784

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

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

SAMPLE	21252	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	83.5
COUNTY	EDWARDS	ETHANE	3.4
FIELD	WAC.N	PROPANE	1.3
WELL NAME	G.D. WHITE 1-12	N-BUTANE	0.5
API	1504720336	ISOBUTANE	0.2
LOCATION	SEC. 12, T24S, R18W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	780512	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.4
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	9.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4350	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	6450	CARBON DIOXIDE	0.2
		HELIUM	0.92
		HEATING VALUE*	991
		SPECIFIC GRAVITY	0.645

SAMPLE	21263	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.9
COUNTY	EDWARDS	ETHANE	3.7
FIELD	WAC.NW	PROPANE	1.6
WELL NAME	LUNZ 3-21	N-BUTANE	0.6
API	1504720648	ISOBUTANE	0.3
LOCATION	SEC. 21, T24S, R16W	N-PENTANE	0.2
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.2
COMPLETED	800627	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.7
FORMATION	MISS-KINDERHOOK	NITROGEN	3.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4349	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	221	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.39
		HEATING VALUE*	1,079
		SPECIFIC GRAVITY	0.637

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

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

SAMPLE	21268	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	82.2
COUNTY	EDWARDS	ETHANE	1.9
FIELD	WAYNE	PROPANE	0.6
WELL NAME	FROHLING A1-23	N-BUTANE	0.1
API	1504721434	ISOBUTANE	0.1
LOCATION	SEC. 23, T24S, R17W	N-PENTANE	TRACE
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	TRACE
COMPLETED	990621	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.1
FORMATION	PERM-FORT RILEY, FLORENCE	NITROGEN	14.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2427	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	80	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	TRACE
		HELIUM	0.67
		HEATING VALUE*	895
		SPECIFIC GRAVITY	0.631

SAMPLE	21270	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	86.2
COUNTY	EDWARDS	ETHANE	3.6
FIELD	WAYNE	PROPANE	1.5
WELL NAME	BRITTON 3-15	N-BUTANE	0.6
API	1504721131	ISOBUTANE	0.3
LOCATION	SEC. 15, T24S, R17W	N-PENTANE	0.2
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.2
COMPLETED	840130	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.8
FORMATION	MISS-KINDERHOOK	NITROGEN	5.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4390	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	108	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.62
		HEATING VALUE*	1,053
		SPECIFIC GRAVITY	0.649

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

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

SAMPLE	50602	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	81.6
COUNTY	EDWARDS	ETHANE	1.6
FIELD	WAYNE	PROPANE	0.4
WELL NAME	CROSS, J.H. NO. 2-22	N-BUTANE	TRACE
API	1504721440	ISOBUTANE	TRACE
LOCATION	SEC. 22, T24S, R17W	N-PENTANE	TRACE
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	TRACE
COMPLETED	030227	CYCLOPENTANE	--
SAMPLED	030409	HEXANES PLUS	TRACE
FORMATION	PERM-WINFIELD	NITROGEN	15.5
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2266	ARGON	--
MEASURED DEPTH		HYDROGEN	--
WELLHEAD PRESSURE, PSIG	410	HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD	100	CARBON DIOXIDE	TRACE
		HELIUM	0.78
		HEATING VALUE*	866
		SPECIFIC GRAVITY	0.63

SAMPLE	21267	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	88.8
COUNTY	EDWARDS	ETHANE	3.2
FIELD	WAYNE S.	PROPANE	1.2
WELL NAME	MEIER 1-2	N-BUTANE	0.4
API	1504721066	ISOBUTANE	0.2
LOCATION	SEC. 2, T25S, R17W	N-PENTANE	0.1
OWNER	HOLL, F.G., CO. LLC	ISOPENTANE	0.1
COMPLETED	821030	CYCLOPENTANE	--
SAMPLED	030821	HEXANES PLUS	0.5
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	4.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4424	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	184	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	520	CARBON DIOXIDE	0.1
		HELIUM	0.50
		HEATING VALUE*	1,041
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	21195	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.3
COUNTY	BARBER	ETHANE	3.7
FIELD	WHELAN	PROPANE	2.1
WELL NAME	SWARTZ 1	N-BUTANE	0.7
API	1500721148	ISOBUTANE	0.3
LOCATION	SEC. 31, T31S, R11W	N-PENTANE	0.2
OWNER	MICA ENERGY CORP.	ISOPENTANE	0.2
COMPLETED	990630	CYCLOPENTANE	--
SAMPLED	030610	HEXANES PLUS	0.3
FORMATION	PENN-ELGIN	NITROGEN	7.9
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3337	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	607	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	150	CARBON DIOXIDE	0.1
		HELIUM	0.26
		HEATING VALUE*	1,032
		SPECIFIC GRAVITY	0.654

SAMPLE	21194	COMPONENT, MOLE PCT	
STATE	KANSAS	METHANE	84.3
COUNTY	BARBER	ETHANE	3.6
FIELD	WHELAN	PROPANE	2.0
WELL NAME	SWAYDEN 1B	N-BUTANE	0.7
API	1500721938	ISOBUTANE	0.3
LOCATION	SEC. 1, T32S, R12W	N-PENTANE	0.2
OWNER	WOOLSEY PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	940624	CYCLOPENTANE	--
SAMPLED	030610	HEXANES PLUS	0.4
FORMATION	PENN-ELGN, SDVL, MISS-MISSISSIPPIAN	NITROGEN	7.9
GEOLOGIC PROVINCE CODE	375	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4298	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	464	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	140	CARBON DIOXIDE	0.1
		HELIUM	0.25
		HEATING VALUE*	1,034
		SPECIFIC GRAVITY	0.655

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

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

SAMPLE	21197	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 74.9
COUNTY _____	BARBER	ETHANE _____ 7.8
FIELD _____	WHELAN SW	PROPANE _____ 5.2
WELL NAME _____	WHEELOCK 4	N-BUTANE _____ 1.6
API _____	1500722649	ISOBUTANE _____ 0.7
LOCATION _____	SEC. 3, T32S, R12W	N-PENTANE _____ 0.4
OWNER _____	MULL DRILLING CO., INC.	ISOPENTANE _____ 0.4
COMPLETED _____	010614	CYCLOPENTANE _____ --
SAMPLED _____	030610	HEXANES PLUS _____ 0.7
FORMATION _____	MISS-MISSISSIPPIAN	NITROGEN _____ 7.8
GEOLOGIC PROVINCE CODE _____	375	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____		ARGON _____ 0.1
MEASURED DEPTH _____		HYDROGEN _____ TRACE
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.1
		HELIUM _____ 0.29
		HEATING VALUE* _____ 1,168
		SPECIFIC GRAVITY _____ 0.741

SAMPLE	21247	COMPONENT, MOLE PCT
STATE _____	KANSAS	METHANE _____ 87.5
COUNTY _____	EDWARDS	ETHANE _____ 4.1
FIELD _____	WIL	PROPANE _____ 1.9
WELL NAME _____	SMITH-WOOD 1	N-BUTANE _____ 0.7
API _____	1504720182	ISOBUTANE _____ 0.3
LOCATION _____	SEC. 12, T26S, R16W	N-PENTANE _____ 0.2
OWNER _____	BEREN CORP.	ISOPENTANE _____ 0.2
COMPLETED _____	760115	CYCLOPENTANE _____ --
SAMPLED _____	030820	HEXANES PLUS _____ 1.3
FORMATION _____	PENN-CHEROKEE	NITROGEN _____ 3.0
GEOLOGIC PROVINCE CODE _____	360	OXYGEN _____ 0.0
TRUE VERTICAL DEPTH (FT) _____	4369	ARGON _____ 0.2
MEASURED DEPTH _____		HYDROGEN _____ 0.0
WELLHEAD PRESSURE, PSIG _____		HYDROGEN SULFIDE** _____ 0.0
OPEN FLOW, MCFD _____		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.31
		HEATING VALUE* _____ 1,121
		SPECIFIC GRAVITY _____ 0.662

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

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

SAMPLE	21248	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>88.9</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>3.8</u>
FIELD	<u>WIL</u>	PROPANE	<u>1.7</u>
WELL NAME	<u>MILLER 1</u>	N-BUTANE	<u>0.6</u>
API	<u>1504721324</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 35, T24S, R16W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>KENWORTHY OPERATING CO.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>880809</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030820</u>	HEXANES PLUS	<u>0.6</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>3.2</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4290</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>1125</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>811</u>	CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.38</u>
		HEATING VALUE*	<u>1,080</u>
		SPECIFIC GRAVITY	<u>0.636</u>

SAMPLE	21266	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>88.6</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>3.3</u>
FIELD	<u>WIL W</u>	PROPANE	<u>1.2</u>
WELL NAME	<u>BREITENBACH C-1-14</u>	N-BUTANE	<u>0.5</u>
API	<u>1504720621</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 14, T25S, R17W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>800228</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030821</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PENN-CHEROKEE CONGLOMERATE</u>	NITROGEN	<u>4.6</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4460</u>	ARGON	<u>0.1</u>
MEASURED DEPTH .....	.....	HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>260</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD .....	.....	CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.49</u>
		HEATING VALUE*	<u>1,046</u>
		SPECIFIC GRAVITY	<u>0.63</u>

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

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

SAMPLE	21261	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>86.4</u>
COUNTY	<u>EDWARDS</u>	ETHANE	<u>3.4</u>
FIELD	<u>WILMORE</u>	PROPANE	<u>1.5</u>
WELL NAME	<u>ENLOW 5-36</u>	N-BUTANE	<u>0.5</u>
API	<u>1504721439</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 36, T24S, R16W</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>HOLL, F.G., CO. LLC</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>010126</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030821</u>	HEXANES PLUS	<u>0.5</u>
FORMATION	<u>PENN-LANSING-KC, MISS-KINDERHOOK</u>	NITROGEN	<u>6.5</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4200</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>190</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.32</u>
		HEATING VALUE*	<u>1,034</u>
		SPECIFIC GRAVITY	<u>0.642</u>

SAMPLE	21150	COMPONENT, MOLE PCT	
STATE	<u>KANSAS</u>	METHANE	<u>92.6</u>
COUNTY	<u>COMANCHE</u>	ETHANE	<u>3.4</u>
FIELD	<u>YELLOWSTONE</u>	PROPANE	<u>1.3</u>
WELL NAME	<u>MICHAEL NO. 12-16</u>	N-BUTANE	<u>0.4</u>
API	<u>1503321292</u>	ISOBUTANE	<u>0.2</u>
LOCATION	<u>SEC. 12, T35S, R16W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>REDLAND RESOURCES, INC.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>020226</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030519</u>	HEXANES PLUS	<u>0.4</u>
FORMATION	<u>MISS-MISSISSIPPIAN</u>	NITROGEN	<u>1.1</u>
GEOLOGIC PROVINCE CODE	<u>360</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5326</u>	ARGON	<u>0.1</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>50</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.06</u>
		HEATING VALUE*	<u>1,081</u>
		SPECIFIC GRAVITY	<u>0.613</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	21130	COMPONENT, MOLE PCT	
STATE	LOUISIANA	METHANE	91.3
COUNTY	VERMILION	ETHANE	3.8
FIELD	I E L E U X	PROPANE	1.4
WELL NAME	Y.C.ARCENEUX NO.1	N-BUTANE	0.4
API	1711322194	ISOBUTANE	0.4
LOCATION	SEC. 6, T11S, R2E	N-PENTANE	0.1
OWNER	RANGE RESOURCES CORP.	ISOPENTANE	0.2
COMPLETED	020814	CYCLOPENTANE	--
SAMPLED	030226	HEXANES PLUS	0.7
FORMATION	OLIG-MARGINULINA HOWE	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	220	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11815	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	9000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	8785	CARBON DIOXIDE	0.5
		HELIUM	0.03
		HEATING VALUE*	1.102
		SPECIFIC GRAVITY	0.632
SAMPLE	21133	COMPONENT, MOLE PCT	
STATE	LOUISIANA	METHANE	91.3
COUNTY	JEFFERSON DAVIS	ETHANE	3.9
FIELD	THORNWELL S.	PROPANE	1.5
WELL NAME	TUPPER, V.I., ETAL. BOI. P. RA. SUC. NO. 2.	N-BUTANE	0.5
API	1705321317	ISOBUTANE	0.5
LOCATION	SEC. 20, T11S, R4W	N-PENTANE	0.1
OWNER	DENBURY RESOURCES, INC.	ISOPENTANE	0.2
COMPLETED	020721	CYCLOPENTANE	--
SAMPLED	030224	HEXANES PLUS	0.3
FORMATION	OLIG-BOLIVINA PERCA	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	220	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11580	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2850	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2831	CARBON DIOXIDE	0.6
		HELIUM	0.04
		HEATING VALUE*	1.091
		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	21395	COMPONENT, MOLE PCT	
STATE	MISSISSIPPI	METHANE	95.4
COUNTY	MARION	ETHANE	0.4
FIELD	BAXTERVILLE	PROPANE	0.2
WELL NAME	ALLAR 36-16 NO.4	N-BUTANE	0.1
API	2309120315	ISOBUTANE	0.1
LOCATION	SEC.17, T2N, R17W	N-PENTANE	0.1
OWNER	PENN.VIRGINIA OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	030321	CYCLOPENTANE	--
SAMPLED	041104	HEXANES PLUS	0.1
FORMATION	CRET-SELMA CHALK	NITROGEN	3.1
GEOLOGIC PROVINCE CODE	210	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6591	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	30	CARBON DIOXIDE	0.4
		HELIUM	0.03
		HEATING VALUE*	996
		SPECIFIC GRAVITY	0.583

SAMPLE	21147	COMPONENT, MOLE PCT	
STATE	MISSISSIPPI	METHANE	93.7
COUNTY	MARION	ETHANE	0.6
FIELD	HUB	PROPANE	0.2
WELL NAME	HUB GAS UNIT 20-11 NO. 2	N-BUTANE	0.2
API	2309120277	ISOBUTANE	0.1
LOCATION	SEC. 20, T2N, R14E	N-PENTANE	0.1
OWNER	SKRIVANOS ENGINEERING, INC.	ISOPENTANE	0.1
COMPLETED	020126	CYCLOPENTANE	--
SAMPLED	030422	HEXANES PLUS	0.2
FORMATION	CRET-DANTZLER	NITROGEN	2.6
GEOLOGIC PROVINCE CODE	210	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10020	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2150	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1320	CARBON DIOXIDE	2.1
		HELIUM	0.03
		HEATING VALUE*	991
		SPECIFIC GRAVITY	0.603

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

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

SAMPLE	21135	COMPONENT, MOLE PCT	
STATE	MISSISSIPPI	METHANE	97.2
COUNTY	OKTIBBEHA	ETHANE	0.6
FIELD	MABEN	PROPANE	TRACE
WELL NAME	HAWKINS 20-3 No. 1	N-BUTANE	0.0
API	2310520025	ISOBUTANE	0.0
LOCATION	SEC. 20, T19N, R12E	N-PENTANE	0.0
OWNER	TOTALFINAELF EXPL & PROD USA, INC.	ISOPENTANE	0.0
COMPLETED	020421	CYCLOPENTANE	--
SAMPLED	030320	HEXANES PLUS	0.0
FORMATION	CAMO-KNOX	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	200	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.0
MEASURED DEPTH	14400	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2050	CARBON DIOXIDE	1.3
		HELIUM	0.02
		HEATING VALUE*	994
		SPECIFIC GRAVITY	0.573

SAMPLE	20801	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	1.8
COUNTY	SAN JUAN	ETHANE	0.1
FIELD	BEAUTIFUL MOUNTAIN	PROPANE	0.1
WELL NAME	NAVAJO 32 NO. 2	N-BUTANE	0.1
API	3004524945	ISOBUTANE	0.1
LOCATION	SEC. 32, T27N, R19W	N-PENTANE	0.1
OWNER	MOUNTAIN STATES PETROLEUM CORP.	ISOPENTANE	TRACE
COMPLETED	831003	CYCLOPENTANE	--
SAMPLED	010830	HEXANES PLUS	0.1
FORMATION	PENN-BARKER CREEK	NITROGEN	90.0
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5941	ARGON	1.0
MEASURED DEPTH	6016	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	900	CARBON DIOXIDE	0.6
		HELIUM	5.93
		HEATING VALUE*	39
		SPECIFIC GRAVITY	0.924

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

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

SAMPLE	20838	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	1.8
COUNTY	SAN JUAN	ETHANE	0.1
FIELD	BEAUTIFUL MOUNTAIN	PROPANE	0.1
WELL NAME	NAVAJO 5 NO. 1	N-BUTANE	0.2
API	3004521755	ISOBUTANE	TRACE
LOCATION	SEC. 5, T26N, R19W	N-PENTANE	0.0
OWNER	MOUNTAIN STATES PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	750603	CYCLOPENTANE	--
SAMPLED	010830	HEXANES PLUS	0.1
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	90.1
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6040	ARGON	1.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	700	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	38	CARBON DIOXIDE	0.4
		HELIUM	5.96
		HEATING VALUE*	38
		SPECIFIC GRAVITY	0.922

SAMPLE	20837	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	2.3
COUNTY	SAN JUAN	ETHANE	0.2
FIELD	BEAUTIFUL MOUNTAIN	PROPANE	0.2
WELL NAME	NAVAJO 5 NO. 2	N-BUTANE	0.2
API	3004521816	ISOBUTANE	0.1
LOCATION	SEC. 5, T26N, R19W	N-PENTANE	0.2
OWNER	MOUNTAIN STATES PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	850502	CYCLOPENTANE	--
SAMPLED	010830	HEXANES PLUS	0.9
FORMATION	PERM-ORGAN ROCK, MISS-LEADVILLE	NITROGEN	88.3
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6090	ARGON	1.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	790	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	575	CARBON DIOXIDE	0.7
		HELIUM	5.65
		HEATING VALUE*	100
		SPECIFIC GRAVITY	0.946

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

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

SAMPLE	20791	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	3.4
COUNTY	SAN JUAN	ETHANE	0.3
FIELD	BIG GAP	PROPANE	0.2
WELL NAME	NAVAJO 29 NO. 2	N-BUTANE	0.1
API	3004525103	ISOBUTANE	0.1
LOCATION	SEC. 29, T27N, R19W	N-PENTANE	0.1
OWNER	MOUNTAIN STATES PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	860710	CYCLOPENTANE	--
SAMPLED	010830	HEXANES PLUS	0.1
FORMATION	PERM-ORGAN ROCK	NITROGEN	90.5
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3736	ARGON	0.8
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	175	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1300	CARBON DIOXIDE	0.0
		HELIUM	4.17
		HEATING VALUE*	65
		SPECIFIC GRAVITY	0.93

SAMPLE	20839	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	5.3
COUNTY	SAN JUAN	ETHANE	0.6
FIELD	BIG GAP	PROPANE	0.3
WELL NAME	NAVAJO 32 NO. 1	N-BUTANE	0.2
API	30-045-22272	ISOBUTANE	0.1
LOCATION	SEC. 32, T27N, R19W	N-PENTANE	0.1
OWNER	MOUNTAIN STATES PETROLEUM CORP.	ISOPENTANE	0.1
COMPLETED	860918	CYCLOPENTANE	--
SAMPLED	010830	HEXANES PLUS	0.1
FORMATION	PERM-ORGAN ROCK	NITROGEN	86.9
GEOLOGIC PROVINCE CODE	580	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3800	ARGON	1.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	40	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	300	CARBON DIOXIDE	0.0
		HELIUM	5.38
		HEATING VALUE*	92
		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	21301	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	83.4
COUNTY	CHAVES	ETHANE	4.2
FIELD	CROCKETT DRAW	PROPANE	2.0
WELL NAME	BUDER ACN FEDERAL NO. 2	N-BUTANE	0.7
API	3000563513	ISOBUTANE	0.4
LOCATION	SEC 22, T6S, R26E	N-PENTANE	0.2
OWNER	YATES PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	031112	CYCLOPENTANE	--
SAMPLED		HEXANES PLUS	0.5
FORMATION	PERM-WOLFCAMP	NITROGEN	7.7
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5160	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	816	CARBON DIOXIDE	0.3
		HELIUM	0.33
		HEATING VALUE*	1,046
		SPECIFIC GRAVITY	0.665

SAMPLE	21310	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	0.0
COUNTY	HARDING	ETHANE	0.0
FIELD	NORTHEAST COUNTIES	PROPANE	0.0
WELL NAME	MITCHELL NO. 16	N-BUTANE	0.0
API	3002120033	ISOBUTANE	0.0
LOCATION	SEC 5, T18N, R30E	N-PENTANE	0.0
OWNER	AMERADA HESS CORP.	ISOPENTANE	0.0
COMPLETED	750825	CYCLOPENTANE	--
SAMPLED	040524	HEXANES PLUS	0.0
FORMATION	PERM-ABO	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	445	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2060	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	417	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1536	CARBON DIOXIDE	99.8
		HELIUM	TRACE
		HEATING VALUE*	0
		SPECIFIC GRAVITY	1.519

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

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

SAMPLE	20551	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.3
COUNTY	CHAVES	ETHANE	4.8
FIELD	PECOS SLOPE	PROPANE	1.8
WELL NAME	DALE FEDERAL NO. 12	N-BUTANE	0.6
API	3000561348	ISOBUTANE	0.3
LOCATION	SEC. 27, T7S, R26E	N-PENTANE	0.3
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.2
COMPLETED	820427	CYCLOPENTANE	--
SAMPLED	001220	HEXANES PLUS	0.6
FORMATION	PERM-ABO	NITROGEN	4.7
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4550	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	979	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1447	CARBON DIOXIDE	0.1
		HELIUM	0.34
		HEATING VALUE*	1,079
		SPECIFIC GRAVITY	0.652

SAMPLE	20565	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	86.4
COUNTY	CHAVES	ETHANE	4.7
FIELD	PECOS SLOPE	PROPANE	1.7
WELL NAME	MICHAEL ERIC NO. 2	N-BUTANE	0.6
API	3000561245	ISOBUTANE	0.3
LOCATION	SEC. 22, T7S, R26E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.2
COMPLETED	820310	CYCLOPENTANE	--
SAMPLED	001220	HEXANES PLUS	0.5
FORMATION	PERM-ABO	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4391	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	931	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1328	CARBON DIOXIDE	0.1
		HELIUM	0.35
		HEATING VALUE*	1,070
		SPECIFIC GRAVITY	0.648

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

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

SAMPLE	20554	COMPONENT, MOLE PCT	
STATE	<u>NEW MEXICO</u>	METHANE	<u>86.5</u>
COUNTY	<u>CHAVES</u>	ETHANE	<u>4.8</u>
FIELD	<u>PECOS SLOPE</u>	PROPANE	<u>1.7</u>
WELL NAME	<u>PECOS FEDERAL NO. 2</u>	N-BUTANE	<u>0.6</u>
API	<u>3000562467</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 35, T7S, R26E</u>	N-PENTANE	<u>0.2</u>
OWNER	<u>MCKAY OIL CORP.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>870903</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>001220</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>PERM-ABO</u>	NITROGEN	<u>5.0</u>
GEOLOGIC PROVINCE CODE	<u>430</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4659</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG	<u>895</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1200</u>	CARBON DIOXIDE	<u>0.1</u>
		HELIUM	<u>0.39</u>
		HEATING VALUE*	<u>1,060</u>
		SPECIFIC GRAVITY	<u>0.642</u>

SAMPLE	20535	COMPONENT, MOLE PCT	
STATE	<u>NEW MEXICO</u>	METHANE	<u>82.2</u>
COUNTY	<u>CHAVES</u>	ETHANE	<u>4.3</u>
FIELD	<u>PECOS SLOPE</u>	PROPANE	<u>1.6</u>
WELL NAME	<u>HUSKY-MCKAY NO. 1</u>	N-BUTANE	<u>0.6</u>
API	<u>3000561616</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 18, T8S, R26E</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>MCKAY OIL CORP.</u>	ISOPENTANE	<u>0.2</u>
COMPLETED	<u>820823</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>001219</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>PERM-ABO</u>	NITROGEN	<u>9.1</u>
GEOLOGIC PROVINCE CODE	<u>430</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>4036</u>	ARGON	<u>TRACE</u>
MEASURED DEPTH		HYDROGEN	<u>0.1</u>
WELLHEAD PRESSURE, PSIG	<u>909</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>1280</u>	CARBON DIOXIDE	<u>TRACE</u>
		HELIUM	<u>0.59</u>
		HEATING VALUE*	<u>1,029</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	20592	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.1
COUNTY	CHAVES	ETHANE	3.1
FIELD	PECOS SLOPE W	PROPANE	1.3
WELL NAME	PIERCE FEDERAL NO. 2	N-BUTANE	0.5
API	3000562422	ISOBUTANE	0.2
LOCATION	SEC. 4, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870623	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2901	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	891	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4466	CARBON DIOXIDE	0.0
		HELIUM	0.29
		HEATING VALUE*	1.032
		SPECIFIC GRAVITY	0.622

SAMPLE	20594	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.9
COUNTY	CHAVES	ETHANE	3.1
FIELD	PECOS SLOPE W	PROPANE	1.3
WELL NAME	LOOKOUT FEDERAL NO. 5	N-BUTANE	0.5
API	3000562357	ISOBUTANE	0.2
LOCATION	SEC. 9, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870317	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.3
FORMATION	PERM-ABO	NITROGEN	5.1
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3111	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	705	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1603	CARBON DIOXIDE	0.0
		HELIUM	0.30
		HEATING VALUE*	1.036
		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	20600	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.9
COUNTY	CHAVES	ETHANE	2.4
FIELD	PECOS SLOPE W.	PROPANE	0.9
WELL NAME	LL & E FEDERAL NO. 5	N-BUTANE	0.4
API	3000562378	ISOBUTANE	0.1
LOCATION	SEC. 1, T6S, R22E	N-PENTANE	0.1
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870712	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.5
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4208	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	895	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4506	CARBON DIOXIDE	0.0
		HELIUM	0.31
		HEATING VALUE*	1.009
		SPECIFIC GRAVITY	0.613
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SAMPLE	20593	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.1
COUNTY	CHAVES	ETHANE	3.0
FIELD	PECOS SLOPE W.	PROPANE	1.2
WELL NAME	LOOKOUT FEDERAL NO. 8	N-BUTANE	0.5
API	3000562411	ISOBUTANE	0.2
LOCATION	SEC. 9, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870306	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.2
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3151	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	516	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1107	CARBON DIOXIDE	0.0
		HELIUM	0.32
		HEATING VALUE*	1.030
		SPECIFIC GRAVITY	0.622

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

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

SAMPLE	20589	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.7
COUNTY	CHAVES	ETHANE	2.8
FIELD	PECOS SLOPE W	PROPANE	1.1
WELL NAME	SNAKEWEED FEDERAL NO. 4	N-BUTANE	0.5
API	3000562432	ISOBUTANE	0.2
LOCATION	SEC. 18, T6S, R23E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870512	CYCLOPENTANE	--
SAMPLED	010226	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	4.9
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3381	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	927	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5026	CARBON DIOXIDE	0.0
		HELIUM	0.33
		HEATING VALUE*	1,029
		SPECIFIC GRAVITY	0.618

SAMPLE	20595	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.8
COUNTY	CHAVES	ETHANE	3.0
FIELD	PECOS SLOPE W	PROPANE	1.3
WELL NAME	SOUTH FOUR MILE DRAW FEDERAL NO. 1	N-BUTANE	0.6
API	3000562309	ISOBUTANE	0.2
LOCATION	SEC. 22, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870710	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.3
FORMATION	PERM-ABO	NITROGEN	5.2
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3254	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	993	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1453	CARBON DIOXIDE	0.0
		HELIUM	0.33
		HEATING VALUE*	1,036
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	20591	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.0
COUNTY	CHAVES	ETHANE	2.8
FIELD	PECOS SLOPE W	PROPANE	1.2
WELL NAME	FOUR MILE DRAW FEDERAL NO. 2	N-BUTANE	0.5
API	3000562302	ISOBUTANE	0.2
LOCATION	SEC. 15, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870212	CYCLOPENTANE	--
SAMPLED	010226	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.4
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3126	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	926	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3296	CARBON DIOXIDE	0.0
		HELIUM	0.34
		HEATING VALUE*	1.025
		SPECIFIC GRAVITY	0.622

SAMPLE	20599	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.4
COUNTY	CHAVES	ETHANE	3.1
FIELD	PECOS SLOPE W	PROPANE	1.4
WELL NAME	REMMELE FEDERAL COM. 13	N-BUTANE	0.6
API	3000562420	ISOBUTANE	0.2
LOCATION	SEC. 27, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870529	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.3
FORMATION	PERM-ABO	NITROGEN	5.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3027	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	976	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1740	CARBON DIOXIDE	0.0
		HELIUM	0.36
		HEATING VALUE*	1.036
		SPECIFIC GRAVITY	0.628

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

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

SAMPLE	20596	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	88.6
COUNTY	CHAVES	ETHANE	3.0
FIELD	PECOS SLOPE W.	PROPANE	1.3
WELL NAME	REMMELE FEDERAL COM. 11	N-BUTANE	0.6
API	3000562418	ISOBUTANE	0.2
LOCATION	SEC. 27, T6S, R22E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870527	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.4
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3121	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	968	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4734	CARBON DIOXIDE	0.0
		HELIUM	0.36
		HEATING VALUE*	1.030
		SPECIFIC GRAVITY	0.625

SAMPLE	20601	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	90.3
COUNTY	CHAVES	ETHANE	2.0
FIELD	PECOS SLOPE W.	PROPANE	0.8
WELL NAME	EPPERS FEDERAL NO. 4	N-BUTANE	0.4
API	3000562405	ISOBUTANE	0.1
LOCATION	SEC. 35, T5S, R21E	N-PENTANE	0.1
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	870222	CYCLOPENTANE	--
SAMPLED	010227	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	5.6
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3168	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	746	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	514	CARBON DIOXIDE	0.0
		HELIUM	0.38
		HEATING VALUE*	1.001
		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	20587	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	89.7
COUNTY	CHAVES	ETHANE	2.6
FIELD	PECOS SLOPE W	PROPANE	1.1
WELL NAME	FIVE MILE TANK B FEDERAL NO. 3	N-BUTANE	0.5
API	3000563293	ISOBUTANE	0.2
LOCATION	SEC. 17, T6S, R23E	N-PENTANE	0.2
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED		CYCLOPENTANE	--
SAMPLED	010226	HEXANES PLUS	0.3
FORMATION	PERM-ABO	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.0
		HELIUM	0.41
		HEATING VALUE*	1,026
		SPECIFIC GRAVITY	0.618

SAMPLE	20583	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	90.3
COUNTY	CHAVES	ETHANE	2.3
FIELD	PECOS SLOPE W	PROPANE	0.8
WELL NAME	WEST MCKAY HARVEY FEDERAL NO. 1	N-BUTANE	0.3
API	3000562196	ISOBUTANE	0.1
LOCATION	SEC. 17, T8S, R23E	N-PENTANE	0.1
OWNER	MCKAY OIL CORP.	ISOPENTANE	TRACE
COMPLETED	860310	CYCLOPENTANE	--
SAMPLED	010226	HEXANES PLUS	0.1
FORMATION	PERM-ABO	NITROGEN	5.3
GEOLOGIC PROVINCE CODE	430	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3358	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	10234	CARBON DIOXIDE	0.0
		HELIUM	0.58
		HEATING VALUE*	999
		SPECIFIC GRAVITY	0.605

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

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

SAMPLE	20588	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	82.4
COUNTY	CHAVES	ETHANE	2.1
FIELD	PECOS SLOPE W	PROPANE	0.9
WELL NAME	M & M FEDERAL NO. 5	N-BUTANE	0.4
API	3000562606	ISOBUTANE	0.1
LOCATION	SEC. 19, T6S, R23E	N-PENTANE	0.1
OWNER	MCKAY OIL CORP.	ISOPENTANE	0.1
COMPLETED	880511	CYCLOPENTANE	--
SAMPLED	010226	HEXANES PLUS	0.2
FORMATION	PERM-ABO	NITROGEN	10.8
GEOLOGIC PROVINCE CODE	430	OXYGEN	1.8
TRUE VERTICAL DEPTH (FT)	3098	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	763	CARBON DIOXIDE	0.1
		HELIUM	1.02
		HEATING VALUE*	927
		SPECIFIC GRAVITY	0.639

SAMPLE	21140	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	0.0
COUNTY	UNION	ETHANE	0.0
FIELD	UNNAMED	PROPANE	0.0
WELL NAME	EXCEL NO. 1	N-BUTANE	0.0
API	3005920046	ISOBUTANE	0.0
LOCATION	SEC. 1, T31N, R32E	N-PENTANE	0.0
OWNER	HNG FOSSIL FUELS CO.	ISOPENTANE	0.0
COMPLETED	800613	CYCLOPENTANE	--
SAMPLED	030403	HEXANES PLUS	0.0
FORMATION	PERM-GLORIETA	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	445	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	770	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	85	CARBON DIOXIDE	99.9
		HELIUM	TRACE
		HEATING VALUE*	0
		SPECIFIC GRAVITY	1.519

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

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

SAMPLE	20924	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	0.2
COUNTY	SOCORRO	ETHANE	TRACE
FIELD	WILDCAT	PROPANE	0.0
WELL NAME	CATHEAD MESA UNIT NO. 1	N-BUTANE	0.0
API	3005320012	ISOBUTANE	0.0
LOCATION	SEC. 8, T4S, R9E	N-PENTANE	0.0
OWNER	PRIMERO OPERATING, INC.	ISOPENTANE	0.0
COMPLETED	031030	CYCLOPENTANE	--
SAMPLED	020506	HEXANES PLUS	0.0
FORMATION	PERM-ABO	NITROGEN	95.2
GEOLOGIC PROVINCE CODE	465	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3820	ARGON	0.3
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	2.0
		HELIUM	2.26
		HEATING VALUE*	3
		SPECIFIC GRAVITY	0.959

SAMPLE	20926	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	0.3
COUNTY	SOCORRO	ETHANE	TRACE
FIELD	WILDCAT	PROPANE	0.0
WELL NAME	CATHEAD MESA UNIT NO. 1	N-BUTANE	0.0
API	3005320012	ISOBUTANE	0.0
LOCATION	SEC. 8, T4S, R9E	N-PENTANE	0.0
OWNER	PRIMERO OPERATING, INC.	ISOPENTANE	0.0
COMPLETED	031030	CYCLOPENTANE	--
SAMPLED	020509	HEXANES PLUS	0.0
FORMATION	PERM-ABO	NITROGEN	95.3
GEOLOGIC PROVINCE CODE	465	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3820	ARGON	0.3
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	1.8
		HELIUM	2.28
		HEATING VALUE*	4
		SPECIFIC GRAVITY	0.958

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

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

SAMPLE	21338	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	1.9
COUNTY	SOCORRO	ETHANE	TRACE
FIELD	WILDCAT	PROPANE	0.0
WELL NAME	DULCE DRAW STATE NO. 1	N-BUTANE	0.0
API	3005320014	ISOBUTANE	0.0
LOCATION	SEC. 2, T4S, R9E	N-PENTANE	0.0
OWNER	PRIMERO OPERATING, INC.	ISOPENTANE	0.0
COMPLETED	010808	CYCLOPENTANE	--
SAMPLED	040807	HEXANES PLUS	0.0
FORMATION	PERM-ABO	NITROGEN	68.2
GEOLOGIC PROVINCE CODE	465	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3074	ARGON	0.3
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	26.5
		HELIUM	3.10
		HEATING VALUE*	20
		SPECIFIC GRAVITY	1.081

SAMPLE	21289	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	1.2
COUNTY	SOCORRO	ETHANE	TRACE
FIELD	WILDCAT	PROPANE	0.0
WELL NAME	CATHEAD MESA UNIT NO. 1	N-BUTANE	0.0
API	3005320012	ISOBUTANE	0.0
LOCATION	SEC. 8, T4S, R9E	N-PENTANE	0.0
OWNER	PRIMERO OPERATING, INC.	ISOPENTANE	0.0
COMPLETED	031030	CYCLOPENTANE	--
SAMPLED	031023	HEXANES PLUS	0.0
FORMATION	PERM-ABO, PENN-ATOKA	NITROGEN	95.3
GEOLOGIC PROVINCE CODE	465	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4238	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.7
		HELIUM	2.56
		HEATING VALUE*	13
		SPECIFIC GRAVITY	0.945

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

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

SAMPLE	20922	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	0.7
COUNTY	SOCORRO	ETHANE	0.0
FIELD	WILDCAT	PROPANE	0.0
WELL NAME	CATHEAD MESA UNIT NO. 1	N-BUTANE	TRACE
API	3005320012	ISOBUTANE	TRACE
LOCATION	SEC. 8, T4S, R9E	N-PENTANE	TRACE
OWNER	PRIMERO OPERATING, INC.	ISOPENTANE	0.0
COMPLETED	031030	CYCLOPENTANE	--
SAMPLED	020430	HEXANES PLUS	TRACE
FORMATION	PENN-ATOKA	NITROGEN	5.8
GEOLOGIC PROVINCE CODE	465	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4238	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.6
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	92.6
		HELIUM	0.23
		HEATING VALUE*	11
		SPECIFIC GRAVITY	1.469

SAMPLE	21277	COMPONENT, MOLE PCT	
STATE	NEW MEXICO	METHANE	48.0
COUNTY	QUAY	ETHANE	7.6
FIELD	WILDCAT	PROPANE	4.5
WELL NAME	WILSON NO. 1 (BLACK LABEL CYL)	N-BUTANE	1.5
API	3003720076	ISOBUTANE	0.8
LOCATION	SEC. 8, T10N, R28E	N-PENTANE	0.4
OWNER	COULTHURST MANAGEMENT & INVESTMENT, INC.	ISOPENTANE	0.5
COMPLETED		CYCLOPENTANE	--
SAMPLED	030909	HEXANES PLUS	0.7
FORMATION	PENN-STRAWN	NITROGEN	8.1
GEOLOGIC PROVINCE CODE	435	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7210	ARGON	0.4
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	27.4
		HELIUM	0.17
		HEATING VALUE*	877
		SPECIFIC GRAVITY	1.001

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

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

SAMPLE	21276	COMPONENT, MOLE PCT	
STATE	<u>NEW MEXICO</u>	METHANE	<u>48.2</u>
COUNTY	<u>QUAY</u>	ETHANE	<u>7.6</u>
FIELD	<u>WILDCAT</u>	PROPANE	<u>4.5</u>
WELL NAME	<u>WILSON NO. 1 (RED LABEL CYL)</u>	N-BUTANE	<u>1.5</u>
API	<u>3003720076</u>	ISOBUTANE	<u>0.8</u>
LOCATION	<u>SEC. 8, T10N, R28E</u>	N-PENTANE	<u>0.4</u>
OWNER	<u>COULTHURST MANAGEMENT & INVESTMENT, INC.</u>	ISOPENTANE	<u>0.5</u>
COMPLETED		CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030909</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>PENN-STRAWN</u>	NITROGEN	<u>8.1</u>
GEOLOGIC PROVINCE CODE	<u>435</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>7210</u>	ARGON	<u>0.2</u>
MEASURED DEPTH		HYDROGEN	<u>TRACE</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD		CARBON DIOXIDE	<u>27.3</u>
		HELIUM	<u>0.18</u>
		HEATING VALUE*	<u>878</u>
		SPECIFIC GRAVITY	<u>0.999</u>

SAMPLE	21216	COMPONENT, MOLE PCT	
STATE	<u>NORTH DAKOTA</u>	METHANE	<u>24.8</u>
COUNTY	<u>WILLIAMS</u>	ETHANE	<u>0.9</u>
FIELD	<u>TIOGA</u>	PROPANE	<u>0.1</u>
WELL NAME	<u>ASTRID ONGSTAD 14-22</u>	N-BUTANE	<u>TRACE</u>
API	<u>3310501340</u>	ISOBUTANE	<u>0.1</u>
LOCATION	<u>SEC. 14, T157N, R95W</u>	N-PENTANE	<u>TRACE</u>
OWNER	<u>AMERADA HESS CORP.</u>	ISOPENTANE	<u>TRACE</u>
COMPLETED	<u>010326</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>030707</u>	HEXANES PLUS	<u>0.1</u>
FORMATION	<u>CAMB-DEADWOOD</u>	NITROGEN	<u>70.3</u>
GEOLOGIC PROVINCE CODE	<u>395</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>13720</u>	ARGON	<u>0.3</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>4200</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>8400</u>	CARBON DIOXIDE	<u>2.9</u>
		HELIUM	<u>0.46</u>
		HEATING VALUE*	<u>279</u>
		SPECIFIC GRAVITY	<u>0.882</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	21083	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	90.1
COUNTY	WOODS	ETHANE	4.4
FIELD	CHEYENNE VALLEY	PROPANE	2.1
WELL NAME	MORRIS HULL NO. 1	N-BUTANE	0.7
API	3515121289	ISOBUTANE	0.3
LOCATION	SEC. 34, T24N, R15W	N-PENTANE	0.2
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.2
COMPLETED	950425	CYCLOPENTANE	--
SAMPLED	021031	HEXANES PLUS	0.5
FORMATION	MISS-CHESTER	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6366	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1650	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	203	CARBON DIOXIDE	0.3
		HELIUM	0.07
		HEATING VALUE*	1,117
		SPECIFIC GRAVITY	0.638

SAMPLE	21061	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	97.2
COUNTY	ROGER MILLS	ETHANE	0.6
FIELD	DEMPSEY	PROPANE	TRACE
WELL NAME	C. BERRY NO. 1-24	N-BUTANE	TRACE
API	3512922109	ISOBUTANE	0.0
LOCATION	SEC. 24, T13N, R25W	N-PENTANE	0.0
OWNER	SUNDOWN ENERGY, INC.	ISOPENTANE	0.0
COMPLETED	990131	CYCLOPENTANE	--
SAMPLED	021029	HEXANES PLUS	TRACE
FORMATION	PENN-MORROW U	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	15707	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4200	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	370	CARBON DIOXIDE	2.0
		HELIUM	0.02
		HEATING VALUE*	996
		SPECIFIC GRAVITY	0.578

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

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

SAMPLE	21339	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	40.1
COUNTY	GAREFIELD	ETHANE	2.1
FIELD	GREEN VALLEY	PROPANE	1.6
WELL NAME	LIBERTY 1-34	N-BUTANE	0.6
API	3504724354	ISOBUTANE	0.3
LOCATION	SEC. 34, T22N, R3W	N-PENTANE	0.2
OWNER	PANHANDLE OIL & GAS CONSULTANTS	ISOPENTANE	0.1
COMPLETED	040103	CYCLOPENTANE	--
SAMPLED	040818	HEXANES PLUS	0.2
FORMATION	PENN-CREWS	NITROGEN	54.4
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2150	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.1
		HELIUM	0.40
		HEATING VALUE*	530
		SPECIFIC GRAVITY	0.825

SAMPLE	20876	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	77.5
COUNTY	CIMARRON	ETHANE	7.5
FIELD	GRIGGS SE	PROPANE	5.3
WELL NAME	DAISY FIELD GAS UNIT NO. 1	N-BUTANE	1.8
API	3502500009	ISOBUTANE	0.8
LOCATION	SEC. 36, T1N, R9E	N-PENTANE	0.5
OWNER	TEXACO, INC.	ISOPENTANE	0.3
COMPLETED	890424	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.5
FORMATION	PENN-TOPEKA, GRANITE WASH	NITROGEN	5.5
GEOLOGIC PROVINCE CODE	435	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4274	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	360	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	331	CARBON DIOXIDE	0.1
		HELIUM	0.24
		HEATING VALUE*	1,189
		SPECIFIC GRAVITY	0.729

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

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

SAMPLE	20750	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	74.1
COUNTY	TEXAS	ETHANE	5.6
FIELD	GUYMON-HUGOTON	PROPANE	2.9
WELL NAME	BINGLEY NO. 1	N-BUTANE	0.8
API	3513900850	ISOBUTANE	0.4
LOCATION	SEC. 18, T2N, R18E	N-PENTANE	0.2
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.1
COMPLETED	521204	CYCLOPENTANE	--
SAMPLED	010730	HEXANES PLUS	0.1
FORMATION	PERM-CHASE GROUP	NITROGEN	15.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2673	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	430	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	19120	CARBON DIOXIDE	0.1
		HELIUM	0.51
		HEATING VALUE*	978
		SPECIFIC GRAVITY	0.696

SAMPLE	20674	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	62.1
COUNTY	TEXAS	ETHANE	5.8
FIELD	GUYMON-HUGOTON	PROPANE	3.8
WELL NAME	CSC NO. 1-6	N-BUTANE	1.1
API	3513921098	ISOBUTANE	0.5
LOCATION	SEC. 6, T2N, R12E	N-PENTANE	0.3
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.2
COMPLETED	780825	CYCLOPENTANE	--
SAMPLED	010511	HEXANES PLUS	0.2
FORMATION	PERM-CHASE GROUP	NITROGEN	24.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2648	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	399	CARBON DIOXIDE	0.1
		HELIUM	1.09
		HEATING VALUE*	909
		SPECIFIC GRAVITY	0.756

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

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

SAMPLE	20878	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	62.7
COUNTY	TEXAS	ETHANE	5.7
FIELD	GUYMON-HUGOTON	PROPANE	3.9
WELL NAME	G.M. REYNOLDS NO. 1	N-BUTANE	1.2
API	3513900528	ISOBUTANE	0.5
LOCATION	SEC. 31, T1N, R11E	N-PENTANE	0.3
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.2
COMPLETED	530624	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	23.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2620	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	10220	CARBON DIOXIDE	0.1
		HELIUM	1.22
		HEATING VALUE*	924
		SPECIFIC GRAVITY	0.756

SAMPLE	20879	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	62.4
COUNTY	TEXAS	ETHANE	5.7
FIELD	GUYMON-HUGOTON	PROPANE	3.9
WELL NAME	A.E. SHARP NO. 1	N-BUTANE	1.2
API	3513900115	ISOBUTANE	0.5
LOCATION	SEC. 30, T1N, R11E	N-PENTANE	0.3
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.2
COMPLETED	530623	CYCLOPENTANE	--
SAMPLED	011030	HEXANES PLUS	0.3
FORMATION	PERM-CHASE GROUP	NITROGEN	24.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2715	ARGON	0.1
MEASURED DEPTH	2855	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	6200	CARBON DIOXIDE	0.1
		HELIUM	1.27
		HEATING VALUE*	919
		SPECIFIC GRAVITY	0.756

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

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

SAMPLE	20714	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	93.8
COUNTY	DEWEY	ETHANE	3.4
FIELD	NOBSCOT	PROPANE	0.9
WELL NAME	FRANS TRUST NO. 1-21	N-BUTANE	0.2
API	3504321621	ISOBUTANE	0.1
LOCATION	SEC. 21, T16N, R15W	N-PENTANE	0.1
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.1
COMPLETED	821209	CYCLOPENTANE	--
SAMPLED	010710	HEXANES PLUS	0.1
FORMATION	PENN-MORROW	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10720	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	3585	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2850	CARBON DIOXIDE	1.0
		HELIUM	0.04
		HEATING VALUE*	1,055
		SPECIFIC GRAVITY	0.601

SAMPLE	21084	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	87.9
COUNTY	WOODS	ETHANE	5.3
FIELD	OAKDALE	PROPANE	2.6
WELL NAME	HEPNER NO. 1-25	N-BUTANE	1.0
API	3515120275	ISOBUTANE	0.4
LOCATION	SEC. 25, T23N, R14W	N-PENTANE	0.4
OWNER	KIRKPATRICK OIL CO.	ISOPENTANE	0.3
COMPLETED	710818	CYCLOPENTANE	--
SAMPLED	021031	HEXANES PLUS	1.0
FORMATION	MISS-MISSISSIPPIAN	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7004	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	590	CARBON DIOXIDE	0.3
		HELIUM	0.07
		HEATING VALUE*	1,164
		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	21085	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	87.3
COUNTY	WOODS	ETHANE	5.6
FIELD	OAKDALE	PROPANE	2.7
WELL NAME	FAYE NO. 35-A	N-BUTANE	1.0
API	3515121307	ISOBUTANE	0.4
LOCATION	SEC. 35, T23N, R14W	N-PENTANE	0.4
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.3
COMPLETED	820421	CYCLOPENTANE	--
SAMPLED	021031	HEXANES PLUS	1.1
FORMATION	PENN-OSWEGO, MISS-MISSISSIPPIAN	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7675	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1150	CARBON DIOXIDE	0.2
		HELIUM	0.07
		HEATING VALUE*	1,177
		SPECIFIC GRAVITY	0.673

SAMPLE	21075	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	81.7
COUNTY	ELLIS	ETHANE	8.0
FIELD	PEEK S	PROPANE	4.6
WELL NAME	MITCHELL UNIT NO. 1	N-BUTANE	1.4
API	3504520002	ISOBUTANE	0.7
LOCATION	SEC. 25, T17N, R23W	N-PENTANE	0.4
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE	0.4
COMPLETED	660319	CYCLOPENTANE	--
SAMPLED	021030	HEXANES PLUS	0.8
FORMATION	PENN-TONKAWA	NITROGEN	1.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8269	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	2199	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	31000	CARBON DIOXIDE	0.6
		HELIUM	0.14
		HEATING VALUE*	1,223
		SPECIFIC GRAVITY	0.713

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

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

SAMPLE	21073	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	79.5
COUNTY	ELLIS	ETHANE	6.5
FIELD	PEEK S.	PROPANE	5.4
WELL NAME	BERRYMAN NO. 2-24	N-BUTANE	1.8
API	3504522079	ISOBUTANE	0.9
LOCATION	SEC. 24, T17N, R24W	N-PENTANE	0.6
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.6
COMPLETED	000425	CYCLOPENTANE	--
SAMPLED	021030	HEXANES PLUS	1.2
FORMATION	PENN-TONKAWA	NITROGEN	2.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8138	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1050	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	69	CARBON DIOXIDE	0.6
		HELIUM	0.14
		HEATING VALUE*	1.247
		SPECIFIC GRAVITY	0.746

SAMPLE	21074	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	80.9
COUNTY	ELLIS	ETHANE	7.7
FIELD	PEEK S.	PROPANE	5.3
WELL NAME	BERRYMAN C. NO. 1	N-BUTANE	1.6
API	3504520035	ISOBUTANE	0.8
LOCATION	SEC. 19, T17N, R23W	N-PENTANE	0.4
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.5
COMPLETED	660812	CYCLOPENTANE	--
SAMPLED	021030	HEXANES PLUS	0.5
FORMATION	PENN-TONKAWA	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8212	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	271	CARBON DIOXIDE	0.5
		HELIUM	0.15
		HEATING VALUE*	1.225
		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	21080	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	91.6
COUNTY	DEWEY	ETHANE	0.5
FIELD	PUTNAM	PROPANE	0.1
WELL NAME	KOUNS A NO. 1	N-BUTANE	TRACE
API	3504320630	ISOBUTANE	TRACE
LOCATION	SEC. 17, T17N, R17W	N-PENTANE	TRACE
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	TRACE
COMPLETED	760217	CYCLOPENTANE	--
SAMPLED	021030	HEXANES PLUS	TRACE
FORMATION	DEVO-HUNTON	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	13392	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	6080	CARBON DIOXIDE	6.6
		HELIUM	0.03
		HEATING VALUE*	940
		SPECIFIC GRAVITY	0.626

SAMPLE	20723	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	75.6
COUNTY	DEWEY	ETHANE	11.9
FIELD	PUTNAM	PROPANE	6.2
WELL NAME	GOVERNMENT TWYMAN UNIT NO. 1	N-BUTANE	1.9
API	3504350099	ISOBUTANE	0.9
LOCATION	SEC. 6, T17N, R19W	N-PENTANE	0.6
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.5
COMPLETED	641018	CYCLOPENTANE	--
SAMPLED	010710	HEXANES PLUS	1.1
FORMATION	PENN-OSWEGO	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9358	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	711	CARBON DIOXIDE	0.8
		HELIUM	0.07
		HEATING VALUE*	1,317
		SPECIFIC GRAVITY	0.769

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

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

SAMPLE	21081	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	80.0
COUNTY	DEWEY	ETHANE	9.3
FIELD	PUTNAM	PROPANE	5.1
WELL NAME	GOSDA NO. 3-17	N-BUTANE	1.4
API	3504322703	ISOBUTANE	0.8
LOCATION	SEC. 17, T17N, R17W	N-PENTANE	0.4
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.4
COMPLETED	000329	CYCLOPENTANE	--
SAMPLED	021031	HEXANES PLUS	0.8
FORMATION	PENN-TONKAWA	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7366	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1953	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2000	CARBON DIOXIDE	0.4
		HELIUM	0.13
		HEATING VALUE*	1,246
		SPECIFIC GRAVITY	0.724

SAMPLE	21079	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	80.2
COUNTY	DEWEY	ETHANE	9.7
FIELD	PUTNAM	PROPANE	5.1
WELL NAME	SARKEY NO. 1-32	N-BUTANE	1.3
API	3504335125	ISOBUTANE	0.7
LOCATION	SEC. 32, T17N, R17W	N-PENTANE	0.3
OWNER	EAGLE OIL & GAS CO.	ISOPENTANE	0.4
COMPLETED	970724	CYCLOPENTANE	--
SAMPLED	021030	HEXANES PLUS	0.6
FORMATION	PENN-TONKAWA	NITROGEN	1.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7620	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	1950	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	594	CARBON DIOXIDE	0.4
		HELIUM	0.14
		HEATING VALUE*	1,230
		SPECIFIC GRAVITY	0.714

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

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

SAMPLE	21060	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	86.5
COUNTY	ROGER MILLS	ETHANE	8.0
FIELD	REYDON	PROPANE	2.4
WELL NAME	WRIGHT NO. 1-32	N-BUTANE	0.7
API	3512921918	ISOBUTANE	0.4
LOCATION	SEC. 32, T14N, R25W	N-PENTANE	0.2
OWNER	CHAPARRAL ENERGY, INC.	ISOPENTANE	0.3
COMPLETED	950826	CYCLOPENTANE	--
SAMPLED	021029	HEXANES PLUS	0.3
FORMATION	PENN-CHEROKEE	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	12079	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	6400	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	198	CARBON DIOXIDE	0.8
		HELIUM	0.05
		HEATING VALUE*	1,150
		SPECIFIC GRAVITY	0.658

SAMPLE	21059	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	96.8
COUNTY	ROGER MILLS	ETHANE	0.7
FIELD	REYDON W	PROPANE	0.1
WELL NAME	WRIGHT NO. 2-32	N-BUTANE	TRACE
API	3512920700	ISOBUTANE	TRACE
LOCATION	SEC. 32, T14N, R26W	N-PENTANE	TRACE
OWNER	SAMSON RESOURCES CO.	ISOPENTANE	TRACE
COMPLETED	820301	CYCLOPENTANE	--
SAMPLED	021029	HEXANES PLUS	TRACE
FORMATION	PENN-MORROW	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	14890	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1491	CARBON DIOXIDE	2.1
		HELIUM	0.02
		HEATING VALUE*	997
		SPECIFIC GRAVITY	0.581

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

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

SAMPLE	21069	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	81.0
COUNTY	ROGER MILLS	ETHANE	9.5
FIELD	STRONG CITY	PROPANE	4.6
WELL NAME	KENDALL NO. 3-10	N-BUTANE	1.3
API	3512922001	ISOBUTANE	0.7
LOCATION	SEC. 10, T15N, R23W	N-PENTANE	0.3
OWNER	MARATHON OIL CO.	ISOPENTANE	0.4
COMPLETED	961022	CYCLOPENTANE	--
SAMPLED	021029	HEXANES PLUS	0.7
FORMATION	PENN-PRUE, RED FORK	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11272	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1500	CARBON DIOXIDE	1.0
		HELIUM	0.07
		HEATING VALUE*	1.231
		SPECIFIC GRAVITY	0.715

SAMPLE	21062	COMPONENT, MOLE PCT	
STATE	OKLAHOMA	METHANE	91.7
COUNTY	ROGER MILLS	ETHANE	4.4
FIELD	STRONG CITY	PROPANE	0.9
WELL NAME	MARIO NO. 3-16	N-BUTANE	0.1
API	3512922346	ISOBUTANE	0.2
LOCATION	SEC. 16, T13N, R22W	N-PENTANE	TRACE
OWNER	QUESTAR EXPLORATION & PROD.	ISOPENTANE	0.1
COMPLETED	021007	CYCLOPENTANE	--
SAMPLED	021029	HEXANES PLUS	0.1
FORMATION	PENN-RED FORK	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	360	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1148	CARBON DIOXIDE	2.2
		HELIUM	0.04
		HEATING VALUE*	1.046
		SPECIFIC GRAVITY	0.614

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

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

SAMPLE	21076	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 73.4
COUNTY	ROGER MILLS	ETHANE 10.9
FIELD	STRONG CITY DISTRICT	PROPANE 6.3
WELL NAME	SARA NO. 1	N-BUTANE 2.6
API	3512920647	ISOBUTANE 1.1
LOCATION	SEC. 13, T15N, R23W	N-PENTANE 1.6
OWNER	CONTINENTAL OPERATING CO.	ISOPENTANE 1.4
COMPLETED	810922	CYCLOPENTANE --
SAMPLED	021030	HEXANES PLUS 1.4
FORMATION	PENN-RED FORK	NITROGEN 0.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	11270	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	250	CARBON DIOXIDE 0.8
		HELIUM 0.10
		HEATING VALUE* 1,402
		SPECIFIC GRAVITY 0.823
SAMPLE	21082	COMPONENT, MOLE PCT
STATE	OKLAHOMA	METHANE 87.4
COUNTY	WOODS	ETHANE 3.0
FIELD	WAYNOKA NE	PROPANE 1.8
WELL NAME	CHARLENE NO. 14-13	N-BUTANE 0.6
API	3515122041	ISOBUTANE 0.4
LOCATION	SEC. 14, T24N, R16W	N-PENTANE 0.2
OWNER	CHESAPEAKE OPERATING, INC.	ISOPENTANE 0.2
COMPLETED	950124	CYCLOPENTANE --
SAMPLED	021031	HEXANES PLUS 0.5
FORMATION	PENN-TONKAWA	NITROGEN 5.4
GEOLOGIC PROVINCE CODE	360	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	5193	ARGON TRACE
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	750	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE 0.2
		HELIUM 0.15
		HEATING VALUE* 1,059
		SPECIFIC GRAVITY 0.646

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

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

SAMPLE	21026	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	89.0
COUNTY	WARREN	ETHANE	3.0
FIELD	COLUMBUS	PROPANE	0.5
WELL NAME	GRADLER G. NO. 1	N-BUTANE	0.1
API	3712342980	ISOBUTANE	0.1
LOCATION	SEC. D, LOTTSVILLE 7.5 QUAD, FREEHOLD TWP	N-PENTANE	TRACE
OWNER	NORNEW, INC.	ISOPENTANE	TRACE
COMPLETED	010607	CYCLOPENTANE	--
SAMPLED	020816	HEXANES PLUS	TRACE
FORMATION	SILU-WHIRLPOOL	NITROGEN	6.7
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.3
TRUE VERTICAL DEPTH (FT)	4953	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1350	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1100	CARBON DIOXIDE	0.1
		HELIUM	0.14
		HEATING VALUE*	979
		SPECIFIC GRAVITY	0.608

SAMPLE	20923	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	90.7
COUNTY	CRAWFORD	ETHANE	3.9
FIELD	GENEVA	PROPANE	0.9
WELL NAME	OLIVER NO. 1	N-BUTANE	0.3
API	3703923785	ISOBUTANE	0.2
LOCATION	SEC. A, HADLEY 7.5 QUAD, GREENWOOD TWP	N-PENTANE	0.1
OWNER	ATLAS AMERICA, INC.	ISOPENTANE	0.1
COMPLETED	010828	CYCLOPENTANE	--
SAMPLED	020501	HEXANES PLUS	0.1
FORMATION	SILU-WHIRLPOOL, MEDINA	NITROGEN	3.5
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4966	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	1280	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	8900	CARBON DIOXIDE	TRACE
		HELIUM	0.10
		HEATING VALUE*	1.038
		SPECIFIC GRAVITY	0.61

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

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

SAMPLE	21021	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	94.3
COUNTY	JEFFERSON	ETHANE	2.8
FIELD	MARKTON	PROPANE	0.4
WELL NAME	DAVID MOTTERN NO. 2	N-BUTANE	0.1
API	3706524657	ISOBUTANE	TRACE
LOCATION	SEC. I, SUMMERVILLE 7.5 QUAD, RINGGOLD TWP.	N-PENTANE	TRACE
OWNER	D.E. LIMITED FAMILY PARTNERSHIP	ISOPENTANE	TRACE
COMPLETED	010830	CYCLOPENTANE	--
SAMPLED	020724	HEXANES PLUS	0.0
FORMATION	DEVO-DEVONIAN U	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.3
TRUE VERTICAL DEPTH (FT)	3116	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.2
WELLHEAD PRESSURE, PSIG	770	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1342	CARBON DIOXIDE	0.1
		HELIUM	0.09
		HEATING VALUE*	1,019
		SPECIFIC GRAVITY	0.581

SAMPLE	21024	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	96.2
COUNTY	FAYETTE	ETHANE	2.0
FIELD	PERRYOPOLIS	PROPANE	0.3
WELL NAME	BROWN NO. 2	N-BUTANE	0.1
API	3705121108	ISOBUTANE	0.1
LOCATION	SEC. A, DAWSON 7.5 QUAD, PERRY TWP.	N-PENTANE	TRACE
OWNER	PENNECO OIL CO., INC.	ISOPENTANE	TRACE
COMPLETED	991206	CYCLOPENTANE	--
SAMPLED	020725	HEXANES PLUS	TRACE
FORMATION	DEVO-DEVONIAN U	NITROGEN	1.1
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2926	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	637	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1500	CARBON DIOXIDE	0.0
		HELIUM	0.12
		HEATING VALUE*	1,024
		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	21138	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	92.6
COUNTY	INDIANA	ETHANE	2.8
FIELD	PLUM CREEK	PROPANE	0.5
WELL NAME	DICK NO. 44-4	N-BUTANE	0.1
API	3706332787	ISOBUTANE	0.1
LOCATION	SEC. F, WASHINGTON TWP, ELDERTON QUAD	N-PENTANE	TRACE
OWNER	GREAT LAKES ENERGY PARTNERS, LLC	ISOPENTANE	TRACE
COMPLETED	010615	CYCLOPENTANE	--
SAMPLED	030320	HEXANES PLUS	TRACE
FORMATION	DEVO-DEVONIAN U	NITROGEN	3.6
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3680	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	920	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1187	CARBON DIOXIDE	0.1
		HELIUM	0.09
		HEATING VALUE*	1,010
		SPECIFIC GRAVITY	0.592

SAMPLE	20928	COMPONENT, MOLE PCT	
STATE	PENNSYLVANIA	METHANE	86.1
COUNTY	WARREN	ETHANE	3.4
FIELD	STILLWATER	PROPANE	0.8
WELL NAME	BENEDICT NO. 1	N-BUTANE	0.3
API	3712342947	ISOBUTANE	0.2
LOCATION	SEC. E, LOTTSVILLE 7.5 QUAD, FREEHOLD TWP	N-PENTANE	0.1
OWNER	NORNEW, INC.	ISOPENTANE	0.1
COMPLETED	010608	CYCLOPENTANE	--
SAMPLED	020508	HEXANES PLUS	0.1
FORMATION	SILU-WHIRLPOOL	NITROGEN	8.6
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4476	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	1350	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1100	CARBON DIOXIDE	0.1
		HELIUM	0.14
		HEATING VALUE*	980
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	20986	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	61.4
COUNTY	DENTON	ETHANE	3.2
FIELD	BIG BUCK	PROPANE	1.5
WELL NAME	A & H SHERTZ NO. 1	N-BUTANE	0.3
API	4212130299	ISOBUTANE	0.2
LOCATION	J. AYERS SUR. A-2	N-PENTANE	0.1
OWNER	WAYNE HARPER	ISOPENTANE	0.1
COMPLETED	780621	CYCLOPENTANE	--
SAMPLED	020628	HEXANES PLUS	TRACE
FORMATION	PENN-JOHNSON SAND	NITROGEN	32.8
GEOLOGIC PROVINCE CODE	420	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1739	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	360	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2000	CARBON DIOXIDE	TRACE
		HELIUM	0.50
		HEATING VALUE*	736
		SPECIFIC GRAVITY	0.727

SAMPLE	20930	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	62.7
COUNTY	POTTER	ETHANE	3.2
FIELD	BIVINS RANCH	PROPANE	1.5
WELL NAME	BIVINS RANCH 207-H	N-BUTANE	0.4
API	4237531633	ISOBUTANE	0.2
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & F, I.L.C.	ISOPENTANE	0.1
COMPLETED	011102	CYCLOPENTANE	--
SAMPLED	020603	HEXANES PLUS	0.2
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	24.5
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	4818	HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	418	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	42	CARBON DIOXIDE	5.5
		HELIUM	1.41
		HEATING VALUE*	769
		SPECIFIC GRAVITY	0.752

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

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

SAMPLE	21306	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	64.1
COUNTY	POTTER	ETHANE	3.3
FIELD	BIVINS RANCH	PROPANE	1.5
WELL NAME	BIVINS RANCH 1-212	N-BUTANE	0.4
API	4237531359	ISOBUTANE	0.2
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	900615	CYCLOPENTANE	--
SAMPLED	040504	HEXANES PLUS	0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	24.7
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3467	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	3.7
		HELIUM	1.45
		HEATING VALUE*	785
		SPECIFIC GRAVITY	0.735

SAMPLE	21295	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	64.1
COUNTY	POTTER	ETHANE	3.4
FIELD	BIVINS RANCH	PROPANE	1.6
WELL NAME	BIVINS RANCH 1-212	N-BUTANE	0.4
API	4237531359	ISOBUTANE	0.2
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	900615	CYCLOPENTANE	--
SAMPLED	040129	HEXANES PLUS	0.4
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	24.3
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3467	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	3.8
		HELIUM	1.49
		HEATING VALUE*	795
		SPECIFIC GRAVITY	0.74

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

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

SAMPLE	21387	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	64.4
COUNTY	POTTER	ETHANE	3.4
FIELD	BIVINS RANCH	PROPANE	1.6
WELL NAME	BIVINS RANCH 1-212	N-BUTANE	0.4
API	4237531359	ISOBUTANE	0.2
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	900615	CYCLOPENTANE	--
SAMPLED	040909	HEXANES PLUS	0.1
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	24.3
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3467	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	733	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	139	CARBON DIOXIDE	3.8
		HELIUM	1.50
		HEATING VALUE*	787
		SPECIFIC GRAVITY	0.734

SAMPLE	21307	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	63.2
COUNTY	POTTER	ETHANE	3.6
FIELD	BIVINS RANCH	PROPANE	1.8
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE	0.5
API	4237531628	ISOBUTANE	0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	010103	CYCLOPENTANE	--
SAMPLED	040504	HEXANES PLUS	0.2
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	27.6
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	5170	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	0.5
		HELIUM	1.77
		HEATING VALUE*	795
		SPECIFIC GRAVITY	0.723

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

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

SAMPLE	20929	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	61.3
COUNTY	POTTER	ETHANE	3.5
FIELD	BIVINS RANCH	PROPANE	1.9
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE	0.5
API	4237531628	ISOBUTANE	0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	010103	CYCLOPENTANE	--
SAMPLED	020603	HEXANES PLUS	0.2
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	29.6
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.2
MEASURED DEPTH	5170	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	18	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	0.5
		HELIUM	1.79
		HEATING VALUE*	777
		SPECIFIC GRAVITY	0.732

SAMPLE	21296	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	63.1
COUNTY	POTTER	ETHANE	3.6
FIELD	BIVINS RANCH	PROPANE	1.9
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE	0.5
API	4237531628	ISOBUTANE	0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	010103	CYCLOPENTANE	--
SAMPLED	040129	HEXANES PLUS	0.2
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	27.7
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	5170	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	0.5
		HELIUM	1.79
		HEATING VALUE*	796
		SPECIFIC GRAVITY	0.724

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

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

SAMPLE	21388	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	63.2
COUNTY	POTTER	ETHANE	3.6
FIELD	BIVINS RANCH	PROPANE	1.8
WELL NAME	BIVINS RANCH 1A-212	N-BUTANE	0.5
API	4237531628	ISOBUTANE	0.3
LOCATION	SEC. 212, BLK 2, AB&M SUR.	N-PENTANE	0.1
OWNER	SAND RIVER O & E, LLC	ISOPENTANE	0.1
COMPLETED	010103	CYCLOPENTANE	--
SAMPLED	040909	HEXANES PLUS	0.2
FORMATION	PERM-BROWN DOLOMITE	NITROGEN	27.7
GEOLOGIC PROVINCE CODE	440	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.1
MEASURED DEPTH	5170	HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	583	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	43	CARBON DIOXIDE	0.5
		HELIUM	1.80
		HEATING VALUE*	795
		SPECIFIC GRAVITY	0.723

SAMPLE	21278	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	45.9
COUNTY	BOWIE	ETHANE	3.8
FIELD	MAUID	PROPANE	2.3
WELL NAME	J.D. OWEN NO. 2	N-BUTANE	1.3
API	4203730202	ISOBUTANE	0.7
LOCATION	J.S. HERRING SURVEY, A. 263	N-PENTANE	0.5
OWNER	ENERGYTEC, INC.	ISOPENTANE	0.5
COMPLETED	791215	CYCLOPENTANE	--
SAMPLED	030911	HEXANES PLUS	0.7
FORMATION	JURA-SMACKOVER	NITROGEN	30.6
GEOLOGIC PROVINCE CODE	260	OXYGEN	0.3
TRUE VERTICAL DEPTH (FT)	8710	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2100	HYDROGEN SULFIDE**	6.2
OPEN FLOW, MCFD	2062	CARBON DIOXIDE	7.1
		HELIUM	0.12
		HEATING VALUE*	768
		SPECIFIC GRAVITY	0.895

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

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

SAMPLE	21023	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	88.6
COUNTY	DENTON	ETHANE	6.5
FIELD	NEWARK E.	PROPANE	1.7
WELL NAME	CLYDE NICHOLSON NO. 4	N-BUTANE	0.4
API	4212131310	ISOBUTANE	0.4
LOCATION	CARMEL MANCHACA SURVEY	N-PENTANE	0.1
OWNER	WAYNE HARPER	ISOPENTANE	0.2
COMPLETED	020507	CYCLOPENTANE	--
SAMPLED	020723	HEXANES PLUS	0.1
FORMATION	MISS-BARNETT SHALE	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	420	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8552	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	2100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2100	CARBON DIOXIDE	1.4
		HELIUM	0.02
		HEATING VALUE*	1.095
		SPECIFIC GRAVITY	0.636

SAMPLE	21027	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	81.2
COUNTY	DENTON	ETHANE	10.2
FIELD	NEWARK E.	PROPANE	4.3
WELL NAME	RICK RICH NO. 2	N-BUTANE	1.0
API	4212130867	ISOBUTANE	0.5
LOCATION	BBB&C RAILROAD SURVEY, A-169	N-PENTANE	0.2
OWNER	DALLAS PRODUCTION, INC.	ISOPENTANE	0.2
COMPLETED	010216	CYCLOPENTANE	--
SAMPLED	020909	HEXANES PLUS	0.3
FORMATION	MISS-BARNETT SHALE	NITROGEN	1.4
GEOLOGIC PROVINCE CODE	420	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8490	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.4
WELLHEAD PRESSURE, PSIG	2800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	916	CARBON DIOXIDE	0.3
		HELIUM	0.04
		HEATING VALUE*	1.190
		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	21028	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	82.7
COUNTY	DENTON	ETHANE	8.5
FIELD	NEWARK E	PROPANE	3.4
WELL NAME	DOWNE NO. A-2	N-BUTANE	1.1
API	4212131195	ISOBUTANE	0.7
LOCATION	ELIZANO PIZANO SURVEY, A-991	N-PENTANE	0.4
OWNER	DALLAS PRODUCTION, INC.	ISOPENTANE	0.5
COMPLETED	020404	CYCLOPENTANE	--
SAMPLED	020909	HEXANES PLUS	0.6
FORMATION	MISS-BARNETT SHALE	NITROGEN	1.4
GEOLOGIC PROVINCE CODE	420	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8628	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	3580	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	855	CARBON DIOXIDE	0.6
		HELIUM	0.05
		HEATING VALUE*	1.196
		SPECIFIC GRAVITY	0.696

SAMPLE	21284	COMPONENT, MOLE PCT	
STATE	TEXAS	METHANE	63.3
COUNTY	MONTAGUE	ETHANE	7.5
FIELD	SAINT JO SW	PROPANE	5.7
WELL NAME	COLLIER NO. 7	N-BUTANE	1.6
API	4233702397	ISOBUTANE	0.4
LOCATION	A. MIZELL SUR. A-488	N-PENTANE	0.4
OWNER	HEP OIL COMPANY, LTD.	ISOPENTANE	0.4
COMPLETED	030301	CYCLOPENTANE	--
SAMPLED	031007	HEXANES PLUS	0.5
FORMATION	MISS-BARNETT SHALE	NITROGEN	9.5
GEOLOGIC PROVINCE CODE	420	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8500	ARGON	0.2
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	60	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	200	CARBON DIOXIDE	10.5
		HELIUM	0.12
		HEATING VALUE*	1.036
		SPECIFIC GRAVITY	0.842

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

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

SAMPLE	20944	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	88.2
COUNTY	GRAND	ETHANE	5.2
FIELD	BAR X	PROPANE	2.0
WELL NAME	FEDERAL NO. 6-14	N-BUTANE	0.6
API	4301930462	ISOBUTANE	0.4
LOCATION	SEC. 11, T17S, R25E	N-PENTANE	0.2
OWNER	LONE MOUNTAIN PRODUCTION CO.	ISOPENTANE	0.3
COMPLETED	790515	CYCLOPENTANE	--
SAMPLED	020618	HEXANES PLUS	0.4
FORMATION	CRET-DAKOTA	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4353	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	944	CARBON DIOXIDE	0.8
		HELIUM	0.16
		HEATING VALUE*	1,108
		SPECIFIC GRAVITY	0.646
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SAMPLE	20935	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	78.1
COUNTY	GRAND	ETHANE	8.4
FIELD	BRYSON CANYON	PROPANE	6.4
WELL NAME	BRYSON CANYON NO. 7-A	N-BUTANE	2.1
API	4301911310	ISOBUTANE	1.2
LOCATION	SEC. 9, T17S, R24E	N-PENTANE	0.5
OWNER	TREND OIL CO.	ISOPENTANE	0.6
COMPLETED	631222	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.8
FORMATION	CRET-CASTLEGATE	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1775	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	30	CARBON DIOXIDE	0.8
		HELIUM	0.08
		HEATING VALUE*	1,290
		SPECIFIC GRAVITY	0.757

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

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

SAMPLE	21004	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	93.8
COUNTY	CARBON	ETHANE	0.4
FIELD	CASTLEGATE	PROPANE	0.1
WELL NAME	HUBER-FEDERAL NO. 7-9	N-BUTANE	TRACE
API	4300730137	ISOBUTANE	TRACE
LOCATION	SEC. 9, T12S, R10E	N-PENTANE	0.0
OWNER	J.M. HUBER CORP.	ISOPENTANE	0.0
COMPLETED	001006	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.0
FORMATION	CRET-BLACKHAWK	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4768	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	72	CARBON DIOXIDE	5.6
		HELIUM	TRACE
		HEATING VALUE*	958
		SPECIFIC GRAVITY	0.611

SAMPLE	21003	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	90.8
COUNTY	CARBON	ETHANE	0.4
FIELD	CASTLEGATE	PROPANE	0.1
WELL NAME	HUBER-JENSEN NO. 5-10	N-BUTANE	TRACE
API	4300730162	ISOBUTANE	TRACE
LOCATION	SEC. 10, T12S, R10E	N-PENTANE	0.0
OWNER	J.M. HUBER CORP.	ISOPENTANE	0.0
COMPLETED	000622	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.0
FORMATION	CRET-BLACKHAWK	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4758	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	14	CARBON DIOXIDE	8.6
		HELIUM	TRACE
		HEATING VALUE*	929
		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	21345	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	78.8
COUNTY	UINTAH	ETHANE	6.8
FIELD	CROOKED CANYON	PROPANE	3.4
WELL NAME	CROOKED CANYON NO. 13-17-14-23	N-BUTANE	1.7
API	4304730619	ISOBUTANE	0.8
LOCATION	SEC. 17, T14S, R23E	N-PENTANE	0.5
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	0.7
COMPLETED	800805	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	1.0
FORMATION	CRET-DAKOTA	NITROGEN	5.7
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9272	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	134	CARBON DIOXIDE	0.7
		HELIUM	0.07
		HEATING VALUE*	1,177
		SPECIFIC GRAVITY	0.732

SAMPLE	21010	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	99.7
COUNTY	CARBON	ETHANE	0.2
FIELD	DRUNKARDS WASH	PROPANE	0.0
WELL NAME	LDS NO. 17-133	N-BUTANE	0.0
API	4300730296	ISOBUTANE	0.0
LOCATION	SEC. 17, T15S, R10E	N-PENTANE	0.0
OWNER	PHILLIPS PETROLEUM CO.	ISOPENTANE	0.0
COMPLETED	990518	CYCLOPENTANE	--
SAMPLED	020731	HEXANES PLUS	TRACE
FORMATION	CRET-FERRON	NITROGEN	TRACE
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1315	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	11	CARBON DIOXIDE	0.1
		HELIUM	0.00
		HEATING VALUE*	1,014
		SPECIFIC GRAVITY	0.556

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

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

SAMPLE	21009	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	95.4
COUNTY	CARBON	ETHANE	0.1
FIELD	DRUNKARDS WASH	PROPANE	0.0
WELL NAME	USA NO. 24-183	N-BUTANE	0.0
API	4300730469	ISOBUTANE	0.0
LOCATION	SEC. 24, T14S, R8E	N-PENTANE	0.0
OWNER	PHILLIPS PETROLEUM CO.	ISOPENTANE	0.0
COMPLETED	991109	CYCLOPENTANE	--
SAMPLED	020731	HEXANES PLUS	0.0
FORMATION	CRET-FERRON	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3174	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2454	CARBON DIOXIDE	4.3
		HELIUM	TRACE
		HEATING VALUE*	967
		SPECIFIC GRAVITY	0.597

SAMPLE	21012	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	96.1
COUNTY	CARBON	ETHANE	0.1
FIELD	DRUNKARDS WASH	PROPANE	TRACE
WELL NAME	RGC NO. 25-460	N-BUTANE	0.0
API	4300730747	ISOBUTANE	0.0
LOCATION	SEC. 25, T15S, R8E	N-PENTANE	0.0
OWNER	PHILLIPS PETROLEUM CO.	ISOPENTANE	0.0
COMPLETED	010914	CYCLOPENTANE	--
SAMPLED	020731	HEXANES PLUS	0.0
FORMATION	CRET-FERRON	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3526	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	312	CARBON DIOXIDE	3.3
		HELIUM	TRACE
		HEATING VALUE*	976
		SPECIFIC GRAVITY	0.588

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

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

SAMPLE	21011	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	95.6
COUNTY	CARBON	ETHANE	0.1
FIELD	DRUNKARDS WASH	PROPANE	0.0
WELL NAME	USA NO. 11-245	N-BUTANE	0.0
API	4300730462	ISOBUTANE	0.0
LOCATION	SEC. 11, T15S, R8E	N-PENTANE	0.0
OWNER	PHILLIPS PETROLEUM CO.	ISOPENTANE	0.0
COMPLETED	000913	CYCLOPENTANE	--
SAMPLED	020731	HEXANES PLUS	TRACE
FORMATION	CRET-FERRON	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3619	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	9344	CARBON DIOXIDE	3.8
		HELIUM	0.01
		HEATING VALUE*	970
		SPECIFIC GRAVITY	0.593

SAMPLE	21389	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	87.5
COUNTY	GRAND	ETHANE	5.1
FIELD	EAST CANYON	PROPANE	1.4
WELL NAME	ANDERSON FEDERAL 2-12	N-BUTANE	0.3
API	4301930136	ISOBUTANE	0.3
LOCATION	SEC. 12, T16S, R24E	N-PENTANE	0.1
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	0.1
COMPLETED	730725	CYCLOPENTANE	--
SAMPLED	040800	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA, CEDAR MOUNTAIN	NITROGEN	3.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6242	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4000	CARBON DIOXIDE	1.5
		HELIUM	0.09
		HEATING VALUE*	1,040
		SPECIFIC GRAVITY	0.635

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

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

SAMPLE	21384	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	83.3
COUNTY	GRAND	ETHANE	5.4
FIELD	EAST CANYON	PROPANE	1.6
WELL NAME	EAST CANYON B 22-17 NO. 22	N-BUTANE	0.4
API	4301916202	ISOBUTANE	0.3
LOCATION	SEC 17, T16S, R25E	N-PENTANE	0.1
OWNER	BEARTOOTH OIL & GAS CO.	ISOPENTANE	0.2
COMPLETED	630805	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	0.4
FORMATION	CRET-DAKOTA, CEDAR MOUNTAIN	NITROGEN	6.7
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6830	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	120	CARBON DIOXIDE	1.4
		HELIUM	0.12
		HEATING VALUE*	1.033
		SPECIFIC GRAVITY	0.662

SAMPLE	21380	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	93.1
COUNTY	UINTAH	ETHANE	3.4
FIELD	EIGHT MILE FLAT N	PROPANE	0.8
WELL NAME	FEDERAL NO. 16-26A	N-BUTANE	0.2
API	4304733601	ISOBUTANE	0.2
LOCATION	SEC 26, T9S, R18E	N-PENTANE	0.1
OWNER	DOMINION EXPLORATION & PRODUCTION, INC.	ISOPENTANE	0.1
COMPLETED	011108	CYCLOPENTANE	--
SAMPLED	040819	HEXANES PLUS	0.1
FORMATION	EOCE-CHAPITA WELLS, CRET-MESAVERDE	NITROGEN	1.4
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9363	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	35	CARBON DIOXIDE	0.7
		HELIUM	0.02
		HEATING VALUE*	1.044
		SPECIFIC GRAVITY	0.601

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

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

SAMPLE	20999	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	96.9
COUNTY	UINTAH	ETHANE	1.0
FIELD	FLAT ROCK	PROPANE	0.1
WELL NAME	DEL-RIO/ORION NO. 29-5A	N-BUTANE	TRACE
API	4304733617	ISOBUTANE	TRACE
LOCATION	SEC. 29, T14S, R20E	N-PENTANE	0.0
OWNER	AQUARIUS ENERGY RESOURCES	ISOPENTANE	TRACE
COMPLETED	011018	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	TRACE
FORMATION	CRET-CEDAR MOUNTAIN	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10770	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	916	CARBON DIOXIDE	1.6
		HELIUM	0.01
		HEATING VALUE*	1.004
		SPECIFIC GRAVITY	0.578
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SAMPLE	21000	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	92.7
COUNTY	UINTAH	ETHANE	2.4
FIELD	FLAT ROCK	PROPANE	0.6
WELL NAME	DEL-RIO/ORION NO. 29-6A	N-BUTANE	0.2
API	4304734102	ISOBUTANE	0.3
LOCATION	SEC. 29, T14S, R20E	N-PENTANE	0.1
OWNER	AQUARIUS ENERGY RESOURCES	ISOPENTANE	0.1
COMPLETED	020109	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.2
FORMATION	JURA-CURTIS, ENTRADA	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11640	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3808	CARBON DIOXIDE	2.4
		HELIUM	0.11
		HEATING VALUE*	1.028
		SPECIFIC GRAVITY	0.613

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

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

SAMPLE	20998	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 95.8
COUNTY	UINTAH	ETHANE 1.5
FIELD	FLAT ROCK	PROPANE 0.3
WELL NAME	DEL-RIO/ORION NO. 30-6A	N-BUTANE 0.1
API	4304733596	ISOBUTANE 0.1
LOCATION	SEC. 30, T14S, R20E	N-PENTANE TRACE
OWNER	AQUARIUS ENERGY RESOURCES	ISOPENTANE 0.1
COMPLETED	011107	CYCLOPENTANE --
SAMPLED	020730	HEXANES PLUS 0.2
FORMATION	CRET-DAKOTA	NITROGEN 0.3
GEOLOGIC PROVINCE CODE	575	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	10846	ARGON 0.0
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	93	CARBON DIOXIDE 1.5
		HELIUM 0.01
		HEATING VALUE* 1.026
		SPECIFIC GRAVITY 0.591

SAMPLE	21001	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 85.5
COUNTY	UINTAH	ETHANE 7.0
FIELD	FLAT ROCK	PROPANE 3.5
WELL NAME	DEL-RIO/ORION NO. 30-3A	N-BUTANE 1.0
API	4304710913	ISOBUTANE 0.7
LOCATION	SEC. 30, T14S, R20E	N-PENTANE 0.3
OWNER	PEGASUS ENERGY RESOURCES	ISOPENTANE 0.4
COMPLETED	981119	CYCLOPENTANE --
SAMPLED	020730	HEXANES PLUS 0.9
FORMATION	EOCE-WASATCH	NITROGEN 0.4
GEOLOGIC PROVINCE CODE	575	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	3988	ARGON 0.0
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	670	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	914	CARBON DIOXIDE 0.2
		HELIUM 0.00
		HEATING VALUE* 1.207
		SPECIFIC GRAVITY 0.687

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

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

SAMPLE	21002	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	88.0
COUNTY	UINTAH	ETHANE	6.4
FIELD	FLAT ROCK	PROPANE	3.0
WELL NAME	FLATROCK NO. 30-2A	N-BUTANE	0.7
API	4304730641	ISOBUTANE	0.5
LOCATION	SEC. 30, T14S, R20E	N-PENTANE	0.2
OWNER	ORION ENERGY RESOURCES	ISOPENTANE	0.2
COMPLETED	801020	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.4
FORMATION	EOCE-WASATCH	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4018	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	28	CARBON DIOXIDE	0.1
		HELIUM	0.03
		HEATING VALUE*	1,154
		SPECIFIC GRAVITY	0.651

SAMPLE	21218	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	91.0
COUNTY	UINTAH	ETHANE	3.1
FIELD	GYPSUM HILLS	PROPANE	0.7
WELL NAME	GYPSUM HILLS NO. 16W-17-8-21	N-BUTANE	0.3
API	43047341560	ISOBUTANE	0.2
LOCATION	SEC. 17, T8S, R21E	N-PENTANE	0.1
OWNER	SHENANDOAH ENERGY, INC.	ISOPENTANE	0.1
COMPLETED	011219	CYCLOPENTANE	--
SAMPLED	030710	HEXANES PLUS	0.4
FORMATION	EOCE-WASATCH	NITROGEN	3.6
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7358	ARGON	0.2
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	260	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	255	CARBON DIOXIDE	0.3
		HELIUM	0.03
		HEATING VALUE*	1,036
		SPECIFIC GRAVITY	0.615

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

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

SAMPLE	21007	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	94.0
COUNTY	CARBON	ETHANE	0.1
FIELD	HELPER	PROPANE	0.0
WELL NAME	HELPER FEDERAL NO. H-2	N-BUTANE	0.0
API	4300730550	ISOBUTANE	0.0
LOCATION	SEC. 1, T14S, R10E	N-PENTANE	0.0
OWNER	ANADARKO PETROLEUM CORP.	ISOPENTANE	0.0
COMPLETED	000113	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.0
FORMATION	CRET-FERRON	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2039	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	5	CARBON DIOXIDE	5.8
		HELIUM	0.00
		HEATING VALUE*	953
		SPECIFIC GRAVITY	0.61

SAMPLE	21008	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	93.9
COUNTY	CARBON	ETHANE	0.1
FIELD	HELPER	PROPANE	0.0
WELL NAME	HELPER FEDERAL NO. H-1	N-BUTANE	0.0
API	4300730549	ISOBUTANE	0.0
LOCATION	SEC. 1, T14S, R10E	N-PENTANE	0.0
OWNER	ANADARKO PETROLEUM CORP.	ISOPENTANE	0.0
COMPLETED	991231	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	0.0
FORMATION	CRET-FERRON	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2217	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	44	CARBON DIOXIDE	5.9
		HELIUM	0.00
		HEATING VALUE*	952
		SPECIFIC GRAVITY	0.612

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

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

SAMPLE	21005	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	95.5
COUNTY	CARBON	ETHANE	0.7
FIELD	HELPER	PROPANE	0.1
WELL NAME	HELPER FEDERAL NO. E-1	N-BUTANE	TRACE
API	4300730547	ISOBUTANE	TRACE
LOCATION	SEC. 29, T13S, R10E	N-PENTANE	TRACE
OWNER	ANADARKO PETROLEUM CORP.	ISOPENTANE	TRACE
COMPLETED	010925	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	TRACE
FORMATION	CRET-FERRON	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3300	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	177	CARBON DIOXIDE	3.5
		HELIUM	TRACE
		HEATING VALUE*	984
		SPECIFIC GRAVITY	0.594

SAMPLE	21006	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	96.3
COUNTY	CARBON	ETHANE	1.0
FIELD	HELPER	PROPANE	0.3
WELL NAME	HELPER FEDERAL NO. C-7	N-BUTANE	TRACE
API	4300730684	ISOBUTANE	0.1
LOCATION	SEC. 21, T13S, R10E	N-PENTANE	TRACE
OWNER	ANADARKO PETROLEUM CORP.	ISOPENTANE	TRACE
COMPLETED	011126	CYCLOPENTANE	--
SAMPLED	020730	HEXANES PLUS	TRACE
FORMATION	CRET-FERRON	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3676	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	2.2
		HELIUM	TRACE
		HEATING VALUE*	1,002
		SPECIFIC GRAVITY	0.585

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

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

SAMPLE	21383	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	87.4
COUNTY	GRAND	ETHANE	1.5
FIELD	ICE CANYON	PROPANE	0.2
WELL NAME	STATE 16-9 NO. 9	N-BUTANE	TRACE
API	4301930669	ISOBUTANE	TRACE
LOCATION	SEC.16, T16S, R21E	N-PENTANE	TRACE
OWNER	BEARTOOTH OIL & GAS CO.	ISOPENTANE	TRACE
COMPLETED	820510	CYCLOPENTANE	--
SAMPLED	040826	HEXANES PLUS	TRACE
FORMATION	CRET-DAKOTA, JURA-MORRISON	NITROGEN	9.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9806	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	350	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	100	CARBON DIOXIDE	1.2
		HELIUM	0.03
		HEATING VALUE*	923
		SPECIFIC GRAVITY	0.616

SAMPLE	21405	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	96.6
COUNTY	UINTAH	ETHANE	0.8
FIELD	KENNEDY WASH	PROPANE	0.1
WELL NAME	SAGE GROUSE FEDERAL 6-14-8-22	N-BUTANE	TRACE
API	4304732746	ISOBUTANE	TRACE
LOCATION	SEC.14, T8S, R22E	N-PENTANE	0.0
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE	0.0
COMPLETED	BASIN, INC 981230	CYCLOPENTANE	--
SAMPLED	041209	HEXANES PLUS	0.0
FORMATION	EOCF-GREEN RIVER	NITROGEN	2.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3932	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	48	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	14	CARBON DIOXIDE	0.3
		HELIUM	TRACE
		HEATING VALUE*	997
		SPECIFIC GRAVITY	0.572

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

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

SAMPLE	21410	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 83.9
COUNTY	UINTAH	ETHANE 3.2
FIELD	KENNEDY WASH	PROPANE 1.0
WELL NAME	OVER & UNDER SAGE GROUSE 9W-15-8-22	N-BUTANE 0.3
API	4304734718	ISOBUTANE 0.2
LOCATION	SEC. 15, T8S, R22E	N-PENTANE 0.1
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE 0.1
COMPLETED	BASIN, INC. 030517	CYCLOPENTANE --
SAMPLED	041209	HEXANES PLUS 1.1
FORMATION	EOCE-WASATCH	NITROGEN 8.6
GEOLOGIC PROVINCE CODE	575	OXYGEN 1.1
TRUE VERTICAL DEPTH (FT)	7238	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	144	CARBON DIOXIDE 0.3
		HELIUM 0.03
		HEATING VALUE* 1.007
		SPECIFIC GRAVITY 0.661
SAMPLE	21411	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 87.6
COUNTY	UINTAH	ETHANE 5.2
FIELD	KENNEDY WASH	PROPANE 1.9
WELL NAME	OVER & UNDER SAGE GROUSE 10W-15-8-22	N-BUTANE 0.5
API	4304734719	ISOBUTANE 0.4
LOCATION	SEC. 15, T8S, R22E	N-PENTANE 0.1
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE 0.2
COMPLETED	BASIN, INC. 030825	CYCLOPENTANE --
SAMPLED	041209	HEXANES PLUS 0.9
FORMATION	EOCE-WASATCH,CRET-MESAVERDE,MANCOS B	NITROGEN 2.3
GEOLOGIC PROVINCE CODE	575	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	12496	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	170	CARBON DIOXIDE 0.7
		HELIUM 0.04
		HEATING VALUE* 1.113
		SPECIFIC GRAVITY 0.656

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

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

SAMPLE	21390	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 91.3
COUNTY	UINTAH	ETHANE 3.8
FIELD	KICKER	PROPANE 1.3
WELL NAME	QUEST 16-21	N-BUTANE 0.4
API	4304733805	ISOBUTANE 0.3
LOCATION	SEC 21, T11S, R25E	N-PENTANE 0.1
OWNER	TCC ROYALTY CORP.	ISOPENTANE 0.2
COMPLETED	010307	CYCLOPENTANE --
SAMPLED	040909	HEXANES PLUS 0.4
FORMATION	EOCE-WASATCH	NITROGEN 1.9
GEOLOGIC PROVINCE CODE	575	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	2159	ARGON 0.1
MEASURED DEPTH		HYDROGEN 0.0
WELLHEAD PRESSURE, PSIG	40	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE 0.1
		HELIUM 0.00
		HEATING VALUE* 1,079
		SPECIFIC GRAVITY 0.621
<hr/>		
SAMPLE	21393	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 57.3
COUNTY	GRAND	ETHANE 20.3
FIELD	LONG CANYON	PROPANE 12.9
WELL NAME	LONG CANYON 1	N-BUTANE 3.5
API	4301915925	ISOBUTANE 1.5
LOCATION	SEC 9, T26S, R20E	N-PENTANE 0.8
OWNER	INTREPID OIL & GAS, I.L.C.	ISOPENTANE 0.7
COMPLETED	620830	CYCLOPENTANE --
SAMPLED	040825	HEXANES PLUS 0.6
FORMATION	PENN-CANE CREEK	NITROGEN 2.1
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	7075	ARGON 0.1
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	200	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE 0.2
		HELIUM 0.12
		HEATING VALUE* 1,514
		SPECIFIC GRAVITY 0.902

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

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

SAMPLE	21379	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	90.9
COUNTY	UINTAH	ETHANE	4.2
FIELD	LOVE	PROPANE	1.6
WELL NAME	FEDERAL K NO. 12-22	N-BUTANE	0.4
API	4304733299	ISOBUTANE	0.3
LOCATION	SEC 22, T11S, R21E	N-PENTANE	0.1
OWNER	DOMINION EXPLORATION & PRODUCTION, INC.	ISOPENTANE	0.1
COMPLETED	010821	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.3
FORMATION	CRET-MESAVERDE	NITROGEN	1.4
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7998	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	50	CARBON DIOXIDE	0.5
		HELIUM	0.03
		HEATING VALUE*	1.085
		SPECIFIC GRAVITY	0.624

SAMPLE	21343	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	76.6
COUNTY	UINTAH	ETHANE	8.8
FIELD	MAIN CANYON	PROPANE	5.4
WELL NAME	MAIN CANYON NO. 11-10-15-23	N-BUTANE	1.7
API	4304730639	ISOBUTANE	1.0
LOCATION	SEC 10, T15S, R23E	N-PENTANE	0.6
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	0.7
COMPLETED	881209	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	1.3
FORMATION	CRET-CASTLEGATE	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4384	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1418	CARBON DIOXIDE	0.7
		HELIUM	0.08
		HEATING VALUE*	1.268
		SPECIFIC GRAVITY	0.764

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

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

SAMPLE	21344	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 88.0
COUNTY	UINTAH	ETHANE 4.8
FIELD	MAIN CANYON	PROPANE 1.3
WELL NAME	MAIN CANYON NO. 2-8-15-23	N-BUTANE 0.3
API	4304730735	ISOBUTANE 0.3
LOCATION	SEC. 8, T15S, R23E	N-PENTANE 0.1
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE 0.1
COMPLETED	981108	CYCLOPENTANE --
SAMPLED	040817	HEXANES PLUS 0.3
FORMATION	CRET-MANCOS B. DAKOTA, CEDAR MTN	NITROGEN 3.5
GEOLOGIC PROVINCE CODE	575	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	8612	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD		CARBON DIOXIDE 1.3
		HELIUM 0.08
		HEATING VALUE* 1.048
		SPECIFIC GRAVITY 0.635

SAMPLE	20943	COMPONENT, MOLE PCT
STATE	UTAH	METHANE 94.6
COUNTY	GRAND	ETHANE 2.8
FIELD	MIDDLE CANYON	PROPANE 0.5
WELL NAME	FEDERAL NO. 42-24	N-BUTANE 0.1
API	4301931378	ISOBUTANE 0.1
LOCATION	SEC. 24, T16S, R23E	N-PENTANE TRACE
OWNER	NATIONAL FUEL CORP.	ISOPENTANE 0.1
COMPLETED	011018	CYCLOPENTANE --
SAMPLED	020617	HEXANES PLUS 0.1
FORMATION	CRET-CEDAR MOUNTAIN	NITROGEN 0.4
GEOLOGIC PROVINCE CODE	585	OXYGEN 0.0
TRUE VERTICAL DEPTH (FT)	6180	ARGON TRACE
MEASURED DEPTH		HYDROGEN TRACE
WELLHEAD PRESSURE, PSIG	950	HYDROGEN SULFIDE** 0.0
OPEN FLOW, MCFD	863	CARBON DIOXIDE 1.3
		HELIUM 0.06
		HEATING VALUE* 1.032
		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	20941	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	94.3
COUNTY	GRAND	ETHANE	2.8
FIELD	MIDDLE CANYON	PROPANE	0.5
WELL NAME	FEDERAL NO. 4-30	N-BUTANE	0.1
API	4301930641	ISOBUTANE	0.1
LOCATION	SEC. 30, T16S, R24E	N-PENTANE	TRACE
OWNER	J.C. THOMPSON	ISOPENTANE	0.1
COMPLETED	800731	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5501	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	450	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	100	CARBON DIOXIDE	1.4
		HELIUM	0.06
		HEATING VALUE*	1.034
		SPECIFIC GRAVITY	0.595

SAMPLE	21304	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	80.3
COUNTY	DUCHESNE	ETHANE	8.1
FIELD	MONUMENT BUTTE	PROPANE	4.0
WELL NAME	WEST POINT NO. 13-8-9-16	N-BUTANE	1.1
API	4301332287	ISOBUTANE	0.6
LOCATION	SEC. 8, T9S, R16E	N-PENTANE	0.4
OWNER	INLAND PRODUCTION CO.	ISOPENTANE	0.3
COMPLETED	020104	CYCLOPENTANE	--
SAMPLED	040414	HEXANES PLUS	0.8
FORMATION	EOCE-GREEN RIVER	NITROGEN	3.9
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5747	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1800	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	386	CARBON DIOXIDE	0.3
		HELIUM	0.05
		HEATING VALUE*	1.180
		SPECIFIC GRAVITY	0.71

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

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

SAMPLE	21394	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	79.3
COUNTY	SAN JUAN	ETHANE	10.6
FIELD	PINE RIDGE S.	PROPANE	4.5
WELL NAME	SOUTH PINE RIDGE 7-6	N-BUTANE	1.2
API	4303730714	ISOBUTANE	0.6
LOCATION	SEC 6, T30S, R25E	N-PENTANE	0.2
OWNER	PIONEER OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	811212	CYCLOPENTANE	--
SAMPLED	040927	HEXANES PLUS	0.2
FORMATION	PENN-ISMAV	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5802	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	900	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	100	CARBON DIOXIDE	0.1
		HELIUM	0.07
		HEATING VALUE*	1,188
		SPECIFIC GRAVITY	0.701

SAMPLE	21342	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	83.6
COUNTY	UINTAH	ETHANE	6.9
FIELD	PINE SPRINGS	PROPANE	3.4
WELL NAME	PINE SPRINGS NO. 13-26-14-22	N-BUTANE	0.9
API	4304731074	ISOBUTANE	0.6
LOCATION	SEC 26, T14S, R22E	N-PENTANE	0.2
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	0.3
COMPLETED	011022	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.3
FORMATION	CRET-CASTLEGATE	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4928	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	526	CARBON DIOXIDE	0.7
		HELIUM	0.05
		HEATING VALUE*	1,137
		SPECIFIC GRAVITY	0.678

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

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

SAMPLE	21340	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	92.3
COUNTY	UINTAH	ETHANE	2.3
FIELD	PINE SPRINGS	PROPANE	0.4
WELL NAME	PINE SPRINGS NO. 8-20-14-22	N-BUTANE	0.1
API	4304731063	ISOBUTANE	0.1
LOCATION	SEC 20, T14S, R22E	N-PENTANE	TRACE
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	TRACE
COMPLETED	820304	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	3.2
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8337	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	316	CARBON DIOXIDE	1.4
		HELIUM	0.04
		HEATING VALUE*	997
		SPECIFIC GRAVITY	0.601

SAMPLE	21341	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	87.5
COUNTY	UINTAH	ETHANE	5.7
FIELD	PINE SPRINGS	PROPANE	2.1
WELL NAME	PINE SPRINGS NO. 3-23-14-22	N-BUTANE	0.5
API	4304734675	ISOBUTANE	0.4
LOCATION	SEC 23, T14S, R22E	N-PENTANE	0.1
OWNER	EVERGREEN OPERATING CORP.	ISOPENTANE	0.2
COMPLETED	021101	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.2
FORMATION	CRET-MANCOS B	NITROGEN	2.8
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6106	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	390	CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,088
		SPECIFIC GRAVITY	0.642

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

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

SAMPLE	21407	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	94.0
COUNTY	UINTAH	ETHANE	1.1
FIELD	POWDER SPRINGS	PROPANE	0.6
WELL NAME	UTAH STATE NO. 1	N-BUTANE	0.2
API	4304715128	ISOBUTANE	0.2
LOCATION	SEC. 36, T7S, R24E	N-PENTANE	0.1
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE	0.1
COMPLETED	BASIN, INC. 650317	CYCLOPENTANE	--
SAMPLED	041207	HEXANES PLUS	0.4
FORMATION	EOCE-GREEN RIVER	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4971	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	9850	CARBON DIOXIDE	0.3
		HELIUM	0.03
		HEATING VALUE*	1.021
		SPECIFIC GRAVITY	0.598

SAMPLE	21017	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	88.0
COUNTY	GRAND	ETHANE	4.5
FIELD	STATELINE	PROPANE	1.4
WELL NAME	LANSDALE GOVERNMENT NO. 13-13	N-BUTANE	0.4
API	4301930412	ISOBUTANE	0.3
LOCATION	SEC. 13, T17S, R25E	N-PENTANE	0.1
OWNER	BURTON W. HANCOCK	ISOPENTANE	0.2
COMPLETED	781223	CYCLOPENTANE	--
SAMPLED	020801	HEXANES PLUS	0.1
FORMATION	JURA-BRUSHY BASIN	NITROGEN	4.3
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3332	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1800	CARBON DIOXIDE	0.4
		HELIUM	0.31
		HEATING VALUE*	1.047
		SPECIFIC GRAVITY	0.628

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

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

SAMPLE	21016	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	86.0
COUNTY	GRAND	ETHANE	4.7
FIELD	STATELINE	PROPANE	1.7
WELL NAME	BAR CREEK NO. 1	N-BUTANE	0.7
API	4301930335	ISOBUTANE	0.5
LOCATION	SEC. 19, T17S, R26E	N-PENTANE	0.3
OWNER	BEARTOOTH OIL & GAS CO.	ISOPENTANE	0.3
COMPLETED	770108	CYCLOPENTANE	--
SAMPLED	020801	HEXANES PLUS	0.2
FORMATION	JURA-BRUSHY BASIN	NITROGEN	5.0
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2252	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	9500	CARBON DIOXIDE	0.4
		HELIUM	0.35
		HEATING VALUE*	1.067
		SPECIFIC GRAVITY	0.649

SAMPLE	21019	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	91.0
COUNTY	GRAND	ETHANE	4.8
FIELD	STATELINE	PROPANE	1.6
WELL NAME	HANCOCK GOVERNMENT NO. 35	N-BUTANE	0.4
API	4301930224	ISOBUTANE	0.3
LOCATION	SEC. 17, T17S, R25E	N-PENTANE	0.1
OWNER	BURTON W. HANCOCK	ISOPENTANE	0.2
COMPLETED	750525	CYCLOPENTANE	--
SAMPLED	020801	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3656	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	935	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	780	CARBON DIOXIDE	0.5
		HELIUM	0.13
		HEATING VALUE*	1.089
		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	21020	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	90.5
COUNTY	GRAND	ETHANE	4.7
FIELD	STATELINE	PROPANE	1.6
WELL NAME	FEDERAL NO. 17-12	N-BUTANE	0.5
API	4301931382	ISOBUTANE	0.4
LOCATION	SEC. 17, T17S, R25E	N-PENTANE	0.1
OWNER	BURTON W. HANCOCK	ISOPENTANE	0.2
COMPLETED	010204	CYCLOPENTANE	--
SAMPLED	020801	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA	NITROGEN	1.0
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3810	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2161	CARBON DIOXIDE	0.7
		HELIUM	0.14
		HEATING VALUE*	1,091
		SPECIFIC GRAVITY	0.626

SAMPLE	21018	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	93.3
COUNTY	GRAND	ETHANE	3.6
FIELD	STATELINE	PROPANE	0.8
WELL NAME	HANCOCK GOVERNMENT NO. 4	N-BUTANE	0.2
API	4301915483	ISOBUTANE	0.2
LOCATION	SEC. 9, T17S, R25E	N-PENTANE	0.1
OWNER	BURTON W. HANCOCK	ISOPENTANE	0.1
COMPLETED	600423	CYCLOPENTANE	--
SAMPLED	020801	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA, CEDAR MOUNTAIN	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3978	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	950	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3729	CARBON DIOXIDE	1.0
		HELIUM	0.09
		HEATING VALUE*	1,050
		SPECIFIC GRAVITY	0.601

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

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

SAMPLE	21385	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	88.7
COUNTY	UINTAH	ETHANE	2.5
FIELD	WALKER HOLLOW	PROPANE	2.9
WELL NAME	WALKER HOLLOW UNIT NO. 81	N-BUTANE	1.0
API	4304734758	ISOBUTANE	0.6
LOCATION	SEC. 11, T7S, R23E	N-PENTANE	0.3
OWNER	CITATION OIL & GAS CORP.	ISOPENTANE	0.4
COMPLETED	030610	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.3
FORMATION	EOCE-GREEN RIVER	NITROGEN	3.1
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5368	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	250	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	160	CARBON DIOXIDE	0.2
		HELIUM	0.04
		HEATING VALUE*	1,108
		SPECIFIC GRAVITY	0.652

SAMPLE	21381	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	88.5
COUNTY	UINTAH	ETHANE	4.8
FIELD	WEST WILLOW CREEK	PROPANE	2.7
WELL NAME	FEDERAL NO. 3-25B	N-BUTANE	0.7
API	4304732417	ISOBUTANE	0.4
LOCATION	SEC. 25, T9S, R19E	N-PENTANE	0.2
OWNER	DOMINION EXPLORATION & PRODUCTION, INC.	ISOPENTANE	0.2
COMPLETED	930509	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.2
FORMATION	EOCE-GREEN RIVER	NITROGEN	1.7
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4795	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	500	CARBON DIOXIDE	0.5
		HELIUM	0.03
		HEATING VALUE*	1,112
		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	21382	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	87.1
COUNTY	UINTAH	ETHANE	5.2
FIELD	WEST WILLOW CREEK	PROPANE	3.2
WELL NAME	FEDERAL 5-24B NO. 5	N-BUTANE	0.9
API	4304732447	ISOBUTANE	0.5
LOCATION	SEC. 24, T9S, R19E	N-PENTANE	0.2
OWNER	DOMINION EXPLORATION & PRODUCTION, INC.	ISOPENTANE	0.2
COMPLETED	931219	CYCLOPENTANE	--
SAMPLED	040817	HEXANES PLUS	0.3
FORMATION	EOCE-GREEN RIVER	NITROGEN	1.8
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4854	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	600	CARBON DIOXIDE	0.5
		HELIUM	0.04
		HEATING VALUE*	1,131
		SPECIFIC GRAVITY	0.659

SAMPLE	20933	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	92.9
COUNTY	GRAND	ETHANE	3.4
FIELD	WESTWATER	PROPANE	0.9
WELL NAME	FEDERAL NO. 4-M	N-BUTANE	0.2
API	4301920154	ISOBUTANE	0.2
LOCATION	SEC. 6, T17S, R24E	N-PENTANE	0.1
OWNER	J.C. THOMPSON	ISOPENTANE	0.1
COMPLETED	680619	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.2
FORMATION	CRET-BUCKHORN	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6276	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	180	CARBON DIOXIDE	1.6
		HELIUM	0.06
		HEATING VALUE*	1,051
		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	20936	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	81.5
COUNTY	GRAND	ETHANE	7.5
FIELD	WESTWATER	PROPANE	3.9
WELL NAME	WESTWATER UNIT NO. 6-C	N-BUTANE	1.2
API	4301915652	ISOBUTANE	0.7
LOCATION	SEC. 18, T17S, R24E	N-PENTANE	0.3
OWNER	J.C. THOMPSON	ISOPENTANE	0.4
COMPLETED	590513	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.5
FORMATION	CRET-CASTLEGATE	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	684	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	210	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	50	CARBON DIOXIDE	3.3
		HELIUM	0.03
		HEATING VALUE*	1,172
		SPECIFIC GRAVITY	0.717

SAMPLE	20940	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	84.1
COUNTY	GRAND	ETHANE	6.1
FIELD	WESTWATER	PROPANE	2.4
WELL NAME	FEDERAL NO. 2-C	N-BUTANE	0.7
API	4301915649	ISOBUTANE	0.5
LOCATION	SEC. 18, T17S, R24E	N-PENTANE	0.2
OWNER	J.C. THOMPSON	ISOPENTANE	0.3
COMPLETED	571106	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.4
FORMATION	CRET-CASTLEGATE	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	765	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	30	CARBON DIOXIDE	4.8
		HELIUM	0.03
		HEATING VALUE*	1,095
		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	20939	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	76.1
COUNTY	GRAND	ETHANE	8.4
FIELD	WESTWATER	PROPANE	6.4
WELL NAME	WESTWATER NO. 7-C	N-BUTANE	2.5
API	4301915653	ISOBUTANE	1.5
LOCATION	SEC. 7, T17S, R24E	N-PENTANE	0.9
OWNER	J.C. THOMPSON	ISOPENTANE	1.0
COMPLETED	590509	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	1.6
FORMATION	CRET-CASTLEGATE	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1084	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	30	CARBON DIOXIDE	0.8
		HELIUM	0.08
		HEATING VALUE*	1,366
		SPECIFIC GRAVITY	0.801

SAMPLE	20934	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	90.5
COUNTY	GRAND	ETHANE	4.9
FIELD	WESTWATER	PROPANE	1.5
WELL NAME	WESTWATER UNIT NO. 3-M	N-BUTANE	0.4
API	4301915662	ISOBUTANE	0.3
LOCATION	SEC. 7, T17S, R24E	N-PENTANE	0.1
OWNER	J.C. THOMPSON	ISOPENTANE	0.2
COMPLETED	640624	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.3
FORMATION	CRET-CASTLEGATE, DAKOTA	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2319	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	180	CARBON DIOXIDE	1.0
		HELIUM	0.08
		HEATING VALUE*	1,089
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	20942	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	93.7
COUNTY	GRAND	ETHANE	3.1
FIELD	WESTWATER	PROPANE	0.7
WELL NAME	MIDDLE CANYON FEDERAL NO. 11-30	N-BUTANE	0.1
API	4301930925	ISOBUTANE	0.1
LOCATION	SEC. 30, T16S, R24E	N-PENTANE	0.1
OWNER	J.C. THOMPSON	ISOPENTANE	0.1
COMPLETED	821026	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5581	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	450	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	250	CARBON DIOXIDE	1.3
		HELIUM	0.07
		HEATING VALUE*	1.039
		SPECIFIC GRAVITY	0.6

SAMPLE	20937	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	85.5
COUNTY	GRAND	ETHANE	7.9
FIELD	WESTWATER	PROPANE	2.9
WELL NAME	FEDERAL NO. 2-D	N-BUTANE	0.7
API	4301915656	ISOBUTANE	0.6
LOCATION	SEC. 18, T17S, R24E	N-PENTANE	0.2
OWNER	J.C. THOMPSON	ISOPENTANE	0.3
COMPLETED	610515	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA, CASTLEGATE	NITROGEN	0.9
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	722	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	60	CARBON DIOXIDE	0.7
		HELIUM	0.09
		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	20931	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	89.3
COUNTY	GRAND	ETHANE	6.0
FIELD	WESTWATER	PROPANE	1.9
WELL NAME	WESTWATER NO. 3-E	N-BUTANE	0.4
API	4301915658	ISOBUTANE	0.4
LOCATION	SEC. 17, T17S, R24E	N-PENTANE	0.1
OWNER	J.C. THOMPSON	ISOPENTANE	0.1
COMPLETED	590728	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.1
FORMATION	JURA-ENTRADA	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5488	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	110	CARBON DIOXIDE	0.7
		HELIUM	0.09
		HEATING VALUE*	1,099
		SPECIFIC GRAVITY	0.63

SAMPLE	20938	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	86.7
COUNTY	GRAND	ETHANE	4.2
FIELD	WESTWATER	PROPANE	1.4
WELL NAME	WESTWATER UNIT NO. 2-E	N-BUTANE	0.7
API	4301915657	ISOBUTANE	0.5
LOCATION	SEC. 7, T17S, R24E	N-PENTANE	0.4
OWNER	J.C. THOMPSON	ISOPENTANE	0.5
COMPLETED	590126	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.5
FORMATION	JURA-ENTRADA, MORRISON	NITROGEN	3.9
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5300	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	110	CARBON DIOXIDE	1.0
		HELIUM	0.19
		HEATING VALUE*	1,084
		SPECIFIC GRAVITY	0.659

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

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

SAMPLE	20932	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	82.3
COUNTY	GRAND	ETHANE	7.2
FIELD	WESTWATER	PROPANE	4.3
WELL NAME	FEDERAL NO. 1-B	N-BUTANE	1.4
API	4301930892	ISOBUTANE	0.7
LOCATION	SEC. 17, T17S, R24E	N-PENTANE	0.4
OWNER	J.C. THOMPSON	ISOPENTANE	0.4
COMPLETED	821015	CYCLOPENTANE	--
SAMPLED	020617	HEXANES PLUS	0.4
FORMATION	JURA-MORRISON	NITROGEN	2.5
GEOLOGIC PROVINCE CODE	585	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5698	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	65	CARBON DIOXIDE	0.4
		HELIUM	0.11
		HEATING VALUE*	1,187
		SPECIFIC GRAVITY	0.7

SAMPLE	21408	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	91.0
COUNTY	UINTAH	ETHANE	3.3
FIELD	WHITE RIVER	PROPANE	1.0
WELL NAME	OVER & UNDER GLEN BENCH 16W-9-8-22	N-BUTANE	0.3
API	4304734679	ISOBUTANE	0.2
LOCATION	SEC. 9, T8S, R22E	N-PENTANE	0.1
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE	0.1
COMPLETED	BASIN, INC. 030418	CYCLOPENTANE	--
SAMPLED	041214	HEXANES PLUS	0.9
FORMATION	EOCE-WASATCH	NITROGEN	2.6
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7720	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	208	CARBON DIOXIDE	0.4
		HELIUM	0.03
		HEATING VALUE*	1,070
		SPECIFIC GRAVITY	0.627

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

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

SAMPLE	21406	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	68.3
COUNTY	UINTAH	ETHANE	11.1
FIELD	WONSITS VALLEY	PROPANE	9.6
WELL NAME	WVU 132	N-BUTANE	2.5
API	4304730822	ISOBUTANE	1.4
LOCATION	SEC. 15, T8S, R21E	N-PENTANE	0.6
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE	0.6
COMPLETED	BASIN, INC. 810327	CYCLOPENTANE	--
SAMPLED	041207	HEXANES PLUS	1.0
FORMATION	EOCE-GREEN RIVER	NITROGEN	2.8
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	5261	ARGON	0.1
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	1.7
		HELIUM	0.10
		HEATING VALUE*	1,360
		SPECIFIC GRAVITY	0.836

SAMPLE	21409	COMPONENT, MOLE PCT	
STATE	UTAH	METHANE	90.3
COUNTY	UINTAH	ETHANE	3.6
FIELD	WONSITS VALLEY	PROPANE	1.1
WELL NAME	OVER & UNDER GLEN BENCH 1W-17-8-22	N-BUTANE	0.3
API	4304734623	ISOBUTANE	0.2
LOCATION	SEC. 17, T8S, R22E	N-PENTANE	0.1
OWNER	QUESTAR EXPLORATION & PRODUCTION UINTA	ISOPENTANE	0.1
COMPLETED	BASIN, INC. 030201	CYCLOPENTANE	--
SAMPLED	041214	HEXANES PLUS	0.8
FORMATION	EOCE-WASATCH	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	575	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7666	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1417	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2049	CARBON DIOXIDE	0.3
		HELIUM	0.03
		HEATING VALUE*	1,070
		SPECIFIC GRAVITY	0.629

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

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

SAMPLE	50598	COMPONENT, MOLE PCT	
STATE	WEST VIRGINIA	METHANE	99.0
COUNTY	ROANE	ETHANE	0.7
FIELD	AMMA-LOONEYVILLE-NEWTON	PROPANE	TRACE
WELL NAME	FREDRICK C. PARKER ET AL NO. 820097	N-BUTANE	0.0
API	4708724250	ISOBUTANE	0.0
LOCATION	GEARY DISTRICT, CLIO 7.5 QUAD	N-PENTANE	0.0
OWNER	COLUMBIA NATURAL RESOURCES, INC.	ISOPENTANE	0.0
COMPLETED	990628	CYCLOPENTANE	--
SAMPLED	990428	HEXANES PLUS	0.0
FORMATION	ORDO-TRENTON-BLACK RIVER	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10271	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	5750	HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD	50000	CARBON DIOXIDE	0.1
		HELIUM	0.02
		HEATING VALUE*	1.018
		SPECIFIC GRAVITY	0.56

SAMPLE	50599	COMPONENT, MOLE PCT	
STATE	WEST VIRGINIA	METHANE	99.0
COUNTY	ROANE	ETHANE	0.7
FIELD	AMMA-LOONEYVILLE-NEWTON	PROPANE	0.1
WELL NAME	FREDRICK C. PARKER ET AL NO. 820097	N-BUTANE	0.0
API	4708724250	ISOBUTANE	0.0
LOCATION	GEARY DISTRICT, CLIO 7.5 QUAD	N-PENTANE	0.0
OWNER	COLUMBIA NATURAL RESOURCES, INC.	ISOPENTANE	0.0
COMPLETED	990628	CYCLOPENTANE	--
SAMPLED	991027	HEXANES PLUS	0.0
FORMATION	ORDO-TRENTON-BLACK RIVER	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10271	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	5750	HYDROGEN SULFIDE**	--
OPEN FLOW, MCFD	50000	CARBON DIOXIDE	0.1
		HELIUM	0.02
		HEATING VALUE*	1.018
		SPECIFIC GRAVITY	0.561

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

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

SAMPLE	21134	COMPONENT, MOLE PCT	
STATE	WEST VIRGINIA	METHANE	89.2
COUNTY	MCDOWELL	ETHANE	0.8
FIELD	HUFF CREEK	PROPANE	TRACE
WELL NAME	STATE OF WV-DIV OF NAT RES NO. 506144	N-BUTANE	0.0
API	4704721505	ISOBUTANE	0.0
LOCATION	SANDY RIVER DIST, PANTHER QUAD	N-PENTANE	0.0
OWNER	EQUITABLE PRODUCTION CO.	ISOPENTANE	0.0
COMPLETED	020124	CYCLOPENTANE	--
SAMPLED	030212	HEXANES PLUS	0.0
FORMATION	MISS-MAXON, BEREA, DEVO-HURON	NITROGEN	8.4
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.8
TRUE VERTICAL DEPTH (FT)	5421	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	345	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4980	CARBON DIOXIDE	0.1
		HELIUM	0.55
		HEATING VALUE*	919
		SPECIFIC GRAVITY	0.595

SAMPLE	21148	COMPONENT, MOLE PCT	
STATE	WEST VIRGINIA	METHANE	91.0
COUNTY	WYOMING	ETHANE	3.7
FIELD	MCGRAW	PROPANE	0.7
WELL NAME	POCAHONTAS LAND CORP LC- 223	N-BUTANE	0.1
API	4710922114	ISOBUTANE	0.1
LOCATION	OCEANA DIST, PILOT KNOB QUAD	N-PENTANE	TRACE
OWNER	PENN VIRGINIA OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	020222	CYCLOPENTANE	--
SAMPLED	030507	HEXANES PLUS	0.1
FORMATION	MISS-GLADY FORK, RAVENCLIFF	NITROGEN	3.9
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2980	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.2
WELLHEAD PRESSURE, PSIG	305	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1800	CARBON DIOXIDE	TRACE
		HELIUM	0.11
		HEATING VALUE*	1,018
		SPECIFIC GRAVITY	0.6

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

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

SAMPLE	21025	COMPONENT, MOLE PCT	
STATE	WEST VIRGINIA	METHANE	86.3
COUNTY	CLAY	ETHANE	7.2
FIELD	MIDDLE SYCAMORE CREEK	PROPANE	2.6
WELL NAME	WEBSTER HARDWOOD NO. B-7	N-BUTANE	0.8
API	4701522627	ISOBUTANE	0.5
LOCATION	PLEASANT DISTRICT, BENTREE 7.5 QUAD	N-PENTANE	0.2
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.3
COMPLETED	011102	CYCLOPENTANE	--
SAMPLED	020731	HEXANES PLUS	0.4
FORMATION	MISS-BIG INJUN SANDSTONE	NITROGEN	1.5
GEOLOGIC PROVINCE CODE	160	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)		ARGON	0.0
MEASURED DEPTH	2550	HYDROGEN	0.1
WELLHEAD PRESSURE, PSIG	163	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	814	CARBON DIOXIDE	TRACE
		HELIUM	0.03
		HEATING VALUE*	1,150
		SPECIFIC GRAVITY	0.659

SAMPLE	21283	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	84.0
COUNTY	CARBON	ETHANE	6.7
FIELD	BALDY BUTTE	PROPANE	3.0
WELL NAME	BALDY BUTTE FEDERAL NO. 7	N-BUTANE	0.8
API	4900722047	ISOBUTANE	0.7
LOCATION	SEC. 4, T17N, R92W	N-PENTANE	0.2
OWNER	YATES PETROLEUM CORP.	ISOPENTANE	0.3
COMPLETED	020118	CYCLOPENTANE	--
SAMPLED	031005	HEXANES PLUS	0.3
FORMATION	CRET-ALMOND	NITROGEN	1.5
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	8196	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	295	CARBON DIOXIDE	2.5
		HELIUM	0.06
		HEATING VALUE*	1,127
		SPECIFIC GRAVITY	0.684

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

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

SAMPLE	21054	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	91.7
COUNTY	SWEETWATER	ETHANE	2.8
FIELD	BAXTER BASIN M	PROPANE	0.8
WELL NAME	E.S. LAUZER NO. 2	N-BUTANE	0.3
API	4903720410	ISOBUTANE	0.3
LOCATION	SEC. 24, T18N, R104W	N-PENTANE	0.1
OWNER	WEXPRO CO.	ISOPENTANE	0.1
COMPLETED	780410	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.2
FORMATION	CRET-DAKOTA	NITROGEN	2.5
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2254	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	140	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	140	CARBON DIOXIDE	1.3
		HELIUM	0.13
		HEATING VALUE*	1,029
		SPECIFIC GRAVITY	0.612

SAMPLE	21055	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	92.8
COUNTY	SWEETWATER	ETHANE	2.0
FIELD	BAXTER BASIN M	PROPANE	0.1
WELL NAME	E.S. LAUZER NO. 1	N-BUTANE	TRACE
API	4903705359	ISOBUTANE	TRACE
LOCATION	SEC. 30, T18N, R103W	N-PENTANE	0.0
OWNER	WEXPRO CO.	ISOPENTANE	0.0
COMPLETED	380123	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	TRACE
FORMATION	CRET-FRONTIER	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1685	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	912	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	912	CARBON DIOXIDE	4.4
		HELIUM	0.05
		HEATING VALUE*	977
		SPECIFIC GRAVITY	0.61

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

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

SAMPLE	21294	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	88.7
COUNTY	SWEETWATER	ETHANE	4.2
FIELD	BAXTER BASIN S	PROPANE	1.1
WELL NAME	SOUTH BAXTER UNIT NO. 22	N-BUTANE	0.3
API	4903725253	ISOBUTANE	0.2
LOCATION	SEC. 5, T15N, R104W	N-PENTANE	0.1
OWNER	WEXPRO CO.	ISOPENTANE	0.1
COMPLETED	030124	CYCLOPENTANE	--
SAMPLED	031210	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	3.1
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3602	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	12000	CARBON DIOXIDE	1.9
		HELIUM	0.11
		HEATING VALUE*	1,028
		SPECIFIC GRAVITY	0.63

SAMPLE	21048	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	87.6
COUNTY	LINCOLN	ETHANE	6.4
FIELD	BIRD CANYON	PROPANE	3.0
WELL NAME	COUNTY LINE FEDERAL NO. 22-6	N-BUTANE	0.9
API	4902320629	ISOBUTANE	0.6
LOCATION	SEC. 6, T26N, R111W	N-PENTANE	0.2
OWNER	PRIDE ENERGY CO.	ISOPENTANE	0.3
COMPLETED	850812	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.2
FORMATION	CRET-BEAR RIVER	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9161	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	694	CARBON DIOXIDE	0.2
		HELIUM	0.05
		HEATING VALUE*	1,152
		SPECIFIC GRAVITY	0.653

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

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

SAMPLE	21038	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	97.3
COUNTY	SWEETWATER	ETHANE	1.8
FIELD	BLACK BUTTE CREEK	PROPANE	0.1
WELL NAME	FEDERAL BAXTER NO. 4-22	N-BUTANE	TRACE
API	4903721543	ISOBUTANE	TRACE
LOCATION	SEC. 22, T19N, R103W	N-PENTANE	0.0
OWNER	SAMSON RESOURCES CO.	ISOPENTANE	TRACE
COMPLETED	801013	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	TRACE
FORMATION	CRET-FRONTIER	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	2882	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	288	CARBON DIOXIDE	0.3
		HELIUM	0.03
		HEATING VALUE*	1.022
		SPECIFIC GRAVITY	0.569

SAMPLE	21217	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	89.8
COUNTY	SWEETWATER	ETHANE	4.8
FIELD	BLUE FOREST	PROPANE	1.0
WELL NAME	BLUE FOREST UNIT NO. 20-14	N-BUTANE	0.2
API	4903724580	ISOBUTANE	0.1
LOCATION	SEC. 14, T24N, R111W	N-PENTANE	TRACE
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	010502	CYCLOPENTANE	--
SAMPLED	030710	HEXANES PLUS	0.1
FORMATION	CRET-FRONTIER	NITROGEN	3.2
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10007	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1100	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	440	CARBON DIOXIDE	0.6
		HELIUM	0.02
		HEATING VALUE*	1.040
		SPECIFIC GRAVITY	0.615

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

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

SAMPLE	21031	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	91.5
COUNTY	CARBON	ETHANE	4.7
FIELD	CHEROKEE CREEK	PROPANE	1.7
WELL NAME	WILD COW CREEK NO. 1-23	N-BUTANE	0.5
API	4900721531	ISOBUTANE	0.3
LOCATION	SEC. 23, T15N, R91W	N-PENTANE	0.1
OWNER	MERIT ENERGY CO.	ISOPENTANE	0.1
COMPLETED	961209	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.2
FORMATION	CRET-COW CREEK	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3336	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,098
		SPECIFIC GRAVITY	0.622

SAMPLE	21032	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	81.9
COUNTY	SWEETWATER	ETHANE	7.5
FIELD	FIVE MILE GULCH	PROPANE	3.5
WELL NAME	USA AMOCO T. NO. 1	N-BUTANE	1.0
API	4903721252	ISOBUTANE	0.8
LOCATION	SEC. 4, T20N, R93W	N-PENTANE	0.3
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.4
COMPLETED	790723	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	1.0
FORMATION	CRET-ALMOND	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10490	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	699	CARBON DIOXIDE	3.5
		HELIUM	0.07
		HEATING VALUE*	1,181
		SPECIFIC GRAVITY	0.72

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

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

SAMPLE	21043	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	93.7
COUNTY	SWEETWATER	ETHANE	3.6
FIELD	FOUR MILE GULCH	PROPANE	0.9
WELL NAME	FEDERAL NO. 1-9	N-BUTANE	0.2
API	4903722683	ISOBUTANE	0.1
LOCATION	SEC. 9, T23N, R110W	N-PENTANE	TRACE
OWNER	MERIT ENERGY CO.	ISOPENTANE	0.1
COMPLETED	910523	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.1
FORMATION	CRET-DAKOTA	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11370	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	275	CARBON DIOXIDE	0.8
		HELIUM	0.02
		HEATING VALUE*	1.054
		SPECIFIC GRAVITY	0.599

SAMPLE	21042	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	90.7
COUNTY	SWEETWATER	ETHANE	6.1
FIELD	FOUR MILE GULCH	PROPANE	1.3
WELL NAME	FEDERAL NO. 1-9	N-BUTANE	0.2
API	4903722683	ISOBUTANE	0.2
LOCATION	SEC. 9, T23N, R110W	N-PENTANE	0.1
OWNER	MERIT ENERGY CO.	ISOPENTANE	0.1
COMPLETED	910523	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-FRONTIER	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10670	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	40	CARBON DIOXIDE	0.7
		HELIUM	0.03
		HEATING VALUE*	1.090
		SPECIFIC GRAVITY	0.619

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

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

SAMPLE	21041	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	90.8
COUNTY	SWEETWATER	ETHANE	6.0
FIELD	FOUR MILE GULCH	PROPANE	1.3
WELL NAME	FOUR MILE GULCH NO. 10-9	N-BUTANE	0.2
API	4903724238	ISOBUTANE	0.2
LOCATION	SEC. 9, T23N, R110W	N-PENTANE	0.1
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	991202	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-FRONTIER	NITROGEN	0.4
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10604	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	700	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	382	CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,091
		SPECIFIC GRAVITY	0.619

SAMPLE	21040	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	89.3
COUNTY	SWEETWATER	ETHANE	6.8
FIELD	FOUR MILE GULCH	PROPANE	1.6
WELL NAME	SWAN SOUTH FEDERAL A NO. 2	N-BUTANE	0.3
API	4903722498	ISOBUTANE	0.5
LOCATION	SEC. 8, T23N, R110W	N-PENTANE	0.1
OWNER	SAMSON RESOURCES CO.	ISOPENTANE	0.1
COMPLETED	880413	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.2
FORMATION	CRET-FRONTIER	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10584	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1476	CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,106
		SPECIFIC GRAVITY	0.63

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

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

SAMPLE	21035	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	85.7
COUNTY	SWEETWATER	ETHANE	6.6
FIELD	HIGGINS	PROPANE	2.5
WELL NAME	PRONGHORN FEDERAL NO. 1	N-BUTANE	0.6
API	4903723538	ISOBUTANE	0.5
LOCATION	SEC. 2, T17N, R99W	N-PENTANE	0.1
OWNER	KAISER-FRANCIS OIL CO.	ISOPENTANE	0.2
COMPLETED	950906	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-ALMOND	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6406	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2898	CARBON DIOXIDE	3.2
		HELIUM	0.04
		HEATING VALUE*	1,114
		SPECIFIC GRAVITY	0.672

SAMPLE	21057	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	90.8
COUNTY	SWEETWATER	ETHANE	4.1
FIELD	KINNEY	PROPANE	1.4
WELL NAME	KINNEY UNIT NO. 4	N-BUTANE	0.4
API	4903705151	ISOBUTANE	0.3
LOCATION	SEC. 12, T13N, R100W	N-PENTANE	0.1
OWNER	WEXPRO CO.	ISOPENTANE	0.2
COMPLETED	620929	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-MESAVERDE	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	4664	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1640	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4630	CARBON DIOXIDE	2.3
		HELIUM	0.03
		HEATING VALUE*	1,075
		SPECIFIC GRAVITY	0.632

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

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

SAMPLE	21056	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	97.9
COUNTY	SWEETWATER	ETHANE	0.2
FIELD	KINNEY	PROPANE	0.0
WELL NAME	BIG DROP UNIT NO. 8-2	N-BUTANE	0.0
API	4903723743	ISOBUTANE	TRACE
LOCATION	SEC. 8, T13N, R99W	N-PENTANE	0.0
OWNER	QUESTAR EXPLORATION & PROD.	ISOPENTANE	0.0
COMPLETED	961112	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.0
FORMATION	EOCE-WASATCH	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	1380	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2006	CARBON DIOXIDE	1.6
		HELIUM	0.01
		HEATING VALUE*	996
		SPECIFIC GRAVITY	0.572

SAMPLE	21045	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	89.8
COUNTY	SWEETWATER	ETHANE	6.4
FIELD	LINCOLN ROAD	PROPANE	1.6
WELL NAME	LINCOLN ROAD NO. 70-22	N-BUTANE	0.3
API	4903723829	ISOBUTANE	0.3
LOCATION	SEC. 22, T24N, R111W	N-PENTANE	0.1
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	971018	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-FRONTIER	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9941	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,104
		SPECIFIC GRAVITY	0.628

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

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

SAMPLE	21039	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	75.4
COUNTY	SWEETWATER	ETHANE	11.5
FIELD	MESA	PROPANE	7.7
WELL NAME	HORSESHOE NO. 10-13	N-BUTANE	2.0
API	4903723786	ISOBUTANE	1.5
LOCATION	SEC. 13, T23N, R111W	N-PENTANE	0.2
OWNER	MERRION OIL & GAS CORP.	ISOPENTANE	0.4
COMPLETED	970514	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.1
FORMATION	CRET-MOWRY	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10800	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	163	CARBON DIOXIDE	0.5
		HELIUM	0.12
		HEATING VALUE*	1,304
		SPECIFIC GRAVITY	0.755

SAMPLE	20925	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	92.4
COUNTY	SUBLETTE	ETHANE	4.0
FIELD	MESA UNIT	PROPANE	1.2
WELL NAME	MESA NO. 11-16	N-BUTANE	0.3
API	4903522303	ISOBUTANE	0.3
LOCATION	SEC. 16, T32N, R109W	N-PENTANE	0.1
OWNER	WEXPRO CO.	ISOPENTANE	0.1
COMPLETED	010326	CYCLOPENTANE	--
SAMPLED	020400	HEXANES PLUS	0.2
FORMATION	CRET-LANCE	NITROGEN	0.6
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	13276	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	4700	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	4050	CARBON DIOXIDE	0.8
		HELIUM	0.02
		HEATING VALUE*	1,070
		SPECIFIC GRAVITY	0.612

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

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

SAMPLE	21186	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	86.2
COUNTY	SUBLETTE	ETHANE	4.9
FIELD	PINEDALE WC SE	PROPANE	2.1
WELL NAME	BULL DRAW 3-11	N-BUTANE	0.5
API	4903521283	ISOBUTANE	0.5
LOCATION	SEC. 11, T28N, R107W	N-PENTANE	0.2
OWNER	MOUNTAIN PETROLEUM CORP.	ISOPENTANE	0.2
COMPLETED	020514	CYCLOPENTANE	--
SAMPLED	030521	HEXANES PLUS	0.6
FORMATION	CRET-LANCE, MESAVERDE	NITROGEN	3.0
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	12617	ARGON	0.1
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	260	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	60	CARBON DIOXIDE	1.7
		HELIUM	0.04
		HEATING VALUE*	1,088
		SPECIFIC GRAVITY	0.663

SAMPLE	21036	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	96.8
COUNTY	SWEETWATER	ETHANE	2.1
FIELD	POINT OF ROCKS	PROPANE	0.3
WELL NAME	BROWN FEDERAL NO. 11-12	N-BUTANE	0.1
API	4903720368	ISOBUTANE	TRACE
LOCATION	SEC. 12, T19N, R101W	N-PENTANE	TRACE
OWNER	TRUE OIL CO.	ISOPENTANE	TRACE
COMPLETED	730423	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	TRACE
FORMATION	CRET-FRONTIER	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	7266	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	231	CARBON DIOXIDE	0.4
		HELIUM	0.02
		HEATING VALUE*	1,030
		SPECIFIC GRAVITY	0.574

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

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

SAMPLE	21037	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	96.6
COUNTY	SWEETWATER	ETHANE	2.0
FIELD	POINT OF ROCKS	PROPANE	0.5
WELL NAME	TEXACO FEDERAL NO. 11-2	N-BUTANE	0.1
API	4903720719	ISOBUTANE	0.1
LOCATION	SEC. 2, T19N, R101W	N-PENTANE	TRACE
OWNER	TRUE OIL CO.	ISOPENTANE	TRACE
COMPLETED	760601	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.1
FORMATION	CRET-FRONTIER 2	NITROGEN	0.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	6913	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	373	CARBON DIOXIDE	0.3
		HELIUM	0.02
		HEATING VALUE*	1,037
		SPECIFIC GRAVITY	0.577

SAMPLE	21052	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	87.7
COUNTY	LINCOLN	ETHANE	8.2
FIELD	SEVEN MILE GULCH	PROPANE	2.0
WELL NAME	SEVEN MILE GULCH UNIT NO. 20	N-BUTANE	0.3
API	4902320744	ISOBUTANE	0.2
LOCATION	SEC. 22, T20N, R112W	N-PENTANE	0.1
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.1
COMPLETED	911024	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-DAKOTA, FRONTIER	NITROGEN	0.5
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11330	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	2644	CARBON DIOXIDE	0.6
		HELIUM	0.03
		HEATING VALUE*	1,121
		SPECIFIC GRAVITY	0.638

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

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

SAMPLE	21029	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	82.4
COUNTY	CARBON	ETHANE	6.0
FIELD	SIERRA MADRE	PROPANE	6.1
WELL NAME	SIERRA MADRE NO. 15-19	N-BUTANE	2.1
API	4900721649	ISOBUTANE	0.8
LOCATION	SEC. 19, T13N, R89W	N-PENTANE	0.5
OWNER	MERIT ENERGY CO.	ISOPENTANE	0.5
COMPLETED	980218	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.8
FORMATION	CRET-SHANNON	NITROGEN	0.7
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	3478	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD		CARBON DIOXIDE	0.2
		HELIUM	0.07
		HEATING VALUE*	1,263
		SPECIFIC GRAVITY	0.725

SAMPLE	21030	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	88.4
COUNTY	CARBON	ETHANE	5.1
FIELD	SNOWBANK	PROPANE	1.0
WELL NAME	SNOWBANK UNIT NO. 1	N-BUTANE	0.2
API	4900721396	ISOBUTANE	0.2
LOCATION	SEC. 31, T15N, R93W	N-PENTANE	0.1
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.1
COMPLETED	950827	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.2
FORMATION	CRET-ALMOND	NITROGEN	0.1
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11364	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	617	CARBON DIOXIDE	4.8
		HELIUM	0.02
		HEATING VALUE*	1,037
		SPECIFIC GRAVITY	0.647

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

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

SAMPLE	21034	COMPONENT, MOLE PCT	
STATE	<u>WYOMING</u>	METHANE	<u>90.8</u>
COUNTY	<u>SWEETWATER</u>	ETHANE	<u>4.9</u>
FIELD	<u>STAGE STOP</u>	PROPANE	<u>1.3</u>
WELL NAME	<u>JEWEL FEDERAL NO. 1</u>	N-BUTANE	<u>0.3</u>
API	<u>4903720382</u>	ISOBUTANE	<u>0.3</u>
LOCATION	<u>SEC. 34, T18N, R99W</u>	N-PENTANE	<u>0.1</u>
OWNER	<u>KAISER-FRANCIS OIL CO.</u>	ISOPENTANE	<u>0.1</u>
COMPLETED	<u>730731</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>021010</u>	HEXANES PLUS	<u>0.3</u>
FORMATION	<u>CRET-ALMOND</u>	NITROGEN	<u>0.1</u>
GEOLOGIC PROVINCE CODE	<u>535</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>5556</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>10218</u>	CARBON DIOXIDE	<u>2.0</u>
		HELIUM	<u>0.03</u>
		HEATING VALUE*	<u>1.074</u>
		SPECIFIC GRAVITY	<u>0.627</u>

SAMPLE	21049	COMPONENT, MOLE PCT	
STATE	<u>WYOMING</u>	METHANE	<u>85.5</u>
COUNTY	<u>LINCOLN</u>	ETHANE	<u>6.7</u>
FIELD	<u>STEAD CANYON</u>	PROPANE	<u>3.8</u>
WELL NAME	<u>EAST STEAD CANYON NO. 37-12</u>	N-BUTANE	<u>1.1</u>
API	<u>4902321355</u>	ISOBUTANE	<u>0.7</u>
LOCATION	<u>SEC. 12, T26N, R112W</u>	N-PENTANE	<u>0.3</u>
OWNER	<u>FOG RESOURCES, INC.</u>	ISOPENTANE	<u>0.3</u>
COMPLETED	<u>970805</u>	CYCLOPENTANE	<u>--</u>
SAMPLED	<u>021010</u>	HEXANES PLUS	<u>0.7</u>
FORMATION	<u>CRET-BAXTER</u>	NITROGEN	<u>0.7</u>
GEOLOGIC PROVINCE CODE	<u>535</u>	OXYGEN	<u>0.0</u>
TRUE VERTICAL DEPTH (FT)	<u>6866</u>	ARGON	<u>0.0</u>
MEASURED DEPTH		HYDROGEN	<u>0.0</u>
WELLHEAD PRESSURE, PSIG	<u>720</u>	HYDROGEN SULFIDE**	<u>0.0</u>
OPEN FLOW, MCFD	<u>232</u>	CARBON DIOXIDE	<u>0.2</u>
		HELIUM	<u>0.09</u>
		HEATING VALUE*	<u>1.196</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	21033	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	84.3
COUNTY	SWEETWATER	ETHANE	6.3
FIELD	TIERNEY	PROPANE	2.9
WELL NAME	USA AMOCO S. NO. 1	N-BUTANE	0.7
API	4903721235	ISOBUTANE	0.7
LOCATION	SEC. 22, T20N, R94W	N-PENTANE	0.2
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.3
COMPLETED	790820	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.5
FORMATION	CRET-ALMOND	NITROGEN	0.2
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	9816	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG		HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	679	CARBON DIOXIDE	3.9
		HELIUM	0.06
		HEATING VALUE*	1.127
		SPECIFIC GRAVITY	0.693

SAMPLE	21305	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	78.1
COUNTY	SWEETWATER	ETHANE	8.9
FIELD	TWO RIM	PROPANE	4.2
WELL NAME	TWO RIM UNIT NO. 30-2	N-BUTANE	0.9
API	4903724389	ISOBUTANE	0.7
LOCATION	SEC. 30, T19N, R94W	N-PENTANE	0.2
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.2
COMPLETED	010101	CYCLOPENTANE	--
SAMPLED	040414	HEXANES PLUS	0.1
FORMATION	CRET-MESAVERDE	NITROGEN	3.3
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	10016	ARGON	TRACE
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1000	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	300	CARBON DIOXIDE	3.2
		HELIUM	0.06
		HEATING VALUE*	1.131
		SPECIFIC GRAVITY	0.717

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

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

SAMPLE	21053	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	82.6
COUNTY	JUNTA	ETHANE	9.7
FIELD	VERNE	PROPANE	3.7
WELL NAME	CHAMPLIN 186 AMOCO H NO. 1	N-BUTANE	0.8
API	4904120354	ISOBUTANE	0.7
LOCATION	SEC. 1, T18N, R113W	N-PENTANE	0.1
OWNER	BP AMERICA PRODUCTION CO.	ISOPENTANE	0.3
COMPLETED	821104	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.3
FORMATION	CRET-DAKOTA, FRONTIER 2	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11520	ARGON	0.0
MEASURED DEPTH		HYDROGEN	0.0
WELLHEAD PRESSURE, PSIG	1900	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	3208	CARBON DIOXIDE	0.9
		HELIUM	0.06
		HEATING VALUE*	1,181
		SPECIFIC GRAVITY	0.685

SAMPLE	21051	COMPONENT, MOLE PCT	
STATE	WYOMING	METHANE	77.4
COUNTY	LINCOLN	ETHANE	11.9
FIELD	WHISKEY BUTTE	PROPANE	5.8
WELL NAME	HELWIG NO. 30-8	N-BUTANE	1.2
API	4902321507	ISOBUTANE	1.0
LOCATION	SEC. 8, T20N, R112W	N-PENTANE	0.2
OWNER	CABOT OIL & GAS CORP.	ISOPENTANE	0.4
COMPLETED	000209	CYCLOPENTANE	--
SAMPLED	021010	HEXANES PLUS	0.5
FORMATION	CRET-DAKOTA, FRONTIER	NITROGEN	0.8
GEOLOGIC PROVINCE CODE	535	OXYGEN	0.0
TRUE VERTICAL DEPTH (FT)	11270	ARGON	0.0
MEASURED DEPTH		HYDROGEN	TRACE
WELLHEAD PRESSURE, PSIG	500	HYDROGEN SULFIDE**	0.0
OPEN FLOW, MCFD	1741	CARBON DIOXIDE	0.7
		HELIUM	0.08
		HEATING VALUE*	1,259
		SPECIFIC GRAVITY	0.733

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

Table 2

*Samples from Natural Gas Pipelines
in the United States*

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21125	COMPONENT, MOLE PCT
STATE _____	<u>COLORADO</u>	METHANE _____ <u>96.9</u>
COUNTY _____	<u>LA PLATA</u>	ETHANE _____ <u>0.1</u>
FIELD _____		PROPANE _____ <u>0.0</u>
PLANT _____	<u>FLORIDA RIVER-COAL BED METHANE PLANT</u>	N-BUTANE _____ <u>0.0</u>
LOCATION _____	<u>FUEL TO EL PASO NATURAL GAS</u>	ISOBUTANE _____ <u>0.0</u>
OWNER _____	<u>BP AMERICA PRODUCTION CO.</u>	N-PENTANE _____ <u>0.0</u>
SAMPLED _____	<u>021204</u>	ISOPENTANE _____ <u>0.0</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>580</u>	HEXANES PLUS _____ <u>0.0</u>
PRESSURE, PSIG _____	<u>500</u>	NITROGEN _____ <u>1.2</u>
FLOW, MCFD _____	<u>350000</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.0</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>1.8</u>
		HELIUM _____ <u>0.00</u>
		HEATING VALUE* _____ <u>984</u>
		SPECIFIC GRAVITY _____ <u>0.577</u>

SAMPLE	21288	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>86.6</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>6.6</u>
FIELD _____		PROPANE _____ <u>2.9</u>
PLANT _____	<u>LONG ARROYO "MO" VALLEY CENTRAL POINT</u>	N-BUTANE _____ <u>0.8</u>
LOCATION _____	<u>SEC. 25, T14S, R28E</u>	ISOBUTANE _____ <u>0.4</u>
OWNER _____	<u>YATES PETROLEUM CO.</u>	N-PENTANE _____ <u>0.2</u>
SAMPLED _____	<u>031021</u>	ISOPENTANE _____ <u>0.3</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	HEXANES PLUS _____ <u>0.5</u>
PRESSURE, PSIG _____	<u>974</u>	NITROGEN _____ <u>0.9</u>
FLOW, MCFD _____	<u>2784</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.1</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.6</u>
		HELIUM _____ <u>0.07</u>
		HEATING VALUE* _____ <u>1,152</u>
		SPECIFIC GRAVITY _____ <u>0.664</u>

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21287	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>76.5</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>8.2</u>
FIELD _____		PROPANE _____ <u>4.7</u>
PLANT _____	<u>SLAYTON CDP CENTRAL POINT</u>	N-BUTANE _____ <u>1.6</u>
LOCATION _____	<u>SEC. 23, T14S, R27E</u>	ISOBUTANE _____ <u>0.8</u>
OWNER _____	<u>YATES PETROLEUM CO.</u>	N-PENTANE _____ <u>0.4</u>
SAMPLED _____	<u>031021</u>	ISOPENTANE _____ <u>0.5</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	HEXANES PLUS _____ <u>0.7</u>
PRESSURE, PSIG _____	<u>109</u>	NITROGEN _____ <u>5.8</u>
FLOW, MCFD _____	<u>12</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.1</u>
		HYDROGEN _____ <u>TRACE</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.5</u>
		HELIUM _____ <u>0.12</u>
		HEATING VALUE* _____ <u>1.185</u>
		SPECIFIC GRAVITY _____ <u>0.737</u>

SAMPLE	21285	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>87.0</u>
COUNTY _____	<u>CHAVES</u>	ETHANE _____ <u>4.4</u>
FIELD _____		PROPANE _____ <u>1.8</u>
PLANT _____	<u>BITTER LAKE CENTRAL POINT</u>	N-BUTANE _____ <u>0.6</u>
LOCATION _____	<u>TRANSFER POINT</u>	ISOBUTANE _____ <u>0.3</u>
OWNER _____	<u>YATES PETROLEUM CO.</u>	N-PENTANE _____ <u>0.2</u>
SAMPLED _____	<u>031021</u>	ISOPENTANE _____ <u>0.2</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	HEXANES PLUS _____ <u>0.5</u>
PRESSURE, PSIG _____	<u>950</u>	NITROGEN _____ <u>4.2</u>
FLOW, MCFD _____	<u>45000</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.2</u>
		HYDROGEN _____ <u>TRACE</u>
		HYDROGEN SULFIDE _____ <u>0.0</u>
		CARBON DIOXIDE _____ <u>0.3</u>
		HELIUM _____ <u>0.33</u>
		HEATING VALUE* _____ <u>1.074</u>
		SPECIFIC GRAVITY _____ <u>0.646</u>

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21286	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 87.3
COUNTY _____	CHAVES	ETHANE _____ 3.9
FIELD _____		PROPANE _____ 1.5
PLANT _____	RED BLUFF CENTRAL POINT	N-BUTANE _____ 0.6
LOCATION _____	SEC. 2, T8S, R25E	ISOBUTANE _____ 0.3
OWNER _____	YATES PETROLEUM CO.	N-PENTANE _____ 0.2
SAMPLED _____	031021	ISOPENTANE _____ 0.2
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.4
PRESSURE, PSIG _____	950	NITROGEN _____ 4.9
FLOW, MCFD _____	28000	OXYGEN _____ 0.0
		ARGON _____ 0.1
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 0.2
		HELIUM _____ 0.38
		HEATING VALUE* _____ 1.054
		SPECIFIC GRAVITY _____ 0.639

SAMPLE	21106	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 84.1
COUNTY _____	LEA	ETHANE _____ 7.9
FIELD _____		PROPANE _____ 3.6
PLANT _____	NORTH VERSADO (TOWNSEND)	N-BUTANE _____ 1.0
LOCATION _____	14" INLET	ISOBUTANE _____ 0.5
OWNER _____	DYNEGY CORP.	N-PENTANE _____ 0.2
SAMPLED _____	021202	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.3
PRESSURE, PSIG _____	646	NITROGEN _____ 1.1
FLOW, MCFD _____	7919	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 1.1
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.162
		SPECIFIC GRAVITY _____ 0.679

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21108	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 83.6
COUNTY _____	LEA	ETHANE _____ 7.7
FIELD _____		PROPANE _____ 3.7
PLANT _____	LINAM PLANT	N-BUTANE _____ 1.1
LOCATION _____	EDDY LINE, 12"	ISOBUTANE _____ 0.6
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ 0.3
SAMPLED _____	021202	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.4
PRESSURE, PSIG _____		NITROGEN _____ 1.4
FLOW, MCFD _____	59000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 0.9
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.174
		SPECIFIC GRAVITY _____ 0.687

SAMPLE	21109	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.6
COUNTY _____	LEA	ETHANE _____ 8.6
FIELD _____		PROPANE _____ 4.3
PLANT _____	LINAM PLANT	N-BUTANE _____ 1.3
LOCATION _____	LEA COUNTY INLET LINE, 12"	ISOBUTANE _____ 0.6
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ 0.3
SAMPLED _____	021202	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.5
PRESSURE, PSIG _____		NITROGEN _____ 1.6
FLOW, MCFD _____	42000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 0.8
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1.199
		SPECIFIC GRAVITY _____ 0.703

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21113	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 77.0
COUNTY _____	LEA	ETHANE _____ 9.8
FIELD _____		PROPANE _____ 5.6
PLANT _____	JAL NO. 4 GAS PLANT	N-BUTANE _____ 1.8
LOCATION _____	FEED TO JAL NO. 3, HIGH PRESSURE	ISOBUTANE _____ 0.7
OWNER _____	SID RICHARDSON GASOLINE	N-PENTANE _____ 0.4
SAMPLED _____	021203	ISOPENTANE _____ 0.4
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.4
PRESSURE, PSIG _____	605	NITROGEN _____ 1.9
FLOW, MCFD _____	32000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.3
		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1,230
		SPECIFIC GRAVITY _____ 0.742

SAMPLE	21114	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.2
COUNTY _____	LEA	ETHANE _____ 10.0
FIELD _____		PROPANE _____ 5.9
PLANT _____	EUNICE PLANT	N-BUTANE _____ 2.0
LOCATION _____	NORTH/SOUTH INLET, METER 41	ISOBUTANE _____ 0.8
OWNER _____	DYNEGY CORP.	N-PENTANE _____ 0.5
SAMPLED _____	021203	ISOPENTANE _____ 0.5
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.8
PRESSURE, PSIG _____		NITROGEN _____ 1.8
FLOW, MCFD _____	90800	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.4
		CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.07
		HEATING VALUE* _____ 1,256
		SPECIFIC GRAVITY _____ 0.767

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21110	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 76.3
COUNTY _____	LEA	ETHANE _____ 9.1
FIELD _____		PROPANE _____ 5.4
PLANT _____	EUNICE NATURAL GAS PLANT	N-BUTANE _____ 2.0
LOCATION _____	"P" LINE, 6", FROM SAND DUNES	ISOBUTANE _____ 0.8
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ 0.7
SAMPLED _____	021202	ISOPENTANE _____ 0.7
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.4
PRESSURE, PSIG _____		NITROGEN _____ 3.3
FLOW, MCFD _____	17000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 1.3
		HELIUM _____ 0.08
		HEATING VALUE* _____ 1.233
		SPECIFIC GRAVITY _____ 0.752

SAMPLE	21111	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 75.8
COUNTY _____	LEA	ETHANE _____ 8.6
FIELD _____		PROPANE _____ 5.6
PLANT _____	EUNICE NATURAL GAS PLANT	N-BUTANE _____ 2.1
LOCATION _____	12", 200 PSI LINE FROM CORRIDOR EAST OF PLANT	ISOBUTANE _____ 0.9
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ 0.5
SAMPLED _____	021202	ISOPENTANE _____ 0.6
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.6
PRESSURE, PSIG _____		NITROGEN _____ 2.4
FLOW, MCFD _____	74000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.1
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 2.9
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.230
		SPECIFIC GRAVITY _____ 0.765

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21112	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 71.7
COUNTY _____	LEA	ETHANE _____ 9.5
FIELD _____		PROPANE _____ 6.5
PLANT _____	JAL NO. 3 GAS PLANT	N-BUTANE _____ 2.7
LOCATION _____	LEA COUNTY LOW PRESSURE GAS	ISOBUTANE _____ 0.9
OWNER _____	SID RICHARDSON GASOLINE	N-PENTANE _____ 0.8
SAMPLED _____	021203	ISOPENTANE _____ 0.8
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 1.3
PRESSURE, PSIG _____		NITROGEN _____ 3.0
FLOW, MCFD _____	64500	OXYGEN _____ 0.3
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.5
		CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.302
		SPECIFIC GRAVITY _____ 0.813

SAMPLE	21107	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 74.2
COUNTY _____	LEA	ETHANE _____ 10.9
FIELD _____		PROPANE _____ 6.5
PLANT _____	LINAM PLANT	N-BUTANE _____ 1.8
LOCATION _____	BUCKEYE LINE, 10"	ISOBUTANE _____ 1.0
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ 0.3
SAMPLED _____	021202	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 0.3
PRESSURE, PSIG _____		NITROGEN _____ 2.2
FLOW, MCFD _____	38800	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.5
		CARBON DIOXIDE _____ 2.0
		HELIUM _____ 0.09
		HEATING VALUE* _____ 1.240
		SPECIFIC GRAVITY _____ 0.759

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21104	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>63.1</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>10.9</u>
FIELD _____		PROPANE _____ <u>6.9</u>
PLANT _____	<u>NORTH VERSADO</u>	N-BUTANE _____ <u>2.3</u>
LOCATION _____	<u>16" INLET</u>	ISOBUTANE _____ <u>0.9</u>
OWNER _____	<u>DYNEGY CORP.</u>	N-PENTANE _____ <u>0.5</u>
SAMPLED _____	<u>021202</u>	ISOPENTANE _____ <u>0.6</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	HEXANES PLUS _____ <u>1.0</u>
PRESSURE, PSIG _____	<u>4</u>	NITROGEN _____ <u>10.5</u>
FLOW, MCFD _____	<u>16906</u>	OXYGEN _____ <u>1.5</u>
		ARGON _____ <u>0.0</u>
		HYDROGEN _____ <u>0.0</u>
		HYDROGEN SULFIDE _____ <u>TRACE</u>
		CARBON DIOXIDE _____ <u>1.7</u>
		HELIUM _____ <u>0.10</u>
		HEATING VALUE* _____ <u>1.204</u>
		SPECIFIC GRAVITY _____ <u>0.833</u>

SAMPLE	21103	COMPONENT, MOLE PCT
STATE _____	<u>NEW MEXICO</u>	METHANE _____ <u>69.3</u>
COUNTY _____	<u>LEA</u>	ETHANE _____ <u>8.8</u>
FIELD _____		PROPANE _____ <u>5.2</u>
PLANT _____	<u>VADA BOOSTER</u>	N-BUTANE _____ <u>1.6</u>
LOCATION _____	<u>10" INLET, NORTH SIDE</u>	ISOBUTANE _____ <u>0.7</u>
OWNER _____	<u>DYNEGY CORP.</u>	N-PENTANE _____ <u>0.3</u>
SAMPLED _____	<u>021202</u>	ISOPENTANE _____ <u>0.3</u>
FORMATION _____	<u>-</u>	CYCLOPENTANE _____ <u>--</u>
GEOLOGIC PROVINCE CODE _____	<u>430</u>	HEXANES PLUS _____ <u>0.3</u>
PRESSURE, PSIG _____	<u>740</u>	NITROGEN _____ <u>6.2</u>
FLOW, MCFD _____	<u>16088</u>	OXYGEN _____ <u>0.0</u>
		ARGON _____ <u>0.0</u>
		HYDROGEN _____ <u>TRACE</u>
		HYDROGEN SULFIDE _____ <u>0.8</u>
		CARBON DIOXIDE _____ <u>6.3</u>
		HELIUM _____ <u>0.13</u>
		HEATING VALUE* _____ <u>1.108</u>
		SPECIFIC GRAVITY _____ <u>0.79</u>

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21105	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 70.2
COUNTY _____	LEA	ETHANE _____ 10.5
FIELD _____		PROPANE _____ 7.1
PLANT _____	NORTH VERSADO	N-BUTANE _____ 2.8
LOCATION _____	24" INLET	ISOBUTANE _____ 1.1
OWNER _____	DYNEGY CORP.	N-PENTANE _____ 0.8
SAMPLED _____	021202	ISOPENTANE _____ 0.8
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	430	HEXANES PLUS _____ 1.6
PRESSURE, PSIG _____	6	NITROGEN _____ 3.5
FLOW, MCFD _____	9035	OXYGEN _____ 0.2
		ARGON _____ 0.0
		HYDROGEN _____ TRACE
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 1.2
		HELIUM _____ 0.13
		HEATING VALUE* _____ 1.345
		SPECIFIC GRAVITY _____ 0.828

SAMPLE	21121	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 81.5
COUNTY _____	SAN JUAN	ETHANE _____ 0.4
FIELD _____		PROPANE _____ 0.1
PLANT _____	VALVERDE PLANT	N-BUTANE _____ TRACE
LOCATION _____	16" PLANT INLET - STREAM 6	ISOBUTANE _____ TRACE
OWNER _____	DUKE ENERGY CORP.	N-PENTANE _____ TRACE
SAMPLED _____	021203	ISOPENTANE _____ TRACE
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	580	HEXANES PLUS _____ TRACE
PRESSURE, PSIG _____	660	NITROGEN _____ 0.0
FLOW, MCFD _____	415000	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 17.9
		HELIUM _____ 0.00
		HEATING VALUE* _____ 836
		SPECIFIC GRAVITY _____ 0.731

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21118	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 93.7
COUNTY _____	SAN JUAN	ETHANE _____ 2.9
FIELD _____		PROPANE _____ 0.7
PLANT _____	CHACO PLANT	N-BUTANE _____ 0.2
LOCATION _____	BISTI 16" INLET 02-662-01	ISOBUTANE _____ 0.1
OWNER _____	EL PASO NATURAL GAS CO.	N-PENTANE _____ 0.1
SAMPLED _____	021203	ISOPENTANE _____ 0.1
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	580	HEXANES PLUS _____ 0.1
PRESSURE, PSIG _____	56	NITROGEN _____ 0.4
FLOW, MCFD _____	16989	OXYGEN _____ 0.0
		ARGON _____ 0.0
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 1.8
		HELIUM _____ 0.01
		HEATING VALUE* _____ 1.036
		SPECIFIC GRAVITY _____ 0.603

SAMPLE	21117	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 86.5
COUNTY _____	SAN JUAN	ETHANE _____ 6.9
FIELD _____		PROPANE _____ 3.1
PLANT _____	CHACO PLANT	N-BUTANE _____ 0.9
LOCATION _____	"B" INLET 01-857-01, 30"	ISOBUTANE _____ 0.6
OWNER _____	EL PASO NATURAL GAS CO.	N-PENTANE _____ 0.2
SAMPLED _____	021203	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	580	HEXANES PLUS _____ 0.5
PRESSURE, PSIG _____	160	NITROGEN _____ 0.4
FLOW, MCFD _____	229029	OXYGEN _____ 0.0
		ARGON _____ TRACE
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 0.7
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.164
		SPECIFIC GRAVITY _____ 0.667

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

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

SAMPLE	21116	COMPONENT, MOLE PCT
STATE _____	NEW MEXICO	METHANE _____ 85.8
COUNTY _____	SAN JUAN	ETHANE _____ 6.8
FIELD _____		PROPANE _____ 3.1
PLANT _____	CHACO PLANT	N-BUTANE _____ 0.9
LOCATION _____	"A" INLET 01-261-01, 30"	ISOBUTANE _____ 0.6
OWNER _____	EL PASO NATURAL GAS CO.	N-PENTANE _____ 0.2
SAMPLED _____	021203	ISOPENTANE _____ 0.3
FORMATION _____	-	CYCLOPENTANE _____ --
GEOLOGIC PROVINCE CODE _____	580	HEXANES PLUS _____ 0.5
PRESSURE, PSIG _____	159	NITROGEN _____ 0.4
FLOW, MCFD _____	306329	OXYGEN _____ 0.0
		ARGON _____ TRACE
		HYDROGEN _____ 0.0
		HYDROGEN SULFIDE _____ 0.0
		CARBON DIOXIDE _____ 1.5
		HELIUM _____ 0.06
		HEATING VALUE* _____ 1.155
		SPECIFIC GRAVITY _____ 0.674

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

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