IC 8676

Bureau of Mines Information Circular/1975

Sulfur Content of Crude Oils

UNITED STATES DEPARTMENT OF THE INTERIOR

Information Circular 8676

Sulfur Content of Crude Oils

By M. Carrales, Jr., and R. W. Martin
Dallas Mineral Supply Field Office, Dallas, Tex.

UNITED STATES DEPARTMENT OF THE INTERIOR
Rogers C. B. Morton, Secretary

Jack W. Carlson, Assistant Secretary–Energy and Minerals

BUREAU OF MINES
Thomas V. Falkie, Director

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

This publication has been cataloged as follows:

Carrales, Manuel

Sulfur content of crude oils, by M. Carrales, Jr., and R. W. Martin. [Washington] U.S. Bureau of Mines [1975]

61 p. illus., tables. (U.S. Bureau of Mines. Information circular 8676)

Includes bibliography.

1. Petroleum—Sulphur content. I. Martin, Richard W., jt. auth. II. U.S. Bureau of Mines. III. Title. (Series)

TN23.U71 no. 8676 622.06173

U.S. Dept. of the Int. Library

• For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price $1.25
Catalog No. I28.27:8676
Stock No. 024-004-01759-7

CONTENTS

ILLUSTRATION

TABLES

SULFUR CONTENT OF CRUDE OILS

by

M. Carrales, Jr.,[1] and R. W. Martin[2]

ABSTRACT

This Bureau of Mines report presents information on the sulfur content of crude oil in the United States and in some foreign countries. Data are presented for oil produced in 1971 from fields in 26 States that accounted for about 76 percent of total U.S. oil production; the foreign data cover fields in 24 foreign countries that accounted for about 64 percent of the total oil produced from these countries in 1971. Most of the data are presented in tabular form.

INTRODUCTION

Sulfur in crude oil is very important because it causes difficulties, such as corrosion of metals, in processing the oil and because air pollution results from the burning of high-sulfur fuels processed from crude oils having a high sulfur content. At a time when sulfur content restrictions on the use of fossil fuels are causing shortages and making it more difficult for industry to achieve air quality standards, data are needed regarding the quality of available world crude oil supplies. This Bureau of Mines report presents sulfur data for 2,858 U.S. crude oils and 168 foreign oils. Some Bureau authors have related sulfur content of crude oil to volumes of crude oil produced in the United States (1, 7-11),[3] and one earlier report (2) also included the sulfur content of foreign crude oils. This present report includes a classification of both U.S. and foreign crude oil production for 1971 by sulfur content. Only fields with reported sulfur content are included, and no attempt is made either to classify total production for 1971 by sulfur content or to develop a historical series of U.S. production by sulfur content.

Some articles in trade journals (3-5) have included a correlation between API gravity and sulfur content of crude oils to establish which crude oils qualify as "low-sulfur oils," defined as crude oils having a sulfur content

---

[1] Petroleum engineer.

[2] Industrial specialist (now with the Federal Energy Administration, Area VI, Dallas, Tex.).

[3] Underlined numbers in parentheses refer to items in the list of references at the end of this report.

less than 60 percent of the average sulfur content of all U.S. crude oils of the same API gravity. For this study, the term "low-sulfur oil" refers to oil with a sulfur content of 0.50 percent and less, and the term "high-sulfur oil" refers to oil with greater than 0.50 percent sulfur content.

The Petroleum Publishing Company in its 1972 Petroleum International Encyclopedia published a list of U.S. and foreign major oilfields with current year's production, sulfur content, and other related field data. Although a substantial list of analyses with sulfur content for U.S. and foreign crude oils was included, the oil production was not classified by sulfur content.

The Bureau of Mines classified 1969 crude oil production and reserves in the United States by sulfur content for the Environmental Protection Agency (EPA) (11). In this study, done in 1970-71, about 80 percent of the 1969 oil production was classified from known sulfur contents of crude oils, and this classification served as a basis to classify the remaining 20 percent of the total production. The study did not include any foreign crude oil production by sulfur content nor report the sulfur content of individual field production for the United States.

Basically, this report updates the data developed and entered into the data bank at the Bureau of Mines Automatic Data Processing facilities (ADP) in Denver, Colo., for the 1970-71 study (11). Work for the U.S. part of this report consisted of updating statistics for fields in the data bank with 1971 production and adding statistics for other fields for which crude oil analyses were run after the 1970-71 study (11) was completed or for which sulfur content was obtained from sources other than the Bureau of Mines. For the foreign crude oil fields, most of the sulfur content data were obtained from crude oil analyses at the Bureau of Mines Bartlesville (Okla.) Energy Research Center,[4] and the production data were obtained from the Oil and Gas Journal (6). These data were entered into the data bank. Computer programs were written by the ADP section of the Bureau of Mines in Denver to printout the data in the desired tabular form.

It should be noted that not all of the fields in the United States were included in the present study because the sulfur content of part of the oil produced was not known, and some of the fields to which a sulfur content was assigned were eliminated if their production was less than 5,000 barrels during 1971.

ACKNOWLEDGMENTS

The writers gratefully acknowledge the use of U.S. oilfield production data as reported by State oil and gas agencies, the International Oil Scouts Association, the Conservation Committee of California Oil Producers, and the American Petroleum Institute. Acknowledgment is also made to the Oil and Gas Journal for the use of foreign oilfield production data.

[4]Now transferred to the Energy Research and Development Administration.

GENERAL PROCEDURE

The procedure used in this report was basically the same as that used in the 1970-71 study (11). The method of assigning sulfur content to each field during the study was that only one Bureau of Mines crude oil analysis was selected to be representative of each field (or reservoir). Where more than one reservoir was producing in a field and production was reported as a field total, the crude oil analysis chosen was judged to be representative of that expected from a composite sample from the producing reservoirs. For this reason, it is possible that the sulfur content assigned to some fields will not agree with that reported in other sources.

Most of the sulfur contents for the foreign fields were taken primarily from the Bureau of Mines crude oil analysis file. The method of assigning sulfur content to a foreign oilfield with more than one analysis was basically the same as that used for the U.S. oilfields. A few sulfur contents for some Canadian oilfields were taken from RI 7059 (2). The daily oil production for the first 6 months of 1971 by fields as reported by the Oil and Gas Journal (6) was used to estimate yearly production.

The U.S. and foreign oilfield data tabulation included related field data, such as geologic formation, geologic age, and depth of formation, which were taken from the Bureau of Mines crude oil analyses where available. No related field data were printed for those fields with a sulfur content reported from sources other than the Bureau of Mines. Furthermore, the U.S. tabulation included only those fields that had an assigned sulfur content and produced at least 5,000 barrels of oil during 1971.

The following sulfur content categories in weight-percent were used to classify the U.S. and foreign crude oil production for 1971:

0.00-0.50;

0.51-1.00;

1.01-2.00;

and >2.00.

These categories were the same as those used in the 1970-71 study (11). The results of this present study were summarized and compared with the results of that study to show changes in the sulfur content during 1969-71.

Table 1 presents the data on U.S. crude oil production during 1971 by fields and sulfur content.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
ALABAMA						
(0.00-0.50)						
CITRONELLE	0.38	861053	RODESSA, GLEN ROSE	CRET.	10,700	6,736
(0.51-1.00)						
POLLARD	.65	854023	TUSCALOOSA	CRET.	5,710	168
(1.01-2.00)						
CHOCTAW RIDGE	1.07	870087	SMACKOVER	JUR.	11,987	282
(>2.00)						
GILBERTOWN SOUTH	4.22	857129	EUTAW	CRET.	3,300	6
GILBERTOWN	4.29	845072	SELMA	.DO.	2,470	72
TOXEY	4.59	869112	SMACKOVER	JUR.	10,486	167
ALASKA						
(0.00-0.50)						
GRANITE POINT	.02	L65077	KENAI, MIDDLE	TERT.	8,650	5,577
MCARTHUR RIVER	.09	L66014	KENAI, LOWER, (HEMLOCK)	.DO.	9,370	40,537
MIDDLE GROUND SHOAL	.06	L65001	MIDDLE GROUND SHOALS	.DO.	8,400	11,304
SWANSON RIVER	.08	L65073	HEMLOCK	.DO.	11,200	11,466
TRADING BAY	.05	L65076	KENAI	.DO.	5,363	8,744
(0.51-1.00)						
PRUDHOE BAY	.82	871011				1,157
ARIZONA						
(0.00-0.50)						
DINEH-BI-KEYAH	.19	867088				1,106
DRY MESA	.20	859284				19
ARKANSAS						
(0.00-0.50)						
ATLANTA/COTTON VALLEY	.25					47
ATLANTA/SMACKOVER	.49	839001	REYNOLDS, SMACKOVER	JUR.	8,201	96
CATESVILLE/COTTON VALLEY & JONES	.36					16
DOOLEY CREEK/LIMESTONE	.27	870120	SMACKOVER	JUR.	10,935	10
DORCHEAT-MACEDONIA/COTTON VALLEY	.09	842044	MORGAN, COTTON VALLEY	.DO.	7,860	242
FOUKE/SMACKOVER	.16	870112	SMACKOVER	.DO.	9,023	51
KIBLAH/GLOYD	.38	861089	GLOYD 1ST, GLEN ROSE	CRET.	6,108	41
MCKAMIE-PATTON/REYNOLDS	.43	861017	SMACKOVER	JUR.	9,302	191
PINE TREE	.48	870105				17
RODESSA OLD/GLOYD	.32	838002	CRETACEOUS	CRET.	5,973	18
VILLAGE/COTTON VALLEY	.37					17
VILLAGE/TRAVIS PEAK	.40					179
WALKER CREEK/LIMESTONE	.20	870118	SMACKOVER	JUR.	10,913	2,167
(0.51-1.00)						
BRISTER	.55	870106	SMACKOVER	JUR.	8,501	9
BUCKNER/TRAVIS PEAK	.65					92
CAIRO	1.00	870092				30
HAYNESVILLE/PETTET UNIT	.60					68
HIRANK/NACATOCH	.60					41
LEWISVILLE/PALUXY	.63	839178	RODESSA, GLEN ROSE	CRET.	3,410	8
LEWISVILLE/SMACKOVER	.80	871032	SMACKOVER	JUR.	7,067	399
MAGNOLIA/SMACKOVER	.89	838191	REYNOLDS, SMACKOVER	.DO.	7,633	851
MCNEIL EAST	.80					7
MT HOLLY/REYNOLDS	.87	870099	SMACKOVER	JUR.	7,149	12
SCHULER EAST/MORGAN	.55	842043	MORGAN, COTTON VALLEY	.DO.	5,735	6
SCHULER/COTTON VALLEY	.52	838193	.DO.	.DO.	5,588	72
SCHULER/MORGAN	.56	838198	.DO.	.DO.	5,688	17
SPIRIT LAKE/KILPATRICK	1.00					8
VILLAGE/SMACKOVER	.80	838192	REYNOLDS, SMACKOVER	JUR.	7,388	50
(1.01-2.00)						
BODCAW/KILPATRICK	1.80					16
BUCKNER/SMACKOVER	1.87	838199	REYNOLDS, SMACKOVER	JUR.	7,196	66
EL DORADO E/EZZELL/ALL SANDS	1.60	855171	NACATOCH	CRET.	2,204	214
EL DORADO EAST/NACATOCH	1.92	838212	.DO.	.DO.	2,200	27
EL DORADO SOUTH/NACATOCH	1.07	838299	.DO.	.DO.	2,172	131
FOUKE/PALUXY	1.47	847025	STURGIS, PALUXY	.DO.	3,633	306
HILLSBORO/NACATOCH	1.56	838303	NACATOCH	.DO.	2,250	26
LISBON	1.08	838213	.DO.	.DO.	2,106	16
MIDWAY WEST	1.57	870094	SMACKOVER	JUR.	6,580	119
MIDWAY/REYNOLDS	1.36	842011	REYNOLDS, SMACKOVER	.DO.	6,304	1,164
NEW LONDON	1.94	843048	WALTON, COTTON VALLEY	.DO.	5,717	38
NICK SPRINGS WEST/MEAKIN	1.70					17
PACE CITY EAST/GRAVES	1.96	865025	GRAVES, OZAN	CRET.	2,377	10
SCHULER/JONES	1.40	838194	JONES, COTTON VALLEY	JUR.	7,506	464
SNOW HILL/SMACKOVER	1.08	838293	REYNOLDS, SMACKOVER	.DO.	4,938	10
STAMPS/TOKIO	1.90	86503R	TOKIO	CRET.	2,376	32
STEPHENS-SMART AREA/GLEN ROSE	1.99	846083	TRAVIS PEAK, TRINITY	.DO.	3,650	182
STEPHENS/BUCKRANGE	1.61	854179	BUCKRANGE, OZAN	.DO.	2,100	531
STEPHENS/GLEN ROSE	1.50					10

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
ARKANSAS - CONTINUED						
(1.01-2.00)						
STEPHENS/HOGG	1.96	B53004	HOGG, PINE ISLAND	CRET..	3,125	158
STEPHENS/SMACKOVER	1.79	B70091	SMACKOVER	JUR...	5,891	72
URBANA/NACATOCH	1.14	B38302	NACATOCH	CRET..	2,224	9
URBANA/URBANA & GREGORY	2.00	B35308	URBANA, TRAVIS PEAK	..DO..	3,630	32
WESSON/HOGG	1.43	B52024	HOGG, PINE ISLAND	..DO..	3,000	527
WESSON/LIMESTONE	1.63	B70090	SMACKOVER	JUR...	5,837	169
WESSON/NACATOCH	1.56	B65029	NACATOCH	CRET..	1,548	31
WESSON/TRAVIS PEAK	1.50	.....	.....	.....	.....	30
WOODLEY	1.94	B38296	NACATOCH	CRET..	2,180	7
(>...0)						
ARTESIAN	5.77	B65032	MEAKIN, OZAN	CRET..	2,549	31
CAMP CREEK/BLOSSOM	2.15	B65030	BLOSSOM, BROWNSTOWN	..DO..	2,584	28
CHAMPAGNOLLE LANDING	3.21	B65018	GRAVES, OZAN	..DO..	2,557	68
CHAMPAGNOLLE/GRAVES	2.79	B65035	..DO	..DO..	.....	522
CROSS COUNTRY SLOUGH/BAKER	3.11	B65026	BAKER	..DO..	2,571	19
EL DORADO E/EZZELL/SMACKOVER	3.30	B70119	SMACKOVER	JUR...	6,224	33
FALCON/NACATOCH	3.28	B39004	NACATOCH	CRET..	1,180	10
FALCON/TOKIO	2.51	B65021	TOKIO	..DO..	2,540	14
GUM CREEK/NACATOCH	2.51	B65036	NACATOCH	..DO..	1,621	20
GUM CREEK/SMACKOVER	4.24	B70095	SMACKOVER	JUR...	5,866	9
HAMPTON/MEAKIN	5.04	B65033	NACATOCH	CRET..	2,462	7
IRMA/NACATOCH	2.70	B23275	..DO	..DO..	1,140	44
LEWISVILLE WEST/TOKIO	2.23	B65027	TOKIO	..DO..	2,441	30
LICK CREEK/MEAKIN	2.92	B65016	MEAKIN, OZAN	..DO..	2,522	141
RITCHIE	2.99	B65017	BAKER	..DO..	2,595	141
SANDY BEND/NACATOCH	2.54	B65014	NACATOCH	..DO..	2,385	273
SMACKOVER/NACATOCH	2.07	B23260	CRETACEOUS	..DO..	1,940	2,821
STEPHENS NORTH/BUCKRANGE	2.30	.....	.....	.....	.....	10
TROY/OLD	2.51	B38219	TOKIO	CRET..	2,126	65
WILLISVILLE/NACATOCH	2.60	B65019	NACATOCH	..DO..	1,176	8
WINCHESTER	2.73	B65015	MEAKIN, OZAN	..DO..	2,628	12
CALIFORNIA						
SAN JOAQUIN VALLEY						
(0.00-0.50)						
ANT HILL						
JEWETT	.28	B46046	JEWETT	MIOC..	3,635	11
ASPHALTO						
STEVENS	.42	B64074	STEVENS	..DO..	5,677	1,185
BELGIAN ANTICLINE						
MAIN AREA						
POINT OF ROCKS	.41	.....	.....	.....	.....	222
BELLEVUE						
MAIN AREA						
STEVENS	.36	B46047	STEVENS	MIOC..	6,520	92
BELRIDGE NORTH						
"Y" SAND	.28	B46049	TERTIARY, Y	TERT..	8,990	13
BELRIDGE NORTH						
BELRIDGE "64"	.17	.....	.....	.....	.....	149
BELRIDGE NORTH						
CARNEROS)						
"R" SAND)	.17	B46048	WAGONWHEEL, VAQUEROS	MIOC..	8,450	23
BELRIDGE SOUTH	.23	B55146	TULARE	PLEIS.	500	9,260
CANAL						
STEVENS UPPER	.41	B39469	STEVENS	MIOC..	8,312	418
CANFIELD RANCH						
STEVENS	.37	B46051	STEVENS, 2ND	..DO..	7,859	45
COALINGA						
EASTSIDE AREA						
TEMBLOR)						
EOCENE)	.45	B01132	MIOCENE	..DO..	2,700	4,258
COALINGA EAST EXTENSION						
NOSE AREA						
EOCENE	.31	B61060	GATCHELL	EOCENE	7,443	4,750
COLES LEVEE NORTH						
RICHFIELD WESTERN AREA						
MAIN WESTERN	.39	.....	.....	.....	.....	389
COLES LEVEE SOUTH						
STEVENS (F-1, F-2)						
CRUDE OIL	.18	B39021	STEVENS	MIOC..	9,221	313
CUYAMA SOUTH						
MAIN AREA						
HOMAN	.42	B50087	DIBBLEE, VAQUEROS	..DO..	3,318	1,979
CYMRIC						
SHEEP SPRINGS AREA						
CARNEROS	.44	B46060	CARNEROS	..DO..	3,450	21
CYMRIC						
SHEEP SPRINGS AREA						
OCEANIC	.23	B46052	OCEANIC	OLIG..	4,657	6
CYMRIC						
WELPORT AREA						
OCEANIC	.23	B46052	..DO	..DO..	4,657	49
DEVILS DEN						
BATES	.14	.....	.....	.....	.....	8
EDISON						
RACE TRACK HILL AREA						
JEWETT	.22	B46056	JEWETT	MIOC..	4,705	8

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
SAN JOAQUIN VALLEY - CONTINUED						
(0.00-0.50)						
EDISON						
WEST AREA						
CHANAC-SANTA MARGARITA)						
FREEMAN-JEWETT)....	0.20	B55149	CHANAC.....	PLIO..	4,008	187
GOSFORD						
WEST AREA						
STEVENS.....	.37	.....	.....	.....	.....	14
GREELEY						
OLCESE ("12-21").....	.31	B55162	MIOCENE.....	MIOC..	11,260	286
GREELEY						
RIO BRAVO-VEDDER.....	.29	B38314	..DO.....	..DO..	11,410	285
GREELEY						
STEVENS.....	.28	B37001	..DO.....	..DO..	7,740	192
GUIJARRAL HILLS						
MAIN AREA						
GATCHELL.....	.31	.....	.....	.....	.....	17
HELM						
LANARE AREA						
EOCENE.....	.21	B42189	TERTIARY.....	TERT..	8,070	56
HELM						
LANARE AREA						
MIOCENE.....	.26	B46054	MIOCENE.....	MIOC..	6,848	51
HELM						
MAIN AREA						
EOCENE-PALEOCENE & CRETACEOUS.....	.21	.....	.....	.....	.....	56
HELM						
MAIN AREA						
MIOCENE.....	.26	.....	.....	.....	.....	322
JACALITOS						
TEMBLOR.....	.34	B43175	TEMBLOR.....	MIOC..	3,900	135
KETTLEMAN NORTH DOME						
LOWER MCADAMS (EOCENE).....	.31	.....	.....	.....	.....	111
KETTLEMAN NORTH DOME						
TEMBLOR.....	.50	B37168	TEMBLOR, 5TH.....	MIOC..	8,130	607
KETTLEMAN NORTH DOME						
UPPER MCADAMS (EOCENE).....	.31	B55137	MCADAMS.....	EOCENE	11,035	14
KETTLEMAN NORTH DOME						
VAQUEROS.....	.28	B55136	VAQUEROS.....	MIOC..	9,241	110
MOUNTAIN VIEW						
ARVIN AREA						
M.S.J.-"2" (CHANAC)						
GEORGE)....	.36	B55130	PLIOCENE + MIOCENE.....	PLIO..	5,015	63
MOUNTAIN VIEW						
MAIN AREA.....	.44	B35287	HOGAN.....	MIOC..	5,505	536
PALOMA						
MAIN AREA						
PALOMA - CRUDE OIL.....	.10	B40198	STEVENS.....	..DO..	10,001	130
PLEASANT VALLEY						
EOCENE.....	.35	B43169	EOCENE.....	EOCENE	8,542	10
RAILROAD GAP						
CARNEROS.....	.44	B69083	CARNEROS.....	MIOC..	7,243	175
RAILROAD GAP						
PHACOIDES.....	.22	B69084	PHACOIDES.....	..DO..	9,422	118
RAISIN CITY						
MIOCENE.....	.41	B42187	TEMBLOR.....	..DO..	5,087	249
RIO BRAVO						
RIO BRAVO-VEDDER-OSBORNE.....	.35	B57104	RIO BRAVO.....	..DO..	11,444	382
RIVERDALE						
EOCENE.....	.27	B42191	TERTIARY.....	TERT..	6,780	56
RIVERDALE						
MIOCENE.....	.22	B42190	MIOCENE.....	MIOC..	6,662	207
ROUND MOUNTAIN						
ROUND MOUNTAIN AREA						
JEWETT.....	.43	B37227	JEWETT.....	..DO..	1,175	88
ROUND MOUNTAIN						
ROUND MOUNTAIN AREA						
VEDDER.....	.49	B37228	VEDDER.....	..DO..	1,827	470
RUSSELL RANCH						
MAIN AREA						
DIBBLEE.....	.35	B49036	DIBBLEE, VAQUEROS.....	..DO..	2,700	411
STRAND						
MAIN AREA						
STEVENS UPPER.....	.43	B39444	STEVENS.....	..DO..	8,300	376
TEJON GRAPEVINE						
CENTRAL AREA						
"V".....	.22	B56016	VALVULINERIA.....	..DO..	4,720	19
TEJON GRAPEVINE						
CENTRAL AREA						
OLCESE.....	.33	B56011	OLCESE.....	..DO..	5,636	24
TEJON GRAPEVINE						
CENTRAL AREA						
RESERVE.....	.40	B56014	RESERVE.....	..DO..	4,427	28
TEJON GRAPEVINE						
CENTRAL AREA						
TRANSITION.....	.17	B55182	TRANSITION.....	..DO..	2,600	7
TEJON HILLS						
"S".....	.29	B55158	MIOCENE.....	..DO..	910	54
TEJON HILLS						
"V".....	.29	B50084	VALVULINERIA.....	..DO..	4,485	30
TEJON NORTH						
"J. V.".....	.16	B61019	ZEMORRIAN.....	..DO..	8,710	34
TEJON NORTH						
EOCENE.....	.24	B61020	EOCENE.....	EOCENE	10,840	76

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA [1] SULFUR CONTENT CATEGORY, AND FIELD [2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PROJUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
SAN JOAQUIN VALLEY - CONTINUED						
(0.00-0.50)						
TEN SECTION						
MAIN AREA						
STEVENS	0.37	B37002	STEVENS	MIOC..	7,763	573
TEN SECTION						
NORTHWEST AREA						
STEVENS	.37	.....	.....	.....	.....	32
WHEELER RIDGE						
CENTRAL AREA						
"424-28" (VALV)	.40	.....	.....	.....	.....	15
WHEELER RIDGE						
CENTRAL AREA						
GORDON (OLCESE)						
"2-38")	.40	B37229	MIOCENE, DEEP	MIOC..	3,170	22
WHEELER RIDGE						
CENTRAL AREA						
REFUGIAN-EOCENE	.29	B53051	EOCENE	EOCENE	9,910	661
(0.51-1.00)						
ANT HILL						
OLCESE	.65	B46045	OLCESE	MIOC..	2,304	163
ANTELOPE HILLS						
WILLIAMS AREA	.60	.....	.....	.....	.....	270
BELGIAN ANTICLINE						
MAIN AREA						
OCEANIC	.59	B53057	OCEANIC	OLIG..	5,395	176
BELRIDGE NORTH						
TEMBLOR	.69	B01102	MIOCENE	MIOC..	.....	84
BUENA VISTA						
BUENA VISTA FRONT AREA	1.00	.....	.....	.....	.....	452
BUENA VISTA						
BUENA VISTA HILLS AREA						
"27-9"	.59	B46050	ETCHEGOIN 27B	PLIO..	3,272	121
BUENA VISTA						
BUENA VISTA HILLS AREA						
UPPER	.59	B01117	.....	.....	.....	1,799
BURREL						
MIOCENE	.90	.....	.....	.....	.....	20
CANAL						
STEVENS LOWER (73U-73X)	.70	.....	.....	.....	.....	40
COALINGA						
WESTSIDE AREA						
TEMBLOR	.75	B55105	TERTIARY	TERT..	2,642	3,610
COLES LEVEE NORTH						
NORTHWEST AREA						
STEVENS	.80	.....	.....	.....	.....	7
COLES LEVEE NORTH						
RICHFIELD WESTERN AREA						
"21-1"	.66	B46069	STEVENS, 21-1	MIOC..	9,483	48
CYMRIC						
SALT CREEK MAIN AREA						
CARNEROS UNIT	.69	B46057	CARNEROS	..DO..	2,790	367
CYMRIC						
SHEEP SPRINGS AREA						
ETCHEGOIN	.86	B46053	ETCHEGOIN 54-21	PLIO..	2,810	64
EDISON						
MAIN AREA						
FRACTURED SCHIST	.57	B35285	DUFF	MIOC..	2,904	302
EDISON						
MAIN AREA						
UPPER	.68	B35286	KERN RIVER	PLEIS.	1,577	352
ELK HILLS						
MAIN AREA						
UPPER	.51	L65028	SUB-SCALEZ NO. 1	PLIO..	3,333	942
FRUITVALE						
CALLOWAY	.93	.....	.....	.....	.....	36
FRUITVALE						
MAIN AREA						
CHANAC-KERNCO	.60	B37169	KERNCO, CHANAC	PLIO..	3,754	1,068
GOSFORD						
EAST AREA						
MIDDLE & LOWER STEVENS	.57	B61058	STEVENS	MIOC..	9,464	324
GOSFORD						
EAST AREA						
UPPER STEVENS	.58	B61059	..DO	..DO..	7,548	80
GUIJARRAL HILLS						
MAIN AREA						
LEDA NORTH	.63	B49038	LEDA, KREYENHAGEN	EOCENE	8,658	9
GUIJARRAL HILLS						
MAIN AREA						
LEDA	.63	.....	.....	.....	.....	116
KERN FRONT						
MAIN	.85	B56022	CHANAC	PLIO..	1,865	3,434
LOST HILLS						
MAIN	.85	B01098	TERTIARY	TERT..	.....	2,161
MCKITTRICK						
MAIN AREA						
UPPER	.96	B61072	TULARE	PLEIS.	1,000	4,882
MIDWAY-SUNSET						
GIBSON	.88	.....	.....	.....	.....	24
MIDWAY-SUNSET						
LAKEVIEW	.75	.....	.....	.....	.....	124

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
SAN JOAQUIN VALLEY - CONTINUED						
(0.51-1.00)						
MIDWAY-SUNSET						
MARICOPA FLAT	0.73	B00474	MARICOPA	MIOC.	.....	92
MIDWAY-SUNSET						
MONARCH-"10-10"	.75	.....	.....	.....	.....	423
MIDWAY-SUNSET						
OLIG	1.00	.....	.....	.....	.....	266
MIDWAY-SUNSET						
OTHERS	.88	B45402	.....	.....	.....	31,259
MOUNT POSO						
BAKER AREA - VEDDER	.65	.....	.....	.....	.....	13
MOUNT POSO						
DOMINION AREA - VEDDER	.68	B55150	VEDDER	MIOC.	1,600	110
MOUNT POSO						
DORSEY AREA - VEDDER	.65	.....	.....	.....	.....	87
MOUNT POSO						
GRANITE CANYON AREA - VEDDER	.65	.....	.....	.....	.....	7
MOUNT POSO						
MOUNT POSO AREA						
VEDDER	.65	B37226	VEDDER	MIOC.	1,748	1,120
MOUNTAIN VIEW						
WEST ARVIN AREA						
MAIN HOUCHIN)						
NORTHWEST HOUCHIN)	.51	B39237	CHANAC	PLIO.	5,909	51
PALOMA						
SYMONS AREA						
PALOMA	.53	B55123	STEVENS	MIOC.	11,625	12
POSO CREEK						
PREMIER AREA						
MAIN	.98	B61052	ETCHEGOIN + CHANAC	PLIO.	2,400	1,613
RAISIN CITY						
TAR-MIOCENE	.70	.....	.....	.....	.....	211
ROUND MOUNTAIN						
ALMA AREA - VEDDER	.71	.....	.....	.....	.....	10
ROUND MOUNTAIN						
COFFEE CANYON AREA - VEDDER	.71	B55152	VEDDER	MIOC.	1,900	108
SAN EMIDIO NOSE						
REEF RIDGE	.83	B61018	REEF RIDGE	..DO..	11,460	79
STRAND						
MAIN AREA						
"73-X"	.54	B61087	STEVENS	..DO..	9,475	27
STRAND						
MAIN AREA						
STEVENS LOWER	.54	.....	.....	.....	.....	11
STRAND						
NORTHWEST AREA						
STEVENS UPPER)						
STEVENS LOWER)	.54	.....	.....	.....	.....	97
WHEELER RIDGE						
CENTRAL AREA						
COAL OIL CANYON	.69	B37230	MIOCENE, SHALLOW	MIOC.	2,600	51
WHEELER RIDGE						
CENTRAL AREA						
MAIN	.69	.....	.....	.....	.....	67
(1.01-2.00)						
BELRIDGE NORTH						
SHALLOW	1.14	B52033	TULARE	PLEIS.	670	93
CYMRIC						
MCKITTRICK FRONT AREA						
TULARE	1.16	B61051	..DO..	..DO..	655	1,503
CYMRIC						
WELPORT AREA						
TULARE	1.16	.....	.....	.....	.....	839
KERN RIVER						
PLIOCENE	1.19	B55121	KERN RIVER	PLEIS.	1,099	25,609
MIDWAY-SUNSET						
METSON	1.67	.....	.....	.....	.....	782
RAILROAD GAP						
AMNICOLA	1.60	B69082	AMNICOLA	PLEIS.	995	72
RAILROAD GAP						
ANTELOPE SHALE	1.18	B69081	ANTELOPE	MIOC.	6,534	56
COASTAL						
(0.00-0.50)						
CONCEPTION OFFSHORE						
SESPE EQUIVALENT	.12	B64102	ALEGRIA	OLIG.	3,011	347
ELWOOD						
VAQUEROS	.18	B30251	VAQUEROS	MIOC.	3,329	106
HONOR RANCHO						
MAIN AREA						
WAYSIDE	.40	B53058	WAYSIDE, MOHNIAN	..DO..	6,600	112
(0.51-1.00)						
ALISO CANYON						
MAIN AREA						
ALISO	.67	B39099	PICO, CYPRESS	PLIO.	5,365	135
ALISO CANYON						
MAIN AREA						
SESNON	.92	B55166	SESNON, LUISIAN	MIOC.	8,350	496

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
COASTAL - CONTINUED						
(0.51-1.00)						
BARDSDALE						
IRWIN	0.83	B01167	TERTIARY	TERT..	.....	50
CAPITAN						
VAQUEROS	.69	B38076	VAQUEROS	MIOC..	1,280	38
CASTAIC HILLS						
STERLING EAST	.51	.....	.....	.....	.....	10
CASTAIC HILLS						
STERLING	.51	B53061	STERLING, MOHNIAN	MIOC..	5,600	75
FILLMORE						
PERKINS-SPALDING	.75	B61039	PERKINS-SPALDING	PLIO..	13,765	92
NEWHALL-POTRERO						
"1-2-3"	.52	B38078	MIOCENE	MIOC..	6,385	146
NEWHALL-POTRERO						
"5TH"	.56	B55154	MODELO 5TH	..DO..	8,800	244
NEWHALL-POTRERO						
"6TH"	.56	B55155	MODELO 6TH	..DO..	9,800	70
NEWHALL-POTRERO						
"7TH"	.81	B55156	MODELO 7TH	..DO..	10,300	211
OAK CANYON						
"5-A"	.59	B46070	LECHLER, MODELO	..DO..	7,178	48
OAKRIDGE						
MIOCENE	.98	B53050	LUISIAN	..DO..	2,700	395
SAN MIGUELITO						
FIRST GRUBB	.93	B39507	PICO + REPETTO	PLIO..	6,472	377
SAN MIGUELITO						
SECOND GRUBB	.87	B55160	REPETTO	..DO..	6,022	143
SATICOY						
"F"	.94	B64070	PICO, CYPRESS	..DO..	6,454	79
SHIELLS CANYON						
MAIN AREA						
SESPE (INTERMEDIATE)	.78	B43173	SESPE	OLIG..	2,000	349
SIMI						
OLD AREA - SESPE-EOCENE	.68	B01172	EOCENE	EOCENE	500	53
SUMMERLAND OFFSHORE						
VAQUEROS	.54	B01173	.....	.....	300	651
TEMESCAL	.55	.....	.....	.....	.....	69
VENTURA						
"C" BLOCK	1.00	B55128	PLIOCENE A2 TO D8	PLIO..	4,000	2,633
(1.01-2.00)						
ARROYO GRANDE						
TIBER AREA	1.30	B01170	PISMO	MIOC..	500	68
DEL VALLE						
EAST AREA						
DEL VALLE	1.15	B55147	DEL VALLE	..DO..	6,467	26
DEL VALLE						
EAST AREA						
SHERMAN	1.14	B40197	MODELO	..DO..	5,750	11
OXNARD						
MCINNES	1.72	B61025	MCINNES, SESPE	OLIG..	6,273	265
PLACERITA						
YORK-KRAFT AREA)						
JUANITA AREA)	1.30	.....	.....	.....	.....	354
RINCON						
MAIN AREA						
C-9	1.40	B55131	PLIOCENE	PLIO..	2,000	247
RINCON						
MAIN AREA						
HOBSON-TOMSON-MILEY	1.08	B39506	HOBSON, PICO	..DO..	5,210	968
SHIELLS CANYON						
MAIN AREA						
SESPE OTHERS	1.50	.....	.....	.....	.....	43
SISAR-SILVERTHREAD	1.63	B01147	.....	.....	500	42
VENTURA						
A-3, B-3	1.18	B26335	PICO, CYPRESS	PLIO..	4,725	462
VENTURA						
B-1, B-2	1.15	B01148	TERTIARY	TERT..	3,600	21
VENTURA						
C-1, C-2 WEST	1.17	B26336	PICO, CYPRESS	PLIO..	.....	46
VENTURA						
C-3 WEST	1.20	B26337	..DO..	..DO..	4,075	845
(>2.00)						
CASMALIA						
MONTEREY	2.80	B01164	TERTIARY	TERT..	1,200	640
CASTAIC JUNCTION						
"10-A")						
"10-B")	3.40	B55125	MOHNIAN 10	MIOC..	10,640	505
CAT CANYON EAST						
OLD AREA	6.00	.....	.....	.....	.....	688
CAT CANYON EAST						
SISQUOC AREA	4.10	B01162	TERTIARY	TERT..	2,600	2,794
CAT CANYON WEST						
ALEXANDER	3.13	B70041	SISQUOC	PLIO..	.....	29
CAT CANYON WEST						
LOS FLORES	5.07	B53055	LOS FLORES, MONTEREY	MIOC..	4,612	1,328
CAT CANYON WEST						
PLIOCENE (NEW AREA)	3.83	.....	.....	.....	.....	611
CAT CANYON WEST						
PLIOCENE (OLD AREA)	3.83	B53054	SISQUOC	PLIO..	2,805	631

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
COASTAL - CONTINUED						
(>2.00)						
GATO RIDGE						
TOGNAZZINI	5.87	B69063	MONTEREY	MIOC..	2,380	664
GUADALUPE						
SISQUOC-MONTEREY	5.39	B69078	SISQUOC	PLIO..	2,550	1,703
LOMPOC						
MONTEREY	3.66	B43170	ARENACEOUS	MIOC..	2,500	521
MONTALVO WEST						
COLONIA	4.10	B61024	COLONIA, SESPE	OLIG..	11,094	827
ORCUTT						
MONTEREY-PT. SAL	2.48	B55134	POINT SAL 3RD	MIOC..	3,046	2,176
OXNARD						
MIOCENE	7.47	B46067	MIOCENE	..DO..	2,480	164
RAMONA						
KERN-DEL VALLE	2.45	B53053	KERN + DEL VALLE	..DO..	2,908	199
SAN ARDO						
AURIGNAC	2.25	B53059	AURIGNAC, MONTEREY	..DO..	2,390	2,766
SAN ARDO						
LOMBARDI	2.25	B58028	LOMBARDI, MONTEREY	..DO..	2,100	7,181
SANTA MARIA VALLEY						
CLARK AREA	4.35	.....	.....	.....	.....	686
SANTA MARIA VALLEY						
HOUK AREA	5.20	.....	.....	.....	.....	284
SANTA MARIA VALLEY						
MAIN AREA	4.62	B55112	MONTEREY	MIOC..	3,673	991
SOUTH MOUNTAIN						
MAIN AREA						
SESPE	2.79	B53049	SESPE	OLIG..	4,609	1,140
TORREY CANYON						
LOWER SESPE	2.74	B53048	..DO	..DO..	7,600	257
ZACA CREEK						
MAIN AREA	6.76	B55167	MONTEREY	MIOC..	3,367	406
LOS ANGELES						
(0.00-0.50)						
DOMINGUEZ						
UPPER 1ST EAST REYES	.40	B55139	PLIOCENE + MIOCENE	PLIO..	4,000	60
EAST LOS ANGELES	.50	.....	.....	.....	.....	103
MONTEBELLO						
WEST AREA	.28	B43030	FERNANDO	PLIO..	.....	103
POTRERO						
EAST AREA	.33	B39470	PICO, CYPRESS	..DO..	4,421	115
ROSECRANS						
HOWARD TOWNSITE AREA						
7 & 8	.48	.....	.....	.....	.....	79
SANTA FE SPRINGS						
MAIN AREA						
OTHERS	.44	B23525	MEYER	PLIO..	.....	903
SANTA FE SPRINGS						
MAIN AREA						
SANTA FE	.26	B30254	CLARK	MIOC..	8,060	38
(0.51-1.00)						
BELMONT OFFSHORE						
OLD AREA						
LOWER	.90	B64095	MIOCENE, DEEP	MIOC..	5,810	236
BELMONT OFFSHORE						
SURFSIDE AREA	.90	B64095	..DO	..DO..	5,810	2,286
BREA-OLINDA						
BREA AREA						
OTHERS	.75	B55177	MIOCENE	..DO..	3,390	1,038
BREA-OLINDA						
TONNER AREA	.75	.....	.....	.....	.....	1,187
CHEVIOT HILLS						
MIOCENE UNDIFFERENTIATED	.53	B64113	MIOCENE, 8	MIOC..	9,000	493
CHEVIOT HILLS						
PLIOCENE	.87	B69044	DELMONTIAN 8+MODELO	..DO..	9,057	20
COYOTE EAST						
ANAHEIM	.95	B57092	REPETTO	PLIO..	3,950	388
COYOTE WEST						
EAST AREA						
"138"	.82	B55164	EMERY, REPETTO	..DO..	4,900	39
COYOTE WEST						
WEST AREA						
EMERY	.82	B55164	..DO	..DO..	4,900	267
DOMINGUEZ						
1ST EAST CENTRAL	.93	.....	.....	.....	.....	46
DOMINGUEZ						
1ST EAST UNIT	.93	.....	.....	.....	.....	86
DOMINGUEZ						
3RD, 4TH, & 5TH SOUTHEAST CENTRAL	.96	B55176	TERTIARY 5TH	TERT..	5,871	192
DOMINGUEZ						
3RD, 4TH, & 5TH WEST	.96	.....	.....	.....	.....	8
DOMINGUEZ						
4TH & 5TH MIDDLE EAST CENTRAL	.96	.....	.....	.....	.....	9
INGLEWOOD						
SENTOUS	1.00	.....	.....	.....	.....	88
LAS CIENEGAS						
JEFFERSON	.58	B64061	MIOCENE	MIOC..	2,300	820
LAS CIENEGAS						
MURPHY	.58	.....	.....	.....	.....	847

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
LOS ANGELES - CONTINUED						
(0.51-1.00)						
MONTEBELLO						
MAIN AREA						
BALDWIN "1-2-3"	0.75	B43028	BALDWIN, FERNANDO	PLIO..	.....	623
ROSECRANS						
ATHENS AREA						
UPPER	.53	R26330	TERTIARY	TERT..	4,500	13
ROSECRANS						
MAIN AREA						
MAXWELL-HOGE	.52	.....	.....	.....	.....	55
ROSECRANS						
MAIN AREA						
PADELFORD	.53	.....	.....	.....	.....	20
ROSECRANS						
MAIN AREA						
ZINS	.52	.....	.....	.....	.....	87
SANSINENA						
EAST AREA						
MIOCENE "A-10"						
BLOCKS I & II	.52	R55180	ZINS	PLIO..	5,720	16
SEAL BEACH						
NORTH BLOCK						
MCGRATH	.55	B55142	MCGRATH	MIOC..	8,500	521
SEAL BEACH						
NORTH BLOCK-EAST EXTENSION						
MCGRATH	.55	.....	.....	.....	.....	100
SEAL BEACH						
SOUTH BLOCK						
MCGRATH	.55	.....	.....	.....	.....	312
WHITTIER						
MAIN	.53	B64060	WHITTIER, REPETTO	PLIO..	2,500	556
(1.01-2.00)						
BREA-OLINDA						
BREA AREA						
MIOCENE "D"	1.43	B01136	TERTIARY	TERT..	.....	104
COYOTE EAST						
HUALDE	1.80	.....	.....	.....	.....	53
COYOTE EAST						
STERN	1.44	.....	.....	.....	.....	350
COYOTE WEST						
EAST AREA						
EMERY	1.21	B43033	PLIOCENE	PLIO..	.....	151
COYOTE WEST						
EAST AREA						
MAIN)						
"99" UPPER)	1.60	.....	.....	.....	.....	464
COYOTE WEST						
WEST AREA						
B-4, B-5	1.46	B01143	TERTIARY	TERT..	3,200	57
COYOTE WEST						
WEST AREA						
MAIN)						
"99" UPPER)						
"99" LOWER)	1.21	B43033	PLIOCENE	PLIO..	.....	1,422
HUNTINGTON BEACH						
HUNTINGTON AVENUE AREA						
JONES	1.46	R55141	JONES, MODELO	MIOC..	4,300	231
HUNTINGTON BEACH						
HUNTINGTON AVENUE AREA						
MAIN	1.29	B23515	PLIOCENE	PLIO..	5,000	7
HUNTINGTON BEACH						
NORTH AREA						
ASHTON	1.26	B43026	FERNANDO	..DO..	.....	2,311
HUNTINGTON BEACH						
NORTH AREA						
TAR BOLSA	2.00	B23517	PLIOCENE	..DO..	2,750	300
HUNTINGTON BEACH						
SOUTH AREA (OFFSHORE)						
JONES	1.57	B58014	TERTIARY	TERT..	.....	5,151
HUNTINGTON BEACH						
SOUTH AREA (OFFSHORE)						
UPPER MAIN)						
MAIN)	1.29	.....	.....	.....	.....	6,447
HUNTINGTON BEACH						
SOUTH AREA (ONSHORE)						
"A-37"	1.60	.....	.....	.....	.....	606
HUNTINGTON BEACH						
SOUTH AREA (ONSHORE)						
JONES	1.42	B69088	JONES AE-AK	MIOC..	2,635	351
HUNTINGTON BEACH						
SOUTH AREA (ONSHORE)						
MAIN	1.57	B58014	TERTIARY	TERT..	.....	140
INGLEWOOD						
RINDGE	1.67	B43029	PLIOCENE	PLIO..	.....	483
LAWNDALE						
JOHNSON	1.40	.....	.....	.....	.....	11
LONG BEACH						
NORTHWEST EXTENSION AREA	1.34	B23521	TERTIARY	TERT..	4,769	82
LONG BEACH						
OLD AREA						
UPPER POOLS	1.34	.....	.....	.....	.....	2,823

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
LOS ANGELES - CONTINUED						
(1.01-2.00)						
POTRERO						
INGLEWOOD CITY AREA	2.00	.....	.....	.....	.....	16
RICHFIELD						
EAST AREA	1.60	B01141	MIOCENE	MIOC..	3,800	1,045
RICHFIELD						
WEST AREA	1.86	B55163	KRAEMER	..DO..	4,100	867
SAWTELLE						
MIOCENE	1.53	B69047	PUENTE	..DO..	9,078	750
SEAL BEACH						
SOUTH BLOCK						
BIXBY-SELOVER	1.23	B26328	REPETTO	PLIO..	4,570	28
TORRANCE						
DEL AMO	1.84	B55126	DEL AMO, PUENTE	MIOC..	3,100	265
TORRANCE						
MAIN	1.62	B01135	.....	.....	.....	1,091
WHITTIER						
184 ANTICLINE						
TM8-184 ZONE	1.20	.....	.....	.....	.....	120
WHITTIER						
184 ANTICLINE						
6TH ZONE	1.20	.....	.....	.....	.....	146
WILMINGTON						
HARBOR AREA						
FAULT BLOCK IV						
RANGER	1.42	B66102	REPETTO	PLIO..	.....	1,655
WILMINGTON						
HARBOR AREA						
FAULT BLOCK IV						
TAR	1.14	B66094	..DO.....	..DO..	.....	484
WILMINGTON						
HARBOR AREA						
FAULT BLOCK V						
TAR	1.68	B66095	..DO.....	..DO..	.....	1,118
WILMINGTON						
HARBOR AREA						
FAULT BLOCK V-B						
UPPER TERMINAL	1.44	.....	.....	.....	.....	1,237
WILMINGTON						
HARBOR AREA						
FAULT BLOCK VI						
LOWER TERMINAL	1.44	.....	.....	.....	.....	321
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK II-A						
RANGER	1.24	B37167	TERMINAL, PUENTE	MIOC..	3,109	493
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK II-A						
TAR	1.33	B66091	REPETTO	PLIO..	.....	443
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK II-B						
RANGER	1.40	B54056	TERMINAL HX, PUENTE	MIOC..	2,981	182
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK II-B						
TAR	1.36	B66092	REPETTO	PLIO..	.....	94
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK II-B						
UPPER TERMINAL	1.38	B49005	TERMINAL, PUENTE	MIOC..	3,143	475
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK III						
TAR	1.58	B66093	REPETTO	PLIO..	.....	372
YORBA LINDA						
MAIN (SMITH)	1.68	B61057	SMITH, REPETTO	..DO..	2,181	167
YORBA LINDA						
SHALLOW	1.86	B61055	PLEISTOCENE SHALLOW	PLEIS.	260	3,133
YORBA LINDA						
SHELL	1.99	B61056	SHELL, REPETTO	PLIO..	1,994	142
(>2.00)						
BEVERLY HILLS						
EAST AREA						
PLIOCENE	2.45	B69043	DELMONTIAN<MOHNIAN<MOD..	MIOC..	5,780	2,189
EL SEGUNDO						
MAIN AREA)						
WEST AREA)	4.33	B38049	COMPOSITE	..DO..	7,462	44
HUNTINGTON BEACH						
NORTH AREA						
MAIN ("C")	2.07	B23526	TERTIARY	TERT..	4,200	12
HUNTINGTON BEACH						
SOUTH AREA (ONSHORE)						
TAR ZONE	2.22	B23516	PLIOCENE	PLIO..	2,400	877
INGLEWOOD						
VICKERS	2.50	B55140	VICKERS	..DO..	2,300	2,305
NEWPORT WEST						
ALDRICH AREA						
"B"	2.59	B55143	NEWPORT, MODELO	MIOC..	4,921	30
NEWPORT WEST						
MAIN AREA	3.08	B55144	..DO.....	..DO..	2,275	1,140

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
CALIFORNIA - CONTINUED						
LOS ANGELES - CONTINUED						
(>2.00)						
NEWPORT WEST						
OFFSHORE AREA	2.59	B55143	NEWPORT, MODELO	MIOC..	4,921	150
NEWPORT WEST						
SURF AREA						
EAST BLOCK	3.27	.....	.....	.....	.....	19
PLAYA DEL REY						
DEL REY HILLS AREA	2.60	B30255	MIOCENE	MIOC..	6,126	86
PLAYA DEL REY						
VENICE AREA	3.50	.....	.....	.....	.....	85
SALT LAKE						
PLIOCENE)						
MIOCENE)	2.73	R01145	TERTIARY	TERT..	900	357
WILMINGTON						
EAST AREA						
FAULT BLOCK V						
TAR	2.07	R66098	REPETTO	PLIO..	.....	6
WILMINGTON						
TERMINAL AREA						
FAULT BLOCK I						
TAR-RANGER-TERMINAL	2.47	B37166	TERMINAL, PUENTE	MIOC..	3,190	926
COLORADO						
(0.00-0.50)						
ABBOTT/J SAND	.24	L54218	J	CRET..	4,804	20
ADENA/J SAND	.06	L54219	..DO	..DO..	5,555	201
AKRON EAST/D SAND	.13	L56225	D	..DO..	4,534	194
BADGER CREEK/D SAND	.13	L56133	..DO	..DO..	5,460	10
BATTLESHIP/DAKOTA	.22	L60207	DAKOTA	..DO..	4,561	13
BEALL CREEK/J SAND	.10	L54211	J	..DO..	4,933	21
BIG BEAVER/J SAND	.10	L54224	..DO	..DO..	4,988	198
BIJOU WEST/D SAND	.10	L60138	D	..DO..	6,196	5
BOBCAT	.09	L54225	..DO	..DO..	5,150	35
BRANDON/LANSING-KC	.16	L67204	MISSISSIPPIAN	MISS..	4,617	5
BUCK PEAK/MANCOS	.07	L60210	NIOBRARA	CRET..	6,216	56
CACHE/ISMAY	.09	L66024	ISMAY	PENN..	5,572	95
CEDAR CREEK NORTH/D SAND	.09	L56215	D	CRET..	4,962	8
CLARK LAKE/D SAND	.19	L50273	MUDDY	..DO..	5,850	35
CLIFF	.12	L55369	D	..DO..	5,512	43
DALE/J SAND	.12	L56220	..DO	..DO..	4,663	5
DANFORTH HILLS NORTH	.47	L67118	MORRISON + ENTRADA	JUR...	6,430	11
DANFORTH HILLS/MORRISON	.24	L68009	DAKOTA	CRET..	6,072	25
DARBY CREEK	.09	L56212	D	..DO..	4,814	15
DIVIDE/D SAND	.13	L55372	..DO	..DO..	4,721	38
DUNE RIDGE/D SAND	.11	L55373	..DO	..DO..	4,474	11
FLODINE PARK ISMAY	.05	L67100	ISMAY	PENN..	5,862	74
FLORENCE-CANYON CITY/PIERRE	.32	L52163	PIERRE	CRET..	2,995	21
FT COLLINS/MUDDY-DAKOTA	.17	L50265	MUDDY + DAKOTA	..DO..	4,500	15
GRAYLIN NW/D SAND	.09	L51281	D	..DO..	4,901	92
HARDWAY/D SAND	.16	L56226	..DO	..DO..	4,506	26
HIAWATHA	.21	L36003	WASATCH	EOCENE	2,280	23
JOHNSON HILL NORTH	.16	L56164	J	CRET..	5,402	22
KEOTA	.08	L51309	..DO	..DO..	7,322	6
LEWIS CREEK/J SAND	.10	L56209	..DO	..DO..	5,367	7
LITTLE BEAVER E/D SAND	.17	L55295	D	..DO..	5,080	13
LITTLE BEAVER/D SAND	.08	L52174	..DO	..DO..	5,252	95
MAUDLIN GULCH/MORRISON & SUNDANCE	.50	L67116	DAKOTA	..DO..	6,186	124
MAY/J SAND	.14	L56168	J	..DO..	6,443	11
MCCALLUM/MORRISON	.04	L43041	DAKOTA	..DO..	4,980	20
MERINO/J SAND	.04	L51286	J	..DO..	5,095	35
MESSEX	.08	L51289	..DO	..DO..	5,072	6
MIDDLEMIST/J SAND	.10	L55448	..DO	..DO..	5,522	29
MINTO/J SAND	.09	L56223	..DO	..DO..	4,836	41
MOFFAT	.29	L39009	SUNDANCE	JUR...	4,749	14
MOUNT HOPE	.09	L51285	D	CRET..	4,859	83
NINE MILE/DAKOTA	.06	L67115	DAKOTA	..DO..	7,266	69
NOONEN RANCH J	.04	L52079	J	..DO..	6,240	9
PAWNEE CREEK/J SAND	.05	L52076	..DO	..DO..	4,965	45
PEETZ WEST/J SAND	.11	L52181	..DO	..DO..	5,306	18
PLUM BUSH CREEK/J SAND	.20	L55297	..DO	..DO..	4,972	172
POWDER WASH/FT UNION	.11	L36018	WASATCH,LOWER	EOCENE	5,032	132
PRICE-GRAMPS/DAKOTA-MORRISON	.23	L54038	MORRISON	JUR...	1,323	52
SAND RIVER/D SAND	.13	L54231	D	CRET..	5,160	35
SPRINGDALE SOUTH/J SAND	.07	L52077	J	..DO..	4,870	16
TOW CREEK/NIOBRARA	.20	L49252	MANCOS	..DO..	2,740	15
TOWAOC PARADOX	.08	L60209	PARADOX	PENN..	5,712	9
TREND	.10	L60133	D	CRET..	6,181	5
WALKER/J SAND	.13	L51290	J	..DO..	4,927	18
WELLINGTON	.25	L50266	MUDDY	..DO..	4,400	68
WILSON CREEK	.12	L49257	MORRISON	JUR...	6,664	2,202
WOODROW SOUTH/D SAND	.10	L55299	D	CRET..	4,914	10
XENIA WEST	.08	L55419	J	..DO..	4,808	43
YENTER	.09	L51284	..DO	..DO..	5,176	82
(0.51-1.00)						
BLACK HOLLOW/LYONS	.53	L54035	LYONS	PERM..	8,918	204
ILES/SUNDANCE	.57	L39012	SUNDANCE	JUR...	3,240	107
RANGELY/MANCOS	.70	L54111	.....	.....	.....	184
RANGLEY/WEBER	.70	L45085	.....	.....	.....	10,041

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
FLORIDA						
(>2.00)						
SUNNILAND	3.95	B43167	CRETACEOUS	CRET..	11,613	671
ILLINOIS						
(0.00-0.50)						
ADEN CONSOL	.11	B39490	MCCLOSKY	MISS..	3,325	244
AKIN	.14	B42049	CYPRESS	..DO..	2,839	35
ALBION CONSOL	.18	B54035	MCCLOSKY	..DO..	3,101	451
ALBION EAST	.14	.....	.....	.....	.....	45
BARNHILL	.17	B39489	MCCLOSKY	MISS..	3,371	36
BARTELSO	.20	.....	.....	.....	.....	6
BEAVER CREEK	.25	.....	.....	.....	.....	5
BELLE PRAIRIE	.12	.....	.....	.....	.....	30
BENTON NORTH	.15	.....	.....	.....	.....	95
BENTON	.16	B45020	TAR SPRINGS	MISS..	.....	138
BONE GAP CONSOL	.33	.....	.....	.....	.....	21
BOYD	.14	B44126	BENOIST	MISS..	2,024	23
BROWNS	.18	.....	.....	.....	.....	39
BUNGAY CONSOL	.35	B66123	AUX VASES	MISS..	3,315	148
CALHOUN CONSOL	.15	B46124	MCCLOSKY	..DO..	3,143	16
CENTERVILLE EAST	.20	.....	.....	.....	.....	109
CENTRALIA	.19	B45018	CHESTER	MISS..	.....	394
CLAY CITY CONSOL	.19	B58022	MISSISSIPPIAN	..DO..	2,174	4,658
COIL	.13	B42059	AUX VASES	..DO..	2,897	234
CONCORD CONSOL	.15	B42063	..DO	..DO..	2,901	33
COOKS MILL CONSOL	.43	B57062	ROSICLARE	..DO..	1,798	18
CORDES	.12	B39492	BENOIST	..DO..	1,250	92
COVINGTON SOUTH	.18	.....	.....	.....	.....	13
DALE CONSOL	.15	B57063	AUX VASES	MISS..	3,013	1,135
DIVIDE CONSOL	.21	B46125	MCCLOSKY	..DO..	2,752	294
DUBOIS CONSOL	.26	.....	.....	.....	.....	85
ELDORADO CONSOL	.14	.....	.....	.....	.....	377
FAIRMAN	.27	.....	.....	.....	.....	13
GOLDEN GATE CONSOL	.15	B63265	OMARA	MISS..	3,295	167
HERALD CONSOL	.22	B57064	AUX VASES	..DO..	3,061	253
INMAN EAST CONSOL	.21	B57065	..DO	..DO..	2,755	101
INMAN WEST CONSOL	.19	.....	.....	.....	.....	233
IOLA CONSOL	.14	.....	.....	.....	.....	304
IRVINGTON	.27	.....	.....	.....	.....	146
JOHNSONVILLE CONSOL	.18	B45017	AUX VASES + MCCLOSKY	MISS..	.....	911
JUNCTION	.21	B39472	WALTERSBURG	..DO..	1,757	6
KENNER	.22	.....	.....	.....	.....	23
KINCAID CONSOL	.28	B57067	HIBBARD	DEV...	1,809	38
KING	.17	.....	.....	.....	.....	28
LANCASTER	.28	.....	.....	.....	.....	75
LAWRENCE COUNTY DIVISION	.35	B29649	MCCLOSKY	MISS..	1,691	4,394
LOUDEN	.26	B45036	BETHEL	..DO..	1,550	4,310
MAIN CONSOL	.20	B57072	ROBINSON	PENN..	912	1,979
MARINE	.29	B47033	DEVONIAN + SILURIAN	DEV...	1,727	48
MARKHAM CITY NORTH	.24	B47032	MCCLOSKY	MISS..	3,052	13
MARKHAM CITY	.08	.....	.....	.....	.....	20
MATTOON	.21	B47034	ROSICLARE	MISS..	1,987	279
MILL SHOALS	.10	B39479	AUX VASES	..DO..	3,235	175
MT AUBURN CONSOL	.28	.....	.....	.....	.....	74
MT CARMEL	.17	B42100	CYPRESS	MISS..	2,000	391
NEW HARMONY CONSOL	.22	B39476	..DO	..DO..	2,440	2,625
NEW HAVEN CONSOL	.27	.....	.....	.....	.....	47
OLNEY CONSOL	.17	B39488	MCCLOSKY	MISS..	3,066	71
OMAHA	.24	.....	.....	.....	.....	152
PARKERSBURG CONSOL	.34	B42102	MCCLOSKY	MISS..	3,100	10
PATOKA EAST	.16	.....	.....	.....	.....	80
PATOKA	.16	B37238	BENOIST	MISS..	1,378	74
PHILLIPSTOWN CONSOL	.23	B39501	MCCLOSKY	..DO..	3,083	764
POSEY	.18	.....	.....	.....	.....	60
ROLAND CONSOL	.19	B57073	AUX VASES	MISS..	2,896	1,616
SAILOR SPRINGS CONSOL	.18	B63260	CYPRESS	..DO..	2,578	1,270
SAINT FRANCISVILLE EAST	.21	.....	.....	.....	.....	11
SAINT JACOB	.23	.....	.....	.....	.....	48
SAINT JAMES	.20	B46127	CYPRESS	MISS..	2,010	273
SAINT PAUL	.23	.....	.....	.....	.....	15
SALEM CONSOL	.17	B57074	AUX VASES	MISS..	1,786	3,424
SCHNELL	.19	.....	.....	.....	.....	8
SESSER CONSOL	.17	.....	.....	.....	.....	97
STE MARIE	.14	.....	.....	.....	.....	44
STEWARDSON	.18	.....	.....	.....	.....	29
STORMS CONSOL	.30	B66128	CYPRESS	MISS..	2,665	484
TAMAROA	.12	.....	.....	.....	.....	8
THOMPSONVILLE	.16	.....	.....	.....	.....	9
TONTI	.17	B39486	MCCLOSKY	MISS..	2,128	69
WALPOLE	.27	B66129	TAR SPRINGS	..DO..	2,480	33
WEST FRANKFORT CONSOL	.13	.....	.....	.....	.....	84
WHITTINGTON	.24	.....	.....	.....	.....	73
WOBURN CONSOL	.20	.....	.....	.....	.....	32
WOODLAWN	.15	B42119	BENOIST	MISS..	1,970	138
(0.51-1.00)						
COLMAR-PLYMOUTH	.57	B35135	HOING	DEV...	489	42
DUPO	.70	.....	.....	.....	.....	17

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
INDIANA						
(0.00-0.50)						
DOODS BRIDGE NEW	0.46	B42211	DEVONIAN	DEV...	2,397	23
GRIFFIN CONSOL	.20	B57103	CYPRESS	MISS...	2,473	1,317
HEUSLER CONSOL	.28	B42171	WALTERSBURG	..DO..	1,801	273
MT VERNON CONSOL	.28	B42170	MANSFIELD	PENN..	1,273	237
OWENSVILLE CONSOL	.18	B62140	CYPRESS + BETHEL	MISS...	1,941	71
OWENSVILLE NORTH CONSOL	.17	B62139	..DO..	..DO..	1,951	27
SPRINGFIELD CONSOL	.30	B6108B	PENNSYLVANIAN	PENN..	1,150	402
UNION-BOWMAN CONSOL	.21	B42226	HARDINSBURG	MISS...	1,347	424
(0.51-1.00)						
SIOSI	.69	B34068	NIAGARAN	SIL...	2,110	35
KANSAS						
(0.00-0.50)						
ALAMEDA	.11	B63270	VIOLA + SIMPSON	ORD...	.....	416
ARNOLD	.21	B44024	MISSISSIPPIAN	MISS...	4,529	16
ASH CREEK SOUTHWEST	.40	B50004	ARBUCKLE	ORD...	3,803	11
AUGUSTA	.48	B40219	..DO..	..DO..	2,502	208
BAUM	.38	B42054	LANSING-KANSAS CITY	PENN..	3,069	7
BLANKENSHIP	.30	B00592	PENNSYLVANIAN	..DO..	.....	248
BLOOMER	.24	B35002	KANSAS CITY	..DO..	3,100	318
BROWNING	.20	B41007	BARTLESVILLE	..DO..	.....	35
BURDEN	.19	B35142	BURBANK	..DO..	2,923	111
BURKETT	.24	B25205	BARTLESVILLE	..DO..	.....	57
CALDWELL	.09	B41059	WILCOX, SIMPSON	ORD...	4,750	8
CHASE-SILICA	.44	B60012	KANSAS CITY	PENN..	3,071	1,576
CHEYENNE VIEW	.30	B50042	ARBUCKLE	ORD...	3,346	146
CHITWOOD	.44	B47022	SIMPSON	..DO..	4,370	21
CROWTHER	.41	B42231	.....	.....	2,778	32
DAVIS RANCH	.42	B50075	VIOLA	ORD...	3,201	431
DEICHMAN	.18	B58020	BARTLESVILLE	PENN..	2,800	8
DEMALORIE-SOUDER	.18	B41064	..DO..	..DO..	2,240	91
DREILING	.50	B50076	ARBUCKLE	ORD...	3,367	14
EASTMAN	.19	B41026	BARTLESVILLE	PENN..	.....	25
EL DORADO	.23	B40213	LANSING	..DO..	1,615	1,488
ELBING	.29	B00589	.....	.....	.....	157
EUBANK	.35	B65132	LANSING	PENN..	5,363	414
FAIRPORT	.37	B61082	LANSING-KANSAS CITY	..DO..	3,194	720
FANKHOUSER	.19	B41019	BARTLESVILLE	..DO..	1,850	33
FLORENCE	.23	B00590	.....	.....	.....	10
FOX-BUSH-COUCH	.20	B35206	BURBANK	PENN..	2,782	55
FROG HOLLOW	.18	B41170	BARTLESVILLE	..DO..	.....	46
GARDEN-REYNOLDS-SCHAFFER	.32	B35211	VIOLA	ORD...	3,149	67
GATES	.33	B67146	..DO..	..DO..	3,552	295
GENESEO-EDWARDS	.47	B35073	ARBUCKLE	..DO..	3,130	689
GEUDA SPRINGS	.30	B58025	BARTLESVILLE	PENN..	3,411	23
GLADYS	.12	B61003	MISSISSIPPIAN	MISS...	3,180	283
GOODRICH	.41	B35124	DEVONIAN	DEV...	3,038	62
GRABER	.16	B35082	HUNTON	..DO..	3,310	52
GRAHAM	.12	B35132	KANSAS CITY	PENN..	2,541	94
HALL-GURNEY	.41	B59193	LANSING-KANSAS CITY	..DO..	2,952	2,438
HANSTON-OPPY	.21	B64049	MISSISSIPPIAN	MISS...	4,413	358
HAZEL	.33	B42206	ARBUCKLE	ORD...	3,692	26
HAZLETT	.13	B35254	MISSISSIPPIAN	MISS...	2,470	41
HEIKEN	.30	B35007	ARBUCKLE	ORD...	3,244	24
HOLLOW-NIKKEL	.12	B35084	HUNTON	DEV...	3,505	247
HUFFSTUTTER	.27	B67093	LANSING-KANSAS CITY	PENN..	3,400	471
INTERSTATE	.09	B60033	.....	.....	.....	1,553
IUKA-CARMI	.41	B54100	SIMPSON	ORD...	4,300	435
JOHN CREEK	.39	B67155	VIOLA	..DO..	3,079	263
KEIGHLEY	.20	B35215	BURBANK	PENN..	2,632	132
KRAFT-PRUSA	.27	B46118	.....	.....	3,341	1,130
KRAMER-STERN	.34	B35216	VIOLA	ORD...	3,079	189
LAMONT	.20	B41016	BARTLESVILLE	PENN..	.....	14
LATON	.36	B66014	LANSING-KANSAS CITY	..DO..	3,097	305
LEON	.19	B35208	BURBANK	..DO..	2,700	48
LINDSBORG	.46	B42209	SIMPSON	ORD...	3,451	116
NOVINGER	.10	B69046	MARMATON	PENN..	5,280	167
ORTH	.35	B41367	GRANITE WASH	ORD...	3,150	31
OTIS-ALBERT	.39	B42107	REAGAN	CAMB..	3,561	140
OXFORD	.22	B35271	ARBUCKLE	ORD...	2,801	36
PADGETT	.18	B41049	..DO..	..DO..	3,460	79
PARKER	.38	B50053	LANSING	PENN..	3,070	11
PAWNEE ROCK	.34	B42116	ARBUCKLE	ORD...	3,667	152
PEABODY	.25	B35305	VIOLA	..DO..	2,504	39
PIERCE	.11	B35255	MISSISSIPPIAN	MISS...	2,585	48
POLHAMUS	.20	B41012	BARTLESVILLE	PENN..	2,170	21
POTWIN	.12	B35253	POTWIN	MISS...	2,756	79
QUINCY	.18	B41040	BARTLESVILLE	PENN..	1,436	96
RAHN	.21	B41169	..DO..	..DO..	2,910	33
RAINBOW BEND	.18	B41172	..DO..	..DO..	3,200	98
RICHARDSON	.31	B35072	ARBUCKLE	ORD...	3,550	181
RINGWALD	.32	B50108	LANSING	PENN..	2,859	46
RITZ-CANTON	.50	B35010	MISSISSIPPIAN	MISS...	2,915	603
ROCK	.23	B58026	BARTLESVILLE	PENN..	2,820	105
ROXBURY	.39	B42232	.....	.....	2,658	36
RUSSELL	.45	B36013	ARBUCKLE	ORD...	3,276	136
SALLYARDS	.22	B56003	BARTLESVILLE	PENN..	2,450	149
SCOTT	.19	B41005	..DO..	..DO..	.....	32
SEELEY-WICK	.21	B41008	..DO..	..DO..	1,700	237
SLICK-CARSON	.20	B35129	ARBUCKLE	ORD...	3,462	8

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
KANSAS - CONTINUED						
(0.00-0.50)						
SMITH	0.12	R35140	BURBANK	PENN..	3,107	47
SMOCK-SLUSS	.21	R35207	..DO	..DO..	2,750	50
SNOWDEN-MCSWEENY	.19	R35218	MISSISSIPPIAN	MISS..	2,877	15
STOLTENBERG	.27	R41366	ARBUCKLE	ORD...	3,302	318
TEETER	.20	R65130	BARTLESVILLE	PENN..	.....	133
THRALL-AAGARD	.18	R41068	..DO	..DO..	2,300	192
TRAPP	.41	R41365	ARBUCKLE	ORD...	3,282	1,902
TRICO	.50	R66018	..DO	..DO..	.....	397
UNGER	.19	R60026	HUNTON	DEV...	2,835	95
VALLEY CENTER	.49	R35092	KANSAS CITY	PENN..	2,601	51
VIRGIL	.19	R41053	BARTLESVILLE	..DO..	.....	127
WICHITA	.36	R67095	VIOLA	ORD...	3,330	54
WIGGINS	.17	R41023	BARTLESVILLE	PENN..	1,860	9
WILBURTON	.13	R65127	MORROW G	..DO..	5,082	563
WINFIELD	.23	R00584	.....	.....	1,450	47
YOUNG	.47	R35214	KANSAS CITY	PENN..	2,167	56
ZENITH-PEACE CREEK	.33	R41359	VIOLA	ORD...	3,719	145
(0.51-1.00)						
BARRY	.55	R69049	LANSING-KANSAS CITY	PENN..	3,196	245
BEMIS-SHUTTS	.57	R58157	ARBUCKLE	ORD...	3,592	2,520
BURTON-HAURY	.53	R36190	MISSISSIPPIAN	MISS..	3,248	1,017
COOPER	.51	R67090	ARBUCKLE	ORD...	3,861	360
CUNNINGHAM	.53	R35075	LANSING	PENN..	3,389	77
EULERT	.74	R50057	ARBUCKLE	ORD...	3,267	83
GORHAM	.55	R61080	..DO	..DO..	3,299	667
HAYDEN	.69	R50054	..DO	..DO..	3,470	8
KISMET	.53	R64042	MORROW	PENN..	5,613	231
MARCOTTE	.77	R61084	ARBUCKLE	ORD...	3,757	695
MOREL	.67	R46119	..DO	..DO..	3,711	610
NORTHAMPTON	.75	R67144	..DO	..DO..	3,823	143
NORTON	.65	R67122	..DO	..DO..	3,769	243
PLEASANT PRAIRIE	.70	R58009	MISSISSIPPIAN	MISS..	5,054	627
RAY	.53	R61006	ARBUCKLE	ORD...	3,556	961
SHALLOW WATER	.77	R45104	MISSISSIPPIAN	MISS..	4,587	9
SPIVEY-GRABS-BASIL	.93	R61007	..DO	..DO..	4,472	1,624
SUGARLOAF SOUTHEAST	.57	R67138	ARBUCKLE	ORD...	3,506	157
WELCH-BORNHOLDT	.58	R54025	MISSISSIPPIAN	MISS..	3,534	261
WHERRY	.61	R35078	..DO	..DO..	3,383	245
ZURICH	.78	R44041	ARBUCKLE	ORD...	3,623	10
(1.01-2.00)						
RHODES	1.04	R60009	MISSISSIPPIAN	MISS..	4,600	221
KENTUCKY						
(0.00-0.50)						
APEX CONSOL	.31	R61068	JACKSON + BETHEL	MISS..	700	94
BIRK CITY CONSOL	.35	R47013	MCCLOSKY	..DO..	1,896	142
CLEOPATRA CONSOL	.37	R43148	RENOIST	..DO..	1,833	41
DIXIE WEST	.14	R63264	TRADEWATER A	PENN..	924	274
HITESVILLE CONSOL	.44	R47012	CYPRESS	MISS..	2,317	290
POOLE CONSOL	.26	R47001	JETT, TAR SPRINGS	..DO..	1,814	502
SMITH MILLS CONSOL	.40	R47014	CYPRESS	..DO..	2,288	110
SMITH MILLS NORTH	.40	R47014	..DO	..DO..	2,288	166
UNIONTOWN CONSOL	.27	R47007	WALTERSBURG	..DO..	1,792	180
WHITESVILLE CONSOL	.44	R47012	CYPRESS	..DO..	2,317	9
LOUISIANA NORTH						
(0.00-0.50)						
ADA	.47	R72004	RODESSA	CRET..	5,863	117
ANTIOCH	.29	R71016	COTTON VALLEY	JUR...	8,970	13
ATHENS HOSSTON	.16	R71021	HOSSTON	CRET..	7,452	8
BIG ISLAND, NORTH	.08	R68108	WILCOX	EOCENE	4,798	1,148
BLACK LAKE	.14	R68093	PETTIT, SLIGO	CRET..	7,979	3,248
CADDO - PINE ISLAND	.25	R35094	ANNONA, TAYLOR	..DO..	1,550	3,487
CARTERVILLE NORTH	.23	R71015	TOKIO	..DO..	3,080	46
COLGRADE	.30	R61076	WILCOX	EOCENE	1,310	505
COLQUITT NORTHWEST	.18	R72051	COTTON VALLEY	JUR...	.....	153
COLQUITT	.07	R61077	SMACKOVER B	..DO..	10,308	372
CONVERSE	.13	R34016	ANNONA, TAYLOR	CRET..	1,955	83
COTTON VALLEY	.09	R39080	HOLLOWAY, TRAVIS PEAK	..DO..	5,810	402
DELHI HOLT BRYANT	.09	R59153	TUSCALOOSA	..DO..	3,342	5,472
DELHI MAY EQUIVALENT	.19	R53043	PALUXY, TRINITY	..DO..	3,343	120
DELHI MENGEL	.19	R53043	..DO	..DO..	3,343	99
DELHI, SOUTH	.09	R59153	TUSCALOOSA	..DO..	3,342	194
DIXIE	.22	R35098	TOKIO	..DO..	2,388	10
ESPERANCE POINT	.04	R60031	WILCOX	EOCENE	6,549	488
GREENWOOD-WASKOM	.21	R60014	NACATOCH	CRET..	1,110	593
HICO-KNOWLES	.09	R54031	BODCAW, COTTON VALLEY	JUR...	8,620	32
HOLLY RIDGE	.10	R43197	MASSIVE, TUSCALOOSA	CRET..	8,399	77
LAKE ST. JOHN	.17	R53042	TUSCALOOSA	..DO..	9,138	1,114
LICK CREEK	.18	R71010	SMACKOVER	JUR...	9,950	126
LISBON NORTHEAST	.02	R72057	HOSSTON	CRET..	6,304	91
LITTLE CREEK	.10	R42090	WILCOX	EOCENE	2,700	258
MOUNT SINAI	.11	R71014	SMACKOVER	JUR...	10,450	15
NEBO-HEMPHILL	.08	R60029	WILCOX	EOCENE	3,370	1,695
OLLA	.15	R60030	..DO	..DO..	2,226	1,649

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
LOUISIANA - CONTINUED						
NORTH - CONTINUED						
(0.00-0.50)						
PENDLETON-MANY	0.04	B64057	SARATOGA, TAYLOR	CRET..	2,840	80
PLEASANT HILL	.41	B35110	TRINITY	..DO..	3,279	23
RED RIVER-BULL BAYOU	.16	B35113	PALUXY, TRINITY	..DO..	2,779	911
RODESSA	.25	B40084	COQUINA, GLEN ROSE	..DO..	5,975	274
SHONGALOO	.09	B39085	SEXTON, COTTON VALLEY	JUR...	8,990	143
SHONGALOO, NORTH RED ROCK	.01	B69092	SMACKOVER A	..DO..	10,730	383
SHREVEPORT	.10	B38271	PETTIT	CRET..	5,549	101
SIBLEY	.09	B39079	RODESSA, GLEN ROSE	..DO..	5,575	13
SLIGO	.26	B61126	HEROLD, PALUXY	..DO..	3,003	316
SPRINGHILL	.25	B54066	TOKIO + AUSTIN	..DO..	3,100	54
SUMMERVILLE	.11	B42088	WILCOX	EOCENE	2,575	75
TROUT CREEK	.09	B42087	..DO	..DO..	3,176	82
TULLOS-URANIA	.26	B33064	URANIA, WILCOX	..DO..	1,550	583
(0.51-1.00)						
BELLEVUE	.90	B35106	NACATOCH	CRET..	305	420
CARTERVILLE	.68	B35105	BLOSSOM, BROWNSTOWN	..DO..	2,735	227
ELM GROVE	.59	B35112	BUCKRANGE, OZAN	..DO..	1,550	76
HAYNESVILLE EAST	.57	B53033	BIRDSONG-OWENS	..DO..	5,179	440
HAYNESVILLE PETTIT LIME	.66	B53031	PETTIT	..DO..	5,255	509
HAYNESVILLE	.54	B35104	BLOSSOM, BROWNSTOWN	..DO..	2,797	1,595
MOLLY	.57	B35111	EAGLE FORD	..DO..	2,850	21
HOMER	.63	B00711	BLOSSOM + NACATOCH	..DO..	1,100	334
SUGAR CREEK	.94	B39095	DARRETT, TRAVIS PEAK	..DO..	5,732	15
(1.01-2.00)						
LISBON WEST	1.04	B59180	PETTIT	CRET..	5,300	145
LISBON	1.07	B38455	..DO	..DO..	5,311	451
MINDEN	1.01	B71031	COTTON VALLEY	JUR...	6,830	98
SOUTH						
(0.00-0.50)						
ANSE LA BUTTE	.13	B57130	MARTIN	MIOC..	5,250	1,919
AVERY ISLAND	.12	B50009	MIOCENE	..DO..	8,900	3,561
BANCROFT	.09	B42199	COCKFIELD	EOCENE	7,296	27
BARATARIA WEST	.15	B54024	MIOCENE, 8900 FT	MIOC..	8,864	50
BARATARIA	.14	B42139	MIOCENE	..DO..	8,200	309
BASTIAN BAY	.17	B60039	MIOCENE E	..DO..	9,100	599
BATEMAN LAKE	.13	B54077	MIOCENE, 10900 FT	..DO..	12,063	1,937
BAY DE CHENE	.27	B54070	MIOCENE	..DO..	.....	6,511
BAY MARCHAND BLOCK 2	.28	B69107	PLIOCENE AND MIOCENE	PLIO..	2,472	30,567
BAY STE. ELAINE	.34	B57116	MIOCENE	MIOC..	.....	7,574
BAYOU BLUE	.23	B54057	MIOCENE 13	..DO..	3,716	1,463
BAYOU BOUILLION	.24	B68149	MARGINULINA, SU-H	..DO..	10,283	1,746
BAYOU CHOCTAW	.17	B60024	MIOCENE	..DO..	2,000	445
BAYOU COUBA	.11	B42222	..DO	..DO..	6,536	636
BAYOU DES ALLEMANDS	.13	B42126	..DO	..DO..	.....	2,146
BAYOU HENRY	.15	B68126	MARGINULINA, FRIO	OLIG..	11,910	779
BAYOU MALLET	.09	B37199	MARGINULINA	MIOC..	6,997	276
BAYOU PIGEON	.04	B68164	MIOCENE, V	..DO..	9,201	551
BAYOU SALE	.10	B42134	MIOCENE, 10300 FT	..DO..	10,298	4,934
BAYOU SORREL	.10	B68165	MIOCENE, W2	..DO..	7,102	1,837
BEAR	.09	B43120	FRIO	OLIG..	6,512	19
BELLE ISLE	.16	B68141	MIOCENE, K	MIOC..	11,918	410
BIG LAKE	.09	B44005	MARGINULINA	..DO..	8,571	520
BLACK BAY EAST	.22	B68092	MIOCENE, O-1	..DO..	7,242	3,044
BLACK BAY SOUTHEAST	.16	B69075	MIOCENE O-2	..DO..	8,493	1,472
BLACK BAY WEST	.19	B60051	MIOCENE, 8650 FT	..DO..	8,610	9,713
BLACK BAYOU	.10	B68157	MIOCENE, O2	..DO..	5,640	3,204
BONNET-CARRE	.13	B64032	OPERCULINOIDES 4	..DO..	9,400	1,868
BOSCO	.09	B54059	MIRE	..DO..	8,050	410
BRETON SOUND BLOCK 20	.29	B70032	MIOCENE	..DO..	5,174	2,651
BULLY CAMP	.16	B54049	..DO	..DO..	6,468	4,537
BURRWOOD	.27	B64092	PLIOCENE, 5900 FT, G	PLIO..	7,176	1,176
CAILLOU ISLAND	.23	B58019	MIOCENE 70	MIOC..	12,640	31,364
CAMERON	.09	B42196	MIOCENE	..DO..	4,590	114
CHACAHOULA	.10	B60064	ROBULUS 9	..DO..	12,640	498
CHARENTON	.10	B60050	MIOCENE	..DO..	6,430	1,107
CLEAR CREEK	.09	B60022	BEARHEAD CREEK	EOCENE	8,848	395
CLOVELLY	.16	B61042	MIOCENE M-B	MIOC..	12,567	881
COQUILLE BAY	.18	B68127	MIOCENE, 8450 FT, A	..DO..	8,455	483
COTE BLANCHE BAY WEST	.16	B57117	MIOCENE	..DO..	.....	15,204
COTE BLANCHE ISLAND	.08	B60046	MIOCENE I	..DO..	13,986	9,285
COX BAY	.38	B53038	MIOCENE	..DO..	8,900	1,558
CREOLE-OFFSHORE	.14	B40310	..DO	..DO..	5,160	65
CROWLEY NORTH	.09	B50010	..DO	..DO..	4,900	1,071
CUT OFF	.12	B68086	..DO	..DO..	11,200	3,318
DARROW	.19	B37214	..DO	..DO..	5,760	2,266
DELTA DUCK CLUB	.27	B54071	..DO	..DO..	.....	2,673
DELTA FARMS	.26	B53035	..DO	..DO..	8,780	1,245
DOG LAKE	.17	B69055	MIOCENE 19-7	..DO..	7,415	5,028
DUCK LAKE	.14	B53044	MIOCENE	..DO..	10,892	2,123
EGAN	.09	B50024	..DO	..DO..	9,810	431
ELTON SOUTH	.09	B42218	CHICKASAWHAY	OLIG..	8,952	38
EOLA	.09	B39111	WILCOX	EOCENE	8,550	300
ERATH	.20	B53063	MIOCENE	MIOC..	7,000	934
EUGENE ISLAND BLOCK 100	.08	B68166	PLIOCENE, R	PLIO..	12,348	534
EUGENE ISLAND BLOCK 126	.19	B54091	MIOCENE	MIOC..	4,000	5,773
EUGENE ISLAND BLOCK 128	.10	B64046	MIOCENE, DD	..DO..	10,533	2,745

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, SULFUR CONTENT CATEGORY, AND FIELD [1/] [2/]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
LOUISIANA - CONTINUED						
SOUTH - CONTINUED						
(0.00-0.50)						
EUGENE ISLAND BLOCK 18	0.07	B64044	MIOCENE, N	MIOC..	9,582	3,705
EUGENE ISLAND BLOCK 188	.35	B61129	MIOCENE, 9080 FT	..DO..	9,082	5,150
EUGENE ISLAND BLOCK 208	.15	B64081	MIOCENE, JR C4	..DO..	8,336	1,569
EUGENE ISLAND BLOCK 238	.19	B68113	MIOCENE, C-5	..DO..	9,392	1,204
EUGENE ISLAND BLOCK 32	.07	B61111	MIOCENE	..DO..	8,100	1,674
EUGENE ISLAND BLOCK 45	.08	B64117	MIOCENE, 10000 FT	..DO..	10,060	889
FAUSSE POINTE	.11	B61010	MIOCENE B	..DO..	10,044	1,305
FIELDS	.09	B44004	FRIO	OLIG..	8,011	33
FORDOCHE	.16	B54081	LONG, FRIO	..DO..	8,287	2,883
GARDEN CITY	.08	B68069	MIOCENE OP 9	MIOC..	13,661	14
GARDEN ISLAND BAY	.22	B60044	MIOCENE	..DO..	5,900	15,785
GIBSON	.05	B61033	..DO	..DO..	8,900	165
GOLDEN MEADOW	.18	B53045	..DO	..DO..	8,410	2,662
GOOD HOPE	.28	B53040	..DO	..DO..	7,800	2,496
GRAND BAY	.31	B53039	..DO	..DO..	6,600	6,689
GRAND ISLE BLOCK 16	.18	B60048	PLIOCENE BF-1,E	PLIO..	6,952	21,139
GRAND ISLE BLOCK 18	.22	B60047	PLIOCENE B2	..DO..	8,875	3,217
GRAND ISLE BLOCK 41	.24	B70058	MIOCENE	MIOC..	12,000	5,341
GRAND ISLE BLOCK 43	.40	B70060	MIOCENE KH-I1	..DO..	10,260	22,563
GRAND ISLF BLOCK 47	.23	B60020	PLIOCENE + MIOCENE	PLIO..	7,900	4,226
GRAND LAKE	.11	B60035	MIOCENE, 9900 FT	MIOC..	9,836	815
GUEYDAN WEST	.06	B61093	HARTWELL	..DO..	9,612	307
GUEYDAN	.08	B61094	ALLIANCE	..DO..	9,782	325
HACKBERRY EAST	.30	B64120	CAMERINA, MAIN	OLIG..	7,256	2,230
HACKBERRY WEST	.29	B50015	MIOCENE	MIOC..	3,050	3,767
HORSESHOE BAYOU	.09	B43078	..DO	..DO..	10,180	659
IBERIA	.21	B35117	..DO	..DO..	3,790	1,556
IOWA	.20	B57105	MIOCENE C	..DO..	5,050	832
JEANERETTE	.15	B54102	MIOCENE Q	..DO..	6,500	835
JEFFERSON ISLAND	.10	B42136	MIOCENE	..DO..	3,070	121
JENNINGS	.36	B00945	TERTIARY	TERT..	1,963	292
JOHNSON BAYOU	.05	B64114	AMPHISTEGINA I2	MIOC..	7,132	1,211
LA PICE	.24	B54044	BIGENERINA FLORIDIANA	..DO..	6,845	1,725
LAFITTE	.14	B37218	MIOCENE	..DO..	9,558	10,675
LAKE BARRE	.14	B60049	MIOCENE R1	..DO..	16,534	7,475
LAKE CHICOT	.11	B54062	MIOCENE, 8100 FT	..DO..	8,170	1,784
LAKE LONG	.09	B42131	MIOCENE	..DO..	9,356	369
LAKE MONGOULOIS	.25	B54086	ANAHUAC	OLIG..	10,709	411
LAKE PALOURDE EAST	.13	B60063	CAMERINA	..DO..	12,829	499
LAKE PELTO	.21	B57118	MIOCENE	MIOC..	.....	4,709
LAKE RACCOURCI	.19	B68090	..DO	..DO..	12,404	70
LAKE SALVADOR	.13	B42109	..DO	..DO..	9,670	4,336
LAKE SAND	.05	B68091	OPEPCULINOIDES, 8+10	..DO..	16,090	29
LAKE VERRET WEST	.08	B60060	MIOCENE Q	..DO..	7,669	3,844
LAKE WASHINGTON	.35	B68172	MIOCENE	..DO..	8,000	10,581
LAROSE	.13	B60023	MIOCENE, 11400 FT	..DO..	11,390	865
LEEVILLE	.38	B33037	TERTIARY	TERT..	3,664	4,206
LITTLE LAKE	.24	B61041	MIOCENE E4-2	MIOC..	10,876	1,348
LIVE OAK	.02	B68123	MIOCENE, 9200 FT MASS	..DO..	9,224	37
LOCKPORT	.15	B33025	MIOCENE	..DO..	5,109	329
MAIN PASS BLOCK 35	.22	B64091	BUCCELLA MANSFIELDI	..DO..	7,778	3,440
MAIN PASS BLOCK 41	.16	B68128	MIOCENE, 9200 RA SU	..DO..	9,268	17,904
MAIN PASS BLOCK 6	.28	B68096	DISCORRIS (12,4A)	..DO..	5,932	1,166
MAIN PASS BLOCK 69	.16	B50093	MIOCENE, 6350 FT	..DO..	6,930	12,285
MOUND POINT	.11	B69056	TEXTULARIA L, M-1	..DO..	8,500	342
NAPOLEONVILLE	.09	B43060	MIOCENE	..DO..	9,034	582
NEALE	.13	B42197	WILCOX	EOCENE	8,356	143
OPELOUSAS	.06	B64121	COCKFIELD 2	..DO..	10,215	211
PARADIS	.12	B42130	PARADIS	MIOC..	10,076	1,937
PATTERSON	.13	B64037	MIOCENE	..DO..	.....	83
PERKINS	.21	B43119	FRIO	OLIG..	5,367	400
PHOENIX LAKE	.12	B54061	BROWN A, FRIO	..DO..	7,724	632
PINE PRAIRIE	.14	B43077	YEGUA	EOCENE	8,098	369
POINTE-A-LA-HACHE	.18	B50046	FLEMING UL-4	MIOC..	10,647	1,023
PORT BARRE	.11	B64094	MIOCENE	..DO..	6,746	588
POTASH	.37	B42114	..DO	..DO..	8,700	290
QUARANTINE BAY	.12	B42108	..DO	..DO..	8,618	6,706
RABBIT ISLAND	.09	B69057	TEXTULARIA W, 10,000 FT	..DO..	10,680	6,104
RAYNE	.02	B64053	HOMESEEKER E	..DO..	12,540	12
ROANOKE	.09	B42221	HETEROSTEGINA, 5TH	OLIG..	7,935	135
ROMERE PASS	.30	B53036	MIOCENE	MIOC..	10,100	3,608
SATURDAY ISLAND	.35	B60017	..DO	..DO..	10,350	777
SHIP SHOAL BLOCK 107	.12	B68147	MIOCENE, 9,400 FT	..DO..	9,690	3,468
SHIP SHOAL BLOCK 113	.43	B68138	PLIOCENE	PLIO..	4,820	5,066
SHIP SHOAL BLOCK 154	.36	B60025	MIOCENE	MIOC..	6,322	4,122
SHIP SHOAL BLOCK 176	.14	B68088	PLIOCENE, J5	PLIO..	.....	2,556
SHIP SHOAL BLOCK 208	.36	B70033	PLIOCENE	..DO..	9,180	14,204
SORRENTO	.21	B33041	TERTIARY	TERT..	4,346	168
SOUTH MARSH ISLAND BLOCK 23	.11	B68146	MIOCENE, 13,000 FT	MIOC..	13,242	278
SOUTH MARSH ISLAND BLOCK 6	.13	B70049	MIOCENE BF-1A	..DO..	10,066	3,811
SOUTH MARSH ISLAND BLOCK 73	.20	B68158	PLIOCENE, P6	PLIO..	8,491	6,471
SOUTH PASS BLOCK 24	.31	B71058	MIOCENE	MIOC..	.....	19,820
SOUTH PASS BLOCK 27	.27	B64067	MIOCENE, N4A	..DO..	7,818	20,730
SOUTH PASS BLOCK 62	.27	B70053	MIOCENE T	..DO..	.....	10,255
SOUTH PELTO BLOCK 20	.15	B68094	MIOCENE, AE-9	..DO..	6,850	2,243
SOUTH TIMBALIER BLOCK 131	.20	B64062	MIOCENE, E2	..DO..	8,950	2,639
SOUTH TIMBALIER BLOCK 176	.19	B68110	MIOCENE, F-2	..DO..	10,202	3,033
SOUTHEAST PASS	.12	B64055	MIOCENE	..DO..	8,270	1,640
ST. GABRIEL	.18	B42111	MIOCENE, F	..DO..	7,760	430
STELLA	.09	B42138	MIOCENE	..DO..	7,500	189
SULPHUR MINES	.42	B33032	TERTIARY	TERT..	3,101	80
SWEET BAY LAKE	.14	B64104	MIOCENE, 10400 FT	MIOC..	11,704	983
SWEETLAKE	.13	B68153	MIOCENE, 20-A	..DO..	6,325	1,661

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
LOUISIANA - CONTINUED						
SOUTH - CONTINUED						
(0.00-0.50)						
TEPETATE WEST	0.12	B50014	MIOCENE	MIOC..	8,300	117
TEPETATE	.13	B37203	ORTEGO, FRIO	OLIG..	8,280	531
TIMBALIER BAY	.33	B59162	MIOCENE	MIOC..	8,000	29,403
UNIVERSITY	.23	B53041	..DO	..DO..	9,420	206
VALENTINE	.12	B37246	..DO	..DO..	6,920	1,048
VENICE	.24	B53034	..DO	..DO..	3,547	5,478
VILLE PLATTE	.11	B39115	SPARTA, CLAIBORNE	EOCENE	9,048	178
VINTON	.29	B34073	MIOCENE	MIOC..	2,525	2,371
WASHINGTON	.13	B62113	MIOCENE H	..DO..	7,716	308
WEEKS ISLAND	.18	B52036	MIOCENE	..DO..	9,250	10,407
WELSH	.13	B68151	CAMERINA 2	OLIG..	7,778	1,627
WEST BAY	.27	B57084	MIOCENE	MIOC..	6,400	9,353
WEST CAMERON BLOCK 192	.08	B68168	MIOCENE,5	..DO..	8,343	100
WEST CAMERON BLOCK 45	.04	B61095	PLANULINA	..DO..	9,955	195
WEST DELTA BLOCK 105	.37	B70052	MIOCENE P-2	..DO..	11,338	2,269
WEST DELTA BLOCK 117	.27	B69061	MIOCENE D-10	..DO..	9,646	3,370
WEST DELTA BLOCK 27	.38	B68130	MIOCENE, E-7	..DO..	8,570	1,546
WEST DELTA BLOCK 30	.33	B61021	.....	.....	5,800	25,853
WEST DELTA BLOCK 52	.20	B64079	MIOCENE, 7600 FT, 52-1	MIOC..	7,634	206
WEST DELTA BLOCK 53	.43	B61022	MIOCENE KE	..DO..	10,100	967
WEST DELTA BLOCK 83	.37	B61023	..DO	..DO..	10,100	691
WHITE CASTLE	.30	B32372	MIOCENE	..DO..	5,165	3,661
WHITE LAKE EAST	.06	B61031	MIOCENE R	..DO..	6,390	1,856
WHITE LAKE WEST	.08	B68163	RIGENERINA FLORIDIANA 3	..DO..	8,334	1,012
WOODLAWN	.09	B43007	MARGINULINA	..DO..	8,036	755
(0.51-1.00)						
EDGERLY	.68	B00757	TERTIARY	TERT..	3,200	322
EUGENE ISLAND BLOCK 276	.53	B69059	MIOCENE	MIOC..	.....	9,944
LIRETTE	.85	B37018	..DO	..DO..	11,615	194
SOUTH TIMBALIER BLOCK 135	.66	B68112	MIOCENE, J-3	..DO..	11,384	12,305
TIGER SHOAL	.99	B64096	MIOCENE	..DO..	8,560	747
MICHIGAN						
(0.00-0.50)						
ALBION-PULASKI-SCIPIO TREND	.15	B64020	TRENTON + BLACK RIVER	ORD...	4,170	4,713
BIRCH RUN	.25	B36125	BEREA	MISS..	1,525	14
BUCKEYE NORTH	.29	B64016	DUNDEE	DEV...	3,622	92
CEDAR	.30	B43045	..DO	..DO..	3,823	10
COLDWATER	.30	B57053	..DO	..DO..	3,721	77
CRYSTAL	.37	B36122	..DO	..DO..	3,216	8
EDMORE	.11	B36119	TRAVERSE	..DO..	3,025	11
HEADQUARTERS	.18	B43096	..DO	..DO..	3,219	68
KAWKAWLIN	.45	B57056	DUNDEE	..DO..	2,820	176
MT PLEASANT	.13	B36116	..DO	..DO..	3,506	93
NORWICH EAST	.22	B57054	RICHFIELD	..DO..	4,346	256
PORTER	.26	B36126	DUNDEE	..DO..	3,365	124
PROSPER	.43	B43044	.....	.....	3,813	11
REYNOLDS	.48	B57057	REED CITY, DUNDEE	DEV...	3,340	41
ROSE LAKE	.10	B44001	TRAVERSE	..DO..	3,131	19
WAYLAND	.28	B45044	..DO	..DO..	1,796	63
(0.51-1.00)						
ADAMS (ADAMS SOUTH)	.66	B46122	DUNDEE	DEV...	2,882	17
DEEP RIVER	.57	B63279	..DO	..DO..	2,847	70
EDEN	.55	B57055	..DO	..DO..	2,270	10
PETERS	.54	B64021	NIAGARAN	SIL...	2,611	165
REED CITY	.54	B42146	MONROE, DUNDEE	DEV...	3,574	499
ROSE CITY	.70	B57052	RICHFIELD	..DO..	4,090	176
STERLING	.71	B64004	RICHFIELD+DETROIT RIVER	..DO..	4,098	56
WEST BRANCH	.57	B64015	DUNDEE	..DO..	2,457	166
(1.01-2.00)						
RICH	1.38	B64019	DETROIT RIVER	DEV...	2,982	66
MISSISSIPPI						
(0.00-0.50)						
BAY SPRINGS/L COTTON VALLEY	.37	B69042	COTTON VALLEY	JUR...	14,559	2,375
CRANFIELD/4400 WILCOX	.11	B45070	WILCOX	EOCENE	5,879	17
CRANFIELD/5200 WILCOX	.11	.....	.....	.....	.....	20
CRANFIELD/5750 WILCOX	.11	.....	.....	.....	.....	12
DEXTER/LOWER TUSCALOOSA	.18	B64084	PITTMAN, TUSCALOOSA	CRET..	9,668	243
FAYETTE/L TUSCALOOSA	.09	.....	.....	.....	.....	17
KINGSTON/ 4300 WILCOX	.15	B54094	HARMON, WILCOX	EOCENE	6,587	18
LAGRANGE/BAKER	.17	B48087	BAKER, WILCOX	..DO..	6,222	74
LAGRANGE/4300 WILCOX	.13	.....	.....	.....	.....	215
LAGRANGE/4600 WILCOX	.13	.....	.....	.....	.....	146
LITTLE CREEK/L TUSCALOOSA	.16	B61036	TUSCALOOSA	CRET..	10,700	118
MALLALIEU EAST/L TUSCALOOSA	.16	B45069	..DO	..DO..	10,523	90
MCCOMB/L TUSCALOOSA	.09	B64098	..DO	..DO..	10,493	258
PELAHATCHIE/NORPHLET	.10	B70018	NORPHLET	JUR...	.....	60
RALEIGH/L. CRETACEOUS	.43	B61078	HOSSTON, TRINITY	CRET..	12,084	1,035
SOSO/11081 RODESSA	.43	.....	.....	.....	.....	7
SOSO/11151 RODESSA	.43	B61097	RODESSA, GLEN ROSE	CRET..	11,405	55
SOSO/11180 RODESSA	.43	.....	.....	.....	.....	286
SOSO/11385 RODESSA	.47	B61096	RODESSA, GLEN ROSE	CRET..	11,352	18

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
MISSISSIPPI - CONTINUED						
(0.00-0.50)						
TALLAHALA CREEK EAST/SMACKOVER A.....	0.26	B70111	SMACKOVER A.....	JUR...	16,794	225
TALLAHALA CREEK EAST/SMACKOVER B.....	.29	B70109	SMACKOVER.....	..DO..	16,879	228
TALLAHALA CREEK/COTTON VALLEY.....	.33	B70031	SMACKOVER+COTTON VALLEY.	..DO..	15,546	223
TALLAHALA CREEK/MIDDLE SMACKOVER.....	.44	B70017	SMACKOVER.....	..DO..	15,570	253
TALLAHALA CREEK/SMACK. II.....	.28	B70019	SMACKOVER 2.....	..DO..	15,675	384
(0.51-1.00)						
BARBER CREEK/SMACKOVER.....	.62	B70114	SMACKOVER.....	JUR...	.....	31
BROOKHAVEN/L TUSCALOOSA.....	.86	B45068	TUSCALOOSA.....	CRET..	10,288	1,090
CLARA WEST/SMACKOVER.....	.54	B70115	SMACKOVER.....	JUR...	.....	144
DIAMOND/GLEN ROSE.....	.88	B61035	GLEN ROSE, TRINITY.....	CRET..	9,190	109
PICKENS/EUTAW.....	.72	B45073	EUTAW.....	..DO..	4,836	42
SOSO/11513 RODESSA.....	.57	B61099	RODESSA, GLEN ROSE.....	..DO..	11,691	19
SOSO/11701 BAILEY.....	.89	B61100	BAILEY, RODESSA.....	..DO..	12,041	77
TINSLEY/SELMA-EUTAW-TUSC.....	.78	B43067	WOODRUFF, SELMA.....	..DO..	4,440	1,380
(1.01-2.00)						
BOLTON/E RODESSA.....	1.77	.....	.....	.....	.....	10
BOLTON/HOSSTON.....	1.77	.....	.....	.....	.....	42
BOLTON/W RODESSA.....	1.77	.....	.....	.....	.....	48
BOLTON/W. FAULT SEG. L. RODESSA.....	1.77	.....	.....	.....	.....	29
BOLTON/W. FAULT SEG. RODESSA.....	1.77	B64099	WASHITA+FREDERICKSBURG..	CRET..	8,359	98
BRYAN/RODESSA.....	1.47	B61128	RODESSA, GLEN ROSE.....	..DO..	10,302	241
BRYAN/SLIGO.....	1.28	B61127	SLIGO, TRINITY.....	..DO..	10,760	214
CYPRESS CREEK/SMACKOVER.....	1.70	B72007	SMACKOVER.....	JUR...	12,754	227
FLORA/SELMA GAS ROCK.....	1.32	B43196	GAS ROCK, SELMA.....	CRET..	4,357	385
PACHUTA CREEK/SMACKOVER.....	1.23	B72006	SMACKOVER.....	JUR...	12,900	3,941
SUMMERLAND/LOWER PALUXY.....	1.77	B70047	PALUXY, TRINITY.....	CRET..	11,632	36
SUMMERLAND/LOWER WASHITA-FRED.....	1.55	B70039	CRETACEOUS.....	..DO..	10,401	268
SUMMERLAND/LWR-LWR WASH-FRED.....	1.63	B70045	WASHITA+FREDERICKSBURG..	..DO..	10,418	7
SUMMERLAND/UPPER PALUXY.....	1.46	B70046	PALUXY, TRINITY.....	..DO..	10,614	173
(>2.00)						
BAXTERVILLE/L.TUSCALOOSA.....	2.80	B57093	TUSCALOOSA.....	CRET..	8,700	3,657
EUCUTTA EAST/EUTAW.....	3.89	B45066	XMAS, TUSCALOOSA.....	..DO..	5,141	980
EUCUTTA WEST/EUTAW.....	3.89	.....	.....	.....	.....	61
HEIDELBERG CENTRAL SEGMENT/EUTAW.....	3.03	B44056	EUTAW.....	CRET..	4,518	24
HEIDELBERG EAST/EUTAW.....	3.69	B45065	XMAS, TUSCALOOSA.....	..DO..	4,962	1,810
HEIDELBERG EAST/U TUSCALOOSA.....	3.66	L66018	TUSCALOOSA,UPPER.....	..DO..	.....	354
HEIDELBERG WEST/EUTAW.....	4.19	B45062	XMAS, TUSCALOOSA.....	..DO..	5,138	622
HEIDELBERG WEST/L CRETACEOUS.....	3.03	.....	.....	.....	.....	320
HEIDELBERG WEST/U TUSCALOOSA.....	3.66	.....	.....	.....	.....	7
LANGSDALE/EUTAW.....	4.13	B45074	EUTAW.....	CRET..	3,649	71
POOL CREEK/RODESSA.....	2.35	B44039	RODESSA, GLEN ROSE.....	..DO..	10,800	37
POOL CREEK/SLIGO.....	2.74	B64038	SLIGO, TRINITY.....	..DO..	11,200	28
SUMMERLAND/MOORINGSPORT.....	2.30	B70048	MOORINGSPORT, GLEN ROSE.	..DO..	12,212	11
YELLOW CREEK EAST/EUTAW.....	3.98	B54034	STANLEY, EUTAW.....	..DO..	5,144	119
YELLOW CREEK NORTH/EUTAW.....	3.98	.....	.....	.....	.....	61
YELLOW CREEK WEST/EUTAW.....	3.98	.....	.....	.....	.....	364
YELLOW CREEK WEST/LOWER TUSC.....	3.05	B72032	TUSCALOOSA.....	CRET..	.....	10
MONTANA						
(0.00-0.50)						
BELL CREEK.....	.17	B68018	.....	.....	.....	5,884
BENRUD EAST.....	.11	L63065	NISKU.....	DEV...	7,522	150
BRORSON SOUTH RED RIVER.....	.07	L63119	RED RIVER.....	ORD...	11,630	111
BRORSON/MADISON.....	.07	L63119	..DO.....	..DO..	11,630	220
CABIN CREEK/SILURO-ORD.....	.47	L58177	SILURO + ORDOVICIAN.....	SIL...	8,219	3,498
CAT CREEK/KOOTENAI.....	.27	B50292	.....	.....	.....	196
CUPTON.....	.23	L60125	RED RIVER.....	ORD...	9,308	147
DEER CREEK.....	.12	L53054	..DO.....	..DO..	9,957	16
FRED & GEORGE CREEK/SUNBURST.....	.50	L64169	SUNBURST.....	CRET..	2,624	344
GAS CITY.....	.28	L58179	RED RIVER.....	ORD...	9,145	286
GLENDIVE.....	.19	L52244	STONY MT. + RED RIVER...	..DO..	8,740	326
GRABEN COULEE.....	.43	L64177	CUT BANK.....	CRET..	2,693	46
KEG COULEE.....	.25	L63094	TYLER,C.....	PENN..	4,530	150
LOOKOUT BUTTE/LODGEPOLE.....	.42	L63095	RED RIVER.....	ORD...	8,721	809
MELSTONE.....	.40	L50294	AMSDEN.....	PENN..	4,199	21
MONARCH.....	.50	L59191	RED RIVER.....	ORD...	8,961	204
OUTLOOK/SILURO-DEVONIAN.....	.38	L59188	SILURO-DEVONIAN.....	DEV...	9,056	245
POPLAR EAST.....	.33	L52247	CHARLES.....	MISS..	5,648	559
POPLAR NORTHWEST.....	.35	L52248	..DO.....	..DO..	6,176	16
RED STONE.....	.26	L63066	WINNIPEGOSIS.....	DEV...	9,390	28
RICHEY SOUTHWEST.....	.22	L58181	DEVONIAN-SILURIAN.....	..DO..	9,090	36
SAND CREEK.....	.12	L60116	INTERLAKE.....	SIL...	8,988	66
SPRING LAKE.....	.07	L63119	RED RIVER.....	ORD...	11,630	29
STENSVAD.....	.35	L63117	TYLER,B.....	PENN..	5,356	427
TULE CREEK EAST.....	.14	L61189	NISKU.....	DEV...	7,636	102
TULE CREEK.....	.14	L61189	..DO.....	..DO..	7,636	319
WELDON.....	.41	L65096	KIRBEY.....	MISS..	5,827	174
(0.51-1.00)						
BEARS DEN.....	.77	L64171	SWIFT.....	JUR...	2,444	12
BIG WALL/AMSDEN.....	.77	L50300	.....	.....	.....	16
DWYER.....	.64	L61190	MADISON.....	MISS..	7,749	279
FLAT COULEE.....	.81	L50289	SUNBURST.....	CRET...	2,800	92
FLAT LAKE.....	.68	L65101	RATCLIFFE.....	MISS..	6,540	629
GOOSE LAKE.....	.67	L65097	..DO.....	..DO..	6,935	439

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
MONTANA - CONTINUED						
(0.51-1.00)						
LITTLE BEAVER EAST	0.57	L60129	RED RIVER	ORD...	8,146	169
LITTLE BEAVER	.57	L53052	ORDOVICIAN	..DO..	8,313	415
PENNEL	.52	L58174	SILURO + ORDOVICIAN	SIL...	8,286	1,683
PINE	.54	L58178	SILURIAN	..DO..	8,456	3,029
RAGGED POINT	.51	L50293	KIBBEY	MISS..	4,433	75
REAGAN	.72	L50298	MADISON	..DO..	3,805	224
REPEAT	.87	L60140	RED RIVER	ORD...	8,605	18
RICHEY	.53	L52243	CHARLES	MISS..	7,183	7
SUMATRA	.65	L50283	AMSDEN	PENN..	4,385	799
WHITLASH	.77	L50825	.....	.....	.....	135
WOLF SPRINGS	.93	L60121	AMSDEN	PENN..	6,110	53
WOODROW	.90	L58399	RED RIVER	ORD...	9,998	22
(1.01-2.00)						
BORDER	1.24	L42004	COSMOS + VANALTA	CRET..	2,400	9
BRADLEY	1.62	L64179	MADISON	MISS..	3,273	7
CUTBANK/KOOTENAI	1.01	L36011	CUT BANK	CRET..	2,935	5,541
ELK BASIN/FRONTIER	1.89	L50548	.....	.....	.....	1,790
KEVIN SUNBURST	1.17	H50295	.....	.....	.....	293
MOSSER	1.39	L60126	DAKOTA	CRET..	880	5
RED CREEK	1.82	L64176	CUT BANK + MADISON	..DO..	2,689	95
(>2.00)						
BOWES	3.75	L50284	SAWTOOTH, (FELLIS)	JUR...	3,360	138
ELK BASIN NW/MADISON	2.18	L43036	TENSLEEP	PENN..	5,444	88
FRANNIE	2.60	L51142	PHOSPHORIA	PERM..	3,446	27
LODGE GRASS	2.50	L65038	TENSLEEP	PENN..	6,391	11
PONDERA	2.03	L41003	MADISON	MISS..	.....	285
SOAP CREEK	3.72	L60119	TENSLEEP	PENN..	1,646	57
NEBRASKA						
(0.00-0.50)						
AXIAL	.26	L56184	J	CRET..	5,776	100
BERTRAMSON	.11	L56159	.....	.....	.....	103
BROWNSON EAST	.08	L52034	D	CRET..	4,770	11
CEDAR VALLEY	.26	L56173	J	..DO..	6,012	324
CIZEK	.24	L56187	..DO	..DO..	5,682	42
COOK	.21	L52125	D	..DO..	4,358	32
DALTON	.23	L51318	J	..DO..	4,685	9
DAWSON	.33	H42035	VIOLA	ORD...	.....	9
DIETZ	.14	L55371	J	CRET..	6,343	7
DIX SOUTH	.19	L56181	..DO	..DO..	5,994	12
DORAN FARMS	.11	L56194	D	..DO..	4,589	69
DORMAN	.16	L52074	J	..DO..	4,796	46
DOWNER	.15	L64156	D	..DO..	5,856	7
ENDERS	.12	L52027	J	..DO..	6,304	137
FALLS CITY	.37	H40087	HUNTON	DEV...	2,217	25
FERNQUIST	.25	L56185	J	CRET..	5,738	54
GOODWIN	.20	L55380	..DO	..DO..	6,040	27
GRAFF	.24	L51316	..DO	..DO..	4,840	79
GURLEY	.25	L50175	..DO	..DO..	4,490	23
HAFEMAN	.21	L56170	..DO	..DO..	6,205	11
HARRISBURG	.15	L51314	..DO	..DO..	5,880	71
HENRY	.19	L56196	..DO	..DO..	5,212	29
HOUTBY	.16	L56180	..DO	..DO..	6,008	84
HRUSKA	.26	L56173	..DO	..DO..	6,012	6
HUNTSMAN	.18	L50268	..DO	..DO..	4,885	53
JACINTO	.25	L56174	..DO	..DO..	5,836	70
JOHNSON	.17	L51321	D	..DO..	4,498	103
JUELFS-GAYLORD	.23	L56178	J	..DO..	5,332	13
KENMAC	.23	L56188	..DO	..DO..	5,360	25
KENTON	.18	L56179	..DO	..DO..	5,976	7
KIMBALL	.15	L51319	..DO	..DO..	6,506	48
LONG	.09	L55376	D	..DO..	6,141	47
MADDEN	.26	L56182	J	..DO..	5,990	15
MCLERNON	.15	L50270	D	..DO..	4,490	7
MINATARE	.19	L56197	J	..DO..	5,217	94
OLSEN	.04	L52028	..DO	..DO..	5,380	39
PHILLIPS	.13	L55370	D	..DO..	5,904	13
POTTER SW	.26	L56182	J	..DO..	5,990	87
PREBLE	.17	L56200	D	..DO..	4,418	35
REIHER	.47	L59367	LANSING-KANSAS CITY	PENN..	3,816	98
REIMERS	.24	L51316	J	CRET..	4,840	60
RUDOLPH	.07	L56195	D	..DO..	4,798	29
SIDNEY NORTH	.15	L52031	..DO	..DO..	4,721	13
SINGLETON	.14	L64157	J	..DO..	.....	191
SISSON	.09	L52035	..DO	..DO..	7,326	9
SLOSS-STATE	.12	L56171	..DO	..DO..	6,213	161
SWEARINGEN	.22	L55382	..DO	..DO..	6,284	30
VRTATKO	.08	L55381	D	..DO..	6,003	9
WAITMAN	.16	L63071	J	..DO..	4,734	56
WILLSON RANCH	.14	L64157	..DO	..DO..	.....	71
YOUNG	.26	L56176	..DO	..DO..	5,921	15
ZOLLER	.22	L56186	..DO	..DO..	5,662	26
(0.51-1.00)						
ACKMAN	.86	L59368	.....	.....	.....	243
BARGER	.78	L59370	LANSING-KANSAS CITY	PENN..	3,854	5
SILVER CREEK	.86	L59368	LANSING	..DO..	3,273	218

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
NEBRASKA - CONTINUED						
(0.51-1.00)						
SLEEPY HOLLOW NORTHWEST	0.86	L59368	LANSING	PENN..	3,273	83
SLEEPY HOLLOW	.86	L59368	..DO	..DO..	3,273	2,949
NEVADA						
(1.01-2.00)						
EAGLE SPRINGS	1.68	A66023	SHEEP PASS	EOCENE	5,780	113
NEW MEXICO SOUTHEAST						
(0.00-0.50)						
ALLISON PENN	.11	A61079	BOUGH C	PENN..	9,567	313
BAGLEY NORTH PENN	.14	B54079	PENNSYLVANIAN	..DO..	8,640	4,906
BRUNSON/ELLENBURGER	.30	A46093	ELLENBURGER	ORD...	7,425	59
CAPROCK/DEVONIAN, EAST	.36	B54088	DEVONIAN	DEV...	11,184	231
CAPROCK/WOLFCAMP, EAST	.17	B54089	WOLFCAMP	PERM..	8,384	6
CEDAR LAKE ABO	.19	A65089	ABO	..DO..	7,122	5
CORRIN ABO	.25	A65074	..DO	..DO..	8,707	538
CORBIN/QUEEN	.48	A41081	PERMIAN	..DO..	4,706	15
CORRAL CANYON DELAWARE	.12	A66103	DELAWARE	..DO..	3,668	14
CROSSROADS/SILURO-DEVONIAN	.35	B54037	DEVONIAN	DEV...	12,000	1,696
DENTON WOLFCAMP	.35	B54045	DENTON	PERM..	9,350	746
DENTON/DEVONIAN	.21	B54042	..DO	..DO..	11,715	1,445
DOLLARHIDE DEVONIAN	.48	A61105	DEVONIAN	DEV...	7,498	278
DOLLARHIDE FUSSELMAN	.24	A61106	FUSSELMAN	SIL...	8,520	119
DOLLARHIDE/ELLENBURGER	.15	A61103	ELLENBURGER	ORD...	10,090	35
DRINKARD	.31	A62128	DRINKARD, YESO	PERM..	6,618	934
EMPIRE ABO	.28	A62118	ABO REEF	..DO..	6,276	9,279
GLADIOLA WOLFCAMP	.10	B54032	WOLFCAMP	..DO..	9,040	29
GLADIOLA/DEVONIAN	.24	B54033	DEVONIAN	DEV...	11,900	281
HARE/SIMPSON	.23	B54080	MCKEE, SIMPSON	ORD...	7,780	88
JACKSON ABO	.23	A65102	ABO	PERM..	6,890	23
JUSTIS FUSSELMAN	.41	A66043	FUSSELMAN	SIL...	6,879	359
JUSTIS MONTOYA	.42	A66044	MONTOYA	ORD...	6,854	91
JUSTIS TUBB-DRINKARD	.48	A66041	TUBB-DRINKARD	PERM..	5,930	186
JUSTIS/ELLENBURGER	.22	A66037	ELLENBURGER	ORD...	7,922	211
JUSTIS/FUSSELMAN, NORTH	.41	A66043				115
KEMNITZ WOLFCAMP LOWER	.12	A61067	WOLFCAMP	PERM..	10,674	207
LEA DEVONIAN	.31	B64034	DEVONIAN	DEV...	14,300	181
LEONARD/QUEEN, SOUTH	.34	B54078	DEVONIAN + SILURIAN	..DO..	10,762	33
LOCO HILLS ABO	.26	A65100	ABO	PERM..	6,750	11
LOVINGTON ABO	.36	B54055	..DO	..DO..	8,380	711
LUSK STRAWN	.03	B70006	STRAWN	PENN..	11,430	126
MASON/DELAWARE, NORTH	.13	A65097	DELAWARE	PERM..		54
MOORE DEVONIAN	.33	B54087	DEVONIAN	DEV...	10,385	865
PADUCA DELAWARE	.10	A65098	DELAWARE	PERM..	4,680	738
SAUNDERS PERMO-PENN	.11	B54036	WOLFCAMP	..DO..	9,812	252
SCHARB/BONE SPRINGS	.14	A65052	BONE SPRING	..DO..	10,152	365
SHUGART/YATES 7 RVRS,Q, GRAYBURG	.41	A41092	PERMIAN	..DO..	3,166	886
TEAGUE/SIMPSON	.09	A66080	MCKEE, SIMPSON	ORD...	9,308	69
TOWNSEND WOLFCAMP	.12	A57096	WOLFCAMP	PERM..	10,330	208
VACUUM ABO REEF	.32	A66074	ABO	..DO..	8,848	5,370
VACUUM BLINEBRY	.31	A65056	BLINEBRY	..DO..	6,587	126
VACUUM GLORIETA	.49	A65057	PADDOCK, GLORIETA	..DO..	6,003	3,625
VACUUM WOLFCAMP	.27	A66085	ABO	..DO..	8,882	237
VACUUM/ABO, NORTH	.10	A65053	WOLFCAMP	..DO..	9,122	1,479
VACUUM/LOWER WOLFCAMP, NORTH	.07	A65055	..DO	..DO..	9,975	160
WARREN MCKEE	.14	B54041	MCKEE, SIMPSON	ORD...	8,943	202
(0.51-1.00)						
ARTESIA/QUEEN GRAYBURG SA	.87	B25421	PERMIAN	PERM..	1,995	573
GRAYBURG JACKSON QUEEN SA	.86	B38143	..DO	..DO..	3,400	2,429
HALFWAY/YATES	.57	B41078	..DO	..DO..	2,642	12
INBE/PERMO PENN	.51	B64072	BLINEBRY	..DO..	5,392	439
JUSTIS BLINEBRY	.51	B64072	..DO	..DO..	5,392	1,468
LYNCH/SEVEN RIVERS YATES	.87	B41086	PERMIAN	..DO..	3,774	154
MALJAMAR PADDOCK	.55	B62115	PADDOCK, GLORIETA	..DO..	5,366	20
MALJAMAR/GRAYBURG SA	.85	B31180	PERMIAN	..DO..	4,000	6,268
MIDWAY ABO	.83	A65075	ABO	..DO..	8,902	87
PADDOCK	.96	A47036	PADDOCK, GLORIETA	..DO..	5,055	483
PENROSE SKELLY/GRAYBURG	.93	A37173	PERMIAN	..DO..	3,545	367
RED LAKE/QUEEN GRAYBURG SA	.82	B39257	..DO	..DO..	1,935	152
RHODES/YATES	.94	B41267	..DO	..DO..	3,280	177
SQUARE LAKE/GRAYBURG SAN ANDRES	.74	A43094	LOCO HILLS, GRAYBURG	..DO..	3,000	843
VACUUM GRAYBURG-SAN ANDRES	.95	B57091	SAN ANDRES	..DO..	4,580	5,304
(1.01-2.00)						
ARROWHEAD GRAYBURG	1.30	B41084	PERMIAN	PERM..	3,785	233
CAPROCK QUEEN	1.07					655
CATO SAN ANDRES	1.37	B57126	GRAYBURG	PERM..		1,088
CHAVEROO SAN ANDRES	1.37	B57126	..DO	..DO..		1,046
DOLLARHIDE QUEEN	1.09	B61107	QUEEN	..DO..	3,667	123
EUMONT/YATES SEVEN RIVERS	1.22	B61086	YATES	..DO..	3,882	1,119
EUNICE-MONUMENT (G-SA)	1.42	B57126				4,598
EUNICE/SEVEN RIVERS QUEEN, SOUTH	1.34	B41271	PERMIAN	PERM..	3,860	211
HIGH LONESOME/QUEEN	1.28	B41094	..DO	..DO..	1,810	73
HOBBS (G-SA)	1.41	B62121	GRAYBURG + SAN ANDRES	..DO..	3,981	4,761
JALMAT/YATES SEVEN RIVERS	1.22	B61086	YATES	..DO..	3,882	667
LANGLIE MATTIX/SEVEN RIVERS	1.65	B57089	QUEEN	..DO..	3,325	2,992

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
NEW MEXICO - CONTINUED						
SOUTHEAST - CONTINUED						
(1.01-2.00)						
LOCO HILLS/GRAYBURG SAN ANDRES	1.02	B41393	LOCO, GRAYBURG	PERM..	2,670	1,632
LOVINGTON PADDOCK	1.20	B54054	PADDOCK, GLORIETA	..DO..	6,072	323
LOVINGTON/SAN ANDRES	1.64	B54053	SAN ANDRES	..DO..	4,635	244
LOVINGTON/SAN ANDRES, WEST	1.64	B54045	DENTON	..DO..	9,350	256
PEARL QUEEN	1.35	B40012	PERMIAN	..DO..	3,362	832
RUSSELL/YATES	1.95	L45027	YATES	..DO..	903	29
SAN SIMON/YATES, NORTH	1.42	B44038	..DO	..DO..	3,930	8
SKAGGS/GRAYBURG	1.35	B41083	PERMIAN	..DO..	3,877	226
WILSON/YATES SEVEN RIVERS	1.56	B41085	..DO	..DO..	3,822	47
(>2.00)						
BARBER/YATES	2.12	B41080	PERMIAN	PERM..	1,491	37
NORTHWEST						
(0.00-0.50)						
BISTI L GALLUP	.18	L56066	GALLUP	CRET..	4,838	306
BLANCO/TOCITO, SOUTH	.10	L57006	TOCITO, (MANCOS)	..DO..	6,683	10
BOULDER MANCOS	.10	L67084	GALLUP	..DO..	3,918	46
CHA CHA GALLUP	.12	B64105	..DO	..DO..	5,322	214
DEVILS FORK GALLUP	.07	L67085	LOWER GALLUP	..DO..	5,514	63
ESCRITO GALLUP	.11	L67086	GALLUP	..DO..	5,972	78
HOGBACK DAKOTA	.05	L00075				197
HORSESHOE/GALLUP	.11	L61258	GALLUP	CRET..	1,138	820
HOSPAH GALLUP	.21	L57004	HOSPAH, (MESAVERDE)	..DO..	1,765	253
MANY ROCKS GALLUP	.07	L67097	GALLUP	..DO..	1,726	150
PUERTO CHIQUITO MANCOS EAST	.12	L67083	MANCOS-GALLUP	..DO..	1,245	183
PUERTO CHIQUITO MANCOS WEST	.12	L67083	..DO	..DO..	1,245	778
RATTLESNAKE DAKOTA	.03	L53321	DAKOTA, 3RD	..DO..	731	6
SHIPROCK GALLUP	.07	L67093	GALLUP	..DO..	125	18
SIMPSON GALLUP	.06	L67087	LOWER GALLUP	..DO..	5,788	11
TABLE MESA DAKOTA	.09	L49073	DAKOTA	..DO..	1,335	7
TOCITO DOME/PENNSYLVANIAN D	.15	L67089	PARADOX	PENN..	6,275	705
TOTAH GALLUP	.06	L67094	GALLUP	CRET..	5,592	52
VERDE GALLUP	.12	L57016	GALLUP, (MANCOS)	..DO..	2,085	38
WATERFLOW/GALLUP, SOUTH	.07	L67095	GALLUP	..DO.	4,111	9
NEW YORK						
(0.00-0.50)						
ALLEGHANY	.12	B57100	RICHBURG	DEV...	1,228	390
CATTARAUGUS	.11	B58016				624
NORTH DAKOTA						
(0.00-0.50)						
ANTELOPE DEVONIAN	.08	L61161	DUPEROW	DEV...	10,920	420
ANTELOPE MADISON	.46	L58136	MADISON	MISS..	9,097	449
ANTELOPE SANISH	.05	L58135	SANISH	..DO..	10,352	147
ANTELOPE SILURIAN	.06	L61164	INTERLAKE	SIL...	11,727	190
BEAVER LODGE DEVONIAN	.14	L54201	THREE FORKS + JEFFERSON,	DEV...	10,390	1,516
BEAVER LODGE MADISON	.24	L52239	MADISON	MISS..	8,520	1,015
BEAVER LODGE ORDOVICIAN	.16	L65124	RED RIVER	ORD...	13,164	255
BEAVER LODGE SILURIAN	.09	L51163	INTERLAKE	SIL...	11,630	385
CAMEL BUTTE DEVONIAN	.08	L65125	DUPEROW	DEV...	11,358	40
CAMEL BUTTE MADISON	.26	L61160	MADISON	MISS..	9,386	8
CAPA MADISON	.24	L58296	..DO	..DO..	8,188	160
CHARLSON DEVONIAN	.02	L64188	DUPEROW	DEV...	10,390	177
CHARLSON MADISON	.22	L53061	MADISON	MISS..	8,998	638
CLEAR CREEK MADISON	.18	L61159	..DO	..DO..	9,176	462
CROFF DEVONIAN	.03	L64183	DUPEROW	DEV...	11,652	28
DELTA MADISON	.24	L61181	NESSON, (MADISON)	MISS..	8,322	18
DICKINSON HEATH	.42	L59192	HEATH	..DO..	7,786	736
DICKINSON WEST HEATH	.42	L59192	..DO	..DO..	7,786	433
DIMMICK LAKE MADISON	.23	L58302	MADISON	..DO..	9,260	47
FLAXTON MADISON	.44	L58279	..DO	..DO..	5,723	27
FRYBURG HEATH	.27	L55417	HEATH	..DO..	8,271	556
FRYBURG MADISON	.46	L54042	MADISON	..DO..	9,434	414
HAAS NORTH MADISON	.23	L61178	KIBBEY	..DO..	3,929	25
HAWKEYE/MADISON	.46	L58136	MADISON	..DO..	9,097	559
HOFFLUND MADISON	.24	L53060	..DO	..DO..	8,674	22
KEENE MADISON	.20	L53059	..DO	..DO..	9,066	217
LANDA MADISON	.49	L60107	MISSION CANYON	..DO..	3,170	99
LOST BRIDGE	.10	L61158	DUPEROW	DEV...	11,538	15
MCGREGOR MADISON	.18	L58292	MISSION CANYON	MISS..	8,156	64
MCGREGOR NW DUPEROW	.07	L63088	DUPEROW	DEV...	9,976	56
MEDORA HEATH	.26	L65099	HEATH	MISS..	7,797	257
MEDORA MADISON	.34	L65100	MADISON	..DO..	9,033	294
PERSHING MADISON	.29	L58304	..DO	..DO..	9,506	59
ROUGH RIDER MADISON	.39	L61157	MISSION CANYON	..DO..	9,399	29
TIOGA MADISON	.31	L52241	MADISON	..DO..	8,258	967
TIOGA NORTH MADISON	.25	L61175	NESSON, (MADISON)	..DO..	7,891	517
TIOGA/DEVONIAN	.14	L54201	THREE FORKS + JEFFERSON,	DEV...	10,390	275
TIOGA/ORDOVICIAN	.07	L69276				260
TIOGA/SILURIAN	.12	L57105	SILURIAN	SIL...	11,441	200
ZENITH/HEATH	.26	L58297	HEATH	MISS..	7,968	467

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
NORTH DAKOTA - CONTINUED						
(0.51-1.00)						
ANTLER CREEK SOUTH MADISON	0.71	L65119	MIDALE	MISS..	3,758	21
BAUKOL-NOONAN MADISON	.64	L58289	MISSION CANYON + NESSON	..DO..	6,739	21
BEAR DEN MADISON	.59	L58301	MADISON	..DO..	9,530	29
BLACK SLOUGH MADISON	.65	L61162	..DO	..DO..	6,743	191
BLUE BUTTES MADISON	.52	L58139	..DO	..DO..	9,159	677
CEDAR CREEK ORDOVICIAN	.55	L61173	RED RIVER	ORD...	8,150	464
COLUMBUS MADISON	.75	L56045	MISSION CANYON	MISS..	6,220	6
FOOTHILLS MADISON	.84	L59189	MIDALE + NESSON	..DO..	6,820	123
FOOTHILLS NORTHEAST MADISON	.63	L61166	..DO	..DO..	6,520	287
GRENORA MADISON	.51	L64186	MADISON	..DO..	7,708	192
KUROKI MADISON	.62	L58290	CHARLES + C-2C	..DO..	3,370	11
LANDA NE MADISON	.82	L58291	MISSION CANYON	..DO..	3,074	34
LIGNITE MADISON	.51	L58156	MIDALE, MADISON	..DO..	6,074	31
NEWBURG SPEARFISH-CHARLES	.77	L58138	SPEARFISH	TRIA..	3,343	1,223
NOONAN MADISON	.59	L58288	NESSON, (MADISON)	MISS..	7,260	24
PORTAL MADISON	.58	L58278	MADISON	..DO..	5,881	68
RENNIE LAKE MADISON	.54	L61163	NESSON	..DO..	6,349	59
RIVAL MADISON	.60	L58281	NESSON, (MADISON)	..DO..	6,076	506
RUSSELL SPEARFISH	.70	L65116	SPEARFISH	TRIA..	3,397	17
SHORT CREEK MADISON	.56	L58280	MADISON	MISS..	5,900	5
STARBUCK MADISON	.54	L61179	..DO	..DO..	3,300	21
STARBUCK SOUTH MADISON	.66	L61180	CHARLES	..DO..	3,252	11
TIOGA EAST MADISON	.80	L53058	MADISON	..DO..	8,364	15
TIOGA WEST MADISON	.51	L58137	..DO	..DO..	8,264	9
WESTHOPE NORTH MADISON	.91	L53057	..DO	..DO..	3,268	48
WESTHOPE S SPEARFISH-CHARLES	.71	L58285	SPEARFISH + CHARLES	TRIA..	3,401	365
WHITE EARTH MADISON	.74	L58145	MADISON	MISS..	8,386	53
WOBURN MADISON	.89	L58287	..DO	..DO..	5,856	48
(1.01-2.00)						
ELMORE MADISON	1.49	L64007	FROBISHER-ALIDA	MISS..	3,990	66
LONE TREE/MADISON	2.00	L57106	MISSION CANYON	..DO..	6,734	239
ROCKY RIDGE HEATH	1.14	L58293	HEATH	..DO..	8,082	289
SOURIS NORTH MADISON	1.01	L55302	MISSION CANYON	..DO..	2,980	38
(>2.00)						
CHOLA MADISON	2.06	L65117	SHERWOOD, (MADISON)	MISS..	4,893	58
GLENBURN MADISON	2.79	L59185	MISSION CANYON	..DO..	4,513	545
HAAS MADISON	2.29	L58305	..DO	..DO..	4,034	180
MOHALL MADISON	2.53	L65120	..DO	..DO..	4,412	155
MOUSE RIVER PARK MADISON	2.29	L65118	SHERWOOD, (MADISON)	..DO..	4,928	152
PRATT MADISON	2.78	L61174	MISSION CANYON	..DO..	4,202	17
SHERWOOD MADISON	2.09	L59186	..DO	..DO..	4,178	673
TOLLEY MADISON	2.08	L65115	SHERWOOD, (MADISON)	..DO..	5,215	31
WILEY MADISON	2.28	L58294	MISSION CANYON	..DO..	4,112	379
OKLAHOMA						
(0.00-0.50)						
ALLEN DISTRICT	.27	842096	CROMWELL	PENN..	2,608	2,899
ALLUWE	.26	855080	.....	.....	.....	91
ALMEDA	.18	838036	BARTLESVILLE	PENN..	1,400	21
ANTIOCH DISTRICT EAST	.17	850143	HUNTON	DEV...	5,750	183
APACHE	.38	841440	BROMIDE, SIMPSON	ORD...	3,305	3,274
ARDMORE SOUTHWEST	.29	857049	TULIP CREEK, SIMPSON	..DO..	1,260	51
ASHER WEST	.09	831319	VIOLA	..DO..	3,471	12
ATLANTIC	.13	838033	BURGESS	PENN..	2,460	605
AVANT WEST	.15	838353	..DO	..DO..	1,894	181
AVANT	.19	838359	BARTLESVILLE	..DO..	1,475	184
BALD HILL	.15	800741	PENNSYLVANIAN	..DO..	750	250
BARKER	.14	839344	ARBUCKLE	ORD...	2,894	175
BARNSDALL SOUTH	.20	838340	BARTLESVILLE	PENN..	1,828	17
BARNSDALL WEST	.17	838341	..DO	..DO..	1,750	41
BARNSDALL	.19	800625	PENNSYLVANIAN	..DO..	.....	40
BARTLESVILLE	.18	843140	BARTLESVILLE	..DO..	1,540	22
BARTLESVILLE-DEWEY	.26	857030	PERU	..DO..	600	610
BEGGS DISTRICT	.15	800735	.....	.....	.....	34
BIG BEND	.12	844081	LAYTON + BURBANK	PENN..	2,852	68
BILLINGS	.16	800591	PENNSYLVANIAN	..DO..	.....	35
BIRCH CREEK	.19	839382	CLEVELAND	..DO..	1,399	39
BIRD CREEK	.29	868082	BARTLESVILLE + TUCKER	..DO..	1,100	168
BLACK DOG WEST	.19	845046	BURGESS	..DO..	2,532	27
BLACKWELL	.24	800615	.....	.....	.....	176
BOSTON NORTH	.15	843187	ARBUCKLE	ORD...	2,899	15
BOSTON	.18	839342	..DO	..DO..	2,660	26
BOWLEGS	.29	866035	WILCOX, SIMPSON	..DO..	4,108	2,175
BOYNTON	.15	800742	MISSISSIPPIAN	MISS..	.....	61
BRANSTETTER	.22	844083	ARBUCKLE	ORD...	2,044	7
BRISTOW	.25	800732	PENNSYLVANIAN	PENN..	3,150	116
BRITTON	.15	836110	ORDOVICIAN	ORD...	6,625	35
BROKEN ARROW	.19	800752	.....	.....	.....	15
BULLDOG	.16	841107	BARTLESVILLE	PENN..	2,265	21
BURBANK	.24	858015	LAYTON+BURBANK+GRANITE	..DO..	2,700	5,143
CADDO	.09	842235	BROMIDE, SIMPSON	ORD...	5,412	32
CAMRICK DISTRICT	.06	864051	MORROW	PENN..	7,434	975
CANARY	.32	800580	.....	.....	.....	143
CANYON CREEK	.19	839310	ARBUCKLE	ORD...	2,495	34
CARR CITY	.28	829406	WILCOX, SIMPSON	..DO..	.....	127
CEMENT	.23	841443	ROWE, HOXBAR	PENN..	3,364	2,300
CHANDLER	.21	840237	WILCOX, SIMPSON	ORD...	5,088	309
CHELSEA	.27	855079	.....	.....	.....	222

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
OKLAHOMA - CONTINUED						
(0.00-0.50)						
CHEROKITA TREND	0.34	A69077	CHEROKEE	PENN..	5,002	468
CLEVELAND	.26	B00623	.....	.....	.....	206
COON CREEK	.36	A44135	WILCOX, SIMPSON	ORD...	.....	13
COUNTRY CLUB	.18	B38343	ARBUCKLE	..DO..	2,056	61
CRESCENT-LOVELL	.12	B39331	LAYTON	PENN..	4,886	141
CROMWELL EAST	.10	B42154	CROMWELL	..DO..	3,374	38
CROMWELL	.14	B24486	WILCOX, SIMPSON	ORD...	3,457	286
CUMBERLAND	.46	B40088	SIMPSON	..DO..	4,857	724
CUSHING TOWNSITE	.29	B28494	BARTLESVILLE	PENN..	.....	27
CUSHING	.26	B55098	BARTLESVILLE + TUCKER	..DO..	2,580	4,093
DALTON	.18	B44090	SKINNER	..DO..	2,334	53
DELAWARE-CHILDERS	.21	B59160	BARTLESVILLE	..DO..	650	265
DEPEW	.24	B59170	RED FORK, CHEROKEE	..DO..	2,810	101
DILWORTH DISTRICT	.13	B41146	WILCOX, SIMPSON	ORD...	3,405	161
DOMES-POND CREEK	.21	B58003	.....	.....	1,900	562
EARLSBORO WEST	.45	A37263	HUNTON	DEV...	4,244	12
EARLSBORO	.26	B37256	EARLSBORO	PENN..	3,417	652
EDMOND NORTHEAST	.12	B44137	BARTLESVILLE	..DO..	5,822	212
EDMOND WEST	.13	B48027	COMPOSITE	..DO..	6,401	732
ELGIN SOUTH	.13	B35122	PERU	..DO..	900	6
ELK CITY	.09	B49043	GRANITE WASH	..DO..	10,130	91
ENID NORTHEAST	.13	B70034	OSAGE	MISS..	6,116	534
ENVILLE SOUTHWEST	.04	A67078	OIL CREEK, SIMPSON	ORD...	8,175	342
EOLA-ROBBERSON	.35	B59189	BROMIDE, SIMPSON	..DO..	.....	4,786
FITTS	.14	A42161	CROMWELL	PENN..	2,575	1,464
FLAT ROCK	.22	B38045	BARTLESVILLE	..DO..	1,350	218
FREDERICK WEST	.16	A40027	CANYON	..DO..	3,060	7
GARBER	.11	B25289	.....	.....	.....	923
GILLILAND	.16	A44057	ARBUCKLE	ORD...	2,875	72
GLENN	.31	B54172	GLENN	PENN..	1,420	2,300
GOLDEN TREND	.19	B50111	GIBSON, DEESE	..DO..	7,318	12,210
GRAND VALLEY EAST	.09	A67080	MORROW	..DO..	6,948	310
GUTHRIE TOWNSITE	.09	A42201	SIMPSON	ORD...	5,603	6
GUTHRIE	.12	A41190	WILCOX, SIMPSON	..DO..	5,440	81
HARDESTY NORTH	.03	B56076	MORROW	PENN..	6,236	48
HAYDENVILLE DISTRICT	.15	A39365	WILCOX, SIMPSON	ORD...	3,584	89
HENRYETTA	.33	A37075	.....	.....	.....	38
HOGSHOOTER	.21	B57014	BARTLESVILLE	PENN..	1,120	65
HOMINY EAST	.16	A38347	..DO	..DO..	2,130	35
HOMINY FALLS	.20	B39375	BURGESS	..DO..	1,900	16
HOMINY	.13	B00622	PENN.+MISS	..DO..	.....	6
HOOVER NORTH(HOOVER)	.35	B51026	PONTOTOC	..DO..	1,080	324
HOOVER SOUTHEAST	.36	A68116	BUTTERLY	ORD...	10,010	31
HORNS CORNER	.09	A43118	CROMWELL	PENN..	3,872	10
HUBBARD	.16	A40023	STALNAKER	..DO..	2,528	66
IRON POST	.16	A68080	SKINNER	..DO..	2,406	277
ISOM SPRINGS	.45	A68101	TRINITY	CRET..	365	23
JAVINE	.15	A46044	BURGESS	PENN..	1,618	50
KAW	.11	B39097	SKINNER	..DO..	3,095	10
KELLYVILLE	.28	B00734	.....	.....	.....	139
KENDRICK	.17	A54006	FORT SCOTT	PENN..	.....	54
KEOKUK	.31	B39352	HUNTON	DEV...	4,198	101
KEYES DISTRICT	.12	A46040	KEYES, CHEROKEE	PENN..	4,800	77
KNOX	.09	A47021	DORNICK HILLS	..DO..	3,492	1,249
KONAWA-DORA	.44	A67074	EARLSBORO	..DO..	2,732	522
LANGSTON	.13	B39322	WILCOX, 1ST, SIMPSON	ORD...	5,059	11
LAUDERDALE	.18	A67154	RED FORK, CHEROKEE	PENN..	.....	155
LAWRIE WEST	.13	A68121	OSWEGO	..DO..	5,300	294
LITTLE RIVER	.25	A67156	GILCREASE	..DO..	3,085	240
LOGAN SOUTH	.04	A67075	TONKAWA	..DO..	6,006	192
LUCIEN NORTH	.10	A40262	WILCOX, 1ST, SIMPSON	ORD...	5,373	36
LUCIEN NORTHEAST	.18	A42151	WILCOX, 2ND, SIMPSON	..DO..	5,396	11
LUCIEN	.12	A40249	..DO	..DO..	5,059	354
LYONS-QUINN	.11	B24872	LYONS	PENN..	2,710	113
MACOMB SOUTH	.40	A43014	HUNTON	DEV...	4,669	68
MADALENE EAST	.16	A44049	HOMINY	ORD...	2,425	139
MADALENE	.22	B38354	BARTLESVILLE	PENN..	2,030	48
MADILL NORTH	.33	A68109	BROMIDE, SIMPSON	ORD...	6,784	581
MADILL	.06	B00643	.....	.....	1,700	70
MANION	.22	B39311	BUZZARD, OKESA	PENN..	535	59
MARSHALL	.14	A36103	WILCOX, SIMPSON	ORD...	5,777	79
MAUD	.32	A29245	MISENER	DEV...	4,097	181
MAYSVILLE SOUTHEAST	.34	B50135	SIMPSON	ORD...	6,240	11
MERVINE	.15	B00614	PENNSYLVANIAN	PENN..	.....	8
MISSION	.27	A29240	WILCOX, SIMPSON	ORD...	4,250	56
MOORE WEST	.17	A46031	WILCOX, 2ND, SIMPSON	..DO..	8,792	760
MORRIS	.11	B58035	HOOCH	PENN..	1,232	62
MT VERNON	.29	A69045	RED FORK, CHEROKEE	..DO..	4,200	86
MUSKOGEE	.23	B00750	ORDOVICIAN	ORD...	1,052	181
NAVAL RESERVE SOUTH	.16	A44059	ARBUCKLE	..DO..	3,001	19
NAVAL RESERVE	.20	B38357	BURBANK	PENN..	2,645	556
NEWCASTLE EAST	.11	B51019	HUNTON	DEV...	8,890	7
NORMAN NORTH	.19	A41161	WILCOX, SIMPSON	ORD...	.....	288
NUYAKA	.17	B00740	ORDOVICIAN	..DO..	.....	34
OCHELATA NORTH	.31	B38450	BURGESS	PENN..	700	62
OKEMAH NORTH	.22	A42200	GILCREASE	..DO..	3,121	96
OKLAHOMA CITY	.16	A57101	WILCOX, SIMPSON	ORD...	6,348	1,770
OKMULGEE	.13	B00739	PENNSYLVANIAN	PENN..	1,250	133
OLYMPIC	.24	A41175	OLYMPIC	..DO..	1,721	13
OSAGE CITY EAST	.24	B38358	BARTLESVILLE	..DO..	.....	67
OSAGE CITY	.20	B39315	PEOPLES, MUSSELEM	..DO..	913	135
OSAGE-HOMINY	.16	B38356	MISSISSIPPIAN	MISS..	2,355	737
PAGE	.21	B38024	.....	.....	2,008	22
PAPOOSE	.10	B25335	PAPOOSE	PENN..	3,326	28

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
OKLAHOMA - CONTINUED						
(0.00-0.50)						
PAULS VALLEY EAST	0.37	A45082	BURNS	PENN..	2,948	168
PAULS VALLEY	.34	A44019	CLEVELAND	..DO..	4,053	183
PAWHUSKA	.18	A39379	MISSISSIPPIAN	MISS..	2,135	70
PAYNE	.27	A41065	BROMIDE, SIMPSON	ORD...	9,560	1,879
PAYSON	.24	A54030	SKINNER	PENN..	4,152	76
PEARSONIA	.13	A47102	MISSISSIPPI CHAT	MISS..	2,408	88
PERSHING	.17	A00624	PENNSYLVANIAN	PENN..	.....	124
PIONEER	.26	A38027	BARTLESVILLE	..DO..	1,691	8
POLLYANNA	.38	A40026	GLENN	..DO..	1,790	71
POLO	.12	A41164	WILCOX, SIMPSON	ORD...	4,805	246
PONCA CITY SOUTH	.13	A38160	..DO..	..DO..	3,937	34
PONCA CITY	.18	A00616	.....	.....	.....	384
POSTLE	.14	A47044	MORROW G	PENN..	6,443	9,803
PRUE	.22	A44087	PRUE + SQUIRREL	..DO..	1,486	6
PUTNAM	.01	A48085	OSWEGO	..DO..	9,663	2,376
QUAPAW	.18	A38342	BARTLESVILLE	..DO..	1,750	29
RAMONA	.18	A48020	..DO..	..DO..	1,650	152
RAMSEY	.19	A38015	WILCOX, SIMPSON	ORD...	4,668	170
RICH VALLEY	.12	A46105	MISSISSIPPIAN	MISS..	5,219	192
RINGWOOD	.13	A51048	MANNING	..DO..	6,500	4,798
SAND SPRINGS	.19	A39314	TURKEY MOUNTAIN	ORD...	2,135	19
SAPULPA	.33	A39364	WILCOX, SIMPSON	..DO..	2,651	68
SCHLEGEL NORTH	.33	A43048	WILCOX, 2ND, SIMPSON	..DO..	3,602	6
SEARIGHT	.24	A27341	HUNTON	DEV...	4,055	352
SEMINOLE	.32	A48026	WILCOX, SIMPSON	ORD...	4,136	1,480
SKIATOOK	.16	A34046	BURGESS	PENN..	.....	11
SLICK	.47	A47018	DUTCHER	..DO..	2,583	560
SOONER TREND	.08	A46104	OSWEGO	..DO..	6,330	15,921
ST LOUIS	.36	A37254	SIMPSON	ORD...	4,080	1,384
STILLWATER	.22	A40231	WILCOX, 1ST, SIMPSON	..DO..	4,301	103
STOCKHOLM SOUTHEAST	.04	A49062	TONKAWA	PENN..	5,418	54
STROUD	.20	A40230	WILCOX, SIMPSON	ORD...	4,087	1,172
SYLVIAN	.19	A43049	CROMWELL	PENN..	3,629	51
TECUMSEH LAKE	.20	A41253	WILCOX, 1ST, SIMPSON	ORD...	5,234	43
THOMAS	.11	A40097	WILCOX, SIMPSON	..DO..	4,032	113
TIDAL-OSAGE	.18	A38030	BARTLESVILLE	PENN..	2,134	225
TONKAWA	.22	A71036	.....	.....	.....	279
TRANSCO NORTHWEST	.27	A28495	WILCOX, SIMPSON	ORD...	.....	13
TURLEY	.23	A00731	.....	.....	.....	49
TUSKEGEE	.16	A41135	WILCOX, SIMPSON	ORD...	3,323	21
WANETTE	.41	A44003	VIOLA	..DO..	4,090	17
WASHINGTON	.17	A46027	BROMIDE, SIMPSON	..DO..	10,620	754
WATCHORN EAST	.13	A59223	WILCOX, SIMPSON	..DO..	.....	206
WATCHORN	.14	A25344	..DO..	..DO..	.....	21
WAYNE SOUTHWEST	.12	A50130	PENNSYLVANIAN	PENN..	6,600	414
WELLSTON NORTH	.21	A39400	WILCOX, SIMPSON	ORD...	5,105	135
WEWOKA NORTH	.11	A43022	HUNTON	DEV...	3,923	6
WEWOKA	.18	A47101	..DO..	..DO..	3,859	336
WILDHORSE NORTH	.18	A38348	BARTLESVILLE	PENN..	1,791	16
WILDHORSE WEST	.12	A41073	HOMINY	ORD...	2,407	16
WILDHORSE	.23	A38350	BARTLESVILLE	PENN..	1,723	261
WILZETTA	.41	A39356	HUNTON	DEV...	4,241	12
WOOLAROC	.14	A34041	BARTLESVILLE	PENN..	1,755	15
WYNONA	.14	A41098	..DO..	..DO..	2,098	265
YALE-QUAY	.33	A00620	PENN.+MISS	..DO..	.....	375
YOUNGSTOWN	.32	A00738	PENNSYLVANIAN	..DO..	.....	126
(0.51-1.00)						
BROCK	.54	A39462	BROCK, 3RD	PENN..	1,564	311
CACHE CREEK	.52	A47028	CACHE, PONTOTOC	..DO..	1,320	233
CHICKASHA	.58	A23122	NICHLOS	PERM..	.....	212
EARLSBORO NORTH	.70	A39349	WILCOX, SIMPSON	ORD...	4,637	26
HEALDTON	.75	A50152	HEALDTON	PENN..	1,146	4,838
HEWITT	.79	A44097	BAYOU, DEESE	..DO..	2,760	5,765
JOINER CITY	.65	A46114	WOODFORD	MISS..	8,518	184
ORR NORTH	.52	A41073	HUNTON	DEV...	8,870	62
SEARIGHT NORTH	.61	A39348	WILCOX, SIMPSON	ORD...	4,576	217
SHAWNEE NORTHEAST	.53	A43047	WILCOX, 1ST, SIMPSON	..DO..	4,835	29
SHO-VEL-TUM	1.00	A57047	FUSULINID, DEESE	PENN..	2,660	10,627
SOLDIER CREEK	.53	A47026	SOLDIER CREEK	..DO..	1,629	182
(1.01-2.00)						
LAFFOON	1.10	A54004	WILCOX, SIMPSON	ORD...	.....	108
PECK	1.13	A41255	WILCOX, 1ST + 2ND	..DO..	4,150	75
PENNSYLVANIA						
(0.00-0.50)						
BRADFORD	.11	A58016	DEVONIAN	DEV...	.....	2,200
SOUTH DAKOTA						
(0.51-1.00)						
BUFFALO FIELD	.51	L54041	RED RIVER, MIDDLE	ORD...	8,660	143

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS						
RAILROAD COMMISSION DISTRICT 1						
(0.00-0.50)						
BIG FOOT	0.42	B50062	OLMOS, NAVARRO	CRET..	3,270	630
CALLIHAM	.17	B35276	CALLIHAM, MIRANDO	EOCENE	704	24
CAMPANA, SOUTH	.19	B68015	PETTUS, YEGUA	..DO..	3,026	354
CHAPMAN ABBOTT	.16	B33048	SERPENTINE	CRET..	1,504	15
EZZELL	.22	B39255	LOMA NOVIA, JACKSON	EOCENE	1,530	34
HILBIG	.19	B33122	SERPENTINE	CRET..	2,355	106
JACOB	.22	B35159	COCKFIELD	EOCENE	894	71
JOURDANTON EDWARDS LIME	.39	B68010	EDWARDS	CRET..	7,353	553
LYTTON SPRINGS	.38	B68018	AUSTIN + SERPENTINE	..DO..	1,682	61
MINERVA ROCKDALE	.15	B33177	NAVARRO	..DO..	750	41
SACATOSA SAN MIGUEL # 1	.33	B62045	SAN MIGUEL 1	..DO..	1,250	733
SOUTHTON	.45	B00966	CRETACEOUS	..DO..	.....	23
WEIGANG	.12	B68013	CARRIZO, CLAIBORNE	EOCENE	3,750	230
(0.51-1.00)						
BEAR CREEK	.66	B68014	OLMOS,NAVARRO	CRET..	2,278	79
BIG FOOT OLMOS D-3 SAND	.70	B67082	OLMOS D-3, NAVARRO	..DO..	3,571	13
CHARLOTTE NAVARRO	.58	B50021	CRETACEOUS	..DO..	5,154	1,179
CROWN, EAST NAVARRO	.57	B56129	OLMOS B, NAVARRO	..DO..	4,344	177
DARST CREEK BUDA	.76	B62047	BUDA	..DO..	2,327	905
DARST CREEK EDWARDS	.78	B54123	EDWARDS	..DO..	2,500	1,072
DUNLAP	.77	B68019	AUSTIN + BUDA	..DO..	2,070	249
GLEN HUMMEL POTH	.79	B68011	POTH	EOCENE	2,400	238
LULING BRANYON	.86	B54122	EDWARDS	CRET..	2,100	1,714
PRUITT	.66	B59100	OLMOS, NAVARRO	..DO..	4,822	29
PRUITT, SOUTHEAST OLMOS	.75	B59096	..DO	..DO..	5,003	105
SALT FLAT	.58	B62046	AUSTIN + BUDA	..DO..	2,330	817
SPILLER	.76	B68017	..DO	..DO..	2,033	361
(1.01-2.00)						
KAYE NAVARRO	1.61	B59101	ESCONDIDO, NAVARRO	CRET..	2,567	56
PEARSALL AUSTIN CHALK	1.11	B38074	AUSTIN	..DO..	5,275	45
PEARSALL OLMOS A	1.78	B59098	NAVARRO	..DO..	3,951	155
SOMERSET	1.47	B68012	OLMOS, NAVARRO	..DO..	774	112
(>2.00)						
PEARSALL NAVARRO	2.06	B35153	NAVARRO	CRET..	3,917	87
RAILROAD COMMISSION DISTRICT 2						
(0.00-0.50)						
BERCLAIR FRIO 2200	.19	B62171	FRIO	OLIG..	2,199	77
BERCLAIR VICKSBURG	.23	B62172	VICKSBURG	..DO..	3,183	259
BLOOMINGTON 4600	.19	B67088	GRETA, MASSIVE, FRIO	..DO..	4,646	709
BONNIE VIEW	.18	B50018	GRETA, FRIO	..DO..	4,550	470
BURNELL LULING	.07	B62173	LULING	EOCENE	6,875	288
BURNELL MASSIVE	.09	B56131	WILCOX	..DO..	.....	37
BURNELL REKLAW	.04	B62174	REKLAW	..DO..	6,524	81
CAESAR PETTUS	.42	B35151	COCKFIELD	..DO..	3,055	12
CLAYTON QUEEN CITY B	.03	B68009	QUEEN CITY B	..DO..	5,112	28
COTTONWOOD CREEK, SOUTH	.09	B56130	WILCOX	..DO..	7,651	271
DIRKS	.09	B36187	COCKFIELD	..DO..	3,842	20
FALLS CITY	.25	B62175	WILCOX	..DO..	6,056	457
FRANCITAS BROUGHTON	.12	B54067	BROUGHTON, FRIO	OLIG..	7,377	25
FRANCITAS, NORTH	.04	B67042	FRIO	..DO..	8,814	282
GANADO DEEP HANNA ROSS	.10	B62176	..DO	..DO..	6,406	36
GANADO DEEP HULTQUIST	.10	B62176	..DO	..DO..	6,406	136
GANADO DEEP LOWER 6650	.10	B62176	..DO	..DO..	6,406	146
GANADO FRIO 6-A	.13	B46137	FRIO, 6350 FT	..DO..	6,427	35
GANADO MARG. 3	.16	B62037	MARGINULINA, FRIO	..DO..	5,063	13
GANADO	.10	B62176	FRIO	..DO..	6,406	120
GANADO, WEST 4700	.17	B62038	GRETA, FRIO	..DO..	4,730	905
GANADO, WEST 6000	.17	B62038	..DO	..DO..	4,730	36
GRETA DEEP 5620	.09	B36054	TERTIARY	TERT..	5,615	62
GRETA DEEP 5900	.17	B54158	FRIO	OLIG..	5,939	257
GRETA MASSIVE CATAHOULA	.22	B35160	OSTREA + CATAHOULA	EOCENE	3,505	16
GRETA 4400	.17	B62192	GRETA, FRIO	OLIG..	4,400	3,042
HARMON	.12	B43057	OLIGOCENE	..DO..	5,317	33
HELEN GOHLKE WILCOX	.15	B52057	WILCOX A1	EOCENE	8,096	668
HELEN GOHLKE, WEST WILCOX	.09	B58137	WILCOX	..DO..	8,164	138
HEYSER 5400 NO. 1 SAND	.17	B54159	FRIO, 5400 FT	OLIG..	5,481	399
HEYSER 5400 NO. 2 SAND	.17	B54159	..DO	..DO..	5,481	325
HEYSER 5400 NO. 3 SAND	.17	B54159	..DO	..DO..	5,481	124
HEYSER	.16	B36181	FRIO	..DO..	5,496	65
HOBSON	.09	B43086	TERTIARY	TERT..	4,015	95
KARON LULING 7173	.11	B68016	LULING	EOCENE	7,281	378
KEERAN	.13	B33169	FRIO	OLIG..	5,841	88
LA ROSA ORISCOLL SAND	.12	B62180	ORISCOLL, FRIO	..DO..	8,323	6
LA ROSA 6300	.08	B62178	FRIO, 6300 FT	..DO..	6,300	285
LA ROSA 8200 SAND	.10	B62179	VICKSBURG, 8200 FT	..DO..	8,181	67
LAKE PASTURE FS-527	.16	B62194	FRIO, FS-527	..DO..	5,290	207
LAKE PASTURE FS-550	.10	B69013	FRIO, SINTON	..DO..	5,770	123
LAKE PASTURE FT-569	.13	B61049	SINTON, FRIO, 569 FT	..DO..	5,731	240
LAKE PASTURE FT-572	.11	B69014	FRIO	..DO..	5,710	90
LAKE PASTURE H-440	.20	B61050	GRETA H-440, FRIO	..DO..	4,519	1,684
LAWARD, NORTH ZONE 5600	.14	B50016	FRIO	..DO..	5,200	451
LOLITA DEEP 4-WAY	.11	B58134	FRIO, 4-WAY	..DO..	.....	41
LOLITA DEEP 7000	.11	B54160	FRIO, 7000 FT	..DO..	6,990	102
LOLITA DEEP 8000	.17	B58133	MARGINULINA, FRIO	..DO..	.....	51

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 2 - CONTINUED						
(0.00-0.50)						
LOLITA MARGINULINA	0.17	B58133	MARGINULINA, FRIO	OLIG..	.....	460
LOLITA TONEY	.17	B58133	..DO	..DO..	.....	103
LOLITA VENADO	.11	B58132	VENADO, FRIO	..DO..	6,064	43
LOLITA WARD	.17	B58133	MARGINULINA, FRIO	..DO..	.....	335
MARY ELLEN OCONNOR FQ 40	.16	B54162	FRIO FQ-40	..DO..	5,913	409
MARY ELLEN OCONNOR FS 96	.18	B58138	FRIO FS-96	..DO..	5,523	527
MAYO	.15	B46141	MAYS, FRIO	..DO..	5,437	96
MCFADDIN 4400	.28	B39254	GRETA, FRIO	..DO..	4,376	381
MCFADDIN, NORTH 6200	.11	B35167	FRIO	..DO..	6,179	15
PANNA MARIA EDWARDS	.15	B67092	EDWARDS	CRET..	10,926	348
PERSON EDWARDS	.23	B62040	..DO	..DO..	10,956	730
PETTUS	.09	B30487	COCKFIELD	EOCENE	3,660	78
PLACEDO EAST 5500	.18	B58135	FRIO, 5500 FT	OLIG..	5,560	30
PLACEDO	.17	B54163	FRIO	..DO..	.....	143
PLACEDO, EAST 6050	.09	B58136	FRIO, 6050 FT	..DO..	6,066	10
PLACEDO, EAST	.15	B58141	FRIO	..DO..	6,003	57
REFUGIO FOX 5800	.12	B62041	FRIO, 5800 FT	..DO..	5,843	25
REFUGIO HEARD AREA	.11	B62189	FRIO, 4600	..DO..	4,600	25
REFUGIO NEW 6150 SAND	.09	B58140	FRIO	..DO..	6,226	29
REFUGIO, NEW 6200 FLT B 1	.09	B58139	FRIO, 6200 FT	..DO..	6,202	272
REFUGIO, OLD	.10	B62195	FRIO, 5700 FT	..DO..	5,700	132
ROCHE B	.12	B50019	FRIO	..DO..	6,810	135
ROCHE C	.12	B50019	..DO	..DO..	6,810	517
SLICK WILCOX MASSIVE	.09	B50008	WILCOX	EOCENE	7,570	316
STEWART	.18	B46142	FRIO, 4990 FT	OLIG..	4,999	117
SWAN LAKE 8700	.19	B52067	FRIO	..DO..	8,683	21
TOM OCONNOR 4400	.17	B62042	CATAHOULA, 4400 FT	..DO..	4,392	603
TOM OCONNOR 4500 GRETA MASS	.17	B62043	GRETA, 4500 FT, FRIO	..DO..	4,404	1,330
TOM OCONNOR 5400	.15	B69015	FRIO, SINTON 5400 FT	..DO..	5,395	623
TOM OCONNOR 5425	.16	B68079	FRIO	..DO..	.....	40
TOM OCONNOR 5450 SAND	.14	B62191	FRIO, 5450 FT	..DO..	5,540	79
TOM OCONNOR 5500 SAND	.16	B62044	FRIO, 5500 FT	..DO..	5,536	4,601
TOM OCONNOR 5900	.18	B62193	FRIO, 5900 FT	..DO..	5,900	7,915
TOM OCONNOR	.17	B59154	FRIO	..DO..	.....	7,967
UNA, WEST C-SAND	.06	B62184	FRIO, C	..DO..	6,772	28
UNA, WEST W-SAND	.09	B62185	FRIO, W	..DO..	6,187	25
UNA, WEST 6500	.09	B62170	FRIO, 6500 FT	..DO..	6,522	120
WEST RANCH 41 A ZONE	.17	B58121	FRIO 41A	..DO..	5,736	3,179
WEST RANCH 98 A ZONE	.11	B58126	FRIO 98A	..DO..	6,145	2,019
WEST RANCH GLASSCOCK	.13	B58128	GLASSCOCK, FRIO	..DO..	5,569	4,172
WEST RANCH GRETA ZONE	.16	B58122	GRETA, FRIO	..DO..	5,130	4,565
WEST RANCH TONEY	.11	B67043	TONEY, FRIO	..DO..	5,502	395
WEST RANCH VANDERBILT	.10	B58125	VANDERBILT, FRIO	..DO..	6,267	242
WEST RANCH VENADO	.14	B58127	VENADO, FRIO	..DO..	5,745	268
WEST RANCH WARD ZONE	.15	B58129	WARD, FRIO	..DO..	5,701	957
WEST RANCH 7200	.09	B58130	FRIO, 7200 FT	..DO..	7,304	112
WOODSBORO FT-8 SAND	.13	B62188	TERTIARY	TERT..	.....	18
WOODSBORO	.13	B62196	..DO	..DO..	.....	28
(0.51-1.00)						
LA ROSA 5900	.70	B62177	FRIO, 5900 FT	OLIG..	5,900	324
RAILROAD COMMISSION DISTRICT 3						
(0.00-0.50)						
AMELIA DISCORBIS 3	.20	B63129	DISCORBIS 3, ANAHUAC	OLIG..	5,628	24
AMELIA FRIO 1	.21	B37217	FRIO	..DO..	6,723	47
AMELIA FRIO 2	.20	B38056	..DO	..DO..	6,768	55
AMELIA FRIO 4	.22	B37143	OLIGOCENE	..DO..	6,765	21
AMELIA FRIO 6	.23	B55046	FRIO 6	..DO..	6,766	161
AMELIA MARG 3	.24	B55047	MARGINULINA 3, FRIO	..DO..	6,236	58
ANAHUAC	.19	B55048	FRIO A	..DO..	7,054	8,435
BAMMEL COCKFIELD 6200	.10	B59148	COCKFIELD	EOCENE	6,255	90
BARBERS HILL	.27	B55050	FRIO	OLIG..	4,495	768
BATSON, NEW	.09	B63131	EOCENE	EOCENE	5,124	683
BAY CITY, 7000 FRIO	.12	B49025	FRIO	OLIG..	7,075	61
BAY CITY, 7500 FRIO	.19	B55051	FRIO, 7500 FT	..DO..	7,490	167
BAY CITY, 8200 FRIO	.12	B46138	FRIO, 8200 FT	..DO..	8,248	55
BAY CITY, 8500 FRIO	.12	B46144	FRIO, 8500 FT	..DO..	8,506	143
BEAUMONT	.19	B59137	HETEROSTEGINA	..DO..	5,640	55
BEAUMONT, WEST	.18	B41475	DISCORBIS+MARGINULINA	..DO..	5,400	262
BENDER COCKFIELD	.10	B59120	COCKFIELD	EOCENE	5,826	30
BENDER YEGUA Y 5 SAND	.14	B56084	YEGUA Y5	..DO..	6,072	215
BIG CREEK	.11	B67089	MIOCENE	MIOC..	3,851	1,054
BIG HILL	.19	B55052	MARGINULINA	..DO..	9,283	491
BLESSING F-12	.13	B69070	BLESSING F-12	OLIG..	7,790	19
BLESSING F-14-B	.06	B63136	FRIO F-14B	..DO..	8,179	61
BLESSING F-15	.05	B63137	FRIO F-15	..DO..	8,231	37
BLESSING F-18-A	.06	B63138	FRIO F-18A	..DO..	8,481	9
BLESSING F-3	.05	B63135	FRIO F3	..DO..	7,005	126
BLUE MARSH QUINN	.08	B63140	QUINN, CISCO	PENN..	.....	8
BLUE MARSH 5TH YEGUA	.14	B63139	YEGUA, 5TH	EOCENE	.....	5
BLUE RIDGE	.27	B59149	FRIO	OLIG..	3,949	108
BOLING	.15	B51076	..DO	..DO..	4,984	131
BOLING, SOUTH	.16	B59146	FRIO 6	..DO..	6,430	92
CEDAR POINT	.09	B40082	MIOCENE	MIOC..	4,414	294
CHENANGO 8100 FRIO	.11	B59134	FRIO, 8100 FT	OLIG..	8,152	33
CHENANGO 8500 A	.11	B59133	FRIO, 8500 FT A	..DO..	8,498	29
CHOCOLATE BAYOU ALIBEL	.09	B56085	ALIBEL, FRIO	..DO..	9,305	428
CHOCOLATE BAYOU FRIO UPPER	.09	B50011	FRIO A+B	..DO..	8,700	125
CLAM LAKE	.18	B62063	MIOCENE	MIOC..	4,436	522

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 3 - CONTINUED						
(0.00-0.50)						
CLAY CREEK	0.35	B30490	MT. SELMAN	EOCENE	1,194	219
CLEAR LAKE	.24	B68006	FRIO	OLIG.	6,000	389
COLUMBUS	.09	B59151	WILCOX 7C	EOCENE	8,338	125
CONROE TOWNSITE COCKFIELD	.13	B63144	COCKFIELD	..DO..	5,103	66
CONROE UPPER COCKFIELD	.15	B53018	..DO	..DO..	.....	281
CONROE	.05	B63143	..DO	..DO..	4,991	12,953
COTTON LAKE	.15	B37185	MARGINULINA, FRIO	OLIG.	6,285	9
DAMON MOUND EAST FLT 8-1	.17	B59147	FRIO, FAULT BLOCK 1	..DO..	4,380	119
DAMON MOUND	.28	B00789	TERTIARY	TERT.	3,212	119
DANBURY DOME 5655	.09	B59150	FRIO, 5655 FT	OLIG.	5,050	452
DANBURY DOME	.15	B59142	MIOCENE, 2842 FT	MIOC.	2,865	90
DAYTON, NORTH	.50	B00779	TERTIARY	TERT.	1,700	8
DICKINSON	.09	B36064	FRIO	OLIG.	8,007	71
DURKEE, FAIRBANKS	.13	B68007	FAIRBANKS, YEGUA	EOCENE	7,050	559
DYERSDALE	.18	B49031	FRIO	OLIG.	4,050	116
ESPERSON DOME	.32	B63146	MIOCENE 1	MIOC.	2,664	1,108
ESPERSON DOME, SOUTH	.11	B51074	CROCKETT	EOCENE	7,595	131
FANNETT	.15	B55055	CATAHOULA	OLIG.	3,720	700
FEDERAL BLOCK 288 E	.07	B69071	MIOCENE E	MIOC.	8,214	141
FEDERAL BLOCK 288 F	.06	B69072	MIOCENE F	..DO..	8,496	202
FEDERAL BLOCK 288 G4	.05	B69073	MIOCENE G4	..DO..	8,874	18
FIG RIDGE SEABREEZE	.13	B62065	SEABREEZE, FRIO	OLIG.	8,492	1,509
FIG RIDGE	.17	B46135	FRIO, 81	..DO..	8,561	11
FISHERS REEF FRIO 48	.07	B67041	FRIO 48	..DO..	8,196	193
FISHERS REEF FRIO 8	.09	B67039	FRIO 8	..DO..	8,477	55
FISHERS REEF	.10	B67040	FRIO 17	..DO..	9,173	622
FRANKS SCHENCK SAND	.12	B59126	SCHENK, FRIO	..DO..	11,018	111
FRANKS 8900 SD	.09	B59136	BIG GAS SAND, FRIO	..DO..	8,933	349
FT. TRINIDAD, EAST BUDA	.16	B71065	BUDA	CRET..	9,019	235
FT. TRINIDAD, EAST DEXTER	.16	B71064	DEXTER	..DO..	8,619	146
GILLOCK BIG GAS	.06	B63149	FRIO 1	OLIG.	7,902	397
GILLOCK	.09	B49020	FRIO	..DO..	8,300	79
GILLOCK, EAST SEG	.10	B59129	..DO	..DO..	9,192	909
GILLOCK, SOUTH	.11	B50060	BIG GAS SAND, FRIO	..DO..	9,504	1,287
GOOSE CREEK	.13	B55056	MIOCENE + OLIGOCENE	MIOC..	4,432	1,092
HANKAMER MIOCENE SAND	.22	B50072	MIOCENE	..DO..	4,258	1,176
HANKAMER	.25	B30504	..DO	..DO..	4,232	183
HARDIN	.14	B46148	FRAZIER, FRIO	OLIG.	7,583	309
HASTINGS, EAST	.15	B62066	FRIO	..DO..	6,020	1,355
HASTINGS, WEST	.17	B62067	..DO	..DO..	6,060	15,791
HIGH ISLAND	.26	B55057	MIOCENE	MIOC..	4,487	1,684
HOCKLEY	.47	B33123	TERTIARY	TERT..	2,419	6
HOUSTON, S. MIOCENE	.20	B36067	MIOCENE	MIOC..	4,017	116
HOUSTON, SOUTH OLIGOCENE	.12	B55058	FRIO	OLIG.	4,834	302
HULL, COOK MOUNTAIN	.09	B30511	COOK MOUNTAIN	EOCENE	3,887	151
HULL	.35	B55059	CAPROCK	MIOC..	1,651	1,271
HUMBLE LIGHT	.06	B62068	YEGUA Y4-5	EOCENE	4,392	749
HUMBLE	.22	B30606	OLIGOCENE	OLIG.	2,185	499
KATY, 1-8	.05	B62069	COCKFIELD	EOCENE	6,844	459
LA BELLE	.09	B38135	FRIO	OLIG.	8,622	412
LIBERTY, SOUTH	.16	B54105	YEGUA	EOCENE	5,756	914
LIVINGSTON	.11	B55061	COCKFIELD	..DO..	4,198	319
LOCHRIDGE	.13	B41473	FRIO	OLIG.	6,300	114
LOVELLS LAKE FRIO 1	.10	B39252	..DO	..DO..	7,716	55
LOVELLS LAKE FRIO 2	.09	B40308	..DO	..DO..	7,792	403
LOVELLS LAKE MARG 2	.10	B67083	..DO	..DO..	7,780	336
MAGNET WITHERS E. FRIO	.19	B71067	..DO	..DO..	5,678	81
MAGNET WITHERS	.19	B55062	..DO	..DO..	5,535	2,525
MANVEL MIOCENE BASAL	.21	B50051	MIOCENE	MIOC..	4,039	39
MANVEL OLIGOCENE	.16	B62070	OLIGOCENE	OLIG..	5,115	1,740
MANVEL UPPER MIOCENE	.20	B55074	MIOCENE	MIOC..	4,075	30
MARKHAM N BAY CITY N CARLSON	.10	B63151	CARLSON, FRIO	OLIG..	7,130	451
MARKHAM N BAY CITY N CAYCE	.12	B63152	CAYCE, FRIO	..DO..	7,864	298
MARKHAM N BAY CITY N CORNELIUS	.09	B63153	CORNELIUS, FRIO	..DO..	7,686	432
MARKHAM N BAY CITY N ROSS	.12	B71066	.....	.....	8,380	7
MARKHAM	.17	B24557	TERTIARY	TERT..	1,380	60
MERCHANT EY-18 SAND	.36	B55064	YEGUA EY-18	EOCENE	9,080	184
MERCHANT, EY-1	.34	B55063	YEGUA EY-1	..DO..	8,976	12
MERCY	.09	B44048	WILCOX	..DO..	8,287	86
MOORES, ORCHARD	.09	B59145	YEGUA	..DO..	7,222	546
MORGANS CREEK	.23	B50073	PERKINS, JACKSON	..DO..	3,117	13
MYKAWA NEW	.15	B36069	MIOCENE + OLIGOCENE	MIOC..	4,100	43
NOME	.23	B37215	MARGINULINA, FRIO	OLIG..	6,010	30
NONA MILLS	.09	B59139	COCKFIELD	EOCENE	8,190	87
OLD OCEAN ARMSTRONG	.14	B55066	ARMSTRONG, FRIO	OLIG..	10,204	1,067
OLD OCEAN CHENAULT	.09	B44064	CHENAULT, FRIO	..DO..	9,583	32
ORANGE	.29	B55068	MIOCENE	MIOC..	3,230	309
OYSTER BAYOU	.18	B46132	OYSTER BAYOU, FRIO	OLIG..	8,375	4,812
PICKETT RIDGE F-4	.17	B59141	FRIO, 4700 FT	..DO..	4,767	13
PICKETT RIDGE	.19	B37206	FRIO	..DO..	4,669	90
PIERCE JUNCTION	.12	B51075	..DO	..DO..	4,784	468
PORT NECHES	.25	B33068	TERTIARY	TERT..	3,473	416
RACCOON BEND COCKFIELD	.12	B55069	COCKFIELD	EOCENE	4,082	870
RACCOON BEND GRAWUNDER	.14	B33131	JACKSON	..DO..	3,208	35
RACCOON BEND GUTOWSKY	.19	B56089	HOCKLEY, JACKSON	..DO..	3,344	66
RACCOON BEND JACKSON	.13	B33132	JACKSON	..DO..	3,484	254
RACCOON BEND WILSON	.24	B30508	HOCKLEY, JACKSON	..DO..	3,293	202
RANKIN	.12	B68008	YEGUA	..DO..	8,252	275
RED FISH REEF, S. FRIO 15	.08	B62071	FRIO 15R	OLIG..	11,340	129
RED FISH REEF, SW F-15D	.09	B59121	FRIO F-15D	..DO..	10,834	12
RED FISH REEF, SW F-4	.11	B59127	FRIO F4	..DO..	9,358	45
RED FISH REEF, SW F-8	.09	B59122	FRIO F8	..DO..	9,771	8
ROSE CITY, N	.11	B59152	BEAUMONT, E. FRIO	..DO..	8,098	138

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 3 - CONTINUED						
(0.00-0.50)						
ROSE CITY, S.	0.11	859152	BEAUMONT, E. FRIO	OLIG.	8,098	218
ROWAN	.09	842039	OLIGOCENE	..DO..	8,500	36
SARATOGA	.24	850069	YEGUA	EOCENE	7,200	246
SATSUMA	.09	837212	COCKFIELD	..DO..	6,825	14
SEGNO DEEP	.06	863155	WILCOX	..DO..	8,000	77
SEGNO	.14	863154	COCKFIELD A	..DO..	5,090	121
SHERIDAN WILCOX H SAND	.09	842037	WILCOX	..DO..	8,700	59
SILSBEE	.18	855070	YEGUA 1ST	..DO..	6,849	202
SOUR LAKE	.14	849028	EOCENE	..DO..	.....	1,059
SPINDLETOP	.15	859144	MIOCENE	MIOC..	3,500	345
STOWELL CRAWFORD U-1	.21	846131	CRAWFORD, FRIO	OLIG..	7,825	229
STOWELL INTERMEDIATE U-2	.17	846129	FRIO	..DO..	7,838	117
STOWELL STEWART U-3	.18	846128	STEWART, FRIO	..DO..	7,845	135
STOWELL SULLIVAN B SD	.12	863157	FRIO	..DO..	7,640	18
STOWELL 6500	.15	863156	MIOCENE, 6500 FT.	MIOC..	6,447	38
STOWELL 6700	.16	862134	MIOCENE, 6700 FT.	..DO..	6,736	77
STOWELL, SULLIVAN L F	.13	846130	SULLIVAN, FRIO	OLIG..	7,845	255
SUGAR VALLEY GRAVIER	.11	867038	GRAVIER, FRIO	..DO..	10,125	22
SUGARLAND	.33	831030	FRIO	..DO..	3,600	1,260
THOMPSON NORTH	.11	849026	VICKSBURG	..DO..	7,800	512
THOMPSON SOUTH 4400	.20	863159	MIOCENE, 4400 FT.	MIOC..	4,334	994
THOMPSON SOUTH	.20	849032	MIOCENE	..DO..	5,400	510
THOMPSON 3600	.25	852084	MIOCENE 2	..DO..	3,478	232
THOMPSON	.20	833070	OLIGOCENE	OLIG..	5,137	9,485
THOMPSON, VICKSBURG	.08	863158	VICKSBURG	..DO..	7,551	82
TOMBALL SCHULTZ SE	.09	837204	SCHULTZ, COCKFIELD	EOCENE	5,535	1,576
TOMBALL	.09	836065	COCKFIELD	..DO..	5,552	525
TOMBALL, SCHULTZ CENTRAL	.09	855072	SCHULTZ, COCKFIELD	..DO..	5,537	466
TOMBALL, WEST TRESELER	.05	862072	TRESELER A, YEGUA	..DO..	5,561	63
TRINITY BAY	.11	859123	FRIO 12	OLIG..	8,106	1,478
TURTLE BAY	.15	839047	FRIO	..DO..	6,619	93
UMBRELLA POINT F-5 SD	.14	863160	FRIO 5	..DO..	8,265	354
VILLAGE MILLS, EAST O	.08	863161	COCKFIELD	EOCENE	7,138	286
VILLAGE MILLS, EAST	.09	863161	..DO	..DO..	7,138	467
WEBSTER	.23	852085	FRIO	OLIG..	5,725	16,334
WEST COLUMBIA NEW	.19	863162	FRIO 14+15	..DO..	5,234	677
WEST COLUMBIA	.27	837162	TERTIARY	TERT..	.....	677
WITHERS NORTH	.14	843108	FRIO	OLIG..	5,350	707
WITHERS, NORTH C SAND	.10	855073	FRIO C	..DO..	5,312	197
(0.51-1.00)						
BATSON OLD	.73	859128	MIOCENE	MIOC..	580	110
DICKINSON DEEP FRIO	.82	863145	FRIO 17	OLIG..	9,523	165
LIVINGSTON WILCOX	.89	855060	WILCOX	EOCENE	7,029	603
SARATOGA, WEST	.54	859130	MIOCENE, BASAL	MIOC..	3,091	116
RAILROAD COMMISSION DISTRICT 4						
(0.00-0.50)						
AGUA DULCE	.09	855018	FRIO	OLIG..	6,900	179
ALAZAN ALL ZONES	.06	869017	..DO	..DO..	4,196	633
ALAZAN, NORTH ALL ZONES	.05	863219	FRIO, H-86	..DO..	7,876	3,636
ARANSAS PASS	.09	837049	MARGINULINA, FRIO	..DO..	6,527	13
ARNOLD-DAVID CHAPMAN SAND	.09	863220	CHAPMAN, FRIO	..DO..	6,038	700
AVIATORS	.17	833176	EOCENE	EOCENE	1,740	103
BALDWIN	.21	836083	MIOCENE	MIOC..	4,060	123
BENAVIDES	.09	838131	GRAVIS, JACKSON	EOCENE	4,800	24
BIG CAESAR PFLEUGER UPPER	.04	869028	PFLEUGER, FRIO	OLIG..	7,251	563
BIG CAESAR S. PFLEUGER	.05	869029	..DO	..DO..	7,554	118
BORREGOS WEST ZONE SEG A F-82	.04	863225	FRIO, F-82	..DO..	5,870	61
BORREGOS ZONE P 5, EAST	.05	863223	FRIO 85	..DO..	6,906	4,567
CAYO DEL OSO	.09	855019	FRIO J	..DO..	6,644	9
CLARA DRISCOLL	.12	836184	CATAHOULA	..DO..	3,807	43
COLORADO	.04	848082	COLORADO	EOCENE	3,042	82
CONOCO DRISCOLL	.09	841471	JACKSON	..DO..	3,250	607
FLOUR BLUFF	.09	836146	MARGINULINA, FRIO	OLIG..	6,633	6
FLOUR BLUFF, EAST MASSIVE, UP	.03	867136	FRIO	..DO..	6,745	201
FULTON BEACH A-3	.03	862007	FRIO A3	..DO..	7,112	6
FULTON BEACH A-4-6	.03	862014	FRIO A4-6	..DO..	7,148	19
FULTON BEACH B-3-8 SD	.05	862006	FRIO B3-8	..DO..	7,136	5
FULTON BEACH C-1-2-3	.04	863226	FRIO C-1,2,3	..DO..	7,137	11
FULTON BEACH, NORTH A-2	.03	863227	FRIO A2	..DO..	6,752	6
GARCIA MILLER A	.02	869027	MILLER A, FRIO	..DO..	4,180	89
GARCIA	.09	842080	FRIO	..DO..	3,748	513
GOVERNMENT WELLS, NORTH	.18	833058	GOVERNMENT WELLS	EOCENE	2,230	435
GOVERNMENT WELLS, SOUTH	.18	833059	..DO	..DO..	2,333	307
GOVT. WELLS, NORTH QUEEN CITY	.09	855026	QUEEN CITY	..DO..	5,425	48
HAGIST RANCH QUEEN CITY	.09	856091	..DO	..DO..	5,194	76
HOFFMAN	.14	841472	JACKSON	..DO..	2,650	501
JENNINGS, WEST 3000	.09	859102	CROCKETT, 3000 FT.	..DO..	3,000	75
JOHNS HOCKLEY	.13	859114	CHERNOSKEY, JACKSON	..DO..	3,543	77
KELSEY DEEP ZONE 17-8-N	.06	869018	FRIO	OLIG..	5,527	49
KELSEY DEEP ZONE 18-8-N&CN	.05	869021	..DO	..DO..	5,711	454
KELSEY DEEP ZONE 18-F	.03	863231	FRIO 18E	..DO..	5,772	396
KELSEY DEEP ZONE 19-A	.02	863232	FRIO 19A	..DO..	5,896	20
KELSEY DEEP ZONE 19-K	.05	863233	FRIO 19K	..DO..	5,998	297
KELSEY DEEP ZONE 22-A N	.04	869016	FRIO	..DO..	6,268	17
KELSEY M-2	.03	863230	VICKSBURG	..DO..	4,955	409
KELSEY, K-2,3&4	.02	863229	FRIO K-1,2,3	..DO..	4,723	19
KELSEY, SOUTH 19-B S ZONE	.02	869019	FRIO	..DO..	5,980	1,108
LA GLORIA ATLEE A	.09	848062	ATLEE A, FRIO	..DO..	7,010	10

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 4 - CONTINUED						
(0.00-0.50)						
LA GLORIA LOMA BLANCA	0.09	R48067	LOMA BLANCA, FRIO	OLIG..	6,490	7
LA GLORIA, SOUTH ARGUELLEZ	.09	R48061	ARGUELLEZ, FRIO	..DO..	6,412	12
LA GLORIA, SOUTH CORCORAN	.09	R48063	CORCORAN, FRIO	..DO..	6,263	16
LA GLORIA, SOUTH HAMMOND	.09	R48065	HAMMOND, FRIO	..DO..	6,874	6
LOMA NOVIA	.10	R37178	MCELROY, JACKSON	EOCENE	2,800	175
LONDON GIN	.14	R51047	GRACE, CATAHOULA	MIOC..	4,445	427
LOPEZ	.31	R59104	JACKSON	EOCENE	2,200	478
MIDWAY MAIN MIDWAY	.18	R55028	MIDWAY MAIN, FRIO	OLIG..	5,290	19
MIDWAY	.15	R37182	FRIO	..DO..	5,281	20
MILLS BENNETT E SAND	.09	R55029	FRIO E	..DO..	4,675	40
MIRANDO CITY	.23	R23094	CLAIBORNE	EOCENE	1,560	41
MUSTANG ISLAND SD 9	.09	R56095	MARGINULINA, FRIO 9	OLIG..	7,310	139
MUSTANG ISLAND SD. 6	.09	R56093	FRIO 6	..DO..	7,682	72
MUSTANG ISLAND SD. 7A	.09	R56094	MARGINULINA, FRIO 7A	..DO..	7,230	92
MUSTANG ISLAND SD. 8	.14	R52088	FRIO 8	..DO..	7,280	60
OHERN	.07	R67135	MIRANDO + PETTUS	EOCENE	2,750	103
PIEDRE LUMBRE	.14	R59106	GOVERNMENT WELLS	..DO..	2,015	183
PLYMOUTH MAIN GRETA	.15	R59110	GRETA, FRIO	OLIG..	4,663	142
PLYMOUTH 6100	.12	R55031	FRIO, 6100 FT	..DO..	.....	45
PLYMOUTH	.13	R55032	FRIO	..DO..	.....	497
PLYMOUTH, GRETA STRINGER	.19	R59108	GRETA, FRIO	..DO..	4,634	119
PORTILLA 7100	.09	R56096	FRIO, 7100 FT	..DO..	7,142	250
PORTILLA 7300	.09	R59109	FRIO, 7300 FT	..DO..	7,228	390
PORTILLA 7400	.09	R63237	FRIO, 7400 FT	..DO..	7,357	1,579
PORTILLA 8100	.12	R52090	FRIO, 8100 FT	..DO..	8,100	82
PRADO COMBINED ZONES	.03	R62010	LOMA NOVIA 3, JACKSON	EOCENE	3,710	792
RED FISH BAY ZONE 15	.09	R56097	FRIO 15	OLIG..	8,274	23
RED FISH BAY ZONE 5A	.09	R55035	FRIO 5A	..DO..	7,860	29
RED FISH BAY ZONE 5B	.09	R55036	FRIO 5B	..DO..	7,949	45
RICHARD KING UPPER 5600	.10	R48077	FRIO, 5600 FT	..DO..	5,638	101
RICHARD KING	.09	R48081	BROWNLEE, FRIO	..DO..	5,574	69
RINCON VICKSBURG -A-	.09	R52092	VICKSBURG 1	..DO..	5,322	5
RINCON VICKSBURG	.03	R63243	VICKSBURG	..DO..	5,556	248
RINCON	.05	R63242	FRIO J2	..DO..	4,228	508
SAXET CLARKWOOD	.15	R36148	OLIGOCENE	..DO..	4,200	324
SAXET DEEP	.09	R45045	FRIO	..DO..	6,914	37
SEELIGSON COMBINED ZONE	.09	R55039	FRIO 19C	..DO..	6,123	4,765
SEELIGSON ZONE 20B-07	.03	R63248	FRIO, 20B-07	..DO..	6,380	34
SEELIGSON ZONE 20E	.05	R63249	FRIO, 20E	..DO..	6,691	84
SEELIGSON ZONE 21A	.09	R44119	FRIO, 21-A	..DO..	6,573	10
SEELIGSON ZONE 21B	.05	R69023	FRIO	..DO..	6,893	463
SEELIGSON ZONE 21D-7	.01	R69025	..DO	..DO..	6,908	830
SEJITA	.09	R43158	HOCKLEY, JACKSON	EOCENE	5,777	7
SEVEN SISTERS	.13	R39263	EOCENE	..DO..	2,450	310
STRATTON BERTRAM & WARDNER	.09	R55043	FRIO	OLIG..	6,591	303
STRATTON BERTRAM, EAST	.04	R69020	..DO	..DO..	6,379	18
STRATTON L-12, SOUTH	.05	R69026	..DO	..DO..	6,364	10
STRATTON S-4	.03	R67036	FRIO S4	..DO..	6,530	118
STRATTON	.09	R55043	FRIO	..DO..	6,591	205
SUN	.09	R39264	FRIO, 4800 FT	..DO..	4,843	1,048
SUN, NORTH C-3-R	.09	R59107	FRIO C25	..DO..	4,318	47
SUN, NORTH D-1	.09	R59113	FRIO D-1A	..DO..	4,652	22
SUN, NORTH	.01	R69022	JEWEL, FRIO	..DO..	5,022	40
TAFT DEEP B-1 SINTON SD	.16	R62001	SINTON B1, FRIO	..DO..	5,743	151
TAFT DEEP D-2 SAND	.10	R62052	FRIO D2	..DO..	6,209	16
TAFT, WEST 4000	.20	R62002	CATAHOULA	..DO..	4,127	18
TIJERINA-CANALES-BLUCHER 721-R	.12	R63251	FRIO 21R	..DO..	.....	5,506
TIJERINA-CANALES-BLUCHER 721R4,W	.07	R63252	FRIO 21R-4	..DO..	7,169	191
TIJERINA-CANALES-BLUCHER	.14	R63250	FRIO	..DO..	7,157	173
VIBORAS 8300	.06	R63253	FRIO, 8300 FT	..DO..	8,320	188
WHITE POINT EAST 4600 HET	.10	R63254	FRIO, 4600 FT	..DO..	4,633	81
WHITE POINT EAST 5000	.13	R62016	GRETA, 5000 FT, FRIO	..DO..	4,998	214
WHITE POINT, E	.10	R42036	MIOCENE + OLIGOCENE	MIOC..	.....	830
WHITE POINT, FAST HEEP	.07	R69024	HEEP, FRIO	OLIG..	5,796	238
WILLAMAR	.40	R63255	FRIO	..DO..	7,851	1,194
WILLAMAR, WEST	.38	R63256	..DO	..DO..	7,876	941
RAILROAD COMMISSION DISTRICT 5						
(0.00-0.50)						
BUFFALO	.26	R39096	WOODBINE	CRET..	5,500	100
CORSICANA SHALLOW	.24	R56112	WOLF CITY	..DO..	1,088	568
HONEST RIDGE	.32	R27695	WOODBINE	..DO..	2,876	6
KERENS, SOUTH WOODBINE	.27	R56115	..DO	..DO..	3,380	353
LEONA SUB-CLARKSVILLE	.11	R62164	SUB-CLARKSVILLE	..DO..	6,892	130
MALAKOFF BACON LIME	.26	R56116	BACON, GLEN ROSE	..DO..	7,604	13
MALAKOFF, SOUTH BACON LIME	.26	R56116	..DO	..DO..	7,604	21
MEXIA	.18	R62165	WOODBINE	..DO..	2,950	130
O S R WOODBINE	.11	R67119	..DO	..DO..	7,806	182
OAKWOOD DOME WOODBINE	.09	R62166	..DO	..DO..	5,790	45
OPELIKA	.09	R41426	TRINITY	..DO..	8,065	16
POWELL	.24	R67109	WOODBINE	..DO..	2,900	122
REILLY SPRINGS SMACKOVER	.35	R69113	SMACKOVER	JUR...	.....	65
SULPHUR BLUFF	.44	R58095	PALUXY, TRINITY	CRET..	4,474	319
TAWAKONI SMACKOVER	.42	R69094	SMACKOVER	JUR...	9,758	136
TRI CITIES	.22	R62132	PODESSA, GLEN ROSE	CRET..	7,600	6
WORTHAM	.19	R40144	WOODBINE	..DO..	2,943	19
(0.51-1.00)						
BIRTHRIGHT SMACKOVER	.60	R69116	SMACKOVER	JUR...	.....	294
BRANTLEY JACKSON SMACKOVER	.87	R69119	..DO	..DO..	.....	694

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 5 - CONTINUED						
(0.51-1.00)						
HAM GOSSETT BACON LIME	0.68	B58118	BACON, GLEN ROSE	CRET..	6,132	13
HAM GOSSETT EAST	.82	B58117	WOODBINE	..DO..	3,256	365
HAM GOSSETT LEWISVILLE	.71	B58114	..DO	..DO..	3,362	9
HAM GOSSETT SE RODESSA	.64	B67108	RODESSA, GLEN ROSE	..DO..	6,117	10
HAM GOSSETT, SE PALUXY	.67	B67116	PALUXY, TRINITY	..DO..	4,878	75
REKA 6800	.76	B56114	PETTIT, GLEN ROSE	..DO..	6,832	8
ROWE & BAKER	.89	B39137	WOODBINE	..DO..	3,137	6
VAN	.80	B62168	..DO	..DO..	2,682	12,036
(1.01-2.00)						
VAN SHALLOW	1.42	B33121	NACATOCH	CRET..	1,251	52
RAILROAD COMMISSION DISTRICT 6 & 6A						
(0.00-0.50)						
BETHANY GLEN ROSE 4300	.23	B62078	GLEN ROSE, 4300 FT	CRET..	4,401	1,323
BETHANY NORTHEAST 3720	.23	B62141	WOOLSWORTH, GLEN ROSE	..DO..	3,716	10
BETHANY, NORTHEAST JENKINS	.21	B62142	JENKINS, GLEN ROSE	..DO..	3,685	197
BETHANY, NORTHEAST 3850 LIME	.21	B58076	MOORINGSPORT, GLEN ROSE	..DO..	3,903	316
BOGGY CREEK	.28	B27332	CRETACEOUS	..DO..	3,842	36
CAMP HILL	.36	B57076	..DO	..DO..	520	298
CARBONDALE 9660 SMACKOVER	.44	B69101	SMACKOVER	JUR...	9,662	272
CARTHAGE SABINE	.09	B44102	TRAVIS PEAK, TRINITY	CRET..	6,230	12
CARTHAGE 6400 TRAVIS PEAK	.09	B47005	..DO	..DO..	6,384	47
CARTHAGE	.20	B48090	PETTIT, GLEN ROSE	..DO..	6,072	60
CAYUGA TRINITY	.09	B40033	TRINITY	..DO..	7,310	19
CHAPEL HILL	.35	B40086	PETTIT, GLEN ROSE	..DO..	8,600	74
DANVILLE PETTIT UPPER	.41	B67120	..DO	..DO..	7,320	146
EAST TEXAS FIELD	.26	B67053	WOODBINE	..DO..	.....	70,905
FAIRWAY JAMES LIME	.24	B62087	JAMES, GLEN ROSE	..DO..	9,880	14,165
FAIRWAY PETTIT	.10	B62152	PETTIT, GLEN ROSE	..DO..	10,085	18
FRIENDSHIP RODESSA	.37	B67113	RODESSA, GLEN ROSE	..DO..	6,162	86
FROST SMACKOVER	.39	B67117	SMACKOVER	JUR...	9,758	534
GOOD OMEN PETTIT	.27	B58077	PETTIT, GLEN ROSE	CRET..	8,072	89
GOOD OMEN WOODBINE	.12	B58078	WOODBINE	..DO..	4,020	19
GREEN FOX PETTIT	.27	B67106	PETTIT, GLEN ROSE	..DO..	6,265	338
HALLSVILLE, NORTHEAST PETTIT	.12	B58082	..DO	..DO..	6,918	132
HAYNES MITCHELL	.38	B56119	MITCHELL, GLEN ROSE	..DO..	6,020	580
HENDERSON PETTIT-RUSK CO	.22	B67118	PETTIT, GLEN ROSE	..DO..	7,377	62
JACKSONVILLE NORTH WOODBINE	.13	B56122	WOODBINE	..DO..	4,361	65
KILDARE	.25	B42053	GLOYD, GLEN ROSE	..DO..	5,982	302
LAKE FERRELL PETTIT UP	.22	B42153	PETTIT, GLEN ROSE	..DO..	7,381	99
LONG LAKE	.11	B34017	WOODBINE	..DO..	5,247	450
LONGWOOD GOODLAND LIME	.45	B58083	FREDERICKSBURG	..DO..	2,365	232
MAPLETON DURST SAND	.11	B67107	DURST, WOODBINE	..DO..	8,400	28
NAVARRO CROSSING	.08	B67105	WOODBINE	..DO..	5,802	165
NECHES WOODBINE	.13	B59158	LEWISVILLE, WOODBINE	..DO..	4,656	3,842
NEW DIANA WOODBINE	.37	B67103	WOODBINE	..DO..	3,697	724
NEW HOPE HILL SAND	.34	B46017	HILL, GLEN ROSE	..DO..	7,433	19
NEW HOPE	.49	B62158	PITTSBURG	..DO..	8,000	232
PANOLA	.50	B58084	FREDERICKSBURG	..DO..	2,452	49
PITTSBURG	.42	B40146	PETTIT, GLEN ROSE	..DO..	7,947	703
QUITMAN KIRKLAND	.09	B58093	KIRKLAND, RODESSA	..DO..	8,320	12
QUITMAN RODESSA	.46	B58090	RODESSA, GLEN ROSE	..DO..	8,380	27
QUITMAN, SOUTHEAST KIRKLAND	.50	B42077	KIRKLAND, RODESSA	..DO..	8,412	24
RODESSA GLOYD	.30	B40085	GLEN ROSE, TRINITY	..DO..	5,986	18
RODESSA JEFFERSON DEES	.28	B39138	DEES , GLEN ROSE	..DO..	.....	90
SALMON, SUB-CLARKSVILLE	.19	B67081	SUB-CLARKSVILLE	..DO..	6,050	93
SHILOH PETTIT UPPER	.26	B62162	PETTIT, GLEN ROSE	..DO..	6,993	382
SLOCUM DAVID-GAIL SUB-CLKVLF	.22	B58043	SUB-CLARKSVILLE	..DO..	5,664	7
SLOCUM N.SUB-CLARKSVILLE	.15	B58044	..DO	..DO..	5,667	9
SLOCUM, NORTHWEST WOODBINE C	.09	B58050	WOODBINE D	..DO..	5,506	136
SLOCUM, NORTHWEST WOODBINE D	.23	B58050	..DO	..DO..	5,506	62
SLOCUM, WEST WOODBINE B	.09	B58045	WOODBINE B	..DO..	5,734	7
SLOCUM, WEST WOODBINE	.09	B58046	WOODBINE	..DO..	5,655	168
TATUM LOWER PETTIT	.16	B62084	PETTIT, GLEN ROSE	..DO..	6,782	95
VICKIE LYNNE RODESSA	.20	B67117	RODESSA, GLEN ROSE	..DO..	6,057	56
WASKOM BEARDEN SAND	.17	B54121	BEARDEN, TRAVIS PEAK	..DO..	6,091	9
WASKOM HURLEY-ORR	.11	B54112	HURLEY, TRAVIS PEAK	..DO..	6,173	34
WASKOM TUCKER	.16	B58092	TUCKER, TRAVIS PEAK	..DO..	6,242	51
WASKOM	.22	B54119	TRAVIS PEAK, TRINITY	..DO..	6,193	73
WOODLAWN	.27	B56126	PETTIT, GLEN ROSE	..DO..	6,654	47
WRIGHT MOUNTAIN LOWER PETTIT	.25	B54116	..DO	..DO..	7,996	218
(0.51-1.00)						
NEW HOPE BACON LM	.67	B62159	PALUXY, TRINITY	CRET..	4,568	58
PINE MILLS PALUXY	.93	B58087	TRINITY	..DO..	7,841	41
QUITMAN	.92	B54109	PALUXY, TRINITY	..DO..	6,134	1,981
(1.01-2.00)						
CAYUGA	1.80	B34018	WOODBINE	CRET..	4,078	293
HITTS LAKE PALUXY	1.98	B54113	PALUXY, TRINITY	..DO..	7,174	544
MANZIEL	1.44	B43079	..DO	..DO..	6,243	730
MERIGALE-PAUL	1.91	B51044	SUB-CLARKSVILLE	..DO..	4,428	80
NECHES SUB-CLARKSVILLE	1.17	B56120	..DO	..DO..	4,572	21
QUITMAN EAGLE FORD	1.93	B54108	EAGLE FORD	..DO..	4,260	179
SHAMBURGER LAKE PALUXY	1.28	B62161	PALUXY, TRINITY	..DO..	7,150	1,793

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS BY SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 6 & 6A- CONTINUED						
(>2.00)						
ALBA	3.69	B67115	SUB-CLARKSVILLE	CRET.	3,973	142
COKE SUB-CLARKSVILLE	3.90	B62148	..DO	..DO..	4,030	121
COKE	2.29	B42142	PALUXY, TRINITY	..DO..	6,262	727
CONCORD DOME	3.18	B62149	WOODBINE	..DO..	4,440	78
FOREST HILL HARRIS	3.35	B67110	HARRIS, EAGLE FORD	..DO..	4,840	72
HAWKINS	2.41	B48091	WOODBINE	..DO..	4,508	29,001
MIDWAY LAKE	3.48	B67114	EAGLE FORD	..DO..	4,495	210
PEWITT RANCH	3.34	B62159	PALUXY, TRINITY	..DO..	4,568	423
PINE MILLS ORR	2.47	B58085	ORR, EAGLE FORD	..DO..	4,764	8
PINE MILLS SUBCLARKSVILLE	2.64	B56123	SUB-CLARKSVILLE	..DO..	4,760	121
PINE MILLS WOODBINE WAGONER	2.88	B58119	WOODBINE	..DO..	5,424	91
PINE MILLS WOODBINE	2.79	B56124	..DO	..DO..	5,398	98
QUITMAN SUB-CLARKSVILLE	3.64	B54107	SUB-CLARKSVILLE	..DO..	3,974	157
QUITMAN, SOUTHEAST RODESSA	2.39	B62079	RODESSA, GLEN ROSE	..DO..	8,432	142
SAND FLAT	2.31	B58091	PALUXY, TRINITY	..DO..	7,096	1,329
TALCO	3.00	B54106	..DO	..DO..	4,258	4,430
TRIX-LIZ WOODBINE A	2.86	B62080	WOODBINE A	..DO..	3,376	21
TRIX-LIZ WOODBINE B	2.79	B62083	WOODBINE B	..DO..	3,498	18
TRIX-LIZ WOODBINE D	2.87	B62081	WOODBINE D	..DO..	3,794	203
RAILROAD COMMISSION DISTRICT 7B						
(0.00-0.50)						
AVOCA	.26	B38149	PALO PINTO, CANYON	PENN..	3,233	85
BOX PALO PINTO	.12	B59078	..DO	..DO..	3,259	145
BOYD CONGLOMERATE	.30	B66004	BEND	..DO..	6,063	875
CLAYTONVILLE CANYON LIME	.10	B65088	CANYON REEF	..DO..	5,623	2,873
COKER	.09	B42149	MORRIS	..DO..	3,032	14
COOK RANCH	.30	B63036	COOK	..DO..	.....	331
CORSICA BEND CONGLOMERATE	.33	B59085	BEND	..DO..	5,957	43
DESDEMONA	.14	B00700	PENNSYLVANIAN	..DO..	2,200	6
DORA, NORTH CAMBRIAN	.10	B66010	CAMBRIAN	CAMB..	5,937	317
DORA, NORTH ELLENBURGER	.11	B66009	ELLENBURGER	ORD...	6,124	107
DORA, NORTH ODOM	.17	B54098	CAMBRIAN	CAMB..	6,070	18
E. A. CAMBRIAN SAND	.09	B63035	..DO	..DO..	6,200	8
E. V. B. PALO PINTO	.11	B67139	PALO PINTO, CANYON	PENN..	5,682	186
ESKOTA	.36	B59095	NOODLE CREEK	..DO..	2,582	46
FLOWERS CANYON	.20	B66007	CANYON	..DO..	4,246	1,004
FLOWERS, WEST CANYON	.20	B55002	..DO	..DO..	4,284	240
FRANKIRK CANYON	.25	B68031	..DO	..DO..	4,572	58
FRANKIRK, EAST CANYON	.21	B68030	..DO	..DO..	6,042	34
FRANKIRK, NORTH CANYON REEF	.25	B68032	..DO	..DO..	4,839	221
GLEN COVE JENNINGS	.20	B55005	JENNINGS	..DO..	3,355	21
GOLDSBORO GARDNER	.20	B63037	GARDNER, STRAWN	..DO..	3,993	128
GRIFFIN	.24	B68160	PALO PINTO, CANYON	..DO..	3,208	115
GROUP 4000	.29	B59094	CISCO, 4000 FT	..DO..	4,060	88
GUEST CANYON SAND	.21	B63038	CANYON	..DO..	4,552	302
HAMLIN, EAST	.19	B59070	SWASTIKA	..DO..	3,133	435
HYLTON, NORTHWEST CAMBRIAN	.15	B59093	CAMBRIAN	CAMB..	5,837	135
HYLTON, NORTHWEST CANYON REEF	.31	B59071	CANYON REEF	PENN..	4,502	70
HYLTON, NORTHWEST GOEN	.13	B59088	GOEN	..DO..	5,396	136
HYLTON, NORTHWEST	.09	B59074	STRAWN	..DO..	5,406	82
JULIANA NORTH BURSON	.36	B63040	BURSON, STRAWN	..DO..	4,983	183
JULIANA	.36	B63039	STRAWN	..DO..	4,965	179
KATZ 5100	.46	B61148	STRAWN, 5100 FT	..DO..	5,061	246
KATZ	.34	B63041	STRAWN	..DO..	4,934	819
LAKE TRAMMEL, SOUTH CANYON	.18	B65081	CANYON	..DO..	5,257	22
LAKE TRAMMEL, WEST CANYON	.32	B56082	..DO	..DO..	5,221	323
LEWIS-STEFFENS	.35	B59072	.....	.....	.....	25
NENA LUCIA STRAWN REEF	.07	B65078	STRAWN	PENN..	6,810	1,083
NEWMAN SWASTIKA	.16	B68022	SWASTIKA	..DO..	.....	94
NOODLE NORTH LOWER CISCO	.19	B59083	CISCO	..DO..	3,835	7
OBRIEN STRAWN	.41	B59091	STRAWN	..DO..	4,805	219
OCHO JUAN CANYON REEF	.15	B65083	REEF	..DO..	6,081	226
OLD GLORY STRAWN	.35	B66006	STRAWN	..DO..	5,034	36
OLD GLORY	.29	B66005	BEND	..DO..	5,793	285
PARDUE CANYON	.20	B55009	CANYON	..DO..	4,419	52
PARDUE ELLENBURGER	.29	B55010	ELLENBURGER	ORD...	5,948	35
PARDUE SWASTIKA	.09	B55011	SWASTIKA	PENN..	3,773	204
RAVEN CREEK CANYON SAND	.23	B59084	CANYON	..DO..	4,252	6
RAVEN CREEK STRAWN	.19	B59081	STRAWN	..DO..	4,881	6
REDDIN	.27	B63005	FLIPPEN	PERM..	2,249	35
ROUGH DRAW NOODLE CREEK	.26	B67017	NOODLE CREEK	PENN..	3,750	412
ROUND TOP CANYON SAND	.24	B59075	CANYON	..DO..	4,556	31
ROUND TOP PALO PINTO REEF	.19	B66110	CANYON REEF	..DO..	.....	1,525
ROUND TOP SWASTIKA	.26	B51049	SWASTIKA	..DO..	3,990	29
ROWAN & HOPE STRAWN REEF	.10	B65087	REEF	..DO..	6,040	201
ROYSTON CANYON SAND	.13	B31125	PENNSYLVANIAN	..DO..	3,800	9
ROYSTON	.27	B31124	..DO	..DO..	3,238	50
SAYLES	.31	B63042	PERMIAN	PERM..	1,939	97
SHAMROCK CANYON REEF	.11	B66112	CANYON REEF	PENN..	5,245	112
SOJOURNER BURSEN	.18	B55012	BURSON, STRAWN	..DO..	4,753	172
SOJOURNER 4600	.22	B55014	PENNSYLVANIAN, 4600 FT	..DO..	4,600	17
SOJOURNER	.17	B55015	SOJOURNER, STRAWN	..DO..	5,285	62
SWEETWATER CANYON	.12	B59092	CANYON	..DO..	5,088	67
THREE ACES FLIPPEN	.09	B68034	FLIPPEN	PERM..	1,685	52
TOLAR SWASTIKA	.06	B59089	SWASTIKA	PENN..	3,822	154
TYE SOUTHWEST DOTHAN	.17	B31121	PENNSYLVANIAN	..DO..	2,411	36
WARNER LOWER GARDNER	.09	B59076	GARDNER, STRAWN	..DO..	3,056	12
WEINERT, WEST STRAWN	.39	B59087	STRAWN	..DO..	4,831	62
WHITE FLAT STRAWN	.09	B55017	..DO	..DO..	5,046	60
WHITE FLAT	.12	B55016	WHITE FLAT, CADDO	..DO..	5,399	450

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 7B - CONTINUED						
(0.00-0.50)						
WHITLEY JENNINGS	0.23	B67137	JENNINGS	PENN..	3,651	48
WIMBERLY GUNSIGHT UNIT	.17	B48030	HOPE	..DO..	2,392	17
RAILROAD COMMISSION DISTRICT 7C						
(0.00-0.50)						
AMACKER-TIPPETT ELLENBURGER	.11	B56128	ELLENBURGER	ORD...	.....	899
AMACKER-TIPPETT FUSSELMAN	.09	B59103	FUSSELMAN	SIL...	.....	15
AMACKER-TIPPETT SE 10,600 BEND	.08	B69012	BEND, 10600 FT	PENN..	.....	197
AMACKER-TIPPETT STRAWN	.09	B58103	STRAWN	..DO..	9,870	56
AMACKER-TIPPETT WOLFCAMP	.23	B62133	WOLFCAMP	PERM..	8,507	94
BARNHART	.04	B63012	ELLENBURGER	ORD...	9,050	43
BENEDUM	.07	B62138	SPRABERRY	PERM..	7,423	382
BIG LAKE	.14	B50063	PERMIAN	..DO..	4,200	444
BRONTE CAMBRIAN	.11	B58064	CAMBRIAN	CAMB..	.....	338
BRONTE CAPPS LIME	.27	B58062	CAPPS	PENN..	.....	55
BRONTE 4800	.23	B58063	GOEN	..DO..	.....	34
BRONTE	.10	B58061	PALO PINTO, CANYON	..DO..	.....	48
CALVIN DEAN	.04	B67006	DEAN	PERM..	7,423	1,496
CAMAR STRAWN-OIL	.38	B67140	STRAWN	PENN..	4,304	157
CREE-SYKES UPPER GARDNER	.17	B63006	GARDNER, STRAWN	..DO..	3,908	58
ELKHORN ELLENBURGER	.25	B54068	ELLENBURGER	ORD...	7,283	101
FENNELL CISCO REEF	.09	B66109	CISCO REEF	PENN..	2,905	13
FORT CHADBOURNE GARDNER	.24	B52014	SPRABERRY	PERM..	.....	27
FORT CHADBOURNE	.09	B63004	ODOM, STRAWN	PENN..	5,350	533
H-J STRAWN LOWER	.16	B58106	STRAWN	..DO..	5,387	20
H-J STRAWN	.13	B63002	..DO	..DO..	5,502	1,210
HULLDALE PENN REEF	.31	B52075	STRAWN REEF	..DO..	5,700	543
I. A. B. MENIELLE PENN	.07	B65082	CANYON REEF	..DO..	5,440	878
I. A. B. NE 5150 PENN	.05	B63009	PENNSYLVANIAN, 5150 FT.	..DO..	5,150	122
JAMESON STRAWN	.07	B65084	STRAWN	..DO..	5,935	611
JAMESON	.07	B65086	..DO	..DO..	6,154	796
KING MOUNTAIN DEVONIAN	.09	B58102	DEVONIAN	DEV...	9,950	18
KING MOUNTAIN ELLENBURGER	.19	B58101	ELLENBURGER	ORD...	11,488	149
NEVA, WEST STRAWN	.20	B58096	STRAWN	PENN..	6,200	200
NORTON, WEST PALO PINTO	.09	B67086	PALO PINTO, CANYON	..DO..	4,002	70
PEGASUS ELLENBURGER	.09	B62135	ELLENBURGER	ORD...	9,946	2,974
PEGASUS FUSSELMAN	.01	B62137	FUSSELMAN	SIL...	12,050	100
PEGASUS PENNSYLVANIAN	.09	B54173	PENNSYLVANIAN	PENN..	10,400	291
PEGASUS SPRABERRY	.17	B62060	SPRABERRY	PERM..	7,600	337
SPRABERRY TREND AREA CLEARFORK	.12	B65009	..DO	..DO..	6,690	41
SPRABERRY TREND AREA	.16	B65008	..DO	..DO..	7,595	5,734
SUSAN PEAK CISCO CANYON	.15	B51080	CISCO CANYON	PENN..	4,385	18
SUSAN PEAK MAIN STRAWN	.41	B63007	STRAWN, MAIN	..DO..	4,724	341
SUSAN PEAK, EAST STRAWN	.30	B51081	STRAWN MAIN	..DO..	4,820	9
SUSAN PEAK, NORTH CANYON	.05	B63001	CANYON	..DO..	4,231	5
TIPPETT, WEST HUECO	.31	B69010	HUECO	PERM..	.....	124
TODD DEEP CRINOIDAL	.18	B56127	CRINOIDAL, STRAWN	PENN..	.....	1,587
TODD DEEP ELLENBURGER	.26	B63013	ELLENBURGER	ORD...	6,232	408
WILSHIRE ELLENBURGER	.07	B63010	..DO	..DO..	11,995	1,323
WORLD, WEST STRAWN	.17	B58105	STRAWN	PENN..	8,064	113
(0.51-1.00)						
GRAYSON	.58	B31158	PERMIAN	PERM..	3,135	7
PEGASUS SAN ANDRES	.56	B62061	SAN ANDRES	..DO..	5,600	328
TIPPETT LOWER LEONARD	.73	B69009	LEONARD	..DO..	.....	444
TIPPETT, WEST WOLFCAMP, LO	.73	B63017	WOLFCAMP	..DO..	6,190	133
WORLD	.73	B31164	PERMIAN	..DO..	2,644	568
(1.01-2.00)						
CROCKETT	1.68	B38153	PERMIAN	PERM..	1,463	84
FARMER SAN ANDRES	1.71	B58111	SAN ANDRES	..DO..	2,498	160
NOELKE	1.18	B40007	YATES	..DO..	1,036	9
SHANNON SAN ANDRES	1.43	B58107	SAN ANDRES	..DO..	2,373	238
TIPPETT	1.42	B69011	WOLFCAMP	..DO..	.....	47
(>2.00)						
MCCAMEY	2.26	B54176	GRAYBURG	PERM..	2,100	949
OLSON	2.61	B58112	SAN ANDRES	..DO..	1,924	304
RODMAN-NOEL GRAYBURG	2.73	B54175	GRAYBURG	..DO..	1,700	11
VAUGHN	2.76	B51078	..DO	..DO..	1,394	95
WYATT	3.06	B40010	SAN ANDRES	..DO..	1,217	11
RAILROAD COMMISSION DISTRICT 8						
(0.00-0.50)						
ABELL DEVONIAN	.46	B61172	DEVONIAN	DEV...	5,280	351
ABELL SILURIAN MONTOYA	.50	B54133	FUSSELMAN + MONTOYA	SIL...	4,888	341
ABELL	.33	B46095	ELLENBURGER	ORD...	5,755	52
ABELL, EAST MCKEE	.17	B63180	MCKEE, SIMPSON	..DO..	5,398	74
ABELL, EAST WADDELL WEST SEGMENT	.16	B63181	WADDELL	..DO..	5,844	28
ANDECTOR ELLENBURGER	.23	B63075	ELLENBURGER	..DO..	8,545	5,497
ANDREWS NORTH DEVONIAN	.30	B61150	DEVONIAN	DEV...	10,462	244
ANDREWS NORTH ELLENBURGER	.11	B61151	ELLENBURGER	ORD...	12,482	1,706
ANDREWS PENNSYLVANIAN	.11	B56062	PENNSYLVANIAN	PENN..	9,220	283
ANDREWS, NORTH STRAWN	.09	B61152	STRAWN	..DO..	9,344	124
ANDREWS, SOUTH DEVONIAN	.09	B59037	DEVONIAN	DEV...	11,075	371
ANDREWS, SOUTH WOLFCAMP	.10	B59064	WOLFCAMP	PERM..	9,183	446

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 8 - CONTINUED						
(0.00-0.50)						
APCO WARNER	0.27	B40015	ELLENBURGER	ORD...	4,554	258
ARENOSO STRAWN DETRITUS	.34	B67015	STRAWN DETRITUS	PENN..	8,620	1,303
BAKKE DEVONIAN	.16	B59060	DEVONIAN	DEV...	10,500	576
BAKKE ELLENBURGER	.21	B58150	ELLENBURGER	ORD...	12,400	960
BAKKE WOLFCAMP	.41	B59026	WOLFCAMP	PERM..	8,500	834
BEDFORD ELLENBURGER	.09	B46084	ELLENBURGER	ORD...	11,416	116
BIG SPRING FUSSELMAN	.08	B63128	FUSSELMAN	SIL...	.....	245
BLOCK 12 EAST ELLENBURGER	.23	B59009	ELLENBURGER	ORD...	10,117	176
BLOCK 12 ELLENBURGER	.18	B59065	..DO	..DO..	12,800	18
BLOCK 31 DEVONIAN	.18	B46100	DEVONIAN	DEV...	7,850	5,246
BLOCK 31 ELLENBURGER	.14	B46099	ELLENBURGER	ORD...	10,250	41
BLOCK 9 ELLENBURGER	.07	B63076	..DO	..DO..	12,505	25
BREEDLOVE SPRABERRY	.16	B63080	SPRABERRY	PERM..	7,937	32
BREEDLOVE	.32	B61026	DEVONIAN	DEV...	12,110	1,213
C-BAR SILVRIAN	.26	B59019	SILURIAN	SIL...	8,300	7
CHANCELLOR DELAWARE	.22	B43065	DELAWARE	PERM..	5,072	7
CORDOVA LAKE, NORTH DEVONIAN	.23	B69037	DEVONIAN	DEV...	5,655	41
CROSSETT DEVONIAN	.09	B46102	..DO	..DO..	5,374	566
CROSSETT, N. 3450 CLEARFORK	.28	B63187	CLEAR FORK	PERM..	3,530	20
DEEP ROCK ELLENBURGER	.21	B56042	ELLENBURGER	ORD...	12,252	539
DOLLARHIDE CLEARFORK	.40	B63089	CLEAR FORK	PERM..	6,180	1,125
DOLLARHIDE DEVONIAN	.45	B63090	DEVONIAN	DEV...	7,728	3,898
DOLLARHIDE ELLENBURGER	.23	B52051	ELLENBURGER	ORD...	10,115	986
DOLLARHIDE SILURIAN	.34	B52050	SILURIAN	SIL...	8,576	1,205
DOLLARHIDE, EAST DEVONIAN	.22	B69036	DEVONIAN	DEV...	10,232	201
DOLLARHIDE, EAST ELLENBURGER	.10	B62018	ELLENBURGER	ORD...	12,468	123
DORA ROBERTS ELLENBURGER	.09	B56037	..DO	..DO..	12,835	3,046
DUNE WOLFCAMP	.34	B63095	WOLFCAMP	PERM..	7,662	155
EL MAR DELAWARE	.13	B61153	DELAWARE	..DO..	4,490	612
EMBAR DEVONIAN	.12	B59004	DEVONIAN	DEV...	9,346	19
EMBAR ELLENBURGER	.18	B43064	ELLENBURGER	ORD...	7,805	173
EMBAR PERMIAN	.41	B61154	PERMIAN	PERM..	6,203	104
EMBAR 5600	.49	B59044	CLEAR FORK	..DO..	5,606	111
EMMA DEVONIAN	.06	B61155	DEVONIAN	DEV...	10,503	124
EMMA ELLENBURGER	.03	B61156	ELLENBURGER	ORD...	12,340	1,082
EMMA FUSSELMAN	.04	B61157	FUSSELMAN	SIL...	11,549	11
EMMA STRAWN	.10	B63096	STRAWN	PENN..	9,184	70
EMMA	.09	B56043	GRAYBURG + SAN ANDRES	PERM..	4,200	436
FASKEN ELLENBURGER	.02	B61161	ELLENBURGER	ORD...	12,604	39
FASKEN WOLFCAMP	.09	B61162	WOLFCAMP	PERM..	8,378	215
FASKEN, SOUTH WOLFCAMP	.10	B61163	..DO	..DO..	8,475	12
FT STOCKTON	.42	B54022	YATES	..DO..	2,830	602
FULLERTON SOUTH, ELLENBURGER	.14	B62020	ELLENBURGER	ORD...	10,354	60
FULLERTON 8500	.26	B63065	DEVONIAN	DEV...	8,580	1,179
FULLERTON	.47	B62019	CLEAR FORK	PERM..	6,970	4,599
FULLERTON, SOUTH WOLFCAMP	.17	B62021	WOLFCAMP	..DO..	8,062	104
GERALDINE FORD	.10	B61164	DELAWARE	..DO..	2,584	570
GLASS SPRABERRY	.06	B65090	SPRABERRY	..DO..	7,865	34
GOLDSMITH CLEARFORK	.48	B63100	CLEAR FORK	..DO..	6,272	1,633
GOLDSMITH DEVONIAN	.16	B62022	DEVONIAN	DEV...	7,985	614
GOLDSMITH EAST HOLT	.15	B58144	HOLT	PERM..	5,000	122
GOLDSMITH ELLENBURGER	.12	B62023	ELLENBURGER	ORD...	9,488	18
GOLDSMITH 5600	.46	B63099	CLEAR FORK, 5600 FT	PERM..	5,580	6,638
GOLDSMITH, WEST ELLENBURGER	.32	B59052	ELLENBURGER	ORD...	9,450	175
GRICE DELAWARE	.11	B63192	DELAWARE	PERM..	4,525	228
HARPER DEVONIAN	.09	B66064	DEVONIAN	DEV...	9,738	552
HARPER ELLENBURGER	.10	B66066	ELLENBURGER	ORD...	12,222	1,705
HARPER FUSSELMAN	.10	B66068	FUSSELMAN	SIL...	10,904	11
HARPER STRAWN	.16	B66071	STRAWN	PENN..	9,087	14
HARPER, SOUTHEAST ELLENBURGER	.10	B69033	ELLENBURGER	ORD...	12,505	82
HEADLEE ELLENBURGER	.09	B59010	..DO	..DO..	13,106	1,330
HEADLEE, NORTH DEVONIAN	.03	B63044	DEVONIAN	DEV...	12,260	173
HSA PENN	.13	B63103	PENNSYLVANIAN	PENN..	7,822	117
HUTEX DEVONIAN	.19	B59014	DEVONIAN	DEV...	12,509	1,835
INEZ ELLENBURGER	.01	B63105	ELLENBURGER	ORD...	12,505	825
INEZ FUSSELMAN	.03	B69030	FUSSELMAN	SIL...	11,743	92
JAMESON, NORTH STRAWN	.06	B65085	STRAWN	PENN..	5,984	20
JORDAN CONNELL	.15	B63170	CONNELL, OIL CREEK	ORD...	8,830	63
JORDAN ELLENBURGER	.28	B52058	ELLENBURGER	..DO..	8,898	1,168
KERMIT ELLENBURGER	.19	B46091	..DO	..DO..	10,460	49
KEYSTONE ELLENBURGER	.13	B59177	..DO	..DO..	9,879	4,583
LEA CONNELL	.24	B54144	CONNELL, OIL CREEK	..DO..	8,180	89
LEA ELLENBURGER	.29	B54143	ELLENBURGER	..DO..	8,275	1,407
LEA MCKEE	.20	B66075	MCKEE, SIMPSON	..DO..	7,490	29
LEA SAN ANDRES	.49	B69039	SAN ANDRES	PERM..	3,075	181
LOWE SILURIAN	.02	B67004	SILURIAN	SIL...	12,780	835
LUTHER, SE SILURIAN-DEVONIAN	.14	B56064	DEVONIAN + SILURIAN	DEV...	9,855	594
MAGUTEX DEVONIAN	.30	B54146	DEVONIAN	..DO..	.....	1,792
MAGUTEX ELLENBURGER	.12	B54147	ELLENBURGER	ORD...	.....	1,090
MARTIN ELLENBURGER	.28	B46111	..DO	..DO..	8,840	916
MARTIN MCKEE	.16	B46109	MCKEE, SIMPSON	..DO..	8,836	58
MASON	.12	B38142	DELAWARE	PERM..	3,901	19
MASON, NORTH DELAWARE	.14	B59045	..DO	..DO..	4,055	90
MCFARLAND ELLENBURGER	.10	B63112	ELLENBURGER	ORD...	13,898	357
MCFARLAND PENNSYLVANIAN	.10	B61143	PENNSYLVANIAN	PENN..	10,402	221
MCFARLAND WOLFCAMP	.11	B61135	WOLFCAMP	PERM..	9,032	214
MCKEE LOWER CLEARFORK	.22	B46097	MCKEE, SIMPSON	ORD...	6,078	17
MEANS, EAST STRAWN	.10	B61142	STRAWN	PENN..	10,608	107
METZ, EAST ELLENBURGER	.22	B63072	ELLENBURGER	ORD...	9,128	165
MIDLAND FARMS ELLENBURGER	.03	B65048	..DO	..DO..	12,514	2,024
MIDLAND FARMS FUSSELMAN	.05	B61174	FUSSELMAN	SIL...	.....	261
MIDLAND FARMS NORTHEAST	.09	B59063	ELLENBURGER	ORD...	12,540	54
MIDLAND FARMS WOLFCAMP	.13	B56033	WOLFCAMP	PERM..	8,540	373

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 8 - CONTINUED						
(0.00-0.50)						
MIDLAND FARMS, WEST DEVONIAN	0.04	865046	DEVONIAN	DEV...	10,980	15
MIDLAND, SOUTHWEST FUSSELMAN	.01	866078	FUSSELMAN	SIL...	12,504	23
MILLER BLOCK 8-29 PENN	.10	867150	PENNSYLVANIAN	PENN..	7,554	17
MONAHANS ELLENBURGER	.16	846079	ELLENBURGER	ORD...	10,081	13
MONAHANS, NORTH ELLENBURGER	.08	861013	..DO	..DO..	12,046	164
MONROE	.14	832208	DELAWARE	PERM..	.....	208
NELSON ELLENBURGER	.15	846089	ELLENBURGER	ORD...	10,606	60
NOLLEY WOLFCAMP	.38	858145	WOLFCAMP	PERM..	9,227	889
OCEANIC PENNSYLVANIAN	.15	854149	REEF	PENN..	8,165	1,023
OLDS DELAWARE	.15	866051	BELL CANYON	PERM..	3,013	26
PARKS PENNSYLVANIAN	.06	863116	PENNSYLVANIAN	PENN..	10,485	414
PARKS SPRABERRY	.28	865022	SPRABERRY	PERM..	7,807	15
PENWELL ELLENBURGER	.24	846098	ELLENBURGER	ORD...	8,888	733
QUITO DELAWARE SAND	.15	866003	DELAWARE	PERM..	4,825	30
SAND HILLS ELLENBURGER	.22	837039	ELLENBURGER	ORD...	5,939	19
SCOTT	.18	866050	BELL CANYON	PERM..	4,922	33
SHAFTER LAKE ELLENBURGER	.27	851055	ELLENBURGER	ORD...	11,713	37
SHAFTER LAKE SAN ANDRES	.25	856034	SAN ANDRES	PERM..	4,482	1,572
SHAFTER LAKE WOLFCAMP	.37	854154	WOLFCAMP	..DO..	8,371	674
SHEFFIELD ELLENBURGER	.12	863176	ELLENBURGER	ORD...	9,705	23
SHIPLEY SILURIAN	.29	841266	SILURIAN	SIL...	7,010	6
SPRABERRY TREND	.12	865009	SPRABERRY	PERM..	6,690	12,332
SULLIVAN DELAWARE	.11	866052	BELL CANYON	..DO..	2,688	31
T X L DEVONIAN	.50	846080	DEVONIAN	DEV...	8,050	275
T X L ELLENBURGER	.23	863046	ELLENBURGER	ORD...	9,359	1,858
T X L MCKEE	.10	866081	MCKEE, SIMPSON	..DO..	9,086	17
TRIPLE N DEVONIAN	.08	861168	DEVONIAN	DEV...	10,648	14
TRIPLE N PENN UPPER	.16	869032	PENNSYLVANIAN	PENN..	8,912	606
TUNSTILL	.15	851064	DELAWARE MOUNTAIN	PERM..	3,306	88
TUNSTILL, EAST DELAWARE	.12	866001	BELL CANYON	..DO..	3,660	100
TWOREDS DELAWARE	.22	859058	DELAWARE	..DO..	4,895	240
UNION	.49	859012	WICHITA	..DO..	7,934	247
UNIVERSITY BLOCK 13 DEVONIAN	.23	863126	DEVONIAN	DEV...	.....	17
UNIVERSITY BLOCK 13 ELLENBURGER	.29	863127	ELLENBURGER	ORD...	.....	959
UNIVERSITY BLOCK 9 DEVONIAN	.09	856059	DEVONIAN	DEV...	10,450	471
UNIVERSITY BLOCK 9 PENN	.12	856060	PENNSYLVANIAN	PENN..	8,956	378
UNIVERSITY WADDELL DEVONIAN	.13	863163	DEVONIAN	DEV...	8,499	2,235
UNIVERSITY WADDELL ELLENBURGER	.13	851061	ELLENBURGER	ORD...	10,790	63
VEALMOOR	.09	850031	CANYON REEF	PENN..	7,934	1,228
VEALMOORE, EAST	.24	852066	..DO	..DO..	7,450	2,020
VIREY ELLENBURGER	.09	856048	ELLENBURGER	ORD...	13,276	1,227
VIREY FUSSELMAN	.09	856046	FUSSELMAN	SIL...	16,250	20
VIREY STRAWN	.09	856047	STRAWN	PENN..	8,720	8
WAHA DELAWARE	.25	866057	DELAWARE	PERM..	4,948	45
WAR SAN ELLENBURGER	.09	856055	ELLENBURGER	ORD...	13,070	379
WEMAC ELLENBURGER	.09	859042	..DO	..DO..	13,306	31
WHEAT	.21	826180	PERMIAN	PERM..	4,221	226
WHEELER DEVONIAN	.19	846104	DEVONIAN	DEV...	8,347	7
WHEELER ELLENBURGER	.31	846103	ELLENBURGER	ORD...	10,559	49
YARBROUGH & ALLEN CONNELL	.18	866086	CONNELL, OIL CREEK	..DO..	10,317	59
YARBROUGH & ALLEN ELLENBURGER	.19	851054	ELLENBURGER	..DO..	10,627	1,827
YARBROUGH & ALLEN WADDELL	.14	866087	WADDELL	..DO..	10,061	22
(0.51-1.00)						
ARELL, SOUTHEAST CLEARFORK	.87	865007	CLEAR FORK	PERM..	3,865	8
ANDECTOR, WEST DEVONIAN	.58	861149	DEVONIAN	DEV...	7,948	22
ANDREWS WOLFCAMP	.78	856035	WOLFCAMP	PERM..	8,590	613
BEDFORD DEVONIAN	.57	846085	DEVONIAN	DEV...	8,757	749
BLOCK 11 DEVONIAN	.81	865104	THREE BAR	..DO..	8,200	343
BLOCK 11 SW DEVONIAN	.70	859066	DEVONIAN	..DO..	8,160	9
BLOCK 12	1.00	859016	CLEAR FORK	PERM..	7,170	21
BROWN & THORP CLEARFORK	.94	863168	..DO	..DO..	3,028	106
C-BAR TUBB	.87	859032	TUBB, CLEAR FORK	..DO..	5,300	112
CORDONA LAKE	.58	859023	DEVONIAN	DEV...	5,470	1,006
COWDEN, NORTH DEEP	.96	852060	SAN ANDRES	PERM..	5,168	1,368
COWDEN, NORTH SAN ANDRES	.80	856041	..DO	..DO..	5,170	25
EMMA GLORIETA	.74	861158	GLORIETA	..DO..	5,355	110
EMPEROR HOLT	.61	861159	SAN ANGELO	..DO..	4,822	166
GLASCO DEVONIAN	.53	859053	DEVONIAN	DEV...	12,543	1,051
GOLDSMITH FUSSELMAN	.79	863101	FUSSELMAN	SIL...	8,370	180
GOLDSMITH, EAST GLORIETA	.73	859056	GLORIETA	PERM..	5,136	19
GOLDSMITH, NORTH ELLENBURGER	.58	858143	ORDOVICIAN	ORD...	8,900	194
GOLDSMITH, WEST FUSSELMAN	.96	858142	SILURIAN	SIL...	8,310	91
HALLEY MONTOYA	.65	862026	MONTOYA	ORD...	10,370	77
HERRELL	.78	865091	CLEAR FORK	PERM..	2,535	19
KERMIT, SOUTH DEVONIAN	.79	862028	DEVONIAN	DEV...	8,658	657
KEYSTONE CLEARFORK	.58	862029	CLEAR FORK	PERM..	5,121	120
KEYSTONE COLBY	.78	863195	COLBY, QUEEN	..DO..	.....	1,479
KEYSTONE DEVONIAN	.69	846108	DEVONIAN	DEV...	8,040	122
KEYSTONE HOLT	.63	852080	SAN ANGELO	PERM..	4,777	885
KEYSTONE SILURIAN	.99	846105	SILURIAN	SIL...	8,230	997
MONAHANS PERMIAN TUBB N	.59	843063	TUBB, CLEAR FORK	PERM..	5,633	11
MONAHANS, NORTH DEVONIAN	.63	861014	DEVONIAN	DEV...	9,440	150
NELSON WICHITA	.75	863115	WICHITA-ALBANY	PERM..	7,160	36
NETTERVILLE	.89	859034	YATES	..DO..	2,400	47
OATES	.67	863171	RUSTLER	..DO..	790	29
PECOS VALLEY DEVONIAN 5400	.68	861146	DEVONIAN, 5400 FT	DEV...	5,440	169
PECOS VALLEY HIGH GRAVITY	.97	861136	YATES	PERM..	1,516	246
PECOS VALLEY, PERMIAN	.51	861137	DETRITAL	..DO..	5,292	109
RUNNING W WADDELL	.55	859036	WADDELL	ORD...	5,790	544
SAND HILLS ORDOVICIAN	.73	856044	SIMPSON & ELLENBURGER	..DO..	5,700	175
SAND HILLS TUBB	.92	848035	CLEAR FORK	PERM..	4,137	1,554

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 8 - CONTINUED						
(0.51-1.00)						
SCARBOROUGH, NORTH	0.94	B62032	GRAYBURG	PERM..	3,161	25
SHAFTER LAKE DEVONIAN	.77	B51056	DEVONIAN	DEV...	9,382	352
T X L TUBB	.54	B59047	TUBB, CLEAR FORK	PERM..	6,158	1,162
THREE BAR DEVONIAN	.61	B46110	DEVONIAN	DEV...	8,300	1,298
TXL, SILURIAN	.68	B59048	SILURIAN	SIL...	8,465	454
UNIVERSITY BLOCK 9 WOLFCAMP	.57	B56054	WOLFCAMP	PERM..	8,430	783
WHEELER SILURIAN	.64	B63214	SILURIAN	SIL...	.....	67
WHEELER WOLFCAMP	.60	B63215	WOLFCAMP	PERM..	.....	79
YARBROUGH & ALLEN DEVONIAN	.96	B63049	DEVONIAN	DEV...	8,146	47
(1.01-2.00)						
BLOCK 31 GRAYBURG	1.52	B69040	GRAYBURG	PERM..	3,200	175
BYRD	1.06	B42052	PERMIAN	..DO..	2,634	16
CONCHO BLUFF QUEEN	1.36	B69034	QUEEN	..DO..	4,131	545
COWDEN NORTH GRAYBURG	1.89	B52061	GRAYBURG	..DO..	4,406	8,429
COWDEN, SOUTH	1.38	B34004	PERMIAN	..DO..	3,857	4,190
DEEP ROCK 5950 GLORIETA	1.35	B63050	GLORIETA, 5950 FT	..DO..	5,940	377
DONNELLY SAN ANDRES	1.02	B63093	SAN ANDRES	..DO..	4,177	209
DOUBLE H GRAYBURG	1.32	B63094	GRAYBURG	..DO..	4,481	64
EDWARDS	1.70	B59031	SAN ANDRES	..DO..	3,400	188
EMPEROR DEEP	1.11	B61160	SEVEN RIVERS + QUEEN	..DO..	2,858	361
FOSTER	1.53	B54135	GRAYBURG	..DO..	4,300	6,183
GOLDSMITH	1.16	B58029	SAN ANDRES	..DO..	4,234	8,857
GOLDSMITH,N. SAN ANDRES CON	1.38	B59006	..DO	..DO..	4,280	941
HALLEY GLORIETA	1.32	B62025	GLORIETA	..DO..	4,894	93
HALLEY	1.12	B62027	YATES + SEVEN RIVERS	..DO..	2,726	906
HARPER	1.15	B39258	PERMIAN	..DO..	4,100	590
HENDRICK	1.53	B27859	..DO	..DO..	2,700	771
HOWARD GLASSCOCK	1.92	B63068	YATES	..DO..	1,255	5,438
IATAN, EAST HOWARD	1.47	B54140	CLEAR FORK	..DO..	2,550	3,664
JOHNSON	1.04	B59013	GRAYBURG	..DO..	4,180	327
KERMIT	1.45	B35249	PERMIAN	..DO..	2,900	1,266
LAWSON SAN ANDRES	1.11	B63108	SAN ANDRES	..DO..	4,320	876
MAGUTEX QUEEN	1.45	B63109	QUEEN	..DO..	4,860	262
MASTERSON	1.44	B38154	PERMIAN	..DO..	1,235	21
MCFARLAND QUEEN	1.38	B56061	QUEEN	..DO..	4,680	1,461
MEANS QUEEN	1.11	B61141	..DO	..DO..	3,987	1,121
MONAHANS CLEARFORK	1.74	B62030	CLEAR FORK	..DO..	4,720	154
MONAHANS QUEEN SAND	1.39	B62031	QUEEN	..DO..	3,126	358
PAYTON	1.10	B38156	PERMIAN	..DO..	2,040	47
PECOS VALLEY LOW GRAVITY	1.67	B38155	PECOS VALLEY, YATES	..DO..	1,628	42
PENWELL GLORIETA	1.44	B61167	GLORIETA	..DO..	4,650	114
SCARBOROUGH	1.02	B29312	PERMIAN	..DO..	3,030	207
SHIPLEY QUEEN	1.01	B31161	..DO	..DO..	2,480	268
SNYDER	1.68	B39261	..DO	..DO..	2,710	1,032
T X L SAN ANDRES	1.93	B59005	SAN ANDRES	..DO..	4,380	489
TAYLOR LINK	1.32	B31165	PERMIAN	..DO..	1,613	106
TOBORG	1.93	B39259	TOBORG, TRINITY	CRET..	430	431
WADDELL	1.69	B54155	GRAYBURG	PERM..	3,500	4,423
WALKER	1.59	B63064	QUEEN + GRAYBURG	..DO..	2,148	150
WARD-ESTES, NORTH	1.19	B68171	YATES	..DO..	2,696	9,955
WARD, SOUTH	1.12	B54157	..DO	..DO..	2,400	745
WHITE AND BAKER	1.43	B38080	PERMIAN	..DO..	1,592	99
YATES SMITH SAND	1.23	B62036	SMITH, YATES	..DO..	813	20
YATES	1.50	B68071	.....	.....	.....	13,194
(>2.00)						
BAKKE CLEARFORK	2.07	B59040	CLEAR FORK	PERM..	7,564	7
C-BAR SAN ANDRES	3.46	B59059	SAN ANDRES	..DO..	3,520	410
DUNE GRAYBURG SAN ANDRES	3.11	B59051	GRAYBURG	..DO..	3,270	11,707
FUHRMAN GLORIETA	2.60	B65011	GLORIETA	..DO..	5,582	204
FUHRMAN MASCHO	2.06	B54136	GRAYBURG	..DO..	4,542	1,933
FULLERTON CLEARFORK UP	2.04	B65006	CLEAR FORK	..DO..	6,208	130
FULLERTON SAN ANDRES	2.09	B63098	SAN ANDRES	..DO..	4,519	417
HOWARD GLASSCOCK GLORIETA	2.32	B69035	GLORIETA	..DO..	3,000	922
JORDAN	2.13	B38144	PERMIAN	..DO..	3,407	1,878
MABEE	2.19	B48034	..DO	..DO..	4,654	1,802
MCELROY	2.37	B58030	GRAYBURG	..DO..	2,750	9,043
MEANS	2.36	B35168	SAN ANDRES	..DO..	4,500	6,403
MIDLAND FARMS NORTH GRAYBURG	2.37	B59020	GRAYBURG	..DO..	4,943	510
MIDLAND FARMS	2.05	B65043	..DO	..DO..	4,620	2,942
MOORE	2.45	B59062	..DO	..DO..	3,200	128
PENWELL	2.59	B30408	PERMIAN	..DO..	3,678	1,093
PRIEST & BEAVERS QUEEN	2.27	B63174	QUEEN	..DO..	2,179	60
SAND HILLS JUDKINS	2.24	B61171	SAN ANDRES	..DO..	3,252	467
SAND HILLS MCKNIGHT	3.33	B56059	..DO	..DO..	3,390	3,858
SHAFTER LAKE CLEARFORK	2.65	B63047	CLEAR FORK	..DO..	6,660	299
TRIPLE N GRAYBURG	2.47	B69031	GRAYBURG	..DO..	4,338	493
VAREL SAN ANDRES	2.35	B59011	SAN ANDRES	..DO..	3,100	78
WESTBROOK UPPER CLEARFORK	3.01	B24736	PERMIAN	..DO..	3,100	10
WESTBROOK	2.52	B24733	..DO	..DO..	3,005	3,131
RAILROAD COMMISSION DISTRICT 8A						
(0.00-0.50)						
ACKERLY DEAN	.10	B67011	DEAN	PERM..	8,622	1,166
ADAIR WOLFCAMP	.38	B54134	WOLFCAMP	..DO..	8,434	2,110
BATEMAN RANCH C-ZONE	.50	B66061	STRAWN, 5300 FT	PENN..	5,182	77
BRAHANEY WOLFCAMP	.19	B59038	WOLFCAMP	PERM..	9,028	26
BRONCO SILURO DEVONIAN	.26	B56051	DEVONIAN + SILURIAN	DEV...	11,692	243

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 8A - CONTINUED						
(0.00-0.50)						
BROWNFIELD, SOUTH CANYON	0.29	B63185	CANYON	PENN..	.....	42
CLAIREMONT LOWER PENN	.45	B65076	PENNSYLVANIAN	..DO..	6,605	633
CLAIREMONT, EAST STRAWN	.45	B65077	STRAWN	..DO..	6,467	40
COGDELL AREA	.39	B63083	CANYON REEF	..DO..	.....	13,776
COGDELL FULLER SAND	.24	B51063	FULLER	PERM..	4,991	14
COGDELL, EAST CANYON	.37	B66119	CANYON REEF	PENN..	6,795	367
CORAZON SAN ANDRES	.36	B63061	SAN ANDRES	PERM..	2,139	98
DIAMOND M CANYON LIME AREA	.23	B63087	CANYON	PENN..	6,550	7,198
DIAMOND M SAN ANDRES	.18	B63085	SAN ANDRES	PERM..	2,380	61
DORWARD SAN ANDRES	.32	B59003	..DO	..DO..	2,456	49
DORWARD	.20	B65123	GLORIETA	..DO..	.....	258
ELAM STRAWN	.42	B65002	STRAWN	PENN..	6,910	12
FLUVANNA STRAWN	.48	B61140	..DO	..DO..	7,950	251
FLUVANNA	.46	B56057	MISSISSIPPIAN	MISS..	8,173	129
FULLER, EAST FULLER B	.36	B66114	FULLER B	PERM..	4,935	39
GARZA SAN ANDRES B	.50	B63190	SAN ANDRES	..DO..	2,900	94
GOOD SOUTHEAST FUSSELMAN	.31	B61139	FUSSELMAN	SIL...	9,752	367
GOOD	.21	B50030	CANYON REEF	PENN..	7,940	1,498
GOOD, SOUTHEAST CANYON	.23	B61144	..DO	..DO..	8,038	31
HOBO PENNSYLVANIAN	.16	B54138	REEF	..DO..	7,110	522
HUNTLEY GLORIETA	.38	B59007	GLORIETA	PERM..	3,900	232
HUNTLEY, EAST SAN ANDRES	.46	B59008	SAN ANDRES	..DO..	3,400	131
JO-MILL SPRABERRY	.11	B56056	SPRABERRY	..DO..	7,300	1,405
JONES RANCH	.19	B46086	DEVONIAN	DEV...	11,181	74
JUSTICEBURG GLORIETA	.18	B63107	GLORIETA	PERM..	2,540	62
KELLY SNYDER CISCO	.23	B67010	CISCO	PENN..	6,289	233
KELLY SNYDER	.29	B63045	CANYON REEF	..DO..	6,997	52,062
POST GLORIETA	.17	B63117	GLORIETA	PERM..	2,700	219
REINECKE	.15	B51065	CISCO REEF	PENN..	6,886	1,896
REVILO GLORIETA	.26	B59055	GLORIETA	PERM..	2,624	262
ROPES	.30	B64106	CANYON REEF	PENN..	9,305	1,415
ROPES, WEST CISCO	.23	B64108	CISCO + CANYON REEF	..DO..	9,679	288
RUSSELL, NORTH DEVONIAN	.31	B54038	DEVONIAN	DEV...	11,090	2,857
SEMINOLE, WEST DEV. FB-2	.35	B63122	..DO	..DO..	10,578	8
SMYER, NORTH CANYON	.32	B63204	CANYON	PENN..	9,630	126
SMYER, NORTH STRAWN	.18	B63205	STRAWN	..DO..	.....	114
SNOWDEN SPRABERRY	.15	B52020	SPRABERRY	PERM..	7,276	54
SNYDER, N. STRAWN ZONE C	.19	B50037	STRAWN	PENN..	7,487	8
SNYDER, NORTH STRAWN ZONE B	.34	B63055	STRAWN B	..DO..	7,306	96
SPRABERRY DEEP SPBRY, LO	.17	B52022	SPRABERRY DEEP	PERM..	6,770	270
SPRABERRY DEEP	.30	B52056	SPRABERRY	..DO..	6,400	245
SPRABERRY WEST, DEEP	.22	B59018	..DO	..DO..	6,420	138
SPRABERRY WEST, DP SPBRY, LO	.16	B59057	..DO	..DO..	7,018	143
TEX-HAMON FUSSELMAN	.30	B63206	FUSSELMAN	SIL...	11,570	1,245
TEX-HAMON MISSISSIPPIAN LO	.49	B63178	MISSISSIPPIAN	MISS..	11,092	25
TEX-HAMON MONTOYA	.32	B63207	MONTOYA	ORD...	11,672	316
TEX-SIN DEVONIAN	.17	B67099	DEVONIAN	DEV...	12,286	409
TONTO CANYON SAND	.21	B66118	CANYON	PENN..	6,690	58
TRI-RUE REEF	.05	B66117	TRI RUE	..DO..	6,817	95
U-LAZY S PENN	.41	B63208	PENNSYLVANIAN	..DO..	.....	137
VON ROEDER WOLFCAMP	.34	B67031	WOLFCAMP	PERM..	6,063	31
VON ROEDER	.15	B67030	CANYON	PENN..	6,847	589
VON ROEDER, NORTH	.11	B67032	..DO	..DO..	6,776	327
WASSON WICHITA-ALBANY	.31	B63210	WICHITA-ALBANY	PERM..	8,204	528
WASSON WOLFCAMP	.24	B62035	WOLFCAMP	..DO..	8,390	235
WESCOTT STRAWN	.11	B67077	STRAWN	PENN..	10,952	109
WEST, DEVONIAN	.29	B63213	DEVONIAN	DEV...	.....	876
(0.51-1.00)						
AMROW DEVONIAN	.78	B56050	DEVONIAN	DEV...	12,628	388
BATEMAN RANCH A-ZONE	.56	B58149	CISCO	PENN..	3,700	77
BATEMAN RANCH B-ZONE	.51	B66060	STRAWN, 5100 FT	..DO..	5,017	263
BROWN WICHITA-ALBANY	.51	B63081	WICHITA-ALBANY	PERM..	8,018	176
COROCO, SE SILURIAN-DEVONIAN	.58	B63169	DEVONIAN + SILURIAN	DEV...	12,742	19
FLANAGAN DEVONIAN	.89	B59027	DEVONIAN	..DO..	10,345	28
FLANAGAN ELLENBURGER	.67	B63097	ELLENBURGER	ORD...	12,174	24
FLUVANNA ELLENBURGER	.60	B61147	..DO	..DO..	8,380	27
GARZA	.51	B48032	SAN ANDRES	PERM..	2,935	1,121
HUAT CANYON	.95	B63063	CANYON	PENN..	10,512	353
ROBERTSON, NORTH CLEARFORK 7100	.79	B59061	CLEAR FORK, 7100 FT	PERM..	7,114	1,307
ROSS RANCH	.54	B66062	STRAWN	PENN..	5,314	108
S M S CANYON SAND	.61	B56063	CANYON	..DO..	6,100	208
SALT CREEK	.57	B63120	CANYON REEF	..DO..	6,200	9,172
U-LAZY S ELLENBURGER	.60	B63179	ELLENBURGER	ORD...	8,633	161
WELLMAN	.71	B52078	WOLFCAMP REEF	PERM..	9,100	2,022
WELLS DEVONIAN	.57	B67096	DEVONIAN	DEV...	12,070	308
WESCOTT DEVONIAN	.76	B67076	..DO	..DO..	12,383	161
(1.01-2.00)						
DIAMOND M CLEARFORK	1.82	B63086	CLEAR FORK	PERM..	3,170	73
FLANAGAN CLEARFORK UPPER	1.87	B59021	..DO	..DO..	6,420	435
G-M-K SAN ANDRES	1.98	B63043	SAN ANDRES	..DO..	5,648	587
HARRIS QUEEN	1.60	B63102	QUEEN	..DO..	4,148	78
HUAT WOLFCAMP	1.90	B63060	WOLFCAMP	..DO..	9,806	22
OWNBY CLEARFORK UPPER	1.70	B65004	CLEAR FORK	..DO..	6,644	612
REEVES SAN ANDRES	1.77	B63201	SAN ANDRES	..DO..	4,968	1,141
RUSSELL 6100 GLORIETA	1.20	B54039	GLORIETA	..DO..	6,030	139
RUSSELL 7000 CLEARFORK	1.23	B54040	CLEAR FORK	..DO..	7,350	949
SEMINOLE SAN ANDRES	1.86	B54153	SAN ANDRES	..DO..	5,240	6,964
SEMINOLE, WEST LEONARD	1.80	B65010	YESO	..DO..	8,815	54
SHARON RIDGE CLEARFORK	1.97	B63269	CLEAR FORK	..DO..	2,800	372

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, SULFUR CONTENT CATEGORY, AND FIELD [1/] [2/]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 8A - CONTINUED						
(1.01-2.00)						
SHARON RIDGE 7400	1.71	B61134	SAN ANGELO, 2400 FT	PERM..	2,253	341
SLAUGHTER	1.90	B63203	SAN ANDRES	..DO..	.....	35,842
WASSON GLORIETA	1.71	B65115	GLORIETA	..DO..	5,649	30
WASSON 66	1.41	B43145	CLEAR FORK	..DO..	6,210	1,942
WASSON 72	1.01	B62034	..DO	..DO..	7,006	1,056
WASSON	1.76	B58004	SAN ANDRES	..DO..	4,900	45,800
WASSON, NORTHEAST CLEARFORK	1.60	B69067	CLEAR FORK	..DO..	6,402	905
(>2.00)						
ADAIR	2.04	B63183	SAN ANDRES	PERM..	4,800	1,831
ANTON IRISH	2.29	B63184	CLEAR FORK	..DO..	.....	4,681
ANTON, WEST	2.81	B65116	..DO	..DO..	.....	32
BRAHANEY	2.45	B58148	SAN ANDRES	..DO..	5,301	1,020
BROADVIEW, WEST CLEARFORK	2.91	B64107	CLEAR FORK	..DO..	5,547	92
BUCKSHOT 4950	2.79	B59001	SAN ANDRES	..DO..	4,950	229
CEDAR LAKE	2.04	B63186	..DO	..DO..	4,600	2,782
DIAMOND M 4600 WOLFCAMP	2.56	B63088	WOLFCAMP	..DO..	4,605	20
HARRIS	2.48	B59146	CLEAR FORK	..DO..	6,637	1,114
LANDON	2.11	B52054	SAN ANDRES	..DO..	4,900	160
LEE HARRISON	3.23	B59054	CLEAR FORK	..DO..	4,979	223
LEVELLAND	2.12	B59159	SAN ANDRES	..DO..	4,707	9,460
OWNBY CLEARFORK LOWER	2.02	B63199	CLEAR FORK	..DO..	.....	8
OWNBY	2.28	B63200	SAN ANDRES	..DO..	.....	108
OWNBY, WEST SAN ANDRES	2.38	B69065	..DO	..DO..	5,254	22
PRENTICE 6700	2.08	B65120	CLEAR FORK	..DO..	6,580	4,296
PRENTICE	2.66	B65119	GLORIETA	..DO..	5,966	1,552
RILEY, NORTH	2.12	B59035	CLEAR FORK	..DO..	6,930	459
ROBERTSON	2.58	B42236	PERMIAN	..DO..	5,910	1,439
ROPES, EAST CLEARFORK	2.85	B69064	CLEAR FORK	..DO..	6,032	129
SEMINOLE SAN ANGELO	2.97	B65005	SAN ANGELO	..DO..	6,462	244
SEMINOLE, WEST	2.11	B63121	SAN ANDRES	..DO..	5,009	952
SHARON RIDGE 1700	2.04	B56053	..DO	..DO..	1,759	833
SMYER	3.04	B63177	CLEAR FORK	..DO..	5,850	1,138
WASSON NORTHEAST WICHITA-ALBANY	2.05	B69066	WICHITA-ALBANY	..DO..	8,030	329
WELCH	2.13	B63211	SAN ANDRES	..DO..	4,901	5,551
YELLOWHOUSE	2.15	B59046	..DO	..DO..	.....	240
RAILROAD COMMISSION DISTRICT 9						
(0.00-0.50)						
ALVORD ATOKA CONGLOMERATE	.09	B62049	ATOKA	PENN..	5,707	55
ALVORD CADDO CONGLOMERATE S	.12	B67159	CADDO, STRAWN	..DO..	5,705	418
ALVORD CADDO CONGLOMERATE	.10	B62051	..DO	..DO..	5,344	110
ANTELOPE	.23	B67160	STRAWN M-1	..DO..	3,143	175
BIG MINERAL CREEK U	.45	B56066	DES MOINES	..DO..	6,290	12
BIG MINERAL CREEK V	.37	B56068	..DO	..DO..	6,442	58
BOONSVILLE BASAL ATOKA	.05	B68002	ATOKA	..DO..	6,142	20
BOREN STRAWN	.22	B58075	STRAWN	..DO..	2,993	12
BOWERS	.21	B39245	..DO	..DO..	2,887	33
BRYSON, EAST	.17	B58068	..DO	..DO..	2,934	96
BURNS BEACON MISS	.10	B68042	CHAPPEL	MISS..	.....	94
BURNS MIDWAY	.08	B62111	..DO	..DO..	6,005	6
CAUGHLIN STRAWN	.20	B58073	STRAWN	PENN..	4,073	197
CHICO WEST CADDO CONGLOMERATE UPPER	.13	B58074	PENNSYLVANIAN	..DO..	5,668	73
CONLEY ELLENBURGER	.04	B63019	ELLENBURGER	ORD...	8,072	58
CONLEY MISSISSIPPI	.06	B63020	CHAPPEL	MISS..	7,805	146
CONLEY OSAGE	.05	B63021	OSAGE	..DO..	8,065	20
DILLARD WEST CADDO	.12	B69006	CADDO, STRAWN	PENN..	5,745	8
DILLARD, SOUTHEAST ELLENBURGER	.10	B69007	ELLENBURGER	ORD...	6,324	472
EANES ATOKA	.10	B67033	ATOKA	PENN..	5,901	42
EANES CADDO	.08	B67034	CADDO, STRAWN	..DO..	5,783	351
EANES, NORTHWEST MISS	.18	B67071	MISSISSIPPIAN	MISS..	6,526	15
FARGO CANYON 3900	.09	B41374	CANYON	PENN..	3,982	209
FARGO CANYON 4200	.16	B56070	..DO	..DO..	4,160	440
FARGO CANYON 4400	.12	B41373	STRAWN	..DO..	4,460	19
FARGO CISCO 3200	.09	B41375	CISCO	..DO..	3,246	111
HALSELL, W VOGTSBERGER	.44	B68004	VOGTSBERGER, STRAWN	..DO..	4,821	107
HILDRETH	.20	B63031	BEND, 2ND	..DO..	6,112	506
HOLLIDAY EAST	.23	B58065	PARKEY, STRAWN	..DO..	4,084	127
HOLLIDAY	.21	B38072	KMA, STRAWN	..DO..	3,821	8
HULL SILK SIKES CADDO	.21	B43114	STRAWN	..DO..	4,598	8
JAY 2300 STRAWN	.22	B62050	PALO PINTO, CANYON	..DO..	2,603	9
JOY STRAWN	.15	B53010	STRAWN	..DO..	4,000	207
K-M-A SHALLOW	.31	B54129	..DO	..DO..	3,794	2,900
KIMBELL-SIMS SHARELENE	.13	B63022	SHARLENE, STRAWN	..DO..	3,614	86
KNOX CITY, NORTH CANYON	.44	B58070	PALO PINTO, CANYON	..DO..	4,264	332
LANGSTON-KLEINER, STRAWN	.25	B56075	STRAWN	..DO..	3,488	95
MCKINLAY STRAWN	.24	B56073	..DO	..DO..	4,356	79
RASBERRY 6100 CADDO	.13	B58067	CADDO, STRAWN, 6100 FT	..DO..	6,136	209
RICHARDSON MUELLER CADDO	.19	B53007	.....	.....	6,061	22
RINGGOLD	.12	B58072	STRAWN	PENN..	4,882	30
ROCK CROSSING CANYON LIME	.45	B40133	.....	.....	3,050	11
ROGERS AND ROGERS	.18	B39246	STRAWN	PENN..	4,645	31
RUSMAG	.13	B63023	CADDO, STRAWN	..DO..	4,466	350
SANDUSKEY OIL CREEK	.31	B63024	OIL CREEK, SIMPSON	ORD...	7,130	1,087
SANDUSKY, WEST STRAWN	.03	B63032	STRAWN	PENN..	6,378	34
SHERMAN CARRAWAY	.33	B51045	CARRAWAY, STRAWN	..DO..	3,963	40
SHERMAN EAST	.42	B63026	STRAWN	..DO..	3,090	350
SHERMAN RIFENBURG	.30	B63025	RIFENBURG, STRAWN	..DO..	4,263	88
SHERMAN 7500 SAND	.35	B56071	BAKER	..DO..	7,247	479
SHERMAN 8900 PENN	.35	B56069	COPDELL	..DO..	9,238	202

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
TEXAS - CONTINUED						
RAILROAD COMMISSION DISTRICT 9 - CONTINUED						
(0.00-0.50)						
SIVELLS BEND	0.27	B63027	BEASLEY, STRAWN	PENN..	6,514	640
THRASH PALO PINTO	.08	B67028	PALO PINTO, CANYON	..DO..	5,871	59
TIDWELL 4600 STRAWN	.14	B68003	STRAWN, 4600 FT	..DO..	4,467	67
VOGTSBERGER SOUTH	.33	B53008	.....	.....	4,695	80
WALNUT BD HUDSPETH	.23	B54128	HUDSPETH, STRAWN	PENN..	3,956	470
WALNUT BEND BRUHLMEYER	.13	B63028	BRUHLMEYER, STRAWN	..DO..	3,466	145
WALNUT BEND COX	.21	B54132	COX, STRAWN	..DO..	.....	94
WALNUT BEND	.17	B54125	STRAWN	..DO..	3,692	1,397
WORSHAM STEED	.16	B53011	PENNSYLVANIAN	..DO..	4,698	94
(0.51-1.00)						
BIG MINERAL CREEK BARNES	.59	B56067	BARNES, STRAWN	PENN..	4,925	1,182
BIG MINERAL CREEK Q	.52	B63018	PENNSYLVANIAN, Q	..DO..	4,854	12
BIG MINERAL CREEK S	.55	B56074	DES MOINES	..DO..	5,469	535
BIG MINERAL CREEK STRAWN	.51	B56065	STRAWN	..DO..	3,427	59
GATEWOOD	.51	B63029	..DO	..DO..	.....	233
GOREE	.86	B58069	TANNEHILL, PUEBLO	..DO..	1,730	61
HULL SILK SIKES	.61	B54130	STRAWN, 4300 FT	..DO..	4,338	781
SADLER PENNSYLVANIAN	.58	B54026	SADLER	..DO..	6,896	564
VOSS TANNEHILL	.93	B58071	WOLFCAMP	PERM..	1,956	437
WALNUT BEND ATKINS	.65	B54131	ATKINS, STRAWN	PENN..	.....	140
WALNUT BEND WINGER	.86	B54127	WINGER, STRAWN	..DO..	5,405	1,579
WILSON	.85	B58066	STRAWN	..DO..	2,171	99
RAILROAD COMMISSION DISTRICT 10						
(0.00-0.50)						
BECHTHOLD TONKAWA	.02	B67129	TONKAWA	PENN..	6,158	62
BRADFORD TONKAWA	.05	B67132	..DO	..DO..	6,573	121
CREST DES MOINES	.06	B67127	DES MOINES	..DO..	6,584	197
FARNSWORTH CONNER DES MOINES	.09	B62056	..DO	..DO..	6,793	405
FARNSWORTH N. MARMATON	.09	B67125	MARMATON	..DO..	6,381	1,091
FARNSWORTH OSWEGO	.07	B62055	OSWEGO	..DO..	6,774	21
FARNSWORTH UPPER MORROW	.09	B58055	MORROW	..DO..	7,926	2,507
FOLLETT, WEST CHEROKEE	.05	B67124	CHEROKEE	..DO..	7,972	82
FRASS TONKAWA	.05	B67126	TONKAWA	..DO..	6,235	120
HORIZON CLEVELAND	.15	B59184	CLEVELAND	..DO..	6,208	156
KELLN TONKAWA-OIL	.01	B67130	TONKAWA	..DO..	7,421	67
KIOWA CREEK MORROW-OIL,UP	.02	B67128	MORROW	..DO..	8,975	90
MOBEETIE MISSOURI	.01	B67085	MISSOURI	..DO..	7,203	75
MOBEETIE UPPER MISSOURI	.01	.....	.....	.....	.....	37
PANHANDLE CARSON COUNTY	.43	B69002	WOLFCAMP	PERM..	3,056	2,224
PANHANDLE GRAY COUNTY	.23	B69004	GRANITE WASH	ORD...	2,650	6,797
PANHANDLE HUTCHINSON COUNTY	.47	B69005	WOLFCAMP	PERM..	2,648	3,743
PANHANDLE WHEELER COUNTY	.25	B69003	GRANITE WASH	ORD...	2,328	1,078
PERRYTON WEST MARMATON	.06	B67024	MARMATON	PENN..	6,940	47
PERRYTON, NORTH GEORGE MORROW	.06	B67022	GEORGE	..DO..	7,515	110
PERRYTON, WEST MORROW LOWER	.06	B67025	MORROW	..DO..	7,921	5
QUINDUNO ALBANY DOLOMITE LOWER	.34	B53025	WICHITA-ALBANY	PERM..	4,008	363
QUINDUNO-LECOMPTON	.09	B58057	LECOMPTON	PENN..	6,064	304
R. H. F. MORROW SAND	.05	B62054	MORROW	..DO..	8,045	1,588
SPICER MARMATON	.09	B67123	MARMATON	..DO..	6,538	97
TWIN DES MOINES	.11	B58059	DES MOINES	..DO..	6,437	125
UTAH						
(0.00-0.50)						
AKAH	.16	L60198	PARADOX	PENN..	4,688	10
ALTAMONT	.12	B72034	GREEN RIVER-WASATCH	EOCENE	12,910	1,131
BLUEBELL	.04	L68225	GREEN RIVER, LOWER	..DO..	10,359	1,396
BLUFF	.05	L60197	PARADOX	PENN..	5,623	48
BOUNDARY BUTTE	.11	L49071	COCONINO	PERM..	1,498	451
BRENNAN BOTTOM	.11	L62042	GREEN RIVER	EOCENE	5,520	18
BRIDGER LAKE	.05	L67134	DAKOTA	CRET..	15,764	841
COYOTE BASIN	.08	L68221	GREEN RIVER	EOCENE	4,419	59
DESERT CREEK	.11	L57040	PARADOX	PENN..	5,244	14
DUCHESNE	.01	L55272	WASATCH	EOCENE	7,518	30
GOTHIC MESA	.05	L60193	DESERT CREEK	PENN..	5,768	43
GREATER ANETH	.11	L57011	PARADOX,LOWER,(HERMOSA)	..DO..	5,828	7,860
ISMAY	.05	L57012	PARADOX,UP..(HERMOSA)	..DO..	5,585	213
LISBON	.03	L60195	MCCRACKEN	DEV...	8,905	2,604
LONG CANYON	.02	L65009	PARADOX,LOWER	PENN..	7,050	16
MCELMO MESA	.10	L57139	ANETH,(HERMOSA)	..DO..	5,546	48
MONUMENT BUTTE	.04	L68223	GREEN RIVER	EOCENE	4,916	36
PARIETTE BENCH	.22	L68139	..DO	..DO..	4,851	33
RECAPTURE CREEK	.10	L57038	HERMOSA,UPPER	PENN..	5,354	70
RED WASH AREA	.15	L62043	GREEN RIVER	EOCENE	5,550	5,775
ROOSEVELT	.07	L50337	GREEN RIVER,BASAL	..DO..	9,350	52
SALT WASH	.23	L67101	LEADVILLE	MISS..	8,914	83
TOHONADLA	.09	L60199	PARADOX	PENN..	5,050	54
(0.51-1.00)						
AGATE	.61	L62037	BRUSHY BASIN,(MORRISON)	JUR...	1,562	7
ASHLEY VALLEY	.83	L50341	WEBER	PENN..	4,181	265
(1.01-2.00)						
UPPER VALLEY	1.99	L62179	KAIBAB	PERM..	6,060	1,948

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
WYOMING						
(0.00-0.50)						
ANT HILLS	0.14	L37004	FALL RIVER, (DAKOTA)	CRET.	3,951	29
ARCH UNIT (PATRICK DRAW)	.06	L67146	ALMOND	..DO..	5,290	548
ASH CREEK SOUTH	.10	L56354	ASH CREEK, (SHANNON)	..DO..	4,836	227
ASH CREEK	.15	L52405	SHANNON	..DO..	4,375	111
BADGER BASIN	.05	L31003	WALL CREEK, (FRONTIER)	..DO..	8,590	30
BARBER CREEK	.19	L57072	PARKMAN, (MESAVERDE)	..DO..	6,838	63
BIG MEDICINE BOW & SOUTH	.05	R35185	SUNDANCE	JUR...	5,290	36
BIG MUDDY & BIG MUDDY EAST	.17	L50356	CRETACEOUS	CRET..	2,645	757
BISON BASIN	.45	L46008	FRONTIER, 4TH	..DO..	1,221	70
BORIE	.24	L50176	MUDDY	..DO..	8,494	40
BROOKS RANCH	.11	L58062	FRONTIER, 2ND	..DO..	4,410	37
BURKE RANCH	.18	L58039	DAKOTA	..DO..	6,631	140
CLARETON	.09	L53249	NEWCASTLE	..DO..	6,242	189
COLE CREEK SOUTH	.11	L50353	DAKOTA	..DO..	8,309	707
COLE CREEK	.16	L50354	..DO	..DO..	7,947	583
COLLUMS	.40	L68213	MUDDY	..DO..	7,530	759
COOPER COVE	.30	L50060	DAKOTA + LAKOTA	..DO..	4,830	56
COYOTE CREEK	.04	L60111	MINNELUSA	PENN..	6,368	518
CROOKS GAP	.20	L50084	MUDDY	CRET..	4,820	100
DEAD HORSE CREEK	.08	L57120	PARKMAN, (MESAVERDE)	..DO..	6,968	219
DESERT SPRINGS (PATRICK DRAW)	.06	L67146	ALMOND	..DO..	5,290	104
DESERT SPRINGS WEST (PATRICK DRAW)	.06	L67146	..DO	..DO..	5,290	74
DIAMOND RANCH	.23	L57133	LAKOTA	..DO..	5,466	22
DONKEY CREEK	.12	L57147	DAKOTA	..DO..	6,259	258
ELK MOUNTAIN	.04	L57134	SUNDANCE	JUR...	6,475	26
ESPY	.26	L35025	.....	.....	.....	23
FIDDLER CREEK	.15	L54044	NEWCASTLE, (MUDDY)	CRET..	4,577	542
FLAT TOP	.02	L66031	TEAPOT	..DO..	6,981	105
GAS DRAW	.40	L68213	MUDDY	..DO..	7,530	1,541
GLENROCK SOUTH	.16	L58065	DAKOTA	..DO..	6,090	1,688
GLENROCK	.05	L50110	MUDDY	..DO..	7,202	46
GOLDEN GOOSE	.20	L50084	..DO	..DO..	4,820	49
GOLDEN PRAIRIE	.16	L70291	.....	.....	.....	91
GOVERNMENT BRIDGE	.08	L58061	STEELE	CRET..	2,385	7
GREEN RIVER BEND (BIG PINEY)	.02	L67136	WASATCH	EOCENE	2,612	282
GREYBULL	.08	R20298	GREYBULL, DAKOTA	CRET..	.....	34
GRIEVE	.08	L58066	MUDDY	..DO..	6,723	388
HAPPY SPRINGS	.25	L53186	FRONTIER, 4TH	..DO..	3,904	108
HAY CREEK OIL	.04	L53298	NEWCASTLE, (MUDDY)	..DO..	6,245	20
HILIGHT	.07	L68210	MUDDY	..DO..	9,201	11,172
HOGSBACK (BIG PINEY)	.07	L55357	ALMY	PALEO.	1,031	664
HORNE BROS	.17	L53218	SUNDANCE	JUR...	6,180	5
HORSE CREEK	.36	L50177	MUDDY	CRET..	5,265	142
HUNTER RANCH	.05	L68211	..DO	..DO..	9,089	142
LA BARGE NORTH	.08	L55352	HILLIARD	..DO..	2,000	53
LA BARGE	.07	L55357	ALMY	PALEO.	1,031	313
LANCE CREEK EAST	.01	L42006	DAKOTA	CRET..	3,965	17
LANCE CREEK	.13	L53212	LEO, (MINNELUSA)	PENN..	5,050	316
LIGHTNING CREEK	.22	L53245	MUDDY	CRET..	1,474	40
LONETREE CREEK	.13	L53300	NEWCASTLE, (MUDDY)	..DO..	7,280	45
LONG ISLAND (BIG PINEY)	.02	L67143	WASATCH	EOCENE	3,570	243
LOST CABIN	.13	L59156	WIND RIVER	..DO..	3,171	12
MCDONALD DRAW (BIG PINEY)	.07	L55357	ALMY	PALEO.	1,031	542
MEADOW CREEK NORTH	.12	L50276	SUSSEX	CRET..	3,839	82
MILLER CREEK	.08	L60108	DAKOTA	..DO..	5,934	170
MOORCROFT WEST	.17	L57151	NEWCASTLE	..DO..	4,140	176
MUSH CREEK WEST	.10	L53301	NEWCASTLE, (MUDDY)	..DO..	5,747	139
MUSH CREEK	.08	L54051	..DO	..DO..	4,585	164
OBRIEN SPRINGS	.24	L60110	TENSLEEP	PENN..	6,891	5
OEDEKOVEN	.07	L68210	MUDDY	CRET..	9,201	185
OSAGE	.07	L54048	NEWCASTLE, (MUDDY)	..DO..	2,131	1,471
PATRICK DRAW	.02	L63077	ALMOND	..DO..	4,740	2,037
PINE BLUFFS	.13	L56092	J	..DO..	7,362	36
POISON SPIDER WEST	.09	L50352	MESAVERDE	..DO..	9,230	656
RECLUSE	.40	L68213	MUDDY	..DO..	7,530	2,066
REX LAKE	.28	L50058	DAKOTA	..DO..	3,838	12
ROCK RIVER	.13	L37013	..DO	..DO..	3,447	225
ROZET EAST	.11	L66046	MUDDY	..DO..	6,477	73
ROZET	.13	L60109	..DO	..DO..	6,935	259
SAGE SPRING CREEK	.22	L52413	DAKOTA	..DO..	7,264	180
SALT CREEK L & H	.13	L53098	WALL CREEK, 2ND	..DO..	2,605	12,217
SALT CREEK WEST	.13	L53107	STEELE	..DO..	1,800	32
SANDBAR EAST	.08	L69252	.....	.....	.....	391
SANDBAR WEST	.08	L69252	.....	.....	.....	23
SCHRADER FLATS	.11	L66035	SUNDANCE	JUR...	3,227	93
SEVEN MILE	.33	L50129	MUDDY	CRET..	5,818	25
SHERWOOD	.01	L58043	..DO	..DO..	10,730	7
SHOSHONE NORTH	.01	L56349	FRONTIER, 3RD	..DO..	2,413	12
SKULL CREEK & SKULL CREEK NORTH	.08	L54051	NEWCASTLE, (MUDDY)	..DO..	4,585	356
SLATTERY	.14	L57149	NEWCASTLE	..DO..	6,476	261
SMOKEY GAP	.17	L58050	NIOBRARA	..DO..	815	17
SUSSEX WEST-DUGOUT	.19	L53302	SHANNON	..DO..	2,747	677
SUSSEX	.43	L52429	FRONTIER	..DO..	7,073	1,538
TEAPOT EAST	.14	L52408	NIOBRARA + SHANNON	..DO..	2,660	58
TIP TOP UNIT (BIG PINEY)	.03	L68219	ALMY TRANSITION	PALEO.	1,150	502
TIPPS	.13	L66037	LAKOTA	CRET..	5,516	18
TWENTY MILE HILL	.08	L57161	PARKMAN, (MESAVERDE)	..DO..	6,410	31
UTE	.13	L69239	.....	.....	.....	883
WALLACE CREEK	.01	L66041	MUDDY	CRET..	10,345	15
WIND CREEK	.14	L66047	LAKOTA	..DO..	744	23
WOOD	.16	L66049	..DO	..DO..	5,022	464

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA,[1] SULFUR CONTENT CATEGORY, AND FIELD[2]	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
WYOMING - CONTINUED						
(0.51-1.00)						
BEAVER CREEK	0.54	L67073	MADISON	MISS..	10,666	1,191
BISHOP RANCH SOUTH	.74	L69271	.....	.....	.....	132
DILLINGER RANCH	.76	L70289	.....	.....	.....	843
GOLDEN EAGLE	.85	L50740	TENSLEEP	PENN..	9,350	219
KITTY	.70	L48210	MUDDY	CRET..	9,201	1,794
LITTLE BUCK CREEK	.77	L53183	CONVERSE	PENN..	5,216	14
PINE MOUNTAIN	.51	800555	.....	.....	.....	6
RENO EAST	.77	L66030	MINNELUSA	PENN..	14,931	239
RENO	.77	L66030	..DO	..DO..	14,931	442
RIVERTON DOME	.83	L49116	TENSLEEP	..DO..	11,665	28
(1.01-2.00)						
ADON ROAD	1.20	L48031	MINNELUSA	PENN..	8,990	29
BAILEY DOME	1.39	L50085	TENSLEEP	..DO..	6,959	14
BIG SAND DRAW	1.35	L48033	..DO	..DO..	7,281	1,144
BONANZA	1.87	L51140	..DO	..DO..	2,490	232
CAMP CREEK	1.96	L68208	MINNELUSA	..DO..	7,396	204
ELK BASIN SOUTH	1.73	L50637	TENSLEEP	..DO..	6,898	465
ELK BASIN	1.92	L50551	MADISON	MISS..	5,156	12,360
ENOS CREEK	1.01	L50732	TENSLEEP	PENN..	6,417	8
GEBO	1.83	L50702	PHOSPHORIA	PERM..	4,558	435
LITTLE POLECAT	1.91	L56338	TENSLEEP	PENN..	7,254	12
LITTLE SAND DRAW	1.17	L50734	PHOSPHORIA	PERM..	5,922	183
LOST SOLDIER	1.22	L48025	MADISON	MISS..	4,794	4,848
MAHONEY	1.33	830427	TENSLEEP	PENN..	4,600	43
MANDERSON	1.74	L56330	PHOSPHORIA	PERM..	6,910	74
MEADOW CREEK	1.91	L53149	TENSLEEP	PENN..	9,060	811
MEETEETSEE	1.34	L56343	PHOSPHORIA	PERM..	11,234	13
MURPHY DOME	1.70	L50719	TENSLEEP	PENN..	4,390	711
NEIBER DOME	1.88	L48039	EMBAR	PERM..	10,025	42
NOTCHES	1.80	L52411	TENSLEEP	PENN..	2,865	173
RAINBOW RANCH	1.28	L60114	MINNELUSA	..DO..	9,971	8
RAVEN CREEK	1.19	L69269	.....	.....	.....	1,548
REEL	1.50	L69243	.....	.....	.....	197
SALT CREEK EAST	1.50	L58044	TENSLEEP	PENN..	7,472	291
SHELDON DOME	1.16	L49117	..DO	..DO..	6,764	301
SILVERTIP L & H	1.13	L50642	EMBAR + TENSLEEP	PERM..	8,737	65
SLICK CREEK	2.00	L50742	PHOSPHORIA	..DO..	10,460	172
SOUTH FORK	1.91	L48037	EMBAR	..DO..	10,055	12
TORCHLIGHT L & H	1.83	L50725	TENSLEEP	PENN..	3,176	827
WALKER DOME	1.77	L56145	PHOSPHORIA	PERM..	6,646	70
WALLACE	1.36	L68216	MINNELUSA	PENN..	8,031	207
WERTZ	1.32	L50080	TENSLEEP	..DO..	5,999	1,663
WHISTLE CREEK	1.84	L52215	..DO	..DO..	5,795	121
WORLAND DOME	1.55	L50712	PHOSPHORIA	PERM..	10,000	90
(>2.00)						
ALLEN LAKE EAST	2.71	L50053	TENSLEEP	PENN..	3,923	14
BIG POLECAT	2.56	L56339	..DO	..DO..	5,525	228
BLACK MOUNTAIN	2.84	850700	.....	.....	.....	485
BOOTON	2.55	L68207	MINNELUSA	PENN..	7,447	16
BYRON	2.50	L50630	TENSLEEP	..DO..	5,163	1,905
C-H	2.90	L68209	MINNELUSA	..DO..	7,574	337
CASPER CREEK NORTH	3.00	830446	TENSLEEP	..DO..	3,300	17
CASPER CREEK SOUTH	4.35	L50365	..DO	..DO..	2,630	192
CELLARS RANCH	3.41	L61291	..DO	..DO..	6,530	123
CIRCLE RIDGE	2.73	L43008	..DO	..DO..	680	471
CLARK RANCH	3.74	L58052	..DO	..DO..	4,678	38
COTTONWOOD CREEK	2.52	L56148	PHOSPHORIA	PERM..	7,270	1,014
COWLEY	3.25	L67075	TENSLEEP	PENN..	4,740	40
DALLAS	3.06	L49079	..DO	..DO..	1,272	249
DEAVER NORTH	3.03	L56341	..DO	..DO..	5,230	46
DERBY	2.73	824329	EMBAR	PERM..	1,200	43
DUBOIS	2.45	L49121	PHOSPHORIA	..DO..	2,062	19
DUVALL RANCH	2.12	L70304	.....	.....	.....	312
FOURBEAR	3.52	L56332	TENSLEEP	PENN..	2,965	382
FRANNIE	2.78	L51143	EMBAR + TENSLEEP	PERM..	3,817	1,962
GARLAND	2.77	L48040	TENSLEEP	PENN..	4,267	3,634
GOOSEBERRY	2.03	L50721	EMBAR	PERM..	5,880	177
GRASS CREEK LIGHT & HEAVY	2.68	L50727	TENSLEEP	PENN..	4,236	3,733
GUTHREY	3.74	L69266	.....	.....	.....	214
HALF MOON	4.11	L50560	EMBAR	PERM..	3,426	212
HALVERSON RANCH	2.12	L70304	.....	.....	.....	613
HAMILTON DOME	2.98	L50716	TENSLEEP	PENN..	2,602	4,463
HAMM	3.39	L69245	.....	.....	.....	199
HERRICK DOME	3.26	L50055	TENSLEEP	PENN..	3,637	14
HIDDEN DOME LIGHT & HEAVY	3.45	L50714	..DO	..DO..	4,624	159
KIRBY CREEK	3.28	L50706	EMBAR	PERM..	3,334	22
KUEHNE RANCH	2.05	L68212	MINNELUSA	PENN..	7,906	171
LAKE CREEK	2.02	L56140	TENSLEEP	..DO..	3,484	186
LAMB	3.08	L50739	MADISON	MISS..	3,884	23
LANDER HUDSON	2.85	L37016	TENSLEEP	PENN..	1,715	683
LITTLE BUFFALO BASIN	3.14	L50639	..DO	..DO..	4,594	3,718
LITTLE LARAMIE	3.40	L50054	..DO	..DO..	3,735	16
LITTLE MITCHELL CREEK	2.63	L70303	.....	.....	.....	458
M-D	2.63	L70303	.....	.....	.....	427
MAVERICK SPRINGS	2.66	L63100	PHOSPHORIA	PERM..	991	305
MELLOTT RANCH	3.70	L66050	MINNELUSA	PENN..	6,795	333
MEYER GULCH	3.28	L56149	PHOSPHORIA	PERM..	8,800	6
MIDDLE DOME	2.58	L47076	..DO	..DO..	2,076	17
MULE CREEK	2.38	831026	MINNELUSA	PENN..	3,161	33
NO WATER CREEK	2.60	L70287	.....	.....	.....	154

SEE FOOTNOTES AT END OF TABLE.

TABLE 1. - U.S. CRUDE OIL PRODUCTION DURING 1971 BY FIELDS AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

GEOGRAPHICAL AREA, 1/ SULFUR CONTENT CATEGORY, AND FIELD 2/	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, THOUSAND BARRELS
WYOMING - CONTINUED						
(>2.00)						
NORTH FORK	3.51	L52410	TENSLEEP	PENN..	6,484	538
NOWOOD	2.45	L50698	..DO	..DO..	1,611	17
OREGON BASIN WEST	3.93	L56340	PHOSPHORIA	PERM..	4,311	23
OREGON BASIN	3.20	L50565	TENSLEEP	PENN..	3,380	12,120
PILOT BUTTE L & H	2.30	L49095	PHOSPHORIA	PERM..	5,819	182
PITCHFORK	3.96	L50555	TENSLEEP	PENN..	3,908	786
POISON SPIDER	3.21	R23287	SUNDANCE	JUR...	1,460	56
PRONG CREEK	3.82	L69261				157
QUEALY	3.11	L46011	TENSLEEP	PENN..	5,480	200
RATTLESNAKE	2.18	L70288				173
ROBINSON RANCH EAST	2.29	L60112	MINNELUSA	PENN..	6,066	87
ROBINSON RANCH SOUTH	2.29	L60112	..DO	..DO..	6,066	46
ROBINSON RANCH	2.29	L60112	..DO	..DO..	6,066	154
ROCKY POINT	3.32	L70311				965
ROLFF LAKE	2.03	L63102	CROW MOUNTAIN	TRIA..	3,460	24
SAGE CREEK	2.85	L56342	TENSLEEP	PENN..	3,421	268
SAND DRAW SE	3.49	L53268	..DO	..DO..	8,600	23
SEMLEK	2.09	L70295				355
SHOSHONE	3.20	R30442	EMBAR	PERM..	4,309	35
SODA WELL	2.57	L68214	MINNELUSA	PENN..	7,331	24
SPINDLETOP	3.25	R30450	SUNDANCE	JUR...	1,057	5
SPRING CREEK	3.96	L50555	TENSLEEP	PENN..	3,908	497
STEAMBOAT BUTTE	2.18	L49120	..DO	..DO..	6,830	1,674
STEWART	2.03	L68215	MINNELUSA	..DO..	8,024	575
SUNSHINE NORTH	3.84	R30438	TENSLEEP	..DO..	3,780	25
SUNSHINE SOUTH	3.08	R30439	EMBAR	PERM..	2,514	6
TIMBER CREEK	2.26	L60113	MINNELUSA	PENN..	9,360	504
TISDALE NORTH	2.82	L54272	CURTIS, (CROW MOUNTAIN)	TRIA..	774	127
WARM SPRINGS	2.61	R00565	PERMIAN	PERM..		5
WHISLER	2.41	L68217	MINNELUSA	PENN..	8,304	11
WINKLEMAN	3.17	L44023	TENSLEEP	..DO..	2,915	3,319

1/ GEOGRAPHICAL AREA IS A STATE, STATE SUBDIVISION, OR COMBINATION OF STATE SUBDIVISIONS.

2/ INFORMATION IS PRESENTED BY FIELD FOR MOST STATES, EXCEPT FOR ARKANSAS, CALIFORNIA, COLORADO, MISSISSIPPI, NEW MEXICO, AND NORTH DAKOTA. ONLY FIELDS HAVING AN ASSIGNED SULFUR CONTENT AND PRODUCTION OF AT LEAST 5,000 BARRELS OF OIL DURING 1971 ARE INCLUDED.

SULFUR CONTENT OF U.S. CRUDE OILS

For comparison purposes, the results of this study as well as those of the study of 1969 production (11) were summarized according to six selected regions shown on figure 1. The selected regions were generally the same as those in common use and were based primarily on the grouping of major geologic provinces.

Table 1 presents data pertaining to the sulfur content of crude oil production by fields for 26 States; data for California, Louisiana, New Mexico, and Texas are presented by State geographical subdivisions. Of interest was the fact that the sulfur content of crude oils from a particular formation varied widely. For example, the sulfur content of the oil from the Smackover Formation of Jurassic age in Alabama, Arkansas, north Louisiana, Mississippi, and Texas Railroad Commission (RRC) Districts 5 and 6 and 6A (East Texas field, arbitrarily assigned District 6A) ranged from 0.01 to 4.59 percent. The

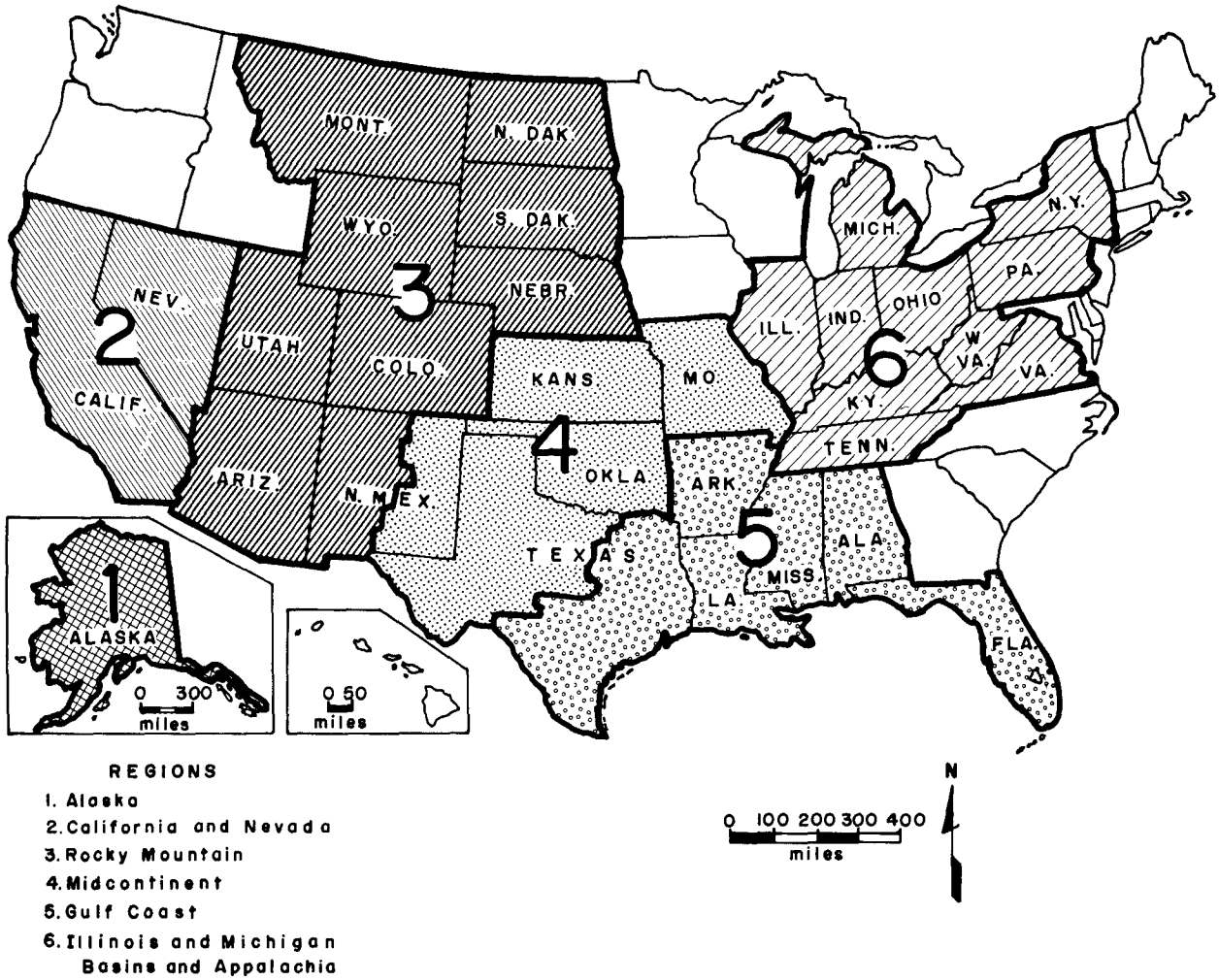

FIGURE 1. - Oil-producing States of the United States, by selected regions.

average sulfur content of all oils (table 1) from the Smackover Formation was 0.85 percent. In other formations, the sulfur content did not vary as much. For example, the sulfur content of the crude oils produced from the Frio Formation of Oligocene age in south Louisiana and Texas RRC Districts 2, 3, and 4 ranged from 0.01 to 0.82 percent and averaged 0.16 percent.

Nationwide, total oil production increased from 3.19 billion barrels during 1969 to 3.30 billion barrels in 1971 according to the American Petroleum Institute (API). This increased production is also reflected in the gain in oil production classified by sulfur content between 1969 and 1971. A total of 2.51 billion barrels of oil (table 2), 76 percent of the total oil produced during 1971, was classified by sulfur content for the States included in this study. It compares with about 75 percent of the 1969 production classified by sulfur content for the same States (11). A comparison of the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969.....	1,586,175	282,025	299,396	212,646	2,380,242
1971.....	1,706,223	256,871	320,193	228,570	2,511,857

The pattern of oil classified by sulfur content between 1969 and 1971 changed very little. Actually, only the first two sulfur content categories had appreciable changes. In 1969, about 67 percent of the oil classified was in the lowest sulfur content category, compared with 68 percent in 1971. The next category (0.51-1.00 percent) had 12 percent of the oil classified for 1969, compared with about 10 percent for 1971. For the third and fourth categories, the percentages of the total oil classified were about 13 and 9 percent, respectively, during both 1969 and 1971.

Of the 1971 oil production classified, 1.71 billion barrels was classified as low-sulfur oil, or about twice that classified as high-sulfur oil. Low-sulfur oil production during 1971 was 120 million barrels more than in 1969. The significant gain can be attributed mainly to the 169-million-barrel increase in production for the Gulf Coast region between 1969 and 1971. This region led all other regions in low-sulfur oil output with 988 million barrels. The Midcontinent region, which was second in low-sulfur oil production during 1971 with 450 million barrels, produced 7 million barrels less of low-sulfur oil in 1971 than in 1969. The California and Nevada region also had a 7-million-barrel drop in low-sulfur oil production. The Illinois and Michigan Basins and Appalachia, which comprise region 6 (fig. 1), had a 14-million-barrel drop in low-sulfur oil output between 1969 and 1971. The Rocky Mountain region had the largest drop in low-sulfur oil production, with 25 million barrels less in 1971 than in 1969. Alaska had a relatively small gain of 4 million barrels of low-sulfur oil between 1969 and 1971.

TABLE 2. - CLASSIFICATION OF 1971 CRUDE OIL PRODUCTION IN THE UNITED STATES, BY SULFUR CONTENT

(THOUSANDS OF BARRELS)

GEOGRAPHICAL AREA [1]	SULFUR CONTENT, PERCENT BY WEIGHT				TOTAL [2]
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
ALABAMA	6,736	160	282	245	7,423
ALASKA	77,628	1,157	.....	.....	78,785
ARIZONA	1,125	.....	.....	.....	1,125
ARKANSAS	3,092	1,670	4,414	4,306	13,482
CALIFORNIA					
SAN JOAQUIN VALLEY	30,488	56,789	28,954	.....	116,231
COASTAL	565	6,364	3,398	27,191	37,518
LOS ANGELES	1,401	10,353	36,188	8,226	56,168
COLORADO	4,801	10,536	.....	.....	15,337
FLORIDA	.....	.....	.....	671	671
ILLINOIS	34,403	59	.....	.....	34,462
INDIANA	2,774	35	.....	.....	2,809
KANSAS	22,821	10,793	221	.....	33,835
KENTUCKY	1,808	.....	.....	.....	1,808
LOUISIANA					
NORTH	24,653	3,637	694	.....	28,984
SOUTH	621,367	23,512	.....	.....	644,879
MICHIGAN	5,776	1,159	66	.....	7,001
MISSISSIPPI	6,377	2,892	5,719	8,536	23,524
MONTANA	14,409	8,096	7,740	606	30,851
NEBRASKA	2,741	3,498	.....	.....	6,239
NEVADA	.....	.....	113	.....	113
NEW MEXICO					
SOUTHEAST	37,907	18,776	21,163	37	77,883
NORTHWEST	3,944	.....	.....	.....	3,944
NEW YORK	1,014	.....	.....	.....	1,014
NORTH DAKOTA	12,503	4,559	632	2,190	19,884
OKLAHOMA	109,864	22,686	183	.....	132,733
PENNSYLVANIA	2,200	.....	.....	.....	2,200
SOUTH DAKOTA	.....	143	.....	.....	143
TEXAS					
RAILROAD COMMISSION DISTRICT 1	2,875	6,938	368	87	10,268
RAILROAD COMMISSION DISTRICT 2	58,120	324	.....	.....	58,444
RAILROAD COMMISSION DISTRICT 3	122,525	994	.....	.....	123,519
RAILROAD COMMISSION DISTRICT 4	41,845	.....	.....	.....	41,845
RAILROAD COMMISSION DISTRICT 5	2,231	13,510	52	.....	15,793
RAILROAD COMMISSION DISTRICTS 6 & 6A	98,266	2,080	3,640	37,392	141,378
RAILROAD COMMISSION DISTRICT 7B	15,883	.....	.....	.....	15,883
RAILROAD COMMISSION DISTRICT 7C	23,012	1,480	538	1,370	26,400
RAILROAD COMMISSION DISTRICT 8	108,648	17,886	79,165	47,925	253,624
RAILROAD COMMISSION DISTRICT 8A	96,419	15,923	97,342	38,944	248,628
RAILROAD COMMISSION DISTRICT 9	13,693	5,682	.....	.....	19,375
RAILROAD COMMISSION DISTRICT 10	21,512	.....	.....	.....	21,512
UTAH	20,885	272	1,948	.....	23,105
WYOMING	49,912	4,908	27,373	50,844	133,037
TOTAL [2]	1,706,223	256,871	320,193	228,570	2,511,857

1/ GEOGRAPHICAL AREA IS A STATE, STATE SUBDIVISION, OR COMBINATION OF STATE SUBDIVISIONS.

2/ TOTAL INCLUDES ONLY PRODUCTION FROM THOSE FIELDS WITH AN ASSIGNED SULFUR CONTENT AND PRODUCTION OF AT LEAST 5,000 BARRELS DURING 1971.

The high-sulfur oil production was about 806 million barrels, about 12 million barrels more than in 1969. Some notable changes occurred among the selected regions in the production of high-sulfur oil and contributed to this net increase. The Midcontinent region produced about 47 percent of the high-sulfur oil during 1971 and had a significant increase of 18 million barrels from that of 1969. The California and Nevada region, second in high-sulfur oil production during 1971 with 22 percent, had a loss of 7 million barrels. The Gulf Coast region, which produced 15 percent of the high-sulfur oil during 1971, increased its output of high-sulfur oil by 14 million barrels over 1969 production. The Rocky Mountain region produced another 15 percent of the high-sulfur oil but had a 14-million-barrel loss from 1969 production. The other two regions produced less than 1 percent of the high-sulfur oil during 1971 and gained about 1 million barrels of high-sulfur oil between 1969 and 1971. The Illinois and Michigan Basins and Appalachia, which comprise region 6, maintained the 1969 level of production of 1.3 million barrels of oil during 1971. Alaska had a fourfold increase in its output of high-sulfur oil production between 1969 and 1971, which was significant within the State.

Overall, the ratio of low-sulfur oil to high-sulfur oil increased slightly, from 2.0 to 1 in 1969 to 2.1 to 1 in 1971. This indicates a

relative increase in the production of low-sulfur oil between 1969 and 1971. This ratio could be affected significantly after 1971 as a result of (1) an increasing market demand factor in Louisiana and Texas, (2) increased production from the North Slope in Alaska, and (3) increased production from Florida.

Each region is discussed individually in order of its rank in low-sulfur oil production during 1971. A comparison of the 1969 and 1971 results is included. It should be noted that the total oil production data for each region were obtained for the States and State subdivisions from API. For States for which oil production data are not reported individually by API, the data were obtained from the International Oil Scouts publications.

Gulf Coast

The Gulf Coast region comprises Alabama, Arkansas, Florida, Mississippi, north Louisiana, south Louisiana, and Texas RRC Districts 1 through 6A. It produced 1.41 billion barrels of crude oil during 1971, compared with 1.26 billion barrels in 1969. Of the 1971 total, 1.11 billion barrels was classified by sulfur content. A comparison between the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969.....	818,780	55,842	10,809	42,008	927,439
1971.....	988,087	55,717	15,169	51,237	1,110,210

The distribution of the 1971 oil as classified by sulfur content remained essentially the same as that of 1969. The percentages of the oil classified for 1971 in each of the four sulfur content groups compared with those of 1969 follow: First, 88.3 percent versus 89.0 percent; second, 6.0 percent versus 5.0 percent; third, 1.2 percent versus 1.4 percent; and fourth, 4.5 percent versus 4.6 percent.

Of the 1971 oil production classified by sulfur content, about 988 million barrels of oil was classified as low-sulfur oil. South Louisiana and Texas RRC Districts 2, 3, 4, and 6 and 6A accounted for about 95 percent of this oil. Production of low-sulfur oil during 1971 was 169 million barrels greater than in 1969. Main contributors to this increase were south Louisiana and Texas RRC Districts 2, 3, and 6 and 6A.

About 122 million barrels of oil produced during 1971 was classified as high-sulfur oil. Significant contributors to the high-sulfur oil were Arkansas, Mississippi, south Louisiana, and Texas RRC Districts 5 and 6 and 6A. However, of these, only Arkansas, Mississippi, and Texas RRC District 5 had more high-sulfur oil than low-sulfur oil during 1971.

In summary, this region produced about 8.1 barrels of low-sulfur oil to 1 barrel of high-sulfur oil during 1971, compared with a 7.5-to-1 ratio during 1969. There were net increases in production of both low-sulfur and high-sulfur oil between 1969 and 1971. One reason for such gains was that the

average market demand factor increased from 44 percent in 1969 to 73 percent in 1971 for Louisiana, and from 52 percent to 73 percent for Texas during the same interim. Also, in south Louisiana there was a considerable gain in the oil classified during 1971 from that of 1969 because of the addition of those fields for which crude oil analyses were run after 1969. Short-term increases in low- and high-sulfur oil production are expected in this region as the market demand factor increases.

Midcontinent

The Midcontinent region includes Kansas, Missouri, Oklahoma, southeast New Mexico, and Texas RRC Districts 7B, 7C, 8, 8A, 9, and 10. There were no data pertaining to the sulfur content of crude oil from Missouri. Therefore, Missouri's production was omitted in this study.

This region produced 1.10 billion barrels of oil during 1971, compared with 1.08 billion barrels in 1969. Of the 1971 total, 830 million barrels was classified by sulfur content. A comparison between the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969....	457,026	110,039	175,410	77,093	819,568
1971....	449,759	93,226	198,612	88,276	829,873

The percentage of the oil classified in the lowest sulfur content group decreased from 56 percent in 1969 to 54 percent in 1971; for the next group there was a decrease from 13 percent to 11 percent. Conversely, the percentages for the third and fourth groups increased from 21 percent to 24 percent and from 9 percent to 11 percent, respectively.

About 450 million barrels of oil produced during 1971 was classified as low-sulfur oil. Oklahoma, southeast New Mexico, and Texas RRC Districts 8 and 8A accounted for 78 percent of this low-sulfur oil. Although southeast New Mexico and Texas RRC District 8A had substantial gains of 5 and 19 million barrels of low-sulfur oil production, respectively, between 1969 and 1971, these gains did not offset the drop in production from the other States and State subdivisions. As a result, low-sulfur oil production in this region was about 7 million barrels less than in 1969.

In the other sulfur-content categories, the 1.01 to 2.00 percent group had the most oil: 199 million barrels out of the 380 million barrels of oil classified as high-sulfur oil for 1971. About 78 percent of the 1971 high-sulfur oil production was from Texas RRC Districts 8 and 8A. Southeast New Mexico and Oklahoma accounted for most of the remaining high-sulfur oil. There was a net increase of 18 million barrels of high-sulfur oil between 1969 and 1971 because of the gains in high-sulfur oil production from southeast New Mexico and Texas RRC District 8A.

Overall, the ratio of low-sulfur oil to high-sulfur oil changed slightly, from 1.3 barrels of oil to 1 in 1969, to 1.2 barrels of oil to 1 in 1971.

Southeast New Mexico and Texas RRC District 8A had significant gains in both low- and high-sulfur oil production; however, the gains in low-sulfur oil output did not offset the losses in other areas. Low-sulfur oil output was 7 million barrels less in 1971 than in 1969, whereas high-sulfur oil output was 18 million barrels more in 1971 than in 1969.

Rocky Mountain

The Rocky Mountain region includes Arizona, Colorado, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming, and northwest New Mexico. It should be noted that Nebraska's oil production was totally included in this region, although some of its oil accumulations are more closely associated with those of the Midcontinent region. However, no attempt was made to subdivide this State according to the association of its oil accumulations. Virtually all of the crude oil analyses included for this region were from the Laramie (Wyo.) Energy Research Center of the Bureau of Mines.[5]

This region produced 269.7 million barrels of oil during 1971, compared with 292.3 million barrels during 1969. A total of 233.7 million barrels of the 1971 oil production was classified by sulfur content. A comparison between the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Years	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969....	134,826	38,024	41,638	57,220	271,708
1971....	110,320	32,012	37.693	53,640	233,665

The notable changes between 1969 and 1971 were in the lowest and highest sulfur content group. The percentage of the oil classified in the lowest group decreased from 50 percent in 1969 to 47 percent in 1971. Oil in the highest group increased from 21 percent in 1969 to 23 percent in 1971. For the 0.51- to 1.00-percent sulfur content group, the percentage remained at 14 percent during the interim. The percentage in the third sulfur content group had a slight change, from 15 percent in 1969 to 16 percent in 1971. It should be noted that during 1969-71 some important new fields from this region were not sampled, and that in some old fields new-oil discoveries may have been made in different formations. In a particular field, this new oil could be contributing significantly to overall production, and yet the sulfur content of the oil could be quite different from the one assigned to the field.

Of the total oil production classified by sulfur content, 110.3 million barrels of oil was classified as low-sulfur oil. The leading States in low-sulfur-oil production and their 1971 output follow: Wyoming, 49.9 million barrels; Utah, 20.9 million barrels; Montana, 14.4 million barrels; and North Dakota, 12.5 million barrels. Low-sulfur-oil production during 1971 was less than 1969 production for all States except Utah. The net result was a decline in low-sulfur-oil output from 134.8 million barrels of oil in 1969 to 110.3 million barrels in 1971.

[5]Now transferred to the Energy Research and Development Administration.

About 123.3 million barrels of oil was classified as high-sulfur oil for 1971. This was about 13.5 million barrels less than in 1969. Wyoming accounted for slightly more than two-thirds of the 1971 high-sulfur oil, but its 1971 high-sulfur-oil production was 9.5 million barrels less than in 1969. Of the remaining States, Utah had a very slight increase in high-sulfur-oil production between 1969 and 1971.

Of the total oil classified for 1971, there was more high-sulfur oil than low-sulfur oil as indicated by the ratio of 0.89 barrel of low-sulufur oil to 1 barrel of high-sulfur oil. However, this was slightly lower than the 0.98-to-1 ratio of 1969. Even with fields such as Bell Creek in Montana, Hilight in Wyoming, and Altamont and Bluebell in Utah, which are significant producers of low-sulfur oil, this region's 1971 output of low-sulfur oil declined from that of 1969.

Alaska

According to API, Alaska's total net oil production (gross minus that returned to the formation) increased from 74.1 million barrels in 1969 to 78.0 million barrels in 1971. About 78.8 million barrels of gross oil production for 1971 was classified by sulfur content. The following comparison shows the 1969 and 1971 oil production classification by sulfur content, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969.....	74,036	277	-	-	74,313
1971.....	77,628	1,157	-	-	78,785

For the lowest sulfur content group, the percentage of the oil classified decreased from 99.6 percent in 1969 to 98.5 percent in 1971; for the other group classified it increased from 0.4 percent to 1.5 percent.

Alaska ranked fourth among the regions in the production of low-sulfur oil during 1971. Output of low-sulfur oil was about 4 million barrels higher in 1971 than in 1969. All this oil was from fields commonly referred to as the Cook Inlet fields.

The production classified as high-sulfur oil was produced from the North Slope. During 1971, this production amounted to about 1.2 million barrels, a fourfold increase over that of 1969. The sulfur content assigned to the oil from the North Slope was 0.82 percent. Therefore, the pattern of crude oil production by sulfur content could change significantly when production from the North Slope reaches full pipeline capacity.

Illinois and Michigan Basins and Appalachia

Of the 10 oil-producing States that comprise this region, only Illinois, Indiana, Kentucky, Michigan, New York, and Pennsylvania were included in this study. These six States produced 89.4 million barrels of oil during 1969, but by 1971 production dropped to 73.3 million barrels of oil. Of the 1971 total

production, about 49.3 million barrels of oil was classified by sulfur content. A comparison of the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969.....	62,447	1,236	69	-	63,752
1971.....	47,975	1,253	66	-	49,294

There was little change in the distribution of the oil classified by sulfur content for 1971 from that of 1969. The lowest sulfur content group had most of the classified oil, and during the interim its percentage of the classified oil decreased from 98 to 97 percent. For the next group the percentage increased slightly, from 1.9 percent to 2.5 percent. The next highest group, which had the remaining classified oil, maintained a level of about 0.1 percent during 1971 as in 1969. No new crude oils were analyzed from this region during 1969-71.

About 48.0 million barrels of oil was classified as low-sulfur oil for 1971. Illinois was the main contributor with 34.4 million barrels. There was a significant drop of 14.5 million barrels between the 1969 and 1971 production classified as low-sulfur oil. All six States showed a drop in low-sulfur oil production between 1969 and 1971.

As for the oil classified as high sulfur, this region produced about 1.3 million barrels, about the same in 1969. Michigan was the leading producer of high-sulfur oil during 1971 in this region, with 1.2 million barrels, or about 92.9 percent of the total high-sulfur oil. Illinois and Indiana accounted for the remainder.

Overall, the ratio of low-sulfur oil to high-sulfur oil dropped from 47.9 barrels of oil to 1 barrel in 1969 to 36.4 barrels of oil to 1 barrel in 1971. The reduction in the ratio between 1969 and 1971 emphasizes the drop in low-sulfur oil output which parallels the 16-million-barrel drop in total oil production during the same period.

California and Nevada

California and Nevada produced 358.5 million barrels of oil during 1971, compared with 375.0 million barrels during 1969. Of the 1971 total, 210.0 million barrels was classified by sulfur content. Nevada accounted for 113,000 barrels of that production, which was all the oil produced in that State during 1971. It should be noted that the 1969 data for California from the 1970-71 study (11) were revised for comparison with the results of this study. Therefore, these data will not necessarily agree with that published previously. A comparison between the 1969 and 1971 oil production classification by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1969....	39,060	76,607	71,470	36,325	223,462
1971....	32,454	73,506	68,653	35,417	210,030

The distribution of the oil classified by sulfur content for 1971 remained essentially the same as in 1969. During the interim, the percentages of the classified oil for the four sulfur content groups changed as follows: First, 17 percent to 15 percent; second, 34 percent to 35 percent; third, 32 percent to 33 percent; and fourth, 16 percent to 17 percent.

California and Nevada had 32.5 million barrels of 1971 oil production classified as low-sulfur oil. About 30.5 million barrels of this oil was produced from the San Joaquin Valley State subdivision (table 2). Low-sulfur-oil production in California and Nevada dropped 6.6 million barrels from the 39.0 million barrels of 1969.

About 177.6 million barrels was classified as high-sulfur oil for 1971. This was about 5.5 times as much as the low-sulfur oil output. However, the 1971 high-sulfur-oil production was 6.8 million barrels less than in 1969. As in the low-sulfur-content category, the San Joaquin Valley State subdivision had the most high-sulfur oil, about 48.3 percent of the total high-sulfur oil produced during 1971. All of this oil had a sulfur content that ranged from 0.51 to 2.00 percent. The other State subdivisions, Coastal and Los Angeles, had 20.8 and 30.8 percent of the high-sulfur oil, respectively. Nevada had the remaining 0.1 percent.

In summary, this region is primarily a producer of high-sulfur oil, as indicated by the ratio of 0.18 barrel of low-sulfur oil to 1 barrel of high-sulfur oil during 1971. During 1971 the drop in the production of high-sulfur oil from that of 1969 was greater than the drop of low-sulfur-oil production during the same interval. High-sulfur-oil production during 1971 dropped 6.8 million barrels from that of 1969, whereas low-sulfur oil during 1971 dropped 6.6 million barrels from that of 1969.

SULFUR CONTENT OF FOREIGN CRUDE OILS

Table 3 presents data pertaining to the sulfur content of crude oil production by fields for 24 foreign countries. For fields with an assigned sulfur content from a Bureau of Mines crude oil analysis, the geologic data and depth of formation were taken from the analysis where available. For fields with an assigned sulfur content from sources other than the Bureau of Mines, the geologic data or depth of formation were not printed. Individual field production was estimated from the average daily production for the first 6 months of 1971 as published by the Oil and Gas Journal (6).

The field production data shown in table 3 were summarized in table 4, which is a classification of the foreign crude oil production during 1971 by sulfur content and by country. For purposes of discussion, the results were grouped alphabetically as follows:

Africa (Algeria, Egypt, Gabon, Libya, and Nigeria).
Canada.
Europe (France, Netherlands, and West Germany).
Far East (Australia, Burma, Indonesia, and Japan).
Latin America (Colombia, Mexico, Peru, Trinidad-Tobago, and Venezuela).
Middle East (Abu Dhabi, Iran, Iraq, Israel, Qatar, and Saudi Arabia).

TABLE 3. - FOREIGN CRUDE OIL PRODUCTION DURING 1971 BY FIELDS[1] AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES

FOREIGN COUNTRY, SULFUR CONTENT CATEGORY, AND FIELD	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION,[2] THOUSAND BARRELS
ABU DHABI						
(0.51-1.00)						
MURBAN, BAB, & BU HASA	0.62	870007	.....	.....	.....	205,896
ALGERIA						
(0.00-0.50)						
EDJELEH	.09	871041	DEVONIAN	DEV...	.....	6,898
GASSI TOUIL[3]	.02	864076	TRIASSIC 2ND	TRIA..	6,450	21,125
HASSI MESSAOUD[3]	.15	867056	.....	.....	.....	141,318
RHOURDE EL BAGUEL	.31	864097	CAMBRIAN	CAMB..	8,560	24,064
TIN FOUYE[4]	.14	871043	.....	.....	.....	6,692
ZARZAITINE[5]	.06	871045	DEVONIAN	DEV...	.....	16,131
AUSTRALIA						
(0.00-0.50)						
ALTON	.02	865072	EVERGREEN	.....	6,060	146
BARROW ISLAND	.02	865073	.....	.....	6,740	16,107
HALIBUT	.16	871050	LA TROUBE	.....	7,650	63,875
KINGFISH	.12	871049	..DO	.....	7,500	20,075
MOONIE	.02	865071	PRECIPICE	.....	5,641	903
BURMA						
(0.00-0.50)						
YENANGYUANG	.13	823225	MIOCENE	MIOC..	300	1,825
CANADA						
(0.00-0.50)						
ACHESON	.23	.....	.....	.....	.....	3,431
BONNIE GLENN	.25	.....	.....	.....	.....	13,432
GILBY	.12	.....	.....	.....	.....	1,916
GOLDEN SPIKE	.23	852038	D-3	DEV...	6,300	13,651
HARMATTAN EAST	.37	.....	.....	.....	.....	2,190
HARMATTAN, ELKTON	.44	.....	.....	.....	.....	1,635
JOARCAM	.13	.....	.....	.....	.....	2,154
JOFFRE	.17	.....	.....	.....	.....	2,409
KAYBOB	.04	.....	.....	.....	.....	3,978
LEDUC-WOODBEND	.30	849047	D-2	DEV...	5,050	6,096
PEMBINA	.24	.....	.....	.....	.....	51,100
SWAN HILLS, SOUTH	.11	871078	BEAVER HILL LAKE	DEV...	8,441	12,556
TURNER VALLEY	.30	.....	.....	.....	.....	1,060
WEST DRUMHELLER	.28	.....	.....	.....	.....	706
WESTEROSE	.25	.....	.....	.....	.....	3,431
WIZARD LAKE	.24	851085	D-3	DEV...	6,047	10,074
(0.51-1.00)						
EXCELSIOR	.64	851067	D-2	DEV...	3,820	589
INNISFAIL	.58	.....	.....	.....	.....	2,008
REDWATER	.55	849046	D-3	DEV...	3,100	21,170
SWAN HILLS	.80	.....	.....	.....	.....	28,068
(1.01-2.00)						
FENN-BIG VALLEY	1.05	852037	D-2	DEV...	5,325	7,154
N. VIRDEN-SCALLION	1.47	.....	.....	.....	.....	2,726
STETTLER	1.46	851028	DEVONIAN	DEV...	.....	1,164
VIRDEN-ROSELEA	1.43	.....	.....	.....	.....	1,367
(>2.00)						
WEYBURN	2.12	.....	.....	.....	.....	12,154
COLOMBIA						
(0.00-0.50)						
COLORADO	.25	848004	LA PAZ, C	EOCENE	3,395	315
(0.51-1.00)						
INFANTAS	.88	848002	LA PAZ, C	EOCENE	4,150	1,638
LA CIRA	.96	848003	..DO	..DO..	3,038	6,264
PAYOA	.83	870012	.....	..DO..	7,000	2,986
TIBU	.99	847042	.....	.....	.....	4,696
(1.01-2.00)						
CASABE	1.06	848008	ARGILLACEOUS, MUGROSA	OLIG..	4,386	2,731
GALAN	1.11	848001	COLORADO, A	..DO..	3,480	466

SEE FOOTNOTES AT END OF TABLE.

TABLE 3. - FOREIGN CRUDE OIL PRODUCTION DURING 1971 BY FIELDS[1]/AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

FOREIGN COUNTRY, SULFUR CONTENT CATEGORY, AND FIELD	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION, 2/ THOUSAND BARRELS
EGYPT						
(0.51-1.00)						
EL ALAMEIN	0.84	870011	.....	.....	.....	8,965
(1.01-2.00)						
EL MORGAN	1.67	869069	MIOCENE	MIOC..	.....	95,217
FRANCE						
(>2.00)						
LACQ SUPERIEUR	4.34	853062	.....	.....	.....	395
GABON						
(0.00-0.50)						
BATANGA	.44	868052	SENONIAN	CRET..	5,986	226
CAP LOPEZ	.50	868049	..DO	..DO..	5,396	259
GAMBA	.18	868046	GAMBA	..DO..	2,020	13,177
(0.51-1.00)						
CAP LOPEZ, NORTH	.86	868050	SENONIAN	CRET..	5,632	1,701
POINTE CLAIRETTE	.55	868047	..DO	..DO..	3,608	1,102
TCHENGUE	.80	868048	MIOCENE	MIOC..	3,280	1,332
GERMANY, WEST						
(0.51-1.00)						
GEORGSDORF	.94	852008	.....	.....	.....	3,474
NIENHAGEN-HANIGSEN	.87	852006	.....	.....	.....	401
SUDERBRUCH	.71	852005	.....	.....	.....	526
INDONESIA						
(0.00-0.50)						
BEKASAP	.17	870013	.....	.....	.....	38,748
DURI	.18	869074	TERTIARY	TERT..	.....	13,830
LEDOK	.16	801240	MIOCENE	MIOC..	1,033	87
MINAS	.13	870004	.....	.....	.....	149,183
PEMATANG	.10	870014	.....	.....	.....	24,378
SANGA-SANGA	.10	801247	MIOCENE	MIOC..	1,148	563
SEMANGGI	.10	801243	..DO	..DO..	1,758	44
TARAKAN	.14	830397	PLIOCENE	PLIO..	1,115	569
IRAN						
(1.01-2.00)						
AGHA JARI	1.39	849014	ASMARI	MIOC..	4,500	309,520
GACH SARAN	1.57	870113	..DO	..DO..	4,268	321,930
HAFT KEL	1.12	830319	..DO	..DO..	3,300	16,425
(>2.00)						
CYRUS	3.68	869086	.....	.....	.....	8,849
DARIUS	2.44	869085	.....	.....	.....	36,583
SASSAN	2.06	869080	ARAB	JUR...	.....	50,162
IRAQ						
(1.01-2.00)						
KIRKUK	1.93	848019	.....	.....	.....	400,442
ISRAEL						
(1.01-2.00)						
HELETZ-BRUR	1.66	866028	CRETACEOUS	CRET..	4,869	347
KOCHAV	1.85	866033	JURASSIC	JUR...	5,338	128
JAPAN						
(0.00-0.50)						
KUBIKI	.10	800976	MIOCENE	MIOC..	.....	822
(0.51-1.00)						
NIITSU	.52	800972	MIOCENE	MIOC..	1,200	74

SEE FOOTNOTES AT END OF TABLE.

TABLE 3. - FOREIGN CRUDE OIL PRODUCTION DURING 1971 BY FIELDS[1] AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

FOREIGN COUNTRY, SULFUR CONTENT CATEGORY, AND FIELD	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION,[2] THOUSAND BARRELS
LIBYA						
(0.00-0.50)						
AMAL	0.14	B65064	AMAL	TERT..	9,715	59,279
BEDA	.45	B64080	HOFRA	..DO..	3,900	2,875
BEL MEDAN	.25	B64025	SAMAH	ORD...	7,100	2,397
DAHRA	.42	B64024	PL5	PALEO.	3,100	12,152
DEFA	.28	B64128	PALEOCENE	..DO..	5,478	60,508
FARUD	.39	B68038	MABRUK A	..DO..	3,245	1,642
HOFRA	.33	B60013	PALEOCENE	..DO..	3,078	1,899
ORA	.22	B65060	M59	QUART.	4,900	4,122
RAKB	.23	B65058	RAKB	MIOC..	9,337	4,210
SAMAH	.25	B64127	CRET. + ORD. + CAMB	CRET..	6,300	20,829
SARIR	.16	B68054			8,030	160,698
UMM FARUD	.13	B68024	BUCHARMA B + DAHRA B	PALEO.	2,700	1,533
WAHA	.24	B64129	CRETACEOUS	CRET..	6,500	47,212
ZAGGUT	.30	B64131	PALEOCENE	PALEO.	6,400	1,003
ZELTEN	.23	B60008	..DO	..DO..	5,770	130,635
(0.51-1.00)						
GIALO	.52	B64125	GIALO	EOCENE	2,735	131,184
KOTLA	.84	B64077	GHERIAT	CRET..	5,315	4,350
(1.01-2.00)						
ED DIR	1.31	B68037	GIR	EOCENE	2,666	812
MEXICO						
(0.00-0.50)						
FCO. CANO	.13	B54230				151
MONTERREY	.10	B54241				1,522
(1.01-2.00)						
LOS SOLDADOS	1.75	B54217	CONCEPCION	TERT..	7,062	1,196
POZA RICA	1.77	B54211	TAMABRA	CRET..	7,218	19,261
TONALA	1.60	B54235	ENCANTO	MIOC..	2,472	564
(>2.00)						
ALAMO SAN ISIDRO	2.95	B00990				185
ANGOSTURA	5.18	B54243	MENDEZ + ESCAMELA	CRET..	3,780	186
ARROYO BLANCO	2.16	B54216	ENCANTO	MIOC..	2,543	57
AVILA CAMACHO	2.93	B54210	CHICONTEPEC	TERT..	5,200	318
E. ORDONEZ	3.23	B54205			4,807	1,660
EBANO-PANUCO	5.38	B54207	CALIZA VERDE	CRET..	1,804	3,245
EL BURRO	2.06	B54226	ENCANTO	MIOC..	3,409	321
EL PLAN	3.50	B54238	LIGNITIC CEDRAL	TERT..	2,142	2,092
HORCON	3.50	B54218	EL ABRA	CRET..	2,805	64
MOLOACAN	4.20	B54208	ENCANTO	MIOC..	1,491	607
MOZUTLA	3.93	B54206	EL ABRA	CRET..	4,150	80
NARANJOS-C.AZUL	3.80	B54227	..DO	..DO..	1,597	3,031
OCOTEPEC	3.45	B54214	..DO	..DO..	3,412	325
SANTA AGUEDA	3.98	B54242	..DO	..DO..	4,659	1,998
NETHERLANDS						
(0.51-1.00)						
IJESSELMONDA	.53	B58037	BARREMIAN	CRET..	3,100	3,188
SCHOONEBEEK	.96	B58036	VALANGINIAN	..DO..	2,500	5,957
NIGERIA						
(0.00-0.50)						
DELTA	.18	B68062	MIOCENE	MIOC..	5,642	7,043
MEJI	.15	B68068	..DO	..DO..	9,049	7,074
MEREN	.09	B68065	..DO	..DO..		30,177
OBAGI	.21	B68061	..DO	..DO..	6,850	15,747
PHL-AFAM	.09	B64139	..DO	..DO..	9,000	3,078
PHL-APARA	.11	B64138	..DO	..DO..	9,500	355
PHL-BOMU	.20	B64134	..DO	..DO..	7,050	16,801
PHL-EBUBU	.20	B64137	..DO	..DO..	7,650	937
PHL-IMO RIVER	.20	B64135	..DO	..DO..	5,800	37,999
PHL-UMUECHEM	.14	B64132	..DO	..DO..	7,900	11,977
PHS-OLOIBIRI	.26	B64133	..DO	..DO..	8,000	1,534
PERU						
(0.00-0.50)						
LA BREA-PARINAS	.12	B47054				4,380

SEE FOOTNOTES AT END OF TABLE.

TABLE 3. - FOREIGN CRUDE OIL PRODUCTION DURING 1971 BY FIELDS[1/] AND SULFUR CONTENT WITH RELATED FIELD DATA FROM BUREAU OF MINES OIL ANALYSES - CONTINUED

FOREIGN COUNTRY, SULFUR CONTENT CATEGORY, AND FIELD	SULFUR, WEIGHT-PERCENT	ANALYSIS NUMBER	FORMATION	AGE	DEPTH, FEET	1971 OIL PRODUCTION,[2/] THOUSAND BARRELS
QATAR						
(1.01-2.00)						
IDD EL SHARGI	1.99	870003	.....	.....	.....	16,853
MAYDAN-MAHZAN	1.48	870002	.....	.....	.....	64,928
SAUDI ARABIA						
(1.01-2.00)						
ABQAIQ	1.30	870063	.....	.....	.....	325,774
ABU HADRIYA	1.69	848005	CRETACEOUS	CRET..	10,000	37,851
DAMMAM	1.54	847053	.....	.....	.....	7,881
FADHILI	1.25	870064	.....	.....	.....	17,474
GHAWAR	1.85	857009	ARAB D, CLASTIC	JUR...	.....	751,129
KHURAIS	1.73	870068	.....	.....	.....	8,131
(>2.00)						
ABU SA FAH	2.61	870067	.....	.....	.....	30,289
BERRI	2.24	870070	.....	.....	.....	56,900
KHURSANIYA	2.54	857006	ARAB D, CLASTIC	JUR...	.....	27,102
MANIFA	2.75	870069	.....	.....	.....	1,854
QATIF	2.55	857018	ARAB C, CLASTIC	JUR...	.....	34,706
SAFANIYA	2.97	867066	.....	.....	.....	288,853
TRINIDAD-TOBAGO						
(0.51-1.00)						
BARRACKPORE	.54	800950	.....	.....	.....	776
FYZABAD	.95	800951	.....	.....	.....	2,104
(>2.00)						
BRIGHTON	2.63	800954	.....	.....	.....	1,899
VENEZUELA						
(0.00-0.50)						
GUARIO	.13	847044	.....	.....	.....	403
LA CEIBITA	.41	869106	.....	.....	.....	5,235
SAN JOAQUIN	.14	852030	.....	.....	.....	850
SANTA ROSA	.09	870026	.....	.....	.....	12,661
ZAPATOS	.48	870030	.....	.....	.....	7,036
(0.51-1.00)						
LA CONCEPCION	.88	826273	.....	.....	.....	2,267
MATA	.60	870066	OFICINA-MERCURE	PLIO..	.....	20,370
OFICINA	.59	847045	.....	.....	.....	17,549
(1.01-2.00)						
CABIMAS	1.71	867069	.....	.....	.....	29,944
CHIMIRE	1.07	870023	.....	.....	.....	6,238
DACION	1.29	870001	.....	.....	.....	3,985
GUARA	1.85	869105	.....	.....	.....	9,831
LAMA	1.47	870029	.....	.....	.....	116,890
QUIRIQUIRE	1.33	870022	.....	.....	.....	8,035
SILVESTRE	1.17	869103	.....	.....	.....	4,451
SINCO	1.38	869102	.....	.....	.....	10,354
TIA JUANA	1.54	870024	.....	.....	.....	136,154
TUCUPITA	1.05	847046	.....	.....	.....	1,351
(>2.00)						
BACHAQUERO	2.68	870025	.....	.....	.....	269,681
BOSCAN	5.54	871024	.....	.....	.....	24,942
LAGUNILLAS	2.18	847043	.....	.....	.....	343,126
MENE GRANDE	2.65	823539	.....	.....	.....	4,467
MEREY	2.52	870015	.....	.....	.....	10,033
PILON	2.11	870016	.....	.....	.....	8,732

1/ INCLUDES ONLY THOSE FIELDS WITH ASSIGNED SULFUR CONTENT.

2/ SOURCE: THE OIL AND GAS JOURNAL. WORLDWIDE PRODUCTION. V. 69, NO. 52, DEC. 27, 1971, PP. 86-106. PRODUCTION FIGURES ARE ESTIMATES BASED ON THE AVERAGE DAILY PRODUCTION RATE FOR FIRST 6 MONTHS OF 1971.

3/ INCLUDES HASSI MESSAOUD, NORTH AND SOUTH, COMBINED.

4/ INCLUDES TIN FOUYE, NORTH.

5/ INCLUDES ZARZAITINE, NORTH.

TABLE 4. - CLASSIFICATION OF 1971 CRUDE OIL PRODUCTION FROM FOREIGN COUNTRIES, BY SULFUR CONTENT

(THOUSANDS OF BARRELS)

FOREIGN COUNTRY	SULFUR CONTENT, PERCENT BY WEIGHT				TOTAL[1]
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
ABU DHABI	.....	205,896	.....	.....	205,896
ALGERIA	216,228	.....	.....	.....	216,228
AUSTRALIA	101,106	.....	.....	.....	101,106
BURMA	1,825	.....	.....	.....	1,825
CANADA	129,819	51,835	12,411	12,154	206,219
COLOMBIA	315	15,584	3,197	.....	19,096
EGYPT	.....	8,965	95,217	.....	104,182
FRANCE	.....	.....	.....	395	395
GABON	13,662	4,135	.....	.....	17,797
GERMANY, WEST	.....	4,401	.....	.....	4,401
INDONESIA	227,402	.....	.....	.....	227,402
IRAN	.....	.....	647,875	95,594	743,469
IRAQ	.....	.....	400,442	.....	400,442
ISRAEL	.....	.....	475	.....	475
JAPAN	822	74	.....	.....	896
LIBYA	510,994	135,534	812	.....	647,340
MEXICO	1,673	.....	21,021	14,169	36,863
NETHERLANDS	.....	9,145	.....	.....	9,145
NIGERIA	132,722	.....	.....	.....	132,722
PERU	4,380	.....	.....	.....	4,380
QATAR	.....	.....	81,781	.....	81,781
SAUDI ARABIA	.....	.....	1,148,240	439,704	1,587,944
TRINIDAD-TOBAGO	.....	2,880	.....	1,899	4,779
VENEZUELA	26,185	40,186	327,233	660,981	1,054,585
TOTAL[1]	1,367,133	478,635	2,738,704	1,224,896	5,809,368

[1]/TOTAL INCLUDES ONLY PRODUCTION FROM THOSE FIELDS WITH ASSIGNED SULFUR CONTENT AND MAY NOT BE ALL OF THE PRODUCTION FROM EACH COUNTRY.

NOTE.--PRODUCTION FIGURES ARE ESTIMATES BASED ON THE AVERAGE DAILY PRODUCTION RATE FOR FIRST 6 MONTHS OF 1971.

Overall, about 5.81 billion barrels of oil, or 64 percent of the 1971 oil production from the countries listed in table 4, was classified according to sulfur content. Of the total oil classified, low-sulfur oil accounted for 24 percent. Africa was the main producer with 64 percent of the oil. The Far East had 24 percent of this oil, while Canada and Latin America had 10 percent and 2 percent, respectively.

As indicated in table 4, about 4.44 billion barrels of oil produced during 1971 was classified as high-sulfur oil, about three times as much as that classified as low-sulfur oil. The Middle East and Latin America accounted for about 92 percent of this oil, with 3.02 billion barrels and 1.09 billion barrels, respectively. It is interesting that the Middle East and Latin America (Venezuela) have such concentrations of high-sulfur oil and also supply large quantities of oil to other parts of the world.

An individual writeup for each group of countries considered for this study is included. However, it does not include a comparison of results with previous work.

Africa

About 54 percent of the total oil produced during 1971 from the countries considered in this study as comprising Africa was classified according to sulfur content. The classification of 1971 oil production by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1971.....	873,606	148,634	96,029	-	1,118,269

Overall, the production classified as low-sulfur oil far outweighed the production classified as high-sulfur oil for 1971. Main producers of low-sulfur oil during 1971 were Libya (511 million barrels), Algeria (216 million barrels), and Nigeria (133 million barrels). Libya and Egypt accounted for over 98 percent of the high-sulfur oil. Of the oil classified, Gabon had the lowest volume with 18 million barrels, but 14 million barrels of that was of low sulfur content.

Canada

About 43 percent of the oil produced during 1971 in Canada was classified according to sulfur content. The classification of its 1971 oil production by sulfur content is shown in table 4. Of significance in Canada was that, of the oil classified, the low-sulfur exceeded the high-sulfur oil. This is emphasized by its ratio of 1.7 barrels of low-sulfur oil to 1 barrel of high-sulfur oil.

Europe

About 18 percent of the 1971 oil production from the countries considered in this study as comprising Europe was classified according to sulfur content. The classification of 1971 oil production by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1971.....	-	13,546	-	395	13,941

All of the oil classified was high-sulfur oil. Almost two-thirds of this oil was from the Netherlands. The relatively low volume of oil classified tends to lessen the significance of the classification.

Far East

About 78 percent of the total oil produced during 1971 from the countries considered in this study as comprising the Far East was classified according to sulfur content. The classification of 1971 oil production by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1971.....	331,155	74	-	-	331,229

Virtually all of the production from the Far East during 1971 was classified as low sulfur. Indonesia and Australia were the leaders in low-sulfur oil output during 1971, with 227 million barrels and 101 million barrels, respectively. Japan accounted for the only high-sulfur oil.

Latin America

Approximately two-thirds of the oil produced during 1971 from the countries considered in this study as comprising Latin America was classified by sulfur content. The classification of 1971 oil production by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1971.....	32,553	58,650	351,451	677,049	1,119,703

Overall, Venezuela accounted for about 94 percent of the total oil classified for Latin America. Venezuela accounted for 80 percent of the low-sulfur oil of Latin America and for about 95 percent of the high-sulfur oil. Therefore, Venezuela dominated to a great extent the pattern of oil supply by sulfur content from Latin America. Mexico and Colombia had most of the remaining production, which was primarily of high sulfur content.

Middle East

About 69 percent of the oil produced during 1971 from the countries considered in this study as comprising the Middle East was classified by sulfur content. The classification of 1971 oil production by sulfur content follows, in thousand barrels:

Year	Sulfur content, weight-percent				Total
	0.00-0.50	0.51-1.00	1.01-2.00	>2.00	
1971.....	-	205,896	2,278,813	535,298	3,020,077

All of the classified oil from the Middle East was high-sulfur oil. Saudi Arabia had 52.6 percent of this oil, and Iran had about 24.6 percent. The remainder was divided among Iraq with about 13.3 percent, Abu Dhabi with about 6.8 percent, Qatar with about 2.7 percent, and Israel with less than 1 percent.

CONCLUSIONS

This study includes data pertaining to the sulfur content of crude oils from both the United States and foreign countries. About 76 percent of the 1971 oil production of the United States and 64 percent of the 1971 oil production from the foreign countries considered in this study was classified according to sulfur content.

Of the oil classified, low-sulfur-oil production during 1971 in the United States was about 1.71 billion barrels, slightly more than twice that of high-sulfur oil. Between 1969 and 1971, production of low-sulfur oil increased by about 8 percent. During the interim, high-sulfur-oil production increased by about 1.5 percent. The relative increase in low-sulfur oil is important because the demand for fuels of low-sulfur content is increasing owing to air quality standards.

Foreign crude oil production for 1971 was estimated from the average daily production for the first 6 months of 1971. A total of 5.81 billion barrels of oil was classified according to sulfur content. Of this total, 1.37 billion barrels was low sulfur, and 4.44 billion barrels was high sulfur. About 88 percent of the low-sulfur oil was from countries of Africa and the Far East. The Middle East and Latin America accounted for 92 percent of the high-sulfur oil. This is significant in that large quantities of this oil are exported to other countries, principally the United States.

REFERENCES

1. Blade, O. C. High-Sulfur Crude Oils--Trends in Supply. II. U.S. Data of 1945-47. Petroleum Refiner, v. 28, No. 3, March 1949, pp. 151-152.

2. McKinney, C. M., and E. M. Shelton. Sulfur Content of Crude Oils of the Free World. BuMines RI 7059, 1967, 36 pp.

3. Nelson, W. L. Sulfur Content of U.S. Crude Oils. Oil and Gas J., v. 68, No. 33, Aug. 17, 1970, pp. 78-79.

4. _____. More on Sulfur Content of Crude Oils in the U.S. Oil and Gas J., v. 68, No. 34, Aug. 24, 1970, p. 65.

5. _____. Nearly Half of All U.S. Crudes Qualify as Low in Sulfur. Oil and Gas J., v. 69, No. 49, Dec. 6, 1971, p. 73.

6. Oil and Gas Journal. Worldwide Production. V. 69, No. 52, Dec. 27, 1971, pp. 86-106.

7. Shelton, E. M., C. M. McKinney, and O. C. Blade. Domestic Crudes Contain Less Sulfur. Petroleum Refiner, v. 36, No. 5, May 1957, pp. 257-260.

8. Smith, H. M., and O. C. Blade. High-Sulfur Crude Oils of the United States--Trends in Supply. Proc. API, Sec. III, Refining, 1947, pp. 119-140.

9. _____. Trends in Supply of High-Sulfur Crudes in the U.S. Oil and Gas J., v. 46, No. 30, Nov. 29, 1947, pp. 73-78.

10. _____. Trends in Supply of High-Sulfur Crudes in the U.S. Petroleum Refiner, v. 27, No. 5, May 1948, pp. 101-110.

11. U.S. Bureau of Mines. Oil Availability by Sulfur Levels. Special report prepared for Office of Air Programs, Environmental Protection Agency, August 1971, pp. 8-36; available from National Technical Information Service, Springfield, Va., PB 202 281.

U.S. GOVERNMENT PRINTING OFFICE : 1975 O—576-006