

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 ¹	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 ¹	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 ¹	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 ¹	11,356	6,292,000
Deepwater Gulf	13,222	11,262,000
United States	5,755	604,000

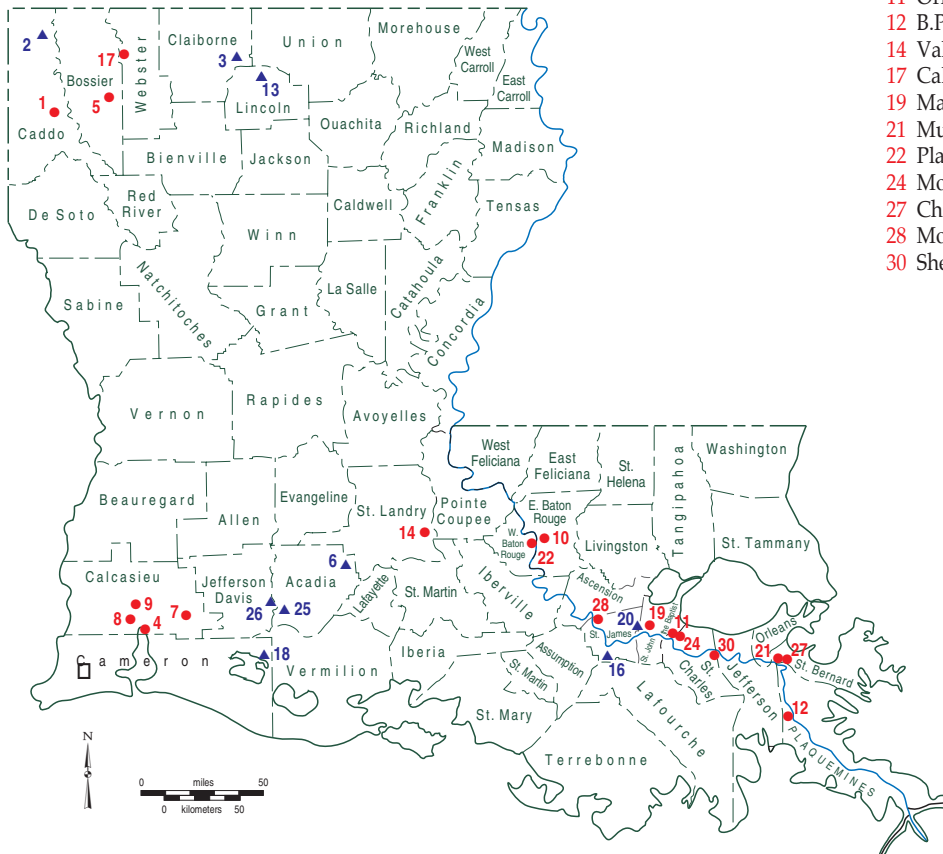
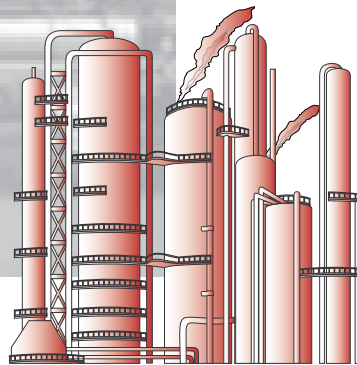
Source: 1997 Joint Association Survey on Drilling Costs.

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 MAKES¹

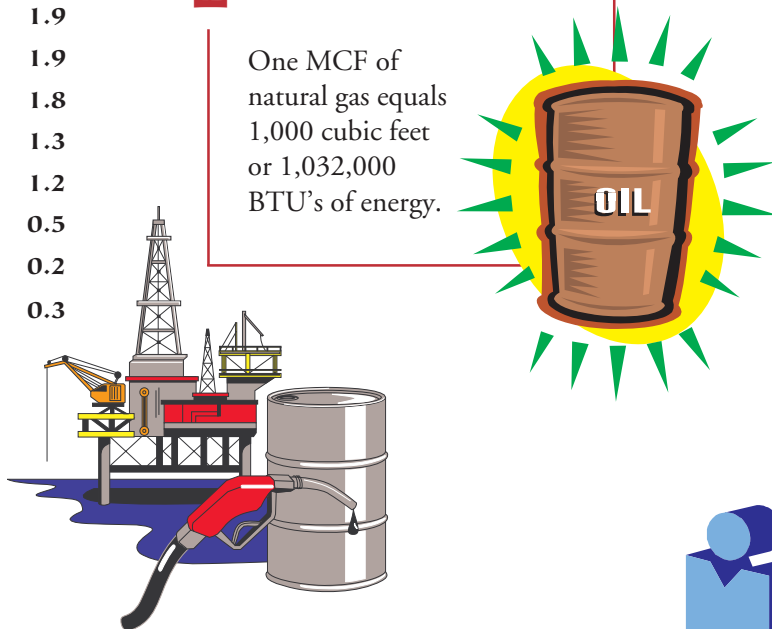
<i>PRODUCT</i>	<i>GALLONS PER BARREL</i>
Gasoline	19.5
Distillate fuel oil (includes home heating oil and diesel fuel)	9.2
Kerosene-type jet fuel	4.1
Residual fuel oil (heavy oils used as fuels in industry, marine transportation, and for electric power generation)	2.3
Liquefied refinery gasses	1.9
Still 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).

¹Figures 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 STATISTICS¹

<i>YEAR</i>	<i>EXPLORATION AND PRODUCTION</i>	<i>REFINING</i>	<i>PIPELINES— OIL & 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.

¹ 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

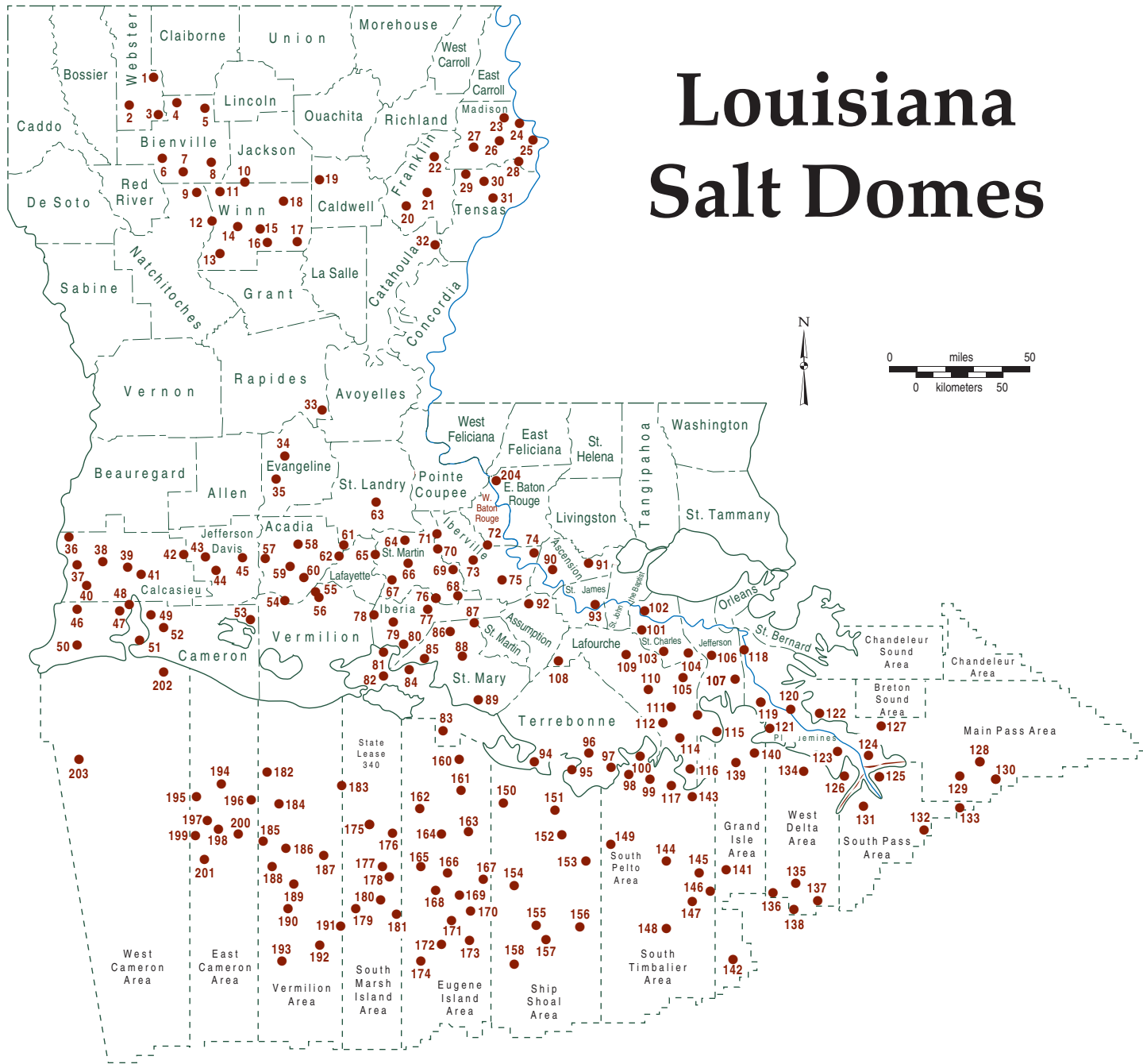


financial markets determine the value of natural gas.

Related web site addresses:

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

Louisiana Salt Domes



FOR MORE INFORMATION
 Call (225) 388-8590 or Fax (225) 388-3662,
 or visit our web site at www.lgs.lsu.edu for
 our free list of publications

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

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