



Independent Statistics & Analysis

U.S. Energy Information
Administration

Refinery Capacity Report

June 2018

With Data as of January 1, 2018



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Table 1. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2018

PAD District and State	Number of Operable Refineries			Atmospheric Crude Oil Distillation Capacity					
				Barrels per Calendar Day			Barrels per Stream Day		
	Total	Operating	Idle ^a	Total	Operating	Idle ^b	Total	Operating	Idle ^b
PAD District I	8	8	0	1,223,500	1,223,500	0	1,283,800	1,283,800	0
Delaware.....	1	1	0	182,200	182,200	0	190,200	190,200	0
New Jersey.....	2	2	0	418,000	418,000	0	430,800	430,800	0
Pennsylvania.....	4	4	0	601,000	601,000	0	639,800	639,800	0
West Virginia.....	1	1	0	22,300	22,300	0	23,000	23,000	0
PAD District II	27	27	0	4,092,000	4,070,000	22,000	4,338,264	4,315,264	23,000
Illinois.....	4	4	0	998,865	976,865	22,000	1,074,700	1,051,700	23,000
Indiana.....	2	2	0	442,300	442,300	0	460,800	460,800	0
Kansas.....	3	3	0	389,920	389,920	0	400,500	400,500	0
Kentucky.....	2	2	0	282,500	282,500	0	298,300	298,300	0
Michigan.....	1	1	0	139,000	139,000	0	147,000	147,000	0
Minnesota.....	2	2	0	408,515	408,515	0	442,700	442,700	0
North Dakota.....	2	2	0	93,300	93,300	0	94,600	94,600	0
Ohio.....	4	4	0	597,800	597,800	0	633,000	633,000	0
Oklahoma.....	5	5	0	521,800	521,800	0	551,664	551,664	0
Tennessee.....	1	1	0	180,000	180,000	0	185,000	185,000	0
Wisconsin.....	1	1	0	38,000	38,000	0	50,000	50,000	0
PAD District III	56	56	0	9,762,196	9,762,196	0	10,425,630	10,425,630	0
Alabama.....	3	3	0	141,675	141,675	0	150,500	150,500	0
Arkansas.....	2	2	0	90,500	90,500	0	92,700	92,700	0
Louisiana.....	17	17	0	3,302,507	3,302,507	0	3,514,230	3,514,230	0
Mississippi.....	3	3	0	389,500	389,500	0	409,800	409,800	0
New Mexico.....	2	2	0	136,600	136,600	0	151,100	151,100	0
Texas.....	29	29	0	5,701,414	5,701,414	0	6,107,300	6,107,300	0
PAD District IV	15	15	0	682,730	673,130	9,600	734,400	724,400	10,000
Colorado.....	1	1	0	103,000	103,000	0	111,500	111,500	0
Montana.....	4	4	0	214,700	205,100	9,600	222,400	212,400	10,000
Utah.....	5	5	0	196,530	196,530	0	209,100	209,100	0
Wyoming.....	5	5	0	168,500	168,500	0	191,400	191,400	0
PAD District V	29	29	0	2,838,071	2,838,071	0	3,012,400	3,012,400	0
Alaska.....	5	5	0	158,400	158,400	0	178,500	178,500	0
California.....	16	16	0	1,892,471	1,892,471	0	2,014,400	2,014,400	0
Hawaii.....	2	2	0	147,500	147,500	0	152,000	152,000	0
Nevada.....	1	1	0	2,000	2,000	0	5,000	5,000	0
Washington.....	5	5	0	637,700	637,700	0	662,500	662,500	0
U.S. Total	135	135	0	18,598,497	18,566,897	31,600	19,794,494	19,761,494	33,000

Table 1. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2018

PAD District and State	Downstream Charge Capacity (Barrels per Stream Day)							
	Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro- Cracking	Catalytic Reforming	Hydrotreating/ Desulfurization	Fuels Solvent Deasphalting
			Fresh	Recycled				
PAD District I	554,400	81,500	497,500	5,000	45,300	266,700	1,055,900	22,000
Delaware	104,600	54,500	82,000	4,000	22,300	43,800	151,500	0
New Jersey	165,000	27,000	200,000	0	0	66,000	335,100	22,000
Pennsylvania	276,200	0	215,500	1,000	23,000	152,200	545,200	0
West Virginia	8,600	0	0	0	0	4,700	24,100	0
PAD District II	1,815,242	591,085	1,350,135	15,800	377,160	901,993	3,944,679	22,350
Illinois	475,400	211,700	324,300	0	99,460	249,500	956,950	0
Indiana	277,900	102,000	183,600	7,200	0	71,500	451,800	0
Kansas	156,000	74,000	104,000	500	43,000	81,600	399,200	0
Kentucky	130,000	0	104,000	0	0	56,300	274,300	13,000
Michigan	88,000	35,000	41,000	0	0	21,500	131,500	0
Minnesota	284,600	72,000	122,500	2,500	67,000	75,700	445,030	4,500
North Dakota	0	0	27,000	3,600	0	12,500	52,060	0
Ohio	159,500	58,000	208,300	0	109,000	170,300	517,900	0
Oklahoma	220,342	38,385	154,112	2,000	32,200	117,793	546,439	4,850
Tennessee	0	0	70,000	0	26,500	36,000	129,000	0
Wisconsin	23,500	0	11,323	0	0	9,300	40,500	0
PAD District III	4,835,801	1,649,180	3,076,900	33,500	1,401,100	1,920,370	9,455,935	262,400
Alabama	47,000	32,000	0	0	20,500	37,300	125,100	0
Arkansas	48,850	0	21,000	0	0	15,300	98,250	7,400
Louisiana	1,752,076	569,100	1,138,200	5,500	501,400	649,890	3,069,830	71,000
Mississippi	338,875	105,000	88,000	0	117,500	95,600	299,300	0
New Mexico	33,800	0	38,500	3,000	18,000	31,300	130,100	18,000
Texas	2,615,200	943,080	1,791,200	25,000	743,700	1,090,980	5,733,355	166,000
PAD District IV	273,100	90,800	220,460	4,990	60,200	132,350	597,690	6,000
Colorado	33,500	0	30,000	500	0	21,900	87,430	0
Montana	126,100	47,100	64,660	990	30,200	39,550	218,260	0
Utah	34,500	10,000	71,300	3,000	15,000	36,800	141,600	6,000
Wyoming	79,000	33,700	54,500	500	15,000	34,100	150,400	0
PAD District V	1,597,706	610,100	886,200	17,600	578,600	579,900	2,643,000	80,300
Alaska	26,000	0	0	0	12,500	13,500	24,500	0
California	1,199,756	516,300	718,500	14,600	481,100	408,500	2,132,000	56,000
Hawaii	71,000	11,000	22,000	0	20,000	13,500	16,500	0
Nevada	2,750	0	0	0	0	0	0	0
Washington	298,200	82,800	145,700	3,000	65,000	144,400	470,000	24,300
U.S. Total	9,076,249	3,022,665	6,031,195	76,890	2,462,360	3,801,313	17,697,204	393,050

^a Refineries where distillation units were completely idle but not permanently shutdown on January 1, 2018.

^b Includes capacity from refineries that are either completely or partially idle.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 2. Production Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

PAD District and State	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons/day)
PAD District I	84,729	10,111	43,765	22,300	20,345	21,120	84	1,110
Delaware	11,729	5,191	0	6,000	0	13,620	40	596
New Jersey	30,000	0	21,000	4,000	12,000	7,500	31	280
Pennsylvania	43,000	4,920	22,065	12,300	2,945	0	10	233
West Virginia	0	0	700	0	5,400	0	3	1
PAD District II	284,316	112,500	278,814	162,000	9,900	180,909	625	8,527
Illinois	86,600	17,200	38,100	16,000	0	67,095	202	2,380
Indiana	33,200	16,800	33,700	31,100	0	30,000	0	1,913
Kansas	33,600	0	4,000	32,300	0	23,064	120	831
Kentucky	21,000	2,500	35,400	17,000	0	0	0	448
Michigan	7,000	0	26,000	0	0	12,300	0	460
Minnesota	19,150	0	58,400	28,500	0	25,000	199	1,320
North Dakota	4,830	0	0	0	0	0	2	19
Ohio	28,950	20,000	23,800	23,200	0	14,400	0	683
Oklahoma	35,586	21,000	43,414	13,900	9,900	9,050	72	324
Tennessee	12,700	29,000	0	0	0	0	30	116
Wisconsin	1,700	6,000	16,000	0	0	0	0	33
PAD District III	646,050	199,670	201,225	324,710	192,295	498,934	860	24,863
Alabama	0	0	16,500	5,350	0	7,120	40	228
Arkansas	5,000	0	21,500	7,500	5,500	0	13	157
Louisiana	223,700	49,900	55,500	100,220	66,000	169,177	118	6,628
Mississippi	20,500	21,000	36,125	0	48,000	35,500	243	1,224
New Mexico	10,900	0	7,000	0	0	0	38	226
Texas	385,950	128,770	64,600	211,640	72,795	287,137	408	16,400
PAD District IV	49,450	0	82,350	15,950	0	27,050	232	1,029
Colorado	0	0	12,250	0	0	0	22	116
Montana	17,050	0	44,300	6,750	0	14,050	148	489
Utah	21,900	0	1,800	9,200	0	2,500	0	95
Wyoming	10,500	0	24,000	0	0	10,500	62	329
PAD District V	251,162	1,500	52,850	218,400	39,800	168,130	1,236	5,890
Alaska	0	0	13,000	5,000	0	0	13	25
California	208,462	1,500	30,250	173,100	39,800	144,480	1,065	5,005
Hawaii	5,000	0	0	3,200	0	0	21	38
Nevada	0	0	1,600	0	0	0	0	0
Washington	37,700	0	8,000	37,100	0	23,650	137	822
U.S. Total	1,315,707	323,781	659,004	743,360	262,340	896,143	3,037	41,419

^a Includes hydrogen production capacity of hydrogen plants on refinery grounds.

MMcfd = Million cubic feet per day.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Directory of Operable Petroleum Refineries on Tables 3 and 4

Refiner	State(s)	Refiner	State(s)
Alon Refining Krotz Springs Inc.....	LA	Kinder Morgan Crude & Condensate.....	TX
Alon USA Energy Inc.....	TX	Lazarus Energy LLC.....	TX
American Refining Group Inc.....	PA	Lima Refining Company.....	OH
BP Exploration Alaska Inc.....	AK	Lion Oil Co.....	AR
BP Products North America Inc.....	IN	Little America Refining Co.....	WY
BP West Coast Products LLC.....	WA	Lunday Thagard Co.....	CA
BP-Husky Refining LLC.....	OH	Magellan Terminal Holdings LP.....	TX
Big West Oil Co.....	UT	Marathon Petroleum Co LP.....	IL, KY, LA, MI, OH, TX
Buckeye Texas Processing LLC.....	TX	Monroe Energy LLC.....	PA
CHS McPherson Refinery Inc.....	KS	Motiva Enterprises LLC.....	TX
Calcasieu Refining Co.....	LA	PDV Midwest Refining LLC.....	IL
Calumet Lubricants Co LP.....	LA	Par Hawaii Refining LLC.....	HI
Calumet Montana Refining LLC.....	MT	Pasadena Refining Systems Inc.....	TX
Calumet San Antonio Refining LLC.....	TX	Paulsboro Refining Co LLC.....	NJ
Calumet Shreveport LLC.....	LA	Petro Star Inc.....	AK
Cenex Harvest States Coop.....	MT	Petromax Refining Co LLC.....	TX
Chalmette Refining LLC.....	LA	Philadelphia Energy Solutions.....	PA
Chevron USA Inc.....	CA, MS, UT	Phillips 66 Company.....	CA, LA, MT, NJ, OK, TX, WA
Citgo Petroleum Corp.....	LA	Placid Refining Co.....	LA
Citgo Refining & Chemical Inc.....	TX	Premcor Refining Group Inc.....	TX
Coffeyville Resources Rfg & Mktg.....	KS	San Joaquin Refining Co Inc.....	CA
ConocoPhillips Alaska Inc.....	AK	Santa Maria Refining Company.....	CA
Continental Refining Company LLC.....	KY	Shell Chemical LP.....	AL
Countrymark Cooperative Inc.....	IN	Shell Oil Products US.....	CA, LA, WA
Cross Oil Refining & Marketing Inc.....	AR	Silver Eagle Refining.....	UT, WY
Dakota Prairie Refining LLC.....	ND	Sinclair Wyoming Refining Co.....	WY
Deer Park Refining LTD Partnership.....	TX	South Hampton Resources Inc.....	TX
Delaware City Refining Co LLC.....	DE	St Paul Park Refining Co LLC.....	MN
Delek Refining LTD.....	TX	Suncor Energy (USA) Inc.....	CO
Diamond Shamrock Refining Co LP.....	TX	Superior Refining Company LLC.....	WI
Equistar Chemicals LP.....	TX	Tesoro Alaska Company LLC.....	AK
Ergon Refining Inc.....	MS	Tesoro Refining & Marketing Co.....	CA, ND, UT, WA
Ergon West Virginia Inc.....	WV	Toledo Refining Co LLC.....	OH
Excel Paralubes.....	LA	Torrance Refining Co LLC.....	CA
ExxonMobil Refining & Supply Co.....	IL, LA, MT, TX	Total Petrochemicals & Refining USA.....	TX
Flint Hills Resources LP.....	MN, TX	US Oil & Refining Co.....	WA
Foreland Refining Corp.....	NV	Ultramar Inc.....	CA
Goodway Refining LLC.....	AL	United Refining Co.....	PA
Hermes Consolidated LLC.....	WY	Valero Ref Company Tennessee LLC.....	TN
HollyFrontier Cheyenne Refining LLC.....	WY	Valero Refining - Meraux LLC.....	LA
HollyFrontier El Dorado Refining LLC.....	KS	Valero Refining Co California.....	CA
HollyFrontier Navajo Refining LLC.....	NM	Valero Refining Co Oklahoma.....	OK
HollyFrontier Tulsa Refining LLC.....	OK	Valero Refining Co Texas LP.....	TX
HollyFrontier Woods Cross Refining LLC.....	UT	Valero Refining New Orleans LLC.....	LA
Houston Refining LP.....	TX	WRB Refining LP.....	IL, TX
Hunt Refining Co.....	AL	Western Refining Company LP.....	TX
Hunt Southland Refining Co.....	MS	Western Refining Southwest Inc.....	NM
Island Energy Services Downstream.....	HI	Wynnewood Refining Co.....	OK
Kern Oil & Refining Co.....	CA		

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
Alabama	141,675	0	150,500	0	47,000	32,000	0	0	0
Goodway Refining LLC									
Atmore	4,100	0	5,000	0	0	0	0	0	0
Hunt Refining Co									
Tuscaloosa	46,000	0	50,000	0	18,000	32,000	0	0	0
Shell Chemical LP									
Saraland	91,575	0	95,500	0	29,000	0	0	0	0
Alaska	158,400	0	178,500	0	26,000	0	0	0	0
BP Exploration Alaska Inc									
Prudhoe Bay	6,000	0	8,000	0	0	0	0	0	0
ConocoPhillips Alaska Inc									
Prudhoe Bay	15,000	0	16,000	0	0	0	0	0	0
Petro Star Inc									
North Pole	19,700	0	22,500	0	0	0	0	0	0
Valdez	55,000	0	60,000	0	0	0	0	0	0
Tesoro Alaska Company LLC									
Kenai	62,700	0	72,000	0	26,000	0	0	0	0
Arkansas	90,500	0	92,700	0	48,850	0	0	0	0
Cross Oil Refining & Marketing Inc									
Smackover	7,500	0	7,700	0	3,850	0	0	0	0
Lion Oil Co									
El Dorado	83,000	0	85,000	0	45,000	0	0	0	0
California	1,892,471	0	2,014,400	0	1,199,756	459,300	52,000	5,000	0
Chevron USA Inc									
El Segundo	269,000	0	290,500	0	169,100	76,700	0	0	0
Richmond	245,271	0	257,200	0	123,456	0	0	0	0
Kern Oil & Refining Co									
Bakersfield	26,000	0	27,000	0	0	0	0	0	0
Lunday Thagard Co									
South Gate	8,500	0	10,000	0	5,000	0	0	0	0
Phillips 66 Company									
Rodeo	120,200	0	128,000	0	93,200	51,000	0	0	0
Wilmington	139,000	0	147,000	0	82,000	53,200	0	0	0
San Joaquin Refining Co Inc									
Bakersfield	15,000	0	25,000	0	14,300	0	0	5,000	0
Santa Maria Refining Company									
Santa Maria	9,500	0	10,000	0	10,000	0	0	0	0
Shell Oil Products US									
Martinez	156,400	0	158,000	0	102,000	25,500	22,500	0	0
Tesoro Refining & Marketing Co									
Carson	243,800	0	276,000	0	140,000	67,100	0	0	0
Martinez	166,000	0	170,000	0	156,900	53,000	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
Alabama	0	0	0	20,500	0	15,300	22,000	0
Goodway Refining LLC								
Atmore	0	0	0	0	0	0	0	0
Hunt Refining Co								
Tuscaloosa	0	0	0	20,500	0	15,300	0	0
Shell Chemical LP								
Saraland	0	0	0	0	0	0	22,000	0
Alaska	0	0	0	12,500	0	13,500	0	0
BP Exploration Alaska Inc								
Prudhoe Bay	0	0	0	0	0	0	0	0
ConocoPhillips Alaska Inc								
Prudhoe Bay	0	0	0	0	0	0	0	0
Petro Star Inc								
North Pole	0	0	0	0	0	0	0	0
Valdez	0	0	0	0	0	0	0	0
Tesoro Alaska Company LLC								
Kenai	0	0	0	12,500	0	13,500	0	0
Arkansas	21,000	0	0	0	0	15,300	0	7,400
Cross Oil Refining & Marketing Inc								
Smackover	0	0	0	0	0	0	0	0
Lion Oil Co								
El Dorado	21,000	0	0	0	0	15,300	0	7,400
California	718,500	14,600	197,700	283,400	0	197,800	210,700	56,000
Chevron USA Inc								
El Segundo	73,800	0	0	55,000	0	49,000	0	0
Richmond	90,000	0	0	103,400	0	71,300	0	56,000
Kern Oil & Refining Co								
Bakersfield	0	0	0	0	0	2,500	3,300	0
Lunday Thagard Co								
South Gate	0	0	0	0	0	0	0	0
Phillips 66 Company								
Rodeo	0	0	0	65,000	0	0	34,000	0
Wilmington	51,600	0	27,500	0	0	0	36,200	0
San Joaquin Refining Co Inc								
Bakersfield	0	0	0	0	0	0	0	0
Santa Maria Refining Company								
Santa Maria	0	0	0	0	0	0	0	0
Shell Oil Products US								
Martinez	72,000	0	42,900	0	0	31,000	0	0
Tesoro Refining & Marketing Co								
Carson	102,500	0	55,000	0	0	0	47,000	0
Martinez	72,000	1,000	0	37,000	0	26,000	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Alabama	40,100	0	20,500	30,000	24,000	0	10,500	0
Goodway Refining LLC								
Atmore	0	0	0	0	0	0	0	0
Hunt Refining Co								
Tuscaloosa	12,100	0	2,500	0	24,000	0	10,500	0
Shell Chemical LP								
Saraland	28,000	0	18,000	30,000	0	0	0	0
Alaska	13,000	0	0	11,500	0	0	0	0
BP Exploration Alaska Inc								
Prudhoe Bay	0	0	0	0	0	0	0	0
ConocoPhillips Alaska Inc								
Prudhoe Bay	0	0	0	0	0	0	0	0
Petro Star Inc								
North Pole	0	0	0	0	0	0	0	0
Valdez	0	0	0	0	0	0	0	0
Tesoro Alaska Company LLC								
Kenai	13,000	0	0	11,500	0	0	0	0
Arkansas	20,000	8,750	0	35,000	0	0	21,000	13,500
Cross Oil Refining & Marketing Inc								
Smackover	0	0	0	0	0	0	0	5,500
Lion Oil Co								
El Dorado	20,000	8,750	0	35,000	0	0	21,000	8,000
California	424,200	280,500	194,800	335,100	123,100	0	704,100	70,200
Chevron USA Inc								
El Segundo	62,500	0	41,500	51,500	14,000	0	74,000	0
Richmond	57,600	64,800	96,000	64,800	0	0	65,000	34,000
Kern Oil & Refining Co								
Bakersfield	5,000	0	0	0	9,000	0	0	0
Lunday Thagard Co								
South Gate	0	0	0	0	0	0	0	0
Phillips 66 Company								
Rodeo	27,500	0	0	35,000	0	0	0	0
Wilmington	50,800	0	12,900	32,000	0	0	55,000	0
San Joaquin Refining Co Inc								
Bakersfield	0	0	0	0	3,600	0	1,800	0
Santa Maria Refining Company								
Santa Maria	0	0	0	0	0	0	0	0
Shell Oil Products US								
Martinez	27,500	92,500	0	0	49,000	0	84,500	14,500
Tesoro Refining & Marketing Co								
Carson	45,000	37,000	10,000	22,000	0	0	95,000	0
Martinez	27,000	43,000	0	40,000	19,500	0	69,500	0

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(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
California	1,892,471	0	2,014,400	0	1,199,756	459,300	52,000	5,000	0
Tesoro Refining & Marketing Co Wilmington	97,500	0	107,000	0	65,000	42,000	0	0	0
Torrance Refining Co LLC Torrance	160,000	0	166,200	0	102,300	62,000	0	0	0
Ultramar Inc Wilmington	85,000	0	87,000	0	46,000	28,800	0	0	0
Valero Refining Co California Benicia	145,000	0	149,000	0	85,500	0	29,500	0	0
Wilmington	6,300	0	6,500	0	5,000	0	0	0	0
Colorado	103,000	0	111,500	0	33,500	0	0	0	0
Suncor Energy (USA) Inc Commerce City	103,000	0	111,500	0	33,500	0	0	0	0
Delaware	182,200	0	190,200	0	104,600	0	54,500	0	0
Delaware City Refining Co LLC Delaware City	182,200	0	190,200	0	104,600	0	54,500	0	0
Hawaii	147,500	0	152,000	0	71,000	0	0	11,000	0
Island Energy Services Downstream Honolulu	54,000	0	57,000	0	31,000	0	0	0	0
Par Hawaii Refining LLC Kapolei	93,500	0	95,000	0	40,000	0	0	11,000	0
Illinois	976,865	22,000	1,051,700	23,000	475,400	211,700	0	0	0
ExxonMobil Refining & Supply Co Joliet	238,600	0	275,000	0	126,700	57,500	0	0	0
Marathon Petroleum Co LP Robinson	245,000	0	258,000	0	75,000	30,500	0	0	0
PDV Midwest Refining LLC Lemont	179,265	0	188,700	0	77,200	40,700	0	0	0
WRB Refining LP Wood River	314,000	22,000	330,000	23,000	196,500	83,000	0	0	0
Indiana	442,300	0	460,800	0	277,900	102,000	0	0	0
BP Products North America Inc Whiting	413,500	0	430,000	0	263,900	102,000	0	0	0
Countrymark Cooperative Inc Mount Vernon	28,800	0	30,800	0	14,000	0	0	0	0
Kansas	389,920	0	400,500	0	156,000	74,000	0	0	0
CHS McPherson Refinery Inc McPherson	97,920	0	102,500	0	46,000	30,000	0	0	0
Coffeyville Resources Rfg & Mktg Coffeyville	132,000	0	136,000	0	46,000	25,000	0	0	0
HollyFrontier El Dorado Refining LLC El Dorado	160,000	0	162,000	0	64,000	19,000	0	0	0
Kentucky	282,500	0	298,300	0	130,000	0	0	0	0
Continental Refining Company LLC Somerset	5,500	0	6,300	0	0	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
California	718,500	14,600	197,700	283,400	0	197,800	210,700	56,000
Tesoro Refining & Marketing Co Wilmington	35,000	0	10,000	23,000	0	0	33,000	0
Torrance Refining Co LLC Torrance	90,000	13,600	28,300	0	0	0	20,000	0
Ultramar Inc Wilmington	56,300	0	0	0	0	18,000	0	0
Valero Refining Co California Benicia	75,300	0	34,000	0	0	0	37,200	0
Wilmington	0	0	0	0	0	0	0	0
Colorado	30,000	500	0	0	0	21,900	0	0
Suncor Energy (USA) Inc Commerce City	30,000	500	0	0	0	21,900	0	0
Delaware	82,000	4,000	0	22,300	0	43,800	0	0
Delaware City Refining Co LLC Delaware City	82,000	4,000	0	22,300	0	43,800	0	0
Hawaii	22,000	0	2,000	18,000	0	13,500	0	0
Island Energy Services Downstream Honolulu	22,000	0	0	0	0	0	0	0
Par Hawaii Refining LLC Kapolei	0	0	2,000	18,000	0	13,500	0	0
Illinois	324,300	0	0	99,460	0	214,300	35,200	0
ExxonMobil Refining & Supply Co Joliet	99,300	0	0	0	0	52,600	0	0
Marathon Petroleum Co LP Robinson	54,500	0	0	43,500	0	82,000	0	0
PDV Midwest Refining LLC Lemont	69,500	0	0	0	0	0	35,200	0
WRB Refining LP Wood River	101,000	0	0	55,960	0	79,700	0	0
Indiana	183,600	7,200	0	0	0	6,500	65,000	0
BP Products North America Inc Whiting	175,000	7,000	0	0	0	0	65,000	0
Countrysmark Cooperative Inc Mount Vernon	8,600	200	0	0	0	6,500	0	0
Kansas	104,000	500	0	43,000	0	58,100	23,500	0
CHS McPherson Refinery Inc McPherson	24,000	500	0	43,000	0	24,600	0	0
Coffeyville Resources Rfg & Mktg Coffeyville	36,000	0	0	0	0	26,000	0	0
HollyFrontier El Dorado Refining LLC El Dorado	44,000	0	0	0	0	7,500	23,500	0
Kentucky	104,000	0	0	0	0	22,000	34,300	13,000
Continental Refining Company LLC Somerset	0	0	0	0	0	0	1,300	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
California	424,200	280,500	194,800	335,100	123,100	0	704,100	70,200
Tesoro Refining & Marketing Co Wilmington	34,000	0	19,000	10,000	23,000	0	45,000	0
Torrance Refining Co LLC Torrance	25,300	0	0	19,800	0	0	108,300	0
Ultramar Inc Wilmington	32,000	0	0	45,000	0	0	67,000	0
Valero Refining Co California Benicia	30,000	43,200	15,400	15,000	5,000	0	39,000	21,700
Wilmington	0	0	0	0	0	0	0	0
Colorado	22,000	0	12,100	23,330	0	0	30,000	0
Suncor Energy (USA) Inc Commerce City	22,000	0	12,100	23,330	0	0	30,000	0
Delaware	50,000	33,000	16,500	52,000	0	0	0	0
Delaware City Refining Co LLC Delaware City	50,000	33,000	16,500	52,000	0	0	0	0
Hawaii	13,000	0	0	0	0	0	0	3,500
Island Energy Services Downstream Honolulu	0	0	0	0	0	0	0	3,500
Par Hawaii Refining LLC Kapolei	13,000	0	0	0	0	0	0	0
Illinois	439,400	115,500	66,950	328,300	0	0	0	6,800
ExxonMobil Refining & Supply Co Joliet	169,500	0	0	78,000	0	0	0	0
Marathon Petroleum Co LP Robinson	74,500	41,500	0	79,500	0	0	0	0
PDV Midwest Refining LLC Lemont	111,100	0	13,700	94,500	0	0	0	6,800
WRB Refining LP Wood River	84,300	74,000	53,250	76,300	0	0	0	0
Indiana	78,000	6,500	46,000	134,300	0	0	187,000	0
BP Products North America Inc Whiting	69,000	0	46,000	120,800	0	0	187,000	0
Countrymark Cooperative Inc Mount Vernon	9,000	6,500	0	13,500	0	0	0	0
Kansas	125,000	49,000	21,000	127,200	27,000	0	50,000	0
CHS McPherson Refinery Inc McPherson	39,000	0	0	43,200	0	0	0	0
Coffeyville Resources Rfg & Mktg Coffeyville	36,000	22,000	9,000	30,000	27,000	0	0	0
HollyFrontier El Dorado Refining LLC El Dorado	50,000	27,000	12,000	54,000	0	0	50,000	0
Kentucky	57,800	0	31,000	78,500	0	0	107,000	0
Continental Refining Company LLC Somerset	1,300	0	0	1,000	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
Kentucky	282,500	0	298,300	0	130,000	0	0	0	0
Marathon Petroleum Co LP Catlettsburg	277,000	0	292,000	0	130,000	0	0	0	0
Louisiana	3,302,507	0	3,514,230	0	1,752,076	558,500	0	0	10,600
Alon Refining Krotz Springs Inc Krotz Springs	80,000	0	83,000	0	36,200	0	0	0	0
Calcasieu Refining Co Lake Charles	125,000	0	126,000	0	36,000	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	13,020	0	14,000	0	0	0	0	0	0
Princeton	8,300	0	8,655	0	7,000	0	0	0	0
Calumet Shreveport LLC Shreveport	57,000	0	60,000	0	28,000	0	0	0	0
Chalmette Refining LLC Chalmette	190,000	0	197,000	0	169,000	30,000	0	0	0
Citgo Petroleum Corp Lake Charles	418,000	0	440,000	0	230,000	110,000	0	0	0
Excel Paralubes Westlake	0	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baton Rouge	502,500	0	523,200	0	246,100	123,500	0	0	0
Marathon Petroleum Co LP Garyville	556,000	0	586,000	0	289,000	94,500	0	0	0
Phillips 66 Company Belle Chasse	249,700	0	262,875	0	104,176	26,000	0	0	0
Westlake	260,000	0	273,000	0	132,000	60,000	0	0	10,600
Placid Refining Co Port Allen	75,000	0	82,500	0	27,000	0	0	0	0
Shell Oil Products US Convent	209,787	0	260,000	0	116,300	0	0	0	0
Norco	218,200	0	250,000	0	91,300	28,500	0	0	0
Valero Refining - Meraux LLC Meraux	125,000	0	128,000	0	60,000	0	0	0	0
Valero Refining New Orleans LLC Norco	215,000	0	220,000	0	180,000	86,000	0	0	0
Michigan	139,000	0	147,000	0	88,000	35,000	0	0	0
Marathon Petroleum Co LP Detroit	139,000	0	147,000	0	88,000	35,000	0	0	0
Minnesota	408,515	0	442,700	0	284,600	72,000	0	0	0
Flint Hills Resources LP Saint Paul	310,000	0	339,000	0	234,000	72,000	0	0	0
St Paul Park Refining Co LLC Saint Paul	98,515	0	103,700	0	50,600	0	0	0	0
Mississippi	389,500	0	409,800	0	338,875	105,000	0	0	0
Chevron USA Inc Pascagoula	352,000	0	370,000	0	314,000	105,000	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
Kentucky	104,000	0	0	0	0	22,000	34,300	13,000
Marathon Petroleum Co LP Catlettsburg	104,000	0	0	0	0	22,000	33,000	13,000
Louisiana	1,138,200	5,500	55,000	391,900	54,500	507,690	142,200	71,000
Alon Refining Krotz Springs Inc Krotz Springs	34,000	0	0	0	0	0	13,000	0
Calcasieu Refining Co Lake Charles	0	0	0	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	0	0	0	0	0	0	0	0
Princeton	0	0	0	0	0	0	0	0
Calumet Shreveport LLC Shreveport	0	0	0	0	0	12,000	0	0
Chalmette Refining LLC Chalmette	75,600	0	0	0	0	22,700	30,000	0
Citgo Petroleum Corp Lake Charles	148,000	3,000	0	51,200	0	60,000	53,200	0
Excel Paralubes Westlake	0	0	0	43,000	0	0	0	0
ExxonMobil Refining & Supply Co Baton Rouge	244,500	0	27,000	0	0	77,000	0	0
Marathon Petroleum Co LP Garyville	145,000	0	0	120,000	0	135,500	0	38,000
Phillips 66 Company Belle Chasse	105,000	2,000	0	0	0	48,490	0	0
Westlake	50,000	0	0	0	0	44,000	0	0
Placid Refining Co Port Allen	25,000	500	0	0	0	11,000	0	11,000
Shell Oil Products US Convent	92,300	0	0	0	54,500	0	46,000	0
Norco	118,800	0	0	44,000	0	40,000	0	0
Valero Refining - Meraux LLC Meraux	0	0	0	48,700	0	32,000	0	22,000
Valero Refining New Orleans LLC Norco	100,000	0	28,000	85,000	0	25,000	0	0
Michigan	41,000	0	0	0	0	21,500	0	0
Marathon Petroleum Co LP Detroit	41,000	0	0	0	0	21,500	0	0
Minnesota	122,500	2,500	67,000	0	0	37,000	38,700	4,500
Flint Hills Resources LP Saint Paul	92,000	0	67,000	0	0	37,000	13,800	0
St Paul Park Refining Co LLC Saint Paul	30,500	2,500	0	0	0	0	24,900	4,500
Mississippi	88,000	0	0	117,500	0	61,600	34,000	0
Chevron USA Inc Pascagoula	88,000	0	0	117,500	0	61,600	34,000	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Kentucky	57,800	0	31,000	78,500	0	0	107,000	0
Marathon Petroleum Co LP Catlettsburg	56,500	0	31,000	77,500	0	0	107,000	0
Louisiana	715,940	799,590	242,000	925,100	44,000	12,500	305,700	25,000
Alon Refining Krotz Springs Inc Krotz Springs	14,000	18,000	0	0	0	0	0	0
Calcasieu Refining Co Lake Charles	0	0	0	0	0	0	0	0
Calumet Lubricants Co LP Cotton Valley	6,200	0	0	0	0	0	0	0
Princeton	0	0	0	0	0	0	0	0
Calumet Shreveport LLC Shreveport	16,000	0	0	14,000	0	0	21,100	1,200
Chalmette Refining LLC Chalmette	42,000	46,000	0	35,000	0	0	65,600	0
Citgo Petroleum Corp Lake Charles	121,000	85,400	68,000	100,000	0	0	0	23,800
Excel Paralubes Westlake	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baton Rouge	76,000	242,000	0	202,500	0	0	0	0
Marathon Petroleum Co LP Garyville	112,000	116,500	81,000	166,500	0	0	106,000	0
Phillips 66 Company Belle Chasse	50,540	71,190	0	74,800	0	0	0	0
Westlake	50,000	63,500	24,000	55,000	0	12,500	49,000	0
Placid Refining Co Port Allen	11,000	20,000	0	25,000	0	0	0	0
Shell Oil Products US Convent	96,000	0	42,000	76,300	0	0	40,000	0
Norco	38,500	77,000	0	70,000	0	0	0	0
Valero Refining - Meraux LLC Meraux	37,700	0	15,000	40,000	0	0	0	0
Valero Refining New Orleans LLC Norco	45,000	60,000	12,000	66,000	44,000	0	24,000	0
Michigan	34,000	0	7,000	46,000	0	0	44,500	0
Marathon Petroleum Co LP Detroit	34,000	0	7,000	46,000	0	0	44,500	0
Minnesota	89,700	51,200	53,600	95,630	9,000	0	145,900	0
Flint Hills Resources LP Saint Paul	51,300	51,200	43,500	62,000	9,000	0	115,000	0
St Paul Park Refining Co LLC Saint Paul	38,400	0	10,100	33,630	0	0	30,900	0
Mississippi	57,300	0	30,000	37,200	0	0	104,000	70,800
Chevron USA Inc Pascagoula	57,300	0	30,000	35,000	0	0	104,000	50,000

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
Mississippi	389,500	0	409,800	0	338,875	105,000	0	0	0
Ergon Refining Inc									
Vicksburg	26,500	0	27,300	0	18,000	0	0	0	0
Hunt Southland Refining Co									
Sandersville	11,000	0	12,500	0	6,875	0	0	0	0
Montana	205,100	9,600	212,400	10,000	126,100	36,700	10,400	0	0
Calumet Montana Refining LLC									
Great Falls	24,000	9,600	25,000	10,000	20,000	0	0	0	0
Cenex Harvest States Coop									
Laurel	59,600	0	61,100	0	29,000	15,000	0	0	0
ExxonMobil Refining & Supply Co									
Billings	61,500	0	62,900	0	32,300	0	10,400	0	0
Phillips 66 Company									
Billings	60,000	0	63,400	0	44,800	21,700	0	0	0
Nevada	2,000	0	5,000	0	2,750	0	0	0	0
Foreland Refining Corp									
Ely	2,000	0	5,000	0	2,750	0	0	0	0
New Jersey	418,000	0	430,800	0	165,000	27,000	0	0	0
Paulsboro Refining Co LLC									
Paulsboro	160,000	0	166,000	0	90,000	27,000	0	0	0
Phillips 66 Company									
Linden	258,000	0	264,800	0	75,000	0	0	0	0
New Mexico	136,600	0	151,100	0	33,800	0	0	0	0
HollyFrontier Navajo Refining LLC									
Artesia	110,000	0	124,000	0	33,800	0	0	0	0
Western Refining Southwest Inc									
Gallup	26,600	0	27,100	0	0	0	0	0	0
North Dakota	93,300	0	94,600	0	0	0	0	0	0
Dakota Prairie Refining LLC									
Dickinson	19,500	0	20,000	0	0	0	0	0	0
Tesoro Refining & Marketing Co									
Mandan	73,800	0	74,600	0	0	0	0	0	0
Ohio	597,800	0	633,000	0	159,500	58,000	0	0	0
BP-Husky Refining LLC									
Toledo	155,000	0	160,000	0	71,500	35,000	0	0	0
Lima Refining Company									
Lima	177,000	0	185,000	0	53,000	23,000	0	0	0
Marathon Petroleum Co LP									
Canton	93,000	0	100,000	0	35,000	0	0	0	0
Toledo Refining Co LLC									
Toledo	172,800	0	188,000	0	0	0	0	0	0
Oklahoma	521,800	0	551,664	0	220,342	38,385	0	0	0
HollyFrontier Tulsa Refining LLC									
Tulsa East	70,300	0	75,500	0	27,000	0	0	0	0
Tulsa West	85,000	0	91,020	0	32,000	11,000	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
Mississippi	88,000	0	0	117,500	0	61,600	34,000	0
Ergon Refining Inc								
Vicksburg	0	0	0	0	0	0	0	0
Hunt Southland Refining Co								
Sandersville	0	0	0	0	0	0	0	0
Montana	64,660	990	6,200	24,000	0	12,500	27,050	0
Calumet Montana Refining LLC								
Great Falls	3,000	0	0	24,000	0	0	1,000	0
Cenex Harvest States Coop								
Laurel	16,500	0	0	0	0	12,500	0	0
ExxonMobil Refining & Supply Co								
Billings	23,660	0	6,200	0	0	0	12,500	0
Phillips 66 Company								
Billings	21,500	990	0	0	0	0	13,550	0
Nevada	0	0	0	0	0	0	0	0
Foreland Refining Corp								
Ely	0	0	0	0	0	0	0	0
New Jersey	200,000	0	0	0	0	66,000	0	22,000
Paulsboro Refining Co LLC								
Paulsboro	55,000	0	0	0	0	32,000	0	0
Phillips 66 Company								
Linden	145,000	0	0	0	0	34,000	0	22,000
New Mexico	38,500	3,000	0	18,000	0	24,000	7,300	18,000
HollyFrontier Navajo Refining LLC								
Artesia	30,000	0	0	18,000	0	24,000	0	18,000
Western Refining Southwest Inc								
Gallup	8,500	3,000	0	0	0	0	7,300	0
North Dakota	27,000	3,600	0	0	0	0	12,500	0
Dakota Prairie Refining LLC								
Dickinson	0	0	0	0	0	0	0	0
Tesoro Refining & Marketing Co								
Mandan	27,000	3,600	0	0	0	0	12,500	0
Ohio	208,300	0	52,000	57,000	0	63,500	106,800	0
BP-Husky Refining LLC								
Toledo	55,000	0	0	31,000	0	42,000	0	0
Lima Refining Company								
Lima	45,300	0	0	26,000	0	0	55,000	0
Marathon Petroleum Co LP								
Canton	26,000	0	0	0	0	21,500	0	0
Toledo Refining Co LLC								
Toledo	82,000	0	52,000	0	0	0	51,800	0
Oklahoma	154,112	2,000	14,000	18,200	0	64,200	53,593	4,850
HollyFrontier Tulsa Refining LLC								
Tulsa East	25,000	2,000	0	0	0	25,000	0	0
Tulsa West	0	0	0	0	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Mississippi	57,300	0	30,000	37,200	0	0	104,000	70,800
Ergon Refining Inc								
Vicksburg	0	0	0	2,200	0	0	0	20,800
Hunt Southland Refining Co								
Sandersville	0	0	0	0	0	0	0	0
Montana	46,950	26,500	19,400	46,750	25,000	0	45,760	7,900
Calumet Montana Refining LLC								
Great Falls	2,500	0	6,000	6,000	0	0	0	0
Cenex Harvest States Coop								
Laurel	17,000	0	0	0	25,000	0	20,000	0
ExxonMobil Refining & Supply Co								
Billings	13,900	20,500	7,600	11,000	0	0	0	7,900
Phillips 66 Company								
Billings	13,550	6,000	5,800	29,750	0	0	25,760	0
Nevada	0	0	0	0	0	0	0	0
Foreland Refining Corp								
Ely	0	0	0	0	0	0	0	0
New Jersey	97,500	37,000	29,100	154,000	17,500	0	0	0
Paulsboro Refining Co LLC								
Paulsboro	32,000	37,000	29,100	46,000	0	0	0	0
Phillips 66 Company								
Linden	65,500	0	0	108,000	17,500	0	0	0
New Mexico	49,600	0	15,000	47,500	0	0	18,000	0
HollyFrontier Navajo Refining LLC								
Artesia	42,000	0	15,000	43,000	0	0	18,000	0
Western Refining Southwest Inc								
Gallup	7,600	0	0	4,500	0	0	0	0
North Dakota	13,600	0	0	31,800	6,660	0	0	0
Dakota Prairie Refining LLC								
Dickinson	0	0	0	8,000	0	0	0	0
Tesoro Refining & Marketing Co								
Mandan	13,600	0	0	23,800	6,660	0	0	0
Ohio	181,400	107,000	69,500	82,000	0	0	78,000	0
BP-Husky Refining LLC								
Toledo	40,000	0	0	22,000	0	0	51,000	0
Lima Refining Company								
Lima	63,000	35,000	24,000	36,000	0	0	0	0
Marathon Petroleum Co LP								
Canton	32,500	0	13,500	24,000	0	0	27,000	0
Toledo Refining Co LLC								
Toledo	45,900	72,000	32,000	0	0	0	0	0
Oklahoma	158,411	102,987	18,500	134,581	37,590	0	58,338	36,032
HollyFrontier Tulsa Refining LLC								
Tulsa East	25,000	29,000	0	45,000	0	0	0	0
Tulsa West	28,000	0	0	0	0	0	0	21,600

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
Oklahoma	521,800	0	551,664	0	220,342	38,385	0	0	0
Phillips 66 Company									
Ponca City	206,000	0	219,144	0	89,042	27,385	0	0	0
Valero Refining Co Oklahoma									
Ardmore	86,000	0	88,000	0	32,000	0	0	0	0
Wynnewood Refining Co									
Wynnewood	74,500	0	78,000	0	40,300	0	0	0	0
Pennsylvania	601,000	0	639,800	0	276,200	0	0	0	0
American Refining Group Inc									
Bradford	11,000	0	11,800	0	0	0	0	0	0
Monroe Energy LLC									
Trainer	190,000	0	208,000	0	73,000	0	0	0	0
Philadelphia Energy Solutions									
Philadelphia	335,000	0	350,000	0	163,200	0	0	0	0
United Refining Co									
Warren	65,000	0	70,000	0	40,000	0	0	0	0
Tennessee	180,000	0	185,000	0	0	0	0	0	0
Valero Ref Company Tennessee LLC									
Memphis	180,000	0	185,000	0	0	0	0	0	0
Texas	5,701,414	0	6,107,300	0	2,615,200	901,080	42,000	0	0
Alon USA Energy Inc									
Big Spring	73,000	0	74,000	0	24,000	0	0	0	0
Buckeye Texas Processing LLC									
Corpus Christi	60,000	0	65,000	0	0	0	0	0	0
Calumet San Antonio Refining LLC									
San Antonio	20,000	0	21,000	0	0	0	0	0	0
Citgo Refining & Chemical Inc									
Corpus Christi	157,500	0	163,500	0	85,300	44,900	0	0	0
Deer Park Refining LTD Partnership									
Deer Park	275,000	0	340,000	0	180,000	92,000	0	0	0
Delek Refining LTD									
Tyler	75,000	0	76,000	0	28,000	7,500	0	0	0
Diamond Shamrock Refining Co LP									
Sunray	195,000	0	200,000	0	50,000	0	0	0	0
Three Rivers	89,000	0	91,000	0	33,500	0	0	0	0
Equistar Chemicals LP									
Channelview	0	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co									
Baytown	560,500	0	584,000	0	297,000	54,000	42,000	0	0
Beaumont	365,644	0	380,900	0	148,800	48,000	0	0	0
Flint Hills Resources LP									
Corpus Christi	319,000	0	330,000	0	87,500	15,500	0	0	0
Houston Refining LP									
Houston	263,776	0	296,300	0	196,500	100,000	0	0	0
Kinder Morgan Crude & Condensate									
Galena Park	84,000	0	100,000	0	0	0	0	0	0
Lazarus Energy LLC									
Nixon	13,765	0	15,000	0	0	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
Oklahoma	154,112	2,000	14,000	18,200	0	64,200	53,593	4,850
Phillips 66 Company Ponca City	76,912	0	0	0	0	0	53,593	0
Valero Refining Co Oklahoma Ardmore	30,000	0	14,000	0	0	20,500	0	0
Wynnewood Refining Co Wynnewood	22,200	0	0	18,200	0	18,700	0	4,850
Pennsylvania	215,500	1,000	23,000	0	0	50,000	102,200	0
American Refining Group Inc Bradford	0	0	0	0	0	0	2,200	0
Monroe Energy LLC Trainer	53,000	0	23,000	0	0	50,000	0	0
Philadelphia Energy Solutions Philadelphia	137,500	0	0	0	0	0	86,000	0
United Refining Co Warren	25,000	1,000	0	0	0	0	14,000	0
Tennessee	70,000	0	26,500	0	0	36,000	0	0
Valero Ref Company Tennessee LLC Memphis	70,000	0	26,500	0	0	36,000	0	0
Texas	1,791,200	25,000	250,300	409,900	83,500	975,700	115,280	166,000
Alon USA Energy Inc Big Spring	25,000	0	0	0	0	21,500	0	10,000
Buckeye Texas Processing LLC Corpus Christi	0	0	0	0	0	0	0	0
Calumet San Antonio Refining LLC San Antonio	0	0	0	0	0	0	6,000	0
Citgo Refining & Chemical Inc Corpus Christi	83,800	0	0	0	0	51,500	0	0
Deer Park Refining LTD Partnership Deer Park	74,000	5,000	0	60,000	0	44,000	24,500	0
Delek Refining LTD Tyler	20,250	0	0	0	0	13,000	4,500	0
Diamond Shamrock Refining Co LP Sunray	54,500	0	0	27,000	0	29,000	18,000	14,500
Three Rivers	23,500	0	0	28,000	0	23,500	10,000	10,500
Equistar Chemicals LP Channelview	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baytown	220,000	8,000	29,900	0	0	127,500	0	47,000
Beaumont	117,700	0	70,000	0	0	146,000	0	0
Flint Hills Resources LP Corpus Christi	110,000	0	0	14,100	0	0	0	0
Houston Refining LP Houston	110,000	0	0	0	0	0	0	0
Kinder Morgan Crude & Condensate Galena Park	0	0	0	0	0	0	0	0
Lazarus Energy LLC Nixon	0	0	0	0	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Oklahoma	158,411	102,987	18,500	134,581	37,590	0	58,338	36,032
Phillips 66 Company Ponca City	51,511	58,987	18,500	31,981	37,590	0	23,888	14,432
Valero Refining Co Oklahoma Ardmore	27,000	0	0	32,000	0	0	34,450	0
Wynnewood Refining Co Wynnewood	26,900	15,000	0	25,600	0	0	0	0
Pennsylvania	185,600	104,000	28,300	70,300	157,000	0	0	0
American Refining Group Inc Bradford	3,600	0	0	0	0	0	0	0
Monroe Energy LLC Trainer	80,000	34,000	23,300	53,300	0	0	0	0
Philadelphia Energy Solutions Philadelphia	78,000	65,000	0	0	157,000	0	0	0
United Refining Co Warren	24,000	5,000	5,000	17,000	0	0	0	0
Tennessee	52,000	39,000	0	38,000	0	0	0	0
Valero Ref Company Tennessee LLC Memphis	52,000	39,000	0	38,000	0	0	0	0
Texas	1,408,490	1,058,100	628,700	1,371,125	16,000	184,000	921,240	145,700
Alon USA Energy Inc Big Spring	25,500	0	5,000	23,000	0	0	6,500	0
Buckeye Texas Processing LLC Corpus Christi	0	0	0	0	0	0	0	0
Calumet San Antonio Refining LLC San Antonio	6,000	0	0	8,000	0	0	0	0
Citgo Refining & Chemical Inc Corpus Christi	52,800	45,100	0	95,300	0	0	70,900	0
Deer Park Refining LTD Partnership Deer Park	70,000	43,000	38,000	50,000	0	0	49,500	43,000
Delek Refining LTD Tyler	28,000	13,000	0	36,000	0	0	0	0
Diamond Shamrock Refining Co LP Sunray	44,400	39,600	0	47,500	0	0	0	0
Three Rivers	24,000	0	10,000	25,000	0	0	20,000	0
Equistar Chemicals LP Channelview	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co Baytown	155,500	196,000	132,700	146,300	0	0	117,000	46,500
Beaumont	159,800	25,000	51,000	42,000	0	0	0	19,500
Flint Hills Resources LP Corpus Christi	93,800	75,000	54,000	78,000	0	0	54,000	0
Houston Refining LP Houston	60,500	76,000	43,500	92,175	0	0	116,100	5,200
Kinder Morgan Crude & Condensate Galena Park	0	0	0	0	0	0	0	0
Lazarus Energy LLC Nixon	0	0	0	0	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
Texas	5,701,414	0	6,107,300	0	2,615,200	901,080	42,000	0	0
Magellan Terminal Holdings LP									
Corpus Christi	42,500	0	50,000	0	0	0	0	0	0
Marathon Petroleum Co LP									
Texas City	571,000	0	601,000	0	241,000	33,000	0	0	0
Motiva Enterprises LLC									
Port Arthur	603,000	0	635,000	0	331,800	169,000	0	0	0
Pasadena Refining Systems Inc									
Pasadena	112,229	0	115,700	0	38,000	0	0	0	0
Petromax Refining Co LLC									
Houston	25,000	0	27,500	0	0	0	0	0	0
Phillips 66 Company									
Sweeny	256,000	0	269,400	0	132,100	78,700	0	0	0
Premcor Refining Group Inc									
Port Arthur	335,000	0	415,000	0	220,000	99,600	0	0	0
South Hampton Resources Inc									
Silsbee	0	0	0	0	0	0	0	0	0
Total Petrochemicals & Refining USA									
Port Arthur	225,500	0	245,000	0	117,000	60,000	0	0	0
Valero Refining Co Texas LP									
Corpus Christi	275,000	0	282,000	0	97,000	17,000	0	0	0
Houston	199,000	0	205,000	0	38,000	0	0	0	0
Texas City	225,000	0	231,000	0	133,500	53,500	0	0	0
Western Refining Company LP									
El Paso	135,000	0	140,000	0	56,200	0	0	0	0
WRB Refining LP									
Borger	146,000	0	154,000	0	80,000	28,380	0	0	0
Utah	196,530	0	209,100	0	34,500	10,000	0	0	0
Big West Oil Co									
North Salt Lake	30,500	0	33,000	0	0	0	0	0	0
Chevron USA Inc									
Salt Lake City	53,200	0	56,000	0	27,500	10,000	0	0	0
HollyFrontier Woods Cross Refining LLC									
Woods Cross	39,330	0	41,400	0	0	0	0	0	0
Silver Eagle Refining									
Woods Cross	15,000	0	15,700	0	7,000	0	0	0	0
Tesoro Refining & Marketing Co									
Salt Lake City	58,500	0	63,000	0	0	0	0	0	0
Washington	637,700	0	662,500	0	298,200	82,800	0	0	0
BP West Coast Products LLC									
Ferndale	227,000	0	236,000	0	112,000	57,500	0	0	0
Phillips 66 Company									
Ferndale	105,000	0	110,500	0	50,700	0	0	0	0
Shell Oil Products US									
Anacortes	145,000	0	149,000	0	65,800	25,300	0	0	0
Tesoro Refining & Marketing Co									
Anacortes	120,000	0	125,000	0	50,500	0	0	0	0
US Oil & Refining Co									
Tacoma	40,700	0	42,000	0	19,200	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
Texas	1,791,200	25,000	250,300	409,900	83,500	975,700	115,280	166,000
Magellan Terminal Holdings LP Corpus Christi	0	0	0	0	0	0	0	0
Marathon Petroleum Co LP Texas City	203,500	0	78,500	0	83,500	142,500	11,000	17,000
Motiva Enterprises LLC Port Arthur	90,000	0	0	106,000	0	129,500	0	0
Pasadena Refining Systems Inc Pasadena	52,000	0	0	0	0	23,000	0	0
Petromax Refining Co LLC Houston	0	0	0	0	0	0	0	0
Phillips 66 Company Sweeny	107,700	12,000	0	0	0	40,000	0	0
Premcor Refining Group Inc Port Arthur	75,000	0	0	124,800	0	55,000	0	0
South Hampton Resources Inc Silsbee	0	0	0	0	0	1,600	0	0
Total Petrochemicals & Refining USA Port Arthur	80,000	0	0	0	0	43,000	0	15,500
Valero Refining Co Texas LP Corpus Christi	95,500	0	0	50,000	0	39,000	10,000	0
Houston	71,750	0	71,900	0	0	0	0	18,000
Texas City	86,000	0	0	0	0	18,100	0	33,500
Western Refining Company LP El Paso	35,000	0	0	0	0	28,000	0	0
WRB Refining LP Borger	56,000	0	0	0	0	0	31,280	0
Utah	71,300	3,000	0	15,000	0	0	36,800	6,000
Big West Oil Co North Salt Lake	12,300	0	0	0	0	0	8,500	0
Chevron USA Inc Salt Lake City	15,500	0	0	0	0	0	8,500	0
HollyFrontier Woods Cross Refining LLC Woods Cross	17,500	0	0	15,000	0	0	8,400	6,000
Silver Eagle Refining Woods Cross	0	0	0	0	0	0	0	0
Tesoro Refining & Marketing Co Salt Lake City	26,000	3,000	0	0	0	0	11,400	0
Washington	145,700	3,000	0	65,000	0	115,900	28,500	24,300
BP West Coast Products LLC Ferndale	0	0	0	65,000	0	65,000	0	0
Phillips 66 Company Ferndale	38,500	0	0	0	0	18,500	0	0
Shell Oil Products US Anacortes	57,900	0	0	0	0	0	21,700	0
Tesoro Refining & Marketing Co Anacortes	49,300	3,000	0	0	0	32,400	0	24,300
US Oil & Refining Co Tacoma	0	0	0	0	0	0	6,800	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
Texas	1,408,490	1,058,100	628,700	1,371,125	16,000	184,000	921,240	145,700
Magellan Terminal Holdings LP Corpus Christi	0	0	0	0	0	0	0	0
Marathon Petroleum Co LP Texas City	121,000	57,000	79,000	55,000	0	0	108,000	0
Motiva Enterprises LLC Port Arthur	163,150	55,000	78,000	170,800	0	0	50,000	21,000
Pasadena Refining Systems Inc Pasadena	23,000	40,000	0	0	16,000	0	0	0
Petromax Refining Co LLC Houston	0	0	0	0	0	0	0	0
Phillips 66 Company Sweeny	67,300	68,700	0	123,700	0	0	107,000	0
Premcor Refining Group Inc Port Arthur	48,700	85,000	33,000	104,600	0	0	60,000	0
South Hampton Resources Inc Silsbee	11,000	0	0	0	0	0	0	4,000
Total Petrochemicals & Refining USA Port Arthur	57,500	51,600	31,000	70,000	0	0	54,400	0
Valero Refining Co Texas LP Corpus Christi	64,000	60,000	11,000	63,250	0	74,000	30,000	0
Houston	9,000	33,600	16,000	0	0	0	0	0
Texas City	25,000	61,500	28,000	55,000	0	110,000	0	6,500
Western Refining Company LP El Paso	33,000	33,000	10,000	50,000	0	0	0	0
WRB Refining LP Borger	65,540	0	8,500	35,500	0	0	77,840	0
Utah	44,900	8,000	2,900	49,800	28,800	0	0	7,200
Big West Oil Co North Salt Lake	11,500	0	0	11,000	0	0	0	0
Chevron USA Inc Salt Lake City	8,500	0	0	13,300	18,000	0	0	7,200
HollyFrontier Woods Cross Refining LLC Woods Cross	12,500	0	2,900	0	10,800	0	0	0
Silver Eagle Refining Woods Cross	1,000	0	0	3,000	0	0	0	0
Tesoro Refining & Marketing Co Salt Lake City	11,400	8,000	0	22,500	0	0	0	0
Washington	164,700	96,600	42,000	166,700	0	0	0	0
BP West Coast Products LLC Ferndale	74,000	0	20,000	55,000	0	0	0	0
Phillips 66 Company Ferndale	19,400	22,100	0	33,400	0	0	0	0
Shell Oil Products US Anacortes	21,700	42,000	22,000	43,800	0	0	0	0
Tesoro Refining & Marketing Co Anacortes	39,200	32,500	0	26,300	0	0	0	0
US Oil & Refining Co Tacoma	10,400	0	0	8,200	0	0	0	0

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/Gas Oil
West Virginia	22,300	0	23,000	0	8,600	0	0	0	0
Ergon West Virginia Inc									
Newell	22,300	0	23,000	0	8,600	0	0	0	0
Wisconsin	38,000	0	50,000	0	23,500	0	0	0	0
Superior Refining Company LLC									
Superior	38,000	0	50,000	0	23,500	0	0	0	0
Wyoming	168,500	0	191,400	0	79,000	33,700	0	0	0
Hermes Consolidated LLC									
New Castle	18,000	0	18,500	0	0	0	0	0	0
HollyFrontier Cheyenne Refining LLC									
Cheyenne	48,000	0	52,000	0	28,000	13,700	0	0	0
Little America Refining Co									
Evansville	24,500	0	25,500	0	0	0	0	0	0
Silver Eagle Refining									
Evanston	3,000	0	3,400	0	0	0	0	0	0
Sinclair Wyoming Refining Co									
Sinclair	75,000	0	92,000	0	51,000	20,000	0	0	0
U.S. Total	18,566,897	31,600	19,761,494	33,000	9,076,249	2,837,165	158,900	16,000	10,600

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Catalytic Cracking		Catalytic Hydrocracking			Catalytic Reforming		Fuels Solvent Deasphalting
	Fresh	Recycled	Distillate	Gas Oil	Residual	Low Pressure	High Pressure	
West Virginia	0	0	0	0	0	4,700	0	0
Ergon West Virginia Inc								
Newell	0	0	0	0	0	4,700	0	0
Wisconsin	11,323	0	0	0	0	9,300	0	0
Superior Refining Company LLC								
Superior	11,323	0	0	0	0	9,300	0	0
Wyoming	54,500	500	15,000	0	0	14,200	19,900	0
Hermes Consolidated LLC								
New Castle	7,500	0	0	0	0	0	4,000	0
HollyFrontier Cheyenne Refining LLC								
Cheyenne	13,500	0	0	0	0	9,200	0	0
Little America Refining Co								
Evansville	11,500	500	0	0	0	5,000	0	0
Silver Eagle Refining								
Evanston	0	0	0	0	0	0	2,900	0
Sinclair Wyoming Refining Co								
Sinclair	22,000	0	15,000	0	0	0	13,000	0
U.S. Total	6,031,195	76,890	708,700	1,615,660	138,000	2,685,790	1,115,523	393,050

Table 3. Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Downstream Charge Capacity							
	Desulfurization (incl. Catalytic Hydrotreating)							
	Naphtha/ Reformer Feed	Gasoline	Kerosene/ Jet Fuel	Diesel Fuel	Other Distillate	Residual	Heavy Gas Oil	Other
West Virginia	7,700	0	0	9,500	0	0	6,900	0
Ergon West Virginia Inc								
Newell	7,700	0	0	9,500	0	0	6,900	0
Wisconsin	12,500	12,500	8,000	7,500	0	0	0	0
Superior Refining Company LLC								
Superior	12,500	12,500	8,000	7,500	0	0	0	0
Wyoming	46,900	16,500	14,000	53,000	0	0	20,000	0
Hermes Consolidated LLC								
New Castle	4,000	0	0	6,000	0	0	0	0
HollyFrontier Cheyenne Refining LLC								
Cheyenne	10,000	10,000	0	18,000	0	0	0	0
Little America Refining Co								
Evansville	7,500	6,500	0	10,500	0	0	0	0
Silver Eagle Refining								
Evanston	3,900	0	0	0	0	0	0	0
Sinclair Wyoming Refining Co								
Sinclair	21,500	0	14,000	18,500	0	0	20,000	0
U.S. Total	4,649,691	2,952,227	1,616,850	4,521,716	515,650	196,500	2,857,938	386,632

Note: Refer to Table 5 for corporate ownership information. Some names of previously independent companies have been preserved by acquiring companies.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Directory of Operable Petroleum Refineries on Tables 3 and 4

Refiner	State(s)	Refiner	State(s)
Alon Refining Krotz Springs Inc.....	LA	Kinder Morgan Crude & Condensate.....	TX
Alon USA Energy Inc.....	TX	Lazarus Energy LLC.....	TX
American Refining Group Inc.....	PA	Lima Refining Company.....	OH
BP Exploration Alaska Inc.....	AK	Lion Oil Co.....	AR
BP Products North America Inc.....	IN	Little America Refining Co.....	WY
BP West Coast Products LLC.....	WA	Lunday Thagard Co.....	CA
BP-Husky Refining LLC.....	OH	Magellan Terminal Holdings LP.....	TX
Big West Oil Co.....	UT	Marathon Petroleum Co LP.....	IL, KY, LA, MI, OH, TX
Buckeye Texas Processing LLC.....	TX	Monroe Energy LLC.....	PA
CHS McPherson Refinery Inc.....	KS	Motiva Enterprises LLC.....	TX
Calcasieu Refining Co.....	LA	PDV Midwest Refining LLC.....	IL
Calumet Lubricants Co LP.....	LA	Par Hawaii Refining LLC.....	HI
Calumet Montana Refining LLC.....	MT	Pasadena Refining Systems Inc.....	TX
Calumet San Antonio Refining LLC.....	TX	Paulsboro Refining Co LLC.....	NJ
Calumet Shreveport LLC.....	LA	Petro Star Inc.....	AK
Cenex Harvest States Coop.....	MT	Petromax Refining Co LLC.....	TX
Chalmette Refining LLC.....	LA	Philadelphia Energy Solutions.....	PA
Chevron USA Inc.....	CA, MS, UT	Phillips 66 Company.....	CA, LA, MT, NJ, OK, TX, WA
Citgo Petroleum Corp.....	LA	Placid Refining Co.....	LA
Citgo Refining & Chemical Inc.....	TX	Premcor Refining Group Inc.....	TX
Coffeyville Resources Rfg & Mktg.....	KS	San Joaquin Refining Co Inc.....	CA
ConocoPhillips Alaska Inc.....	AK	Santa Maria Refining Company.....	CA
Continental Refining Company LLC.....	KY	Shell Chemical LP.....	AL
Countrymark Cooperative Inc.....	IN	Shell Oil Products US.....	CA, LA, WA
Cross Oil Refining & Marketing Inc.....	AR	Silver Eagle Refining.....	UT, WY
Dakota Prairie Refining LLC.....	ND	Sinclair Wyoming Refining Co.....	WY
Deer Park Refining LTD Partnership.....	TX	South Hampton Resources Inc.....	TX
Delaware City Refining Co LLC.....	DE	St Paul Park Refining Co LLC.....	MN
Delek Refining LTD.....	TX	Suncor Energy (USA) Inc.....	CO
Diamond Shamrock Refining Co LP.....	TX	Superior Refining Company LLC.....	WI
Equistar Chemicals LP.....	TX	Tesoro Alaska Company LLC.....	AK
Ergon Refining Inc.....	MS	Tesoro Refining & Marketing Co.....	CA, ND, UT, WA
Ergon West Virginia Inc.....	WV	Toledo Refining Co LLC.....	OH
Excel Paralubes.....	LA	Torrance Refining Co LLC.....	CA
ExxonMobil Refining & Supply Co.....	IL, LA, MT, TX	Total Petrochemicals & Refining USA.....	TX
Flint Hills Resources LP.....	MN, TX	US Oil & Refining Co.....	WA
Foreland Refining Corp.....	NV	Ultramar Inc.....	CA
Goodway Refining LLC.....	AL	United Refining Co.....	PA
Hermes Consolidated LLC.....	WY	Valero Ref Company Tennessee LLC.....	TN
HollyFrontier Cheyenne Refining LLC.....	WY	Valero Refining - Meraux LLC.....	LA
HollyFrontier El Dorado Refining LLC.....	KS	Valero Refining Co California.....	CA
HollyFrontier Navajo Refining LLC.....	NM	Valero Refining Co Oklahoma.....	OK
HollyFrontier Tulsa Refining LLC.....	OK	Valero Refining Co Texas LP.....	TX
HollyFrontier Woods Cross Refining LLC.....	UT	Valero Refining New Orleans LLC.....	LA
Houston Refining LP.....	TX	WRB Refining LP.....	IL, TX
Hunt Refining Co.....	AL	Western Refining Company LP.....	TX
Hunt Southland Refining Co.....	MS	Western Refining Southwest Inc.....	NM
Island Energy Services Downstream.....	HI	Wynnewood Refining Co.....	OK
Kern Oil & Refining Co.....	CA		

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Alabama	0	0	16,500	1,150	4,200	0	0	7,120	40	228
Hunt Refining Co										
Tuscaloosa	0	0	16,500	0	4,200	0	0	7,120	40	195
Shell Chemical LP										
Saraland	0	0	0	1,150	0	0	0	0	0	33
Alaska	0	0	13,000	0	5,000	0	0	0	13	25
Petro Star Inc										
North Pole	0	0	3,000	0	0	0	0	0	0	0
Tesoro Alaska Company LLC										
Kenai	0	0	10,000	0	5,000	0	0	0	13	25
Arkansas	5,000	0	21,500	0	7,500	0	5,500	0	13	157
Cross Oil Refining & Marketing Inc										
Smackover	0	0	1,000	0	0	0	5,500	0	3	0
Lion Oil Co										
El Dorado	5,000	0	20,500	0	7,500	0	0	0	10	157
California	208,462	1,500	30,250	44,000	129,100	0	39,800	144,480	1,065	5,005
Chevron USA Inc										
El Segundo	33,300	0	0	10,500	22,300	0	0	24,500	77	917
Richmond	32,662	0	0	7,200	46,000	0	34,000	0	181	789
Kern Oil & Refining Co										
Bakersfield	0	0	0	0	0	0	0	0	0	11
Lunday Thagard Co										
South Gate	0	0	3,750	0	0	0	0	0	0	0
Phillips 66 Company										
Rodeo	0	0	0	3,800	10,000	0	0	14,500	22	560
Wilmington	16,000	0	0	7,000	12,800	0	0	16,800	105	370

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
San Joaquin Refining Co Inc										
Bakersfield	0	1,500	8,000	0	0	0	5,800	0	4	6
Santa Maria Refining Company										
Santa Maria	0	0	6,000	0	0	0	0	0	0	0
Shell Oil Products US										
Martinez	12,500	0	0	0	15,000	0	0	9,000	193	413
Tesoro Refining & Marketing Co										
Carson	17,000	0	0	3,500	23,000	0	0	16,700	105	476
Martinez	15,400	0	0	0	0	0	0	15,000	82	200
Wilmington	12,500	0	0	7,800	0	0	0	12,000	15	280
Torrance Refining Co LLC										
Torrance	30,000	0	0	0	0	0	0	19,180	146	400
Ultramar Inc										
Wilmington	22,000	0	0	0	0	0	0	10,000	0	280
Valero Refining Co California										
Benicia	17,100	0	9,000	4,200	0	0	0	6,800	135	303
Wilmington	0	0	3,500	0	0	0	0	0	0	0
Colorado	0	0	12,250	0	0	0	0	0	22	116
Suncor Energy (USA) Inc										
Commerce City	0	0	12,250	0	0	0	0	0	22	116
Delaware	11,729	5,191	0	6,000	0	0	0	13,620	40	596
Delaware City Refining Co LLC										
Delaware City	11,729	5,191	0	6,000	0	0	0	13,620	40	596
Hawaii	5,000	0	0	3,200	0	0	0	0	21	38
Island Energy Services Downstream										
Honolulu	5,000	0	0	3,200	0	0	0	0	3	0

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Par Hawaii Refining LLC										
Kapolei	0	0	0	0	0	0	0	0	18	38
Illinois	86,600	17,200	38,100	0	16,000	0	0	67,095	202	2,380
ExxonMobil Refining & Supply Co										
Joliet	29,100	0	15,100	0	0	0	0	18,595	0	683
Marathon Petroleum Co LP										
Robinson	13,000	3,300	0	0	16,000	0	0	7,900	0	202
PDV Midwest Refining LLC										
Lemont	22,700	9,400	0	0	0	0	0	12,700	12	487
WRB Refining LP										
Wood River	21,800	4,500	23,000	0	0	0	0	27,900	190	1,008
Indiana	33,200	16,800	33,700	0	31,100	0	0	30,000	0	1,913
BP Products North America Inc										
Whiting	31,000	16,800	30,000	0	27,900	0	0	30,000	0	1,904
Countrymark Cooperative Inc										
Mount Vernon	2,200	0	3,700	0	3,200	0	0	0	0	9
Kansas	33,600	0	4,000	5,300	27,000	0	0	23,064	120	831
CHS McPherson Refinery Inc										
McPherson	9,600	0	0	3,800	12,000	0	0	7,364	42	287
Coffeyville Resources Rfg & Mktg										
Coffeyville	10,000	0	0	0	0	0	0	8,700	22	229
HollyFrontier El Dorado Refining LLC										
El Dorado	14,000	0	4,000	1,500	15,000	0	0	7,000	56	315
Kentucky	21,000	2,500	35,400	0	17,000	0	0	0	0	448
Marathon Petroleum Co LP										
Catlettsburg	21,000	2,500	35,400	0	17,000	0	0	0	0	448

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Louisiana	223,700	49,900	55,500	23,000	77,220	0	66,000	169,177	118	6,628
Alon Refining Krotz Springs Inc										
Krotz Springs	0	0	0	0	6,220	0	0	0	0	0
Calumet Lubricants Co LP										
Cotton Valley	0	0	0	0	500	0	0	0	2	0
Princeton	0	0	2,000	0	0	0	7,000	0	4	3
Calumet Shreveport LLC										
Shreveport	0	0	6,500	0	0	0	12,500	0	12	40
Chalmette Refining LLC										
Chalmette	16,800	10,500	10,000	0	0	0	0	9,000	0	920
Citgo Petroleum Corp										
Lake Charles	26,400	20,900	0	0	28,000	0	0	32,820	0	717
Excel Paralubes										
Westlake	0	0	0	0	0	0	30,000	0	0	185
ExxonMobil Refining & Supply Co										
Baton Rouge	41,000	0	0	0	0	0	16,500	31,525	0	800
Marathon Petroleum Co LP										
Garyville	34,500	0	33,000	23,000	26,500	0	0	33,300	0	1,476
Phillips 66 Company										
Belle Chasse	35,000	15,500	0	0	0	0	0	6,716	0	125
Westlake	8,000	0	4,000	0	0	0	0	22,500	0	440
Placid Refining Co										
Port Allen	7,500	0	0	0	0	0	0	0	0	55
Shell Oil Products US										
Convent	16,700	0	0	0	16,000	0	0	0	0	728
Norco	16,800	0	0	0	0	0	0	7,316	0	180
Valero Refining - Meraux LLC										
Meraux	0	0	0	0	0	0	0	0	0	224

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Valero Refining New Orleans LLC										
Norco	21,000	3,000	0	0	0	0	0	26,000	100	735
Michigan	7,000	0	26,000	0	0	0	0	12,300	0	460
Marathon Petroleum Co LP										
Detroit	7,000	0	26,000	0	0	0	0	12,300	0	460
Minnesota	19,150	0	58,400	1,000	27,500	0	0	25,000	199	1,320
Flint Hills Resources LP										
Saint Paul	12,500	0	45,000	0	18,000	0	0	25,000	189	1,198
St Paul Park Refining Co LLC										
Saint Paul	6,650	0	13,400	1,000	9,500	0	0	0	10	122
Mississippi	20,500	21,000	36,125	0	0	0	48,000	35,500	243	1,224
Chevron USA Inc										
Pascagoula	20,500	21,000	20,000	0	0	0	25,000	35,500	230	1,224
Ergon Refining Inc										
Vicksburg	0	0	10,000	0	0	0	23,000	0	13	0
Hunt Southland Refining Co										
Sandersville	0	0	6,125	0	0	0	0	0	0	0
Montana	17,050	0	44,300	5,250	1,500	0	0	14,050	148	489
Calumet Montana Refining LLC										
Great Falls	700	0	10,000	0	1,500	0	0	0	20	0
Cenex Harvest States Coop										
Laurel	4,000	0	19,800	1,250	0	0	0	4,100	70	243
ExxonMobil Refining & Supply Co										
Billings	5,100	0	14,500	0	0	0	0	4,000	23	0
Phillips 66 Company										
Billings	7,250	0	0	4,000	0	0	0	5,950	35	246

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Nevada	0	0	1,600	0	0	0	0	0	0	0
Foreland Refining Corp										
Ely	0	0	1,600	0	0	0	0	0	0	0
New Jersey	30,000	0	21,000	4,000	0	0	12,000	7,500	31	280
Paulsboro Refining Co LLC										
Paulsboro	11,200	0	21,000	0	0	0	12,000	7,500	9	280
Phillips 66 Company										
Linden	18,800	0	0	4,000	0	0	0	0	22	0
New Mexico	10,900	0	7,000	0	0	0	0	0	38	226
HollyFrontier Navajo Refining LLC										
Artesia	9,100	0	7,000	0	0	0	0	0	38	224
Western Refining Southwest Inc										
Gallup	1,800	0	0	0	0	0	0	0	0	2
North Dakota	4,830	0	0	0	0	0	0	0	2	19
Dakota Prairie Refining LLC										
Dickinson	0	0	0	0	0	0	0	0	2	2
Tesoro Refining & Marketing Co										
Mandan	4,830	0	0	0	0	0	0	0	0	17
Ohio	28,950	20,000	23,800	4,500	18,700	0	0	14,400	0	683
BP-Husky Refining LLC										
Toledo	11,500	0	9,000	0	0	0	0	10,000	0	353
Lima Refining Company										
Lima	0	9,200	0	4,500	18,700	0	0	4,400	0	110
Marathon Petroleum Co LP										
Canton	7,500	0	14,800	0	0	0	0	0	0	104

Table 4. Production Capacity of Operable Petroleum Refineries by State as of January 1, 2018

(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers			Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane	Isooctane				
Toledo Refining Co LLC										
Toledo	9,950	10,800	0	0	0	0	0	0	0	116
Oklahoma	35,586	21,000	43,414	900	13,000	0	9,900	9,050	72	324
HollyFrontier Tulsa Refining LLC										
Tulsa East	5,500	0	15,200	0	13,000	0	0	0	0	75
Tulsa West	0	0	6,500	900	0	0	9,900	2,750	0	0
Phillips 66 Company										
Ponca City	17,574	0	0	0	0	0	0	6,300	35	0
Valero Refining Co Oklahoma										
Ardmore	7,012	0	14,714	0	0	0	0	0	27	249
Wynnewood Refining Co										
Wynnewood	5,500	21,000	7,000	0	0	0	0	0	10	0
Pennsylvania	43,000	4,920	22,065	3,800	8,500	0	2,945	0	10	233
American Refining Group Inc										
Bradford	0	0	65	0	0	0	2,945	0	0	0
Monroe Energy LLC										
Trainer	12,000	0	0	0	0	0	0	0	0	90
Philadelphia Energy Solutions										
Philadelphia	26,500	4,920	0	3,800	0	0	0	0	0	76
United Refining Co										
Warren	4,500	0	22,000	0	8,500	0	0	0	10	67
Tennessee	12,700	29,000	0	0	0	0	0	0	30	116
Valero Ref Company Tennessee LLC										
Memphis	12,700	29,000	0	0	0	0	0	0	30	116
Texas	385,950	128,770	64,600	61,400	150,240	0	72,795	287,137	408	16,400

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				Isobutane	Isopentane and Isohexane	Isooctane				
Alon USA Energy Inc										
Big Spring	5,000	1,000	7,600	0	0	0	0	0	0	150
Citgo Refining & Chemical Inc										
Corpus Christi	23,100	16,300	0	0	0	0	0	17,374	0	380
Deer Park Refining LTD Partnership										
Deer Park	20,000	0	0	0	0	0	0	27,761	0	1,085
Delek Refining LTD										
Tyler	4,700	0	0	0	0	0	0	1,500	0	39
Diamond Shamrock Refining Co LP										
Sunray	9,800	0	12,000	3,000	0	0	0	0	30	75
Three Rivers	6,500	10,800	0	3,000	0	0	1,900	0	0	134
Equistar Chemicals LP										
Channelview	22,000	0	0	0	0	0	0	0	0	0
ExxonMobil Refining & Supply Co										
Baytown	41,000	0	0	0	0	0	28,000	22,750	0	1,828
Beaumont	14,900	0	0	11,200	25,800	0	0	15,039	0	661
Flint Hills Resources LP										
Corpus Christi	15,500	0	0	4,900	3,500	0	0	2,953	0	347
Houston Refining LP										
Houston	11,250	19,500	0	0	0	0	3,895	29,850	0	1,123
Marathon Petroleum Co LP										
Texas City	56,000	39,400	0	0	0	0	0	11,900	0	1,492
Motiva Enterprises LLC										
Port Arthur	20,000	0	0	0	49,140	0	39,000	50,500	0	3,203
Pasadena Refining Systems Inc										
Pasadena	12,500	0	0	0	0	0	0	0	0	28
Phillips 66 Company										
Sweeny	21,700	11,600	0	0	10,100	0	0	22,800	0	915
Premcor Refining Group Inc										
Port Arthur	19,500	0	0	0	0	0	0	32,240	0	1,490

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				Isobutane	Isopentane and Isohexane	Isooctane				
South Hampton Resources Inc										
Silsbee	0	1,070	0	0	4,400	0	0	0	0	0
Total Petrochemicals & Refining USA										
Port Arthur	6,700	13,600	0	0	7,800	0	0	19,200	0	806
Valero Refining Co Texas LP										
Corpus Christi	21,300	15,500	38,000	17,000	12,000	0	0	6,270	275	1,288
Houston	12,500	0	0	0	0	0	0	0	0	336
Texas City	14,700	0	0	0	6,500	0	0	19,000	0	680
Western Refining Company LP										
El Paso	13,300	0	7,000	7,300	0	0	0	0	12	0
WRB Refining LP										
Borger	14,000	0	0	15,000	31,000	0	0	8,000	91	340
Utah	21,900	0	1,800	3,200	6,000	0	0	2,500	0	95
Big West Oil Co										
North Salt Lake	3,000	0	0	1,900	3,000	0	0	0	0	4
Chevron USA Inc										
Salt Lake City	5,600	0	0	1,300	0	0	0	2,500	0	63
HollyFrontier Woods Cross Refining LLC										
Woods Cross	5,300	0	1,800	0	3,000	0	0	0	0	10
Tesoro Refining & Marketing Co										
Salt Lake City	8,000	0	0	0	0	0	0	0	0	18
Washington	37,700	0	8,000	6,600	30,500	0	0	23,650	137	822
BP West Coast Products LLC										
Ferndale	0	0	0	0	26,000	0	0	15,250	137	284
Phillips 66 Company										
Ferndale	11,800	0	0	2,800	0	0	0	0	0	123
Shell Oil Products US										
Anacortes	12,100	0	0	0	0	0	0	8,400	0	350

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				Isobutane	Isopentane and Isohexane	Isooctane				
Tesoro Refining & Marketing Co										
Anacortes	13,800	0	0	3,800	0	0	0	0	0	54
US Oil & Refining Co										
Tacoma	0	0	8,000	0	4,500	0	0	0	0	11
West Virginia	0	0	700	0	0	0	5,400	0	3	1
Ergon West Virginia Inc										
Newell	0	0	700	0	0	0	5,400	0	3	1
Wisconsin	1,700	6,000	16,000	0	0	0	0	0	0	33
Superior Refining Company LLC										
Superior	1,700	6,000	16,000	0	0	0	0	0	0	33
Wyoming	10,500	0	24,000	0	0	0	0	10,500	62	329
Hermes Consolidated LLC										
New Castle	1,300	0	0	0	0	0	0	0	0	0
HollyFrontier Cheyenne Refining LLC										
Cheyenne	4,200	0	16,000	0	0	0	0	4,700	10	116
Little America Refining Co										
Evansville	0	0	0	0	0	0	0	0	0	10
Sinclair Wyoming Refining Co										
Sinclair	5,000	0	8,000	0	0	0	0	5,800	52	203
U.S. Total	1,315,707	323,781	659,004	173,300	570,060	0	262,340	896,143	3,037	41,419

^a Includes hydrogen production capacity of hydrogen plants on refinery grounds.

Note: Refer to Table 5 for corporate ownership information. Some names of previously independent companies have been preserved by acquiring companies.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day
Companies with Capacity Over 100,000 bbl/cd		EXXONMOBIL CORP	1,728,744
VALERO ENERGY CORP	2,160,300	ExxonMobil Refining & Supply Co	
Valero Refining Co Texas LP		Baytown, Texas	560,500
Corpus Christi, Texas	275,000	Baton Rouge, Louisiana	502,500
Texas City, Texas	225,000	Beaumont, Texas	365,644
Houston, Texas	199,000	Joliet, Illinois	238,600
Premcor Refining Group Inc		Billings, Montana	61,500
Port Arthur, Texas	335,000	PHILLIPS 66 COMPANY	1,653,900
Diamond Shamrock Refining Co LP		Phillips 66 Company	
Sunray, Texas	195,000	Westlake, Louisiana	260,000
Three Rivers, Texas	89,000	Linden, New Jersey	258,000
Valero Refining New Orleans LLC		Sweeny, Texas	256,000
Norco, Louisiana	215,000	Belle Chasse, Louisiana	249,700
Valero Ref Company Tennessee LLC		Ponca City, Oklahoma	206,000
Memphis, Tennessee	180,000	Wilmington, California	139,000
Valero Refining Co California		Rodeo, California	120,200
Benicia, California	145,000	Ferndale, Washington	105,000
Wilmington, California	6,300	Billings, Montana	60,000
Valero Refining - Meraux LLC			
Meraux, Louisiana	125,000		
Valero Refining Co Oklahoma			
Ardmore, Oklahoma	86,000		
Ultramar Inc			
Wilmington, California	85,000		
MARATHON PETROLEUM CORP	1,881,000		
Marathon Petroleum Co LP			
Galveston Bay, Texas	571,000		
Garyville, Louisiana	556,000		
Catlettsburg, Kentucky	277,000		
Robinson, Illinois	245,000		
Detroit, Michigan	139,000		
Canton, Ohio	93,000		

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day
ANDEAVOR	1,101,915	Paulsboro, New Jersey	160,000
Tesoro Refining & Marketing Co		Torrance Refining Co LLC	
Carson, California	243,800	Torrance, California	160,000
Martinez, California	166,000	ROYAL DUTCH/SHELL GROUP	820,962
Anacortes, Washington	120,000	Shell Oil Products US ^e	
Wilmington, California	97,500	Norco, Louisiana	218,200
Mandan, North Dakota	73,800	Convent, Louisiana	209,787 ^f
Salt Lake City, Utah	58,500	Martinez, California	156,400
Western Refining Company LP ^b		Anacortes, Washington	145,000
El Paso, Texas	135,000	Shell Chemical LP	
St Paul Park Refining Co LLC ^c		Saraland, Alabama	91,575
Saint Paul, Minnesota	98,515	PDV AMERICA INC	754,765
Tesoro Alaska Company LLC		Citgo Petroleum Corp	
Kenai, Alaska	62,700	Lake Charles, Louisiana	418,000
Western Refining Southwest Inc ^d		PDV Midwest Refining LLC	
Gallup, New Mexico	26,600	Lemont, Illinois	179,265
Dakota Prairie Refining LLC		Citgo Refining & Chemical Inc	
Dickinson, North Dakota	19,500	Corpus Christi, Texas	157,500
CHEVRON CORP	919,471	BP PLC	646,500
Chevron USA Inc		BP Products North America Inc	
Pascagoula, Mississippi	352,000	Whiting, Indiana	413,500
El Segundo, California	269,000	BP West Coast Products LLC	
Richmond, California	245,271	Ferndale, Washington	227,000
Salt Lake City, Utah	53,200	BP Exploration Alaska Inc	
PBF ENERGY CO LLC	865,000	Prudhoe Bay, Alaska	6,000
Chalmette Refining LLC		KOCH INDUSTRIES INC	629,000
Chalmette, Louisiana	190,000	Flint Hills Resources LP	
Delaware City Refining Co LLC		Corpus Christi, Texas	319,000
Delaware City, Delaware	182,200	Saint Paul, Minnesota	310,000
Toledo Refining Co LLC		SAUDI ARAMCO	
Toledo, Ohio	172,800	Motiva Enterprises LLC ^g	
Paulsboro Refining Co LLC		Port Arthur, Texas	603,000

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day
HOLLYFRONTIER CORP	512,630	ACCESS INDUSTRIES	
HollyFrontier El Dorado Refining LLC		Houston Refining LP	
El Dorado, Kansas	160,000	Houston, Texas	263,776
HollyFrontier Tulsa Refining LLC		TOTAL SA	
Tulsa West, Oklahoma	85,000	Total Petrochemicals & Refining USA	
Tulsa East, Oklahoma	70,300	Port Arthur, Texas	225,500
HollyFrontier Navajo Refining LLC		HUSKY ENERGY INC	215,000
Artesia, New Mexico	110,000	Lima Refining Company	
HollyFrontier Cheyenne Refining LLC		Lima, Ohio	177,000
Cheyenne, Wyoming	48,000	Superior Refining Company LLC	
HollyFrontier Woods Cross Refining LLC		Superior, Wisconsin	38,000
Woods Cross, Utah	39,330	CVR ENERGY	206,500
WRB REFINING LP	482,000	Coffeyville Resources Rfg & Mktg	
WRB Refining LP		Coffeyville, Kansas	132,000
Wood River, Illinois	336,000	Wynnewood Refining Co	
(50% Phillips 66, 50% Cenovus)		Wynnewood, Oklahoma	74,500
Borger, Texas	146,000	DELTA AIR LINES INC	
(50% Phillips 66, 50% Cenovus)		Monroe Energy LLC	
CARLYLE GROUP		Trainer, Pennsylvania	190,000
Philadelphia Energy Solutions		CHS INC	157,520
Philadelphia, Pennsylvania	335,000	CHS McPherson Refinery Inc	
DELEK GROUP LTD	311,000	McPherson, Kansas	97,920
Lion Oil Co		Cenex Harvest States Coop	
El Dorado, Arkansas	83,000	Laurel, Montana	59,600
Alon Refining Krotz Springs Inc		BP-HUSKY REFINING LLC	
Krotz Springs, Louisiana	80,000	(50% BP, 50% Husky)	
Delek Refining LTD		BP-Husky Refining LLC	
Tyler, Texas	75,000	Toledo, Ohio	155,000
Alon USA Energy Inc			
Big Spring, Texas	73,000		
DEER PARK REFINING LTD PTNRSHIP			
(50% Royal Dutch/Shell Group, 50% Pemex)			
Deer Park Refining LTD Partnership			
Deer Park, Texas	275,000		

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day
CALUMET SPECIALTY PRODUCTS PARTNERS, L.P.	131,920	Kinder Morgan Crude & Condensate	
Calumet Shreveport LLC		Galena Park, Texas	84,000
Shreveport, Louisiana	57,000	PLACID OIL CO	
Calumet Montana Refining LLC		Placid Refining Co	
Great Falls, Montana	33,600	Port Allen, Louisiana	75,000
Calumet Lubricants Co LP		ARCTIC SLOPE REGIONAL CORP	74,700
Cotton Valley, Louisiana	13,020	Petro Star Inc	
Princeton, Louisiana	8,300	Valdez, Alaska	55,000
Calumet San Antonio Refining LLC		North Pole, Alaska	19,700
San Antonio, Texas	20,000	RED APPLE GROUP INC	
TRANSWORLD OIL USA INC		United Refining Co	
Calcasieu Refining Co		Warren, Pennsylvania	65,000
Lake Charles, Louisiana	125,000	BUCKEYE PARTNERS LP	
PETROBRAS AMERICA INC		Buckeye Texas Processing LLC	
Pasadena Refining Systems Inc		Corpus Christi, Texas	60,000
Pasadena, Texas	112,229	HUNT CONSLD INC	57,000
PAR PACIFIC HOLDINGS	111,500	Hunt Refining Co	
Par Hawaii Refining LLC		Tuscaloosa, Alabama	46,000
Kapolei, Hawaii	93,500	Hunt Southland Refining Co	
Hermes Consolidated LLC		Sandersville, Mississippi	11,000
New Castle, Wyoming	18,000	ISLAND ENERGY SERVICES LLC	
SUNCOR ENERGY INC		Island Energy Services Downstream	
Suncor Energy (USA) Inc		Honolulu, Hawaii	54,000
Commerce City, Colorado	103,000	ERGON OIL PURCHASING INC	48,800
Total	17,677,132	Ergon Refining Inc	
Companies with Capacity 30,001 to 100,000 bbl/cd		Vicksburg, Mississippi	26,500
SINCLAIR OIL CORP	99,500	Ergon West Virginia Inc	
Sinclair Wyoming Refining Co		Newell, West Virginia	22,300
Sinclair, Wyoming	75,000		
Little America Refining Co			
Evansville, Wyoming	24,500		
KINDER MORGAN ENERGY PTNRS LP			

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day
MAGELLAN MIDSTREAM PARTNERS LP		Nixon, Texas	13,765
Magellan Terminal Holdings LP		AMERICAN REFINING GROUP INC	
Corpus Christi, Texas	42,500	American Refining Group Inc	
TRAILSTONE LP		Bradford, Pennsylvania	11,000
US Oil & Refining Co		Total.....	152,565
Tacoma, Washington	40,700	Companies with Capacity	
FJ MANAGEMENT INC		10,000 bbl/cd or Less	
Big West Oil Co		GREKA ENERGY	
North Salt Lake, Utah	30,500	Santa Maria Refining Company	
Total.....	731,700	Santa Maria, California	9,500
Companies with Capacity		WORLD OIL CO	
10,001 to 30,000 bbl/cd		Lunday Thagard Co	
COUNTRYMARK COOP INC		South Gate, California	8,500
Countrysmark Cooperative Inc		MARTIN RESOURCE MGMT CORP	
Mount Vernon, Indiana	28,800	Cross Oil Refining & Marketing Inc	
KERN OIL & REFINING CO		Smackover, Arkansas	7,500
Kern Oil & Refining Co		CONTINENTAL REFINING CO LLC	
Bakersfield, California	26,000	Continental Refining Company LLC	
PETROMAX REFINING CO LLC		Somerset, Kentucky	5,500
Petromax Refining Co LLC		GOODWAY REFINING LLC	
Houston, Texas	25,000	Goodway Refining LLC	
SILVER EAGLE REFINING INC	18,000	Atmore, Alabama	4,100
Silver Eagle Refining		FORELAND REFINING CORP	
Woods Cross, Utah	15,000	Foreland Refining Corp	
Evanston, Wyoming	3,000	Ely, Nevada	2,000
CONOCOPHILLIPS CO		Total.....	37,100
ConocoPhillips Alaska Inc		U.S. Total.....	18,598,497
Prudhoe Bay, Alaska	15,000		
SAN JOAQUIN REFINING CO INC			
San Joaquin Refining Co Inc			
Bakersfield, California	15,000		
BLUE DOLPHIN ENERGY CO			
Lazarus Energy LLC			

Table 5. Refiners' Total Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 2018

CORPORATION / Refiner / Location	Barrels per Calendar Day	CORPORATION / Refiner / Location	Barrels per Calendar Day

a
Marathon, Texas City and Galveston Bay began reporting as one entity with the 2018 Refinery Capacity Report.

b
Formerly Owned by Western Refining Inc

c
Formerly Owned by Western Refining Inc

d
Formerly Owned by Western Refining Inc

e
Formerly Owned by Motiva Enterprises LLC

f
Formerly Owned by Motiva Enterprises LLC

g
Formerly 50% Royal Dutch/Shell Group, 50% Saudi Aramco

h
Formerly owned by Alon Israel Oil Company LTD

i
Formerly owned by Alon Israel Oil Company LTD

j
Formerly owned by Calumet Lubricants Co LP

k
Suncor, Commerce City East and Commerce City West began reporting as one entity with the 2018 Refinery Capacity Report.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 6. Operable Crude Oil and Downstream Charge Capacity of Petroleum Refineries, January 1, 1989 to January 1, 2018
(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Atmospheric Crude Oil Distillation	Downstream Charge Capacity							
		Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro- Cracking	Catalytic Reforming	Hydrotreating/ Desulfurization	Fuels Solvent Deasphalting
				Fresh	Recycled				
JAN 1, 1989	16,568	7,225	2,073	5,324	326	1,238	3,911	9,440	245
JAN 1, 1990	16,507	7,245	2,108	5,441	314	1,282	3,896	9,537	279
JAN 1, 1991	16,557	7,276	2,158	5,559	304	1,308	3,926	9,676	271
JAN 1, 1992	16,633	7,127	2,100	5,608	280	1,363	3,907	9,644	276
JAN 1, 1993	15,935	6,892	2,082	5,540	244	1,397	3,728	9,677	269
JAN 1, 1994	15,904	6,892	2,107	5,586	191	1,376	3,875	10,616	261
JAN 1, 1995	16,326	7,248	2,123	5,583	169	1,386	3,867	10,916	251
JAN 1, 1997	16,287	7,349	2,050	5,595	155	1,388	3,727	11,041	275
JAN 1, 1999	17,155	7,538	2,046	5,920	153	1,552	3,779	11,461	319
JAN 1, 2000	17,393	7,617	2,163	5,949	99	1,576	3,770	11,440	351
JAN 1, 2001	17,511	7,798	2,277	5,983	86	1,615	3,797	11,673	350
JAN 1, 2002	17,676	7,779	2,329	5,989	80	1,633	3,753	11,845	362
JAN 1, 2003	17,675	7,788	2,377	6,052	79	1,644	3,777	11,987	350
JAN 1, 2004	17,815	7,964	2,435	6,098	87	1,602	3,812	13,501	366
JAN 1, 2005	18,031	8,120	2,491	6,151	87	1,624	3,836	14,087	384
JAN 1, 2006	18,308	8,398	2,540	6,188	87	1,637	3,859	14,808	386
JAN 1, 2007	18,425	8,251	2,564	6,219	82	1,791	3,908	15,447	379
JAN 1, 2008	18,558	8,421	2,606	6,266	79	1,770	3,892	15,807	378
JAN 1, 2009	18,681	8,542	2,639	6,292	79	1,743	3,829	16,131	381
JAN 1, 2010	18,581	8,543	2,632	6,140	92	1,820	3,700	16,023	383
JAN 1, 2011	18,953	8,650	2,672	6,220	96	1,856	3,721	16,683	383
JAN 1, 2012	18,560	8,680	2,763	6,033	85	1,880	3,642	16,565	375
JAN 1, 2013	18,972	8,938	2,877	6,089	84	2,081	3,758	16,860	368
JAN 1, 2014	19,064	8,987	2,959	6,032	76	2,208	3,759	17,095	370
JAN 1, 2015	19,134	8,979	2,975	6,012	76	2,305	3,741	17,324	370
JAN 1, 2016	19,508	9,073	2,983	6,052	76	2,318	3,743	17,483	371
JAN 1, 2017	19,800	9,126	2,994	6,007	76	2,421	3,750	17,621	393
JAN 1, 2018	19,794	9,076	3,023	6,031	77	2,462	3,801	17,697	393
PADD I	1,284	554	82	498	5	45	267	1,056	22
PADD II	4,338	1,815	591	1,350	16	377	902	3,945	22
PADD III	10,426	4,836	1,649	3,077	34	1,401	1,920	9,456	262
PADD IV	734	273	91	220	5	60	132	598	6
PADD V	3,012	1,598	610	886	18	579	580	2,643	80
JAN 1, 2019 ^a	19,803	9,077	3,023	5,996	77	2,474	3,805	17,748	393
PADD I	1,284	554	82	498	5	45	267	1,058	22
PADD II	4,338	1,815	591	1,350	16	377	902	3,958	22
PADD III	10,431	4,836	1,649	3,077	34	1,413	1,924	9,491	262
PADD IV	738	273	91	220	5	60	132	598	6
PADD V	3,012	1,598	610	851	18	579	580	2,643	80
2018-2019 ^a	9	1	0	-35	0	12	4	51	0
PADD I	0	0	0	0	0	0	0	2	0
PADD II	0	0	0	0	0	0	0	13	0
PADD III	5	0	0	0	0	12	4	35	0
PADD IV	4	0	0	0	0	0	0	0	0
PADD V	0	0	0	-35	0	0	0	0	0

^a Projected data from refiners.

Notes:

NA = Not available.

Totals may not equal sum of components due to independent rounding.

The EIA-820 refinery capacity survey was not conducted for January 1, 1996 or January 1, 1998.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 7. Operable Production Capacity of Petroleum Refineries, January 1, 1989 to January 1, 2018

(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen ^a (MMcfd)	Sulfur (short tons/day)
JAN 1, 1989	1,015	290	823	469	230	333	2,501	28,369
JAN 1, 1990	1,030	290	844	456	232	341	2,607	24,202
JAN 1, 1991	1,077	292	866	490	229	367	2,527	23,875
JAN 1, 1992	1,095	290	812	494	217	356	2,644	23,811
JAN 1, 1993	1,083	286	814	499	217	393	2,674	25,940
JAN 1, 1994	1,086	278	793	499	213	410	2,940	24,554
JAN 1, 1995	1,105	285	846	502	217	427	3,139	24,885
JAN 1, 1997	1,120	288	872	577	244	458	3,052	26,466
JAN 1, 1999	1,172	302	846	667	233	441	3,104	26,423
JAN 1, 2000	1,185	315	886	643	218	464	3,143	26,645
JAN 1, 2001	1,191	318	900	654	214	538	3,230	27,446
JAN 1, 2002	1,181	313	917	658	218	548	3,244	29,107
JAN 1, 2003	1,191	316	873	679	216	646	3,265	29,766
JAN 1, 2004	1,205	322	887	688	210	672	3,258	30,606
JAN 1, 2005	1,229	318	881	703	217	696	2,965	31,004
JAN 1, 2006	1,238	319	893	708	220	709	2,823	32,421
JAN 1, 2007	1,227	306	877	739	234	722	3,100	33,021
JAN 1, 2008	1,261	285	858	727	249	735	3,109	33,487
JAN 1, 2009	1,261	299	847	736	230	762	2,914	33,500
JAN 1, 2010	1,249	271	844	715	240	760	2,985	34,058
JAN 1, 2011	1,262	297	828	703	243	778	3,082	35,483
JAN 1, 2012	1,247	297	796	688	242	823	3,215	36,663
JAN 1, 2013	1,269	318	741	737	241	867	3,047	39,478
JAN 1, 2014	1,266	297	744	739	240	883	3,094	41,375
JAN 1, 2015	1,267	316	710	757	265	887	3,102	41,266
JAN 1, 2016	1,286	323	733	755	273	889	2,997	41,343
JAN 1, 2017	1,300	324	726	749	261	898	3,009	41,766
JAN 1, 2018	1,316	324	659	743	262	896	3,037	41,419
PADD I	85	10	44	22	20	21	84	1,110
PADD II	284	113	279	162	10	181	625	8,527
PADD III	646	200	201	325	192	499	860	24,863
PADD IV	49	0	82	16	0	27	232	1,029
PADD V	251	2	53	218	40	168	1,236	5,890
JAN 1, 2019^b	1,316	326	661	743	262	896	3,186	41,643
PADD I	85	10	44	22	20	21	84	1,110
PADD II	284	113	281	162	10	181	625	8,640
PADD III	646	202	201	325	192	499	860	24,863
PADD IV	49	0	82	16	0	27	232	1,029
PADD V	251	2	53	218	40	168	1,385	6,001
2018-2019^b	0	2	2	0	0	0	149	224
PADD I	0	0	0	0	0	0	0	0
PADD II	0	0	2	0	0	0	0	113
PADD III	0	2	0	0	0	0	0	0
PADD IV	0	0	0	0	0	0	0	0
PADD V	0	0	0	0	0	0	149	111

^a Includes hydrogen production capacity of hydrogen plants on refinery grounds.^b Projected data from refiners.

Notes:

NA = Not available. MMcfd = Million cubic feet per day.

Totals may not equal sum of components due to independent rounding.

The EIA-820 refinery capacity survey was not conducted for January 1, 1996 or January 1, 1998.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 8. Capacity and Fresh Feed Input to Selected Downstream Units at U.S. Refineries, 2016 - 2018
(Barrels per Calendar Day)

Year/PAD District	Cokers		Catalytic Crackers		Hydrocrackers		Reformers	
	Capacity	Inputs	Capacity	Inputs	Capacity	Inputs	Capacity	Inputs
2016	2,650,839	2,395,645	5,596,552	4,989,344	2,121,715	1,783,505	3,385,049	2,775,404
PADD I	74,900	52,921	475,800	404,986	41,500	32,918	241,050	185,708
PADD II	521,543	473,022	1,235,625	1,094,899	292,600	274,380	812,460	653,497
PADD III	1,458,026	1,350,732	2,867,837	2,627,992	1,193,745	984,011	1,700,570	1,423,511
PADD IV	82,500	66,637	195,480	162,954	51,700	22,773	118,830	99,623
PADD V	513,870	452,333	821,810	698,514	542,170	469,423	512,139	413,066
2017	2,689,470	2,376,386	5,530,482	4,950,060	2,220,779	1,858,600	3,419,464	2,793,786
PADD I	74,900	47,271	464,000	407,732	41,500	34,699	213,600	191,638
PADD II	528,230	482,948	1,235,100	1,107,003	320,900	315,551	821,765	682,690
PADD III	1,485,330	1,334,058	2,805,942	2,541,742	1,267,439	1,009,529	1,736,879	1,413,838
PADD IV	84,900	67,416	202,640	170,005	57,950	22,997	119,990	91,978
PADD V	516,110	444,693	822,800	723,578	532,990	475,825	527,230	413,641
2018	2,719,950	NA	5,552,991	NA	2,245,934	NA	3,463,906	NA
PADD I	74,900	NA	442,800	NA	41,500	NA	237,600	NA
PADD II	541,430	NA	1,238,749	NA	340,520	NA	824,435	NA
PADD III	1,499,920	NA	2,850,087	NA	1,277,749	NA	1,769,985	NA
PADD IV	84,300	NA	202,555	NA	57,325	NA	119,880	NA
PADD V	519,400	NA	818,800	NA	528,840	NA	512,006	NA

NA = Not Available.

Note: Capacities are as of January 1 of the indicated year.

Sources: Capacities are from the Energy Information Administration (EIA) Form EIA-820, "Annual Refinery Report."

Inputs are from the form EIA-810, "Monthly Refinery Report." Year 2016 data is final, 2017 data is preliminary.

Table 9. Refinery Receipts of Crude Oil by Method of Transportation by PAD District, 2017^a
(Thousand Barrels)

Method	PAD Districts					United States
	I	II	III	IV	V	
Pipeline	25,228	1,354,029	2,162,545	182,111	284,266	4,008,179
Domestic	2,412	717,843	1,805,671	89,623	193,860	2,809,409
Foreign	22,816	636,186	356,874	92,488	90,406	1,198,770
Tanker	314,900	0	883,512	0	531,912	1,730,324
Domestic	11,456	0	21,084	0	182,905	215,445
Foreign	303,444	0	862,428	0	349,007	1,514,879
Barge	10,652	7,011	172,848	0	31,979	222,490
Domestic	3,835	7,011	137,039	0	599	148,484
Foreign	6,817	0	35,809	0	31,380	74,006
Tank Cars (Rail)	37,373	279	6,694	227	53,767	98,340
Domestic	26,736	279	1,451	227	48,649	77,342
Foreign	10,637	0	5,243	0	5,118	20,998
Trucks	2,115	9,564	46,801	44,847	7,539	110,866
Domestic	2,115	9,564	46,801	44,847	7,539	110,866
Foreign	0	0	0	0	0	0
Total	390,268	1,370,883	3,272,400	227,185	909,463	6,170,199
Domestic	46,554	734,697	2,012,046	134,697	433,552	3,361,546
Foreign	343,714	636,186	1,260,354	92,488	475,911	2,808,653

^a

Receipts are reported by the last method of transportation used if the distance traveled is greater than 100 miles. If several methods are used and none are greater than 100 miles, the method which represents the greatest distance traveled is reported. For example, if crude oil traveled by rail for 1,500 miles and then by barge for 120 miles, then the reported mode of transportation would be barge rather than rail.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report."

Table 10a. Fuel Consumed at Refineries by PAD District, 2017
(Thousand Barrels, Except Where Noted)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Crude Oil	0	0	0	0	0	0
Liquefied Petroleum Gases	0	1,061	916	172	523	2,672
Distillate Fuel Oil	0	22	167	9	196	394
Residual Fuel Oil	6	15	47	0	179	247
Still Gas	16,078	53,215	110,829	8,495	47,534	236,151
Marketable Petroleum Coke	0	0	0	559	0	559
Catalyst Petroleum Coke	8,294	17,753	42,409	2,902	12,596	83,954
Natural Gas (million cubic feet)	48,799	163,957	465,489	27,825	182,852	888,922
Coal (thousand short tons)	8	0	0	0	0	8
Purchased Electricity (million kWh)	2,567	13,411	25,707	2,368	4,510	48,563
Purchased Steam (million pounds)	4,272	11,363	94,466	1,627	13,318	125,046
Other Products ^a	147	35	340	0	472	994

Note: Includes volumes used as fuel at refineries and all nonprocessing losses of crude oil and petroleum products (e.g., spills, fire losses, contamination, etc.)

^a Includes pentanes plus, other hydrocarbons, oxygenates, hydrogen, unfinished oils, gasoline, special naphthas, jet fuel, lubricants, asphalt and road oil, and miscellaneous products.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report," and Form EIA-810, "Monthly Refinery Report."

Table 10b. Natural Gas Used as Feedstock for Hydrogen Production by PAD District, 2017
(Million Cubic Feet)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Natural Gas Used As Feedstock For Hydrogen Production	5,954	53,272	54,296	15,956	62,090	191,568

Source: Energy Information Administration (EIA), Form EIA-820, "Annual Refinery Report".

Table 11. New, Shutdown and Reactivated Refineries During 2017

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd) ^a	Total Downstream Charge Capacity (bbl/sd) ^b	Date Operable	Date of Last Operation	Date Shutdown
SHUTDOWN						
PAD District I		74,000	32,000			
Axeon Specialty Products LLC ^c	Paulsboro, NJ	74,000	32,000		04/17	06/17
PAD District III		45,000	25,000			
Shell Oil Products US	Saint Rose, LA	45,000	25,000		01/18	01/18
PAD District V		84,500	130,500			
Paramount Petroleum Corporation ^c	Paramount, CA	84,500	78,500		10/12	09/17
Alon Bakersfield Operating Inc ^c	Bakersfield, CA	0	52,000		12/08	09/17
OTHER						
PAD District III		571,000	1,230,000			
Marathon Petroleum Co LP ^d	Galveston Bay, TX	571,000	1,230,000			
PAD District IV		103,000	173,330			
Suncor Energy (USA) Inc ^e	Commerce City, CO	103,000	173,330			

^a bbl/cd=Barrels per calendar day.

^b bbl/sd=Barrels per stream day.

^c Facility no longer operating as a refinery, but continues to have terminal operations.

^d Marathon, Texas City and Galveston Bay began reporting as one entity with the 2018 Refinery Capacity Report.

^e Suncor, Commerce City East and Commerce City West began reporting as one entity with the 2018 Refinery Capacity Report.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and Form EIA-820, "Annual Refinery Report."

Table 12. Refinery Sales During 2017

Former Corporation/Refiner	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	New Corporation/Refiner	Date of Sale
Motiva Enterprises LLC (50% Shell, 50% Saudi Aramco)		Royal Dutch Shell Group/Shell Oil Products US	5/17
Convent, LA	209,787		
Norco, LA	218,200		
Motiva Enterprises LLC (50% Shell, 50% Saudi Aramco)		Saudi Aramco/Motiva Enterprises LLC	5/17
Port Arthur, TX	603,000		
Western Refining Inc/St. Paul Park Refining Co LLC		Andeavor/ St. Paul Park Refining Co LLC	6/17
St. Paul, MN	98,515		
Western Refining Inc/Western Refining Company LP		Andeavor/Western Refining Company LP	6/17
El Paso, TX	135,000		
Western Refining Inc/Western Refining Southwest Inc		Andeavor/Western Refining Southwest Inc	6/17
Gallup, NM	26,600		
Alon Israel Oil Company LTD/Alon Refining Krotz Springs Inc		Delek US Holdings Inc/Alon Refining Krotz Springs Inc	7/17
Krotz Springs, LA	80,000		
Alon Israel Oil Company LTD/Alon USA Energy Inc		Delek US Holdings Inc/Alon USA LP	7/17
Big Spring, TX	73,000		
Calumet Specialty Products Partners, LP/Calumet Lubricants Co LP		Husky Energy Inc/Calumet Lubricants LP	11/17
Superior, WI	38,000		

bbl/cd= Barrels per calendar day

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and Form EIA-820, "Annual Refinery Report."

Table 13. Refineries Permanently Shutdown By PAD District Between January 1, 1990 and January 1, 2018

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date of Last Operation	Date Shutdown
PAD District I		644,450	975,900		
GNC Energy Corp	Greensboro, NC	3,000	0	a	
Primary Energy Corp	Richmond, VA	6,100	0	a	
Saint Mary's Refining Co	Saint Mary's, WV	4,000	4,480	02/93	03/93
Cibro Refining	Albany, NY	41,850	27,000	07/93	09/93
Calumet Lubricants Co LP	Rouseville, PA	12,800	26,820	03/00	06/00
Young Refining Corp.	Douglasville, GA	5,400	0	07/04	07/04
Sunoco Inc	Westville, NJ	145,000	263,000	11/09	02/10
Western Refining Yorktown Inc	Yorktown, VA	66,300	182,600	09/11	12/11
Sunoco Inc	Marcus Hook, PA	178,000	278,000	12/11	12/11
Chevron USA Inc	Perth Amboy, NJ	80,000	47,000	03/08	07/12
Hess Corporation	Port Reading, NJ	0	115,000	02/13	03/13
Axeon Specialty Products LLC	Savannah, GA	28,000	0	09/12	12/14
Axeon Specialty Products LLC	Paulsboro, NJ	74,000	32,000	04/17	06/17
PAD District II		472,315	657,690		
Coastal Refining & Mktg	El Dorado, KS	0	20,000	b	
Intercoastal Energy Svcs Corp	Troy, IN	1,250	2,250	11/90	03/91
Farmland Industries	Philipsburg, KS	26,400	22,800	12/91	07/92
Coastal Refining & Mktg	Wichita, KS	28,800	41,300	05/93	06/93
Coastal Refining & Mktg	Augusta, KS	0	21,000	06/93	06/93
Crystal Refining	Carson City, MI	3,000	0	10/92	09/93
Marathon	Indianapolis, IN	50,000	68,000	09/93	10/93
Indian Refining	Lawrenceville, IL	80,750	103,000	09/95	10/95
Cyril Petrochemical Corp	Cyril, OK	7,500	0	09/95	12/95
Laketon Refining	Laketon, IN	11,100	0	06/95	01/96
Total Petroleum, Inc.	Arkansas City, KS	56,000	74,840	08/96	09/96
TPI Petro Inc.	Alma, MI	51,000	63,300	11/99	12/99
Premcor Refining Group	Blue Island, IL	80,515	124,500	01/01	04/01
Premcor Refining Group	Hartford, IL	64,000	116,700	09/02	10/02
Ventura Refining & Transmission LLC	Thomas, OK	12,000	0	10/10	11/14

Table 13. Refineries Permanently Shutdown By PAD District Between January 1, 1990 and January 1, 2018

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date of Last Operation	Date Shutdown
PAD District III		344,480	351,900		
Imron Refining, Inc.	San Leon, TX	7,000	0	c	08/90
Eagle Refining	Jackson, TX	1,800	1,800	01/90	10/90
Vulcan Refining	Cordova, AL	9,500	5,000	09/90	12/90
Sabine Resources	Stonewall, LA	12,000	0	c	02/92
Rattlesnake Refining	Wickett, TX	8,000	10,400	02/92	03/92
Longview Refining Assoc	Longview, TX	13,300	13,800	08/92	09/92
Thriftway Co	Bloomfield, NM	4,000	3,250	01/92	10/92
El Paso Refining	El Paso, TX	50,000	76,000	10/92	12/92
Dubach Gas	Dubach, LA	8,500	3,000	12/93	12/93
Amerada Hess	Purvis, MS	30,000	50,500	01/94	02/94
Barrett Refg Corp	Vicksburg, MS	8,000	0	06/95	01/96
Arcadia Refining & Mktg	Lisbon, LA	7,350	6,700	01/96	02/96
Canal Refg Co.	Chuch Point, LA	9,500	2,100	07/95	09/97
Gold Line Refining LTD	Jennings, LA	12,000	0	07/97	01/98
Petrolite Corp	Kilgore, TX	600	750	12/97	02/98
Pride Refining Inc.	Abilene, TX	42,750	40,500	05/98	04/98
Shell Oil Co	Odessa, TX	28,300	33,500	10/98	11/98
Berry Petroleum Co.	Stephens, AR	6,700	3,700	07/99	02/00
Dow Haltermann Products	Channelview, TX	880	0	09/04	12/05
Hunt Southland Refining Co	Lumberton, MS	5,800	0	03/05	12/06
Gulf Atlantic Operations LLC	Mobile, AL	16,700	15,400	03/06	09/07
Western Refining Southwest Inc	Bloomfield, NM	16,800	19,500	12/09	11/12
Trigeant LTD	Corpus Christi, TX	0	29,000	12/13	12/14
Pelican Refining Company LLC	Lake Charles, LA	0	12,000	12/14	01/15
Shell Oil Products US	Saint Rose, LA	45,000	25,000	01/18	01/18
PAD District IV		61,800	83,700		
Amoco Oil Co.	Casper, WY	40,000	44,900	12/91	12/91
Landmark Refining	Fruita, CO	10,000	25,900	01/92	11/93
Pennzoil Producing Co.	Roosevelt, UT	8,000	12,900	09/94	10/94
Antelope Refining LLC	Douglas, WY	3,800	0	02/15	12/16

Table 13. Refineries Permanently Shutdown By PAD District Between January 1, 1990 and January 1, 2018

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date of Last Operation	Date Shutdown
PAD District V		494,860	505,350		
Gibson Oil & Refining	Bakersfield, CA	9,600	0	07/87	12/90
Chevron USA Inc	Kenai, AK	22,000	0	06/91	07/91
Anchor Refining Co.	McKittrick, CA	10,000	6,000	06/91	08/91
Golden West	Santa Fe Springs, CA	47,000	94,300	02/92	03/92
Eco Asphalt Inc.	Long Beach, CA	10,550	7,000	c	10/92
Fletcher Oil & Refining	Carson, CA	29,675	48,100	09/92	10/92
Sunbelt Refining	Coolidge, AZ	10,000	7,000	08/93	09/93
Chemoil Refining Corp	Long Beach, CA	18,000	0	02/94	04/94
Powerine Oil Co.	Santa Fe Springs, CA	46,500	100,300	06/95	09/95
Sunland Refining Corp.	Bakersfield, CA	12,000	2,650	03/95	12/95
Intermountain Refining Co.	Fredonia, AZ	3,800	2,000	01/94	05/96
Pacific Refining Co.	Hercules, CA	50,000	62,400	07/95	09/97
Sound Refining Inc	Tacoma, WA	11,900	6,000	10/98	12/98
Chevron USA Inc.	Richmond Beach, WA	0	6,200	05/00	06/00
Foreland Refining Corp.	Tonopah, NV	0	3,000	02/01	01/02
Tricor Refining LLC	Bakersfield, CA	0	14,400	07/01	01/02
Paramount Petroleum Corporation	Portland, OR	0	10,000	11/06	12/08
Tenby Inc	Oxnard, CA	2,800	0	12/11	12/11
Flint Hills Resources LP	North Pole, AK	126,535	5,500	a	06/14
Alon Bakersfield Operating Inc	Bakersfield, CA	0	52,000	12/08	09/17
Paramount Petroleum Corporation	Paramount, CA	84,500	78,500	10/12	09/17
U.S. Total		2,017,905	2,574,540		

Table 13. Refineries Permanently Shutdown By PAD District Between January 1, 1990 and January 1, 2018

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date of Last Operation	Date Shutdown
PAD District VI		704,300	1,413,200		
Arochem International	Ponce, PR	75,600	37,000	12/91	12/92
Peerless Oil & Chemical	Ponce, PR	8,800	45,200	09/94	12/94
Chevron Phillips Chem	Guayama, PR	0	93,200	03/01	01/02
Caribbean Petroleum Corp	San Juan, PR	42,000	60,500	12/00	01/05
Shell Chem Yabucoa Inc	Yabucoa, PR	77,900	91,300	10/08	12/09
Hovensa LLC	Kingshill, VI	500,000	1,086,000	02/12	02/12

a. Facility in operation as other than a refinery since it no longer processes crude oil or unfinished oils.

b. Facility maintained asphalt production capacity until September, 2004.

c. Never Operated

bbl/cd=Barrels per calendar day

bbl/sd=Barrels per stream day.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and Form EIA-820, "Annual Refinery Report."

Explanatory Notes

Survey Methodology

Description of Survey Form

The Form EIA-820, “Annual Refinery Report,” is the primary source of data in the “Refinery Capacity Report” tables. The form collects data on the consumption of purchased steam, electricity, coal, and natural gas; refinery receipts of crude oil by method of transportation; operable capacity for atmospheric crude oil distillation units and downstream units; and production capacity for crude oil and petroleum products.

Frame

The respondent frame consists of all operating and idle petroleum refineries, located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. As of January 1, 2018 there were 135 refineries.

The respondent frame is maintained by monitoring the monthly Form EIA-810, “Monthly Refinery Report,” and industry publications for changes and developments in the petroleum industry such as refinery sales, mergers and new operations.

Collection

The Form EIA-820 is sent to respondents in January. Survey forms can be submitted by electronic mail or facsimile. Completed forms are required to be submitted by the 15th day of February of the current report year. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to secure responses from those companies failing to report by February 15th.

Processing and Micro Editing

Upon receipt, all reported data are transformed into a standard format and sent through a log-in and prescreening process to validate respondent control information and resolve any discrepancies. The data are then processed using generalized edit and imputation procedures. Automated editing procedures check current data for consistency with past data and for internal consistency (e.g., totals equal to the sums of the parts).

After the edit failures are resolved and imputation performed for nonrespondents, preliminary tables are produced and used to identify anomalies. Anomalies result in further review of respondent data which in turn may result in additional flagged data and imputation.

Imputation and Estimation

Imputation is performed for companies that fail to file prior to the publication deadline. When nonresponse occurs, values for these companies are imputed from data reported on the most recent year’s Form EIA-820 and/or from data reported on Form EIA-810, “Monthly Refinery Report,” for that company. For most surveyed items, the value imputed for nonrespondents is the value that the company reported on the Form EIA-820 for the most recent year. For three categories of information however, the imputed value is also based on their data from the Form EIA-810 as follows:

Part 4: Refinery Receipts of Crude Oil by Method of Transportation

The imputation methodology for this section is based on data reported on both the monthly Form EIA-810 and the annual Form EIA-820. Annual refinery receipts of domestic and foreign crude oil for a nonrespondent are imputed by aggregating the values for the refinery on the monthly survey. These values are allocated to the method of transportation by using the percentages reported for the refinery in the previous year.

Part 5: Atmospheric Crude Oil Distillation Capacity

Operable atmospheric crude oil distillation capacity in barrels per calendar day is collected on the monthly Form EIA-810 as of the first day of each month and on the annual Form EIA-820 as of January 1. As part of the editing process for the Form EIA-820, these two values are compared. Companies are contacted and any discrepancies are resolved by the time of publication. Imputed values for operable atmospheric crude oil distillation capacity in barrels per calendar day are taken directly from the January Form EIA-810. A barrel per stream day capacity is then derived by dividing the reported barrels per calendar day capacity by .95.

Parts 6 and 7: Downstream Charge Capacity and Production Capacity

Current year and projected year data for downstream charge capacity and production capacity are taken directly from the previous year's annual report.

Macro Editing

A comparison of the data collected on the EIA-820 with other similar data series and industry trade journals is performed each year.

Dissemination

Prior to 2006, the data collected on Form EIA-820, "Annual Refinery Report," was published in the *Petroleum Supply Annual, Volume 1*. Beginning with data for 2006, the Form EIA-820 data are published as a standalone product in the EIA publication "Refinery Capacity Report." This report contains statistics on consumption of purchased steam, electricity, coal, and natural gas; refinery receipts of crude oil by method of transportation; current and projected capacities for atmospheric crude oil distillation, downstream charge and production capacities. The data are also published in the *Annual Energy Review*. The "Refinery Capacity Report" can be found at:

<http://www.eia.gov/petroleum/refinerycapacity/>

Additional Sources of Data

The Form EIA-820, "Annual Refinery Report," is the primary source of data in the "Refinery Capacity Report" tables. In addition, some data collected on the Form EIA-810, "Monthly Refinery Report," are included.

Quality

Response Rates

The response rate for the Form EIA-820 is normally 100 percent.

Non-sampling Errors

There are two types of errors usually associated with data produced from a survey -sampling errors and nonsampling errors. Because estimates from the Form

EIA-820 survey are based on a complete census of the frame of petroleum refineries, there is no sampling error in the data presented in this report. The data, however, are subject to nonsampling errors. Nonsampling errors are those which can arise from: (1) the inability to obtain data from all companies in the frame or sample (nonresponse) and the method used to account for nonresponses; (2) definitional difficulties and/or improperly worded questions which lead to different interpretations; (3) mistakes in recording or coding the data obtained from respondents; and (4) other errors of collection, response, coverage, and estimation. Quality control procedures are employed in the collection and editing operations to minimize misrepresentation and misreporting. Nonresponse follow-up procedures are employed to reduce the number of nonrespondents, and procedures employed to impute missing data, introduce a minimal amount of error, given the relatively small volume of imputed data.

Resubmissions

EIA-820 resubmissions are required whenever an error greater than 5 percent of the true value is discovered. In the event of a reporting error, company reports are updated after contact with the company and are followed up by corrected report resubmissions.

Revision Policy

The "Refinery Capacity Report" reflects EIA's final data on refinery capacity and will be revised only if, in EIA's judgment, a revision is expected to substantively affect understanding of the U.S. refinery capacity.

Confidentiality

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity reported on Parts 5, 6, and 7 of Form EIA-820 are not considered confidential and are published in the "Refinery Capacity Report." All other information reported on Form EIA-820 (i.e. Parts 3 and 4 and respondent information) will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the General Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Company specific data are also provided to other DOE offices for the purpose of examining specific petroleum operations in the context of emergency response planning and actual emergencies.

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

Refinery Capacity History

Refinery capacity data collection was begun in 1918 by the Bureau of Mines, then in the Department of Commerce, and was operated on a voluntary basis until 1980. In 1980, the mandatory Energy Information Administration (EIA) Form EIA-177, "Capacity of Petroleum Refineries," was implemented. Information on refining capacity was expanded to include not only current year operations, but two-year projections, and refinery input/production data. Working storage capacity data was also added to the form and product categories were added for total coverage. Information on refinery downstream facilities was expanded to include a breakdown of thermal operations and to add vacuum distillation, catalytic hydrotreating and hydrocracking. Production capacity was also added to include information on isomerization, alkylation, aromatics, asphalt/road oil, coking, lubricants and hydrogen.

In 1983, the form was revised to improve the consistency and quality of the data collected by the EIA and redesignated as Form EIA-820, "Annual Refinery

Report." Two sections for data previously reported monthly were added: (1) refinery receipts of crude oil by method of transportation, and (2) fuels consumed for all purposes at refineries. Also, the second year projections on refining capacity were eliminated. As a result of a study conducted by the EIA evaluating motor gasoline data collected by the Federal Highway Administration (FHWA) and by the EIA, motor gasoline blending plants were included for the first time in the respondent frame in order to produce more accurate statistics on the production of motor gasoline.

In 1987, the form was revised to reduce respondent burden and to better reflect current refinery operations through updated terminology. Information on projected input/production of refinery processing facilities was deleted. Several categories under catalytic hydrotreating were combined: naphtha and reformer feeds were combined into a single category as well as residual fuel oil and "other." Thermal cracking types, gas oil and "other" were also combined into a single category. Catalytic reforming types, conventional and bi-metallic were replaced with low and high pressure processing units. Two new categories were added: fuels solvent deasphalting was added to downstream charge capacity and sulfur recovery was added to production capacity.

In 1994, the form was revised to enable EIA to calculate utilization rates for certain downstream processing units and to reflect storage capacity of fuels mandated by the Clean Air Act Amendments of 1990. Additions to the form included calendar day downstream charge capacity for fluid and delayed coking, catalytic cracking, and catalytic hydrocracking. Also storage capacity categories for reformulated, oxygenated, and other finished motor gasoline were added, as well as oxygenate storage capacity and separate categories for high and low sulfur distillate fuel oil.

In 1995, motor gasoline blending plants were dropped from the survey frame, since by this time, the only section of the form that applied to them was working and shell storage capacity. Also in 1995, a decision was made to no longer collect storage capacity from shutdown refineries; therefore, these refineries were also eliminated from the survey frame.

In 1996, the survey was moved to a biennial schedule (every other year) and was renamed "Biennial Refinery Report." The survey was not conducted for January 1, 1996 or January 1, 1998. Respondents were not required

to submit data for crude oil and petroleum products consumed at refineries during 1995 and 1997. These data are available from the Form EIA-810, "Monthly Refinery Report." The requirement to submit data for refinery consumption of natural gas, coal, and purchased steam and electricity on the Form EIA-820 remained.

In 2000, the survey was moved to an annual schedule.

In 2004, the survey form was amended to reflect the increasing emphasis on the removal of sulfur from transportation fuels.

In 2009, natural gas used as feedstock for hydrogen plant production was added to the form. Also, isooctane production capacity was added.

In 2010, the survey form was amended to reflect the increasing use of bio-fuels. Storage capacities of biomass-based diesel fuel, other renewable diesel fuel and other renewable fuels were added to the form. Also, barrels per calendar day capacity of the catalytic reformer was added; previously this was only collected on a stream day basis.

In 2011, storage capacity data was removed from the form. Storage capacity is now being collected as of March 31 and September 30 on the Form EIA-810, "Monthly Refinery Report."