

# Louisiana Petroleum Industry Facts

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**First oil well of commercial quantities discovered in the state:**

The Heywood #1 Jules Clement well, drilled near Evangeline, Louisiana, in Acadia Parish, which was drilled to a depth of approximately 1,700 feet in September 1901 (counties are called "parishes" in Louisiana).

**First oil field discovered:** Jennings Field, Acadia Parish, September 1901

**First over-water drilling in America:** Caddo Lake near Shreveport, Louisiana, circa 1905

**First natural gas pipeline laid in Louisiana:** Caddo Field to Shreveport in 1908

**Largest natural gas field in Louisiana:** Monroe Field, which was discovered in 1916

**Number of salt domes:** 204 are known to exist, 77 of which are located offshore

**Parishes producing oil or gas:** All 64 of Louisiana's parishes

**Parish with greatest natural gas production:** Vermilion

**Parish with greatest oil production:** Plaquemines

**Parish with greatest combined production:** Plaquemines

**Parish with most wells:** Caddo

**Wells drilled in Louisiana since 1901 (as of August 5, 1996):** 71,438 oil wells; 36,184 gas wells; 180,861 total wells

**Deepest borehole drilled in Louisiana:** Martin Exploration #1 Eckart in 1981, St. Landry Parish, 25,703 feet total depth (compared to the deepest borehole drilled in the United States: Lone Star Producing #1 Bertha Rogers in 1974, Washita County, Oklahoma, 31,441 feet total depth)

**Deepest producing well in Louisiana:** Texaco-SL 4666-1, November 1969, Caillou Island, Terrebonne Parish, 21,924 feet total depth

**Existing oil or gas fields as of December 31, 1998:** 1,775 Reserves

**Crude oil and condensate oil produced from 1901 to 1998:** 16,563,234,543 barrels

**Crude oil and condensate produced in 1998:** 132,376,274 barrels

(Source: Louisiana Department of Natural Resources.)

**Natural gas and casinghead gas produced from 1901 to 1998:** 144,452,229,386 thousand cubic feet (MFC)

**Natural gas produced in 1998:** 1,565,921,421 thousand cubic feet (MFC)

(Source: Louisiana Department of Natural Resources.)

**Dry Natural Gas Proven Reserves 1997**

North Louisiana	3,093	billion cubic feet
South Louisiana	5,585	billion cubic feet
State Waters	725	billion cubic feet
Federal Offshore (Louisiana)	21,934	billion cubic feet

(Source: Energy Information Administration, Office of Oil and Gas.)

**Crude Oil Proven Reserves for 1997**

North Louisiana	136	million barrels
South Louisiana	427	million barrels
State Waters	151	million barrels
Federal Offshore (Louisiana)	2,587	million barrels

(Source: Energy Information Administration, Office of Oil and Gas.)

## AVERAGE OIL AND GAS WELL DRILLING COSTS FOR 1997

<i>Oil Wells</i>	<i>Avg. Depth/Feet</i>	<i>Cost/Well</i>
Louisiana (all)	9,481	\$1,592,000
North Louisiana	3,453	210,000
South Louisiana	12,229	2,341,000
Offshore LA (state waters)	9,813	4,840,000
Federal OCS <sup>1</sup>	11,019	6,733,000
Deepwater Gulf	11,929	8,218,000
United States	5,115	445,000

<i>Gas Wells</i>	<i>Avg. Depth/Feet</i>	<i>Cost/Well</i>
Louisiana	9,597	\$2,715,000
North Louisiana	7,372	531,000
South Louisiana	12,140	3,629,000
Offshore LA (state waters)	11,465	6,070,000
Federal OCS <sup>1</sup>	11,930	6,889,000
Deepwater Gulf	13,964	13,477,000
United States	6,304	723,000

<i>Dry Holes</i>	<i>Avg. Depth/Feet</i>	<i>Cost/Well</i>
Louisiana	9,373	\$2,577,000
North Louisiana	5,365	229,000
South Louisiana	11,378	1,935,000
Offshore LA (state waters)	10,310	3,931,000
Federal OCS <sup>1</sup>	10,962	5,676,000
Deepwater Gulf	13,446	11,628,000
United States	5,825	655,000

<i>All Wells</i>	<i>Avg. Depth/Feet</i>	<i>Cost/Well</i>
Louisiana	9,498	\$2,645,000
North Louisiana	6,293	408,000
South Louisiana	11,988	2,604,000
Offshore LA (state waters)	10,584	5,076,000
Federal OCS <sup>1</sup>	11,356	6,292,000
Deepwater Gulf	13,222	11,262,000
United States	5,755	604,000

Source: 1997 Joint Association Survey on Drilling Costs.

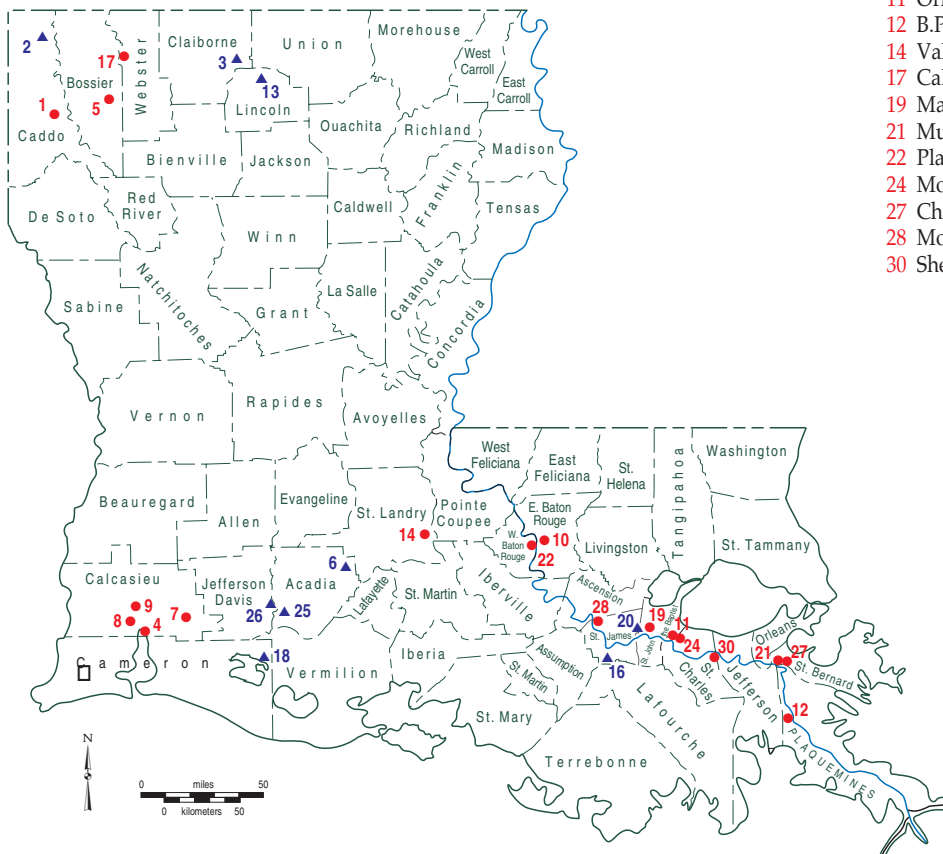
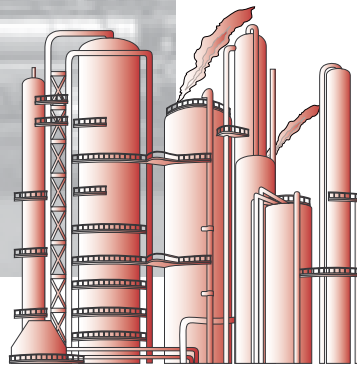


# Louisiana Crude Oil Refineries

September 1999

*Currently the state has 18 refineries in operation, with 2,616,190 barrels per day of refining capacity, which is approximately 15 percent of the nation's refining capacity.*

*(Source: Louisiana Mid-Continent Oil and Gas Association.)*



● Operating Refineries □

- 1 Pennzoil-Quaker State Corp./Shreveport □
- 4 Calcasieu Refining Co./Lake Charles □
- 5 Calumet Lubricants Co., L.P./Princeton □
- 7 American International Company/Lake Charles □
- 8 CITGO Petroleum Corp./Lake Charles □
- 9 Conoco Inc./Lake Charles □
- 10 Exxon Corp., U.S.A./Baton Rouge □
- 11 Orion Refining Co./Norco □
- 12 B.P. Amoco PLC/Belle Chase □
- 14 Valero Refining Company-Louisiana/Krotz Springs □
- 17 Calumet Lubricants Co., L.P./Cotton Valley □
- 19 Marathon Ashland Petroleum LLC/Garyville □
- 21 Murphy Oil U.S.A., Inc./Meroux □
- 22 Placid Refining Co./Port Allen □
- 24 Motiva Enterprises LLC/Norco □
- 27 Chalmette Refining LLC/Chalmette □
- 28 Motiva Enterprises LLC/Convent □
- 30 Shell Chemical/St. Rose □

▲ Nonoperating Refineries □

- 2 Bayou State Oil Corp./Hosston □
- 3 Lisbon Refinery J.V., LLC/Lisbon □
- 6 Canal Refining Co./Church Point □
- 13 El Paso field Services/Dubach □
- 16 St. James Company LLC/St. James □
- 18 Tina Resources, Inc./Talen's Landing □
- 20 Petroleum Fuel & Terminal Co./Mt. Airy □
- 25 Quantum Fuel & Refining/Egan □
- 26 Gold Line Refining, Ltd./Jennings □

Note: Refineries nos. 15, 23, and 29 have been intentionally removed from this list because they no longer produce finished refinery products (no. 15) or have been dismantled (nos. 23 and 29).

Source: Louisiana Department of Natural Resources

## WHAT A BARREL OF CRUDE OIL MAKES<sup>1</sup>

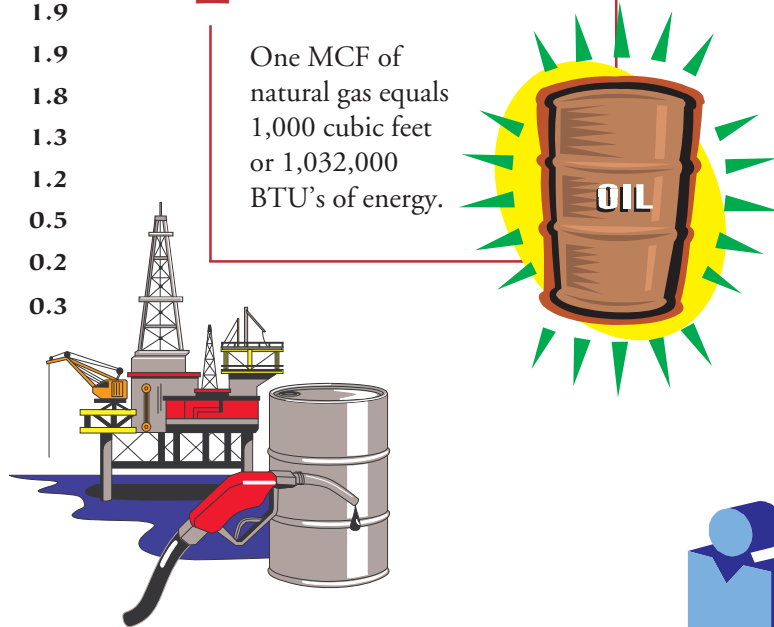
<i>PRODUCT</i>	<i>GALLONS PER BARREL</i>
Gasoline	19.5
Distillate fuel oil (includes home heating oil and diesel fuel)	9.2
Kerosene-type jet fuel	4.1
Residual fuel oil (heavy oils used as fuels in industry, marine transportation, and for electric power generation)	2.3
Liquefied refinery gasses	1.9
Still gas	1.9
Coke	1.8
Asphalt and road oil	1.3
Petrochemical feedstocks	1.2
Lubricants	0.5
Kerosene	0.2
Other	0.3

Source: American Petroleum Institute (API).

<sup>1</sup>Figures are based on 1995 average yields for U.S. refineries. One barrel contains 42 gallons of crude oil. The total volume of products made is 44.2 gallons, which is 2.2 gallons greater than the original 42 gallons of crude oil. This represents "processing gain" that occurs during refining.

**CONVERSION**  
**ENERGY** One barrel of oil equals 42 gallons or 5,800,000 BTU's of energy.

One MCF of natural gas equals 1,000 cubic feet or 1,032,000 BTU's of energy.



## LOUISIANA OIL AND GAS INDUSTRY EMPLOYMENT STATISTICS<sup>1</sup>

<i>YEAR</i>	<i>EXPLORATION AND PRODUCTION</i>	<i>REFINING</i>	<i>PIPELINES— OIL &amp; PRODUCTS</i>	<i>GAS UTILITIES</i>	<i>MARKETING</i>	<i>TOTAL</i>
1997	51,688	9,842	792	4,102	15,469	81,893
1996	46,885	9,978	789	4,310	15,635	77,577
1995	44,144	10,361	932	4,855	16,097	76,389
1994	44,757	11,898	1,014	5,123	15,467	79,268
1993	44,302	11,639	1,078	5,250	14,960	77,229
1992	45,749	11,474	1,095	5,550	14,355	78,223
1991	54,414	11,437	1,073	5,832	14,323	87,079
1990	53,700	10,500	1,015	5,791	13,882	84,888
1985	78,500	11,700	1,200	6,700	13,900	112,000
1980	83,800	12,100	1,200	5,900	14,744	117,444
1975	54,800	9,600	950	6,500	14,700	86,550

Source: Louisiana Mid-Continent Oil and Gas Association.

<sup>1</sup> Direct employment only—no service company or spin-off positions.

## RANKINGS

Louisiana 1997 Gasoline Consumption ..... 1,998,982,000 gallons  
 U.S. 1997 Gasoline Consumption ..... 118,322,536,000 gallons

Louisiana Registered Motor Vehicles in 1996 ..... 3,318,205  
 U.S. Total Registered Motor Vehicles in 1996 ..... 206,365,156

Louisiana Gasoline Tax Rate ..... 20 cents per gallon  
 Federal Gasoline Taxes ..... 18.4 cents per gallon  
 Total Tax Per Gallon of Gasoline Purchased in Louisiana ..... 38.4 cents per gallon



Louisiana's Ranking as an Energy Producer (including offshore)  
 Second in Total Energy • Second in Natural Gas • Third in Crude Oil

Louisiana's Ranking as an Energy Producer (excluding offshore)  
 Fourth in Total Energy • Third in Natural Gas • Fourth in Crude Oil

Louisiana's Ranking as an Energy Consumer  
 Second in Industrial Energy • Second in Per Capita Energy • Third in Natural Gas • Fifth in Petroleum  
 Sixth in Total Energy • Twenty-second in Residential Energy

(Source: Louisiana Mid-Continent Oil and Gas Association.)

## PIPELINE INFORMATION

- There are an estimated 25,000 miles of natural gas interstate pipelines. There are 7,600 miles of natural gas intrastate pipelines that carry natural gas to users within the state's boundaries. Another 3,450 miles of pipelines in Louisiana transport crude oil and crude oil products. There are thousands of miles of flow lines and gathering lines moving oil and gas from wellheads to separating facilities, while other pipelines transport chemical products that have no petroleum base.
- The total assessed value of the interstate pipelines in Louisiana is \$605 million, according to the Louisiana Tax Commission. The pipeline industry employs 4,855 persons in Louisiana with an annual payroll of more than \$250 million.  
 (Source: Louisiana Mid-Continent Oil and Gas Association.)
- Louisiana is home to the world's only offshore superport, Louisiana Offshore Oil Port (LOOP), which allows supertankers to unload crude oil away from shore so that it can be transported via pipeline to onshore terminals.

The Henry Hub in Louisiana is a hub of pipelines and is the point where



financial markets determine the value of natural gas.

### *Related web site addresses:*

(LSU) Basin Research Institute (BRI)	<a href="http://www.bri.lsu.edu">www.bri.lsu.edu</a>
Louisiana Department of Natural Resources (DNR)	<a href="http://www.dnr.state.la.us">www.dnr.state.la.us</a>
Louisiana Mid-Continent Oil and Gas Association	<a href="http://www.lmoga.com">www.lmoga.com</a>
Louisiana Independent Oil and Gas Association (LIOGA)	<a href="http://www.lioga.com">www.lioga.com</a>
American Petroleum Institute (API)	<a href="http://www.api.org">www.api.org</a>
(LSU) Center for Energy Studies	<a href="http://www.energyprograms.lsu.edu">www.energyprograms.lsu.edu</a>
(LSU) Louisiana Energy & Environmental Resources & Information Center (LEERIC)	<a href="http://www.leeric.lsu.edu">www.leeric.lsu.edu</a>



<b>Webster Parish</b>		<b>Vermilion Parish</b>		<b>Lafourche Parish</b>		<b>Eugene Island Area</b>	
1. Minden .....	19N - 8W	54. Gueydan .....	11S - 1W	108. Chacahoula .....	15S - 15E	160. BL. 32	
*2. Bistineau .....	18N - 10W	55. Perry Point .....	11S - 1E	109. Raceland .....	15S - 19E	161. BL. 77	
<b>Bienville Parish</b>		<b>Acadia Parish</b>		<b>Plaquemines Parish</b>		<b>South Marsh Island Area</b>	
*3. Vacherie .....	17N - 8W	57. Jennings .....	9S - 2W	110. Valentine .....	17S - 20E	162. BL. 110	
*4. Gibsland .....	18N - 7W	58. North Crowley .....	9S - 1E	111. Cut Off .....	18S - 21E	163. BL. 126	
5. Arcadia .....	18N - 5W	59. Lawson .....	9S - 1E	112. Bully Camp .....	18S - 20E	164. BL. 128	
*6. Kings .....	15N - 8W	60. Crowley .....	10S - 1E	113. Clovelly .....	18S - 22E	165. BL. 175	
*7. Prothro .....	14N - 6W	61. Bosco .....	8S - 3E	114. Golden Meadow .....	19S - 22E	166. BL. 184	
*8. Rayburns .....	15N - 5W	62. Bosco, South .....	9S - 3E	115. Bay de Chene .....	19S - 24E	167. BL. 188	
<b>Natchitoches Parish</b>		<b>St. Landry Parish</b>		<b>Offshore</b>		<b>East Cameron Area</b>	
*9. Chestnut .....	13N - 6W	63. Port Barre .....	6S - 5E	<b>Main Pass Area</b>		<b>West Cameron Area</b>	
<b>Winn Parish</b>		<b>St. Martin Parish</b>		<b>South Pass Area</b>		<b>West Cameron Area</b>	
*10. Milams .....	13N - 3W	64. Plumb Bob .....	8S - 7E	<b>West Delta Area</b>		<b>West Cameron Area</b>	
*11. Prices .....	13N - 4W	65. Anse la Butte .....	9S - 5E	<b>Bay Marchand Area</b>		<b>West Cameron Area</b>	
*12. Drakes .....	12N - 5W	66. Section "28" .....	9S - 7E	<b>South Timbalier Area</b>		<b>East Baton Rouge Parish</b>	
*13. Coochie Brake .....	10N - 4W	67. St. Martinville .....	10S - 6E	<b>Ship Shoal Area</b>			
*14. Winnfield .....	11N - 3W	68. Lake Chico .....	11S - 10E				
*15. Cedar Creek .....	11N - 2W	69. Lake Mongoulois .....	10S - 9E				
*16. Packton .....	10N - 2W	70. Bayou Bouillon .....	9S - 8E				
*17. Castor Creek .....	10N - 1E	<b>Iberville Parish</b>					
*18. Sikes .....	12N - 1W	71. Bayou des Glaises .....	8S - 8E				
<b>Caldwell Parish</b>		72. Bayou Choctaw .....	9S - 11E				
*19. Chester .....	13N - 2E	73. Bayou Bleu .....	9S - 10E				
<b>Franklin Parish</b>		++74 St. Gabriel .....	9S - 2E				
*20. Fort Necessity .....	12N - 7E	75. White Castle .....	11S - 12E				
*21. Gilbert .....	13N - 8E	<b>Iberia Parish</b>					
*22. Crowville .....	15N - 8E	76. Fausse Pointe .....	11S - 8E				
<b>Madison Parish</b>		77. Iberia .....	12S - 7E				
*23. North Tallulah .....	17N - 13E	78. Jefferson Island .....	12S - 5E				
*24. Walnut Bayou .....	17N - 13E	79. Avery Island .....	13S - 5E				
*25. Duck Port .....	16N - 14E	80. Weeks Island .....	14S - 6E				
*26. Tallulah .....	16N - 12E	81. South Tigre Lagoon .....	14S - 5E				
*27. Singer .....	15N - 11E	82. Vermilion Bay .....	16S - 5E				
*28. South Coleman .....	15N - 13E	83. Rabbit Island .....	Gulf				
<b>Tensas Parish</b>		<b>St. Mary Parish</b>					
*29. Snake Bayou .....	14N - 10E	84. West Cote Blanche Bay .....	16S - 7E				
*30. Somerset .....	14N - 11E	85. Cote Blanche Island .....	15S - 7E				
*31. Newellton .....	13N - 12E	86. Jeanerette .....	13S - 9E				
<b>Catahoula Parish</b>		87. Charenton .....	13S - 9E				
*32. Foules .....	10N - 8E	88. Franklin .....	14S - 9E				
<b>Rapides Parish</b>		89. Belle Isle .....	17S - 10E				
33. Cheneyville .....	1S - 2E	<b>Ascension Parish</b>					
<b>Evangeline Parish</b>		++90. Darrow .....	10S - 2E				
34. Pine Prairie .....	3S - 1W	++91. Sorrento .....	10S - 4E				
35. Reddell .....	4S - 1W	<b>Assumption Parish</b>					
<b>Calcasieu Parish</b>		92. Napoleonville .....	12S - 13E				
36. North Starks .....	8S - 13W	<b>St. James Parish</b>					
37. Starks .....	9S - 12W	++93. Hester-Vacherie .....	12S - 5E				
38. Edgerly .....	9S - 11W	<b>Terrebonne Parish</b>					
39. Sulphur Mines .....	9S - 10W	94. Bay Junop .....	21S - 14E				
40. Vinton .....	10S - 12W	95. Dog Lake .....	21S - 16E				
41. Lockport .....	10S - 9W	96. Four Isle Dome .....	21S - 16E				
<b>Jefferson Davis Parish</b>		97. Bay St. Elaine .....	22S - 18E				
42. Iowa .....	9S - 6W	98. Lake Pelto .....	23S - 18E				
43. Woodlawn .....	9S - 6W	99. Caillou Island .....	23S - 20E				
44. Welsh .....	9S - 5W	100. Lake Barre .....	21S - 20E				
45. Roanoke .....	9S - 4W	<b>St. Charles Parish</b>					
<b>Cameron Parish</b>		101. Paradis .....	14S - 20E				
46. Black Bayou .....	12S - 12W	102. Good Hope .....	12S - 8E				
47. Hackberry, West .....	12S - 10W	103. Bayou des Allemands .....	15S - 20E				
48. Hackberry, East .....	12S - 9W	104. Bayou Couba .....	15S - 21E				
49. Big Lake .....	12S - 8W	105. Lake Salvador .....	16S - 22E				
50. Cameron Meadows .....	14S - 13W	<b>Jefferson Parish</b>					
51. Calcasieu Lake .....	13S - 9W	106. Barataria .....	16S - 23E				
52. Sweet Lake .....	13S - 8W	107. Lafitte .....	17S - 24E				
53. Mallard Bay .....	12S - 3W						

Information compiled by Bill Marsalis, Louisiana Office of Mineral Resources; Chacko John, Brian Harder, Reed Bourgeois, and Riley Milner, LGS. Graphic design by Lisa Pond and edited by Margo Olinde, LGS.



**Louisiana Geological Survey**  
**208 Howe-Russell Geoscience Complex**  
**Baton Rouge, Louisiana 70893**  
**225 • 388 • 5320 Fax 225 • 388 • 3662**  
**[www.lgs.lsu.edu](http://www.lgs.lsu.edu)**

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