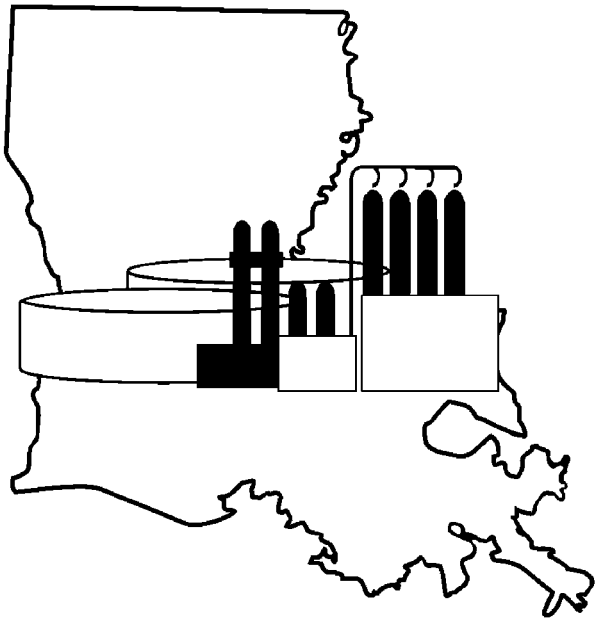
LOUISIANA CRUDE OIL REFINERY SURVEY REPORT

Sixteenth Edition
2007 Survey

By Bryan Crouch, P.E.

Refining, Alternative Energy & Power Systems Program



LOUISIANA DEPARTMENT OF NATURAL RESOURCES

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Baton Rouge, Louisiana
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Foreword

Since 1989, the Technology Assessment Division of the Louisiana Department of Natural Resources (DNR) has periodically conducted surveys of Louisiana crude oil refineries. The results of the survey are compiled into a report focusing on developments that have occurred since the previous survey. These include an overview of the general direction of the industry and updated information on the current status of refinery ownership, mailing addresses, operating status, and key personnel. Tabulated statistical data, charts, and graphs relating to oil production, refinery crude oil sources, refinery margins, capacities, operating rates, and product slate are also presented. Information on both operating and non-operating refineries that are still intact is included. The previous survey was published in June 2007.

The time period covered by DNR's current survey is July 1, 2006 – June 30, 2007, and is designed to complement the petroleum statistics published by the Energy Information Administration (EIA). DNR gratefully acknowledges permission to use the latest *Oil and Gas Journal* Worldwide Refining Survey results to provide another independent dataset for comparison.

The operating refining capacities, operating rates, and product slate statistics presented in this report are prepared from data supplied by survey respondents. The information on the non-operating refineries is obtained from their owners, trustees, or management personnel and is current within a few weeks of publication. The data used to construct the charts and graphs on oil production, refinery margins, and crude oil sources is obtained from DNR's database.

The principal terms and phrases used in this report are the same as those used in EIA publications. The definitions of these terms can be found on page 6 of this report. The slight difference in meaning between oper*able* and oper*ating*, when used to specify capacity or utilization rate, has caused some confusion. "Operable" refers to the maximum amount of crude oil capacity that a refinery can utilize to process crude oil in its atmospheric stills; "operating" refers to the amount of crude oil capacity actually utilized. See page 6 for detailed definitions.

The Department of Natural Resources uses the information in this report to enhance the economic development efforts of the State by:

- Developing information on State and Federal energy policies that affect the oil and gas production and refining industries located in the State;
- Helping crude suppliers locate refining sources and refined petroleum product buyers locate sources of supply;
- Assisting new industries desiring to site facilities near refineries; and,
- Providing information to parties evaluating refineries for possible purchase.

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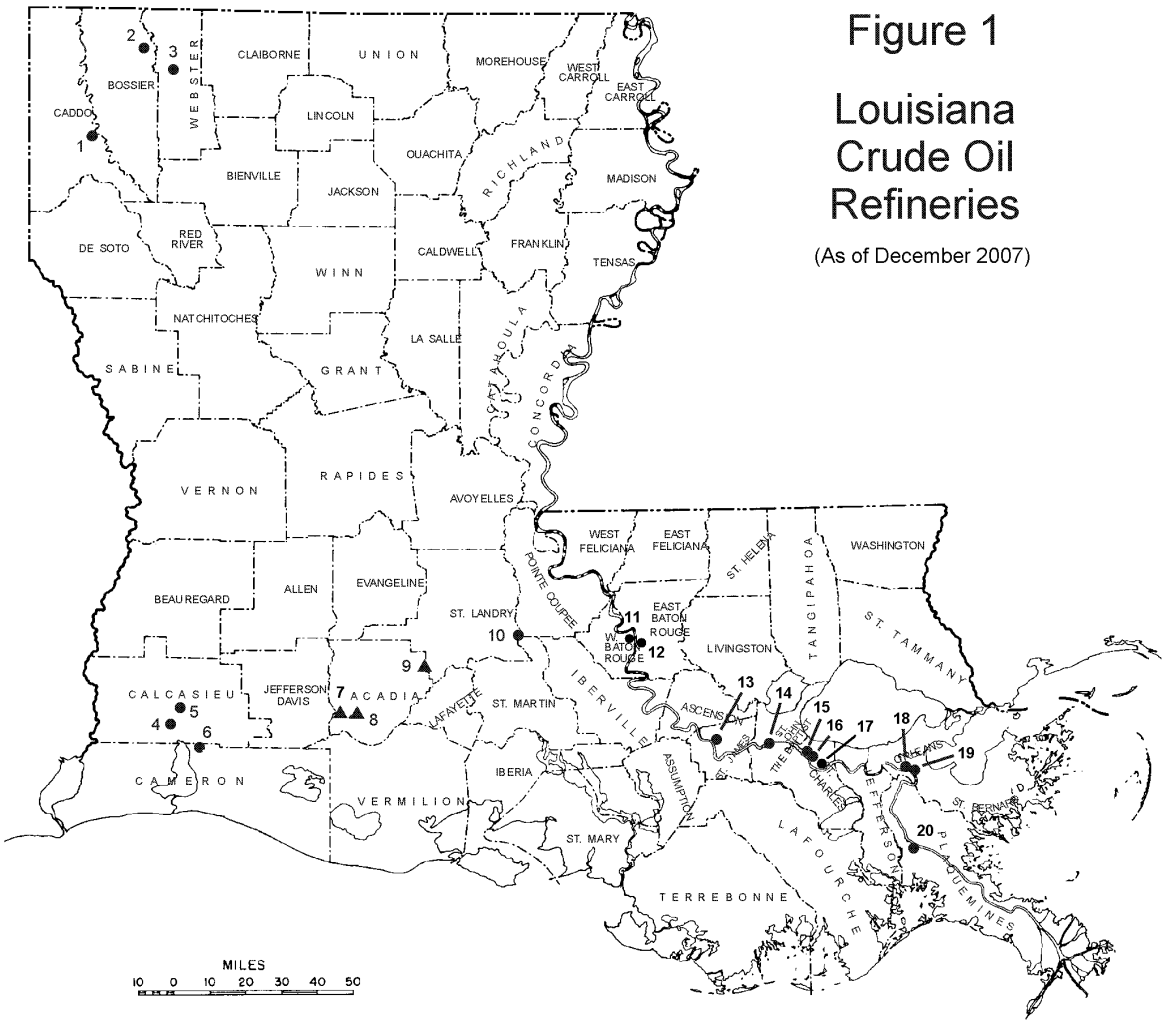
Figure 1

Louisiana Crude Oil Refineries

(As of December 2007)



OPERATING REFINERIES ●	
1	Calumet Shreveport - Shreveport
2	Calumet Lubricants - Princeton
3	Calumet Lubricants - Cotton Valley
4	Citgo Petroleum - Lake Charles
5	ConocoPhillips - Lake Charles
6	Calcasieu Refining - Lake Charles
10	Valero Refining - Krotz Springs
11	Placid Refining - Port Allen
12	ExxonMobil - Baton Rouge
13	Motiva Enterprises - Convent
14	Marathon Petroleum - Garyville
15	Motiva Enterprises - Norco
16	Valero Refining - Norco
17	Shell Chemical - St. Rose
18	Murphy Oil U.S.A. - Meraux
19	Chalmette Refining - Chalmette
20	ConocoPhillips - Belle Chase

NON-OPERATING REFINERIES ▲	
7	Lazarus Energy - Jennings
8	Quantum Fuel & Refining - Egan
9	Lazarus Energy - Church Point

Technology Assessment Division

Discussion

Overview

Louisiana is a primary energy producing state with 428 million barrels in crude reserves (2006), ranking it 7th among the states (2nd if the Louisiana portion of the federal outer continental shelf (OCS) is included). Louisiana ranks 4th among the states in crude oil production (1st if Louisiana OCS is included), with an estimated 76.5 million barrels produced in 2007. The Louisiana OCS territory is the most extensively developed and matured OCS territory in the United States. The Louisiana OCS territory has produced approximately 85% of the 16.7 billion barrels of crude oil and condensate consumed in the U.S. from the beginning of time through the end of 2006.

The discovery of these large quantities of crude oil led to the development of the refining and petrochemical industry in Louisiana. Louisiana's refining capacity grew with oil production until about 1970 when Louisiana's oil production peaked and began to decline. Refinery capacity continued to grow by processing more oil from other states as well as overseas. In 2006, 61% of refinery input was foreign crude.

All refineries and refining companies are not created equal. There are small refineries and large ones. Some are quite complex, while others are relatively simple. A number are part of major, integrated oil companies, and some are independent.

In addition to refining, integrated oil companies are engaged in all other aspects of the petroleum industry which range from the exploration of crude oil to the marketing of finished petroleum products.

Independent refiners, on the other hand, purchase most of their crude oil on the open market rather than producing it. Refiners such as Placid Refining Co. and Calcasieu Refining Co. are examples of independent refiners.

Major oil companies dominate the refining industry. The top 10 U.S. refiners, all of them major, integrated oil companies, account for about 75% of the total domestic refinery charge capacity. Most of these have operations in Louisiana, either as wholly owned facilities such as the Baton Rouge ExxonMobil refinery or as part owners or joint ventures such as Motiva Refineries in Norco and Convent.

Many refineries are primarily fuels refineries, some are lube stock refineries, and others are petrochemical refineries. The Shell oil refinery in St. Rose is a good example of a petrochemical refinery. All of its products are raw feed for a chemical plant. Table 2 (pg. 10 & 11) clearly shows the focus and product slate of the refiners in Louisiana.

Besides the level of vertical integration of a refiner and the product mix of a refinery, industry analysts also look at capacity and complexity.

A "complexity factor" is assigned to each process unit of a refinery based on its relative construction cost. The atmospheric crude distillation unit is assigned a value of one. For

example, the cost of a fluidized catalytic cracker is six times greater than an atmospheric crude distillation unit of the same capacity, so its unit complexity factor is six.

Greater complexity does not necessarily go hand-in-hand with larger capacity. Some of the smaller facilities in Louisiana are the most complex. For example, the smaller lube and wax producing refineries of North Louisiana are quite complex when compared to some very large refineries in the state.

EIA statistics show that overall U.S. petroleum product consumption for 2007 was 20.698 million barrels per day (bpd), essentially unchanged from 2006. Finished motor gasoline (9.29 million bpd in 2007) and jet fuel (1.623 million bpd in 2007) consumption was also essentially unchanged from 2006. Overall distillate fuel consumption increased 1.22% in 2007 to 4.22 million bpd. Due to ultra low sulfur diesel regulations taking effect, consumption of diesel fuel with 15 ppm and under sulfur content has risen sharply from 26,000 bpd in 2005 to 2.947 million bpd in 2007.

According to DNR's survey, the Louisiana refinery operating rate was 95.9% for this survey period with almost no idle capacity. Figure 3 (pg. 22) compares Louisiana Gulf Coast, Texas Gulf Coast, and total U.S. refinery operating rates since 1985. The operating capacity for Louisiana refineries was 2,975,152 barrels per calendar day (bcd), a 0.74% increase from DNR's previous survey. Table 1 (pg. 9) shows the details of operating capacity and throughput changes between DNR's two most recent surveys. Figure 2 (pg. 21) shows the historical Louisiana and U.S. operating capacity since 1954. Regular gasoline accounted for 69.6% of Louisiana refinery production. A complete listing of Louisiana refinery products is shown in Table 2 (pg. 11).

As reported in the *Oil & Gas Journal's* 2007 Worldwide Refinery Report, world wide refining capacity increased by approximately 129,000 bcd to 85.309 million bcd (MMbcd). The increase was over double the increase in 2006. U.S. refining capacity increased by 174,650 bcd to 17,447,237 bcd, and Louisiana refining capacity increased by 100 bcd to 2,911,600 bcd. Louisiana ranks second among the states with 16.7% of the U.S. refining capacity. Texas ranks first with 27.7% and California ranks third with 11.4%.

The table to the right shows the ranking of the 10 largest refiners in the world according to crude capacity. There were no newcomers to the list, but some changes occurred in the 5th through 8th positions. Total SA moved from 8th to 5th, ConocoPhillips dropped from 5th to 6th, and Valero Energy dropped from 6th to 8th.

World Rank	Company	Crude Capacity (bcd)
1	ExxonMobil	5,626,000
2	Royal Dutch Shell	4,885,000
3	Sinopec	3,611,000
4	BP	3,420,000
5	Total SA	2,719,000
6	ConocoPhillips	2,696,000
7	Petroleos de Venezuela SA	2,678,000
8	Valero Energy	2,672,000
9	China National Petroleum	2,440,000
10	Saudi Aramco	2,433,000

Source: *Oil & Gas Journal*, Dec. 24, 2007

Gulf Coast refinery margins for 2007 were over $12 per barrel for the third straight year. Figure 7 (pg. 27) shows historical Gulf Coast refinery margins as reported in the *Oil & Gas Journal*. In 1999, the *Oil & Gas Journal* switched data sources from Wright Killen to Muse Stancil. Both

sources trend similarly, but differ in value due to different assumptions about refinery operations. Wright Killen refining margins are gross cash margins before depreciation, taxes, and financial charges, based on actual refinery yields and crude oil and wholesale product prices. Wright Killen estimates fixed costs, excluding most corporate expenses for such activities as research and development, and variable costs based on regional refinery configurations. Details about the methodology used by Muse Stancil are explained in the January 15, 2001 edition of the *Oil & Gas Journal*.

Ethanol

Refiners nationwide continue to make adjustments to allow for increasing amounts of ethanol to be blended into gasoline. The increase is the result of the phase-out of methyl tertiary butyl ether (MTBE), the elimination of the oxygenate requirement for reformulated gasoline (RFG), and the enactment of a national renewable fuel standard (RFS).

The Clean Air Act Amendments of 1990 mandated the use of oxygenated gasoline in areas of high pollution. One of the programs designed to meet this requirement was the RFG program. MTBE is the preferred oxygenate (outside the Midwest region) for RFG because it is easier to blend, has a high octane rating, has lower volatility, and can be shipped through existing pipelines; however, the use of MTBE in gasoline has been banned in several states due to concerns over ground water contamination.

The Energy Policy Act of 2005 contained two provisions that led to the increasing use of ethanol. First, it eliminated the Clean Air Act's oxygenate requirement for RFG beginning in 2006. This removed a key defense in MTBE product liability suits, and has led to a further decrease in the use of MTBE. Ethanol is being used to make up for the volume loss associated with the removal of MTBE. Second, the legislation enacted a national RFS that required the transportation fuel pool to contain a certain and increasing volume of renewable fuel. Ethanol is currently the only renewable fuel that has significant production capacity, and is thus being used to comply with the RFS. In December 2007, the Energy Independence and Security Act of 2007 was signed into law which increased the volume of renewable fuel required by the RFS to 9 billion gallons in 2008, increasing to up to 36 billion gallons by 2022.

Ultra Low Sulfur Diesel (ULSD) Phase-In

The transition to ULSD began in 2006. The specifications for ULSD require a dramatic reduction in sulfur content, from 500 parts per million (ppm) to 15 ppm. The deadlines were: June 1st – 80% of refined and imported on-highway diesel had to be ULSD, September 1st – distribution terminals had to receive ULSD, and October 15th – ULSD had to be available at retail outlets. In order to reduce the sulfur content, many refiners had to make investments in desulfurization technology. By December 1, 2010, all on-highway diesel must be ULSD. A similar transition to ULSD for off-highway use is mandated to occur between 2010 and 2014.

Operating Refinery Recent Changes

Placid is planning to expand its Port Allen refinery. The $300 million investment will bring the facility's crude capacity up to 80,000 bcd, allow the processing of lower quality crudes, and increase its gasoline and diesel production capacity. Valero is planning a $1.4 billion expansion of its Norco facility. The expansion includes a 50,000 bcd hydrocracker and an increase in the

capacity of its crude and coker units. The project will result in an increase of gasoline and diesel production. Alon USA Energy, Inc. has agreed to purchase Valero's Krotz Springs refinery. Marathon's Garyville facility is about midway through its 180,000 bcd expansion with completion set for late 2009.

The identity and location of each of the operating refineries is shown on the map in Figure 1 (pg. 1). Mailing addresses and contacts are listed in Table 7 (pg. 28). Physical locations are listed in Table 8 (pg. 29), and name histories are listed in Table 9 (pg. 30).

Non-Operating Refinery Recent Changes

Lazarus Energy Co. bought the Gold Line Refining facility in Jennings, and the Canal Refining facility in Church Point with plans to operate both. No estimate for start up dates was available.

The identity and location of each of the non-operating refineries is shown on the map in Figure 1 (pg. 1). Mailing addresses and contacts are listed in Table 10 (pg. 31). Physical locations, last known crude capacity, date last operated, and present status are described in Table 11 (pg. 32), and name histories are listed in Table 12 (pg. 33).

Definitions

Barrels per calendar day - The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see Barrels per Stream Day) to account for the following limitations that may delay, interrupt, or slow down production:

- The capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams, through other than downstream facilities, is part of a refinery's normal operation;
- The types and grades of inputs to be processed;
- The types and grades of products expected to be manufactured;
- The environmental constraints associated with refinery operations;
- The reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and
- The reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.

Barrels per stream day - The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude oil and product slate conditions with no allowance for downtime.

Charge capacity - The input (feed) capacity of the refinery processing facilities.

Idle capacity - The component of oper*able* capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation, but under active repair that can be completed within 90 days.

Operable capacity - The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation, but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day. *Note: This survey uses the capacity at the **end** of the period.*

Operating capacity - The component of operable capacity that is in operation at the beginning of the period. *Note: This survey uses the capacity at the **end** of the period.*

Operable utilization rate - Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

Operating utilization rate - Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

Throughput - Is the actual barrels of crude oil processed by the atmospheric stills for the survey time period.

Operating rate % - Throughput divided by 365 divided by operating capacity expressed as a percentage.

Operable rate % - Throughput divided by 365 divided by operable capacity expressed as a percentage.

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Table 1

Louisiana Operating Refineries [1]

Capacity and Throughput Changes from DNR Survey [2]

Refinery Name	Previous Survey Operating Capacity (bcd)	Capacity Change (bcd)	Previous Survey 12-Month Throughput (Barrels)	Throughput Change (Barrels)	Capacity Change (%)	Throughput Change (%)
Calcasieu Refining Co Lake Charles	55,000	23,000	13,547,768	11,473,284	41.82	84.69
Calumet Lubricants Co LP Cotton Valley	12,158	0	3,018,699	-169,038	0.00	-5.60
Calumet Lubricants Co LP Princeton	8,284	-990	2,852,135	-266,840	-11.95	-9.36
Calumet Shreveport LLC Shreveport	41,000	-1,000	14,966,511	-2,263,905	-2.44	-15.13
Chalmette Refining LLC Chalmette	196,000	0	52,559,000	9,794,600	0.00	18.64
Citgo Petroleum Corp Lake Charles	438,000	-8,500	147,782,668	-6,699,369	-1.94	-4.53
ConocoPhillips Belle Chasse	247,000	0	46,988,100	42,327,900	0.00	90.08
ConocoPhillips West Lake	239,000	0	63,550,771	24,448,560	0.00	38.47
ExxonMobil Refining & Supply Co Baton Rouge	501,000	2,000	168,630,000	13,760,500	0.40	8.16
Marathon Petroleum Co LLC Garyville	255,000	0	86,912,143	6,155,067	0.00	7.08
Motiva Enterprises LLC Convent	225,000	5,000	82,125,000	-345,000	2.22	-0.42
Motiva Enterprises LLC Norco	240,000	2,200	72,943,060	-2,124,726	0.92	-2.91
Murphy Oil USA Inc Meraux	120,000	0	8,469,318	30,186,737	0.00	356.42
Placid Refining Co Port Allen	56,000	0	19,484,621	-7,395	0.00	-0.04
Shell Chemical Co St. Rose	55,000	0	17,943,436	39,954	0.00	0.22
Valero Refining Co Krotz Spings	80,000	0	24,245,668	4,119,198	0.00	16.99
Valero Refining Co Norco	185,000	0	85,338,390	-5,587	0.00	-0.01
Totals	2,953,442	21,710	911,357,288	130,423,940	0.74	14.31

1. Louisiana operating refineries with no atmospheric distillation capacity were not surveyed by DNR and not included in this table. These facilities are listed in table 13.

2. Capacity change from 6/30/2006 to 6/30/2007. Througput change from 12-month period ending 6/30/2006 to the 12-month period ending 6/30/2007.

Table 2

Louisiana Operating Refineries [1]

Crude Capacity and Percent Product Slate

June 30, 2007 DNR Survey

Data in this table may differ from data reported elsewhere for a different time period.

Refinery Name	DNR Fac. Code	Operating capacity as of 6/30/2007 (bcd)	Operating rate (%)	Idle capacity (bcd)	Operable rate (%)	Throughput 7/1/2006 - 6/30/2007 (Barrels)
Calcasieu Refining Co Lake Charles	CLC	78,000	87.9	0	87.9	25,021,052
Calumet Lubricants Co LP Cotton Valley	CTT	12,158	64.2	0	64.2	2,849,661
Calumet Lubricants Co LP Princeton	CLM	7,294	97.1	2,206	74.6	2,585,295
Calumet Shreveport LLC Shreveport	ATL	40,000	87.0	0	87.0	12,702,606
Chalmette Refining LLC Chalmette	TNN	196,000	87.2	0	87.2	62,353,600
Citgo Petroleum Corp Lake Charles	CTS	429,500	90.0	0	90.0	141,083,299
ConocoPhillips Belle Chasse	STN	247,000	99.1	0	99.1	89,316,000
ConocoPhillips West Lake	CNB	239,000	100.9	0	100.9	87,999,331
ExxonMobil Refining & Supply Co Baton Rouge	EXX	503,000	99.3	0	99.3	182,390,500
Marathon Petroleum Co LLC Garyville	MRT	255,000	100.0	0	100.0	93,067,210
Motiva Enterprises LLC Convent	TXC	230,000	97.4	0	97.4	81,780,000
Motiva Enterprises LLC Norco	SHL	242,200	80.1	0	80.1	70,818,334
Murphy Oil USA Inc Meraux	MRP	120,000	88.3	0	88.3	38,656,055
Placid Refining Co Port Allen	PLC	56,000	95.3	0	95.3	19,477,226
Shell Chemical Co St. Rose	INT	55,000	89.6	0	89.6	17,983,390
Valero Refining Co Krotz Spings	HLL	80,000	97.1	0	97.1	28,364,866
Valero Refining Co Norco	GDH	185,000	126.4	0	126.4	85,332,803
Weighted State Average			95.9		95.9	
Total La. Operating Capacity		2,975,152		2,206		1,041,781,228

Table 2 (Continued)

Louisiana Operating Refineries [1]

Crude Capacity and Percent Product Slate

June 30, 2007 DNR Survey

Data in this table may differ from data reported elsewhere for a different time period.

DNR Fac. Code	% of Total Product Slate												
	Gasoline			Other Fuels			Miscellaneous			Other Products			
	Reg.	Prem.	RFG	Diesel	Jet/ Kero.	Fuel oil	LPGs	Napth.	Resid./ Coke	Product 1	Product 2	Product 3	All Other
CLC				23.7	13.9		8.0	29.7		21.2 ATB/cat feed	3.2 LSVGO	0.2 mineral spirits	
CTT				1.3				77.9		18.7 gas oil	0.4 light straight run	1.7 butane/ pentane	
CLM				8.0				2.0		72.0 lube oil	18.0 asphalt		
ATL	25.3			17.6	22.0				8.5	17.7 lubes	3.4 waxes	3.3 butane	2.1 FCC feedstock
TNN	28.4	8.6		23.9	7.9	2.7	4.2		9.0	7.4 fuel gas/FCC carbon	3.8 aromatics	3.7 gas oil	0.7 gasoline comp., sulfur
CTS	37.9	1.5	1.1	23.7	17.6	3.1	1.1	0.2	6.3	2.0 petrochem.	2.5 propane/ propylene	3.0 lubes, waxes	2.8 vacuum gas oil, butane
STN	35.2	4.1		27.6	12.0	1.4	5.0		4.5	5.9 gasoline & diesel bldstk.	3.5 chemicals, sulfur	0.7 vacuum gas oil	0.3 mid-grade gasoline
CNB	32.3			32.9	12.3		1.0		7.9	11.9 lube oil feed stock	1.9 ref. grade propylene		
EXX	15.3	4.3	15.7	14.8	11.8	3.4	2.4	2.2	4.3	19.2 petrochem. feedstock	3.8 fuel gas, sulfur	2.4 lubes, waxes	0.4 light-cycle oil
MRT	43.8	3.3	0.1				7.2	0.9	7.0	6.9 asphalt	3.2 dry gas	0.6 sulfur	27.1 fuel oil, ULSD
TXC	43.7	0.1		24.5	12.0	12.5	2.0			3.1 propylene	1.3 export gas	0.9 sulfur	
SHL	39.0	12.4		15.5	8.9	0.4	11.2	0.5	5.8	1.0 MTBE	2.2 fuel gas	2.0 normal butane	1.1 gasoline bldsk., misc.
MRP	34.3	5.2		37.8		12.1	2.2	0.1	0.0	3.0 gas oil	3.5 refinery fuel	1.2 FCC coke	0.7 butanes, sulfur
PLC	41.8	2.8		25.0	11.0		0.3	0.5	7.2	3.8 propylene	3.0 fuel gas	2.4 gas oil	2.2 light-cycle oil
INT					5.0			30.0	14.0	17.0 non-fuel grade diesel	5.0 HAGO	10.0 LVGO	19.0 HVGO
HLL	26.1			16.2	7.4	26.7	2.1	11.7	2.5	5.0 light-cycle oil	2.2 light straight run	0.2 fuel gas	
GDH	38.0			26.0		22.0	5.0		9.0				
Wtd. %	31.3	3.2	2.9	20.5	9.6	5.3	3.6	2.3	5.5				

1. Louisiana operating refineries with no atmospheric distillation capacity were not surveyed by DNR and not included in this table. These facilities are listed in table 13.

Table 3
U.S. Department of Energy
Capacity of Louisiana Operable Petroleum Refineries as of January 1, 2007

(Barrels per Stream Day, Except Where Noted)

Refinery Name	DNR Fac. Code	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
		Barrels per Calender Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
		Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Vis-Breaking	Other Gas/Oil
Calcasieu Refining Co Lake Charles	CLC	78,000	0	80,000	0	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	CTT	13,020	0	14,000	0	0	0	0	0	0
Calumet Lubricants Co LP Princeton	CLM	8,300	0	8,655	0	7,000	0	0	0	0
Calumet Shreveport LLC Shreveport	ATL	42,000	0	50,000	0	18,000	0	0	0	0
Chalmette Refining LLC Chalmette	TNN	192,760	0	200,700	0	116,700	40,150	0	0	0
Citgo Petroleum Corp Lake Charles	CTS	429,500	0	454,500	0	200,000	104,000	0	0	0
ConocoPhillips Belle Chasse	STN	247,000	0	260,000	0	92,000	27,000	0	0	0
ConocoPhillips West Lake	CNB	239,400	0	252,000	0	132,000	64,000	0	0	10,600
ExxonMobil Refining & Supply Co Baton Rouge	EXX	503,000	0	524,000	0	241,100	119,800	0	0	0
Marathon Petroleum Co LLC Garyville	MRT	245,000	0	275,000	0	134,000	40,000	0	0	0
Motiva Enterprises LLC Convent	TXC	235,000	0	255,000	0	119,400	0	0	0	0
Motiva Enterprises LLC Norco	SHL	242,200	0	250,000	0	94,000	23,600	0	0	0
Murphy Oil USA Inc Meraux	MRP	120,000	0	125,000	0	50,000	0	0	0	0
Placid Refining Co Port Allen	PLC	56,000	0	58,000	0	25,000	0	0	0	0
Shell Chemical Co St. Rose	INT	55,000	0	56,000	0	28,000	0	0	0	0
Valero Refining Co Krotz Spings	HLL	80,000	0	83,000	0	36,200	0	0	0	0
Valero Refining Co Norco	GDH	185,003	0	186,000	0	130,000	70,400	0	0	0
Totals		2,971,183	0	3,131,855	0	1,423,400	488,950	0	0	10,600

Source: Energy Information Administration, "Refinery Capacity Report 2007", Table 3

Table 3 (Continued)
U.S. Department of Energy
Capacity of Louisiana Operable Petroleum Refineries as of January 1, 2007

(Barrels per Stream Day, Except Where Noted)

DNR Fac. Code	Downstream Charge Capacity (Continued)							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
CLC	0	0	0	0	0	0	0	0
CTT	0	0	0	0	0	0	0	0
CLM	0	0	0	0	0	0	0	0
ATL	3,500	7,000	0	0	0	12,000	0	0
TNN	71,600	0	20,200	0	0	20,000	29,400	0
CTS	147,000	3,000	0	42,000	0	58,000	52,800	0
STN	102,000	2,000	0	0	0	0	44,600	0
CNB	50,000	0	0	0	0	44,000	0	0
EXX	241,000	0	29,000	0	0	78,000	0	0
MRT	131,000	0	0	0	0	49,000	0	34,000
TXC	92,000	0	0	0	52,000	0	40,000	0
SHL	114,000	0	0	34,000	0	40,000	22,000	0
MRP	37,000	0	0	32,000	0	32,000	0	18,000
PLC	20,000	500	0	0	0	11,000	0	7,000
INT	0	0	0	0	0	0	0	0
HLL	34,000	0	0	0	0	0	13,000	0
GDH	97,380	8,000	0	0	0	25,000	0	0
Totals	1,140,480	20,500	49,200	108,000	52,000	369,000	201,800	59,000

Source: Energy Information Administration, "Refinery Capacity Report 2007", Table 3

Table 3 (Continued)
U.S. Department of Energy
Capacity of Louisiana Operable Petroleum Refineries as of January 1, 2007

(Barrels per Stream Day, Except Where Noted)

Refinery Name	DNR Fac. Code	Downstream Charge Capacity (Continued)							
		Desulfurization (incl. Catalytic Hydrotreating)							
		Naptha/Reformer Feed	Gasoline	Kerosene/Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Calcasieu Refining Co Lake Charles	CLC	0	0	0	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	CTT	4,750	0	0	0	0	0	0	0
Calumet Lubricants Co LP Princeton	CLM	0	0	0	0	8,500	0	0	0
Calumet Shreveport LLC Shreveport	ATL	12,000	0	0	0	8,000	0	8,000	1,200
Chalmette Refining LLC Chalmette	TNN	40,000	45,000	0	0	27,500	0	65,000	0
Citgo Petroleum Corp Lake Charles	CTS	123,000	77,000	29,000	117,500	0	0	0	0
ConocoPhillips Belle Chasse	STN	48,300	53,000	0	70,100	0	0	0	0
ConocoPhillips West Lake	CNB	50,000	38,500	24,000	55,000	0	12,500	49,000	0
ExxonMobil Refining & Supply Co Baton Rouge	EXX	78,000	130,000	0	101,900	0	0	0	122,000
Marathon Petroleum Co LLC Garyville	MRT	50,000	87,000	0	108,000	0	0	108,000	0
Motiva Enterprises LLC Convent	TXC	98,000	0	39,800	70,000	0	0	40,000	0
Motiva Enterprises LLC Norco	SHL	38,500	73,000	0	55,000	0	0	0	0
Murphy Oil USA Inc Meraux	MRP	35,000	0	18,000	34,000	0	0	12,000	0
Placid Refining Co Port Allen	PLC	11,000	0	0	15,000	0	0	0	0
Shell Chemical Co St. Rose	INT	0	0	0	0	0	0	0	0
Valero Refining Co Krotz Spings	HLL	14,000	18,000	0	0	0	0	0	0
Valero Refining Co Norco	GDH	34,100	60,000	11,200	0	78,000	0	0	0
Totals		636,650	581,500	122,000	626,500	122,000	12,500	282,000	123,200

Source: Energy Information Administration, "Refinery Capacity Report 2007", Table 3

Table 4
U.S. Department of Energy
Production Capacity of Lousiana Operable Petroleum Refineries as of January 1, 2007

(Barrels per Stream Day)

Refinery Name	DNR FAC. CODE	Production Capacity								
					Isomers					
		Alkylate	Aromatics	Asphalt and Road Oil	Isobutane	Isopentane and Isohexane	Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
Calcasieu Refining Co Lake Charles	CLC	0	0	0	7,600	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	CTT	0	0	0	0	500	0	0	2	0
Calumet Lubricants Co LP Princeton	CLM	0	0	2,000	0	0	7,000	0	5	3
Calumet Shreveport LLC Shreveport	ATL	0	0	5,800	0	0	9,000	0	6	14
Chalmette Refining LLC Chalmette	TNN	13,100	10,200	0	10,000	10,000	0	11,000	0	935
Citgo Petroleum Corp Lake Charles	CTS	22,000	17,200	0	0	28,000	11,000	26,500	0	640
ConocoPhillips Belle Chasse	STN	38,000	12,300	0	0	0	0	5,289	0	125
ConocoPhillips West Lake	CNB	6,000	0	0	930	0	0	22,500	0	440
ExxonMobil Refining & Supply Co Baton Rouge	EXX	39,700	0	0	0	0	16,600	30,831	0	800
Marathon Petroleum Co LLC Garyville	MRT	28,000	0	30,000	22,000	21,000	0	12,900	0	756
Motiva Enterprises LLC Convent	TXC	16,500	0	0	0	12,500	0	0	63	728
Motiva Enterprises LLC Norco	SHL	16,800	0	0	0	0	0	5,550	60	169
Murphy Oil USA Inc Meraux	MRP	8,500	0	18,000	0	0	0	0	0	180
Placid Refining Co Port Allen	PLC	4,000	0	0	0	0	0	0	0	28
Shell Chemical Co St. Rose	INT	0	0	0	0	0	0	0	0	0
Valero Refining Co Krotz Spings	HLL	0	0	0	2,970	6,220	0	0	0	0
Valero Refining Co Norco	GDH	19,800	0	0	0	0	0	23,785	135	393
Totals		212,400	39,700	55,800	43,500	78,220	43,600	138,355	271	5,211

MMcfd = Million cubic feet per day

Source: Energy Information Administration, "Refinery Capacity Report 2007", Table 4

Table 5: *Oil & Gas Journal* 2007 Worldwide Refining Survey
Capacities of Louisiana Refineries as of January 1, 2008

Reprinted with permission. *Oil and Gas Journal* , December 24, 2007

Refinery Name	DNR Fac. Code	Charge Capacity, Barrels per Calendar Day							
		Crude	Vacuum Distillation	Coking	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Cat Hydro-cracking	Cat Hydro-treating
Calcasieu Refining Co. Lake Charles	CLC	32,000							
Calumet Lubricants Co. Cotton Valley	CTT	9,500							[13]5,000
Calumet Lubricants Co. Princeton	CLM	9,500	8,500					[4]8,000	
Calumet Lubricants Co. Shreveport	ATL	35,000	15,000				[1]10,000	[C4]8,500	[1]12,000 [5]7,000 [13]5,000
Chalmette Refining LLC Chalmette	TNN	192,500	112,000	[2]38,000		[1]68,000	[1]28,000 [3]19,000	[C1]18,500	[1]39,500 [7]27,000 [8]62,000 [12]44,000
Cit-Con Oil Corp - Lake Charles			36,100						
Citgo Petroleum Corp. Lake Charles	CTS	440,000	79,800	[2]88,200		[1]126,000	[1]42,300 [3]52,200	[C1]37,800	[1]103,500 [2]6,300 [4]26,100 [5]32,400 [8]64,800
ConocoPhillips Belle Chasse	STN	247,000	92,000	[2]25,200		[1]104,000	[1]42,000		[1]47,000 [7]65,000 [12]53,000 [13]32,400
ConocoPhillips Westlake	CNB	239,000	106,200	[2]60,480		[1]46,350	[3]44,325	[3]34,200	[1]46,350 [4]23,310 [5]34,470 [6]4,000 [7]22,500 [8]45,720 [12]31,500 [13]12,150
ExxonMobil Refining Supply Co. Baton Rouge	EXX	503,000	231,500	[2]114,000		[1]229,000	[2]75,500	[C1]26,500	[1]75,500 [2]104,000 [7]105,500 [11]22,000 [12]97,000 [13]47,500
Marathon Ashland Petroleum LLC Garyville	MRT	245,000	127,300	[2]38,000		[1]124,500	[3]46,100		[1]47,500 [5]102,600 [8]100,700 [12]82,700
Motiva Enterprises LLC Convent	TXC	235,000	100,000		[2]12,520	[1]86,000	[1]36,000	[2]51,780	[1]40,000 [4]26,000 [5]64,000 [8]38,000 [12]48,000
Motiva Enterprises LLC Norco	SHL	220,000	78,000	[2]21,380		[1]107,000	[1]20,000 [4]38,000	[C1]31,000	[1]38,000 [5]36,000 [12]49,500

See page 20 for notes and legend

Table 5 (Cont.): *Oil & Gas Journal* 2007 Worldwide Refining Survey
Capacities of Louisiana Refineries as of January 1, 2008

Reprinted with permission. *Oil and Gas Journal* , December 24, 2007

DNR Fac. Code	Production Capacity, Barrels per Calendar Day									
	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (t/d)	Sulfur (t/d)	Asphalt
CLC										
CTT							[a1]2.5 [4]2.5			
CLM					7,500		[a1]4.5 [4]4.5		3	
ATL					8,000		[a1]6.1 [4]6.1		15	
TNN	[2]12,500		[1]10,000	[3]10,000				2,050	920	
CTS	[1]20,700		[1]13,500	[3]28,800	8,550 9,900	[1]3,150	[a1]47.7 [6]10.8	3,870	567	
STN	[2]38,000		[1]24,600 [2]7,200				[7]10.4	800	70	
CNB	[1]7,200	[1]540					[a1]15.0 [4]112.0	3,600	350	
EXX	[1]38,500	[1]9,500			16,500		[4]12.0	5,430	690	
MRT	[2]26,600			[1]20,900 [3]20,000				2368	686	28,500
TXC	[1]14,000	[2]4,000		[3]12,000			[1]58.0		640	
SHL	[1]14,000	[1]7780				[1]8,000	[1]50.0	1020	140	

See page 20 for notes and legend

Table 5 (Cont.): *Oil & Gas Journal* 2007 Worldwide Refining Survey
Capacities of Louisiana Refineries as of January 1, 2008

Reprinted with permission. *Oil and Gas Journal* , December 24, 2007

Refinery Name	DNR Fac. Code	Charge Capacity, Barrels per Calendar Day							
		Crude	Vacuum Distillation	Coking	Thermal Operations	Catalytic Cracking	Catalytic Reforming	Cat Hydro-cracking	Cat Hydro-treating
Murphy Oil USA Inc. Meraux	MRP	125,000	50,000			[1]37,000			[2]35,000 [7]52,000 [9]12,000 [13]24,750
Placid Refining Co. LLC Port Allen	PLC	55,100	20,900			[1]18,000	[1]9,900		[1]9,900 [5]16,200
Shell Chemical Co. - St. Rose	INT	55,000	28,000						
Valero Energy Corp. Krotz Springs	HLL	83,000	36,000			[1]33,000	[1]12,000		[1]14,000 [2]4,500
Valero Energy Corp. Norco	GDH	186,000	200,000	[2]70,400		[1]100,000	[3]25,000		[2]36,000 [5]48,000 [8]35,100 [12]12,000
Totals		2,911,600	1,325,300	456,020	12,520	1,078,850	500,325	216,280	2,275,950

See page 20 for notes and legend

Table 5 (Cont.): Oil & Gas Journal 2007 Worldwide Refining Survey
Capacities of Louisiana Refineries as of January 1, 2008

Reprinted with permission. *Oil and Gas Journal* , December 24, 2007

DNR Fac. Code	Production Capacity, Barrels per Calendar Day									
	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (t/d)	Sulfur (t/d)	Asphalt
MRP	[2]8,500								1,800	
PLC	[2]3,600								28	
INT										
HLL		[1]2,100		[3]4,500						
GDH	[1]19,000							4,500	450	
Totals	202,600	23,920	55,300	96,200	49,950	11,150	342	23,638	6,359	28,500

See page 20 for notes and legend

Legend & Notes for Table 5

LEGEND

Coking
1. Fluid coking
2. Delayed coking
3. Other

Thermal Processes
1. Thermal cracking
2. Visbreaking

Catalytic Cracking
1. Fluid
2. Other

Catalytic Reforming
1. Semiregenerative
2. Cyclic
3. Continuous regen.
4. Other

Catalytic Hydrocracking
1. Distillate upgrading
2. Residual upgrading
3. Lube oil manufacturing
4. Other

c. Conventional (high-pressure) hydrocracking: (>100 barg or 1,450 psig)

m. Mild to moderate hydrocracking: (<100 barg or 1,450 psig)

Catalytic Hydrotreating
1. Pretreating cat reformer feeds
2. Naphtha desulfurization
3. Naphtha aromatics saturation
4. Kerosine/jet fuel desulfurization
5. Diesel desulfurization
6. Distillate aromatics saturation
7. Other distillates
8. Pretreatment of cat cracker feeds
9. Other heavy gas oil hydrotreating
10. Resid hydrotreating
11. Lube oil polishing
12. Post hydrotreating of FCC naphtha
13. Other

Alkylation
1. Sulfuric acid
2. Hydrofluoric acid

Polymerization/Dimerization
1. Polymerization
2. Dimerization

Aromatics
1. BTX
2. Hydrodealkylation
3. Cyclohexane
4. Cumene

Isomerization
1. C_4 feed
2. C_5 feed
3. C_5 and C_6 feed

Oxygenates
1. MTBE
2. ETBE
3. TAME
4. Other

Hydrogen
Production:
1. Steam methane reforming
2. Steam naphtha reforming
3. Partial oxidation
   a. Third-party plant

Recovery:
4. Pressure swing adsorption
5. Cryogenic
6. Membrane
7. Other

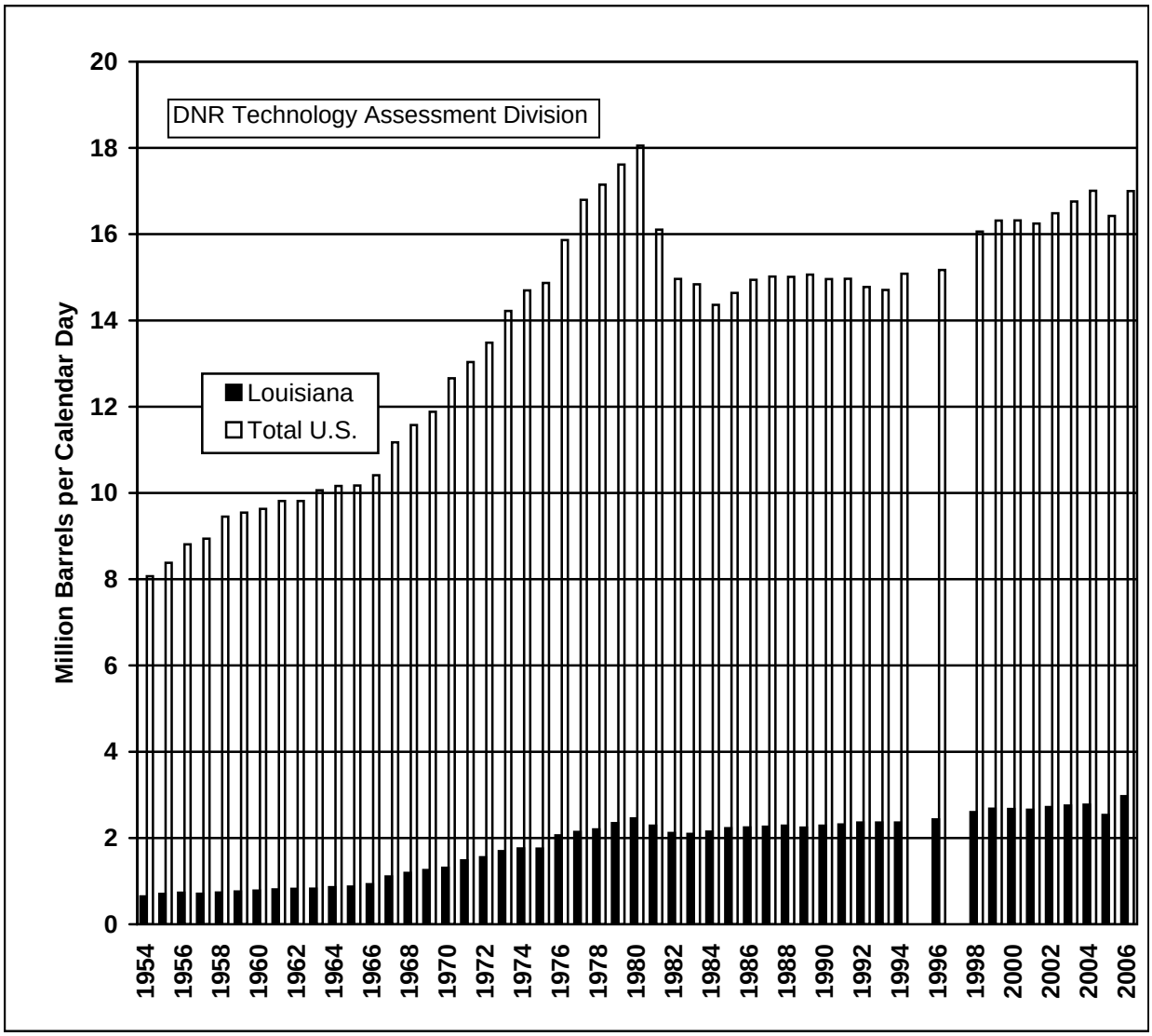
NOTES

Capacity definitions:
Capacity expressed in barrels per calendar day (b/cd) is the maximum number of barrels of input that can be processed during a 24-hr period, after making allowances for the following:
(a) Types and grades of inputs to be processed.
(b) Types and grades of products to be manufactured.
(c) Environmental constraints associated with refinery operations.
(d) Scheduled downtime such as mechanical problems, repairs, and slowdowns.
Capacity expressed in barrels per stream day (b/sd) is the amount a unit can process when running at full capacity under optimal feedstock and product slate conditions. An asterisk (*) beside a refinery location indicates that the number has been converted from b/sd to b/cd using the conversion factor 0.95 for crude and vacuum distillation units and 0.9 for all downstream cracking and conversion units.

Hydrogen:
Hydrogen volumes presented here represent either generation or upgrading to 90+% purity.

Catalytic reforming:
1. Semiregenerative reforming is characterized by shutdown of the reforming unit at specified intervals, or at the operator's convenience, for in situ catalyst regeneration.
2. Cyclic regeneration reforming is characterized by continuous or continual regeneration of catalyst in situ in any one of several reactors that can be isolated from and returned to the reforming operation. This is accomplished without changing feed rate or octane.
3. Continuous regeneration reforming is characterized by the continuous regeneration of part of the catalyst in a special regenerator, followed by continuous addition of this regenerated catalyst to the reactor.
4. Other includes nonregenerative reforming (catalyst is replaced by fresh catalyst) and moving-bed catalyst systems.

Figure 2
Operating Capacity of Louisiana and U.S. Refineries



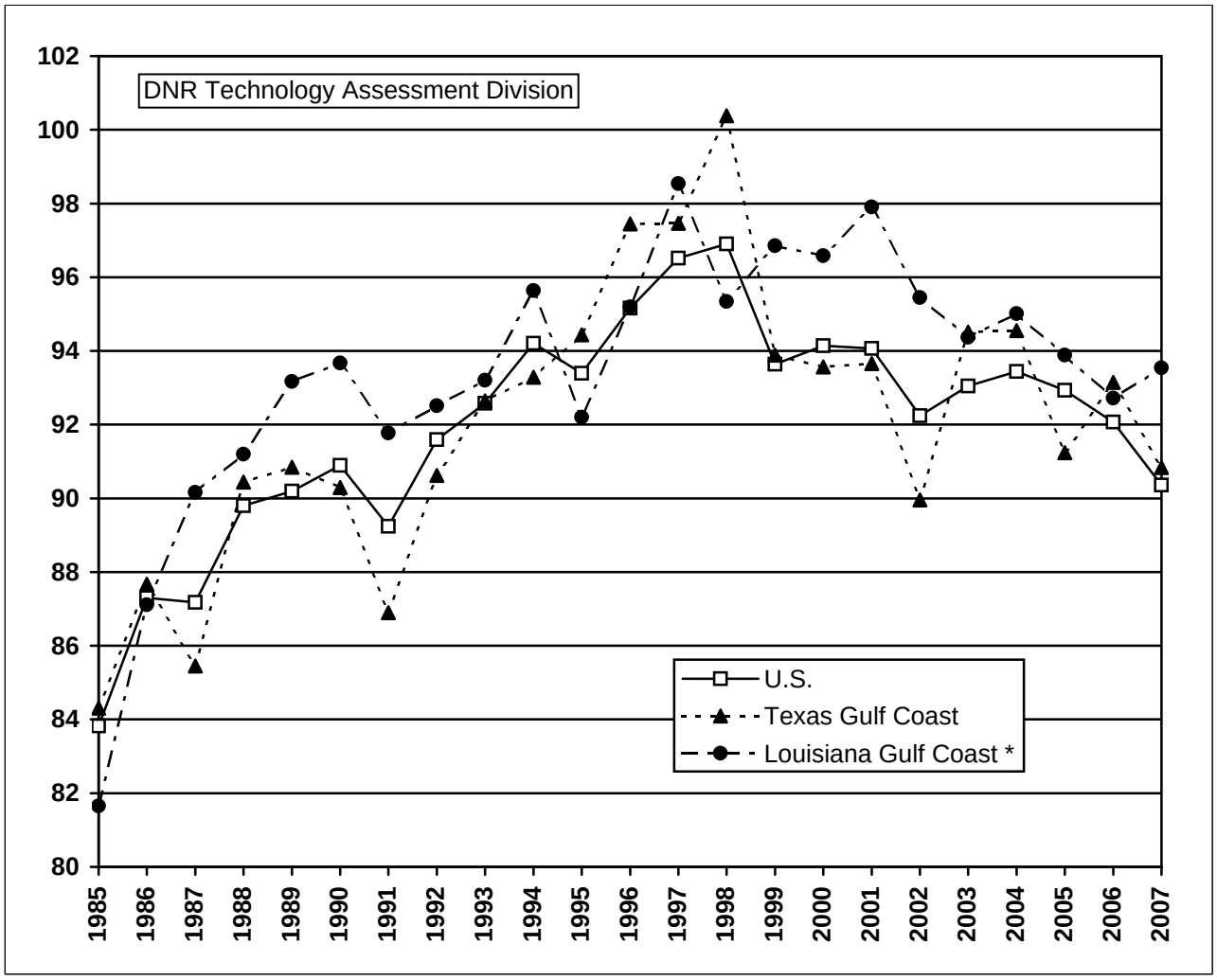
Source: 1953 - 1975: U.S. Bureau of Mines, "Petroleum Refineries in the Untied States and Puerto Rico" Annual

1976 - 1981: EIA, "Petroleum Refineries in the United States and U.S. Territories" Annual

1982 - 2004: EIA, "Petroleum Supply Annual, Vol. 1" (data not available for 1995 & 1997)

2005 - 2006: EIA, "Refinery Capacity Report"

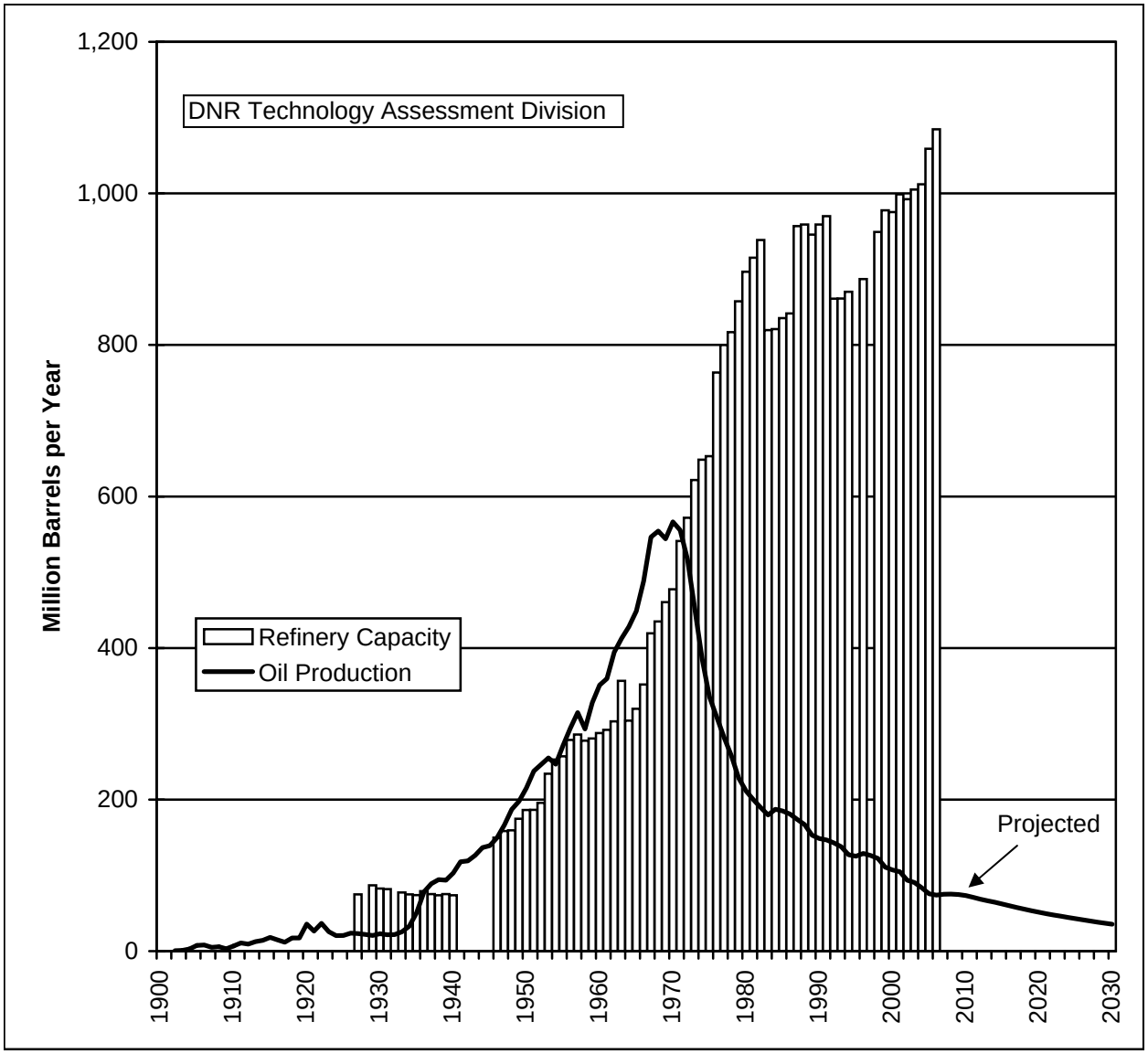
Figure 3
Operating Rates (%)
U.S., Texas Gulf Coast, Louisiana Gulf Coast Refineries



* Louisiana Gulf Coast includes the parishes of Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all parishes south thereof, Mississippi counties of Pearl River, Stone, George, Hancock, Harrison, and Jackson, and Alabama counties of Mobile and Baldwin.

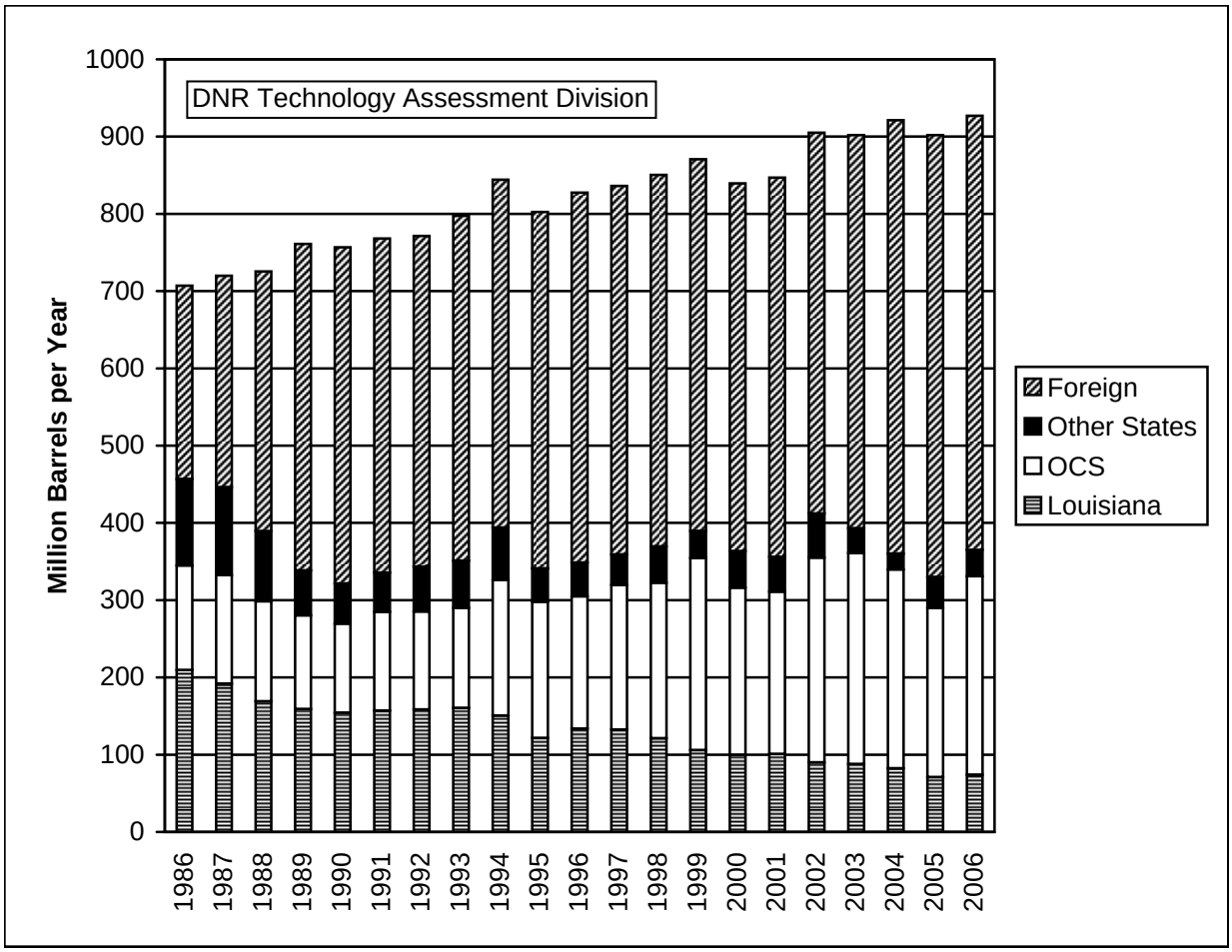
Source: EIA, "Petroleum Supply Annual, Volume 1"

Louisiana Oil Production (Excluding OCS) and Refinery Operable Capacity



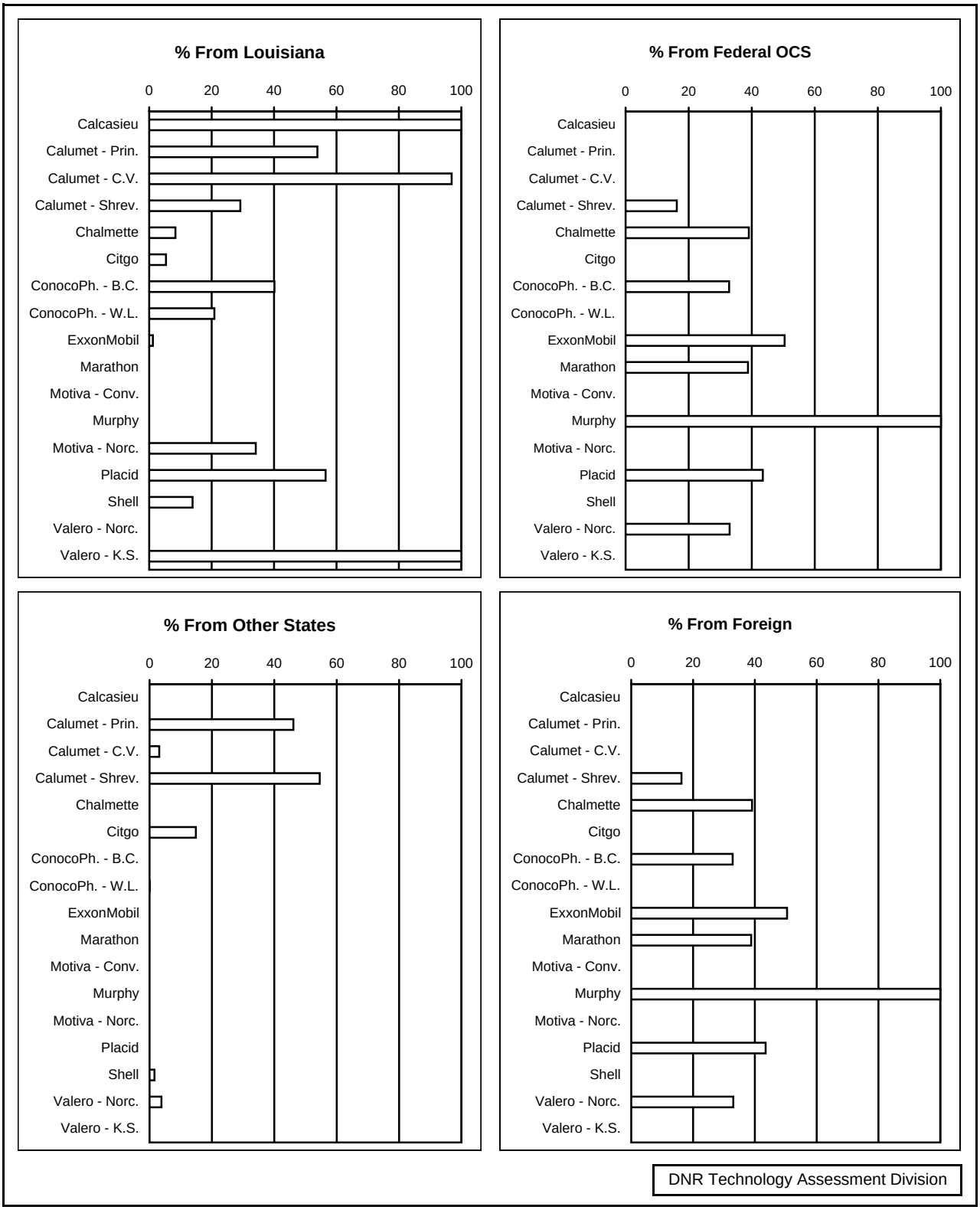
Source: Oil production data from DNR database; Refinery capacity data from DNR database and EIA, "Petroleum Supply Annual, Vol. 1" and EIA, Refinery Capacity Data Report

Figure 5
Historical Crude Oil Sources for Louisiana Refineries



Source: DNR Database, from Refiner's Monthly Report, Form R-3

Figure 6
Crude Oil Input Percentages by Source and Refinery
2007 DNR Survey (FY 2007)



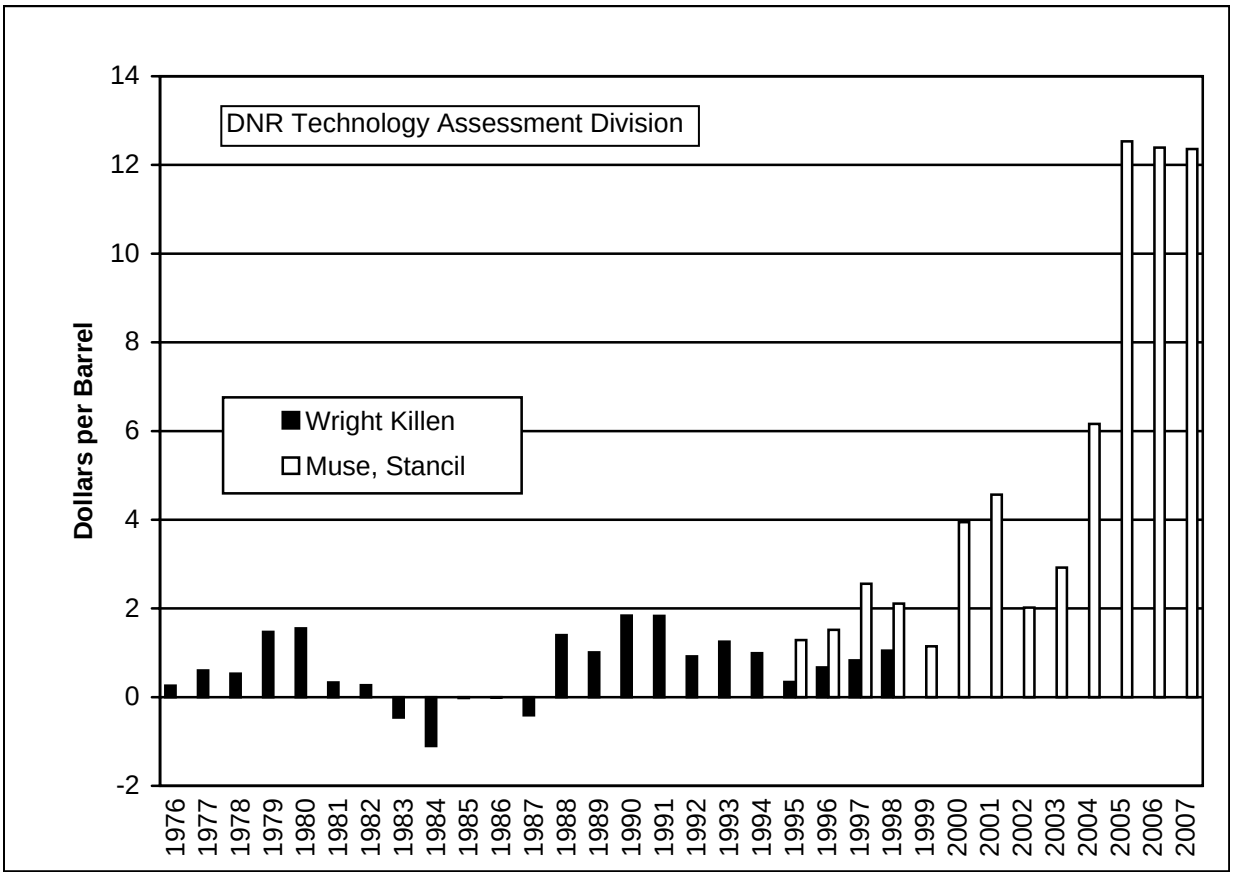
Source: DNR Database, from Refiner's Monthly Report, Form R-3

Table 6 (Data for Figure 6)
Crude Oil Input Percentages by Source and Refinery
2007 DNR Survey (FY 2007)

Refinery	Louisiana	Federal OCS	Other States	Foreign
Calcasieu Refining Co Lake Charles	100.00	0.00	0.00	0.00
Calumet Lubricants Co Princeton	53.88	0.00	46.12	0.00
Calumet Lubricants Co Cotton Valley	96.91	0.00	3.09	0.00
Calumet Shreveport LLC Shreveport	29.19	16.24	54.57	0.00
Chalmette Refining LLC Chalmette	8.41	39.06	0.00	52.53
Citgo Petroleum Corp Lake Charles	5.38	0.00	14.83	79.79
ConocoPhillips Belle Chase	40.10	32.81	0.00	27.08
ConocoPhillips West Lake	20.87	0.00	0.08	79.05
ExxonMobil Refining & Supply Co Baton Rouge	1.19	50.42	0.00	48.39
Marathon Petroleum Co LLC Garyville	0.00	38.82	0.00	61.18
Motiva Enterprises LLC Convent	0.00	0.00	0.00	100.00
Murphy Oil USA Inc Meraux	0.00	100.00	0.00	0.00
Motiva EnterprisesLLC Norco	34.15	0.00	0.00	65.85
Placid Refining Co LLC Port Allen	56.51	43.49	0.00	0.00
Shell Chemical Co St. Rose	13.88	0.00	1.57	84.55
Valero Refinging Co Norco	0.00	33.00	3.83	63.17
Valero Refining Co Krotz Springs	100.00	0.00	0.00	0.00

Source: DNR Database, from Refiner's Monthly Report, Form R-3

Figure 7
Gulf Coast Refinery Cash Operating Margins



Source: *Oil & Gas Journal*

Table 7
Louisiana Operating Refinery Mailing Address and Contact Information

Company Name	Mailing Address	Contacts *	Telephone
Calcasieu Refining Co	4359 W. Tank Farm Rd. Lake Charles, LA 70605	Carolyn Taflinger Russ Willmon Tim Jordan	(337) 478 2130
Calumet Lubricants Co LP	PO Box 97 Cotton Valley, LA 71018	Wayne Rhymes Charles Cost Rodney Butts	(318) 832 4236
Calumet Lubricants Co LP	10234 La Hwy. 157 Princeton, LA 71067-9172	Jerry Arnold Jerry Arnold Jerry Tollefsen	(318) 949 2421
Calumet Shreveport LLC	PO Box 3099 Shreveport, LA 71133	Rick Williams Jeff Lang Dan McKibben	(318) 632 4102
Chalmette Refining LLC	PO Box 1007 Chalmette, LA 70044	Nicole Ferrier Richard Igercich	(504) 281 1270
Citgo Petroleum Corp	PO Box 1562 Lake Charles, LA 70602	Phil Woods Robert Kent Rick Zagar	(337) 708 6357
ConocoPhillips	PO Box 176 Bell Chasse, LA 70037-0176	Bill Crawford Chris Chandler	(504) 656 3641
ConocoPhillips	PO Box 37 Westlake, LA 70669	Carl Castleberry John Gott	(918) 661 5841
ExxonMobil Refining and Supply Co	PO Box 551 Baton Rouge, LA 70821	Barbara Beckman Stan Vanderleeuw A.K. Drew Turner	(225) 977 8888
Marathon Petroleum Co LLC	PO Box AC Garyville, LA 70051-0842	Junius McCants Rich Bedell Bill Kepner	(985) 535 2241
Motiva Enterprises LLC	PO Box 37 Convent, LA 70723	Gary Miller Doug Quinn Roxan Kraft	(225) 562 6820
Motiva Enterprises LLC	PO Box 10 Norco, LA 70079	Gene Bourgeois Anne-Marie Ainsworth Jones Devlin	(504) 465 6986
Murphy Oil USA Inc	PO Box 100 Meraux, LA 70075-0100	Aubrey Marchand Lynn Bourgeois Aubrey Marchand	(504) 278 5311
Placid Refining Co	1940 La Hwy 1 North Port Allen, LA 70767	Joey Hagmann Gary Fuller	(225) 346 7464
Shell Chemical Co	PO Box 10 Norco, LA 70079	Tom Ford Tom Ford Jo Leissinger	(504) 465 6393
Valero Refining Co	PO Box 453 Krotz Springs, LA 70750 0453	Kevin Roy Bill Wuensche Gregg Byers	(337) 566 0114
Valero Refining Co	PO Box 537 Norco, LA 70079	Tracie Lack Ralph Phillip Greg Burns	(985) 764 5839

* Contacts are listed in order as: Contact person, Plant Manager, Plant Engineer

Table 8
Louisiana Operating Refinery Locations

Company Name	Physical Location
Calcasieu Refining Co	4359 W. Tank Farm Rd. Lake Charles, LA 70605
Calumet Lubricants Co LP	1756 Old Hwy. 7 Cotton Valley 71018
Calumet Lubricants Co LP	10234 Hwy. 157 Princeton 71067
Calumet Shreveport LLC	3333 Midway St. Shreveport 71109
Chalmette Refining LLC	500 W. St. Bernard Hwy. Chalmette 70044
Citgo Petroleum Corp	4401 Hwy. 108 Sulphur 70665
ConocoPhillips	15551 Hwy. 23 South Belle Chase 70037
ConocoPhillips	2200 Old Spanish Trail Rd. Westlake 70669
ExxonMobil Refining and Supply Co	4045 Scenic Hwy. Baton Rouge 70805
Marathon Petroleum Co LLC	U.S. 61 @ Marathon Ave. Garyville 70051
Motiva Enterprises LLC	La. 44 Convent 70723
Motiva Enterprises LLC	15536 River Rd. Norco 70079
Murphy Oil USA Inc	2500 St. Bernard Hwy. Meraux 70075
Placid Refining Co	1940 La. 1 North. Port Allen 70767
Shell Chemical Co	11842 River Rd. St. Rose 70087
Valero Energy Corp	La. 105 Krotz Springs 70750
Valero Energy Corp	14902 River Rd. Norco 70079

Table 9
Louisiana Operating Refinery Name History (1980-2007)

Refinery Name	Date	DNR Code & Location
ExxonMobil Refinery and Supply Co	1999-	EXX - Baton Rouge
Exxon Co USA	1980-99	
ConocoPhillips	2003-	STN - Belle Chasse
Philips Petroleum Co	2000-02	
B.P. Amoco PLC	1999-00	
B.P. Oil Corp	1989-98	
Standard Oil Co	1986-88	
Gulf Refining & Marketing Co	1985-85	
Gulf Oil Corp	1981-84	
Gulf Oil Co US	1979-80	
Chalmette Refining LLC	1998 -	TNN - Chalmette
Mobil Oil Corp	1989-98	
Tenneco Oil Co	1980-88	
Motiva Enterprises LLC	1998-	TXC - Convent
Star Enterprises	1989-98	
Texaco Refining & Marketing	1985-88	
Texaco Inc	1980-84	
Calumet Lubricants Co LP	1996-	CTT - Cotton Valley
Kerr-McGee Refining Corp	1985-95	
Kerr-McGee Corp	1983-84	
Cotton Valley Solvents Co	1980-82	
Marathon Petroleum Co LLC	2005-	MRT - Garyville
Marathon Ashland Petroleum LLC	1998-04	
Marathon Oil Co	1992-98	
Marathon Petroleum Co	1985-91	
Marathon Oil Co	1980-84	
Valero Refining Co	2004-	GDH - Good Hope
Orion Refining Corp	1999-03	
TransAmerican Refining Co	1992-98	
TransAmerica Refining Co	1988-91	
GHR Energy Corp	1982-87	
Good Hope Refineries Inc	1981-81	
Good Hope Industries Inc	1980-80	
Valero Refining Co	1997-	HLL - Krotz Springs
Basis Petroleum Inc	1996-96	
Phibro Energy USA Inc	1993-95	
Phibro Refining Inc	1992-92	
Hill Petroleum Co	1980-91	

Refinery Name	Date	DNR Code & Location
Calcasieu Refining Co	1985-	CLC - Lake Charles
CPI Oil & Refining Inc	1982-84	
Calcasieu Refining Ltd	1980-81	
Citgo Petroleum Corp	1984-	CTS - Lake Charles
Cities Service Co	1980-83	
ConocoPhillips	2003-	CNB - Lake Charles
Conoco Inc	1982-02	
Conoco	1980-81	
Continental Oil Co	1979	
Murphy Oil USA Inc	1984-	MRP - Meraux
Murphy Oil Corp	1980-83	
Motiva Enterprises LLC	1998-	SHL - Norco
Shell Oil Co	1980-98	
Calumet Lubricants Co LP	1991-	CLM - Princeton
Calumet Refining Co	1980-90	
Placid Refining Co	1980-	PLC - Port Allen
Calumet Shreveport LLC	2005-	ATL - Shreveport
Calumet Lubricants Co LP	2000-04	
Pennzoil-Quaker State Corp	1999-00	
Pennzoil Producing Co	1992-98	
Pennzoil Products Co	1986-91	
Pennzoil Co	1985-85	
Atlas Processing Co	1980-84	
Shell Chemical Co	1996-	INT - St. Rose
St. Rose Refinery Inc	1994-95	
Phibro Energy USA Inc	1993-93	
Phibro Refining Inc	1992-92	
Hill Petroleum Co	1987-91	
International Processors	1981-86	

Table 10
Louisiana Non-Operating Refinery Mailing Address and Contact Information

Company Name	Mailing Address	Contacts	Telephone
Lazarus Energy Holdings LLC	4400 Post Oak Pkwy Houston, TX 77027	Mr. Jason Huering	(713) 850 0500
Lazarus Energy Holdings LLC	4400 Post Oak Pkwy Houston, TX 77027	Mr. Jason Huering	(713) 850 0500
Quantum Fuel & Refining	PO Box 136 Newton, TX 75966	Mr. Mike McQueen	(713) 977 6108

Table 11
Louisiana Non-Operating Refinery Location and Status Information

Name	Physical Location	Last Known Operating Capacity	Date Last Operated	Status
American International Refinery Inc	La. 3059 Lake Charles	35,000	2003	Sold to Pelican Refining.
Bayou State Oil Corp	U.S. 71 N. @ La. 2 West Hosston	3,000	Feb. 1987	Dismantled.
Lazarus Energy Co.	1901 E. Ebey Church Point	30,000	2003	Planning to start up.
Lazarus Energy Co.	U.S. 90 E. Jennings	14,800	Feb. 1998	Planning to start up.
Lisbon Refinery J.V. LLC	La. 2 Lisbon	12,500	Jan. 1996	Dismantled.
Ergon St. James Co LLC	La.18 St. James	20,000	Aug. 1983	Dismantled.
Tina Resources Inc.	La. 14 Lake Arthur	7,400	Feb. 1986	Dismantled.
Quantum Fuel & Refining	101 Old Ferry Rd. Egan	10,000	Sep. 1987	Planning to start up.

Table 12
Louisiana Non-Operating Refinery Name History (1980-2007)

Refinery Name	Dates	DNR Code & Location
American International Refinery Inc	1997-04	LKC - Lake Charles
Gold Line Refining Ltd	1992-97	
American Int'l Refining Inc	1989-91	
Lake Charles Refining Co	1980-88	
Aweco	1979-79	
Sooner Refining Co	1980-82	SNR - Darrow
Conoco Inc	1982-89	CNA - Egan
Conoco	1980-81	
Continental Oil Co	1979	
Quantum Fuel & Refining	1998-	LOR - Egan
U.S. Refining Inc	1994-98	
Britt Processing & Refining Co	1992-93	
Crystal Refining Inc	1989-91	
OGC Corp	1988-88	
Louisiana Oil Refining Co of Egan	1987-87	
El Paso Field Services	1997-05	KRR - Dubach
Arcadia Refining	1995-96	
Endevco Inc	1989-94	
Kerr-McGee Refining Corp	1985-88	
Kerr-McGee Corp	1980-84	
Tina Resources Inc	1993-96	MLL - Gueydon
Cameron Oil Refining Co Inc	1992-92	
Cameron Resources	1990-91	
Mallard Resources Inc	1980-89	
Bayou State Oil Corp	1980-06	BYS - Hosston
Evangeline Refining Co	1980-92	EVN - Jennings
Shepard Oil Co	1980-82	SHP - Jennings
Laidlaw Environmental Systems	1992-92	TSR - Jennings
GSX Recovery Systems	1983-91	
T & S Refining Co	1980-82	

Refinery Name	Dates	DNR Code & Location
Lazarus Energy Holdings LLC	2006-	SLP - Mermanteau
Gold Line Refining Co Ltd	1994-98	
CAS Refining	1991-93	
Celeron Oil and Gas Co	1983-90	
Slapco	1980-82	
South Louisiana Production Co	1979	
Petroleum Fuel & Terminal Co	1992-03	MTR- Mt. Airy
Clark Oil and Refining Corp	1983-91	
Mt. Airy Refining	1980-82	
St. James Co LLC	1998-03	TXS - St. James
Texas NAPCO Inc	1983-98	
La Jet Inc	1980-82	
McTan Refining Corp	1983-96	BRN - St. James
McTan Corp	1982-82	
Bruin Refining Co	1980-81	
Sabine Resources Group	1990-92	PRT - Stonewall
Port Petroleum Inc	1980-89	
Schulze Processing Inc	1980-82	SCH - Tallulah
Gulf Oil Co USA	1981-81	GLF - Venice
Gulf Oil Corp	1980-80	
Lisbon Refinery J.V LLC	1998-07	CLB - Lisbon
Padre Refining Co	1997-98	
Arcadia Refining & Mktg. Co	1995-96	
Dubach Gas Co	1992-94	
Claiborne Gasoline Co	1980-91	
Lazarus Energy Holdings LLC	2006-	CNL - Church Pt.
Canal Refining Co	1980-06	

Table 13

Louisiana Operating Refineries not Surveyed by DNR [1]

Company Name	Contact Information	Capacity (bcd)	Process	Product
Cit-Con Oil Corp Lake Charles	1601 LA Hwy. 108 Lake Charles, LA 70601 337-491-6011	36,100 [2]	Vacuum distillation	Lubes
Excel Paralubes Westlake	2800 Old Spanish Trail Westlake, LA 70669	34,892 [3]	Catalytic hydrocracking	Lubes
Pelican Refining Co Lake Charles	4646 Old Town Rd Lake Charles, LA 70615 337-433-6773	15,000 [3]	Vacuum distillation	Asphalt

1. The facilities in this table do not have any atmospheric distillation capacity. They typically process heavy crude fractions and/or waste streams.

2. Source: *Oil & Gas Journal* 2007 Worldwide Refining Survey

3. Source: Energy Information Administration, "Refinery Capacity Report 2007"