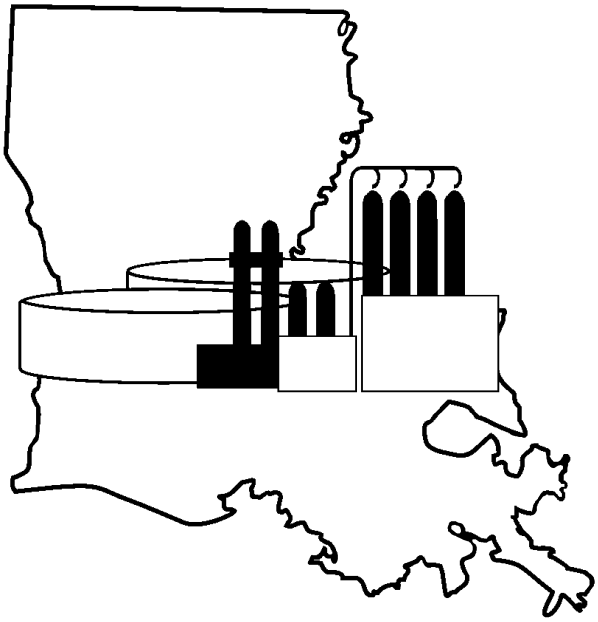
LOUISIANA CRUDE OIL REFINERY SURVEY REPORT

Nineteenth Edition
2013 Survey

By Ross LeBlanc

Refining, Alternative Energy & Power Systems Program



LOUISIANA DEPARTMENT OF NATURAL RESOURCES

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Baton Rouge, Louisiana
October 2014

This edition of **Louisiana Crude Oil Refinery Survey Report** is funded 100% ($1621.70) with Petroleum Violation Escrow funds as part of the State Energy Conservation Program as approved by the U.S. Department of Energy and Louisiana Department of Natural Resources.

This public document was published at a total cost of $1621.70. 540 copies of this public document were published in this first printing at a total cost of $1621.70. The total cost of all printings of this document, including reprints, is $1621.70. This document was published by the Department of Natural Resources, 617 N. 3rd Street, Baton Rouge, LA, to promulgate the State Energy Conservation Plan developed under authority of P.L. 94-163. This material was printed in accordance with the standards for printing by State agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of the Louisiana Revised Statutes.

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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 time period covered by DNR's current survey is January 1, 2013 – December 31, 2013, and is designed to complement the petroleum statistics published by the Energy Information Administration (EIA). DNR gratefully acknowledges permission to use the December 2, 2013 *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 4 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 4 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: Map and Highlights of Louisiana Refineries

	Operating Refineries
1	Alon Refining Krotz Springs Inc - Krotz Springs
2	Calcasieu Refining Co - Lake Charles
3	Calumet Lubricants Co - Princeton
4	Calumet Lubricants Co - Cotton Valley
5	Calumet Shreveport LLC - Shreveport
6	Chalmette Refining LLC - Chalmette
7	Citgo Petroleum Corp - Lake Charles
8	ExxonMobil Refining & Supply Co Baton Rouge
9	Marathon Petroleum Co LLC - Garyville
10	Motiva EnterprisesLLC - Norco
11	Motiva Enterprises LLC - Convent
12	Pelican Refining Co - Lake Charles
13	Phillips 66 - Lake Charles
14	Phillips 66 - Alliance
15	Placid Refining Co LLC - Port Allen
16	Shell Chemical Co - Norco
17	Shell Chemical Co - St. Rose
18	Valero Refining Co - Meraux
19	Valero Refining Co - Norco
	Non Operating Refineries
20	Lazarus Energy - Jennings
21	Quantum Fuel & Refining - Egan
22	Lazarus Energy - Church Point

Discussion

Overview

Louisiana is a primary energy producing state with 417 million barrels in crude reserves (2012), ranking it 10th among the states (2nd if the Louisiana portion of the federal outer continental shelf (OCS) is included). Louisiana ranks 7th among the states in crude oil production (2nd if Louisiana OCS is included), with an estimated 54.8 million barrels produced in 2012. The Louisiana OCS territory is the most extensively developed and matured OCS territory in the United States. The Louisiana OCS territory has produced approximately 88.% of the 19.3 billion barrels of crude oil and condensate produced in the U.S. through the end of 2012.

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 foreign oil and oil from other states as well. Approximately two thirds of refinery input is 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. Shell's 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. 7 & 8) 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 total U.S. petroleum consumption in 2012 dropped 1.8% to 18.49 million barrels per day (bpd). Finished motor gasoline dropped 0.8% to 8,682 thousand bpd, jet fuel dropped 1.8% to 1,398 thousand bpd, and overall distillate fuel decreased 0.6% to 3,827 thousand bpd in 2012.

According to DNR's survey, the Louisiana refinery operating rate was 87.4% for this survey period with little idle capacity. Figure 3 (pg. 19) compares Louisiana Gulf Coast, Texas Gulf Coast, and total U.S. refinery operating rates since 1989. The operating capacity for Louisiana refineries was 3,349,520 barrels per calendar day (bcd), a 2.89% increase from DNR's previous survey. Table 1 (pg. 6) shows the details of operating capacity and throughput changes between DNR's two most recent surveys. Figure 2 (pg. 18) shows the historical Louisiana and U.S. operating capacity since 1960. Regular gasoline accounted for 35% of Louisiana refinery production. A complete listing of Louisiana refinery products is shown in Table 2 (pg. 8).

As reported in the *Oil & Gas Journal's* 2013 Worldwide Refinery Report, worldwide refining capacity stood at 88 million bcd, a decrease by nearly 900,000 bcd from 88.9 million in 2012.

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, Saudi Aramco, moves up from 10th to the 5th spot. Other changes in position were Phillips66 moves from 8th to 10th place. Source: *Oil & Gas Journal*, Dec. 2, 2013

World Rank	Company	Crude Capacity (bcd)
1	ExxonMobil	5,589,000
2	Royal Dutch Shell	4,109,239
3	Sinopec	3,971,000
4	BP	2,858,964
5	Saudi Aramco	2,851,500
6	Valero Energy	2,776,500
7	Petroleos de Venezuela SA	2,678,000
8	China National Petroleum	2,675,000
9	Chevron	2,539,600
10	Phillips66	2,514,200

Operating Refinery Recent Changes

Valero Refining Co. acquired Murthy Oil's Meraux refinery in October 2011. Marathon's expansion of its Garyville facility is complete and resulted in a capacity increase of 235,000 bcd. Marathon is also increasing its diesel exporting facilities and is currently expanding capacity by an additional 100,000 bcd. Valero Energy Co. completed a $3 billion expansion to increase diesel production at its refineries in Louisiana and Texas, which it will export overseas.

The identity and location of each of the operating refineries is shown on the map in Figure 1 (pg. V). Mailing addresses and contacts are listed in Table 7 (pg. 24). Physical locations are listed in Table 8 (pg. 25), and name histories are listed in Table 9 (pg. 26).

Non-Operating Refinery Recent Changes

During this survey period there are no recent changes to non-operating refinery status. The identity and location of each of the non-operating refineries is shown on the map in Figure 1 (pg. v). Mailing addresses and contacts are listed in Table 10 (pg. 27). Physical locations, last known crude capacity, date last operated, and present status are described in Table 11 (pg. 28), and name histories are listed in Table 12 (pg. 29).

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.

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 (%)
Alon Refining Krotz Springs Inc Krotz Springs	80,000	0	23,700,411	-83,004	0.00	-0.35
Calcasieu Refining Co Lake Charles	80,000	0	20,000,000	6,177,791	0.00	30.89
Calumet Lubricants Co LP Cotton Valley	13,020	0	2,954,986	137,191	0.00	4.64
Calumet Lubricants Co LP Princeton	10,000	-1,700	2,513,498	-427,295	-17.00	-17.00
Calumet Shreveport LLC Shreveport	65,000	0	14,567,150	-1,361,209	0.00	-9.34
Chalmette Refining LLC Chalmette	192,500	4,500	50,126,910	-679,910	2.34	-1.36
Citgo Petroleum Corp Lake Charles	425,000	2,800	147,547,128	-8,734,708	0.66	-5.92
Phillips66[3] Belle Chasse*	247,000	5,000	78,619,690	1,516,310	2.02	1.93
Phillips66[3] West Lake*	239,000	400	77,989,876	54,524	0.17	0.07
ExxonMobil Refining & Supply Co Baton Rouge	502,500	0	173,661,826	-4,535,326	0.00	-2.61
Marathon Petroleum Co LLC Garyville	490,000	32,000	181,033,448	-1,637,500	6.53	-0.90
Motiva Enterprises LLC Convent	235,000	0	82,175,176	-7,859,883	0.00	-9.56
Motiva Enterprises LLC Norco	233,500	0	75,168,897	-4,201,146	0.00	-5.59
Placid Refining Co Port Allen	58,000	1,000	20,689,952	859,971	1.72	4.16
Shell Chemical Co St. Rose*	0	0	0	0	0.00	0.00
Valero Refining Co Meraux	135,000	5,000	36,559,664	1,481,683	3.70	4.05
Valero Refining Co Norco	250,000	0	84,384,315	16,297,386	0.00	19.31
Totals	3,255,520	49,000	1,071,692,927	-2,995,125	1.51	-0.28

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 12/31/2011 to 12/31/2013. Througput change from 12-month period ending 12/31/2011 to the 12-month period ending 12/31/2013.
3.Formerly ConocoPhillips
*Data from EIA Refinery Capacity Report 2013

Table 2

Louisiana Operating Refineries [1]

Crude Capacity and Percent Product Slate

December 31, 2013 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 12/31/2013 (bcd)	Operating rate (%)	Idle capacity (bcd)	Operable rate (%)	Throughput 1/1/2013 - 12/31/2013 (Barrels)
Alon Refining Co Krotz Spings	HLL	80,000	80.9	0	80.9	23,617,407
Calcasieu Refining Co Lake Charles	CLC	80,000	89.6	0	89.6	26,177,791
Calumet Lubricants Co LP Cotton Valley	CTT	13,020	65.1	0	65.1	3,092,177
Calumet Lubricants Co LP Princeton*	CLM	8,300	68.9	0	68.9	2,086,203
Calumet Shreveport LLC Shreveport	ATL	65,000	55.7	0	55.7	13,205,941
Chalmette Refining LLC Chalmette	TNN	197,000	68.8	0	68.8	49,447,000
Citgo Petroleum Corp Lake Charles	CTS	427,800	88.9	0	88.9	138,812,420
Phillips 66[2] Belle Chasse*	STN	252,000	87.1	0	87.1	80,136,000
Phillips 66[2] Lake Charles*	CNB	239,400	89.3	0	89.3	78,044,400
ExxonMobil Refining & Supply Co Baton Rouge	EXX	502,500	92.2	0	92.2	169,126,500
Marathon Petroleum Co LLC Garyville	MRT	522,000	94.2	0	94.2	179,395,948
Motiva Enterprises LLC Convent	TXC	235,000	86.6	0	86.6	74,315,293
Motiva Enterprises LLC Norco	SHL	233,500	83.3	0	83.3	70,967,751
Placid Refining Co Port Allen	PLC	59,000	100.1	0	100.1	21,549,923
Shell Chemical Co St. Rose*	INT	45,000	0.0	0	0.0	0
Valero Refining Co Meraux	MRP	140,000	74.4	0	74.4	38,041,347
Valero Refining Co Norco	GDH	250,000	110.3	0	110.3	100,681,701
Weighted State Average			87.4		87.4	
Total La. Operating Capacity		3,349,520		0		1,068,697,802

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. Formerly ConocoPhillips
*Data from EIA Refinery Capacity Report 2013

Table 2 (Continued)

Louisiana Operating Refineries [1]

Crude Capacity and Percent Product Slate

December 31, 2013 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	ULSD	Other Diesel	Jet/ Kero	Fuel oil	LPGs	Napth	Res/ Coke	Product 1	Product 2	Product 3	All Other
HLL	42.2	0.0	0.0	0.0	12.7	15.5	0.0	7.8	3.5	3.3	3.6 Fuel Gas	9.8 LCO	1.6 LSR	
CLC	0.0	0.0	0.0	0.0	29.0	18.2	22.8	1.9	23.4	3.6	1.0 ATB/cat feed	0.0 LSVGO	0.1 mineral spirits	
CTT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.0	0.0	20.5 gas oil	1.0 butane/ pentane		
CLM*	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.0	0.0	70.6 lube oil	18.1 asphalt	11.3 Atmospheric Gas	
ATL	26.4	0.0	0.0	33.1	0.0	11.2	1.7	1.0	0.0	9.2	15.1 lubes	2.3 waxes		
TNN	28.0	5.0	0.0	13.0	19.0	0.0	2.0	4.0	3.0	10.0	5.0 NAP	1.0 Sulpher/Other	4.0 gas oil	6.0 Aromatics
CTS	1.4	40.5	0.0	25.9	0.6	19.6	6.5	1.8	2.0	7.6	3.9 Aromatics	3.1 Prop/Mix	0.5 Butanes	0.5 Sulphur
STN	29.8	6.5	0.0	0.0	30.8	11.8	4.1	5.0	0.0	2.2	5.0 gasoline blend stock	3.7 chemicals		
CNB	28.4	0.0	0.0	0.0	29.2	14.5	0.0	1.2	4.6	7.0	12.8 lube oil feed stock	2.4 ref. grade propylene	0.7 butane	0.2 butylene
EXX	22.3	0.6	12.8	19.1	0.0	9.3	2.5	0.1	1.6	3.7	19.5 petrochem feed stock	4.4 fuel gas, sulfur	2.4 lubes, waxes	1.7 other
MRT	41.5	4.3	0.0	38.2	0.0	0.0	0.0	4.8	0.2	5.1	2.1 asphalt	3.2 dry gas	0.6 sulfur	
TXC	38.9	3.0	0.0	26.2	0.0	11.8	14.7	1.3	0.0	0.0	2.5 propylene	0.3 export gas	0.6 sulfur	0.6 other
SHL	41.4	4.5	0.0	23.2	0.0	12.2	0.0	6.3	0.9	5.7	1.2 Butane	0.4 Blendstock	2.1 Chem Feed	2.8 Cat Feed
PLC	42.4	3.9	0.0	22.1	1.3	15.9	10.8	0.4	4.1	1.7	4.5 propylene	1.0 light-cylcle oil		
INT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MRP	35.8	1.7	0.0	31.5	0.0	6.6	9.0	0.6	0.0	0.0	4.7 VGO	0.5 sulfur	1.8 Propylene	4.5 Alkylate
GDH	28.0	0.0	0.0	32.0	0.0	0.0	0.0	5.0	7.0	4.0	9.0 VGO	7.0 Petcoke	5.0 Alkylate	3.0 sulpher, Y grade
Wtd %	35.0	8.9	2.6	8.0	11.0	11.0	4.8	3.6	3.4	5.8				

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, 2013

(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
Alon Refining Krotz Springs Inc	HLL	80,000	0	83,000	0	36,200	0	0	0	0
Calcasieu Refining Co Lake Charles	CLC	78,000	0	80,000	0	30,000	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	57,000	0	60,000	0	28,000	0	0	0	0
Chalmette Refining LLC Chalmette	TNN	192,500	0	195,000	0	116,700	30,000	0	0	0
Citgo Petroleum Corp Lake Charles	CTS	427,800	0	440,000	0	230,000	110,000	0	0	0
Phillips66 Belle Chasse	STN	252,000	0	260,000	0	99,700	26,000	0	0	0
Phillips66 West Lake	CNB	239,400	0	252,000	0	132,000	60,000	0	0	10,600
Excel Paralubes Westlake	EXL	0	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baton Rouge	EXX	502,500	0	523,200	0	246,100	123,500	0	0	0
Marathon Petroleum Co LLC Garyville	MRT	522,000	0	548,000	0	279,000	87,000	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	233,500	0	250,000	0	95,000	28,500	0	0	0
Pelican Refining Company LLC Lake Charles	PLN	0	0	0	0	12,000	0	0	0	0
Placid Refining Co Port Allen	PLC	57,000	0	59,000	0	27,000	0	0	0	0
Shell Chemical Co St. Rose	INT	45,000	0	46,000		25,000	0	0	0	0
Valero Refining Co Meraux	MRP	125,000	0	140,000	0	60,000	0	0	0	0
Valero Refining Co Norco	GDH	205,000	0	210,000	0	160,000	83,000	0	0	0
Totals		3,273,020	0	3,423,855	0	1,703,100	548,000	0	0	10,600

Source: Energy Information Administration, "Refinery Capacity Report 2013", Table 3

Table 3 (Continued)
U.S. Department of Energy
Capacity of Louisiana Operable Petroleum Refineries as of January 1, 2013

(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	
HLL	34,000	0	0	0	0	0	13,000	0
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	0	0	0	0	0	12,000	0	0
TNN	75,600	0	0	0	0	18,500	0	0
CTS	145,000	3,000	0	47,000	0	58,000	52,000	0
STN	105,000	2,000	0	0	0	0	44,600	0
CNB	50,000	0	0	0	0	38,400	0	0
EXL	0	0	0	41,000	0	0	0	0
EXX	244,500	0	27,000	0	0	76,000	0	0
MRT	138,000	0	0	93,000	0	126,000	0	35,500
TXC	92,000	0	0	0	52,000	0	40,000	0
SHL	118,800	0	0	44,000	0	40,000	0	0
PLN	0	0	0	0	0	0	0	0
PLC	25,000	500	0	0	0	11,000	0	11,000
INT	0	0	0	0	0	0	0	0
MRP	38,000	0	0	38,000	0	32,000	0	22,000
GDH	100,000	0	0	0	0	27,500	0	0
Totals	1,165,900	5,500	27,000	263,000	52,000	439,400	149,600	68,500

Source: Energy Information Administration, "Refinery Capacity Report 2013", Table 3

Table 3 (Continued)
U.S. Department of Energy
Capacity of Louisiana Operable Petroleum Refineries as of January 1, 2013

(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
Alon Refining Krotz Springs Inc	HLL	14,000	18,000	0	0	0	0	0	0
Calcasieu Refining Co Lake Charles	CLC	0	0	0	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	CTT	6,200	0	0	0	0	0	0	0
Calumet Lubricants Co LP Princeton	CLM	0	0	0	0	0	0	0	0
Calumet Shreveport LLC Shreveport	ATL	16,000	0	0	14,000		0	21,100	1,200
Chalmette Refining LLC Chalmette	TNN	22,000	44,000	0	30,000	0	0	65,600	0
Citgo Petroleum Corp Lake Charles	CTS	127,000	77,000	63,800	100,000	0	0	0	0
Phillips66 Belle Chasse	STN	48,000	45,000	0	74,800	0	0	0	0
Phillips66 West Lake	CNB	50,000	38,500	24,000	55,000	0	12,500	49,000	0
Excel Paralubes Westlake	EXL	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baton Rouge	EXX	76,000	212,000	0	185,400	0	0	0	0
Marathon Petroleum Co LLC Garyville	MRT	103,500	110,000	71,500	147,500	0	0	106,000	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	77,000	0	70,000	0	0	0	0
Pelican Refining Company LLC Lake Charles	PLN	0	0	0	0	0	0	0	0
Placid Refining Co Port Allen	PLC	11,000	20,000	0	19,000	0	0	0	0
Shell Chemical Co St. Rose	INT	0	0	0	0	0	0	0	0
Valero Refining Co Meraux	MRP	40,000	0	16,400	45,000	0	0	14,000	0
Valero Refining Co Norco	GDH	35,000	60,000	12,000	50,000	44,000	0	24,000	0
Totals		685,200	701,500	227,500	860,700	44,000	12,500	319,700	1,200

Source: Energy Information Administration, "Refinery Capacity Report 2013", Table 3

Table 4
U.S. Department of Energy
Production Capacity of Lousiana Operable Petroleum Refineries as of January 1, 2013

(Barrels per Stream Day, Except Where Noted)

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)
Alon Refining Krotz Springs Inc	HLL	0	0	0	0	6,220	0	0	0	0
Calcasieu Refining Co Lake Charles	CLC	0	0	0	3,500	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	4	3
Calumet Shreveport LLC Shreveport	ATL	0	0	6,500	0	0	12,500	0	12	40
Chalmette Refining LLC Chalmette	TNN	16,800	5,800	0	8,200	8,200	0	9,000	0	935
Citgo Petroleum Corp Lake Charles	CTS	24,000	17,200	0	0	28,000	0	30,000	0	640
Phillips66 Belle Chasse	STN	38,000	15,500	0	0	0	0	6,869	0	125
Phillips66 West Lake	CNB	6,000	0	0	0	0	0	22,500	0	440
Excel Westlake	EXL	0	0	0	0	0	30,000	0	0	185
ExxonMobil Refining & Supply Co Baton Rouge	EXX	41,000	0	0	0	0	16,500	31,525	0	800
Marathon Petroleum Co LLC Garyville	MRT	31,000	0	30,000	23,000	26,000	0	30,600	0	1,476
Motiva Enterprises LLC Convent	TXC	16,500	0	0	0	12,500	0	0		728
Motiva Enterprises LLC Norco	SHL	16,800	0	0	0	0	0	7,316	0	180
Pelican Refining Company LLC Lake Charles	PLN	0	0	6,000	0	0	0	0	0	0
Placid Refining Co Port Allen	PLC	7,500	0	0	0	0	0	0	0	55
Shell Chemical Co St. Rose	INT	0	0	13,000	0	0	0	0	0	0
Valero Refining Co Meraux	MRP	7,300	0		0	0	0	0	0	200
Valero Refining Co Norco	GDH	21,000	0	0	0	0	0	23,500	50	845
Totals		225,900	38,500	57,500	34,700	81,420	66,000	161,310	68	6,652

MMcfd = Million cubic feet per day

Source: Energy Information Administration, "Refinery Capacity Report 2013", Table 4

Table 5
Capacities of Louisiana Refineries as of January 1, 2013

Reprinted with permission. *Oil and Gas Journal* , December 2, 2013

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
Alon Refining Krotz Springs Inc. Krotz Springs	HLL	83,000	36,000			[1]33,000	[1]12,000		[1]14,000
									[2]4,500
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	189,000	162,000	[2]28,500		[1]72,000	[3]21,500		[1]21,500
									[7]30,500
									[8]63,000
									[12]43,000
Citgo Oil Corp - Lake Charles	CTS		36,100						
Citgo Petroleum Corp. Lake Charles	CTS	440,000	79,800	[2]88,200		[1]126,000	[1]42,300	[C1]37,800	[1]103,500
							[3]52,200		[2]6,300
									[4]26,100
									[5]32,400
									[8]64,800
Phillips66 Belle Chasse	STN	247,000	97,900	[1]23,400		[1]94500	[1]40,200		[1]43,200
									[7]65,400
									[12]58,500
									[13]32,400
Phillips66 Westlake	CNB	239,000	106,200	[2]61,000		[1]46,100	[3]43,200	[3]35,100	[1]51,900
								[3]27,900	[4]25,100
									[5]35,000
									[6]4,000
									[7]24,000
									[8]45,700
									[12]31,500
									[13]12,100
ExxonMobil Refining Supply Co. Baton Rouge	EXX	502,500	236,500	117,500		[1]232,500	[2]73,500	[C1]24,500	[1]73,500
									[2]105,000
									[7]183,000
									[11]23,500
									[12]101,000
									[13]47,500
Marathon Ashland Petroleum LLC Garyville	MRT	522,000	265,100	[2]86,000		[1]131,100	[3]121,200	[1]91,200	[1]100,700
									[4]72,700
									[5]79,800
									[8]100,700
									[12]104,500
Motiva Enterprises LLC Convent	TXC	227,000	104,000		[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	[C1]31,000	[1]38,000
							[4]38,000		[5]36,000
									[12]49,500

See page 17 for notes and legend

Table 5 (Continued)
Capacities of Louisiana Refineries as of January 1, 2013

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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
HLL		[1]2,100		[3]4,500						
CLC										
CTT							[a1]2.5			
							[4]2.5			
CLM					7,500		[a1]4.5		3	
							[4]4.5			
ATL					8,000		[a1]6.1		15	
							[4]6.1			
TNN	[2]15,000							1,540	870	
CTS					8,550					
CTS	[1]20,700		[1]13,500	[3]28,800	9,900	[1]3,150	[a1]47.7	3,870	567	
							[6]10.8			
STN	[2]34,200		[1]30,000				[7]10.4	1100	80	
			[2]8,100							
CNB	[1]7,700	[1]1900					[a1]15.0	3,600	340	
							[4]112.0			
EXX	[1]40,000	[1]9,500			16,000		[4]12.0	5,430	690	
MRT	[2]30,900			[1]21,900				5,492	1,087	31,400
				[3]24,700						
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	1,020	140	

See page 17 for notes and legend

Table 5 (Continued)
Capacities of Louisiana Refineries as of January 1, 2013

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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
Placid Refining Co. LLC Port Allen	PLC	60,000	27,000			[1]25,000	[1]11,000		[1]11,000
									[5]20,000
									[12]20,000
Shell Chemical Co. - St. Rose	INT	55,000	28,000						
Valero Energy Corp. Meraux	MRP	135,000	50,000			[1]37,000			[2]35,000
									[7]52,000
									[9]12,000
									[13]24,750
Valero Energy Corp. Norco	GDH	250,000	200,000	[2]70,400		[1]100,000	[3]25,000		[2]36,000
									[5]48,000
									[8]35,100
									[12]12,000
Totals		3,255,500	1,530,100	496,380	12,520	1,090,200	546,100	315,780	2,504,650

See page 17 for notes and legend

Table 5 (Continued)
Capacities of Louisiana Refineries as of January 1, 2013

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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
PLC	[2]7,500								50	
INT										
MRP	[2]8,500								1,800	
GDH	[1]19,000							4,500	450	
Totals	211,500	25,280	51,600	91,900	49,950	11,150	342	26,522	6,732	31,400

See page 17 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 regenerative
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

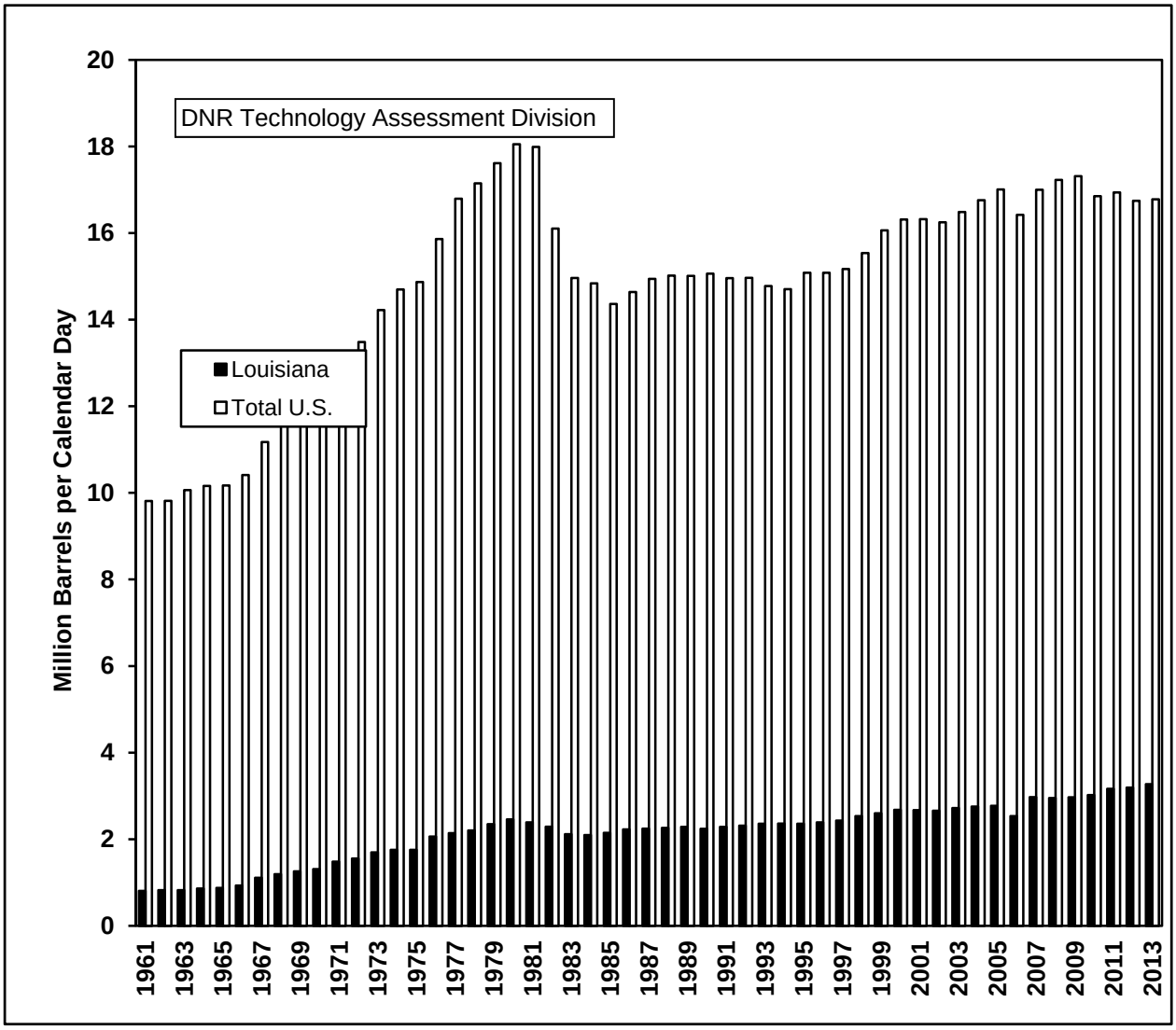
NOTES

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

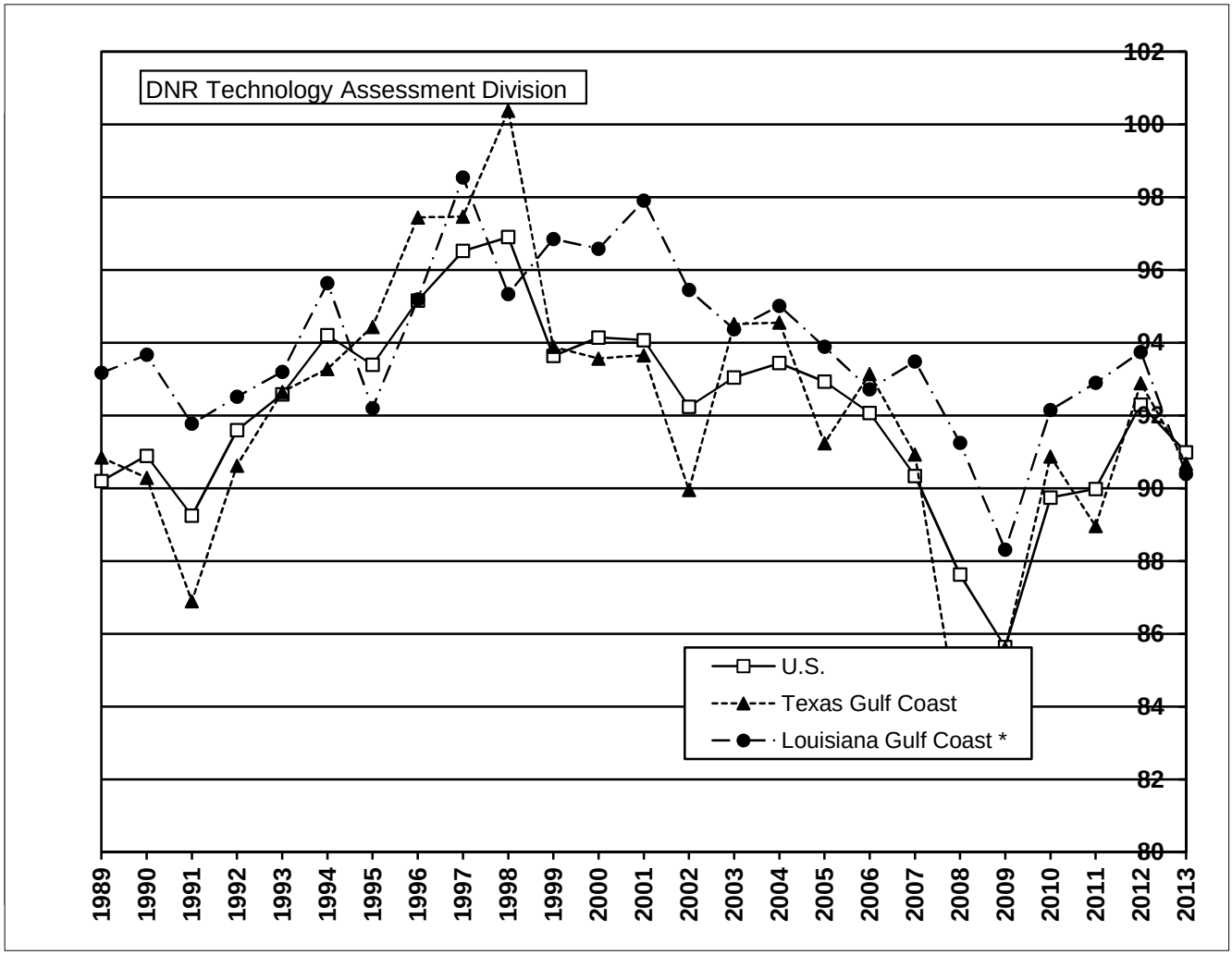
1982 - 2004: EIA, "Petroleum Supply Annual, Vol. 1"

2005 - 2013: EIA, "Refinery Capacity Report"

1995: Louisiana data from DNR survey, as of June 30, 1995

1997: Louisiana data from DNR survey, as of June 30, 1997

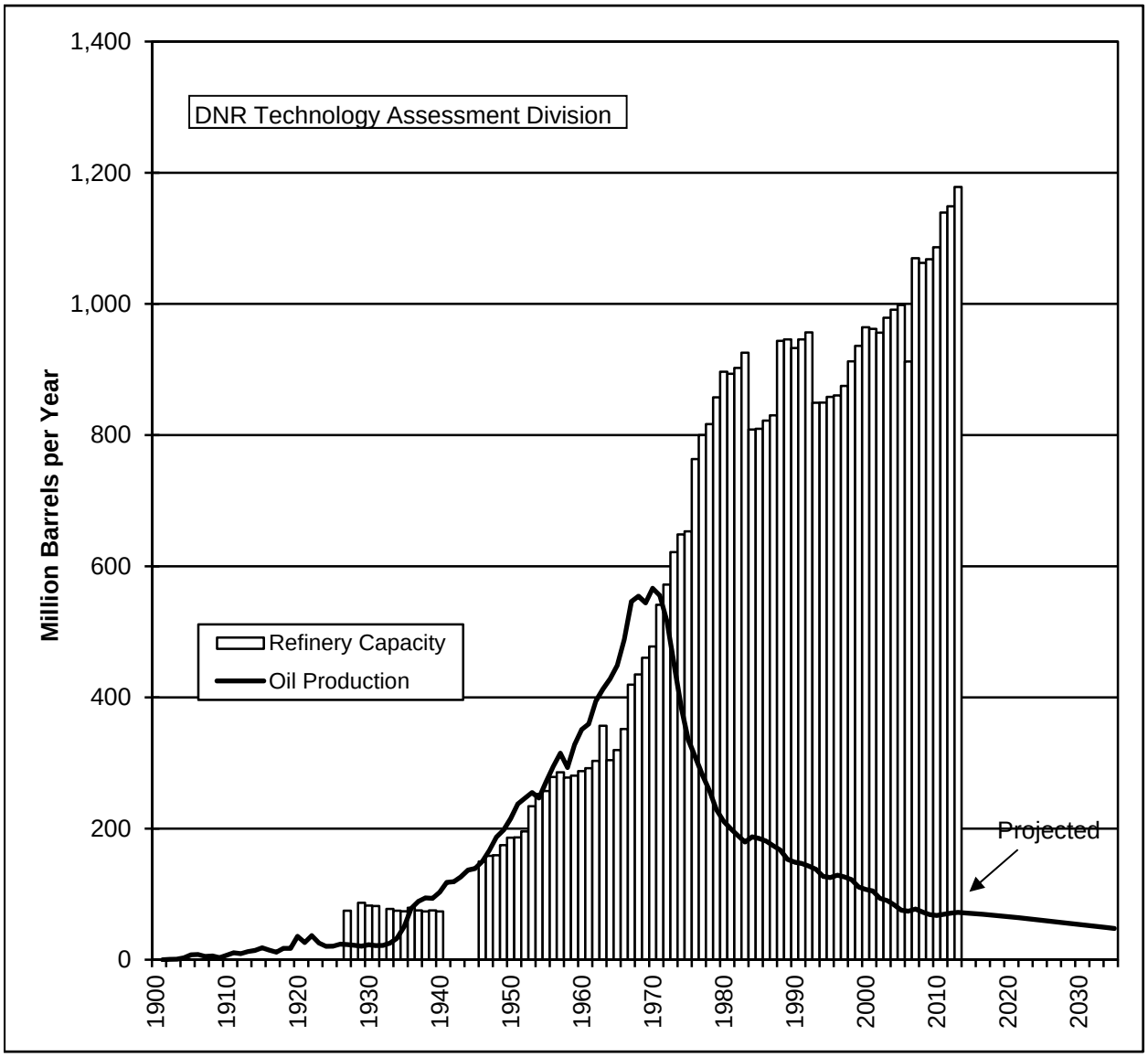
Figure 3
Operating Rates (%)
U.S., Texas Gulf Coast, Louisiana Gulf Coast Refineries



* 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.

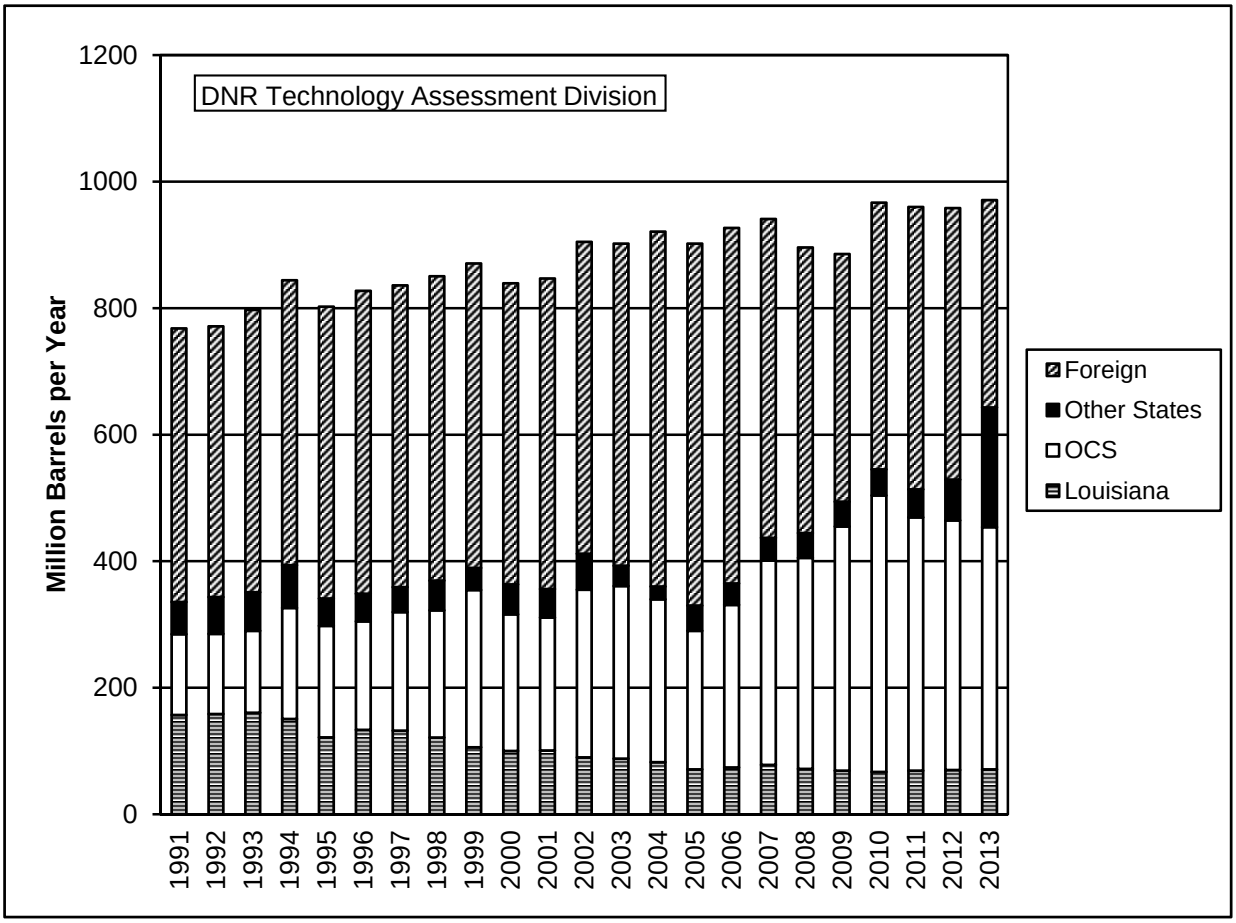
Source: EIA, "Petroleum Supply Annual, Volume 1"

Figure 4
Louisiana Oil Production (Excluding OCS) and Refinery Operable Capacity



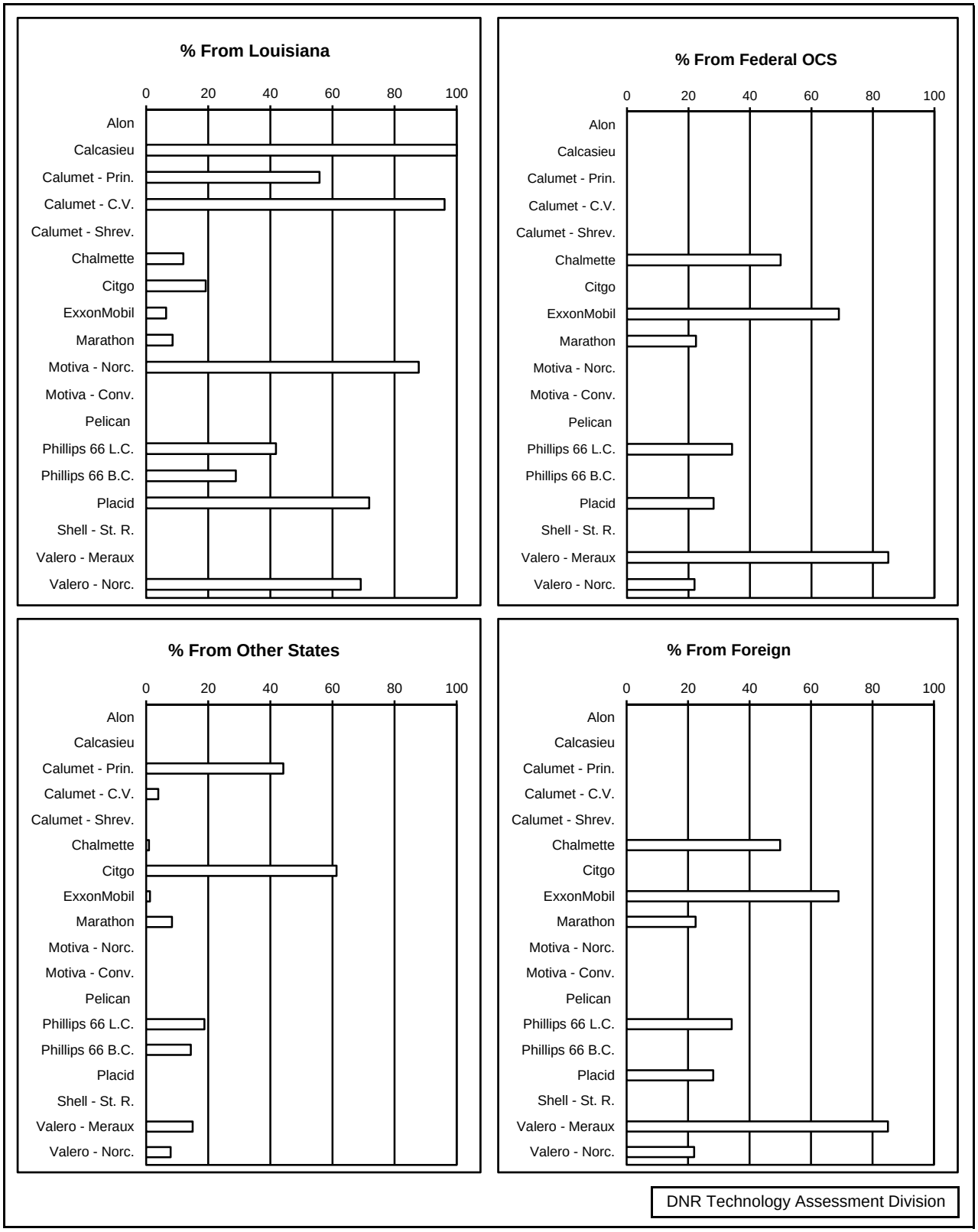
Source: Oil production data from DNR database; Refinery capacity data from DNR database and EIA, "Petroleum Supply Annual, Vol. 1" and EIA, Refinery Capacity Data Report

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
2013 DNR's R3 Report



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
2013 DNR's R3 Report

Refinery	Louisiana	Federal OCS	Other States	Foreign
Alon Refining Krotz Springs Inc Krotz Springs	0.0	0.0	0.0	0.0
Calcasieu Refining Co Lake Charles	100.0	0.0	0.0	0.0
Calumet Lubricants Co Princeton	56.0	0.0	44.0	0.0
Calumet Lubricants Co Cotton Valley	96.0	0.0	4.0	0.0
Calumet Shreveport LLC Shreveport	0.0	0.0	0.0	0.0
Chalmette Refining LLC Chalmette	12.0	50.0	1.0	37.0
Citgo Petroleum Corp Lake Charles	19.0	0.0	61.0	19.0
ExxonMobil Refining & Supply Co Baton Rouge	6.0	69.0	1.0	23.0
Marathon Petroleum Co LLC Garyville	9.0	22.0	8.0	61.0
Motiva EnterprisesLLC Norco	88.0	0.0	0.0	12.0
Motiva Enterprises LLC Convent	0.0	0.0	0.0	100.0
Pelican Refining Co Lake Charles	0.0	0.0	0.0	0.0
Phillis 66 Lake Charles	42.0	34.0	19.0	5.0
Phillis 66 Belle Chase	29.0	0.0	14.0	57.0
Placid Refining Co LLC Port Allen	72.0	28.0	0.0	0.0
Shell Chemical Co St. Rose	0.0	0.0	0.0	0.0
Valero Refining Co Meraux	0.0	85.0	15.0	0.0
Valero Refining Co Norco	69.0	22.0	8.0	1.0

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

Table 7
Louisiana Operating Refinery Mailing Address and Contact Information

Company Name	Mailing Address	Contacts *	Telephone
Alon Refining Krotz Springs Inc	PO Box 453 Krotz Springs, LA 70750 0453	Kevin Roy Gregg Byers Gregory Wilkening	(337) 566 0114
Calcasieu Refining Co	4359 W. Tank Farm Rd. Lake Charles, LA 70605	Dennis Lawson Russ Willmon Marty Poole	(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	Levi LaMothe Jerry Arnold Grady Lee	(318) 949 2421
Calumet Shreveport LLC	PO Box 3099 Shreveport, LA 71133	Jack Supple Joey Hagmann James Kelly	(318) 632 4138
Chalmette Refining LLC	500 W Saint Bernard Hwy Chalmette, LA 70043	Ajesh D'Souza Wade Maxwell	(504) 281 6266
Citgo Petroleum Corp	PO Box 1562 Lake Charles, LA 70602	Andy Sharp Tomeu Vadell Jerry Dunn	(337) 708 6470
ConocoPhillips	15551 Hwy 23 Bell Chasse, LA 70037	Bill Baker Greg Lucchesi	(504) 656 3647
ConocoPhillips	PO Box 37 Westlake, LA 70669	Grant Jones Willie Tempton Jr	(337) 491 4913
ExxonMobil Refining and Supply Co	PO Box 551 Baton Rouge, LA 70821	Barbara Beckman Mark Northcut Gerard Forde	(225) 977 8888
Marathon Petroleum Co LLC	PO Box AC Garyville, LA 70051-0842	Scott Poche Aulton Anderson John Weber	(985) 535 2241
Motiva Enterprises LLC	PO Box 37 Convent, LA 70723	Gina Frusha Odeh Khoury Kris Torberson	(225) 562 6342
Motiva Enterprises LLC	PO Box 10 Norco, LA 70079	Wendy Duhe Donald Weaver Robert Perrotta	(504) 465 6352
Placid Refining Co	1940 La Hwy 1 North Port Allen, LA 70767	Billy Judge Robert Beadle	(225) 387 0278
Valero Refining Co	PO Box 537 Norco, LA 70079	Tracie Lack Ralph Phillip Gary Devenish	(985) 764 5839
Valero Refining Co	1615 E. Judge Perez Chalmette, LA 70043	Tim Andrews Lauren Bird Chuck Morgan	(504) 278 5245

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

Table 8
Louisiana Operating Refinery Locations

Company Name	Physical Location
Alon Refining Krotz Springs Inc	Hwy 105 South Krotz Springs 70750
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	4663 West Airline Hwy. Garyville 70051
Motiva Enterprises LLC	La. 44 & 70 Convent 70723
Motiva Enterprises LLC	15536 River Rd. Norco 70079
Placid Refining Co	1940 La. 1 North. Port Allen 70767
Valero Energy Corp	14902 River Rd. Norco 70079
Valero Refining Co	2500 E. St. Bernard Meraux 70075

Table 9
Louisiana Operating Refinery Name History (1980-2013)

Refinery Name	Date	DNR Code & Location
ExxonMobil Refinery and Supply Co	1999-	EXX - Baton Rouge
Exxon Co USA	1980-99	
Phillips 66	2013-	STN - Belle Chasse
ConocoPhillips	2003-12	
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	
Alon Refining Krotz Springs Inc	2008-	HLL - Krotz Springs
Valero Refining Co	1997-07	
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	
Phillips 66	2013-	
Citgo Petroleum Corp	1984-	CTS - Lake Charles
Cities Service Co	1980-83	
Phillips66	2013-	CNB - Lake Charles
ConocoPhillips	2003-12	
Conoco Inc	1982-02	
Conoco	1980-81	
Continental Oil Co	1979	
Valero Refining Meraux	2011-	MRP - Meraux
Murphy Oil USA Inc	1984-11	
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 Oil Products US		INT - St. Rose
Shell Chemical Co	1996-11	
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
Shell Chemical Co	PO Box 10 Norco, LA 70079	Mr. Alan Sullivan	(504) 465 7360

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 in 2005 (asphalt plant, no crude capacity).
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.
Shell Chemical Co	11842 River Rd. St. Rose	55,000	May-09	Idle

Table 12
Louisiana Non-Operating Refinery Name History (1980-2012)

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	
Shell Chemical Co.	2009-13	INT - St. Rose

Table 13

Louisiana Operating Refineries not Surveyed by DNR [1]

Company Name	Contact Information	Capacity (bcd)	Process	Product
Excel Paralubes Westlake	2800 Old Spanish Trail Westlake, LA 70669	39,000 [2]	Catalytic hydrocracking	Lubes
Pelican Refining Co Lake Charles	4646 Old Town Rd Lake Charles, LA 70615 337-433-6773	15,000 [2]	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: Energy Information Administration, "Refinery Capacity Report 2013"

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