



U.S. Energy Information
Administration

Petroleum Supply Monthly

with data for December 2018

March 2019



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Preface

The Petroleum Supply Monthly (PSM) is the monthly component of a series of three publications produced by the Office of Petroleum and Biofuels Statistics of the U.S. Energy Information Administration (EIA). The other two components are the Weekly Petroleum Status Report (WPSR) and the Petroleum Supply Annual (PSA). Together these publications present comprehensive petroleum and biofuel supply data on a weekly, monthly and annual basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply. Included are: petroleum refiners, motor gasoline blenders, oxygenate producers, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of crude oil, petroleum products, and biofuels. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

Scope of data

The PSM presents statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District levels, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources including federal and state agencies.

Sections

- U.S. supply and disposition of crude oil, petroleum products, and biofuels
- Regional supply and disposition of crude oil, petroleum products, and biofuels
- Crude oil supply and disposition and production by state
- Natural Gas Processing
- Refinery Operations
- Imports of residual fuel oil by state of entry
- Imports by PADD
- Imports by country of origin
- Exports
- Net imports
- Stocks
- Movements of crude oil, petroleum products, and biofuels

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Table 1. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply					Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³	
Crude Oil⁴	367,310	--	--	220,059	22,923	-7,241	539,691	77,842	0	1,090,933
Hydrocarbon Gas Liquids	138,839	-617	11,538	8,298	--	-20,324	22,680	49,508	106,194	188,517
Natural Gas Liquids	138,839	-617	2,119	7,640	--	-20,271	22,680	49,508	96,064	180,361
Ethane	53,597	--	167	--	--	-872	--	7,970	46,666	49,640
Propane	45,695	--	9,384	5,897	--	-10,247	--	34,195	37,028	63,658
Normal Butane	11,884	--	-6,814	1,264	--	-9,351	11,259	3,577	849	37,735
Isobutane	12,410	--	-618	474	--	-82	6,846	45	5,457	8,490
Natural Gasoline	15,253	-617	--	5	--	281	4,575	3,719	6,066	20,838
Refinery Olefins	--	--	9,419	658	--	-53	--	--	10,130	8,156
Ethylene	--	--	14	--	--	0	--	--	14	0
Propylene	--	--	9,694	476	--	835	--	--	9,335	6,946
Normal Butylene	--	--	-271	182	--	-938	--	--	849	1,075
Isobutylene	--	--	-18	--	--	50	--	--	-68	135
Other Liquids	--	38,402	--	32,083	-1,045	9,707	45,696	14,577	-539	337,804
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	38,407	--	1,092	4,101	981	36,762	5,857	0	31,375
Hydrogen	--	--	--	--	7,174	--	7,174	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	2,680	--	195	-38	371	--	2,466	0	1,551
Renewable Fuels (including Fuel Ethanol)	--	35,727	--	897	-3,074	602	29,557	3,391	0	29,803
Fuel Ethanol ⁵	--	31,736	--	255	-1,111	-341	27,891	3,330	0	23,338
Renewable Fuels Except Fuel Ethanol	--	3,991	--	642	-1,963	943	1,666	61	0	6,465
Other Hydrocarbons	--	--	--	--	39	8	31	--	0	21
Unfinished Oils	--	--	--	15,482	--	-6,075	15,002	7,082	-527	85,856
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	-5	--	15,509	-5,146	14,804	-6,083	1,637	0	220,542
Reformulated	--	-1	--	5,030	7,213	662	11,573	7	0	50,101
Conventional	--	-4	--	10,479	-12,359	14,142	-17,656	1,630	0	170,441
Aviation Gasoline Blend. Comp.	--	--	--	--	--	-3	15	--	-12	31
Finished Petroleum Products	--	104	634,024	19,251	8,712	19,069	--	113,824	529,199	294,289
Finished Motor Gasoline	--	104	310,612	897	6,257	1,465	--	30,610	285,795	25,732
Reformulated	--	--	99,502	--	-6,684	-3	--	--	92,821	44
Conventional	--	104	211,110	897	12,941	1,468	--	30,610	192,974	25,688
Finished Aviation Gasoline	--	--	340	5	--	-36	--	--	381	956
Kerosene-Type Jet Fuel	--	--	57,527	3,256	--	2,283	--	6,826	51,674	41,586
Kerosene	--	--	385	--	--	3	--	320	62	2,595
Distillate Fuel Oil ⁵	--	--	172,845	5,875	2,456	13,650	--	42,672	124,854	140,006
15 ppm sulfur and under	--	--	160,879	5,193	2,456	12,386	--	34,648	121,493	123,596
Greater than 15 ppm to 500 ppm sulfur	--	--	3,810	319	--	420	--	3,657	52	5,111
Greater than 500 ppm sulfur	--	--	8,156	363	--	844	--	4,366	3,309	11,299
Residual Fuel Oil ⁶	--	--	13,648	5,583	--	-1,479	--	8,174	12,536	28,314
Less than 0.31 percent sulfur	--	--	2,019	2	--	-44	--	NA	NA	2,145
0.31 to 1.00 percent sulfur	--	--	1,432	1,294	--	-212	--	NA	NA	4,717
Greater than 1.00 percent sulfur	--	--	10,197	4,287	--	-1,219	--	NA	NA	21,446
Petrochemical Feedstocks	--	--	9,733	659	--	-204	--	--	10,596	3,404
Naphtha for Petro. Feed. Use	--	--	6,680	543	--	-51	--	--	7,274	2,394
Other Oils for Petro. Feed. Use	--	--	3,053	116	--	-153	--	--	3,322	1,010
Special Naphthas	--	--	1,111	423	--	261	--	--	1,273	1,461
Lubricants	--	--	5,478	1,183	--	809	--	2,995	2,857	13,955
Waxes	--	--	116	204	--	-15	--	128	207	676
Petroleum Coke	--	--	29,164	525	--	324	--	21,041	8,324	7,899
Marketable	--	--	21,813	525	--	324	--	21,041	973	7,899
Catalyst	--	--	7,351	--	--	--	--	--	7,351	--
Asphalt and Road Oil	--	--	7,916	640	--	1,959	--	1,036	5,561	27,045
Still Gas	--	--	22,097	--	--	--	--	--	22,097	--
Miscellaneous Products	--	--	3,052	1	--	49	--	22	2,982	660
Total	506,149	37,889	645,562	279,691	30,591	1,211	608,067	255,750	634,854	1,911,543

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 2. U.S. Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply					Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³	
Crude Oil⁴	3,996,883	--	--	2,831,289	103,596	6,977	6,193,389	731,402	0	1,090,933
Hydrocarbon Gas Liquids	1,587,427	-7,588	231,406	71,069	--	-2,387	209,770	584,705	1,090,226	188,517
Natural Gas Liquids	1,587,427	-7,588	123,747	62,521	--	-4,463	209,770	584,705	976,095	180,361
Ethane	622,889	--	2,230	--	--	-5,979	--	93,217	537,881	49,640
Propane	508,747	--	110,037	49,942	--	1,311	--	354,734	312,681	63,658
Normal Butane	132,011	--	16,428	8,450	--	-586	69,345	69,283	18,847	37,735
Isobutane	140,834	--	-4,948	4,069	--	97	79,882	1,633	58,343	8,490
Natural Gasoline	182,946	-7,588	--	60	--	694	60,543	65,838	48,343	20,838
Refinery Olefins	--	--	107,659	8,548	--	2,076	--	--	114,131	8,156
Ethylene	--	--	78	--	--	0	--	--	78	0
Propylene	--	--	106,877	6,384	--	2,104	--	--	111,157	6,946
Normal Butylene	--	--	791	2,164	--	-133	--	--	3,088	1,075
Isobutylene	--	--	-87	--	--	105	--	--	-192	135
Other Liquids	--	454,779	--	469,664	9,512	9,350	731,657	192,857	92	337,804
Hydrogen/Oxygenates/Renewables/	--	--	--	--	--	--	--	--	--	--
Other Hydrocarbons	--	454,829	--	12,950	40,704	1,304	438,616	68,564	0	31,375
Hydrogen	--	--	--	--	80,825	--	80,825	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	28,813	--	3,524	-7,097	105	--	25,135	0	1,551
Renewable Fuels (including Fuel Ethanol)	--	426,016	--	9,331	-33,297	1,225	357,397	43,429	0	29,803
Fuel Ethanol ⁵	--	382,400	--	1,294	-6,082	290	336,346	40,976	0	23,338
Renewable Fuels Except Fuel Ethanol	--	43,616	--	8,037	-27,214	935	21,051	2,453	0	6,465
Other Hydrocarbons	--	--	--	95	273	-26	394	--	0	21
Unfinished Oils	--	--	--	222,990	--	-404	121,721	101,283	390	85,856
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	-50	--	233,724	-31,192	8,434	171,038	23,010	0	220,542
Reformulated	--	-2	--	64,620	58,714	-3,354	126,516	170	0	50,101
Conventional	--	-48	--	169,104	-89,906	11,788	44,522	22,840	0	170,441
Aviation Gasoline Blend. Comp.	--	--	--	--	--	16	282	--	-298	31
Finished Petroleum Products	--	1,832	7,319,496	251,755	65,152	2,652	--	1,260,603	6,374,980	294,289
Finished Motor Gasoline	--	1,832	3,671,368	16,390	37,274	1,091	--	324,258	3,401,515	25,732
Reformulated	--	--	1,187,033	--	-54,132	4	--	--	1,132,897	44
Conventional	--	1,832	2,484,335	16,390	91,407	1,087	--	324,258	2,268,618	25,688
Finished Aviation Gasoline	--	--	4,279	71	--	-85	--	--	4,435	956
Kerosene-Type Jet Fuel	--	--	659,797	46,282	--	368	--	81,211	624,500	41,586
Kerosene	--	--	3,343	616	--	457	--	1,646	1,856	2,595
Distillate Fuel Oil ⁵	--	--	1,886,287	63,727	27,877	-5,568	--	474,706	1,508,754	140,006
15 ppm sulfur and under	--	--	1,769,981	55,424	27,877	-4,295	--	399,448	1,458,129	123,596
Greater than 15 ppm to 500 ppm sulfur	--	--	36,722	1,355	--	-2,458	--	36,391	4,144	5,111
Greater than 500 ppm sulfur	--	--	79,584	6,948	--	1,185	--	38,866	46,481	11,299
Residual Fuel Oil ⁶	--	--	154,917	76,861	--	-1,045	--	115,450	117,373	28,314
Less than 0.31 percent sulfur	--	--	22,171	8,572	--	-3	--	NA	NA	2,145
0.31 to 1.00 percent sulfur	--	--	22,667	7,180	--	-1,884	--	NA	NA	4,717
Greater than 1.00 percent sulfur	--	--	110,079	61,109	--	842	--	NA	NA	21,446
Petrochemical Feedstocks	--	--	115,971	7,898	--	503	--	--	123,366	3,404
Naphtha for Petro. Feed. Use	--	--	76,361	6,462	--	545	--	--	82,278	2,394
Other Oils for Petro. Feed. Use	--	--	39,610	1,436	--	-42	--	--	41,088	1,010
Special Naphthas	--	--	13,121	4,923	--	269	--	--	17,775	1,461
Lubricants	--	--	67,180	15,557	--	1,934	--	39,846	40,957	13,955
Waxes	--	--	1,659	1,856	--	-181	--	1,552	2,144	676
Petroleum Coke	--	--	329,344	4,153	--	-620	--	212,584	121,533	7,899
Marketable	--	--	244,420	4,153	--	-620	--	212,584	36,609	7,899
Catalyst	--	--	84,924	--	--	--	--	--	84,924	--
Asphalt and Road Oil	--	--	121,310	13,342	--	5,539	--	8,995	120,118	27,045
Still Gas	--	--	256,515	--	--	--	--	--	256,515	--
Miscellaneous Products	--	--	34,405	79	--	-10	--	356	34,138	660
Total	5,584,310	449,023	7,550,902	3,623,777	178,260	16,592	7,134,816	2,769,567	7,465,297	1,911,543

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

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Table 3. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³
Crude Oil⁴	11,849	--	--	7,099	739	-234	17,409	2,511	0
Hydrocarbon Gas Liquids	4,479	-20	372	268	--	-656	732	1,597	3,426
Natural Gas Liquids	4,479	-20	68	246	--	-654	732	1,597	3,099
Ethane	1,729	--	5	--	--	-28	--	257	1,505
Propane	1,474	--	303	190	--	-331	--	1,103	1,194
Normal Butane	383	--	-220	41	--	-302	363	115	27
Isobutane	400	--	-20	15	--	-3	221	1	176
Natural Gasoline	492	-20	--	0	--	9	148	120	196
Refinery Olefins	--	--	304	21	--	-2	--	--	327
Ethylene	--	--	0	--	--	0	--	--	0
Propylene	--	--	313	15	--	27	--	--	301
Normal Butylene	--	--	-9	6	--	-30	--	--	27
Isobutylene	--	--	-1	--	--	2	--	--	-2
Other Liquids	--	1,239	--	1,035	-34	313	1,474	470	-17
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,239	--	35	132	32	1,186	189	0
Hydrogen	--	--	--	--	231	--	231	--	0
Oxygenates (excluding Fuel Ethanol)	--	86	--	6	-1	12	--	80	0
Renewable Fuels (including Fuel Ethanol) ...	--	1,152	--	29	-99	19	953	109	0
Fuel Ethanol ⁵	--	1,024	--	8	-36	-11	900	107	0
Renewable Fuels Except Fuel Ethanol	--	129	--	21	-63	30	54	2	0
Other Hydrocarbons	--	--	--	--	1	0	1	--	0
Unfinished Oils	--	--	--	499	--	-196	484	228	-17
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	0	--	500	-166	478	-196	53	0
Reformulated	--	0	--	162	233	21	373	0	0
Conventional	--	0	--	338	-399	456	-570	53	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	0	0	--	0
Finished Petroleum Products	--	3	20,452	621	281	615	--	3,672	17,071
Finished Motor Gasoline	--	3	10,020	29	202	47	--	987	9,219
Reformulated	--	--	3,210	--	-216	0	--	--	2,994
Conventional	--	3	6,810	29	417	47	--	987	6,225
Finished Aviation Gasoline	--	--	11	0	--	-1	--	--	12
Kerosene-Type Jet Fuel	--	--	1,856	105	--	74	--	220	1,667
Kerosene	--	--	12	--	--	0	--	10	2
Distillate Fuel Oil ⁵	--	--	5,576	190	79	440	--	1,377	4,028
15 ppm sulfur and under	--	--	5,190	168	79	400	--	1,118	3,919
Greater than 15 ppm to 500 ppm sulfur	--	--	123	10	--	14	--	118	2
Greater than 500 ppm sulfur	--	--	263	12	--	27	--	141	107
Residual Fuel Oil ⁶	--	--	440	180	--	-48	--	264	404
Less than 0.31 percent sulfur	--	--	65	0	--	-1	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	46	42	--	-7	--	NA	NA
Greater than 1.00 percent sulfur	--	--	329	138	--	-39	--	NA	NA
Petrochemical Feedstocks	--	--	314	21	--	-7	--	--	342
Naphtha for Petro. Feed. Use	--	--	215	18	--	-2	--	--	235
Other Oils for Petro. Feed. Use	--	--	98	4	--	-5	--	--	107
Special Naphthas	--	--	36	14	--	8	--	--	41
Lubricants	--	--	177	38	--	26	--	97	92
Waxes	--	--	4	7	--	0	--	4	7
Petroleum Coke	--	--	941	17	--	10	--	679	269
Marketable	--	--	704	17	--	10	--	679	31
Catalyst	--	--	237	--	--	--	--	--	237
Asphalt and Road Oil	--	--	255	21	--	63	--	33	179
Still Gas	--	--	713	--	--	--	--	--	713
Miscellaneous Products	--	--	98	0	--	2	--	1	96
Total	16,327	1,222	20,825	9,022	987	39	19,615	8,250	20,479

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 4. U.S. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports	Adjustments ¹	Stock Change ²	Refinery and Blender Net Inputs	Exports	Products Supplied ³
Crude Oil⁴	10,950	--	--	7,757	284	19	16,968	2,004	0
Hydrocarbon Gas Liquids	4,349	-21	634	195	--	-7	575	1,602	2,987
Natural Gas Liquids	4,349	-21	339	171	--	-12	575	1,602	2,674
Ethane	1,707	--	--	--	--	-16	--	255	1,474
Propane	1,394	--	301	137	--	4	--	972	857
Normal Butane	362	--	45	23	--	-2	190	190	52
Isobutane	386	--	-348	11	--	0	219	4	160
Natural Gasoline	501	-21	--	0	--	2	166	180	132
Refinery Olefins	--	--	295	23	--	6	--	--	313
Ethylene	--	--	0	--	--	0	--	--	0
Propylene	--	--	293	17	--	6	--	--	305
Normal Butylene	--	--	2	6	--	0	--	--	8
Isobutylene	--	--	308	--	--	0	--	--	-1
Other Liquids	--	1,246	--	1,287	26	26	2,005	528	0
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,246	--	35	112	4	1,202	188	0
Hydrogen	--	--	--	--	221	--	221	--	0
Oxygenates (excluding Fuel Ethanol)	--	79	--	10	-19	0	--	69	0
Renewable Fuels (including Fuel Ethanol)	--	1,167	--	26	-91	3	979	119	0
Fuel Ethanol ⁵	--	1,048	--	4	-17	1	921	112	0
Renewable Fuels Except Fuel Ethanol	--	119	--	22	-75	3	58	7	0
Other Hydrocarbons	--	--	--	0	1	0	1	--	0
Unfinished Oils	--	--	--	611	--	-1	333	277	1
Motor Gasoline Blend.Comp. (MGBC) ⁵	--	0	--	640	-85	23	469	63	0
Reformulated	--	0	--	177	161	-9	347	0	0
Conventional	--	0	--	463	-246	32	122	63	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	0	1	--	-1
Finished Petroleum Products	--	5	20,053	690	178	7	--	3,454	17,466
Finished Motor Gasoline	--	5	10,059	45	102	3	--	888	9,319
Reformulated	--	--	3,252	--	-148	0	--	--	3,104
Conventional	--	5	6,806	45	250	3	--	888	6,215
Finished Aviation Gasoline	--	--	12	0	--	0	--	--	12
Kerosene-Type Jet Fuel	--	--	1,808	127	--	1	--	222	1,711
Kerosene	--	--	9	2	--	1	--	5	5
Distillate Fuel Oil ⁵	--	--	5,168	175	76	-15	--	1,301	4,134
15 ppm sulfur and under	--	--	4,849	152	76	-12	--	1,094	3,995
Greater than 15 ppm to 500 ppm sulfur	--	--	101	4	--	-7	--	100	11
Greater than 500 ppm sulfur	--	--	218	19	--	3	--	106	127
Residual Fuel Oil ⁶	--	--	424	211	--	-3	--	316	322
Less than 0.31 percent sulfur	--	--	61	23	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	62	20	--	-5	--	NA	NA
Greater than 1.00 percent sulfur	--	--	302	167	--	2	--	NA	NA
Petrochemical Feedstocks	--	--	318	22	--	1	--	--	338
Naphtha for Petro. Feed. Use	--	--	209	18	--	1	--	--	225
Other Oils for Petro. Feed. Use	--	--	109	4	--	0	--	--	113
Special Naphthas	--	--	36	13	--	1	--	--	49
Lubricants	--	--	184	43	--	5	--	109	112
Waxes	--	--	5	5	--	0	--	4	6
Petroleum Coke	--	--	902	11	--	-2	--	582	333
Marketable	--	--	670	11	--	-2	--	582	100
Catalyst	--	--	233	--	--	--	--	--	233
Asphalt and Road Oil	--	--	332	37	--	15	--	25	329
Still Gas	--	--	703	--	--	--	--	--	703
Miscellaneous Products	--	--	94	0	--	0	--	1	94
Total	15,299	1,230	20,687	9,928	488	45	19,547	7,588	20,453

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

² Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

³ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁴ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁵ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, the U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates.

Table 5. PAD District 1 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	1,941	--	--	23,478	6,942	-509	-635	32,486	2	0	11,655
Hydrocarbon Gas Liquids	15,057	-16	674	2,033	-342	--	-1,379	1,768	3,494	13,523	9,037
Natural Gas Liquids	15,057	-16	264	1,915	-829	--	-1,369	1,768	3,494	12,498	8,749
Ethane	5,951	--	--	--	--	--	220	--	1,066	-165	843
Propane	5,244	--	601	1,685	4,129	--	-1,186	--	2,225	10,620	5,987
Normal Butane	1,594	--	-277	108	535	--	-349	1,242	1	1,066	1,420
Isobutane	799	--	-60	122	-366	--	-62	361	1	195	194
Natural Gasoline	1,469	-16	--	--	-297	--	8	165	201	782	305
Refinery Olefins	--	--	410	118	--	--	-10	--	--	1,025	288
Ethylene	--	--	14	--	--	--	--	--	--	14	--
Propylene	--	--	438	118	--	--	-7	--	--	1,050	121
Normal Butylene	--	--	-49	--	--	--	-23	--	--	-26	107
Isobutylene	--	--	7	--	--	--	20	--	--	-13	60
Other Liquids	--	1,055	--	14,771	64,967	3,489	1,421	83,271	437	-847	72,335
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,058	--	364	10,688	-1,243	-293	10,741	419	0	8,116
Hydrogen	--	--	--	--	--	119	--	119	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	1	--	--	1	0	--
Renewable Fuels (including Fuel Ethanol)	--	1,058	--	364	10,688	-1,363	-293	10,622	418	0	8,116
Fuel Ethanol	--	794	--	--	10,348	-1,069	-571	10,231	413	0	6,581
Renewable Fuels Except Fuel Ethanol	--	264	--	364	340	-294	278	391	5	0	1,535
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	620	142	--	-151	1,744	16	-847	5,205
Motor Gasoline Blend.Comp. (MGBC)	--	-3	--	13,787	54,137	4,733	1,865	70,786	3	0	59,014
Reformulated	--	--	--	5,024	8,638	1,540	-1,329	16,530	1	0	18,832
Conventional	--	-3	--	8,763	45,499	3,192	3,194	54,256	1	0	40,182
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	118,636	9,667	52,935	-3,370	2,103	--	4,414	171,351	73,074
Finished Motor Gasoline	--	--	99,303	791	6,584	-3,663	166	--	346	102,502	3,880
Reformulated	--	--	40,262	--	--	-1,359	1	--	--	38,902	30
Conventional	--	--	59,041	791	6,584	-2,305	165	--	346	63,600	3,850
Finished Aviation Gasoline	--	--	--	1	45	--	5	--	--	41	130
Kerosene-Type Jet Fuel	--	--	2,935	926	14,463	--	-495	--	698	18,121	7,876
Kerosene	--	--	-64	--	315	--	-155	--	201	205	2,052
Distillate Fuel Oil ⁶	--	--	10,965	4,826	29,078	293	2,302	--	884	41,976	44,872
15 ppm sulfur and under	--	--	9,533	4,243	27,171	293	1,050	--	593	39,597	37,678
Greater than 15 ppm to 500 ppm sulfur	--	--	437	319	236	--	580	--	291	121	2,602
Greater than 500 ppm sulfur	--	--	995	264	1,671	--	672	--	0	2,258	4,592
Residual Fuel Oil ⁷	--	--	1,524	2,667	-71	--	-412	--	887	3,645	6,033
Less than 0.31 percent sulfur	--	--	596	2	--	--	52	--	NA	NA	901
0.31 to 1.00 percent sulfur	--	--	267	376	--	--	108	--	NA	NA	1,429
Greater than 1.00 percent sulfur	--	--	661	2,289	-71	--	-572	--	NA	NA	3,703
Petrochemical Feedstocks	--	--	56	--	--	--	-34	--	--	90	80
Naphtha for Petro. Feed. Use	--	--	56	--	--	--	-34	--	--	90	80
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	17	--	--	--	6	--	--	11	43
Lubricants	--	--	418	130	276	--	86	--	164	574	1,301
Waxes	--	--	21	63	--	--	-12	--	73	23	376
Petroleum Coke	--	--	1,153	3	1,023	--	--	--	1,095	1,084	--
Marketable	--	--	396	3	1,023	--	--	--	1,095	327	--
Catalyst	--	--	757	--	--	--	--	--	--	757	--
Asphalt and Road Oil	--	--	806	260	1,222	--	644	--	50	1,594	6,397
Still Gas	--	--	1,410	--	--	--	--	--	--	1,410	--
Miscellaneous Products	--	--	92	--	--	--	2	--	13	77	34
Total	16,998	1,039	119,310	49,949	124,502	-390	1,510	117,525	8,346	184,028	166,101

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix

D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report", EIA-812, "Monthly Product Pipeline Report", EIA-813, "Monthly Crude Oil Report", EIA-814, "Monthly Imports Report", EIA-815, "Monthly Bulk Terminal and Blender Report", EIA-816, "Monthly Natural Gas Liquids Report", EIA-817, "Monthly Tanker and Barge Movements Report", and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 6. PAD District 1 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil	21,045	--	--	291,286	62,119	17,080	176	382,193	9,161	0	11,655
Hydrocarbon Gas Liquids	181,536	-165	13,146	17,312	-23,332	--	560	16,200	37,278	134,459	9,037
Natural Gas Liquids	181,536	-165	8,942	15,273	-26,810	--	604	16,200	37,278	124,694	--
Ethane	78,258	--	--	--	--	--	389	--	11,433	2,881	--
Propane	59,474	--	7,721	13,446	37,909	--	142	--	21,587	96,821	--
Normal Butane	17,969	--	1,569	627	3,261	--	70	9,976	3,020	10,360	--
Isobutane	8,927	--	-348	1,200	-1,806	--	18	4,735	12	3,208	--
Natural Gasoline	16,908	-165	--	--	-2,619	--	-15	1,489	1,227	11,423	--
Refinery Olefins	--	--	4,204	2,039	--	--	-44	--	--	9,765	--
Ethylene	--	--	71	--	--	--	--	--	--	71	--
Propylene	--	--	4,287	2,039	--	--	-33	--	--	9,837	--
Normal Butylene	--	--	-462	--	--	--	-41	--	--	-421	--
Isobutylene	--	--	308	--	--	--	30	--	--	278	--
Other Liquids	--	11,704	--	217,630	699,535	73,101	3,207	996,446	3,732	-1,415	72,335
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	11,740	--	2,231	114,778	38	-694	127,710	1,771	0	8,116
Hydrogen	--	--	--	--	--	1,254	--	1,254	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	14	--	--	14	0	--
Renewable Fuels (including Fuel Ethanol)	--	11,740	--	2,231	114,778	-1,230	-694	126,456	1,756	0	8,116
Fuel Ethanol	--	9,019	--	--	112,385	2,518	-433	122,742	1,612	0	6,581
Renewable Fuels Except Fuel Ethanol	--	2,721	--	2,231	2,393	-3,748	-261	3,714	144	0	1,535
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	14,919	75	--	-8	16,015	402	-1,415	5,205
Motor Gasoline Blend.Comp. (MGBC)	--	-36	--	200,480	584,682	73,063	3,909	852,721	1,559	0	59,014
Reformulated	--	--	--	63,584	95,063	30,805	-1,031	190,454	29	0	18,832
Conventional	--	-36	--	136,896	489,619	42,257	4,940	662,267	1,529	0	40,182
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	1,398,682	128,883	573,736	-71,822	-10,005	--	49,830	1,989,654	73,074
Finished Motor Gasoline	--	--	1,179,054	13,493	78,602	-75,580	-1,625	--	2,294	1,194,900	3,880
Reformulated	--	--	475,142	--	--	-25,831	6	--	--	449,305	30
Conventional	--	--	703,912	13,493	78,602	-49,750	-1,631	--	2,294	745,594	3,850
Finished Aviation Gasoline	--	--	--	30	1,056	--	-45	--	--	1,131	130
Kerosene-Type Jet Fuel	--	--	32,497	16,915	180,574	--	-1,633	--	5,520	226,099	7,876
Kerosene	--	--	1,288	614	1,625	--	254	--	308	2,965	2,052
Distillate Fuel Oil ⁶	--	--	120,201	53,222	287,787	3,758	-7,805	--	12,949	459,824	44,872
15 ppm sulfur and under	--	--	109,710	47,125	266,355	3,758	-6,180	--	7,946	425,183	37,678
Greater than 15 ppm to 500 ppm sulfur	--	--	1,637	1,355	1,335	--	-1,990	--	2,882	3,435	2,602
Greater than 500 ppm sulfur	--	--	8,854	4,742	20,097	--	365	--	2,121	31,207	4,592
Residual Fuel Oil ⁷	--	--	17,292	33,062	-1,998	--	-1,271	--	14,659	34,968	6,033
Less than 0.31 percent sulfur	--	--	4,938	694	-91	--	-289	--	NA	NA	901
0.31 to 1.00 percent sulfur	--	--	5,220	2,055	-1,078	--	3	--	NA	NA	1,429
Greater than 1.00 percent sulfur	--	--	7,134	30,313	-829	--	-985	--	NA	NA	3,703
Petrochemical Feedstocks	--	--	1,105	13	135	--	-18	--	--	1,271	80
Naphtha for Petro. Feed. Use	--	--	1,105	12	144	--	-18	--	--	1,279	80
Other Oils for Petro. Feed. Use	--	--	--	1	-9	--	--	--	--	-8	--
Special Naphthas	--	--	245	7	--	--	-4	--	--	256	43
Lubricants	--	--	4,847	1,816	4,799	--	239	--	2,861	8,362	1,301
Waxes	--	--	184	907	--	--	-151	--	816	426	376
Petroleum Coke	--	--	12,458	193	5,857	--	--	--	9,407	9,101	--
Marketable	--	--	4,746	193	5,857	--	--	--	9,407	1,389	--
Catalyst	--	--	7,712	--	--	--	--	--	--	7,712	--
Asphalt and Road Oil	--	--	12,524	8,611	15,299	--	2,049	--	853	33,532	6,397
Still Gas	--	--	15,824	--	--	--	--	--	--	15,824	--
Miscellaneous Products	--	--	1,163	--	--	--	5	--	163	995	34
Total	202,581	11,539	1,411,828	655,111	1,312,058	18,359	-6,062	1,394,839	100,001	2,122,698	166,101

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol,

biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix

D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 7. PAD District 1 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	63	--	--	757	224	-16	-20	1,048	0	0
Hydrocarbon Gas Liquids	486	-1	22	66	-11	--	-44	57	113	436
Natural Gas Liquids	486	-1	9	62	-27	--	-44	57	113	403
Ethane	192	--	--	--	--	--	7	--	34	-5
Propane	169	--	19	54	133	--	-38	--	--	343
Normal Butane	51	--	-9	3	17	--	-11	40	0	34
Isobutane	26	--	-2	4	-12	--	-2	12	0	6
Natural Gasoline	47	-1	--	--	-10	--	0	5	6	25
Refinery Olefins	--	--	13	4	--	--	0	--	--	33
Ethylene	--	--	0	--	--	--	--	--	--	0
Propylene	--	--	14	4	16	--	0	--	--	34
Normal Butylene	--	--	-2	--	--	--	-1	--	--	-1
Isobutylene	--	--	0	--	--	--	1	--	--	0
Other Liquids	--	34	--	476	2,096	113	46	2,686	14	-27
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	34	--	12	345	-40	-9	346	14	0
Hydrogen	--	--	--	--	--	4	--	4	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	34	--	12	345	-44	-9	343	13	0
Fuel Ethanol ⁶	--	26	--	--	334	-34	-18	330	13	0
Renewable Fuels Except Fuel Ethanol	--	9	--	12	11	-9	9	13	0	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	20	5	--	-5	56	1	-27
Motor Gasoline Blend.Comp. (MGBC) ⁶	--	0	--	445	1,746	153	60	2,283	0	0
Reformulated	--	--	--	162	279	50	-43	533	0	0
Conventional	--	0	--	283	1,468	103	103	1,750	0	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,827	312	1,708	-109	68	--	142	5,527
Finished Motor Gasoline	--	--	3,203	26	212	-118	5	--	11	3,307
Reformulated	--	--	1,299	--	--	-44	0	--	--	1,255
Conventional	--	--	1,905	26	212	-74	5	--	11	2,052
Finished Aviation Gasoline	--	--	--	0	1	--	0	--	--	1
Kerosene-Type Jet Fuel	--	--	95	30	467	--	-16	--	23	585
Kerosene	--	--	-2	--	10	--	-5	--	6	7
Distillate Fuel Oil ⁶	--	--	354	156	938	9	74	--	29	1,354
15 ppm sulfur and under	--	--	308	137	876	9	34	--	19	1,277
Greater than 15 ppm to 500 ppm sulfur	--	--	14	10	8	--	19	--	9	4
Greater than 500 ppm sulfur	--	--	32	9	54	--	22	--	0	73
Residual Fuel Oil ⁷	--	--	49	86	-2	--	-13	--	29	118
Less than 0.31 percent sulfur	--	--	19	0	--	--	2	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	9	12	--	--	3	--	NA	NA
Greater than 1.00 percent sulfur	--	--	21	74	-2	--	-18	--	NA	NA
Petrochemical Feedstocks	--	--	2	--	--	--	-1	--	--	3
Naphtha for Petro. Feed. Use	--	--	2	--	--	--	-1	--	--	3
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	0
Lubricants	--	--	13	4	9	--	3	--	5	19
Waxes	--	--	1	2	--	--	0	--	2	1
Petroleum Coke	--	--	37	0	33	--	--	--	35	35
Marketable	--	--	13	0	33	--	--	--	35	11
Catalyst	--	--	24	--	--	--	--	--	--	24
Asphalt and Road Oil	--	--	26	8	39	--	21	--	2	51
Still Gas	--	--	45	--	--	--	--	--	--	45
Miscellaneous Products	--	--	3	--	--	--	0	--	0	2
Total	548	34	3,849	1,611	4,016	-13	49	3,791	269	5,936

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 8. PAD District 1 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	58	--	--	798	170	47	0	1,047	25	0
Hydrocarbon Gas Liquids	497	0	36	47	-64	--	2	44	102	368
Natural Gas Liquids	497	0	24	42	-73	--	2	44	102	342
Ethane	214	--	--	--	--	--	1	--	31	8
Propane	163	--	21	37	104	--	0	--	--	265
Normal Butane	49	--	4	2	9	--	0	27	8	28
Isobutane	24	--	-1	3	-5	--	0	13	0	9
Natural Gasoline	46	0	--	--	-7	--	0	4	3	31
Refinery Olefins	--	--	12	6	--	--	0	--	--	27
Ethylene	--	--	0	--	--	--	--	--	--	0
Propylene	--	--	12	6	10	--	0	--	--	27
Normal Butylene	--	--	-1	--	--	--	0	--	--	-1
Isobutylene	--	--	1	--	--	--	0	--	--	1
Other Liquids	--	32	--	596	1,917	200	9	2,730	10	-4
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	32	--	6	314	0	-2	350	5	0
Hydrogen	--	--	--	--	--	3	--	3	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	32	--	6	314	-3	-2	346	5	0
Fuel Ethanol ⁶	--	25	--	--	308	7	-1	336	4	0
Renewable Fuels Except Fuel Ethanol	--	7	--	6	7	-10	-1	10	0	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	41	0	--	0	44	1	-4
Motor Gasoline Blend.Comp. (MGBC) ⁶	--	0	--	549	1,602	200	11	2,336	4	0
Reformulated	--	--	--	174	260	84	-3	522	0	0
Conventional	--	0	--	375	1,341	116	14	1,814	4	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,832	353	1,572	-197	-27	--	137	5,451
Finished Motor Gasoline	--	--	3,230	37	215	-207	-4	--	6	3,274
Reformulated	--	--	1,302	--	--	-71	0	--	--	1,231
Conventional	--	--	1,929	37	215	-136	-4	--	6	2,043
Finished Aviation Gasoline	--	--	--	0	3	--	0	--	--	3
Kerosene-Type Jet Fuel	--	--	89	46	495	--	-4	--	15	619
Kerosene	--	--	4	2	4	--	1	--	1	8
Distillate Fuel Oil ⁶	--	--	329	146	788	10	-21	--	35	1,260
15 ppm sulfur and under	--	--	301	129	730	10	-17	--	22	1,165
Greater than 15 ppm to 500 ppm sulfur	--	--	4	4	4	--	-5	--	8	9
Greater than 500 ppm sulfur	--	--	24	13	55	--	1	--	6	85
Residual Fuel Oil ⁷	--	--	47	91	-5	--	-3	--	40	96
Less than 0.31 percent sulfur	--	--	14	2	0	--	-1	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	14	6	-3	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	20	83	-2	--	-3	--	NA	NA
Petrochemical Feedstocks	--	--	3	0	0	--	0	--	--	3
Naphtha for Petro. Feed. Use	--	--	3	0	0	--	0	--	--	4
Other Oils for Petro. Feed. Use	--	--	--	0	0	--	--	--	--	0
Special Naphthas	--	--	1	0	--	--	0	--	--	1
Lubricants	--	--	13	5	13	--	1	--	8	23
Waxes	--	--	1	2	--	--	0	--	2	1
Petroleum Coke	--	--	34	1	16	--	--	--	26	25
Marketable	--	--	13	1	16	--	--	--	26	4
Catalyst	--	--	21	--	--	--	--	--	--	21
Asphalt and Road Oil	--	--	34	24	42	--	6	--	2	92
Still Gas	--	--	43	--	--	--	--	--	--	43
Miscellaneous Products	--	--	3	--	--	--	0	--	0	3
Total	555	32	3,868	1,795	3,595	50	-17	3,821	274	5,816

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 9. PAD District 2 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	67,541	--	--	88,604	-20,735	-4,977	2,689	121,859	5,885	0	132,102
Hydrocarbon Gas Liquids	30,334	-564	506	3,483	-7,420	--	-5,766	4,244	6,766	21,095	50,031
Natural Gas Liquids	30,334	-564	-927	3,054	-6,467	--	-5,674	4,244	6,766	20,094	49,602
Ethane	10,035	--	--	--	--	--	648	--	3,123	4,416	5,191
Propane	11,191	--	2,354	2,504	-7,146	--	-3,371	--	77	12,197	20,659
Normal Butane	3,911	--	-3,160	328	-1,409	--	-3,835	1,820	145	1,540	11,389
Isobutane	1,755	--	-121	217	525	--	114	1,657	0	605	1,952
Natural Gasoline	3,442	-564	--	5	3,411	--	770	767	3,421	1,336	10,411
Refinery Olefins	--	--	1,433	429	--	--	-92	--	--	1,001	429
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	1,416	358	--	--	-18	--	--	839	355
Normal Butylene	--	--	7	71	--	--	-99	--	--	177	4
Isobutylene	--	--	10	--	--	--	25	--	--	-15	70
Other Liquids	--	31,800	--	869	-14,689	-1,128	5,562	11,178	1,188	-1,077	71,950
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	31,802	--	72	-21,327	90	806	9,230	601	0	9,621
Hydrogen	--	--	--	--	--	1,315	--	1,315	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	3	0	--	3	0	4
Renewable Fuels (including Fuel Ethanol)	--	31,802	--	72	-21,327	-1,267	798	7,884	598	0	9,596
Fuel Ethanol	--	29,233	--	--	-20,251	-57	825	7,514	586	0	8,679
Renewable Fuels Except Fuel Ethanol	--	2,569	--	72	-1,076	-1,209	-27	370	12	0	917
Other Hydrocarbons	--	--	--	--	--	39	8	31	--	0	21
Unfinished Oils	--	--	--	85	-415	--	-2,100	2,262	585	-1,077	12,744
Motor Gasoline Blend.Comp. (MGBC)	--	-2	--	712	7,053	-1,219	6,856	-314	2	0	49,585
Reformulated	--	-1	--	--	1,733	-658	550	524	--	0	6,189
Conventional	--	-1	--	712	5,320	-561	6,306	-838	2	0	43,396
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	104	144,943	1,309	-1,098	2,485	6,711	--	938	140,095	64,051
Finished Motor Gasoline	--	104	78,486	--	-587	1,276	211	--	65	79,003	6,504
Reformulated	--	--	11,195	--	--	868	--	--	--	12,063	--
Conventional	--	104	67,291	--	-587	408	211	--	65	66,940	6,504
Finished Aviation Gasoline	--	--	25	2	10	--	17	--	--	20	166
Kerosene-Type Jet Fuel	--	--	8,788	--	894	--	404	--	45	9,233	7,537
Kerosene	--	--	457	--	--	--	154	--	1	302	281
Distillate Fuel Oil	--	--	39,163	499	1,878	1,209	5,722	--	92	36,936	33,653
15 ppm sulfur and under	--	--	39,383	400	1,725	1,209	5,792	--	1	36,925	32,934
Greater than 15 ppm to 500 ppm sulfur	--	--	68	--	153	--	62	--	42	117	382
Greater than 500 ppm sulfur	--	--	-288	99	--	--	-132	--	49	-106	337
Residual Fuel Oil ⁶	--	--	1,826	218	-1,062	--	87	--	233	662	1,280
Less than 0.31 percent sulfur	--	--	81	--	-33	--	-9	--	NA	NA	57
0.31 to 1.00 percent sulfur	--	--	221	41	-65	--	130	--	NA	NA	274
Greater than 1.00 percent sulfur	--	--	1,524	177	-964	--	-34	--	NA	NA	949
Petrochemical Feedstocks	--	--	906	187	-119	--	-44	--	--	1,018	565
Naphtha for Petro. Feed. Use	--	--	650	83	-95	--	-49	--	--	687	427
Other Oils for Petro. Feed. Use	--	--	256	104	-24	--	5	--	--	331	138
Special Naphthas	--	--	50	3	28	--	24	--	--	57	183
Lubricants	--	--	80	90	115	--	-146	--	175	256	827
Waxes	--	--	4	2	--	--	-23	--	35	-6	28
Petroleum Coke	--	--	6,607	18	-1,513	--	16	--	208	4,889	1,338
Marketable	--	--	5,050	18	-1,513	--	16	--	208	3,332	1,338
Catalyst	--	--	1,557	--	--	--	--	--	--	1,557	--
Asphalt and Road Oil	--	--	3,301	290	-772	--	280	--	82	2,457	11,572
Still Gas	--	--	4,715	--	--	--	--	--	--	4,715	--
Miscellaneous Products	--	--	535	--	30	--	9	--	3	553	117
Total	97,875	31,340	145,449	94,265	-43,941	-3,620	9,196	137,281	14,776	160,114	318,134

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol,

biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 10. PAD District 2 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	739,236	--	--	1,023,132	-222,227	-100,157	359	1,385,256	54,369	0	132,102
Hydrocarbon Gas Liquids	355,265	-6,957	38,270	31,831	-114,390	--	-98	38,964	102,115	163,038	50,031
Natural Gas Liquids	355,265	-6,957	22,075	26,853	-105,605	--	226	38,964	102,115	150,326	--
Ethane	125,622	--	--	--	--	--	158	--	33,462	43,889	--
Propane	125,766	--	26,766	21,809	-86,159	--	640	--	1,609	85,933	--
Normal Butane	42,317	--	-9	2,946	-24,611	--	-426	9,205	3,650	5,120	--
Isobutane	21,284	--	-1,580	2,038	2,272	--	-208	18,744	6	5,472	--
Natural Gasoline	40,276	-6,957	--	60	51,006	--	62	11,015	63,396	9,912	--
Refinery Olefins	--	--	16,195	4,978	--	--	-324	--	--	12,712	--
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	15,535	4,342	--	--	-283	--	--	11,375	--
Normal Butylene	--	--	687	636	--	--	-111	--	--	1,434	--
Isobutylene	--	--	-27	--	--	--	70	--	--	-97	--
Other Liquids	--	380,383	--	6,826	-146,682	-25,138	2,430	205,422	30,053	-22,517	71,950
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	380,397	--	784	-247,861	-14,707	-757	110,727	8,642	0	9,621
Hydrogen	--	--	--	--	--	13,620	--	13,620	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	15	-3	--	18	0	4
Renewable Fuels (including Fuel Ethanol)	--	380,397	--	758	-247,861	-28,684	-728	96,713	8,624	0	9,596
Fuel Ethanol	--	351,489	--	--	-238,529	-14,968	-401	90,776	7,617	0	8,679
Renewable Fuels Except Fuel Ethanol	--	28,908	--	758	-9,333	-13,716	-327	5,937	1,007	0	917
Other Hydrocarbons	--	--	--	26	--	342	-26	394	--	0	21
Unfinished Oils	--	--	--	731	-1,520	--	-724	1,438	21,014	-22,517	12,744
Motor Gasoline Blend.Comp. (MGBC)	--	-14	--	5,311	102,699	-10,431	3,911	93,257	397	0	49,585
Reformulated	--	-2	--	64	28,753	-14,223	26	14,565	1	0	6,189
Conventional	--	-12	--	5,247	73,946	3,792	3,885	78,692	396	0	43,396
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	1,832	1,674,920	11,528	35,296	39,170	7,574	--	11,841	1,743,332	64,051
Finished Motor Gasoline	--	1,832	947,433	--	4,217	25,399	-32	--	2,033	976,880	6,504
Reformulated	--	--	132,906	--	--	17,028	--	--	--	149,934	--
Conventional	--	1,832	814,527	--	4,217	8,371	-32	--	2,033	826,946	6,504
Finished Aviation Gasoline	--	--	456	30	183	--	8	--	--	661	166
Kerosene-Type Jet Fuel	--	--	95,732	--	13,799	--	637	--	555	108,339	7,537
Kerosene	--	--	1,456	2	45	--	161	--	24	1,318	281
Distillate Fuel Oil	--	--	414,487	2,923	44,462	13,771	4,858	--	1,396	469,389	33,653
15 ppm sulfur and under	--	--	414,987	2,031	43,030	13,771	4,802	--	278	468,740	32,934
Greater than 15 ppm to 500 ppm sulfur	--	--	1,068	--	1,432	--	58	--	575	1,867	382
Greater than 500 ppm sulfur	--	--	-1,568	892	--	--	-2	--	544	-1,218	337
Residual Fuel Oil ⁶	--	--	17,577	1,351	-9,304	--	47	--	1,925	7,652	1,280
Less than 0.31 percent sulfur	--	--	537	1	-404	--	-52	--	NA	NA	57
0.31 to 1.00 percent sulfur	--	--	2,530	409	-218	--	90	--	NA	NA	274
Greater than 1.00 percent sulfur	--	--	14,510	941	-8,682	--	9	--	NA	NA	949
Petrochemical Feedstocks	--	--	11,212	1,737	-1,349	--	77	--	--	11,523	565
Naphtha for Petro. Feed. Use	--	--	7,640	851	-1,081	--	75	--	--	7,335	427
Other Oils for Petro. Feed. Use	--	--	3,572	886	-268	--	2	--	--	4,188	138
Special Naphthas	--	--	681	383	305	--	82	--	--	1,287	183
Lubricants	--	--	2,399	1,535	2,162	--	-56	--	2,334	3,818	827
Waxes	--	--	354	57	--	--	-35	--	391	55	28
Petroleum Coke	--	--	68,551	287	-10,732	--	-179	--	1,921	56,363	1,338
Marketable	--	--	50,917	287	-10,732	--	-179	--	1,921	38,729	1,338
Catalyst	--	--	17,634	--	--	--	--	--	--	17,634	--
Asphalt and Road Oil	--	--	55,999	3,215	-8,584	--	2,014	--	1,237	47,379	11,572
Still Gas	--	--	52,895	--	--	--	--	--	--	52,895	--
Miscellaneous Products	--	--	5,688	8	92	--	-8	--	24	5,772	117
Total	1,094,501	375,258	1,713,190	1,073,317	-448,003	-86,125	10,265	1,629,642	198,378	1,883,853	318,134

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 11. PAD District 2 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	2,179	--	--	2,858	-669	-161	87	3,931	190	0
Hydrocarbon Gas Liquids	979	-18	16	112	-239	--	-186	137	218	680
Natural Gas Liquids	979	-18	-30	99	-209	--	-183	137	218	648
Ethane	324	--	--	--	--	--	21	--	101	142
Propane	361	--	76	81	-231	--	-109	--	2	393
Normal Butane	126	--	-1,652	11	-45	--	-124	59	5	50
Isobutane	57	--	-4	7	17	--	4	53	0	20
Natural Gasoline	111	-18	--	0	110	--	25	25	110	43
Refinery Olefins	--	--	46	14	--	--	-3	--	--	32
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	46	12	-31	--	-1	--	--	27
Normal Butylene	--	--	0	2	--	--	-3	--	--	6
Isobutylene	--	--	0	--	--	--	1	--	--	0
Other Liquids	--	1,026	--	28	-474	-36	179	361	38	-35
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,026	--	2	-688	3	26	298	19	0
Hydrogen	--	--	--	--	--	42	--	42	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	1,026	--	2	-688	-41	26	254	19	0
Fuel Ethanol	--	943	--	--	-653	-2	27	242	19	0
Renewable Fuels Except Fuel Ethanol	--	83	--	2	-35	-39	-1	12	0	0
Other Hydrocarbons	--	--	--	--	--	1	0	1	--	0
Unfinished Oils	--	--	--	3	-13	--	-68	73	19	-35
Motor Gasoline Blend.Comp. (MGBC)	--	0	--	23	228	-39	221	-10	0	0
Reformulated	--	0	--	--	56	-21	18	17	--	0
Conventional	--	0	--	23	172	-18	203	-27	0	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	3	4,676	42	-35	80	216	--	30	4,519
Finished Motor Gasoline	--	3	2,532	--	-19	41	7	--	2	2,548
Reformulated	--	--	361	--	--	28	--	--	--	389
Conventional	--	3	2,171	--	-19	13	7	--	2	2,159
Finished Aviation Gasoline	--	--	1	0	0	--	1	--	--	1
Kerosene-Type Jet Fuel	--	--	283	--	29	--	13	--	1	298
Kerosene	--	--	15	--	--	--	5	--	0	10
Distillate Fuel Oil	--	--	1,263	16	61	39	185	--	3	1,191
15 ppm sulfur and under	--	--	1,270	13	56	39	187	--	0	1,191
Greater than 15 ppm to 500 ppm sulfur	--	--	2	--	5	--	2	--	1	4
Greater than 500 ppm sulfur	--	--	-9	3	--	--	-4	--	2	-3
Residual Fuel Oil ⁶	--	--	59	7	-34	--	3	--	8	21
Less than 0.31 percent sulfur	--	--	3	--	-1	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	7	1	-2	--	4	--	NA	NA
Greater than 1.00 percent sulfur	--	--	49	6	-31	--	-1	--	NA	NA
Petrochemical Feedstocks	--	--	29	6	-4	--	-1	--	--	33
Naphtha for Petro. Feed. Use	--	--	21	3	-3	--	-2	--	--	22
Other Oils for Petro. Feed. Use	--	--	8	3	-1	--	0	--	--	11
Special Naphthas	--	--	2	0	1	--	1	--	--	2
Lubricants	--	--	3	3	4	--	-5	--	6	8
Waxes	--	--	0	0	--	--	-1	--	1	0
Petroleum Coke	--	--	213	1	-49	--	1	--	7	158
Marketable	--	--	163	1	-49	--	1	--	7	107
Catalyst	--	--	50	--	--	--	--	--	--	50
Asphalt and Road Oil	--	--	106	9	-25	--	9	--	3	79
Still Gas	--	--	152	--	--	--	--	--	--	152
Miscellaneous Products	--	--	17	--	1	--	0	--	0	18
Total	3,157	1,011	4,692	3,041	-1,417	-117	297	4,428	477	5,165

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 12. PAD District 2 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	2,025	--	--	2,803	-609	-274	1	3,795	149	0
Hydrocarbon Gas Liquids	973	-19	105	87	-313	--	0	107	280	447
Natural Gas Liquids	973	-19	60	74	-289	--	1	107	280	412
Ethane	344	--	--	--	--	--	0	--	92	120
Propane	345	--	73	60	-236	--	2	--	4	235
Normal Butane	116	--	-9	8	-67	--	-1	25	10	14
Isobutane	58	--	-4	6	6	--	-1	51	0	15
Natural Gasoline	110	-19	--	0	140	--	0	30	174	27
Refinery Olefins	--	--	44	14	--	--	-1	--	--	35
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	43	12	-24	--	-1	--	--	31
Normal Butylene	--	--	2	2	--	--	0	--	--	4
Isobutylene	--	--	0	--	--	--	0	--	--	0
Other Liquids	--	1,042	--	19	-402	-69	7	563	82	-62
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	1,042	--	2	-679	-40	-2	303	24	0
Hydrogen	--	--	--	--	37	--	--	37	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	1,042	--	2	-679	-79	-2	265	24	0
Fuel Ethanol	--	963	--	--	-654	-41	-1	249	21	0
Renewable Fuels Except Fuel Ethanol	--	79	--	2	-26	-38	-1	16	3	0
Other Hydrocarbons	--	--	--	0	--	1	0	1	--	0
Unfinished Oils	--	--	--	2	-4	--	-2	4	58	-62
Motor Gasoline Blend.Comp. (MGBC)	--	0	--	15	281	-29	11	255	1	0
Reformulated	--	0	--	0	79	-39	0	40	0	0
Conventional	--	0	--	14	203	10	11	216	1	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	5	4,589	32	97	107	21	--	32	4,776
Finished Motor Gasoline	--	5	2,596	--	12	70	0	--	6	2,676
Reformulated	--	--	364	--	--	47	--	--	--	411
Conventional	--	5	2,232	--	12	23	0	--	6	2,266
Finished Aviation Gasoline	--	--	1	0	1	--	0	--	--	2
Kerosene-Type Jet Fuel	--	--	262	--	38	--	2	--	2	297
Kerosene	--	--	4	0	0	--	0	--	0	4
Distillate Fuel Oil	--	--	1,136	8	122	38	13	--	4	1,286
15 ppm sulfur and under	--	--	1,137	6	118	38	13	--	1	1,284
Greater than 15 ppm to 500 ppm sulfur	--	--	3	--	4	--	0	--	2	5
Greater than 500 ppm sulfur	--	--	-4	2	--	--	0	--	1	-3
Residual Fuel Oil ⁶	--	--	48	4	-25	--	0	--	5	21
Less than 0.31 percent sulfur	--	--	1	0	-1	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	7	1	-1	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	40	3	-24	--	0	--	NA	NA
Petrochemical Feedstocks	--	--	31	5	-4	--	0	--	--	32
Naphtha for Petro. Feed. Use	--	--	21	2	-3	--	0	--	--	20
Other Oils for Petro. Feed. Use	--	--	10	2	-1	--	0	--	--	11
Special Naphthas	--	--	2	1	1	--	0	--	--	4
Lubricants	--	--	7	4	6	--	0	--	6	10
Waxes	--	--	1	0	--	--	0	--	1	0
Petroleum Coke	--	--	188	1	-29	--	0	--	5	154
Marketable	--	--	139	1	-29	--	0	--	5	106
Catalyst	--	--	48	--	--	--	--	--	--	48
Asphalt and Road Oil	--	--	153	9	-24	--	6	--	3	130
Still Gas	--	--	145	--	--	--	--	--	--	145
Miscellaneous Products	--	--	16	0	0	--	0	--	0	16
Total	2,999	1,028	4,694	2,941	-1,227	-236	28	4,465	544	5,161

-- = Not Applicable.

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NA = Not Available.

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³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

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Table 13. PAD District 3 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil⁶	238,456	--	--	60,479	29,462	28,219	-5,949	290,610	71,955	0	880,490
Hydrocarbon Gas Liquids	78,059	-14	10,616	111	18,502	--	-10,472	12,282	37,769	67,695	122,430
Natural Gas Liquids	78,059	-14	3,258	--	18,036	--	-10,556	12,282	37,769	59,844	115,078
Ethane	33,581	--	167	--	--	--	-1,644	--	3,781	42,296	43,141
Propane	24,161	--	5,223	--	6,539	--	-4,892	--	30,942	9,873	34,203
Normal Butane	4,195	--	-1,652	--	1,953	--	-3,370	5,811	2,959	-904	22,325
Isobutane	8,566	--	-480	--	453	--	-145	3,783	44	4,857	5,673
Natural Gasoline	7,556	-14	--	--	-1,594	--	-505	2,688	43	3,722	9,736
Refinery Olefins	--	--	7,358	111	--	--	84	--	--	7,851	7,352
Ethylene	--	--	--	--	--	--	0	--	--	0	0
Propylene	--	--	7,576	--	--	--	856	--	--	7,186	6,457
Normal Butylene	--	--	-186	111	--	--	-772	--	--	697	895
Isobutylene	--	--	-32	--	--	--	0	--	--	-32	0
Other Liquids	--	4,206	--	13,865	-59,176	-790	2,714	-57,741	12,504	628	132,163
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	4,206	--	255	6,146	3,394	219	9,243	4,539	0	8,209
Hydrogen	--	--	--	--	--	4,353	--	4,353	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	2,680	--	195	--	-42	371	--	2,462	0	1,547
Renewable Fuels (including Fuel Ethanol)	--	1,526	--	60	6,146	-917	-152	4,890	2,077	0	6,662
Fuel Ethanol	--	658	--	--	6,018	-636	-534	4,510	2,064	0	4,553
Renewable Fuels Except Fuel Ethanol	--	868	--	60	128	-281	382	380	13	0	2,109
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	12,655	273	--	-2,898	8,798	6,388	640	44,960
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	955	-65,595	-4,183	5,396	-75,797	1,578	0	78,963
Reformulated	--	--	--	--	-12,506	6,831	1,256	-6,936	5	0	12,316
Conventional	--	--	--	955	-53,089	-11,014	4,140	-68,861	1,573	0	66,647
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	-3	15	--	-12	31
Finished Petroleum Products	--	--	255,515	4,459	-53,365	5,682	7,367	--	96,536	108,389	112,297
Finished Motor Gasoline	--	--	75,664	--	-5,816	4,819	882	--	28,877	44,908	11,651
Reformulated	--	--	14,303	--	--	-7,328	--	--	--	6,975	--
Conventional	--	--	61,361	--	-5,816	12,147	882	--	28,877	37,933	11,651
Finished Aviation Gasoline	--	--	309	--	-55	--	-34	--	--	288	435
Kerosene-Type Jet Fuel	--	--	29,357	28	-16,370	--	1,284	--	5,318	6,413	15,437
Kerosene	--	--	-24	--	-315	--	-13	--	115	-441	187
Distillate Fuel Oil	--	--	97,973	318	-31,904	863	4,226	--	36,499	26,525	43,188
15 ppm sulfur and under	--	--	88,082	318	-29,844	863	4,092	--	29,656	25,671	35,964
Greater than 15 ppm to 500 ppm sulfur	--	--	2,931	--	-389	--	-226	--	3,224	-456	1,682
Greater than 500 ppm sulfur	--	--	6,960	--	-1,671	--	360	--	3,619	1,310	5,542
Residual Fuel Oil ⁷	--	--	6,678	1,751	1,133	--	-512	--	6,176	3,898	16,251
Less than 0.31 percent sulfur	--	--	1,138	--	33	--	-96	--	NA	NA	900
0.31 to 1.00 percent sulfur	--	--	464	302	65	--	-50	--	NA	NA	2,539
Greater than 1.00 percent sulfur	--	--	5,076	1,449	1,035	--	-366	--	NA	NA	12,812
Petrochemical Feedstocks	--	--	8,768	434	119	--	-126	--	--	9,447	2,754
Naphtha for Petro. Feed. Use	--	--	5,971	422	95	--	32	--	--	6,456	1,882
Other Oils for Petro. Feed. Use	--	--	2,797	12	24	--	-158	--	--	2,991	872
Special Naphthas	--	--	1,009	420	-28	--	218	--	--	1,183	1,178
Lubricants	--	--	4,424	956	-391	--	727	--	2,580	1,682	10,558
Waxes	--	--	91	72	--	--	20	--	16	127	272
Petroleum Coke	--	--	15,796	480	758	--	212	--	16,067	754	4,896
Marketable	--	--	12,074	480	758	--	212	--	16,067	-2,968	4,896
Catalyst	--	--	3,722	--	--	--	--	--	--	3,722	--
Asphalt and Road Oil	--	--	1,965	--	-465	--	456	--	881	162	5,096
Still Gas	--	--	11,621	--	--	--	--	--	--	11,621	--
Miscellaneous Products	--	--	1,884	--	-30	--	27	--	5	1,822	394
Total	316,515	4,192	266,131	78,914	-64,577	33,112	-6,340	245,151	218,764	176,712	1,247,380

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 14. PAD District 3 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	Ending Stocks
Crude Oil⁶	2,573,601	--	--	905,059	307,741	188,138	13,124	3,297,614	663,801	0	880,490
Hydrocarbon Gas Liquids	871,016	-195	157,449	1,529	270,114	--	-2,901	115,486	428,147	759,181	122,430
Natural Gas Liquids	871,016	-195	73,405	1	264,807	--	-5,301	115,486	428,147	670,702	--
Ethane	370,324	--	2,230	--	--	--	-6,523	--	48,313	488,747	--
Propane	265,644	--	59,160	1	92,823	--	665	--	320,177	96,786	--
Normal Butane	46,707	--	16,660	--	35,406	--	-400	35,285	57,752	6,136	--
Isobutane	96,197	--	-4,645	--	8,466	--	307	44,004	1,611	54,096	--
Natural Gasoline	92,144	-195	--	--	-29,871	--	650	36,197	294	24,937	--
Refinery Olefins	--	--	84,044	1,528	--	--	2,400	--	--	88,479	--
Ethylene	--	--	7	--	--	--	0	--	--	7	--
Propylene	--	--	83,783	--	--	--	2,434	--	--	86,656	--
Normal Butylene	--	--	619	1,528	--	--	-34	--	--	2,181	--
Isobutylene	--	--	-365	--	--	--	0	--	--	-365	--
Other Liquids	--	46,935	--	200,308	-673,682	-7,121	6,072	-614,252	152,376	22,244	132,163
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	46,935	--	4,091	70,269	43,062	1,389	107,409	55,559	0	8,209
Hydrogen	--	--	--	--	--	48,796	--	48,796	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	28,813	--	3,524	--	-7,136	108	--	25,093	0	1,547
Renewable Fuels (including Fuel Ethanol)	--	18,122	--	498	70,269	1,471	1,281	58,613	30,466	0	6,662
Fuel Ethanol	--	9,457	--	--	68,162	6,833	475	54,079	29,898	0	4,553
Renewable Fuels Except Fuel Ethanol	--	8,665	--	498	2,106	-5,362	806	4,534	568	0	2,109
Other Hydrocarbons	--	--	--	69	--	-69	0	--	--	0	--
Unfinished Oils	--	--	--	175,416	1,445	--	40	75,441	78,838	22,542	44,960
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	20,801	-745,396	-50,182	4,627	-797,384	17,980	0	78,963
Reformulated	--	--	--	--	-152,641	44,806	1,184	-109,135	116	0	12,316
Conventional	--	--	--	20,801	-592,755	-94,989	3,443	-688,249	17,863	0	66,647
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	16	282	--	-298	31
Finished Petroleum Products	--	--	2,873,828	60,200	-626,878	51,646	3,765	--	1,067,756	1,287,276	112,297
Finished Motor Gasoline	--	--	849,387	838	-81,359	43,350	2,769	--	298,526	510,920	11,651
Reformulated	--	--	170,353	--	--	-48,068	--	--	--	122,285	--
Conventional	--	--	679,034	838	-81,359	91,418	2,769	--	298,526	388,635	11,651
Finished Aviation Gasoline	--	--	3,222	--	-1,239	--	-34	--	--	2,017	435
Kerosene-Type Jet Fuel	--	--	343,363	28	-206,605	--	1,593	--	65,422	69,771	15,437
Kerosene	--	--	460	--	-1,670	--	11	--	1,288	-2,509	187
Distillate Fuel Oil	--	--	1,068,646	2,686	-343,585	8,297	-2,634	--	423,685	314,993	43,188
15 ppm sulfur and under	--	--	971,790	1,764	-320,721	8,297	-2,839	--	364,495	299,474	35,964
Greater than 15 ppm to 500 ppm sulfur	--	--	29,934	--	-2,767	--	-559	--	30,343	-2,617	1,682
Greater than 500 ppm sulfur	--	--	66,922	922	-20,097	--	764	--	28,848	18,135	5,542
Residual Fuel Oil ⁷	--	--	74,444	30,436	11,302	--	-106	--	87,148	29,140	16,251
Less than 0.31 percent sulfur	--	--	14,184	7,877	495	--	250	--	NA	NA	900
0.31 to 1.00 percent sulfur	--	--	7,199	2,226	1,296	--	-1,928	--	NA	NA	2,539
Greater than 1.00 percent sulfur	--	--	53,061	20,333	9,511	--	1,572	--	NA	NA	12,812
Petrochemical Feedstocks	--	--	103,625	5,770	1,214	--	441	--	--	110,168	2,754
Naphtha for Petro. Feed. Use	--	--	67,587	5,221	937	--	485	--	--	73,260	1,882
Other Oils for Petro. Feed. Use	--	--	36,038	549	277	--	-44	--	--	36,908	872
Special Naphthas	--	--	11,797	4,533	-305	--	179	--	--	15,846	1,178
Lubricants	--	--	52,478	12,053	-6,602	--	1,497	--	30,570	25,862	10,558
Waxes	--	--	1,121	449	--	--	5	--	276	1,289	272
Petroleum Coke	--	--	181,152	3,348	8,849	--	-667	--	154,362	39,654	4,896
Marketable	--	--	137,598	3,348	8,849	--	-667	--	154,362	-3,900	4,896
Catalyst	--	--	43,554	--	--	--	--	--	--	43,554	--
Asphalt and Road Oil	--	--	28,531	--	-6,786	--	695	--	6,384	14,666	5,096
Still Gas	--	--	134,474	--	--	--	--	--	--	134,474	--
Miscellaneous Products	--	--	21,128	59	-92	--	16	--	93	20,986	394
Total	3,444,617	46,740	3,031,277	1,167,096	-722,705	232,663	20,060	2,798,848	2,312,080	2,068,701	1,247,380

-- = Not Applicable.

NA = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 15. PAD District 3 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil⁶	7,692	--	--	1,951	950	910	-192	9,375	2,321	0
Hydrocarbon Gas Liquids	2,518	0	342	4	597	--	-338	396	1,218	2,184
Natural Gas Liquids	2,518	0	105	--	582	--	-341	396	1,218	1,930
Ethane	1,083	--	5	--	--	--	-53	--	122	1,364
Propane	779	--	168	--	211	--	-158	--	998	318
Normal Butane	135	--	-53	--	63	--	-109	187	95	-29
Isobutane	276	--	-15	--	15	--	-5	122	1	157
Natural Gasoline	244	0	--	--	-51	--	-16	87	1	120
Refinery Olefins	--	--	237	4	--	--	3	--	--	253
Ethylene	--	--	--	--	--	--	0	--	--	0
Propylene	--	--	244	--	15	--	28	--	--	232
Normal Butylene	--	--	-6	4	--	--	-25	--	--	22
Isobutylene	--	--	-1	--	--	--	0	--	--	-1
Other Liquids	--	136	--	447	-1,909	-25	88	-1,863	403	20
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	136	--	8	198	109	7	298	146	0
Hydrogen	--	--	--	--	--	140	--	140	--	0
Oxygenates (excluding Fuel Ethanol)	--	86	--	6	--	-1	12	--	79	0
Renewable Fuels (including Fuel Ethanol)	--	49	--	2	198	-30	-5	158	67	0
Fuel Ethanol	--	21	--	--	194	-21	-17	145	67	0
Renewable Fuels Except Fuel Ethanol	--	28	--	2	4	-9	12	12	0	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	408	9	--	-93	284	206	21
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	31	-2,116	-135	174	-2,445	51	0
Reformulated	--	--	--	--	-403	220	41	-224	0	0
Conventional	--	--	--	31	-1,713	-355	134	-2,221	51	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	0	0	--	0
Finished Petroleum Products	--	--	8,242	144	-1,721	183	238	--	3,114	3,496
Finished Motor Gasoline	--	--	2,441	--	-188	155	28	--	932	1,449
Reformulated	--	--	461	--	--	-236	--	--	--	225
Conventional	--	--	1,979	--	-188	392	28	--	932	1,224
Finished Aviation Gasoline	--	--	10	--	-2	--	-1	--	--	9
Kerosene-Type Jet Fuel	--	--	947	1	-528	--	41	--	172	207
Kerosene	--	--	-1	--	-10	--	0	--	4	-14
Distillate Fuel Oil	--	--	3,160	10	-1,029	28	136	--	1,177	856
15 ppm sulfur and under	--	--	2,841	10	-963	28	132	--	957	828
Greater than 15 ppm to 500 ppm sulfur	--	--	95	--	-13	--	-7	--	104	-15
Greater than 500 ppm sulfur	--	--	225	--	-54	--	12	--	117	42
Residual Fuel Oil ⁷	--	--	215	56	37	--	-17	--	199	126
Less than 0.31 percent sulfur	--	--	37	--	1	--	-3	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	15	10	2	--	-2	--	NA	NA
Greater than 1.00 percent sulfur	--	--	164	47	33	--	-12	--	NA	NA
Petrochemical Feedstocks	--	--	283	14	4	--	-4	--	--	305
Naphtha for Petro. Feed. Use	--	--	193	14	3	--	1	--	--	208
Other Oils for Petro. Feed. Use	--	--	90	0	1	--	-5	--	--	96
Special Naphthas	--	--	33	14	-1	--	7	--	--	38
Lubricants	--	--	143	31	-13	--	23	--	83	54
Waxes	--	--	3	2	--	--	1	--	1	4
Petroleum Coke	--	--	510	15	24	--	7	--	518	24
Marketable	--	--	389	15	24	--	7	--	518	-96
Catalyst	--	--	120	--	--	--	--	--	--	120
Asphalt and Road Oil	--	--	63	--	-15	--	15	--	28	5
Still Gas	--	--	375	--	--	--	--	--	--	375
Miscellaneous Products	--	--	61	--	-1	--	1	--	0	59
Total	10,210	135	8,585	2,546	-2,083	1,068	-205	7,908	7,057	5,700

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 16. PAD District 3 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil⁶	7,051	--	--	2,480	843	515	36	9,035	1,819	0
Hydrocarbon Gas Liquids	2,386	-1	431	4	740	--	-8	316	1,173	2,080
Natural Gas Liquids	2,386	-1	201	0	725	--	-15	316	1,173	1,838
Ethane	1,015	--	6	--	--	--	-18	--	132	1,339
Propane	728	--	162	0	254	--	2	--	877	265
Normal Butane	128	--	152	--	97	--	-1	97	158	17
Isobutane	264	--	-13	--	23	--	1	121	4	148
Natural Gasoline	252	-1	--	--	-82	--	2	99	1	68
Refinery Olefins	--	--	230	4	--	--	7	--	--	242
Ethylene	--	--	0	--	--	--	0	--	--	0
Propylene	--	--	230	--	15	--	7	--	--	237
Normal Butylene	--	--	2	4	--	--	0	--	--	6
Isobutylene	--	--	-1	--	--	--	0	--	--	-1
Other Liquids	--	129	--	549	-1,846	-20	17	-1,683	417	61
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	129	--	11	193	118	4	294	152	0
Hydrogen	--	--	--	--	--	134	--	134	--	0
Oxygenates (excluding Fuel Ethanol)	--	79	--	10	--	-20	0	--	69	0
Renewable Fuels (including Fuel Ethanol)	--	50	--	1	193	4	4	161	83	0
Fuel Ethanol	--	26	--	--	187	19	1	148	82	0
Renewable Fuels Except Fuel Ethanol	--	24	--	1	6	-15	2	12	2	0
Other Hydrocarbons	--	--	--	0	--	0	0	--	--	0
Unfinished Oils	--	--	--	481	4	--	0	207	216	62
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	57	-2,042	-137	13	-2,185	49	0
Reformulated	--	--	--	--	-418	123	3	-299	0	0
Conventional	--	--	--	57	-1,624	-260	9	-1,886	49	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	0	1	--	-1
Finished Petroleum Products	--	--	7,874	165	-1,717	141	10	--	2,925	3,527
Finished Motor Gasoline	--	--	2,327	2	-223	119	8	--	818	1,400
Reformulated	--	--	467	--	--	-132	--	--	--	335
Conventional	--	--	1,860	2	-223	250	8	--	818	1,065
Finished Aviation Gasoline	--	--	9	--	-3	--	0	--	--	6
Kerosene-Type Jet Fuel	--	--	941	0	-566	--	4	--	179	191
Kerosene	--	--	1	--	-5	--	0	--	4	-7
Distillate Fuel Oil	--	--	2,928	7	-941	23	-7	--	1,161	863
15 ppm sulfur and under	--	--	2,662	5	-879	23	-8	--	999	820
Greater than 15 ppm to 500 ppm sulfur	--	--	82	--	-8	--	-2	--	83	-7
Greater than 500 ppm sulfur	--	--	183	3	-55	--	2	--	79	50
Residual Fuel Oil ⁷	--	--	204	83	31	--	0	--	239	80
Less than 0.31 percent sulfur	--	--	39	22	1	--	1	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	20	6	4	--	-5	--	NA	NA
Greater than 1.00 percent sulfur	--	--	145	56	26	--	4	--	NA	NA
Petrochemical Feedstocks	--	--	284	16	3	--	1	--	--	302
Naphtha for Petro. Feed. Use	--	--	185	14	3	--	1	--	--	201
Other Oils for Petro. Feed. Use	--	--	99	2	1	--	0	--	--	101
Special Naphthas	--	--	32	12	-1	--	0	--	--	43
Lubricants	--	--	144	33	-18	--	4	--	84	71
Waxes	--	--	3	1	--	--	0	--	1	4
Petroleum Coke	--	--	496	9	24	--	-2	--	423	109
Marketable	--	--	377	9	24	--	-2	--	423	-11
Catalyst	--	--	119	--	--	--	--	--	--	119
Asphalt and Road Oil	--	--	78	--	-19	--	2	--	17	40
Still Gas	--	--	368	--	--	--	--	--	--	368
Miscellaneous Products	--	--	58	0	0	--	0	--	0	57
Total	9,437	128	8,305	3,198	-1,980	637	55	7,668	6,334	5,668

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Includes value for the Strategic Petroleum Reserve. See Table 25 for the breakout of Commercial Crude Oil.

⁷ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 17. PAD District 4 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	29,206	--	--	10,180	-21,436	-1,125	-2,185	19,010	--	0	21,540
Hydrocarbon Gas Liquids	13,523	-9	-40	662	-11,818	--	-680	791	54	2,153	3,460
Natural Gas Liquids	13,523	-9	-61	662	-11,818	--	-650	791	54	2,102	3,423
Ethane	4,029	--	--	--	--	--	-96	--	--	118	465
Propane	4,803	--	245	590	-3,858	--	-67	--	--	1,847	1,396
Normal Butane	1,911	--	-305	60	-1,576	--	-505	437	--	158	943
Isobutane	871	--	-1	12	-857	--	3	200	--	-178	267
Natural Gasoline	1,909	-9	--	--	-1,520	--	15	154	54	157	352
Refinery Olefins	--	--	21	--	--	--	-30	--	--	51	37
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	9	--	--	--	1	--	--	8	1
Normal Butylene	--	--	15	--	--	--	-36	--	--	51	31
Isobutylene	--	--	-3	--	--	--	5	--	--	-8	5
Other Liquids	--	436	--	53	300	-1,103	186	-872	0	372	9,638
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	436	--	4	335	351	19	1,107	0	0	467
Hydrogen	--	--	--	--	--	189	--	189	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0	--
Renewable Fuels (including Fuel Ethanol)	--	436	--	4	335	162	19	918	--	0	467
Fuel Ethanol	--	436	--	--	299	136	-10	881	--	0	353
Renewable Fuels Except Fuel Ethanol	--	0	--	4	35	27	29	37	--	0	114
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	-70	-302	0	372	3,497
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	49	-35	-1,454	237	-1,677	0	0	5,674
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	-35	-1,454	237	-1,677	0	0	5,674
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	19,660	204	-565	1,317	943	--	13	19,660	8,976
Finished Motor Gasoline	--	--	9,271	--	-587	1,318	111	--	0	9,891	1,613
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	9,271	--	-587	1,318	111	--	0	9,891	1,613
Finished Aviation Gasoline	--	--	6	2	--	--	1	--	--	7	10
Kerosene-Type Jet Fuel	--	--	1,101	--	860	--	194	--	--	1,767	814
Kerosene	--	--	1	--	--	--	1	--	--	0	2
Distillate Fuel Oil	--	--	6,310	57	-41	-2	412	--	--	5,912	4,444
15 ppm sulfur and under	--	--	6,274	57	-41	-2	412	--	--	5,876	4,157
Greater than 15 ppm to 500 ppm sulfur	--	--	27	--	--	--	-9	--	--	36	201
Greater than 500 ppm sulfur	--	--	9	--	--	--	9	--	--	0	86
Residual Fuel Oil ⁶	--	--	370	110	--	--	-10	--	5	485	236
Less than 0.31 percent sulfur	--	--	200	--	--	--	-9	--	NA	NA	25
0.31 to 1.00 percent sulfur	--	--	22	--	--	--	-6	--	NA	NA	8
Greater than 1.00 percent sulfur	--	--	148	110	--	--	5	--	NA	NA	203
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	7	-7	--
Waxes	--	--	--	--	--	--	--	--	0	0	--
Petroleum Coke	--	--	763	--	-289	--	101	--	--	373	194
Marketable	--	--	545	--	-289	--	101	--	--	155	194
Catalyst	--	--	218	--	--	--	--	--	--	218	--
Asphalt and Road Oil	--	--	1,074	34	-509	--	134	--	0	465	1,647
Still Gas	--	--	679	--	--	--	--	--	--	679	--
Miscellaneous Products	--	--	85	1	--	--	-1	--	0	87	16
Total	42,729	427	19,620	11,099	-33,520	-911	-1,736	18,929	66	22,185	43,614

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil.

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual

fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 18. PAD District 4 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	313,775	--	--	134,575	-203,762	-19,093	-822	226,188	130	0	21,540
Hydrocarbon Gas Liquids	156,511	-107	3,238	4,259	-142,206	--	-173	7,328	882	13,658	3,460
Natural Gas Liquids	156,511	-107	2,968	4,259	-142,206	--	-195	7,328	882	13,410	--
Ethane	48,675	--	--	--	--	--	-3	--	--	2,363	--
Propane	54,171	--	3,029	3,706	-48,611	--	-88	--	5	12,378	--
Normal Butane	21,272	--	152	312	-18,573	--	-93	3,054	90	112	--
Isobutane	9,691	--	-213	241	-10,191	--	-8	2,281	--	-2,745	--
Natural Gasoline	22,702	-107	--	--	-18,516	--	-3	1,993	787	1,302	--
Refinery Olefins	--	--	270	--	--	--	22	--	--	248	--
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	38	--	--	--	1	--	--	37	--
Normal Butylene	--	--	235	--	--	--	16	--	--	219	--
Isobutylene	--	--	-3	--	--	--	5	--	--	-8	--
Other Liquids	--	5,087	--	965	6,237	-10,115	767	-939	24	2,323	9,638
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	5,087	--	37	4,501	4,420	133	13,897	16	0	467
Hydrogen	--	--	--	--	--	2,444	--	2,444	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0	--
Renewable Fuels (including Fuel Ethanol)	--	5,087	--	37	4,501	1,976	133	11,453	15	0	467
Fuel Ethanol	--	5,087	--	--	4,039	1,810	29	10,893	14	0	353
Renewable Fuels Except Fuel Ethanol	--	0	--	37	462	167	104	560	2	0	114
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	30	--	--	746	-3,046	7	2,323	3,497
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	898	1,736	-14,535	-112	-11,790	1	0	5,674
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	1,736	-14,535	-112	-11,790	1	0	5,674
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	239,385	1,341	-8,781	12,660	394	--	304	243,908	8,976
Finished Motor Gasoline	--	--	113,227	--	-7,131	12,726	-201	--	12	119,011	1,613
Reformulated	--	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	113,227	--	-7,131	12,726	-201	--	12	119,011	1,613
Finished Aviation Gasoline	--	--	60	8	--	--	1	--	--	67	10
Kerosene-Type Jet Fuel	--	--	13,055	124	8,974	--	92	--	--	22,061	814
Kerosene	--	--	2	--	--	--	0	--	1	1	2
Distillate Fuel Oil	--	--	74,925	749	51	-66	236	--	0	75,423	4,444
15 ppm sulfur and under	--	--	74,484	749	91	-66	187	--	0	75,071	4,157
Greater than 15 ppm to 500 ppm sulfur	--	--	427	--	-40	--	29	--	--	358	201
Greater than 500 ppm sulfur	--	--	14	--	--	--	20	--	--	-6	86
Residual Fuel Oil ⁶	--	--	4,439	124	--	--	21	--	119	4,423	236
Less than 0.31 percent sulfur	--	--	2,446	--	--	--	-7	--	NA	NA	25
0.31 to 1.00 percent sulfur	--	--	311	--	--	--	4	--	NA	NA	8
Greater than 1.00 percent sulfur	--	--	1,682	124	--	--	24	--	NA	NA	203
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	98	-98	--
Waxes	--	--	--	--	--	--	--	--	4	-4	--
Petroleum Coke	--	--	9,413	--	-3,549	--	111	--	15	5,738	194
Marketable	--	--	6,618	--	-3,549	--	111	--	15	2,943	194
Catalyst	--	--	2,795	--	--	--	--	--	--	2,795	--
Asphalt and Road Oil	--	--	14,828	324	-7,126	--	134	--	52	7,840	1,647
Still Gas	--	--	8,185	--	--	--	--	--	--	8,185	--
Miscellaneous Products	--	--	1,251	12	--	--	0	--	1	1,262	16
Total	470,286	4,980	242,623	141,140	-348,511	-16,547	166	232,577	1,339	259,888	43,614

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 19. PAD District 4 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	942	--	--	328	-691	-36	-70	613	--	0
Hydrocarbon Gas Liquids	436	0	-1	21	-381	--	-22	26	2	69
Natural Gas Liquids	436	0	-2	21	-381	--	-21	26	2	68
Ethane	130	--	--	--	--	--	-3	--	--	4
Propane	155	--	8	19	-124	--	-2	--	--	60
Normal Butane	62	--	-10	2	-51	--	-16	14	--	5
Isobutane	28	--	0	0	-28	--	0	6	--	-6
Natural Gasoline	62	0	--	--	-49	--	0	5	2	5
Refinery Olefins	--	--	1	--	--	--	-1	--	--	2
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	0	--	--	--	0	--	--	0
Normal Butylene	--	--	0	--	--	--	-1	--	--	2
Isobutylene	--	--	0	--	--	--	0	--	--	0
Other Liquids	--	14	--	2	10	-36	6	-28	0	12
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	14	--	0	11	11	1	36	0	0
Hydrogen	--	--	--	--	--	6	--	6	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	14	--	0	11	5	1	30	--	0
Fuel Ethanol	--	14	--	--	10	4	0	28	--	0
Renewable Fuels Except Fuel Ethanol	--	0	--	0	1	1	1	1	--	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	--	--	--	-2	-10	0	12
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	2	-1	-47	8	-54	0	0
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	-1	-47	8	-54	0	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	634	7	-18	42	30	--	0	634
Finished Motor Gasoline	--	--	299	--	-19	43	4	--	0	319
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	299	--	-19	43	4	--	0	319
Finished Aviation Gasoline	--	--	0	0	--	--	0	--	--	0
Kerosene-Type Jet Fuel	--	--	36	--	28	--	6	--	--	57
Kerosene	--	--	0	--	--	--	0	--	--	0
Distillate Fuel Oil	--	--	204	2	-1	0	13	--	--	191
15 ppm sulfur and under	--	--	202	2	-1	0	13	--	--	190
Greater than 15 ppm to 500 ppm sulfur	--	--	1	--	--	--	0	--	--	1
Greater than 500 ppm sulfur	--	--	0	--	--	--	0	--	--	0
Residual Fuel Oil ⁶	--	--	12	4	--	--	0	--	0	16
Less than 0.31 percent sulfur	--	--	6	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	1	--	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	5	4	--	--	0	--	NA	NA
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	0	0
Waxes	--	--	--	--	--	--	--	--	0	0
Petroleum Coke	--	--	25	--	-9	--	3	--	--	12
Marketable	--	--	18	--	-9	--	3	--	--	5
Catalyst	--	--	7	--	--	--	--	--	--	7
Asphalt and Road Oil	--	--	35	1	-16	--	4	--	0	15
Still Gas	--	--	22	--	--	--	--	--	--	22
Miscellaneous Products	--	--	3	0	--	--	0	--	0	3
Total	1,378	14	633	358	-1,081	-29	-56	611	2	716

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 20. PAD District 4 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	860	--	--	369	-558	-52	-2	620	0	0
Hydrocarbon Gas Liquids	429	0	9	12	-390	--	0	20	2	37
Natural Gas Liquids	429	0	8	12	-390	--	-1	20	2	37
Ethane	133	--	--	--	--	--	0	--	--	6
Propane	148	--	8	10	-133	--	0	--	0	34
Normal Butane	58	--	0	1	-51	--	0	8	0	0
Isobutane	27	--	-1	1	-28	--	0	6	--	-8
Natural Gasoline	62	0	--	--	-51	--	0	5	2	4
Refinery Olefins	--	--	1	--	--	--	0	--	--	1
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	0	--	--	--	0	--	--	0
Normal Butylene	--	--	1	--	--	--	0	--	--	1
Isobutylene	--	--	0	--	--	--	0	--	--	0
Other Liquids	--	14	--	3	17	-28	2	-3	0	6
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	14	--	0	12	12	0	38	0	0
Hydrogen	--	--	--	--	--	7	--	7	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	0	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	14	--	0	12	5	0	31	0	0
Fuel Ethanol	--	14	--	--	11	5	0	30	0	0
Renewable Fuels Except Fuel Ethanol	--	0	--	0	1	0	0	2	0	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	0	--	--	2	-8	0	6
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	2	5	-40	0	-32	0	0
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	--	--	5	-40	0	-32	0	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	656	4	-24	35	1	--	1	668
Finished Motor Gasoline	--	--	310	--	-20	35	-1	--	0	326
Reformulated	--	--	--	--	--	--	--	--	--	--
Conventional	--	--	310	--	-20	35	-1	--	0	326
Finished Aviation Gasoline	--	--	0	0	--	--	0	--	--	0
Kerosene-Type Jet Fuel	--	--	36	0	25	--	0	--	--	60
Kerosene	--	--	0	--	--	--	0	--	0	0
Distillate Fuel Oil	--	--	205	2	0	0	1	--	0	207
15 ppm sulfur and under	--	--	204	2	0	0	1	--	0	206
Greater than 15 ppm to 500 ppm sulfur	--	--	1	--	0	--	0	--	--	1
Greater than 500 ppm sulfur	--	--	0	--	--	--	0	--	--	0
Residual Fuel Oil ⁶	--	--	12	0	--	--	0	--	0	12
Less than 0.31 percent sulfur	--	--	7	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	1	--	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	5	0	--	--	0	--	NA	NA
Petrochemical Feedstocks	--	--	--	--	--	--	--	--	--	--
Naphtha for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	--	--	--	--	--	--	--	--
Lubricants	--	--	--	--	--	--	--	--	0	0
Waxes	--	--	--	--	--	--	--	--	0	0
Petroleum Coke	--	--	26	--	-10	--	0	--	0	16
Marketable	--	--	18	--	-10	--	0	--	0	8
Catalyst	--	--	8	--	--	--	--	--	--	8
Asphalt and Road Oil	--	--	41	1	-20	--	0	--	0	21
Still Gas	--	--	22	--	--	--	--	--	--	22
Miscellaneous Products	--	--	3	0	--	--	0	--	0	3
Total	1,288	14	665	387	-955	-45	0	637	4	712

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 21. PAD District 5 - Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	30,165	--	--	37,318	5,767	1,315	-1,161	75,726	--	0	45,146
Hydrocarbon Gas Liquids	1,866	-14	-218	2,009	1,078	--	-2,027	3,595	1,425	1,728	3,559
Natural Gas Liquids	1,866	-14	-415	2,009	1,078	--	-2,022	3,595	1,425	1,526	3,509
Ethane	1	--	--	--	--	--	--	--	0	1	--
Propane	296	--	961	1,118	336	--	-731	--	951	2,491	1,413
Normal Butane	273	--	-1,420	768	497	--	-1,292	1,949	472	-1,011	1,658
Isobutane	419	--	44	123	245	--	8	845	0	-22	404
Natural Gasoline	877	-14	--	--	--	--	-7	801	1	68	34
Refinery Olefins	--	--	197	--	--	--	-5	--	--	202	50
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	255	--	--	--	3	--	--	252	12
Normal Butylene	--	--	-58	--	--	--	-8	--	--	-50	38
Isobutylene	--	--	--	--	--	--	0	--	--	0	0
Other Liquids	--	905	--	2,525	8,598	-1,513	-176	9,860	448	384	51,717
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	905	--	397	4,158	1,509	230	6,441	299	0	4,961
Hydrogen	--	--	--	--	--	1,198	--	1,198	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0	--
Renewable Fuels (including Fuel Ethanol)	--	905	--	397	4,158	311	230	5,243	299	0	4,961
Fuel Ethanol	--	615	--	255	3,585	516	-51	4,755	267	0	3,172
Renewable Fuels Except Fuel Ethanol	--	290	--	142	573	-205	281	488	32	0	1,789
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	2,122	--	--	-856	2,500	94	384	19,450
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	6	4,440	-3,022	450	919	55	0	27,306
Reformulated	--	--	--	6	2,135	-500	185	1,455	1	0	12,764
Conventional	--	--	--	--	2,305	-2,523	265	-536	53	0	14,542
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	95,270	3,612	2,092	2,599	1,945	--	11,924	89,704	35,891
Finished Motor Gasoline	--	--	47,888	106	406	2,506	95	--	1,321	49,491	2,084
Reformulated	--	--	33,742	--	--	1,135	-4	--	--	34,881	14
Conventional	--	--	14,146	106	406	1,372	99	--	1,321	14,610	2,070
Finished Aviation Gasoline	--	--	--	--	--	--	-25	--	--	25	215
Kerosene-Type Jet Fuel	--	--	15,346	2,302	153	--	896	--	765	16,140	9,922
Kerosene	--	--	15	--	--	--	16	--	3	-4	73
Distillate Fuel Oil	--	--	18,434	175	989	92	988	--	5,197	13,506	13,849
15 ppm sulfur and under	--	--	17,607	175	989	92	1,040	--	4,399	13,424	12,863
Greater than 15 ppm to 500 ppm sulfur	--	--	347	--	--	--	13	--	100	234	244
Greater than 500 ppm sulfur	--	--	480	--	--	--	-65	--	698	-153	742
Residual Fuel Oil ⁶	--	--	3,250	837	--	--	-632	--	873	3,846	4,514
Less than 0.31 percent sulfur	--	--	4	--	--	--	18	--	NA	NA	262
0.31 to 1.00 percent sulfur	--	--	458	575	--	--	-394	--	NA	NA	467
Greater than 1.00 percent sulfur	--	--	2,788	262	--	--	-252	--	NA	NA	3,779
Petrochemical Feedstocks	--	--	3	38	--	--	0	--	--	41	5
Naphtha for Petro. Feed. Use	--	--	3	38	--	--	0	--	--	41	5
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	35	--	--	--	13	--	--	22	57
Lubricants	--	--	556	7	--	--	142	--	69	352	1,269
Waxes	--	--	--	67	--	--	--	--	4	63	--
Petroleum Coke	--	--	4,845	24	21	--	-5	--	3,670	1,224	1,471
Marketable	--	--	3,748	24	21	--	-5	--	3,670	127	1,471
Catalyst	--	--	1,097	--	--	--	--	--	--	1,097	--
Asphalt and Road Oil	--	--	770	56	524	--	445	--	22	882	2,333
Still Gas	--	--	3,672	--	--	--	--	--	--	3,672	--
Miscellaneous Products	--	--	456	--	--	--	12	--	1	443	99
Total	32,031	891	95,052	45,464	17,535	2,400	-1,419	89,181	13,797	91,815	136,313

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as "Unaccounted For Crude Oil." Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 22. PAD District 5 - Year-to-Date Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵	
Crude Oil	349,225	--	--	477,237	56,129	17,627	-5,860	902,138	3,940	0	45,146
Hydrocarbon Gas Liquids	23,099	-164	19,303	16,138	9,814	--	225	31,792	16,283	19,890	3,559
Natural Gas Liquids	23,099	-164	16,357	16,135	9,814	--	203	31,792	16,283	16,963	--
Ethane	10	--	--	--	--	--	--	--	9	1	--
Propane	3,692	--	13,361	10,980	4,038	--	-48	--	11,356	20,763	--
Normal Butane	3,746	--	1,158	4,565	4,517	--	263	11,825	4,778	-2,880	--
Isobutane	4,735	--	1,838	590	1,259	--	-12	10,118	5	-1,689	--
Natural Gasoline	10,916	-164	--	--	--	--	0	9,849	134	769	--
Refinery Olefins	--	--	2,946	3	--	--	22	--	--	2,927	--
Ethylene	--	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	3,234	3	--	--	-15	--	--	3,252	--
Normal Butylene	--	--	-288	--	--	--	37	--	--	-325	--
Isobutylene	--	--	--	--	--	--	0	--	--	0	--
Other Liquids	--	10,670	--	43,935	114,593	-21,214	-3,126	144,980	6,673	-543	51,717
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	10,670	--	5,807	58,314	7,891	1,233	78,873	2,576	0	4,961
Hydrogen	--	--	--	--	--	14,711	--	14,711	--	0	--
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	10	--	--	10	0	--
Renewable Fuels (including Fuel Ethanol)	--	10,670	--	5,807	58,314	-6,830	1,233	64,162	2,567	0	4,961
Fuel Ethanol	--	7,348	--	1,294	53,942	-2,274	620	57,856	1,834	0	3,172
Renewable Fuels Except Fuel Ethanol	--	3,322	--	4,513	4,372	-4,555	613	6,306	733	0	1,789
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	31,894	--	--	-458	31,873	1,022	-543	19,450
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	6,234	56,279	-29,106	-3,901	34,234	3,074	0	27,306
Reformulated	--	--	--	972	28,825	-2,675	-3,533	30,632	23	0	12,764
Conventional	--	--	--	5,262	27,454	-26,431	-368	3,602	3,051	0	14,542
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	1,132,681	49,803	26,626	33,497	924	--	130,873	1,110,811	35,891
Finished Motor Gasoline	--	--	582,267	2,059	5,671	31,380	180	--	21,393	599,804	2,084
Reformulated	--	--	408,632	--	--	2,738	-2	--	--	411,372	14
Conventional	--	--	173,635	2,059	5,671	28,642	182	--	21,393	188,432	2,070
Finished Aviation Gasoline	--	--	541	3	--	--	-15	--	--	559	215
Kerosene-Type Jet Fuel	--	--	175,150	29,215	3,258	--	-321	--	9,714	198,230	9,922
Kerosene	--	--	137	--	--	--	31	--	25	81	73
Distillate Fuel Oil	--	--	208,028	4,147	11,285	2,117	-223	--	36,676	189,124	13,849
15 ppm sulfur and under	--	--	199,010	3,755	11,245	2,117	-265	--	26,730	189,662	12,863
Greater than 15 ppm to 500 ppm sulfur	--	--	3,656	--	40	--	4	--	2,591	1,101	244
Greater than 500 ppm sulfur	--	--	5,362	392	--	--	38	--	7,354	-1,638	742
Residual Fuel Oil ⁶	--	--	41,165	11,888	--	--	264	--	11,599	41,190	4,514
Less than 0.31 percent sulfur	--	--	66	--	--	--	95	--	NA	NA	262
0.31 to 1.00 percent sulfur	--	--	7,407	2,490	--	--	-53	--	NA	NA	467
Greater than 1.00 percent sulfur	--	--	33,692	9,398	--	--	222	--	NA	NA	3,779
Petrochemical Feedstocks	--	--	29	378	--	--	3	--	--	404	5
Naphtha for Petro. Feed. Use	--	--	29	378	--	--	3	--	--	404	5
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	398	--	--	--	12	--	--	386	57
Lubricants	--	--	7,456	153	-359	--	254	--	3,982	3,014	1,269
Waxes	--	--	--	443	--	--	--	--	64	379	--
Petroleum Coke	--	--	57,770	325	-425	--	115	--	46,877	10,678	1,471
Marketable	--	--	44,541	325	-425	--	115	--	46,877	-2,551	1,471
Catalyst	--	--	13,229	--	--	--	--	--	--	13,229	--
Asphalt and Road Oil	--	--	9,428	1,192	7,196	--	647	--	468	16,701	2,333
Still Gas	--	--	45,137	--	--	--	--	--	--	45,137	--
Miscellaneous Products	--	--	5,175	--	--	--	-23	--	75	5,123	99
Total	372,324	10,506	1,151,984	587,113	207,162	29,910	-7,837	1,078,910	157,769	1,130,158	136,313

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 23. PAD District 5 - Daily Average Supply and Disposition of Crude Oil and Petroleum Products, December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	973	--	--	1,204	186	42	-37	2,443	--	0
Hydrocarbon Gas Liquids	60	0	-7	65	35	--	-65	116	46	56
Natural Gas Liquids	60	0	-13	65	35	--	-65	116	46	49
Ethane	0	--	--	--	--	--	--	--	0	0
Propane	10	--	31	36	11	--	-24	--	31	80
Normal Butane	9	--	-46	25	16	--	-42	63	15	-33
Isobutane	14	--	1	4	8	--	0	27	0	-1
Natural Gasoline	28	0	--	--	--	--	0	26	0	2
Refinery Olefins	--	--	6	--	--	--	0	--	--	7
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	8	--	--	--	0	--	--	8
Normal Butylene	--	--	-2	--	--	--	0	--	--	-2
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	29	--	81	277	-49	-6	318	14	12
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	29	--	13	134	49	7	208	10	0
Hydrogen	--	--	--	--	--	39	--	39	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	29	--	13	134	10	7	169	10	0
Fuel Ethanol	--	20	--	8	116	17	-2	153	9	0
Renewable Fuels Except Fuel Ethanol	--	9	--	5	18	-7	9	16	1	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	68	--	--	-28	81	3	12
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	0	143	-97	15	30	2	0
Reformulated	--	--	--	0	69	-16	6	47	0	0
Conventional	--	--	--	--	74	-81	9	-17	2	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,073	117	67	84	63	--	385	2,894
Finished Motor Gasoline	--	--	1,545	3	13	81	3	--	43	1,596
Reformulated	--	--	1,088	--	--	37	0	--	--	1,125
Conventional	--	--	456	3	13	44	3	--	43	471
Finished Aviation Gasoline	--	--	--	--	--	--	-1	--	--	1
Kerosene-Type Jet Fuel	--	--	495	74	5	--	29	--	25	521
Kerosene	--	--	0	--	--	--	1	--	0	0
Distillate Fuel Oil	--	--	595	6	32	3	32	--	168	436
15 ppm sulfur and under	--	--	568	6	32	3	34	--	142	433
Greater than 15 ppm to 500 ppm sulfur	--	--	11	--	--	--	0	--	3	8
Greater than 500 ppm sulfur	--	--	15	--	--	--	-2	--	23	-5
Residual Fuel Oil ⁶	--	--	105	27	--	--	-20	--	28	124
Less than 0.31 percent sulfur	--	--	0	--	--	--	1	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	15	19	--	--	-13	--	NA	NA
Greater than 1.00 percent sulfur	--	--	90	8	--	--	-8	--	NA	NA
Petrochemical Feedstocks	--	--	0	1	--	--	0	--	--	1
Naphtha for Petro. Feed. Use	--	--	0	1	--	--	0	--	--	1
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	1
Lubricants	--	--	18	0	--	--	5	--	2	11
Waxes	--	--	--	2	--	--	--	--	0	2
Petroleum Coke	--	--	156	1	1	--	0	--	118	39
Marketable	--	--	121	1	1	--	0	--	118	4
Catalyst	--	--	35	--	--	--	--	--	--	35
Asphalt and Road Oil	--	--	25	2	17	--	14	--	1	28
Still Gas	--	--	118	--	--	--	--	--	--	118
Miscellaneous Products	--	--	15	--	--	--	0	--	0	14
Total	1,033	29	3,066	1,467	566	77	-46	2,877	445	2,962

-- = Not Applicable.

-- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 24. PAD District 5 - Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-December 2018
(Thousand Barrels per Day)

Commodity	Supply						Disposition			
	Field Production	Renewable Fuels and Oxygenate Plant Net Production	Refinery and Blender Net Production	Imports (PADD of Entry) ¹	Net Receipts ²	Adjustments ³	Stock Change ⁴	Refinery and Blender Net Inputs	Exports	Products Supplied ⁵
Crude Oil	957	--	--	1,307	154	48	-16	2,472	11	0
Hydrocarbon Gas Liquids	63	0	53	44	27	--	1	87	45	54
Natural Gas Liquids	63	0	45	44	27	--	1	87	45	46
Ethane	0	--	--	--	--	--	--	--	0	0
Propane	10	--	37	30	11	--	0	--	31	57
Normal Butane	10	--	3	13	12	--	1	32	13	-8
Isobutane	13	--	5	2	3	--	0	28	0	-5
Natural Gasoline	30	0	--	--	--	--	0	27	0	2
Refinery Olefins	--	--	8	0	--	--	0	--	--	8
Ethylene	--	--	--	--	--	--	--	--	--	--
Propylene	--	--	9	0	--	--	0	--	--	9
Normal Butylene	--	--	-1	--	--	--	0	--	--	-1
Isobutylene	--	--	--	--	--	--	0	--	--	0
Other Liquids	--	29	--	120	314	-58	-9	397	18	-1
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	--	29	--	16	160	22	3	216	7	0
Hydrogen	--	--	--	--	--	40	--	40	--	0
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	0	--	--	0	0
Renewable Fuels (including Fuel Ethanol)	--	29	--	16	160	-19	3	176	7	0
Fuel Ethanol	--	20	--	4	148	-6	2	159	5	0
Renewable Fuels Except Fuel Ethanol	--	9	--	12	12	-12	2	17	2	0
Other Hydrocarbons	--	--	--	--	--	--	--	--	--	--
Unfinished Oils	--	--	--	87	--	--	-1	87	3	-1
Motor Gasoline Blend.Comp. (MGBC)	--	--	--	17	154	-80	-11	94	8	0
Reformulated	--	--	--	3	79	-7	-10	84	0	0
Conventional	--	--	--	14	75	-72	-1	10	8	0
Aviation Gasoline Blend. Comp.	--	--	--	--	--	--	--	--	--	--
Finished Petroleum Products	--	--	3,103	136	73	92	3	--	359	3,043
Finished Motor Gasoline	--	--	1,595	6	16	86	0	--	59	1,643
Reformulated	--	--	1,120	--	--	8	0	--	--	1,127
Conventional	--	--	476	6	16	78	0	--	59	516
Finished Aviation Gasoline	--	--	1	0	--	--	0	--	--	2
Kerosene-Type Jet Fuel	--	--	480	80	9	--	-1	--	27	543
Kerosene	--	--	0	--	--	--	0	--	0	0
Distillate Fuel Oil	--	--	570	11	31	6	-1	--	100	518
15 ppm sulfur and under	--	--	545	10	31	6	-1	--	73	520
Greater than 15 ppm to 500 ppm sulfur	--	--	10	--	0	--	0	--	7	3
Greater than 500 ppm sulfur	--	--	15	1	--	--	0	--	20	-4
Residual Fuel Oil ⁶	--	--	113	33	--	--	1	--	32	113
Less than 0.31 percent sulfur	--	--	0	--	--	--	0	--	NA	NA
0.31 to 1.00 percent sulfur	--	--	20	7	--	--	0	--	NA	NA
Greater than 1.00 percent sulfur	--	--	92	26	--	--	1	--	NA	NA
Petrochemical Feedstocks	--	--	0	1	--	--	0	--	--	1
Naphtha for Petro. Feed. Use	--	--	0	1	--	--	0	--	--	1
Other Oils for Petro. Feed. Use	--	--	--	--	--	--	--	--	--	--
Special Naphthas	--	--	1	--	--	--	0	--	--	1
Lubricants	--	--	20	0	-1	--	1	--	11	8
Waxes	--	--	--	1	--	--	--	--	0	1
Petroleum Coke	--	--	158	1	-1	--	0	--	128	29
Marketable	--	--	122	1	-1	--	0	--	128	-7
Catalyst	--	--	36	--	--	--	--	--	--	36
Asphalt and Road Oil	--	--	26	3	20	--	2	--	1	46
Still Gas	--	--	124	--	--	--	--	--	--	124
Miscellaneous Products	--	--	14	--	--	--	0	--	0	14
Total	1,020	29	3,156	1,609	568	82	-21	2,956	432	3,096

-- = Not Applicable.

- = No Data Reported.

NA = Not Available.

¹ Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

³ Includes an adjustment for crude oil, previously referred to as 'Unaccounted For Crude Oil.' Also included is an adjustment for motor gasoline blending components, fuel ethanol, and distillate fuel oil. See

Appendix B, Note 2C for a detailed explanation of these adjustments.

⁴ Net receipts equal gross receipts minus gross shipments by pipeline, tanker, and barge. Receipts and shipments by rail are included for crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil

⁵ Product supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, plus net receipts, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

⁶ Total residual fuel oil ending stocks and stock change include stocks held at pipelines. Residual fuel oil ending stocks and stock change by sulfur content exclude pipeline stocks. Therefore, the sum of residual fuel oil ending stocks and stock change by sulfur content may not equal total residual fuel oil ending stocks and stock change.

Notes: Totals may not equal sum of components due to independent rounding. Domestic crude oil field production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", Forms EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movements Report," and EIA-819, "Monthly Oxygenate Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 25. Crude Oil Supply, Disposition, and Ending Stocks by PAD District, December 2018
(Thousand Barrels, Except Where Noted)

Process	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Supply							
Field Production	1,941	67,541	238,456	29,206	30,165	367,310	11,849
Alaskan	--	--	--	--	--	15,366	496
Lower 48 States	--	--	--	--	--	351,944	11,353
Imports (PAD District of Entry)	23,478	88,604	60,479	10,180	37,318	220,059	7,099
Commercial	23,478	88,604	60,479	10,180	37,318	220,059	7,099
Strategic Petroleum Reserve (SPR)	--	--	--	--	--	--	--
Net Receipts	6,942	-20,735	29,462	-21,436	5,767	--	--
Adjustments ¹	-509	-4,977	28,219	-1,125	1,315	22,923	739
Disposition							
Stock Change ²	-635	2,689	-5,949	-2,185	-1,161	-7,241	-234
Commercial	--	--	-5,521	--	--	-6,813	-220
SPR	--	--	-428	--	--	-428	-14
Refinery Inputs	32,486	121,859	290,610	19,010	75,726	539,691	17,409
Exports	2	5,885	71,955	--	--	77,842	2,511
Ending Stocks							
Total	11,655	132,102	880,490	21,540	45,146	1,090,933	--
Commercial	11,655	132,102	231,351	21,540	45,146	441,794	--
Refinery	9,464	13,919	47,492	2,283	19,263	92,421	--
Tank Farms and Pipelines	2,191	118,183	183,859	19,257	22,110	345,600	--
Cushing, Oklahoma	--	41,895	--	--	--	41,895	--
Lease	--	--	--	--	--	--	--
Alaskan Crude Oil In-Transit by Water	--	--	--	--	3,773	3,773	--
SPR	--	--	649,139	--	--	649,139	--
SPR Stocks							
Percent of Total Crude Oil Stocks (Percent)	--	--	--	--	--	59.5	--
Percent of Total Petroleum Stocks (Percent)	--	--	--	--	--	34.0	--
Days of Total Petroleum Net Imports (Days)	--	--	--	--	--	841	--
SPR Receipts Detail							
Receipts	--	--	--	--	--	--	--
Domestic	--	--	--	--	--	--	--
Imports	--	--	--	--	--	--	--
Imported by SPR	--	--	--	--	--	--	--
Imported for SPR by Others	--	--	--	--	--	--	--
Imports							
PAD District of Entry	23,478	88,604	60,479	10,180	37,318	220,059	7,099
PAD District of Processing	24,029	78,565	70,807	8,591	38,067	220,059	7,099

-- = Not Applicable.

-- = No Data Reported.

¹ Crude oil adjustment was previously referred to as Unaccounted-for Crude Oil.

² A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks. Stock change for crude oil excludes lease stocks beginning with January 2005 (see explanatory notes).

Notes: Totals may not equal the sum of components due to independent rounding. Values of Domestic Crude Oil Field Production are estimates.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movements Report." Domestic crude oil field production estimates based on Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," and data from State conservation agencies, U.S. Department of Interior, and the Bureau of Ocean Energy Management. Export data from the U.S. Census Bureau and EIA estimates. Rail net receipts estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 26. Production of Crude Oil by PAD District and State, December 2018
(Thousand Barrels)

PAD District and State	December 2018		January-December 2018	
	Total	Daily Average	Total	Daily Average
PAD District 1	1,941	63	21,045	58
Florida	158	5	1,839	5
New York	16	1	184	1
Pennsylvania	433	14	6,345	17
Virginia	0	0	3	0
West Virginia	1,335	43	12,674	35
PAD District 2	67,541	2,179	739,236	2,025
Illinois	755	24	8,454	23
Indiana	141	5	1,684	5
Kansas	2,823	91	34,608	95
Kentucky	265	9	2,265	6
Michigan	457	15	5,465	15
Missouri	7	0	91	0
Nebraska	183	6	2,056	6
North Dakota	42,574	1,373	459,294	1,258
Ohio	2,111	68	23,226	64
Oklahoma	18,107	584	200,613	550
South Dakota	102	3	1,264	3
Tennessee	18	1	215	1
PAD District 3	238,456	7,692	2,573,601	7,051
Alabama	459	15	5,855	16
Arkansas	391	13	4,882	13
Louisiana	3,735	120	46,247	127
Mississippi	1,512	49	17,436	48
New Mexico	25,294	816	250,148	685
Texas	151,198	4,877	1,617,397	4,431
Federal Offshore PAD District 3	55,868	1,802	631,636	1,731
PAD District 4	29,206	942	313,775	860
Colorado	16,017	517	167,939	460
Idaho	5	0	90	0
Montana	1,951	63	21,396	59
Utah	3,147	102	37,220	102
Wyoming	8,087	261	87,131	239
PAD District 5	30,165	973	349,225	957
Alaska	15,366	496	174,808	479
South Alaska	502	16	5,563	15
North Slope	14,864	479	169,246	464
Arizona	1	0	10	0
California	14,384	464	169,154	463
Nevada	22	1	254	1
Federal Offshore PAD District 5	393	13	4,999	14
U.S. Total	367,310	11,849	3,996,883	10,950

– = No Data Reported.

Note: Year-to-date totals include revised monthly production estimates by state published in Petroleum Navigator. Crude oil production quantities are estimated by state and summed to the PADD and the U.S. level. State production estimates reported by EIA are normally different from data reported by state agencies. For example, production estimates for Texas reported on table 26 are different from production reported by the Railroad Commission of Texas. See EIA "Today In Energy" article released on July 10, 2015 (<http://www.eia.gov/todayinenergy/detail.cfm?id=22012>) for an explanation of differences in production data for Texas. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration Form EIA-914, "Monthly Crude Oil and Lease Condensate, and Natural Gas Production Report," state government agencies, U.S. Department of the Interior, and the Bureau of Ocean Energy Management.

Table 27. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels)

Commodity	Production						
	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	13	15,044	15,057	5,893	8,475	15,966	30,334
Natural Gas Liquids	13	15,044	15,057	5,893	8,475	15,966	30,334
Ethane	—	5,951	5,951	1,942	1,891	6,202	10,035
Propane	4	5,240	5,244	2,467	3,388	5,336	11,191
Normal Butane	9	1,585	1,594	632	1,511	1,768	3,911
Isobutane	—	799	799	422	382	951	1,755
Natural Gasoline	—	1,469	1,469	430	1,303	1,709	3,442

Commodity	Production								
	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	58,954	5,148	5,948	800	7,209	78,059	13,523	1,866	138,839
Natural Gas Liquids	58,954	5,148	5,948	800	7,209	78,059	13,523	1,866	138,839
Ethane	25,721	2,235	2,202	295	3,128	33,581	4,029	1	53,597
Propane	18,138	1,567	2,013	187	2,256	24,161	4,803	296	45,695
Normal Butane	5,949	-3,207	691	77	685	4,195	1,911	273	11,884
Isobutane	3,537	4,091	406	66	466	8,566	871	419	12,410
Natural Gasoline	5,609	462	636	175	674	7,556	1,909	877	15,253

Commodity	Stocks						
	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	5	247	252	1,203	132	310	1,645
Natural Gas Liquids	5	247	252	1,203	132	310	1,645
Ethane	—	—	—	107	2	37	146
Propane	3	109	112	745	49	104	898
Normal Butane	2	33	35	149	26	40	215
Isobutane	—	33	33	139	4	43	186
Natural Gasoline	—	72	72	63	51	86	200

Commodity	Stocks								
	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	120	329	883	27	—	1,359	160	139	3,555
Natural Gas Liquids	120	329	883	27	—	1,359	160	139	3,555
Ethane	20	87	—	—	—	107	—	—	253
Propane	40	166	31	20	—	257	71	12	1,350
Normal Butane	9	59	364	6	—	438	35	72	795
Isobutane	17	14	52	—	—	83	11	26	339
Natural Gasoline	34	3	436	1	—	474	43	29	818

— = No Data Reported.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	29,332	3,154	32,486	78,834	16,052	26,973	121,859
Hydrocarbon Gas Liquids	1,768	—	1,768	2,800	133	1,311	4,244
Natural Gas Liquids	1,768	—	1,768	2,800	133	1,311	4,244
Normal Butane	1,242	—	1,242	1,283	30	507	1,820
Isobutane	361	—	361	1,065	87	505	1,657
Natural Gasoline	165	—	165	452	16	299	767
Other Liquids	77,253	6,018	83,271	8,037	1,561	1,580	11,178
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	9,955	786	10,741	6,005	1,385	1,840	9,230
Hydrogen	105	14	119	813	294	208	1,315
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	9,850	772	10,622	5,161	1,091	1,632	7,884
Fuel Ethanol	9,509	722	10,231	4,906	1,040	1,568	7,514
Renewable Diesel Fuel ²	341	50	391	255	51	64	370
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	31	—	—	31
Unfinished Oils (net)	1,850	-106	1,744	2,226	-329	365	2,262
Naphthas and Lighter	1,020	-81	939	582	-169	160	573
Kerosene and Light Gas Oils	74	14	88	127	-88	408	447
Heavy Gas Oils	346	-32	314	1,176	-72	-85	1,019
Residuum	410	-7	403	341	—	-118	223
Motor Gasoline Blend.Comp. (MGBC)(net)	65,448	5,338	70,786	-194	505	-625	-314
Reformulated - RBOB	16,433	97	16,530	-1,881	1,113	1,292	524
Conventional	49,015	5,241	54,256	1,687	-608	-1,917	-838
CBOB	42,446	5,235	47,681	2,512	-539	-1,891	82
GTAB	1,929	—	1,929	—	—	—	—
Other	4,640	6	4,646	-825	-69	-26	-920
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—
Total Input	108,353	9,172	117,525	89,671	17,746	29,864	137,281

See footnotes at end of table.

Table 28. Refinery and Blender Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	21,079	145,718	112,361	7,226	4,226	290,610	19,010	75,726	539,691
Hydrocarbon Gas Liquids	881	5,727	5,387	99	188	12,282	791	3,595	22,680
Natural Gas Liquids	881	5,727	5,387	99	188	12,282	791	3,595	22,680
Normal Butane	599	2,518	2,632	62	—	5,811	437	1,949	11,259
Isobutane	123	1,648	1,791	33	188	3,783	200	845	6,846
Natural Gasoline	159	1,561	964	4	—	2,688	154	801	4,575
Other Liquids	8,063	-41,895	-30,451	7,003	-461	-57,741	-872	9,860	45,696
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	2,177	3,294	2,390	1,144	238	9,243	1,107	6,441	36,762
Hydrogen	20	2,401	1,778	108	46	4,353	189	1,198	7,174
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	2,157	893	612	1,036	192	4,890	918	5,243	29,557
Fuel Ethanol	2,051	824	482	988	165	4,510	881	4,755	27,891
Renewable Diesel Fuel ²	106	69	130	48	27	380	37	483	1,661
Other Renewable Fuels	—	—	—	—	—	—	—	5	5
Other Hydrocarbons	—	—	—	—	—	—	—	—	31
Unfinished Oils (net)	-167	-616	9,799	-185	-33	8,798	-302	2,500	15,002
Naphthas and Lighter	52	-5,217	70	-32	-58	-5,185	33	133	-3,507
Kerosene and Light Gas Oils	-12	-789	1,581	-15	73	838	-307	-185	881
Heavy Gas Oils	-28	5,643	7,043	-76	-48	12,534	-122	1,801	15,546
Residuum	-179	-253	1,105	-62	—	611	94	751	2,082
Motor Gasoline Blend.Comp. (MGBC)(net)	6,045	-44,573	-42,647	6,044	-666	-75,797	-1,677	919	-6,083
Reformulated - RBOB	5,940	-9,821	-2,218	—	-837	-6,936	—	1,455	11,573
Conventional	105	-34,752	-40,429	6,044	171	-68,861	-1,677	-536	-17,656
CBOB	263	-35,945	-38,102	6,061	174	-67,549	-1,797	537	-21,046
GTAB	—	—	—	—	—	—	—	—	1,929
Other	-158	1,193	-2,327	-17	-3	-1,312	120	-1,073	1,461
Aviation Gasoline Blend. Comp. (net)	8	—	7	—	—	15	—	—	15
Total Input	30,023	109,550	87,297	14,328	3,953	245,151	18,929	89,181	608,067

— = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

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

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	726	-52	674	1,068	-219	-343	506
Natural Gas Liquids	316	-52	264	39	-374	-592	-927
Ethane	-	-	-	-	-	-	-
Propane	577	24	601	1,633	278	443	2,354
Normal Butane	-215	-62	-277	-1,551	-617	-992	-3,160
Isobutane	-46	-14	-60	-43	-35	-43	-121
Natural Gasoline	-	-	-	-	-	-	-
Refinery Olefins	410	-	410	1,029	155	249	1,433
Ethylene	14	-	14	-	-	-	-
Propylene	438	-	438	1,023	155	238	1,416
Normal Butylene	-49	-	-49	6	-	1	7
Isobutylene	7	-	7	-	-	10	10
Finished Motor Gasoline	92,050	7,253	99,303	51,735	9,929	16,822	78,486
Reformulated	40,154	108	40,262	8,163	1,596	1,436	11,195
Reformulated Blended with Fuel Ethanol	40,154	108	40,262	8,163	1,596	1,436	11,195
Reformulated Other	-	-	-	-	-	-	-
Conventional	51,896	7,145	59,041	43,572	8,333	15,386	67,291
Conventional Blended with Fuel Ethanol	54,053	7,089	61,142	40,229	8,804	13,944	62,977
Ed55 and Lower	54,002	7,089	61,091	40,218	8,776	13,887	62,881
Greater than Ed55	51	-	51	11	28	57	96
Conventional Other	-2,157	56	-2,101	3,343	-471	1,442	4,314
Finished Aviation Gasoline	-	-	-	-	25	-	25
Kerosene-Type Jet Fuel	2,935	-	2,935	6,941	835	1,012	8,788
Kerosene	-68	4	-64	309	-	148	457
Distillate Fuel Oil	10,064	901	10,965	22,664	5,477	11,022	39,163
15 ppm sulfur and under	8,731	802	9,533	22,784	5,505	11,094	39,383
Greater than 15 ppm to 500 ppm sulfur	375	62	437	-	-	68	68
Greater than 500 ppm sulfur	958	37	995	-120	-28	-140	-288
Residual Fuel Oil	1,523	1	1,524	1,584	134	108	1,826
Less than 0.31 percent sulfur	595	1	596	81	-	-	81
0.31 to 1.00 percent sulfur	267	-	267	144	77	-	221
Greater than 1.00 percent sulfur	661	-	661	1,359	57	108	1,524
Petrochemical Feedstocks	56	-	56	888	-	18	906
Naphtha for Petro. Feed. Use	56	-	56	650	-	-	650
Other Oils for Petro. Feed. Use	-	-	-	238	-	18	256
Special Naphthas	-	17	17	36	-	14	50
Lubricants	196	222	418	-	-	80	80
Waxes	-	21	21	-	-	4	4
Petroleum Coke	1,130	23	1,153	4,734	922	951	6,607
Marketable	396	-	396	3,563	754	733	5,050
Catalyst	734	23	757	1,171	168	218	1,557
Asphalt and Road Oil	144	662	806	1,860	1,210	231	3,301
Still Gas	1,356	54	1,410	3,008	657	1,050	4,715
Miscellaneous Products	64	28	92	344	128	63	535
Total	110,176	9,134	119,310	95,171	19,098	31,180	145,449
Processing Gain(-) or Loss(+) ¹	-1,823	38	-1,785	-5,500	-1,352	-1,316	-8,168

See footnotes at end of table.

Table 29. Refinery and Blender Net Production of Finished Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	283	4,702	5,687	-65	9	10,616	-40	-218	11,538
Natural Gas Liquids	-152	1,306	2,199	-104	9	3,258	-61	-415	2,119
Ethane	1	141	25	—	—	167	—	—	167
Propane	314	2,430	2,421	8	50	5,223	245	961	9,384
Normal Butane	-270	-802	-422	-112	-46	-1,652	-305	-1,420	-6,814
Isobutane	-197	-463	175	—	5	-480	-1	44	-618
Natural Gasoline	—	—	—	—	—	—	—	—	—
Refinery Olefins	435	3,396	3,488	39	—	7,358	21	197	9,419
Ethylene	—	—	—	—	—	—	—	—	14
Propylene	435	3,650	3,452	39	—	7,576	9	255	9,694
Normal Butylene	—	-222	36	—	—	-186	15	-58	-271
Isobutylene	—	-32	—	—	—	-32	-3	—	-18
Finished Motor Gasoline	21,125	26,384	16,898	9,221	2,036	75,664	9,271	47,888	310,612
Reformulated	7,804	6,499	—	—	—	14,303	—	33,742	99,502
Reformulated Blended with Fuel Ethanol	7,804	6,499	—	—	—	14,303	—	33,742	99,502
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	13,321	19,885	16,898	9,221	2,036	61,361	9,271	14,146	211,110
Conventional Blended with Fuel Ethanol	12,402	1,595	4,781	9,819	1,668	30,265	8,783	13,647	176,814
Ed55 and Lower	12,382	1,595	4,781	9,806	1,668	30,232	8,772	13,645	176,621
Greater than Ed55	20	—	—	13	—	33	11	2	193
Conventional Other	919	18,290	12,117	-598	368	31,096	488	499	34,296
Finished Aviation Gasoline	81	120	108	—	—	309	6	—	340
Kerosene-Type Jet Fuel	1,404	15,136	12,706	111	—	29,357	1,101	15,346	57,527
Kerosene	5	—	-72	43	—	-24	1	15	385
Distillate Fuel Oil	6,216	47,193	40,084	2,678	1,802	97,973	6,310	18,434	172,845
15 ppm sulfur and under	6,211	44,327	33,244	2,498	1,802	88,082	6,274	17,607	160,879
Greater than 15 ppm to 500 ppm sulfur	5	282	2,517	127	—	2,931	27	347	3,810
Greater than 500 ppm sulfur	—	2,584	4,323	53	—	6,960	9	480	8,156
Residual Fuel Oil	364	2,248	3,996	-37	107	6,678	370	3,250	13,648
Less than 0.31 percent sulfur	232	28	878	—	—	1,138	200	4	2,019
0.31 to 1.00 percent sulfur	—	106	374	-37	21	464	22	458	1,432
Greater than 1.00 percent sulfur	132	2,114	2,744	—	86	5,076	148	2,788	10,197
Petrochemical Feedstocks	124	5,750	2,892	2	—	8,768	—	3	9,733
Naphtha for Petro. Feed. Use	113	4,253	1,603	2	—	5,971	—	3	6,680
Other Oils for Petro. Feed. Use	11	1,497	1,289	—	—	2,797	—	—	3,053
Special Naphthas	100	693	—	216	—	1,009	—	35	1,111
Lubricants	12	1,821	1,744	847	—	4,424	—	556	5,478
Waxes	—	37	30	24	—	91	—	—	116
Petroleum Coke	449	8,571	6,589	149	38	15,796	763	4,845	29,164
Marketable	185	6,556	5,197	136	—	12,074	545	3,748	21,813
Catalyst	264	2,015	1,392	13	38	3,722	218	1,097	7,351
Asphalt and Road Oil	189	336	545	875	20	1,965	1,074	770	7,916
Still Gas	705	6,124	4,518	186	88	11,621	679	3,672	22,097
Miscellaneous Products	121	1,052	641	19	51	1,884	85	456	3,052
Total	31,178	120,167	96,366	14,269	4,151	266,131	19,620	95,052	645,562
Processing Gain(-) or Loss(+) ¹	-1,155	-10,617	-9,069	59	-198	-20,980	-691	-5,871	-37,495

— = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels, Except Where Noted)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	29,332	3,154	32,486	78,834	16,052	26,973	121,859
Hydrocarbon Gas Liquids	888	—	888	2,700	87	874	3,661
Natural Gas Liquids	888	—	888	2,700	87	874	3,661
Normal Butane	527	—	527	1,183	—	132	1,315
Isobutane	361	—	361	1,065	87	505	1,657
Natural Gasoline	—	—	—	452	—	237	689
Other Liquids	-13,611	45	-13,566	-37,552	-7,029	-12,024	-56,605
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	171	160	331	1,116	399	337	1,852
Hydrogen	105	14	119	813	294	208	1,315
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	66	146	212	272	105	129	506
Fuel Ethanol	66	125	191	174	85	108	367
Renewable Diesel Fuel ²	—	21	21	98	20	21	139
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	31	—	—	31
Unfinished Oils (net)	1,850	-106	1,744	1,865	-329	365	1,901
Naphthas and Lighter	1,020	-81	939	582	-169	160	573
Kerosene and Light Gas Oils	74	14	88	127	-88	408	447
Heavy Gas Oils	346	-32	314	1,176	-72	-85	1,019
Residuum	410	-7	403	-20	—	-118	-138
Motor Gasoline Blend.Comp. (MGBC)(net)	-15,632	-9	-15,641	-40,533	-7,099	-12,726	-60,358
Reformulated - RBOB	-9,919	—	-9,919	-8,830	-324	—	-9,154
Conventional	-5,713	-9	-5,722	-31,703	-6,775	-12,726	-51,204
CBOB	-5,366	-15	-5,381	-30,856	-6,706	-12,696	-50,258
GTAB	—	—	—	—	—	—	—
Other	-347	6	-341	-847	-69	-30	-946
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—
Total Input to Refineries	16,609	3,199	19,808	43,982	9,110	15,823	68,915
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	946	104	1,050	2,529	518	872	3,919
Operable Capacity (daily average)	1,125	98	1,224	2,640	540	914	4,094
Operable Utilization Rate (percent) ³	84.1	105.5	85.8	95.8	96.0	95.4	95.7
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	156	17	173	476	75	159	710
Catalytic Cracking	349	18	367	783	147	224	1,154
Catalytic Hydrocracking	29	—	29	187	58	61	306
Delayed and Fluid Coking	62	—	62	389	70	92	551
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.67	1.68	0.77	1.60	1.82	0.73	1.43
API Gravity, Weighted Average (degrees)	35.50	31.91	35.14	31.33	27.96	38.93	32.49
Operable Capacity (daily average)	1,125	98	1,224	2,640	540	914	4,094
Operating	1,125	98	1,224	2,613	502	914	4,029
Idle	—	—	—	28	38	—	66
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—

See footnotes at end of table.

Table 30. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels, Except Where Noted) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	21,079	145,718	112,361	7,226	4,226	290,610	19,010	75,726	539,691
Hydrocarbon Gas Liquids	847	4,734	5,139	37	188	10,945	662	3,572	19,728
Natural Gas Liquids	847	4,734	5,139	37	188	10,945	662	3,572	19,728
Normal Butane	577	2,101	2,384	—	—	5,062	345	1,926	9,175
Isobutane	123	1,648	1,791	33	188	3,783	197	845	6,843
Natural Gasoline	147	985	964	4	—	2,100	120	801	3,710
Other Liquids	-9,681	-52,702	-33,306	-1,785	-1,557	-99,031	-5,387	-35,259	-209,848
Hydrogen/Oxygenates/Renewables/									
Other Hydrocarbons	301	2,462	2,083	151	112	5,109	490	1,487	9,269
Hydrogen	20	2,401	1,778	108	46	4,353	189	1,198	7,174
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	281	61	305	43	66	756	301	289	2,064
Fuel Ethanol	226	47	175	28	54	530	277	91	1,456
Renewable Diesel Fuel ²	55	14	130	15	12	226	24	198	608
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	31
Unfinished Oils (net)	-167	-470	9,749	-185	-33	8,894	-302	2,501	14,738
Naphthas and Lighter	52	-5,217	70	-32	-58	-5,185	33	133	-3,507
Kerosene and Light Gas Oils	-12	-643	1,531	-15	73	934	-307	-186	976
Heavy Gas Oils	-28	5,643	7,043	-76	-48	12,534	-122	1,801	15,546
Residuum	-179	-253	1,105	-62	—	611	94	753	1,723
Motor Gasoline Blend.Comp. (MGBBC)(net)	-9,823	-54,694	-45,145	-1,751	-1,636	-113,049	-5,575	-39,247	-233,870
Reformulated - RBOB	-1,080	-14,060	-2,218	—	-837	-18,195	—	-28,345	-65,613
Conventional	-8,743	-40,634	-42,927	-1,751	-799	-94,854	-5,575	-10,902	-168,257
CBOB	-8,585	-34,266	-39,233	-1,722	-792	-84,598	-5,693	-9,829	-155,759
GTAB	—	—	—	—	—	—	—	—	—
Other	-158	-6,368	-3,694	-29	-7	-10,256	118	-1,073	-12,498
Aviation Gasoline Blend. Comp. (net)	8	—	7	—	—	15	—	—	15
Total Input to Refineries	12,245	97,750	84,194	5,478	2,857	202,524	14,285	44,039	349,571
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	682	4,799	3,730	208	137	9,557	614	2,611	17,750
Operable Capacity (daily average)	747	4,955	3,671	256	137	9,765	683	2,838	18,603
Operable Utilization Rate (percent) ³	91.3	96.9	101.6	81.2	100.3	97.9	89.9	92.0	95.4
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	141	694	606	33	29	1,503	98	388	2,873
Catalytic Cracking	180	1,295	1,079	15	33	2,603	164	673	4,961
Catalytic Hydrocracking	49	556	460	17	18	1,100	19	440	1,894
Delayed and Fluid Coking	24	804	566	26	—	1,420	64	462	2,559
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.57	1.53	1.37	1.52	0.69	1.38	1.35	1.41	1.36
API Gravity, Weighted Average (degrees)	39.88	32.48	31.88	30.88	40.14	32.90	33.99	28.04	32.28
Operable Capacity (daily average)	747	4,955	3,671	256	137	9,765	683	2,838	18,603
Operating	747	4,955	3,671	256	137	9,765	673	2,838	18,528
Idle	—	—	—	—	—	—	10	—	75
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	14,873	14,873

— = No Data Reported.

NA = Not Available.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

³ Represents gross input divided by operable calendar day capacity.

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

Note: Refer to Appendix A for Refining District descriptions.

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

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	726	-52	674	1,068	-219	-343	506
Natural Gas Liquids	316	-52	264	39	-374	-592	-927
Ethane	-	-	-	-	-	-	-
Propane	577	24	601	1,633	278	443	2,354
Normal Butane	-215	-62	-277	-1,551	-617	-992	-3,160
Isobutane	-46	-14	-60	-43	-35	-43	-121
Natural Gasoline	-	-	-	-	-	-	-
Refinery Olefins	410	-	410	1,029	155	249	1,433
Ethylene	14	-	14	-	-	-	-
Propylene	438	-	438	1,023	155	238	1,416
Normal Butylene	-49	-	-49	6	-	1	7
Isobutylene	7	-	7	-	-	10	10
Finished Motor Gasoline	654	1,314	1,968	6,557	1,323	2,825	10,705
Reformulated	654	-	654	-	-	-	-
Reformulated Blended with Fuel Ethanol	654	-	654	-	-	-	-
Reformulated Other	-	-	-	-	-	-	-
Conventional	-	1,314	1,314	6,557	1,323	2,825	10,705
Conventional Blended with Fuel Ethanol	-	1,247	1,247	1,761	1,023	1,095	3,879
Ed55 and Lower	-	1,247	1,247	1,761	1,023	1,095	3,879
Greater than Ed55	-	-	-	-	-	-	-
Conventional Other	-	67	67	4,796	300	1,730	6,826
Finished Aviation Gasoline	-	-	-	-	25	-	25
Kerosene-Type Jet Fuel	2,935	-	2,935	6,956	835	1,012	8,803
Kerosene	-68	4	-64	310	-	148	458
Distillate Fuel Oil	9,673	867	10,540	22,494	5,447	10,981	38,922
15 ppm sulfur and under	8,583	768	9,351	22,614	5,475	11,053	39,142
Greater than 15 ppm to 500 ppm sulfur	-	62	62	-	-	-43	-43
Greater than 500 ppm sulfur	1,090	37	1,127	-120	-28	-29	-177
Residual Fuel Oil	1,573	1	1,574	1,584	134	108	1,826
Less than 0.31 percent sulfur	646	1	647	81	-	-	81
0.31 to 1.00 percent sulfur	266	-	266	144	77	-	221
Greater than 1.00 percent sulfur	661	-	661	1,359	57	108	1,524
Petrochemical Feedstocks	56	-	56	888	-	18	906
Naphtha for Petro. Feed. Use	56	-	56	650	-	-	650
Other Oils for Petro. Feed. Use	-	-	-	238	-	18	256
Special Naphthas	-	17	17	36	-	14	50
Lubricants	196	222	418	-	-	80	80
Waxes	-	21	21	-	-	4	4
Petroleum Coke	1,130	23	1,153	4,734	922	951	6,607
Marketable	396	-	396	3,563	754	733	5,050
Catalyst	734	23	757	1,171	168	218	1,557
Asphalt and Road Oil	144	662	806	1,499	1,210	231	2,940
Still Gas	1,356	54	1,410	3,008	657	1,050	4,715
Miscellaneous Products	64	28	92	344	128	63	535
Total	18,439	3,161	21,600	49,478	10,462	17,142	77,082
Processing Gain(-) or Loss(+) ¹	-1,830	38	-1,792	-5,496	-1,352	-1,319	-8,167

See footnotes at end of table.

Table 31. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	283	4,702	5,687	-65	9	10,616	-40	-218	11,538
Natural Gas Liquids	-152	1,306	2,199	-104	9	3,258	-61	-415	2,119
Ethane	1	141	25	—	—	167	—	—	167
Propane	314	2,430	2,421	8	50	5,223	245	961	9,384
Normal Butane	-270	-802	-422	-112	-46	-1,652	-305	-1,420	-6,814
Isobutane	-197	-463	175	—	5	-480	-1	44	-618
Natural Gasoline	—	—	—	—	—	—	—	—	—
Refinery Olefins	435	3,396	3,488	39	—	7,358	21	197	9,419
Ethylene	—	—	—	—	—	—	—	—	14
Propylene	435	3,650	3,452	39	—	7,576	9	255	9,694
Normal Butylene	—	-222	36	—	—	-186	15	-58	-271
Isobutylene	—	-32	—	—	—	-32	-3	—	-18
Finished Motor Gasoline	3,399	14,492	13,846	406	955	33,098	4,638	3,035	53,444
Reformulated	—	—	—	—	—	—	—	611	1,265
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	611	1,265
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	3,399	14,492	13,846	406	955	33,098	4,638	2,424	52,179
Conventional Blended with Fuel Ethanol	2,226	469	1,738	287	547	5,267	2,794	332	13,519
Ed55 and Lower	2,222	469	1,738	287	547	5,263	2,794	332	13,515
Greater than Ed55	4	—	—	—	—	4	—	—	4
Conventional Other	1,173	14,023	12,108	119	408	27,831	1,844	2,092	38,660
Finished Aviation Gasoline	81	120	108	—	—	309	6	—	340
Kerosene-Type Jet Fuel	1,404	15,140	12,701	111	—	29,356	1,038	15,363	57,495
Kerosene	5	—	-74	43	—	-26	1	4	373
Distillate Fuel Oil	6,167	46,802	40,090	2,645	1,786	97,490	6,359	18,142	171,453
15 ppm sulfur and under	6,162	44,272	33,250	2,465	1,786	87,935	6,323	17,335	160,086
Greater than 15 ppm to 500 ppm sulfur	5	282	2,517	127	—	2,931	27	347	3,324
Greater than 500 ppm sulfur	—	2,248	4,323	53	—	6,624	9	460	8,043
Residual Fuel Oil	364	2,726	3,960	-37	107	7,120	370	3,247	14,137
Less than 0.31 percent sulfur	232	31	878	—	—	1,141	200	—	2,069
0.31 to 1.00 percent sulfur	—	106	374	-37	21	464	22	551	1,524
Greater than 1.00 percent sulfur	132	2,589	2,708	—	86	5,515	148	2,696	10,544
Petrochemical Feedstocks	124	5,750	2,892	2	—	8,768	—	3	9,733
Naphtha for Petro. Feed. Use	113	4,253	1,603	2	—	5,971	—	3	6,680
Other Oils for Petro. Feed. Use	11	1,497	1,289	—	—	2,797	—	—	3,053
Special Naphthas	100	693	—	216	—	1,009	—	35	1,111
Lubricants	12	1,821	1,744	847	—	4,424	—	556	5,478
Waxes	—	37	30	24	—	91	—	—	116
Petroleum Coke	449	8,571	6,589	149	38	15,796	763	4,845	29,164
Marketable	185	6,556	5,197	136	—	12,074	545	3,748	21,813
Catalyst	264	2,015	1,392	13	38	3,722	218	1,097	7,351
Asphalt and Road Oil	189	336	531	875	20	1,951	1,074	770	7,541
Still Gas	705	6,124	4,518	186	88	11,621	679	3,672	22,097
Miscellaneous Products	121	1,052	641	19	51	1,884	85	456	3,052
Total	13,403	108,366	93,263	5,421	3,054	223,507	14,973	49,910	387,072
Processing Gain(-) or Loss(+) ¹	-1,158	-10,616	-9,069	57	-197	-20,983	-688	-5,871	-37,501

— = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

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

Table 32. Blender Net Inputs of Petroleum Products by PAD District, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	880	—	880	100	46	437	583
Natural Gas Liquids	880	—	880	100	46	437	583
Normal Butane	715	—	715	100	30	375	505
Isobutane	—	—	—	—	—	—	—
Natural Gasoline	165	—	165	—	16	62	78
Other Liquids	90,864	5,973	96,837	45,589	8,590	13,604	67,783
Oxygenates/Renewables	9,784	626	10,410	4,889	986	1,503	7,378
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	9,784	626	10,410	4,889	986	1,503	7,378
Fuel Ethanol	9,443	597	10,040	4,732	955	1,460	7,147
Renewable Diesel Fuel ²	341	29	370	157	31	43	231
Other Renewable Fuels	—	—	—	—	—	—	—
Unfinished Oils (net)	—	—	—	361	—	—	361
Naphthas and Lighter	—	—	—	—	—	—	—
Kerosene and Light Gas Oils	—	—	—	—	—	—	—
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	361	—	—	361
Motor Gasoline Blend.Comp. (MGBC)(net)	81,080	5,347	86,427	40,339	7,604	12,101	60,044
Reformulated - RBOB	26,352	97	26,449	6,949	1,437	1,292	9,678
Conventional	54,728	5,250	59,978	33,390	6,167	10,809	50,366
CBOB	47,812	5,250	53,062	33,368	6,167	10,805	50,340
GTAB	1,929	—	1,929	—	—	—	—
Other	4,987	—	4,987	22	—	4	26
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—
Total Input	91,744	5,973	97,717	45,689	8,636	14,041	68,366

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	34	993	248	62	—	1,337	129	23	2,952
Natural Gas Liquids	34	993	248	62	—	1,337	129	23	2,952
Normal Butane	22	417	248	62	—	749	92	23	2,084
Isobutane	—	—	—	—	—	—	3	—	3
Natural Gasoline	12	576	—	—	—	588	34	—	865
Other Liquids	17,744	10,807	2,855	8,788	1,096	41,290	4,515	45,119	255,544
Oxygenates/Renewables	1,876	832	307	993	126	4,134	617	4,954	27,493
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	1,876	832	307	993	126	4,134	617	4,954	27,493
Fuel Ethanol	1,825	777	307	960	111	3,980	604	4,664	26,435
Renewable Diesel Fuel ²	51	55	—	33	15	154	13	285	1,053
Other Renewable Fuels	—	—	—	—	—	—	—	5	5
Unfinished Oils (net)	—	-146	50	—	—	-96	—	-1	264
Naphthas and Lighter	—	—	—	—	—	—	—	—	—
Kerosene and Light Gas Oils	—	-146	50	—	—	-96	—	1	-95
Heavy Gas Oils	—	—	—	—	—	—	—	—	—
Residuum	—	—	—	—	—	—	—	-2	359
Motor Gasoline Blend.Comp. (MGBC)(net)	15,868	10,121	2,498	7,795	970	37,252	3,898	40,166	227,787
Reformulated - RBOB	7,020	4,239	—	—	—	11,259	—	29,800	77,186
Conventional	8,848	5,882	2,498	7,795	970	25,993	3,898	10,366	150,601
CBOB	8,848	-1,679	1,131	7,783	966	17,049	3,896	10,366	134,713
GTAB	—	—	—	—	—	—	—	—	1,929
Other	—	7,561	1,367	12	4	8,944	2	—	13,959
Aviation Gasoline Blend. Comp. (net)	—	—	—	—	—	—	—	—	—
Total Input	17,778	11,800	3,103	8,850	1,096	42,627	4,644	45,142	258,496

— = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 33. Blender Net Production of Petroleum Products by PAD District, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Finished Motor Gasoline	91,396	5,939	97,335	45,178	8,606	13,997	67,781
Reformulated	39,500	108	39,608	8,163	1,596	1,436	11,195
Reformulated Blended with Fuel Ethanol	39,500	108	39,608	8,163	1,596	1,436	11,195
Reformulated Other	-	-	-	-	-	-	-
Conventional	51,896	5,831	57,727	37,015	7,010	12,561	56,586
Conventional Blended with Fuel Ethanol	54,053	5,842	59,895	38,468	7,781	12,849	59,098
Ed55 and Lower	54,002	5,842	59,844	38,457	7,753	12,792	59,002
Greater than Ed55	51	-	51	11	28	57	96
Conventional Other	-2,157	-11	-2,168	-1,453	-771	-288	-2,512
Finished Aviation Gasoline	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	-	-	-	-15	-	-	-15
Kerosene	-	-	-	-1	-	-	-1
Distillate Fuel Oil	391	34	425	170	30	41	241
15 ppm sulfur and under	148	34	182	170	30	41	241
Greater than 15 ppm to 500 ppm sulfur	375	-	375	-	-	111	111
Greater than 500 ppm sulfur	-132	-	-132	-	-	-111	-111
Residual Fuel Oil	-50	-	-50	-	-	-	-
Less than 0.31 percent sulfur	-51	-	-51	-	-	-	-
0.31 to 1.00 percent sulfur	1	-	1	-	-	-	-
Greater than 1.00 percent sulfur	0	-	0	-	-	-	-
Special Naphthas	-	-	-	-	-	-	-
Lubricants	-	-	-	-	-	-	-
Asphalt and Road Oil	-	-	-	361	-	-	361
Miscellaneous Products	-	-	-	-	-	-	-
Total Production	91,737	5,973	97,710	45,693	8,636	14,038	68,367
Processing Gain(-) or Loss(+) ¹	7	0	7	-4	0	3	-1

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Finished Motor Gasoline	17,726	11,892	3,052	8,815	1,081	42,566	4,633	44,853	257,168
Reformulated	7,804	6,499	-	-	-	14,303	-	33,131	98,237
Reformulated Blended with Fuel Ethanol	7,804	6,499	-	-	-	14,303	-	33,131	98,237
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	9,922	5,393	3,052	8,815	1,081	28,263	4,633	11,722	158,931
Conventional Blended with Fuel Ethanol	10,176	1,126	3,043	9,532	1,121	24,998	5,989	13,315	163,295
Ed55 and Lower	10,160	1,126	3,043	9,519	1,121	24,969	5,978	13,313	163,106
Greater than Ed55	16	-	-	13	-	29	11	2	189
Conventional Other	-254	4,267	9	-717	-40	3,265	-1,356	-1,593	-4,364
Finished Aviation Gasoline	-	-	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	-	-4	5	-	-	1	63	-17	32
Kerosene	-	-	2	-	-	2	-	11	12
Distillate Fuel Oil	49	391	-6	33	16	483	-49	292	1,392
15 ppm sulfur and under	49	55	-6	33	16	147	-49	272	793
Greater than 15 ppm to 500 ppm sulfur	-	-	-	-	-	-	-	-	486
Greater than 500 ppm sulfur	-	336	-	-	-	336	-	20	113
Residual Fuel Oil	-	-478	36	-	-	-442	-	3	-489
Less than 0.31 percent sulfur	-	-3	-	-	-	-3	-	4	-50
0.31 to 1.00 percent sulfur	-	-	-	-	-	-	-	-93	-92
Greater than 1.00 percent sulfur	-	-475	36	-	-	-439	-	92	-347
Special Naphthas	-	-	-	-	-	-	-	-	-
Lubricants	-	-	-	-	-	-	-	-	-
Asphalt and Road Oil	-	-	14	-	-	14	-	-	375
Miscellaneous Products	-	-	-	-	-	-	-	-	-
Total Production	17,775	11,801	3,103	8,848	1,097	42,624	4,647	45,142	258,490
Processing Gain(-) or Loss(+) ¹	3	-1	0	2	-1	3	-3	0	6

- = No Data Reported.

¹ Represents the arithmetic difference between input and production.

Note: Refer to Appendix A for Refining District descriptions.

Sources: Energy Information Administration (EIA) Form EIA-815, "Monthly Bulk Terminal and Blender Report."

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels)

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Crude Oil	8,818	646	9,464	9,745	2,239	1,935	13,919
Petroleum Products	14,616	2,376	16,992	29,824	8,419	11,783	50,026
Hydrocarbon Gas Liquids	830	48	878	2,036	456	1,210	3,702
Natural Gas Liquids	542	48	590	1,730	429	1,125	3,284
Ethane	—	—	—	—	—	—	—
Propane	93	2	95	374	35	615	1,024
Normal Butane	332	31	363	960	358	170	1,488
Isobutane	117	15	132	266	36	100	402
Natural Gasoline	—	—	—	130	—	240	370
Refinery Olefins	288	0	288	306	27	85	418
Ethylene	—	—	—	—	—	—	—
Propylene	121	0	121	306	27	11	344
Normal Butylene	107	0	107	0	0	4	4
Isobutylene	60	0	60	0	0	70	70
Oxygenates/Renewable Fuels/Other Hydrocarbons ...	130	93	223	58	51	31	140
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	130	93	223	37	51	31	119
Fuel Ethanol	130	90	220	20	34	27	81
Renewable Diesel Fuel ²	—	3	3	17	17	4	38
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	21	—	—	21
Unfinished Oils	4,466	478	4,944	8,009	788	3,652	12,449
Naphthas and Lighter	1,077	337	1,414	2,031	216	1,137	3,384
Kerosene and Light Gas Oils	823	—	823	1,695	209	310	2,214
Heavy Gas Oils	1,990	130	2,120	2,733	359	1,483	4,575
Residuum	576	11	587	1,550	4	722	2,276
Motor Gasoline Blending Components (MGBC)	4,606	224	4,830	8,527	2,622	3,607	14,756
Reformulated - RBOB	1,210	—	1,210	1,102	40	—	1,142
Conventional	3,396	224	3,620	7,425	2,582	3,607	13,614
CBOB	580	197	777	2,985	1,227	2,274	6,486
GTAB	—	—	—	—	—	—	—
Other	2,816	27	2,843	4,440	1,355	1,333	7,128
Aviation Gasoline Blending Components	—	—	—	—	—	—	—
Finished Motor Gasoline	—	42	42	955	94	363	1,412
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	—	42	42	955	94	363	1,412
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	—	42	42	955	94	363	1,412
Finished Aviation Gasoline	—	—	—	—	60	—	60
Kerosene-Type Jet Fuel	653	—	653	1,429	312	240	1,981
Kerosene	153	5	158	170	—	74	244
Distillate Fuel Oil	2,508	303	2,811	4,409	1,292	1,636	7,337
15 ppm sulfur and under	2,046	131	2,177	4,290	1,152	1,544	6,986
Greater than 15 ppm to 500 ppm sulfur	41	156	197	—	9	42	51
Greater than 500 ppm sulfur	421	16	437	119	131	50	300
Residual Fuel Oil	509	11	520	761	218	39	1,018
Less than 0.31 percent sulfur	126	9	135	54	—	—	54
0.31 to 1.00 percent sulfur	41	2	43	114	27	—	141
Greater than 1.00 percent sulfur	342	—	342	593	191	39	823
Petrochemical Feedstocks	80	—	80	565	—	—	565
Naphtha for Petro. Feed. Use	80	—	80	427	—	—	427
Other Oils for Petro. Feed. Use	—	—	—	138	—	—	138
Special Naphthas	—	23	23	69	—	18	87
Lubricants	571	261	832	—	—	359	359
Waxes	—	376	376	—	—	28	28
Petroleum Coke	—	—	—	430	822	86	1,338
Marketable	—	—	—	430	822	86	1,338
Catalyst	—	—	—	—	—	—	—
Asphalt and Road Oil	96	492	588	2,326	1,673	434	4,433
Miscellaneous Products	14	20	34	80	31	6	117
Total Stocks, All Oils	23,434	3,022	26,456	39,569	10,658	13,718	63,945

See footnotes at end of table.

Table 34. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2018
(Thousand Barrels) — Continued

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Crude Oil	1,958	27,638	16,358	1,224	314	47,492	2,283	19,263	92,421
Petroleum Products	9,554	60,975	52,245	4,584	1,510	128,868	11,552	51,100	258,538
Hydrocarbon Gas Liquids	2,201	2,463	4,768	8	84	9,524	409	1,347	15,860
Natural Gas Liquids	1,402	2,210	3,621	7	84	7,324	372	1,297	12,867
Ethane	188	—	—	—	—	188	—	—	188
Propane	366	538	212	2	3	1,121	56	111	2,407
Normal Butane	510	1,438	2,391	1	66	4,406	224	807	7,288
Isobutane	267	204	789	4	11	1,275	83	378	2,270
Natural Gasoline	71	30	229	—	4	334	9	1	714
Refinery Olefins	799	253	1,147	1	0	2,200	37	50	2,993
Ethylene	0	—	—	—	—	0	—	—	0
Propylene	799	48	457	1	0	1,305	1	12	1,783
Normal Butylene	0	205	690	0	0	895	31	38	1,075
Isobutylene	0	0	0	0	0	0	5	0	135
Oxygenates/Renewable Fuels/Other Hydrocarbons	43	48	249	96	13	449	228	457	1,497
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	43	48	249	96	13	449	228	457	1,476
Fuel Ethanol	36	20	76	38	11	181	116	31	629
Renewable Diesel Fuel ²	7	28	173	58	2	268	112	426	847
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	21
Unfinished Oils	2,312	21,158	14,307	907	583	39,267	3,497	18,837	78,994
Naphthas and Lighter	687	6,560	2,213	213	248	9,921	627	3,023	18,369
Kerosene and Light Gas Oils	528	3,317	2,033	208	124	6,210	649	3,489	13,385
Heavy Gas Oils	486	9,543	7,593	426	211	18,259	1,751	9,744	36,449
Residuum	611	1,738	2,468	60	—	4,877	470	2,581	10,791
Motor Gasoline Blending Components (MGBC)	2,368	13,316	13,550	358	356	29,948	3,126	13,851	66,511
Reformulated - RBOB	168	1,225	250	—	—	1,643	—	4,897	8,892
Conventional	2,200	12,091	13,300	358	356	28,305	3,126	8,954	57,619
CBOB	899	3,889	6,699	269	14	11,770	1,702	2,370	23,105
GTAB	—	—	1	—	—	1	—	—	1
Other	1,301	8,202	6,600	89	342	16,534	1,424	6,584	34,513
Aviation Gasoline Blending Components	22	—	9	—	—	31	—	—	31
Finished Motor Gasoline	422	1,587	1,762	29	78	3,878	736	801	6,869
Reformulated	—	—	—	—	—	—	—	14	14
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	14	14
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	422	1,587	1,762	29	78	3,878	736	787	6,855
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	77	—	77
Ed55 and Lower	—	—	—	—	—	—	77	—	77
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	422	1,587	1,762	29	78	3,878	659	787	6,778
Finished Aviation Gasoline	35	232	107	—	—	374	10	137	581
Kerosene-Type Jet Fuel	366	3,474	2,691	47	—	6,578	353	4,046	13,611
Kerosene	46	7	50	6	—	109	2	3	516
Distillate Fuel Oil	968	6,818	7,749	507	167	16,209	1,873	5,887	34,117
15 ppm sulfur and under	928	5,842	5,867	344	167	13,148	1,642	5,153	29,106
Greater than 15 ppm to 500 ppm sulfur	40	149	689	47	—	925	145	244	1,562
Greater than 500 ppm sulfur	—	827	1,193	116	—	2,136	86	490	3,449
Residual Fuel Oil	95	2,149	1,612	23	118	3,997	236	2,238	8,009
Less than 0.31 percent sulfur	10	—	180	—	—	190	25	—	404
0.31 to 1.00 percent sulfur	—	208	87	23	4	322	8	239	753
Greater than 1.00 percent sulfur	85	1,941	1,345	—	114	3,485	203	1,999	6,852
Petrochemical Feedstocks	115	1,822	795	22	—	2,754	—	5	3,404
Naphtha for Petro. Feed. Use	39	1,181	640	22	—	1,882	—	5	2,394
Other Oils for Petro. Feed. Use	76	641	155	—	—	872	—	—	1,010
Special Naphthas	113	893	—	157	—	1,163	—	57	1,330
Lubricants	50	2,814	2,689	983	—	6,536	—	997	8,724
Waxes	—	89	120	63	—	272	—	—	676
Petroleum Coke	33	3,661	1,202	—	—	4,896	194	1,471	7,899
Marketable	33	3,661	1,202	—	—	4,896	194	1,471	7,899
Catalyst	—	—	—	—	—	—	—	—	—
Asphalt and Road Oil	349	198	483	1,377	82	2,489	872	867	9,249
Miscellaneous Products	16	246	102	1	29	394	16	99	660
Total Stocks, All Oils	11,512	88,613	68,603	5,808	1,824	176,360	13,835	70,363	350,959

¹ = No Data Reported.

¹ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Note: Refer to Appendix A for Refining District descriptions.

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

Table 35. Percent Yield of Petroleum Products by PAD and Refining Districts, December 2018

Commodity	PAD District 1 - East Coast			PAD District 2 - Midwest			
	East Coast	Appalachian No. 1	Total	Indiana, Illinois, Kentucky	Minnesota, Wisconsin, North and South Dakota	Oklahoma, Kansas, Missouri	Total
Hydrocarbon Gas Liquids	2.3	-1.7	2.0	1.3	-1.4	-1.3	0.4
Finished Motor Gasoline ¹	49.0	39.1	48.1	54.2	51.5	52.9	53.6
Finished Aviation Gasoline ²	—	—	—	—	0.2	—	0.0
Kerosene-Type Jet Fuel	9.4	—	8.5	8.5	5.2	3.7	7.0
Kerosene	-0.2	0.1	-0.2	0.4	—	0.5	0.4
Distillate Fuel Oil ³	30.9	27.6	30.6	27.5	33.9	39.8	31.0
Residual Fuel Oil	5.0	0.0	4.6	1.9	0.8	0.4	1.5
Naphtha for Petro. Feed. Use	0.2	—	0.2	0.8	—	—	0.5
Other Oils for Petro. Feed. Use	—	—	—	0.3	—	0.1	0.2
Special Naphthas	—	0.6	0.1	0.0	—	0.1	0.0
Lubricants	0.6	7.3	1.2	—	—	0.3	0.1
Waxes	—	0.7	0.1	—	—	0.0	0.0
Petroleum Coke	3.6	0.8	3.4	5.8	5.8	3.5	5.3
Asphalt and Road Oil	0.5	21.6	2.4	1.8	7.6	0.8	2.4
Still Gas	4.3	1.8	4.1	3.7	4.1	3.8	3.8
Miscellaneous Products	0.2	0.9	0.3	0.4	0.8	0.2	0.4
Processing Gain(-) or Loss(+) ⁴	-5.8	1.2	-5.2	-6.7	-8.4	-4.8	-6.5

Commodity	PAD District 3 - Gulf Coast						PAD District 4 - Rocky Mountain	PAD District 5 - West Coast	U.S. Total
	Texas Inland	Texas Gulf Coast	Louisiana Gulf Coast	North Louisiana, Arkansas	New Mexico	Total			
Hydrocarbon Gas Liquids	1.4	3.2	4.6	-0.9	0.2	3.5	-0.2	-0.3	2.1
Finished Motor Gasoline ¹	58.0	43.6	43.3	29.3	55.4	44.3	49.1	48.6	47.4
Finished Aviation Gasoline ²	0.4	0.1	0.1	—	—	0.1	0.0	—	0.1
Kerosene-Type Jet Fuel	6.7	10.3	10.3	1.6	—	9.7	5.5	19.3	10.2
Kerosene	0.0	—	-0.1	0.6	—	0.0	0.0	0.0	0.1
Distillate Fuel Oil ³	29.2	31.7	32.3	36.8	41.9	32.0	33.5	22.6	30.4
Residual Fuel Oil	1.7	1.9	3.2	-0.5	2.5	2.3	2.0	4.1	2.5
Naphtha for Petro. Feed. Use	0.5	2.9	1.3	0.0	—	2.0	—	0.0	1.2
Other Oils for Petro. Feed. Use	0.1	1.0	1.0	—	—	0.9	—	—	0.5
Special Naphthas	0.5	0.5	—	3.0	—	0.3	—	0.0	0.2
Lubricants	0.1	1.2	1.4	11.9	—	1.5	—	0.7	1.0
Waxes	—	0.0	0.0	0.3	—	0.0	—	—	0.0
Petroleum Coke	2.2	5.8	5.3	2.1	0.9	5.2	4.0	6.1	5.2
Asphalt and Road Oil	0.9	0.2	0.4	12.2	0.5	0.6	5.7	1.0	1.3
Still Gas	3.4	4.2	3.7	2.6	2.1	3.8	3.6	4.6	3.9
Miscellaneous Products	0.6	0.7	0.5	0.0	1.0	0.6	0.5	0.6	0.5
Processing Gain(-) or Loss(+) ⁴	-5.5	-7.2	-7.3	0.8	-4.7	-6.9	-3.7	-7.4	-6.7

— = No Data Reported.

¹ Based on net production of finished motor gasoline minus input of natural gas plant liquids, fuel ethanol, oxygenates, and net input of motor gasoline blending components.

² Based on finished aviation gasoline net production minus net input of aviation gasoline blending components.

³ Based on distillate fuel oil net production minus input of biodiesel, "other" renewable diesel fuels, and "other" renewable fuels.

⁴ Represents the arithmetic difference between input and production.

Note: Percent yield is calculated as net production (or adjusted net production) divided by input of crude oil, hydrogen, "other" hydrocarbons, and net input of unfinished oils.

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

Note: Refer to Appendix A for Refining District descriptions.

Source: Calculated from data on Tables 30 and 31.

Table 36. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, December 2018
(Thousand Barrels)

PAD District and State of Entry	Residual Fuel Oil			
	Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
PAD District 1	2	376	2,289	2,667
Connecticut	—	—	—	—
Delaware	—	—	—	—
Florida	—	—	837	837
Georgia	—	—	216	216
Maine	—	—	—	—
Maryland	—	—	—	—
Massachusetts	—	—	—	—
New Hampshire	—	—	—	—
New Jersey	—	375	1,208	1,583
New York	—	—	28	28
North Carolina	—	—	—	—
Pennsylvania	—	—	—	—
Rhode Island	—	—	—	—
South Carolina	—	—	—	—
Vermont	2	1	—	3
Virginia	—	—	—	—
West Virginia	—	—	—	—
PAD District 2	—	41	177	218
Illinois	—	—	—	—
Indiana	—	—	—	—
Michigan	—	—	177	177
Minnesota	—	35	—	35
North Dakota	—	6	—	6
Ohio	—	—	—	—
Wisconsin	—	—	—	—
PAD District 3	—	302	1,449	1,751
Alabama	—	—	—	—
Louisiana	—	—	—	—
Mississippi	—	—	—	—
New Mexico	—	—	—	—
Texas	—	302	1,449	1,751
PAD District 4	—	—	110	110
Idaho	—	—	—	—
Montana	—	—	110	110
PAD District 5	—	575	262	837
Alaska	—	—	—	—
California	—	350	248	598
Hawaii	—	—	—	—
Oregon	—	—	—	—
Washington	—	225	14	239
U.S. Total	2	1,294	4,287	5,583

— = No Data Reported.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 37. Imports of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels, Except Where Noted)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil^{1,2}	24,029	78,565	70,807	8,591	38,067	220,059	7,099
Hydrocarbon Gas Liquids	2,033	3,483	111	662	2,009	8,298	268
Natural Gas Liquids	1,915	3,054	—	662	2,009	7,640	246
Ethane	—	—	—	—	—	—	—
Propane	1,685	2,504	—	590	1,118	5,897	190
Normal Butane	108	328	—	60	768	1,264	41
Isobutane	122	217	—	12	123	474	15
Natural Gasoline	—	5	—	—	—	5	0
Refinery Olefins	118	429	111	—	—	658	21
Ethylene	—	—	—	—	—	—	—
Propylene	118	358	—	—	—	476	15
Normal Butylene	—	71	111	—	—	182	6
Isobutylene	—	—	—	—	—	—	—
Other Liquids	14,771	869	13,865	53	2,525	32,083	1,035
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	364	72	255	4	397	1,092	35
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	—	—	195	—	—	195	6
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—
Other Oxygenates ³	—	—	195	—	—	195	6
Renewable Fuels (including Fuel Ethanol)	364	72	60	4	397	897	29
Fuel Ethanol	—	—	—	—	255	255	8
Biodiesel	364	72	60	4	36	536	17
Other Renewable Diesel Fuel	—	—	—	—	106	106	3
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—
Unfinished Oils ¹	620	85	12,655	—	2,122	15,482	499
Naphthas and Lighter	18	—	—	—	—	18	1
Kerosene and Lighter Gas Oils	—	—	—	—	—	—	—
Heavy Gas Oils	602	85	9,969	—	1,315	11,971	386
Residuum	—	—	2,686	—	807	3,493	113
Motor Gasoline Blend.Comp. (MGBC)	13,787	712	955	49	6	15,509	500
Reformulated - RBOB	5,024	—	—	—	6	5,030	162
Conventional	8,763	712	955	49	—	10,479	338
CBOB	220	455	—	—	—	675	22
GTAB	1,015	—	—	—	—	1,015	33
Other	7,528	257	955	49	—	8,789	284
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	9,667	1,309	4,459	204	3,612	19,251	621
Finished Motor Gasoline	791	—	—	—	106	897	29
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	791	—	—	—	106	897	29
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	791	—	—	—	106	897	29
Finished Aviation Gasoline	1	2	—	2	—	5	0
Kerosene-Type Jet Fuel	926	—	28	—	2,302	3,256	105
Bonded Aircraft Fuel	214	—	—	—	533	747	24
Other	712	—	28	—	1,769	2,509	81
Kerosene	—	—	—	—	—	—	—
Distillate Fuel Oil	4,826	499	318	57	175	5,875	190
15 ppm sulfur and under	4,243	400	318	57	175	5,193	168
Bonded	—	—	—	—	—	—	—
Other	4,243	400	318	57	175	5,193	168
Greater than 15 ppm to 500 ppm sulfur	319	—	—	—	—	319	10
Bonded	—	—	—	—	—	—	—
Other	319	—	—	—	—	319	10
Greater than 500 ppm to 2000 ppm sulfur	264	79	—	—	—	343	11
Bonded	—	—	—	—	—	—	—
Other	264	79	—	—	—	343	11
Greater than 2000 ppm	—	20	—	—	—	20	1
Bonded	—	—	—	—	—	—	—
Other	—	20	—	—	—	20	1
Residual Fuel Oil	2,667	218	1,751	110	837	5,583	180
Less than 0.31 percent sulfur	2	—	—	—	—	2	0
0.31 to 1.00 percent sulfur	376	41	302	—	575	1,294	42
Greater than 1.00 percent sulfur	2,289	177	1,449	110	262	4,287	138
Petrochemical Feedstocks	—	187	434	—	38	659	21
Naphtha for Petro. Feed. Use	—	83	422	—	38	543	18
Other Oils for Petro. Feed. Use	—	104	12	—	—	116	4
Special Naphthas	—	3	420	—	—	423	14
Lubricants	130	90	956	—	7	1,183	38
Waxes	63	2	72	—	67	204	7
Petroleum Coke (Marketable)	3	18	480	—	24	525	17
Asphalt and Road Oil	260	290	—	34	56	640	21
Miscellaneous Products	—	—	—	1	—	1	0
Total	50,500	84,226	89,242	9,510	46,213	279,691	9,022

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 38. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January-December 2018
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil^{1,2}	309,962	906,023	1,017,231	109,404	488,669	2,831,289	7,757
Hydrocarbon Gas Liquids	17,312	31,831	1,529	4,259	16,138	71,069	195
Natural Gas Liquids	15,273	26,853	1	4,259	16,135	62,521	171
Ethane	—	—	—	—	—	—	—
Propane	13,446	21,809	1	3,706	10,980	49,942	137
Normal Butane	627	2,946	—	312	4,565	8,450	23
Isobutane	1,200	2,038	—	241	590	4,069	11
Natural Gasoline	—	60	—	—	—	60	0
Refinery Olefins	2,039	4,978	1,528	—	3	8,548	23
Ethylene	—	—	—	—	—	—	—
Propylene	2,039	4,342	—	—	3	6,384	17
Normal Butylene	—	636	1,528	—	—	2,164	6
Isobutylene	—	—	—	—	—	—	—
Other Liquids	217,261	9,333	198,553	967	43,550	469,664	1,287
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	2,231	784	4,091	37	5,807	12,950	35
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	—	—	3,524	—	—	3,524	10
Methyl Tertiary Butyl Ether (MTBE)	—	—	1,672	—	—	1,672	5
Other Oxygenates ³	—	—	1,852	—	—	1,852	5
Renewable Fuels (including Fuel Ethanol)	2,231	758	498	37	5,807	9,331	26
Fuel Ethanol	—	—	—	—	1,294	1,294	4
Biodiesel	2,231	758	498	37	389	3,913	11
Other Renewable Diesel Fuel	—	—	—	—	4,124	4,124	11
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	26	69	—	—	95	0
Unfinished Oils ¹	14,550	3,238	173,661	32	31,509	222,990	611
Naphthas and Lighter	3,140	321	1,567	—	386	5,414	15
Kerosene and Lighter Gas Oils	—	—	221	—	—	221	1
Heavy Gas Oils	10,525	2,917	131,709	32	22,381	167,564	459
Residuum	885	—	40,164	—	8,742	49,791	136
Motor Gasoline Blend Comp. (MGBC)	200,480	5,311	20,801	898	6,234	233,724	640
Reformulated - RBOB	63,584	64	—	—	972	64,620	177
Conventional	136,896	5,247	20,801	898	5,262	169,104	463
CBOB	10,320	2,746	310	—	1,188	14,564	40
GTAB	29,781	—	1,653	—	80	31,514	86
Other	96,795	2,501	18,838	898	3,994	123,026	337
Aviation Gasoline Blend Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	128,883	11,528	60,200	1,341	49,803	251,755	690
Finished Motor Gasoline	13,493	—	838	—	2,059	16,390	45
Reformulated	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—
Conventional	13,493	—	838	—	2,059	16,390	45
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—
Conventional Other	13,493	—	838	—	2,059	16,390	45
Finished Aviation Gasoline	30	30	—	8	3	71	0
Kerosene-Type Jet Fuel	16,915	—	28	124	29,215	46,282	127
Bonded Aircraft Fuel	2,327	—	—	—	11,653	13,980	38
Other	14,588	—	28	124	17,562	32,302	88
Kerosene	614	2	—	—	—	616	2
Distillate Fuel Oil	53,222	2,923	2,686	749	4,147	63,727	175
15 ppm sulfur and under	47,125	2,031	1,764	749	3,755	55,424	152
Bonded	3	—	—	—	88	91	0
Other	47,122	2,031	1,764	749	3,667	55,333	152
Greater than 15 ppm to 500 ppm sulfur	1,355	—	—	—	—	1,355	4
Bonded	—	—	—	—	—	—	—
Other	1,355	—	—	—	—	1,355	4
Greater than 500 ppm to 2000 ppm sulfur	4,292	758	681	—	186	5,917	16
Bonded	—	—	—	—	—	—	—
Other	4,292	758	681	—	186	5,917	16
Greater than 2000 ppm	450	134	241	—	206	1,031	3
Bonded	—	—	—	—	—	—	—
Other	450	134	241	—	206	1,031	3
Residual Fuel Oil	33,062	1,351	30,436	124	11,888	76,861	211
Less than 0.31 percent sulfur	694	1	7,877	—	—	8,572	23
0.31 to 1.00 percent sulfur	2,055	409	2,226	—	2,490	7,180	20
Greater than 1.00 percent sulfur	30,313	941	20,333	124	9,398	61,109	167
Petrochemical Feedstocks	13	1,737	5,770	—	378	7,898	22
Naphtha for Petro. Feed. Use	12	851	5,221	—	378	6,462	18
Other Oils for Petro. Feed. Use	1	886	549	—	—	1,436	4
Special Naphthas	7	383	4,533	—	—	4,923	13
Lubricants	1,816	1,535	12,053	—	153	15,557	43
Waxes	907	57	449	—	443	1,856	5
Petroleum Coke (Marketable)	193	287	3,348	—	325	4,153	11
Asphalt and Road Oil	8,611	3,215	—	324	1,192	13,342	37
Miscellaneous Products	—	8	59	12	—	79	0
Total	673,418	958,715	1,277,513	115,971	598,160	3,623,777	9,928

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	67,672	—	—	4,708	—	225	225	—	2,966	2,966
Algeria	2,690	—	—	2,998	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—
Ecuador	5,954	—	—	—	—	—	—	—	—	—
Equatorial Guinea	991	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	6,983	—	—	—	—	—	—	—	—	—
Kuwait	502	—	—	—	—	—	—	—	—	—
Libya	3,758	—	—	—	—	—	—	—	—	—
Nigeria	5,177	—	—	—	—	—	—	—	307	307
Qatar	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	26,102	—	—	—	—	225	225	—	1,769	1,769
United Arab Emirates	—	—	—	1,710	—	—	—	—	—	—
Venezuela	15,515	—	—	—	—	—	—	—	890	890
Non-OPEC	152,387	7,640	658	10,774	—	672	672	5,030	7,513	12,543
Argentina	1,459	70	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	1,712	—	—	—	—	—	—
Brazil	496	—	—	287	—	—	—	—	1,432	1,432
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—
Canada	114,143	7,186	547	526	—	370	370	2,117	1,487	3,604
Chad	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	7,880	—	—	—	—	—	—	—	588	588
Denmark	—	—	—	437	—	—	—	—	—	—
Egypt	516	—	—	613	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—
France	—	—	—	135	—	302	302	580	—	580
Germany	—	—	—	25	—	—	—	—	—	—
Guatemala	280	—	—	—	—	—	—	—	—	—
India	—	—	—	268	—	—	—	—	1,367	1,367
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	370	—	—	—	—	317	317
Korea, South	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—
Mexico	17,941	—	34	—	—	—	—	—	100	100
Netherlands	—	—	—	279	—	—	—	1,088	100	1,188
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
Norway	2,735	192	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	284	284
Russia	4,156	—	—	3,908	—	—	—	—	—	—
Spain	—	—	—	18	—	—	—	—	1,008	1,008
Sweden	—	192	—	284	—	—	—	—	536	536
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	1,127	—	—	—	—	—	—	—	—	—
United Kingdom	1,654	—	—	1,026	—	—	—	1,245	—	1,245
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	0	0	77	886	—	0	0	0	294	294
Total	220,059	7,640	658	15,482	—	897	897	5,030	10,479	15,509
Persian Gulf³	33,587	—	—	1,710	—	225	225	—	1,769	1,769

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	1,020	—	—	—	1,020
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	727	—	—	—	727
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	293	—	—	—	293
Non-OPEC	—	195	255	536	106	—	4,173	319	343	20	4,855
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	163	—	163
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	195	255	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	103	—	—	2,433	40	94	20	2,587
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	1,368	—	—	—	1,368
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	60	—	—	—	—	—	—	—
Germany	—	—	—	344	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	29	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	2	—	2
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	279	66	—	345
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	0	0	0	106	—	372	0	18	0	390
Total	—	195	255	536	106	—	5,193	319	343	20	5,875
Persian Gulf³	—	—	—	—	—	—	727	—	—	—	727

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	58	—	—	—	1,100	1,100
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	10	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	48	—	—	—	1,100	1,100
Non-OPEC	—	5	—	3,198	423	2	1,294	3,187	4,483
Argentina	—	—	—	—	—	—	200	—	200
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	300	300
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	21	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	5	—	539	129	2	442	1,440	1,884
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	318	318
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	2,116	199	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	10	—	—	302	1,061	1,363
Netherlands	—	—	—	—	—	—	—	53	53
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	0	—	533	74	0	350	15	365
Total	—	5	—	3,256	423	2	1,294	4,287	5,583
Persian Gulf³	—	—	—	10	—	—	—	—	—

See footnotes at end of table.

Table 39. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	242	—	10,319	77,991	2,183	333	2,516
Algeria	—	—	—	—	—	—	—	2,998	5,688	87	97	183
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	5,954	192	—	192
Equatorial Guinea	—	—	—	—	—	—	—	—	991	32	—	32
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	10	6,993	225	0	226
Kuwait	—	—	—	—	—	—	—	—	502	16	—	16
Libya	—	—	—	—	—	—	—	—	3,758	121	—	121
Nigeria	—	—	—	—	—	—	—	307	5,484	167	10	177
Qatar	—	—	—	—	—	242	—	242	242	—	8	8
Saudi Arabia	—	—	—	—	—	—	—	2,721	28,823	842	88	930
United Arab Emirates	—	—	—	—	—	—	—	1,710	1,710	—	55	55
Venezuela	—	—	—	—	—	—	—	2,331	17,846	500	75	576
Non-OPEC	543	116	204	525	640	941	1	49,313	201,700	4,916	1,591	6,506
Argentina	—	—	—	—	—	3	—	273	1,732	47	9	56
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	463	463	—	15	15
Bahrain	—	—	—	—	—	62	—	62	62	—	2	2
Belgium	—	—	—	—	—	2	—	1,714	1,714	—	55	55
Brazil	—	12	—	143	—	—	—	2,345	2,841	16	76	92
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	83	104	39	42	569	186	1	18,504	132,647	3,682	597	4,279
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	101	—	—	—	—	101	101	—	3	3
Colombia	—	—	—	183	—	—	—	2,457	10,337	254	79	333
Denmark	—	—	—	—	—	—	—	437	437	—	14	14
Egypt	—	—	—	—	—	—	—	613	1,129	17	20	36
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	7	—	7	7	—	0	0
France	—	—	—	—	—	8	—	1,085	1,085	—	35	35
Germany	—	—	—	—	—	13	—	382	382	—	12	12
Guatemala	—	—	—	—	—	—	—	—	280	9	—	9
India	—	—	—	—	—	1	—	1,636	1,636	—	53	53
Indonesia	—	—	—	—	—	76	—	76	76	—	2	2
Italy	—	—	—	—	—	6	—	693	693	—	22	22
Korea, South	—	—	1	—	—	472	—	2,817	2,817	—	91	91
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	18	—	—	—	—	18	18	—	1	1
Mexico	244	—	—	—	—	—	—	1,753	19,694	579	57	635
Netherlands	—	—	—	—	—	1	—	1,521	1,521	—	49	49
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	192	2,927	88	6	94
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	284	284	—	9	9
Russia	—	—	—	—	—	—	—	4,253	8,409	134	137	271
Spain	—	—	2	—	71	—	—	1,099	1,099	—	35	35
Sweden	—	—	—	—	—	1	—	1,013	1,013	—	33	33
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	1,127	36	—	36
United Kingdom	—	—	—	156	—	16	—	2,443	4,097	53	79	132
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	216	0	43	1	0	87	0	3,072	3,072	1	100	102
Total	543	116	204	525	640	1,183	1	59,632	279,691	7,099	1,924	9,022
Persian Gulf³	—	—	—	—	—	304	—	4,745	38,332	1,083	153	1,237

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	942,957	140	-	59,180	-	625	625	-	17,139	17,139
Algeria	28,735	140	-	34,684	-	-	-	-	536	536
Angola	32,994	-	-	2	-	-	-	-	1,334	1,334
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	64,159	-	-	-	-	-	-	-	-	-
Equatorial Guinea	6,881	-	-	-	-	-	-	-	-	-
Gabon	1,795	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	189,324	-	-	850	-	-	-	-	-	-
Kuwait	28,441	-	-	109	-	-	-	-	-	-
Libya	20,216	-	-	151	-	-	-	-	-	-
Nigeria	64,057	-	-	803	-	-	-	-	3,855	3,855
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	317,599	-	-	1,428	-	625	625	-	3,058	3,058
United Arab Emirates	1,995	-	-	18,331	-	-	-	-	-	-
Venezuela	184,533	-	-	1,565	-	-	-	-	8,356	8,356
Non-OPEC	1,888,332	62,381	8,548	163,810	-	15,765	15,765	64,620	151,965	216,585
Argentina	8,319	70	-	13	-	-	-	-	731	731
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	529	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	15,745	-	306	306	1,445	6,575	8,020
Brazil	45,936	-	-	3,535	-	-	-	-	7,497	7,497
Brunei	5,478	-	-	-	-	-	-	-	-	-
Cameroon	1,144	-	-	791	-	-	-	-	-	-
Canada	1,348,358	60,073	7,020	7,662	-	4,467	4,467	33,543	19,407	52,950
Chad	7,310	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	157	157
Colombia	108,119	-	-	475	-	103	103	-	6,086	6,086
Denmark	2,436	-	-	2,329	-	-	-	80	80	160
Egypt	7,989	-	-	4,534	-	-	-	96	690	786
Estonia	-	-	-	90	-	-	-	-	-	-
Finland	-	-	-	612	-	-	-	277	4,228	4,505
France	-	-	37	2,189	-	2,116	2,116	4,270	3,985	8,255
Germany	-	-	-	770	-	18	18	13	236	249
Guatemala	2,501	-	-	-	-	-	-	-	-	-
India	-	-	-	927	-	644	644	511	19,511	20,022
Indonesia	14,531	-	-	-	-	-	-	-	-	-
Italy	438	-	-	3,931	-	630	630	107	3,208	3,315
Korea, South	-	56	-	120	-	622	622	-	2,287	2,287
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	630	630
Malaysia	588	-	-	382	-	-	-	-	-	-
Mexico	242,773	-	345	398	-	-	-	-	2,273	2,273
Netherlands	-	-	-	4,056	-	1,211	1,211	5,056	8,673	13,729
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	19,507	843	-	6,387	-	579	579	1,284	5,782	7,066
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	1,106	1,106	1,485	7,669	9,154
Russia	26,705	-	-	85,894	-	378	378	248	12,148	12,396
Spain	-	-	-	3,217	-	385	385	47	14,173	14,220
Sweden	-	455	-	619	-	1,022	1,022	77	2,322	2,399
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	2,706	387	-	348	-	-	-	-	-	-
United Kingdom	20,774	384	-	2,783	-	1,494	1,494	16,081	11,024	27,105
Vietnam	788	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	21,403	113	1,146	16,003	-	684	684	0	12,593	12,593
Total	2,831,289	62,521	8,548	222,990	-	16,390	16,390	64,620	169,104	233,724
Persian Gulf³	537,359	-	-	20,718	-	625	625	-	3,058	3,058

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
OPEC	—	—	—	—	—	—	9,768	—	140	100	10,008
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	140	—	140
Qatar	—	—	—	—	—	—	2,523	—	—	—	2,523
Saudi Arabia	—	—	—	—	—	—	5,809	—	—	—	5,809
United Arab Emirates	—	—	—	—	—	—	32	—	—	—	32
Venezuela	—	—	—	—	—	—	1,404	—	—	100	1,504
Non-OPEC	1,672	1,852	1,294	3,913	4,124	—	45,656	1,355	5,777	931	53,719
Argentina	132	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	542	—	163	—	705
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	52	—	—	—	—	—	605	—	—	—	605
Brazil	719	1,228	1,265	—	—	—	717	—	—	—	717
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	1,886	—	—	29,925	503	4,814	134	35,376
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	1,556	—	—	—	1,556
Colombia	—	—	—	—	—	—	3,339	—	—	300	3,639
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	382	—	—	—	—	—	—	—
Germany	87	—	—	1,488	—	—	—	—	—	—	5
Guatemala	—	—	29	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	3,369	—	—	—	3,369
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	157	—	—	331	—	—	—	331
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	241	—	—	—	241
Mexico	—	—	—	—	—	—	293	—	279	—	572
Netherlands	337	624	—	—	—	—	524	—	—	69	593
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	161	—	—	—	161
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	345	—	—	—	—	—	3,254	852	503	167	4,776
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	4,124	—	799	0	18	261	1,073
Total	1,672	1,852	1,294	3,913	4,124	—	55,424	1,355	5,917	1,031	63,727
Persian Gulf³	—	—	—	—	—	—	8,364	—	—	—	8,364

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	2,312	84	3,879	229	11,926	16,034
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	227	—	227
Ecuador	—	—	—	—	—	—	—	438	438
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	108	—	—	—	—	—
Kuwait	—	—	—	165	—	—	—	—	—
Libya	—	—	—	—	—	147	2	—	149
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	133	84	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	43	43
Venezuela	—	—	—	1,906	—	3,732	—	11,445	15,177
Non-OPEC	616	71	—	43,970	4,839	4,693	6,951	49,183	60,827
Argentina	—	—	—	6	—	208	771	1	980
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	651	651
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	71	78	50	—	128
Brazil	—	—	—	—	219	80	595	268	943
Brunel	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	2	52	—	6,577	1,091	679	2,852	15,076	18,607
Chad	—	—	—	—	—	—	—	—	—
China	153	—	—	3,634	—	—	—	—	—
Colombia	108	—	—	61	—	—	302	2,721	3,023
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	32	—	326	358
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	107	123	—	—	123
Germany	—	—	—	—	24	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	2,054	84	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	74	—	—	—	—	—
Korea, South	353	—	—	23,771	2,042	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	97	97
Malaysia	—	—	—	—	—	—	—	75	75
Mexico	—	—	—	38	37	525	302	12,471	13,298
Netherlands	—	19	—	—	3	57	—	2,069	2,126
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	53	—	—	—	—
Russia	—	—	—	7	—	1,749	—	4,431	6,180
Spain	—	—	—	—	—	—	263	80	343
Sweden	—	—	—	—	—	—	—	286	286
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	85	—	6,281	6,366
United Kingdom	—	—	—	—	—	38	10	—	48
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	0	0	—	7,748	1,108	1,039	1,806	4,350	7,195
Total	616	71	—	46,282	4,923	8,572	7,180	61,109	76,861
Persian Gulf³	—	—	—	406	84	—	—	43	43

See footnotes at end of table.

Table 40. Year-to-Date Imports of Crude Oil and Petroleum Products into the United States by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	558	—	—	—	809	4,287	—	111,176	1,054,133	2,583	305	2,888
Algeria	327	—	—	—	—	—	—	35,687	64,422	79	98	176
Angola	—	—	—	—	—	—	—	1,336	34,330	90	4	94
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	438	64,597	176	1	177
Equatorial Guinea	—	—	—	—	—	—	—	—	6,881	19	—	19
Gabon	—	—	—	—	—	—	—	—	1,795	5	—	5
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	958	190,282	519	3	521
Kuwait	—	—	—	—	—	—	—	274	28,715	78	1	79
Libya	—	—	—	—	—	—	—	300	20,516	55	1	56
Nigeria	231	—	—	—	—	—	—	5,029	69,086	175	14	189
Qatar	—	—	—	—	—	3,376	—	5,899	5,899	—	16	16
Saudi Arabia	—	—	—	—	—	—	—	11,137	328,736	870	31	901
United Arab Emirates	—	—	—	—	—	911	—	19,317	21,312	5	53	58
Venezuela	—	—	—	—	809	—	—	29,317	213,850	506	80	586
Non-OPEC	5,904	1,436	1,856	4,153	12,533	11,270	79	681,312	2,569,644	5,174	1,867	7,040
Argentina	—	36	—	1,121	—	54	—	3,143	11,462	23	9	31
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	529	1	—	1
Bahamas	—	—	—	—	—	—	—	1,356	1,356	—	4	4
Bahrain	—	—	—	—	—	1,037	—	1,037	1,037	—	3	3
Belgium	—	—	—	—	106	153	—	25,188	25,188	—	69	69
Brazil	26	12	—	288	—	—	—	16,449	62,385	126	45	171
Brunel	—	—	—	—	—	—	—	—	5,478	15	—	15
Cameroon	—	—	—	—	—	—	—	791	1,935	3	2	5
Canada	853	887	537	850	10,698	2,769	20	212,403	1,560,761	3,694	582	4,276
Chad	—	—	—	—	—	—	—	—	7,310	20	—	20
China	—	—	846	318	91	—	—	6,755	6,755	—	19	19
Colombia	—	—	—	350	34	—	—	13,879	121,998	296	38	334
Denmark	—	—	—	—	—	—	—	2,489	4,925	7	7	13
Egypt	—	—	—	—	—	—	—	5,320	13,309	22	15	36
Estonia	—	—	—	—	—	—	—	448	448	—	1	1
Finland	—	—	—	—	—	29	—	5,146	5,146	—	14	14
France	57	178	—	—	—	160	—	13,604	13,604	—	37	37
Germany	—	—	17	—	—	179	—	2,841	2,841	—	8	8
Guatemala	—	—	—	—	—	—	—	29	2,530	7	0	7
India	—	—	—	—	—	13	—	27,113	27,113	—	74	74
Indonesia	—	—	—	—	—	945	—	945	15,476	40	3	42
Italy	—	—	—	—	—	310	—	8,267	8,705	1	23	24
Korea, South	23	—	8	—	66	4,539	—	34,375	34,375	—	94	94
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	727	727	—	2	2
Malaysia	—	—	162	—	—	1	—	861	1,449	2	2	4
Mexico	2,574	—	—	—	—	—	—	19,535	262,308	665	54	719
Netherlands	53	—	—	—	—	11	59	22,844	22,844	—	63	63
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	14,875	34,382	53	41	94
Oman	—	—	—	601	—	66	—	828	828	—	2	2
Portugal	—	—	—	—	—	—	—	10,313	10,313	—	28	28
Russia	—	—	—	255	—	74	—	110,305	137,010	73	302	375
Spain	—	—	12	—	1,230	23	—	19,430	19,430	—	53	53
Sweden	—	—	—	8	—	4	—	4,793	4,793	—	13	13
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	7,101	9,807	7	19	27
United Kingdom	276	4	—	351	—	214	—	32,659	53,433	57	89	146
Vietnam	—	—	—	—	—	—	—	—	788	2	—	2
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	2,042	319	274	11	308	689	0	55,463	76,866	60	152	214
Total	6,462	1,436	1,856	4,153	13,342	15,557	79	792,488	3,623,777	7,757	2,171	9,928
Persian Gulf³	—	—	—	—	—	5,324	—	38,622	575,981	1,472	106	1,578

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	11,009	—	—	—	—	225	225	—	2,966	2,966
Algeria	2,690	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	538	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—
Libya	1,086	—	—	—	—	—	—	—	—	—
Nigeria	3,912	—	—	—	—	—	—	—	307	307
Qatar	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	2,783	—	—	—	—	225	225	—	1,769	1,769
United Arab Emirates	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	890	890
Non-OPEC	13,020	1,915	118	620	—	566	566	5,024	5,797	10,821
Argentina	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	907	907
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—
Canada	5,337	1,531	118	219	—	264	264	2,111	726	2,837
Chad	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	522	—	—	—	—	—	—	—	588	588
Denmark	—	—	—	—	—	—	—	—	—	—
Egypt	516	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—
France	—	—	—	108	—	302	302	580	—	580
Germany	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	1,037	1,037
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	317	317
Korea, South	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	1,088	100	1,188
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
Norway	2,735	192	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	284	284
Russia	2,736	—	—	105	—	—	—	—	—	—
Spain	—	—	—	18	—	—	—	—	1,008	1,008
Sweden	—	192	—	—	—	—	—	—	536	536
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—
United Kingdom	1,174	—	—	170	—	—	—	1,245	—	1,245
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	—	0	0	0	294	294
Total	24,029	1,915	118	620	—	791	791	5,024	8,763	13,787
Persian Gulf³	3,321	—	—	—	—	225	225	—	1,769	1,769

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	727	—	—	—	727
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	727	—	—	—	727
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	—	—	—	364	—	—	3,516	319	264	—	4,099
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	163	—	163
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	20	—	—	1,851	40	15	—	1,906
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	1,368	—	—	—	1,368
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	344	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	2	—	2
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	279	66	—	345
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	—	—	297	0	18	—	315
Total	—	—	—	364	—	—	4,243	319	264	—	4,826
Persian Gulf³	—	—	—	—	—	—	727	—	—	—	727

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	40	—	—	—	542	542
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	40	—	—	—	542	542
Non-OPEC	—	1	—	886	—	2	376	1,747	2,125
Argentina	—	—	—	—	—	—	200	—	200
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	300	300
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	1	—	527	—	2	176	1,061	1,239
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	318	318
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	359	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	53	53
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	0	—	0	—	0	0	15	15
Total	—	1	—	926	—	2	376	2,289	2,667
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 41. PAD District 1 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	—	—	4,500	15,509	355	145	500
Algeria	—	—	—	—	—	—	—	—	2,690	87	—	87
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	538	17	—	17
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	1,086	35	—	35
Nigeria	—	—	—	—	—	—	—	307	4,219	126	10	136
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	2,721	5,504	90	88	178
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	1,472	1,472	—	47	47
Non-OPEC	—	—	63	3	260	130	—	21,971	34,991	420	709	1,129
Argentina	—	—	—	—	—	—	—	200	200	—	6	6
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	463	463	—	15	15
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	1	—	1	1	—	0	0
Brazil	—	—	—	—	—	—	—	907	907	—	29	29
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	37	—	189	88	—	8,976	14,313	172	290	462
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	22	—	—	—	—	22	22	—	1	1
Colombia	—	—	—	—	—	—	—	2,274	2,796	17	73	90
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	516	17	—	17
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	7	—	997	997	—	32	32
Germany	—	—	—	—	—	7	—	351	351	—	11	11
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	1	—	1,038	1,038	—	33	33
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	317	317	—	10	10
Korea, South	—	—	1	—	—	25	—	385	385	—	12	12
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	1	—	—	—	—	1	1	—	0	0
Mexico	—	—	—	—	—	—	—	2	2	—	0	0
Netherlands	—	—	—	—	—	1	—	1,242	1,242	—	40	40
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	192	2,927	88	6	94
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	284	284	—	9	9
Russia	—	—	—	—	—	—	—	450	3,186	88	15	103
Spain	—	—	2	—	71	—	—	1,099	1,099	—	35	35
Sweden	—	—	—	—	—	—	—	728	728	—	23	23
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	2	—	—	—	1,417	2,591	38	46	84
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	0	1	0	0	—	625	625	0	23	23
Total	—	—	63	3	260	130	—	26,471	50,500	775	854	1,629
Persian Gulf³	—	—	—	—	—	—	—	2,721	6,042	107	88	195

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	78,565	3,054	429	85	-	-	-	-	712	712
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	78,266	3,054	429	85	-	-	-	-	712	712
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	299	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	0	0	0	0	-	-	-	-	0	0
Total	78,565	3,054	429	85	-	-	-	-	712	712
Persian Gulf³	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	—	—	—	72	—	—	400	—	79	20	499
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	72	—	—	400	—	79	20	499
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	—	—	0	—	0	0	0
Total	—	—	—	72	—	—	400	—	79	20	499
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	2	—	—	3	—	41	177	218
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	2	—	—	3	—	41	177	218
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	0	—	—	0	—	0	0	0
Total	—	2	—	—	3	—	41	177	218
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 42. PAD District 2 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	-	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	83	104	2	18	290	90	-	5,661	84,226	2,534	183	2,717
Argentina	-	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-	-
Canada	83	104	2	18	290	90	-	5,661	83,927	2,525	183	2,707
Chad	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	299	10	-	10
Netherlands	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-	-
Other	0	0	0	0	0	0	-	0	0	-1	0	0
Total	83	104	2	18	290	90	-	5,661	84,226	2,534	183	2,717
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-	-

- = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	32,597	-	-	3,474	-	-	-	-	-	-
Algeria	-	-	-	2,043	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	108	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	6,445	-	-	-	-	-	-	-	-	-
Kuwait	502	-	-	-	-	-	-	-	-	-
Libya	598	-	-	-	-	-	-	-	-	-
Nigeria	1,265	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	8,432	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	1,431	-	-	-	-	-	-
Venezuela	15,247	-	-	-	-	-	-	-	-	-
Non-OPEC	38,210	-	111	9,181	-	-	-	-	955	955
Argentina	437	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	1,712	-	-	-	-	-	-
Brazil	496	-	-	287	-	-	-	-	525	525
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	15,215	-	-	222	-	-	-	-	-	-
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	3,917	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	437	-	-	-	-	-	-
Egypt	-	-	-	613	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-	-	-	27	-	-	-	-	-	-
Germany	-	-	-	25	-	-	-	-	-	-
Guatemala	280	-	-	-	-	-	-	-	-	-
India	-	-	-	268	-	-	-	-	330	330
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	370	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	16,091	-	34	-	-	-	-	-	100	100
Netherlands	-	-	-	279	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-
Russia	718	-	-	3,443	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	51	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	576	-	-	-	-	-	-	-	-	-
United Kingdom	480	-	-	856	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	0	-	77	591	-	-	-	-	0	0
Total	70,807	-	111	12,655	-	-	-	-	955	955
Persian Gulf³	15,379	-	-	1,431	-	-	-	-	-	-

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	293	—	—	—	293
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	293	—	—	—	293
Non-OPEC	—	195	—	60	—	—	25	—	—	—	25
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	195	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	25	—	—	—	25
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	60	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	0	—	0	—	—	0	—	—	—	0
Total	—	195	—	60	—	—	318	—	—	—	318
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	18	—	—	—	558	558
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	10	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	8	—	—	—	558	558
Non-OPEC	—	—	—	10	420	—	302	891	1,193
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	21	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	126	—	—	—	—
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	199	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	10	—	—	302	891	1,193
Netherlands	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	74	—	0	0	0
Total	—	—	—	28	420	—	302	1,449	1,751
Persian Gulf³	—	—	—	10	—	—	—	—	—

See footnotes at end of table.

Table 43. PAD District 3 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	242	—	4,585	37,182	1,052	148	1,199
Algeria	—	—	—	—	—	—	—	2,043	2,043	—	66	66
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	108	3	—	3
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	10	6,455	208	0	208
Kuwait	—	—	—	—	—	—	—	—	502	16	—	16
Libya	—	—	—	—	—	—	—	—	598	19	—	19
Nigeria	—	—	—	—	—	—	—	—	1,265	41	—	41
Qatar	—	—	—	—	—	242	—	242	242	—	8	8
Saudi Arabia	—	—	—	—	—	—	—	—	8,432	272	—	272
United Arab Emirates	—	—	—	—	—	—	—	1,431	1,431	—	46	46
Venezuela	—	—	—	—	—	—	—	859	16,106	492	28	520
Non-OPEC	422	12	72	480	—	714	—	13,850	52,060	1,233	447	1,679
Argentina	—	—	—	—	—	3	—	3	440	14	0	14
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	62	—	62	62	—	2	2
Belgium	—	—	—	—	—	1	—	1,713	1,713	—	55	55
Brazil	—	12	—	143	—	—	—	1,183	1,679	16	38	54
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	1	—	374	15,589	491	12	503
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	12	—	—	—	—	12	12	—	0	0
Colombia	—	—	—	183	—	—	—	183	4,100	126	6	132
Denmark	—	—	—	—	—	—	—	437	437	—	14	14
Egypt	—	—	—	—	—	—	—	613	613	—	20	20
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	7	—	7	7	—	0	0
France	—	—	—	—	—	1	—	88	88	—	3	3
Germany	—	—	—	—	—	6	—	31	31	—	1	1
Guatemala	—	—	—	—	—	—	—	—	280	9	—	9
India	—	—	—	—	—	—	—	598	598	—	19	19
Indonesia	—	—	—	—	—	76	—	76	76	—	2	2
Italy	—	—	—	—	—	6	—	376	376	—	12	12
Korea, South	—	—	—	—	—	447	—	646	646	—	21	21
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	17	—	—	—	—	17	17	—	1	1
Mexico	244	—	—	—	—	—	—	1,581	17,672	519	51	570
Netherlands	—	—	—	—	—	—	—	279	279	—	9	9
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	3,443	4,161	23	111	134
Spain	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	1	—	52	52	—	2	2
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	576	19	—	19
United Kingdom	—	—	—	154	—	16	—	1,026	1,506	15	33	49
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	178	0	43	0	—	87	—	1,050	1,050	1	35	34
Total	422	12	72	480	—	956	—	18,435	89,242	2,284	595	2,879
Persian Gulf³	—	—	—	—	—	304	—	1,745	17,124	496	56	552

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
	PAD District 4									
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	8,591	662	-	-	-	-	-	-	49	49
Canada	8,591	662	-	-	-	-	-	-	49	49
Other	0	0	-	-	-	-	-	-	0	0
Total	8,591	662	-	-	-	-	-	-	49	49
	PAD District 5									
OPEC	24,066	-	-	1,234	-	-	-	-	-	-
Algeria	-	-	-	955	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	5,846	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	2,074	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	14,887	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	279	-	-	-	-	-	-
Venezuela	268	-	-	-	-	-	-	-	-	-
Non-OPEC	14,001	2,009	-	888	-	106	106	6	-	6
Argentina	1,022	70	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-
Canada	6,734	1,939	-	-	-	106	106	6	-	6
China	-	-	-	-	-	-	-	-	-	-
Colombia	3,441	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	1,551	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	233	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Other	1,253	0	-	655	-	0	0	0	-	0
Total	38,067	2,009	-	2,122	-	106	106	6	-	6
Persian Gulf ³	14,887	-	-	279	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
PAD District 4											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	4	-	-	57	-	-	-	57
Canada	-	-	-	4	-	-	57	-	-	-	57
Other	-	-	-	0	-	-	0	-	-	-	0
Total	-	-	-	4	-	-	57	-	-	-	57
PAD District 5											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	255	36	106	-	175	-	-	-	175
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	255	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	7	-	-	100	-	-	-	100
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	75	-	-	-	75
Korea, South	-	-	-	29	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	0	0	106	-	0	-	-	-	0
Total	-	-	255	36	106	-	175	-	-	-	175
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
	PAD District 4								
OPEC	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-
Non-OPEC	-	2	-	-	-	-	-	110	110
Canada	-	2	-	-	-	-	-	110	110
Other	-	0	-	-	-	-	-	0	0
Total	-	2	-	-	-	-	-	110	110
	PAD District 5								
OPEC	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	2,302	-	-	575	262	837
Argentina	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-
Canada	-	-	-	12	-	-	225	92	317
China	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-
Japan	-	-	-	266	-	-	-	-	-
Korea, South	-	-	-	1,757	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	170	170
Netherlands	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-
Other	-	-	-	267	-	-	350	0	350
Total	-	-	-	2,302	-	-	575	262	837
Persian Gulf ³	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. PAD District 4 and 5 - Imports of Crude Oil and Petroleum Products by Country of Origin, December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
	PAD District 4											
OPEC	—	—	—	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	—	—	—	—	34	—	1	919	9,510	277	30	307
Canada	—	—	—	—	34	—	1	919	9,510	277	30	307
Other	—	—	—	—	0	—	0	0	0	0	0	0
Total	—	—	—	—	34	—	1	919	9,510	277	30	307
	PAD District 5											
OPEC	—	—	—	—	—	—	—	1,234	25,300	776	40	816
Algeria	—	—	—	—	—	—	—	955	955	—	31	31
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	5,846	189	—	189
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	2,074	67	—	67
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	14,887	480	—	480
United Arab Emirates	—	—	—	—	—	—	—	279	279	—	9	9
Venezuela	—	—	—	—	—	—	—	—	268	9	—	9
Non-OPEC	38	—	67	24	56	7	—	6,912	20,913	452	223	675
Argentina	—	—	—	—	—	—	—	70	1,092	33	2	35
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	255	255	—	8	8
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	24	56	7	—	2,574	9,308	217	83	300
China	—	—	67	—	—	—	—	67	67	—	2	2
Colombia	—	—	—	—	—	—	—	—	3,441	111	—	111
Finland	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Japan	—	—	—	—	—	—	—	341	341	—	11	11
Korea, South	—	—	—	—	—	—	—	1,786	1,786	—	58	58
Malaysia	—	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	170	1,721	50	5	56
Netherlands	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Peru	—	—	—	—	—	—	—	—	—	—	—	—
Singapore	—	—	—	—	—	—	—	106	106	—	3	3
Sweden	—	—	—	—	—	—	—	233	233	—	8	8
Taiwan	38	—	—	—	—	—	—	38	38	—	1	1
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	—	0	0	0	0	—	1,272	2,525	41	42	82
Total	38	—	67	24	56	7	—	8,146	46,213	1,228	263	1,491
Persian Gulf ³	—	—	—	—	—	—	—	279	15,166	480	9	489

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	157,464	140	-	4,432	-	625	625	-	16,049	16,049
Algeria	28,735	140	-	3,779	-	-	-	-	218	218
Angola	14,477	-	-	2	-	-	-	-	1,334	1,334
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	1,001	-	-	-	-	-	-	-	-	-
Gabon	1,397	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	14,398	-	-	398	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	10,541	-	-	-	-	-	-	-	-	-
Nigeria	47,442	-	-	253	-	-	-	-	3,538	3,538
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	37,245	-	-	-	-	625	625	-	3,058	3,058
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	7,901	7,901
Non-OPEC	152,498	15,133	2,039	10,118	-	12,868	12,868	63,584	120,847	184,431
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	306	306	1,445	6,534	7,979
Brazil	1,320	-	-	-	-	-	-	-	5,235	5,235
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	1,144	-	-	-	-	-	-	-	-	-
Canada	75,953	13,562	2,039	2,038	-	3,911	3,911	33,458	11,802	45,260
Chad	3,756	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	9,591	-	-	259	-	103	103	-	5,535	5,535
Denmark	2,436	-	-	369	-	-	-	10	65	75
Egypt	5,228	-	-	-	-	-	-	96	334	430
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	277	3,899	4,176
France	-	-	-	108	-	1,874	1,874	4,253	3,410	7,663
Germany	-	-	-	57	-	18	18	13	117	130
Guatemala	-	-	-	-	-	-	-	-	-	-
India	-	-	-	125	-	267	267	511	17,574	18,085
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	630	630	107	2,850	2,957
Korea, South	-	-	-	-	-	-	-	-	1,366	1,366
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	323	323
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	3,469	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	303	-	1,162	1,162	4,618	7,582	12,200
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	19,507	732	-	58	-	578	578	1,284	5,433	6,717
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	1,106	1,106	1,485	7,463	8,948
Russia	11,400	-	-	3,429	-	241	241	188	11,639	11,827
Spain	-	-	-	1,031	-	275	275	47	12,279	12,326
Sweden	-	455	-	82	-	968	968	30	1,903	1,933
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
United Kingdom	7,477	-	-	435	-	1,429	1,429	15,762	9,619	25,381
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	9,820	384	0	1,824	-	0	0	0	5,885	5,885
Total	309,962	15,273	2,039	14,550	-	13,493	13,493	63,584	136,896	200,480
Persian Gulf³	51,643	-	-	398	-	625	625	-	3,058	3,058

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	8,364	—	—	100	8,464
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	2,523	—	—	—	2,523
Saudi Arabia	—	—	—	—	—	—	5,809	—	—	—	5,809
United Arab Emirates	—	—	—	—	—	—	32	—	—	—	32
Venezuela	—	—	—	—	—	—	—	—	—	100	100
Non-OPEC	—	—	—	2,231	—	—	38,761	1,355	4,292	350	44,758
Argentina	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	542	—	163	—	705
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	605	—	—	—	605
Brazil	—	—	—	—	—	—	717	—	—	—	717
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	717	—	—	24,475	503	3,793	—	28,771
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	1,191	—	—	—	1,191
Colombia	—	—	—	—	—	—	3,339	—	—	300	3,639
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	168	—	—	—	—	—	—	—
Germany	—	—	—	1,346	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	3,369	—	—	—	3,369
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	2	—	2
Netherlands	—	—	—	—	—	—	508	—	—	—	508
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	161	—	—	—	161
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	3,254	852	316	—	4,422
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	—	—	600	0	18	50	668
Total	—	—	—	2,231	—	—	47,125	1,355	4,292	450	53,222
Persian Gulf³	—	—	—	—	—	—	8,364	—	—	—	8,364

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	2,198	—	147	229	6,867	7,243
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	227	—	227
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	2	—	—	—	—	—
Kuwait	—	—	—	165	—	—	—	—	—
Libya	—	—	—	—	—	147	2	—	149
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	133	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	1,898	—	—	—	6,867	6,867
Non-OPEC	614	30	—	14,717	7	547	1,826	23,446	25,819
Argentina	—	—	—	6	—	204	771	—	975
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	301	301
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	80	315	268	663
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	11	—	6,487	7	2	303	11,571	11,876
Chad	—	—	—	—	—	—	—	—	—
China	153	—	—	116	—	—	—	—	—
Colombia	108	—	—	61	—	—	302	2,432	2,734
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	2,054	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	74	—	—	—	—	—
Korea, South	353	—	—	5,340	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	419	419
Netherlands	—	19	—	—	—	—	—	1,719	1,719
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	7	—	—	—	260	260
Spain	—	—	—	—	—	—	—	80	80
Sweden	—	—	—	—	—	—	—	286	286
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	5,314	5,314
United Kingdom	—	—	—	—	—	—	10	—	10
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	0	0	—	572	0	261	125	796	1,182
Total	614	30	—	16,915	7	694	2,055	30,313	33,062
Persian Gulf³	—	—	—	300	—	—	—	—	—

See footnotes at end of table.

Table 45. PAD District 1 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	809	125	—	40,085	197,549	431	110	541
Algeria	—	—	—	—	—	—	—	4,137	32,872	79	11	90
Angola	—	—	—	—	—	—	—	1,336	15,813	40	4	43
Congo (Brazzaville)	—	—	—	—	—	—	—	227	—	—	1	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	1,001	3	—	3
Gabon	—	—	—	—	—	—	—	—	1,397	4	—	4
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	400	14,798	39	1	41
Kuwait	—	—	—	—	—	—	—	165	165	—	0	0
Libya	—	—	—	—	—	—	—	149	10,690	29	0	29
Nigeria	—	—	—	—	—	—	—	3,791	51,233	130	10	140
Qatar	—	—	—	—	—	—	—	2,523	2,523	—	7	7
Saudi Arabia	—	—	—	—	—	—	—	9,625	46,870	102	26	128
United Arab Emirates	—	—	—	—	—	125	—	157	157	—	0	0
Venezuela	—	—	—	—	809	—	—	17,575	17,575	—	48	48
Non-OPEC	12	1	907	193	7,802	1,691	—	323,371	475,869	418	886	1,304
Argentina	—	—	—	—	—	18	—	999	999	—	3	3
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	1,006	1,006	—	3	3
Bahrain	—	—	—	—	—	51	—	51	51	—	0	0
Belgium	—	—	—	—	106	52	—	9,048	9,048	—	25	25
Brazil	—	—	—	—	—	—	—	6,615	7,935	4	18	22
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	1,144	3	—	3
Canada	2	1	480	3	6,124	1,147	—	122,436	198,389	208	335	544
Chad	—	—	—	—	—	—	—	—	3,756	10	—	10
China	—	—	280	—	—	—	—	1,740	1,740	—	5	5
Colombia	—	—	—	167	34	—	—	12,640	22,231	26	35	61
Denmark	—	—	—	—	—	—	—	444	2,880	7	1	8
Egypt	—	—	—	—	—	—	—	430	5,658	14	1	16
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	15	—	4,191	4,191	—	11	11
France	—	—	—	—	—	104	—	9,917	9,917	—	27	27
Germany	—	—	17	—	—	96	—	1,664	1,664	—	5	5
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	6	—	23,906	23,906	—	65	65
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	23	—	3,684	3,684	—	10	10
Korea, South	—	—	8	—	—	117	—	7,184	7,184	—	20	20
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	323	323	—	1	1
Malaysia	—	—	5	—	—	1	—	6	6	—	0	0
Mexico	—	—	—	—	—	—	—	421	3,890	10	1	11
Netherlands	—	—	—	—	—	11	—	15,922	15,922	—	44	44
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	8,085	27,592	53	22	76
Oman	—	—	—	—	—	—	—	161	161	—	0	0
Portugal	—	—	—	—	—	—	—	10,054	10,054	—	28	28
Russia	—	—	—	—	—	39	—	20,225	31,625	31	55	87
Spain	—	—	12	—	1,230	—	—	14,954	14,954	—	41	41
Sweden	—	—	—	—	—	—	—	3,724	3,724	—	10	10
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	5,314	5,314	—	15	15
United Kingdom	10	—	—	12	—	—	—	27,661	35,138	20	76	96
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	105	11	308	11	—	10,566	20,386	28	29	53
Total	12	1	907	193	8,611	1,816	—	363,456	673,418	849	996	1,845
Persian Gulf³	—	—	—	—	—	176	—	12,921	64,564	141	35	177

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	574	-	-	1,197	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	223	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	574	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	974	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	905,449	26,853	4,978	2,041	-	-	-	64	5,247	5,311
Argentina	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	22	22
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	900,688	26,853	4,978	723	-	-	-	64	5,225	5,289
Chad	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	304	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-
Mexico	4,761	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	693	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-
Other	0	0	0	321	-	-	-	0	0	0
Total	906,023	26,853	4,978	3,238	-	-	-	64	5,247	5,311
Persian Gulf³	574	-	-	974	-	-	-	-	-	-

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	758	-	-	2,031	-	758	134	2,923
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-	-	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	758	-	-	2,031	-	758	134	2,923
Chad	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-
Korea, South	-	-	-	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-	-	-	-
Trinidad and Tobago	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	0	-	-	0	-	0	0	0
Total	-	-	-	758	-	-	2,031	-	758	134	2,923
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	—	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	2	30	—	—	383	1	409	941	1,351
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	2	30	—	—	383	1	409	941	1,351
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	0	0	—	—	0	0	0	0	0
Total	2	30	—	—	383	1	409	941	1,351
Persian Gulf³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 46. PAD District 2 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	—	—	—	—	—	8	—	1,205	1,779	2	3	5
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	223	223	—	1	1
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	574	2	—	2
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	8	—	8	8	—	0	0
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	974	974	—	3	3
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	851	886	57	287	3,215	1,527	8	51,487	956,936	2,481	141	2,622
Argentina	—	—	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	22	22	—	0	0
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—	—
Canada	851	886	57	279	3,215	1,523	8	50,135	950,823	2,468	137	2,605
Chad	—	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	304	304	—	1	1
Estonia	—	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	1	—	1	1	—	0	0
France	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	1	—	1	1	—	0	0
Korea, South	—	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	—	4,761	13	—	13
Netherlands	—	—	—	—	—	—	—	—	—	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—	—
Russia	—	—	—	—	—	—	—	693	693	—	2	2
Spain	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	8	—	—	—	8	8	—	0	0
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	0	0	0	2	0	323	323	0	1	1
Total	851	886	57	287	3,215	1,535	8	52,692	958,715	2,482	144	2,627
Persian Gulf³	—	—	—	—	—	8	—	982	1,556	2	3	4

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	514,237	—	—	43,359	—	—	—	—	862	862
Algeria	—	—	—	23,422	—	—	—	—	318	318
Angola	6,967	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—
Ecuador	12,015	—	—	—	—	—	—	—	—	—
Equatorial Guinea	1,943	—	—	—	—	—	—	—	—	—
Gabon	398	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—
Iraq	144,524	—	—	452	—	—	—	—	—	—
Kuwait	13,377	—	—	109	—	—	—	—	—	—
Libya	598	—	—	151	—	—	—	—	—	—
Nigeria	11,730	—	—	464	—	—	—	—	89	89
Qatar	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	141,071	—	—	1,428	—	—	—	—	—	—
United Arab Emirates	—	—	—	14,734	—	—	—	—	—	—
Venezuela	181,614	—	—	1,565	—	—	—	—	455	455
Non-OPEC	502,994	1	1,528	130,302	—	838	838	—	19,939	19,939
Argentina	2,867	—	—	13	—	—	—	—	731	731
Aruba	—	—	—	—	—	—	—	—	—	—
Australia	529	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	15,239	—	—	—	—	41	41
Brazil	19,887	—	—	3,515	—	—	—	—	2,240	2,240
Brunei	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	791	—	—	—	—	—	—
Canada	178,891	1	—	2,916	—	—	—	—	—	—
Chad	3,554	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—
Colombia	53,880	—	—	216	—	—	—	—	254	254
Denmark	—	—	—	1,577	—	—	—	—	15	15
Egypt	2,761	—	—	4,230	—	—	—	—	356	356
Estonia	—	—	—	90	—	—	—	—	—	—
Finland	—	—	—	612	—	—	—	—	329	329
France	—	—	37	2,081	—	242	242	—	575	575
Germany	—	—	—	617	—	—	—	—	119	119
Guatemala	2,501	—	—	—	—	—	—	—	—	—
India	—	—	—	802	—	—	—	—	1,937	1,937
Indonesia	—	—	—	—	—	—	—	—	—	—
Italy	438	—	—	3,419	—	—	—	—	358	358
Korea, South	—	—	—	—	—	—	—	—	266	266
Latvia	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	307	307
Malaysia	—	—	—	120	—	—	—	—	—	—
Mexico	216,855	—	345	398	—	—	—	—	2,273	2,273
Netherlands	—	—	—	3,520	—	1	1	—	778	778
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	6,329	—	—	—	—	349	349
Oman	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	206	206
Russia	718	—	—	68,746	—	—	—	—	509	509
Spain	—	—	—	1,726	—	110	110	—	1,894	1,894
Sweden	—	—	—	304	—	54	54	—	419	419
Syria	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	2,155	—	—	348	—	—	—	—	—	—
United Kingdom	12,508	—	—	2,348	—	—	—	—	1,405	1,405
Vietnam	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—
Other	5,052	0	1,146	10,345	—	431	431	—	4,578	4,578
Total	1,017,231	1	1,528	173,661	—	838	838	—	20,801	20,801
Persian Gulf³	298,972	—	—	16,723	—	—	—	—	—	—

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	—	—	—	—	—	—	1,404	—	140	—	1,544
Algeria	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	140	—	140
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	1,404	—	—	—	1,404
Non-OPEC	1,672	1,852	—	498	—	—	360	—	541	241	1,142
Argentina	132	—	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	52	—	—	—	—	—	—	—	—	—	—
Brazil	719	1,228	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	142	—	—	51	—	77	—	128
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—
Denmark	—	—	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	—	—	214	—	—	—	—	—	—	—
Germany	87	—	—	142	—	—	—	—	—	—	5
Guatemala	—	—	—	—	—	—	—	—	—	—	—
India	—	—	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	—	—	—	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	293	—	277	—	570
Netherlands	337	624	—	—	—	—	16	—	—	—	85
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Russia	345	—	—	—	—	—	—	—	187	167	354
Spain	—	—	—	—	—	—	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	0	0	—	0	—	—	0	—	0	74	0
Total	1,672	1,852	—	498	—	—	1,764	—	681	241	2,686
Persian Gulf³	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
OPEC	—	—	—	18	84	3,732	—	3,928	7,660
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Equatorial Guinea	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	10	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	84	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	43	43
Venezuela	—	—	—	8	—	3,732	—	3,885	7,617
Non-OPEC	—	—	—	10	4,449	4,145	2,226	16,405	22,776
Argentina	—	—	—	—	—	4	—	1	5
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	71	78	50	—	128
Brazil	—	—	—	—	219	—	280	—	280
Brunei	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	701	676	—	1,384	2,060
Chad	—	—	—	—	—	—	—	—	—
China	—	—	—	—	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	289	289
Denmark	—	—	—	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Estonia	—	—	—	—	—	32	—	326	358
Finland	—	—	—	—	—	—	—	—	—
France	—	—	—	—	107	123	—	—	123
Germany	—	—	—	—	24	—	—	—	—
Guatemala	—	—	—	—	—	—	—	—	—
India	—	—	—	—	84	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—
Korea, South	—	—	—	—	2,042	—	—	—	—
Latvia	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	97	97
Malaysia	—	—	—	—	—	—	—	75	75
Mexico	—	—	—	10	37	525	302	8,948	9,775
Netherlands	—	—	—	—	3	57	—	—	57
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	53	—	—	—	—
Russia	—	—	—	—	—	1,749	—	3,811	5,560
Spain	—	—	—	—	—	—	263	—	263
Sweden	—	—	—	—	—	—	—	—	—
Syria	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	85	—	967	1,052
United Kingdom	—	—	—	—	—	38	—	—	38
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—
Other	—	—	—	0	1,108	778	1,331	507	2,616
Total	—	—	—	28	4,533	7,877	2,226	20,333	30,436
Persian Gulf³	—	—	—	10	84	—	—	43	43

See footnotes at end of table.

Table 47. PAD District 3 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks		Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
OPEC	558	—	—	—	—	4,154	—	58,239	572,476	1,409	160	1,568
Algeria	327	—	—	—	—	—	—	24,067	24,067	—	66	66
Angola	—	—	—	—	—	—	—	—	6,967	19	—	19
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	12,015	33	—	33
Equatorial Guinea	—	—	—	—	—	—	—	—	1,943	5	—	5
Gabon	—	—	—	—	—	—	—	—	398	1	—	1
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	462	144,986	396	1	397
Kuwait	—	—	—	—	—	—	—	109	13,486	37	0	37
Libya	—	—	—	—	—	—	—	151	749	2	0	2
Nigeria	231	—	—	—	—	—	—	924	12,654	32	3	35
Qatar	—	—	—	—	—	3,368	—	3,368	3,368	—	9	9
Saudi Arabia	—	—	—	—	—	—	—	1,512	142,583	386	4	391
United Arab Emirates	—	—	—	—	—	786	—	15,563	15,563	—	43	43
Venezuela	—	—	—	—	—	—	—	11,049	192,663	498	30	528
Non-OPEC	4,663	549	449	3,348	—	7,899	59	202,043	705,037	1,378	554	1,932
Argentina	—	36	—	1,121	—	36	—	2,074	4,941	8	6	14
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	529	1	—	1
Bahamas	—	—	—	—	—	—	—	—	—	—	—	—
Bahrain	—	—	—	—	—	986	—	986	986	—	3	3
Belgium	—	—	—	—	—	101	—	15,634	15,634	—	43	43
Brazil	26	12	—	288	—	—	—	8,527	28,414	54	23	78
Brunei	—	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	791	791	—	2	2
Canada	—	—	—	243	—	15	—	6,206	185,097	490	17	507
Chad	—	—	—	—	—	—	—	—	3,554	10	—	10
China	—	—	180	318	—	—	—	498	498	—	1	1
Colombia	—	—	—	183	—	—	—	942	54,822	148	3	150
Denmark	—	—	—	—	—	—	—	1,592	1,592	—	4	4
Egypt	—	—	—	—	—	—	—	4,586	7,347	8	13	20
Estonia	—	—	—	—	—	—	—	448	448	—	1	1
Finland	—	—	—	—	—	13	—	954	954	—	3	3
France	57	178	—	—	—	56	—	3,670	3,670	—	10	10
Germany	—	—	—	—	—	83	—	1,081	1,081	—	3	3
Guatemala	—	—	—	—	—	—	—	—	2,501	7	—	7
India	—	—	—	—	—	7	—	2,830	2,830	—	8	8
Indonesia	—	—	—	—	—	945	—	945	945	—	3	3
Italy	—	—	—	—	—	286	—	4,070	4,508	1	11	12
Korea, South	23	—	—	—	—	4,353	—	6,684	6,684	—	18	18
Latvia	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	404	404	—	1	1
Malaysia	—	—	155	—	—	—	—	350	350	—	1	1
Mexico	2,574	—	—	—	—	—	—	15,982	232,837	594	44	638
Netherlands	53	—	—	—	—	—	59	5,540	5,540	—	15	15
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Norway	—	—	—	—	—	—	—	6,678	6,678	—	18	18
Oman	—	—	—	601	—	66	—	667	667	—	2	2
Portugal	—	—	—	—	—	—	—	259	259	—	1	1
Russia	—	—	—	255	—	35	—	75,804	76,522	2	208	210
Spain	—	—	—	—	—	23	—	4,016	4,016	—	11	11
Sweden	—	—	—	—	—	4	—	781	781	—	2	2
Syria	—	—	—	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—	1,400	3,555	6	4	10
United Kingdom	266	4	—	339	—	214	—	4,614	17,122	34	13	47
Vietnam	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Yemen	—	—	—	—	—	—	—	—	—	—	—	—
Other	1,664	319	114	0	—	676	0	23,030	28,082	14	62	77
Total	5,221	549	449	3,348	—	12,053	59	260,282	1,277,513	2,787	713	3,500
Persian Gulf³	—	—	—	—	—	5,140	—	22,000	320,972	819	60	879

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels)

Country of Origin	Crude Oil ^{1,2}	Natural Gas Liquids	Refinery Olefins	Unfinished Oils ¹	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reform-ulated	Conven- tional	Total	Reform-ulated	Conven- tional	Total
	PAD District 4									
OPEC	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-
Non-OPEC	109,404	4,259	-	32	-	-	-	-	898	898
Canada	109,404	4,259	-	32	-	-	-	-	898	898
Other	0	0	-	0	-	-	-	-	0	0
Total	109,404	4,259	-	32	-	-	-	-	898	898
	PAD District 5									
OPEC	270,682	-	-	10,192	-	-	-	-	228	228
Algeria	-	-	-	7,483	-	-	-	-	-	-
Angola	11,550	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	52,144	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	29,828	-	-	-	-	-	-	-	-	-
Kuwait	15,064	-	-	-	-	-	-	-	-	-
Libya	9,077	-	-	-	-	-	-	-	-	-
Nigeria	4,885	-	-	86	-	-	-	-	228	228
Qatar	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	139,283	-	-	-	-	-	-	-	-	-
United Arab Emirates	1,995	-	-	2,623	-	-	-	-	-	-
Venezuela	2,919	-	-	-	-	-	-	-	-	-
Non-OPEC	217,987	16,135	3	21,317	-	2,059	2,059	972	5,034	6,006
Argentina	5,452	70	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-
Brazil	24,729	-	-	20	-	-	-	-	-	-
Brunei	5,478	-	-	-	-	-	-	-	-	-
Canada	83,422	15,398	3	1,953	-	556	556	21	1,482	1,503
China	-	-	-	-	-	-	-	-	157	157
Colombia	44,648	-	-	-	-	-	-	-	297	297
Finland	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	96	-	-	-	-	-	-
Indonesia	14,531	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	96	96	-	675	675
Korea, South	-	56	-	120	-	622	622	-	655	655
Malaysia	588	-	-	262	-	-	-	-	-	-
Mexico	17,688	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	233	-	48	48	438	313	751
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-
Peru	262	56	-	1,307	-	-	-	-	-	-
Singapore	-	-	-	612	-	-	-	-	503	503
Sweden	-	-	-	233	-	-	-	47	-	47
Taiwan	-	-	-	-	-	3	3	-	725	725
United Kingdom	789	-	-	-	-	65	65	319	-	319
Vietnam	788	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-
Other	19,612	555	0	16,481	-	669	669	147	227	374
Total	488,669	16,135	3	31,509	-	2,059	2,059	972	5,262	6,234
Persian Gulf ³	186,170	-	-	2,623	-	-	-	-	-	-

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	Total
PAD District 4											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	-	37	-	-	749	-	-	-	749
Canada	-	-	-	37	-	-	749	-	-	-	749
Other	-	-	-	0	-	-	0	-	-	-	0
Total	-	-	-	37	-	-	749	-	-	-	749
PAD District 5											
OPEC	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Non-OPEC	-	-	1,294	389	4,124	-	3,755	-	186	206	4,147
Argentina	-	-	-	-	-	-	-	-	-	-	-
Aruba	-	-	-	-	-	-	-	-	-	-	-
Australia	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	1,265	-	-	-	-	-	-	-	-
Brunei	-	-	-	-	-	-	-	-	-	-	-
Canada	-	-	-	232	-	-	2,619	-	186	-	2,805
China	-	-	-	-	-	-	365	-	-	-	365
Colombia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	138	-	-	-	138
Korea, South	-	-	-	157	-	-	331	-	-	-	331
Malaysia	-	-	-	-	-	-	241	-	-	-	241
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	206	206
Singapore	-	-	-	-	-	-	61	-	-	-	61
Sweden	-	-	-	-	-	-	-	-	-	-	-
Taiwan	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	29	0	4,124	-	0	-	0	0	0
Total	-	-	1,294	389	4,124	-	3,755	-	186	206	4,147
Persian Gulf³	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin			Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil			
						Less than 0.31 % sulfur	0.31 to 1.00 % sulfur	Greater than 1.00 % sulfur	Total
	PAD District 4								
OPEC	—	—	—	96	—	—	—	—	—
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	96	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—
Non-OPEC	—	8	—	28	—	—	—	124	124
Canada	—	8	—	—	—	—	—	124	124
Other	—	0	—	28	—	—	—	0	0
Total	—	8	—	124	—	—	—	124	124
	PAD District 5								
OPEC	—	—	—	—	—	—	—	1,131	1,131
Algeria	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	438	438
Iran	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	693	693
Non-OPEC	—	3	—	29,215	—	—	2,490	8,267	10,757
Argentina	—	—	—	—	—	—	—	—	—
Aruba	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	—	—
Brunei	—	—	—	—	—	—	—	—	—
Canada	—	3	—	90	—	—	2,140	1,056	3,196
China	—	—	—	3,518	—	—	—	—	—
Colombia	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—	—
Japan	—	—	—	3,385	—	—	—	—	—
Korea, South	—	—	—	18,431	—	—	—	—	—
Malaysia	—	—	—	—	—	—	—	—	—
Mexico	—	—	—	—	—	—	—	3,104	3,104
Netherlands	—	—	—	—	—	—	—	350	350
Netherlands Antilles	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—	—	—	—
Peru	—	—	—	—	—	—	—	2,795	2,795
Singapore	—	—	—	2,143	—	—	—	—	—
Sweden	—	—	—	—	—	—	—	—	—
Taiwan	—	—	—	545	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—
Vietnam	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—
Other	—	0	—	1,103	—	—	350	962	1,312
Total	—	3	—	29,215	—	—	2,490	9,398	11,888
Persian Gulf ³	—	—	—	—	—	—	—	—	—

See footnotes at end of table.

Table 48. PAD District 4 and 5 - Year-to-Date Imports of Crude Oil and Petroleum Products by Country of Origin, January-December 2018
(Thousand Barrels) — Continued

Country of Origin	Petrochemical Feedstocks								Total Crude Oil and Products	Daily Average		
	Naphtha	Other Oils								Crude Oil	Products	Total
	PAD District 4											
OPEC	—	—	—	—	—	—	—	96	96	—	0	0
Algeria	—	—	—	—	—	—	—	—	—	—	—	—
Angola	—	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	96	96	—	0	0
Kuwait	—	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
Non-OPEC	—	—	—	—	324	—	12	6,471	115,875	300	18	317
Canada	—	—	—	—	324	—	12	6,443	115,847	300	18	317
Other	—	—	—	—	0	—	0	28	28	0	0	0
Total	—	—	—	—	324	—	12	6,567	115,971	300	18	318
	PAD District 5											
OPEC	—	—	—	—	—	—	—	11,551	282,233	742	32	773
Algeria	—	—	—	—	—	—	—	7,483	7,483	—	21	21
Angola	—	—	—	—	—	—	—	—	11,550	32	—	32
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	—	438	52,582	143	1	144
Iran	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	29,828	82	—	82
Kuwait	—	—	—	—	—	—	—	—	15,064	41	—	41
Libya	—	—	—	—	—	—	—	—	9,077	25	—	25
Nigeria	—	—	—	—	—	—	—	314	5,199	13	1	14
Qatar	—	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—	139,283	382	—	382
United Arab Emirates	—	—	—	—	—	—	—	2,623	4,618	5	7	13
Venezuela	—	—	—	—	—	—	—	693	3,612	8	2	10
Non-OPEC	378	—	443	325	1,192	153	—	97,940	315,927	597	268	866
Argentina	—	—	—	—	—	—	—	70	5,522	15	0	15
Aruba	—	—	—	—	—	—	—	—	—	—	—	—
Australia	—	—	—	—	—	—	—	—	—	—	—	—
Brazil	—	—	—	—	—	—	—	1,285	26,014	68	4	71
Brunei	—	—	—	—	—	—	—	—	5,478	15	—	15
Canada	—	—	—	325	1,035	84	—	27,183	110,605	229	74	303
China	—	—	386	—	91	—	—	4,517	4,517	—	12	12
Colombia	—	—	—	—	—	—	—	297	44,945	122	1	123
Finland	—	—	—	—	—	—	—	—	—	—	—	—
Germany	—	—	—	—	—	—	—	96	96	—	0	0
Indonesia	—	—	—	—	—	—	—	—	14,531	40	—	40
Japan	—	—	55	—	—	—	—	4,349	4,349	—	12	12
Korea, South	—	—	—	—	66	69	—	20,507	20,507	—	56	56
Malaysia	—	—	2	—	—	—	—	505	1,093	2	1	3
Mexico	—	—	—	—	—	—	—	3,104	20,792	48	9	57
Netherlands	—	—	—	—	—	—	—	1,382	1,382	—	4	4
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—	—	—	—	—	—	—
Peru	—	—	—	—	—	—	—	4,364	4,626	1	12	13
Singapore	—	—	—	—	—	—	—	7,443	7,443	—	20	20
Sweden	—	—	—	—	—	—	—	280	280	—	1	1
Taiwan	378	—	—	—	—	—	—	1,651	1,651	—	5	5
United Kingdom	—	—	—	—	—	—	—	384	1,173	2	1	3
Vietnam	—	—	—	—	—	—	—	—	788	2	—	2
Virgin Islands, U.S.	—	—	—	—	—	—	—	—	—	—	—	—
Other	0	—	0	0	0	0	—	20,523	40,135	53	56	111
Total	378	—	443	325	1,192	153	—	109,491	598,160	1,339	300	1,639
Persian Gulf ³	—	—	—	—	—	—	—	2,623	188,793	510	7	517

— = No Data Reported.

¹ Crude oil and unfinished oils are reported by PAD District of processing; all other products are reported by PAD District of Entry.

² Includes crude oil imported for storage in the Strategic Petroleum Reserve.

³ Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

Table 49. Exports of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil¹	2	5,885	71,955	—	—	77,842	2,511
Hydrocarbon Gas Liquids	3,494	6,766	37,769	54	1,425	49,508	1,597
Natural Gas Liquids	3,494	6,766	37,769	54	1,425	49,508	1,597
Ethane	1,066	3,123	3,781	—	0	7,970	257
Propane	2,225	77	30,942	—	951	34,195	1,103
Normal Butane	1	145	2,959	—	472	3,577	115
Isobutane	1	0	44	—	0	45	1
Natural Gasoline	201	3,421	43	54	1	3,719	120
Refinery Olefins	—	—	—	—	—	—	—
Ethylene	—	—	—	—	—	—	—
Propylene	—	—	—	—	—	—	—
Normal Butylene	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—
Other Liquids	437	1,188	12,504	0	448	14,577	470
Hydrogen/Oxygenates/Renewables/	—	—	—	—	—	—	—
Other Hydrocarbons	419	601	4,539	0	299	5,857	189
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	1	3	2,462	0	0	2,466	80
Methyl Tertiary Butyl Ether (MTBE)	0	—	1,160	—	0	1,160	37
Other Oxygenates	1	3	1,301	0	0	1,306	42
Renewable Fuels (including Fuel Ethanol) ...	418	598	2,077	—	299	3,391	109
Fuel Ethanol	413	586	2,064	—	267	3,330	107
Biodiesel	5	12	13	—	32	61	2
Other Renewable Diesel	—	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—
Unfinished Oils	16	585	6,388	0	94	7,082	228
Naphthas and Lighter	6	570	6,269	0	84	6,929	224
Kerosene and Light Gas Oils	9	15	119	—	9	153	5
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	—	—	—	—
Motor Gasoline Blend.Comp. (MGBC)	3	2	1,578	0	55	1,637	53
Reformulated	1	—	5	—	1	7	0
Conventional	1	2	1,573	0	53	1,630	53
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	4,414	938	96,536	13	11,924	113,824	3,672
Finished Motor Gasoline	346	65	28,877	0	1,321	30,610	987
Reformulated	—	—	—	—	—	—	—
Conventional	346	65	28,877	0	1,321	30,610	987
Finished Aviation Gasoline	—	—	—	—	—	—	—
Kerosene-Type Jet Fuel	698	45	5,318	—	765	6,826	220
Kerosene	201	1	115	—	3	320	10
Distillate Fuel Oil	884	92	36,499	—	5,197	42,672	1,377
15 ppm sulfur and under	593	1	29,656	—	4,399	34,648	1,118
Greater than 15 ppm to 500 ppm sulfur	291	42	3,224	—	100	3,657	118
Greater than 500 ppm sulfur	0	49	3,619	—	698	4,366	141
Residual Fuel Oil	887	233	6,176	5	873	8,174	264
Naphtha for Petro. Feed. Use	—	—	—	—	—	—	—
Other Oils for Petro. Feed. Use	—	—	—	—	—	—	—
Special Naphthas	—	—	—	—	—	—	—
Lubricants	164	175	2,580	7	69	2,995	97
Waxes	73	35	16	0	4	128	4
Petroleum Coke	1,095	208	16,067	—	3,670	21,041	679
Asphalt and Road Oil	50	82	881	0	22	1,036	33
Miscellaneous Products	13	3	5	0	1	22	1
Total	8,346	14,776	218,764	66	13,797	255,750	8,250

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 50. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January-December 2018
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total	
	1	2	3	4	5	Total	Daily Average
Crude Oil¹	9,161	54,369	663,801	130	3,940	731,402	2,004
Hydrocarbon Gas Liquids	37,278	102,115	428,147	882	16,283	584,705	1,602
Natural Gas Liquids	37,278	102,115	428,147	882	16,283	584,705	1,602
Ethane	11,433	33,462	48,313	—	9	93,217	255
Propane	21,587	1,613	321,054	5	11,387	354,734	972
Normal Butane	3,028	3,652	57,910	90	4,791	69,283	190
Isobutane	12	6	1,615	—	5	1,633	4
Natural Gasoline	1,227	63,396	294	787	134	65,838	180
Refinery Olefins	—	—	—	—	—	—	—
Ethylene	—	—	—	—	—	—	—
Propylene	—	—	—	—	—	—	—
Normal Butylene	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—
Other Liquids	3,732	30,053	152,376	24	6,673	192,857	528
Hydrogen/Oxygenates/Renewables/							
Other Hydrocarbons	1,771	8,642	55,559	16	2,576	68,564	188
Hydrogen	—	—	—	—	—	—	—
Oxygenates (excluding Fuel Ethanol)	14	18	25,093	0	10	25,135	69
Methyl Tertiary Butyl Ether (MTBE)	0	0	13,983	—	0	13,983	38
Other Oxygenates	14	18	11,110	0	10	11,152	31
Renewable Fuels (including Fuel Ethanol) ...	1,756	8,624	30,466	15	2,567	43,429	119
Fuel Ethanol	1,612	7,617	29,898	14	1,834	40,976	112
Biodiesel	144	1,007	568	2	733	2,453	7
Other Renewable Diesel	—	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—
Unfinished Oils	402	21,014	78,838	7	1,022	101,283	277
Naphthas and Lighter	147	20,897	76,376	7	889	98,316	269
Kerosene and Light Gas Oils	255	117	2,462	1	133	2,968	8
Heavy Gas Oils	—	—	—	—	—	—	—
Residuum	—	—	—	—	—	—	—
Motor Gasoline Blend.Comp. (MGBC)	1,559	397	17,980	1	3,074	23,010	63
Reformulated	29	1	116	—	23	170	0
Conventional	1,529	396	17,863	1	3,051	22,840	63
Aviation Gasoline Blend. Comp.	—	—	—	—	—	—	—
Finished Petroleum Products	49,830	11,841	1,067,756	304	130,873	1,260,603	3,454
Finished Motor Gasoline	2,294	2,033	298,526	12	21,393	324,258	888
Reformulated	—	—	—	—	—	—	—
Conventional	2,294	2,033	298,526	12	21,393	324,258	888
Finished Aviation Gasoline	—	—	—	—	—	—	—
Kerosene-Type Jet Fuel	5,520	555	65,422	—	9,714	81,211	222
Kerosene	308	24	1,288	1	25	1,646	5
Distillate Fuel Oil	12,949	1,396	423,685	0	36,676	474,706	1,301
15 ppm sulfur and under	7,946	278	364,495	0	26,730	399,448	1,094
Greater than 15 ppm to 500 ppm sulfur	2,882	575	30,343	—	2,591	36,391	100
Greater than 500 ppm sulfur	2,121	544	28,848	—	7,354	38,866	106
Residual Fuel Oil	14,659	1,925	87,148	119	11,599	115,450	316
Naphtha for Petro. Feed. Use	—	—	—	—	—	—	—
Other Oils for Petro. Feed. Use	—	—	—	—	—	—	—
Special Naphthas	—	—	—	—	—	—	—
Lubricants	2,861	2,334	30,570	98	3,982	39,846	109
Waxes	816	391	276	4	64	1,552	4
Petroleum Coke	9,407	1,921	154,362	15	46,877	212,584	582
Asphalt and Road Oil	853	1,237	6,384	52	468	8,995	25
Miscellaneous Products	163	24	93	1	75	356	1
Total	100,001	198,378	2,312,080	1,339	157,769	2,769,567	7,588

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, December 2018
(Thousand Barrels)

Destination	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
Argentina	—	—	—	—	—	296	296	—	—	—
Australia	—	0	—	—	—	2	2	0	—	0
Bahamas	—	59	—	—	—	511	511	—	0	0
Bahrain	—	—	—	—	—	—	—	—	—	—
Belgium	—	0	—	0	—	—	—	—	0	0
Belize	—	—	—	—	—	38	38	—	—	—
Brazil	648	1,471	—	1,322	—	2,489	2,489	—	—	—
Canada	13,359	7,307	—	644	—	1,232	1,232	—	978	978
Cayman Islands	—	0	—	—	—	—	—	—	—	—
Chile	664	812	—	117	—	768	768	—	—	—
China	3,019	1,704	—	1	—	—	—	—	—	—
Colombia	425	22	—	1,922	—	1,264	1,264	—	0	0
Costa Rica	—	176	—	0	—	460	460	—	—	—
Denmark	1,419	—	—	—	—	—	—	—	—	—
Dominican Republic	499	1,870	—	0	—	803	803	—	—	—
Ecuador	—	971	—	11	—	1,059	1,059	—	—	—
Egypt	—	—	—	—	—	—	—	—	—	—
El Salvador	—	479	—	—	—	564	564	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—
France	729	591	—	25	—	—	—	—	0	0
Germany	679	0	—	2	—	—	—	—	—	—
Ghana	—	—	—	0	—	—	—	—	—	—
Gibraltar	—	578	—	—	—	—	—	—	—	—
Greece	—	—	—	—	—	—	—	—	—	—
Guatemala	—	618	—	—	—	1,326	1,326	—	—	—
Honduras	—	624	—	—	—	487	487	—	—	—
Hong Kong	—	—	—	0	—	—	—	—	—	—
India	6,045	2,381	—	11	—	—	—	—	—	—
Indonesia	—	—	—	1	—	—	—	—	—	—
Ireland	612	—	—	—	—	—	—	—	—	—
Israel	—	0	—	0	—	—	—	—	—	—
Italy	700	—	—	0	—	301	301	—	—	—
Jamaica	—	8	—	—	—	216	216	—	—	—
Japan	2,023	16,767	—	632	—	0	0	1	0	1
Korea, South	17,285	3,084	—	12	—	1	1	—	—	—
Lebanon	—	—	—	—	—	—	—	—	—	—
Mexico	—	4,233	—	150	—	14,280	14,280	4	275	279
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	—	—	—	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—	—	—
Netherlands	7,475	1,148	—	339	—	315	315	—	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
New Zealand	—	—	—	0	—	—	—	—	—	—
Nicaragua	—	—	—	—	—	153	153	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—
Norway	541	793	—	—	—	—	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—	—	—
Panama	—	27	—	0	—	1,025	1,025	—	84	84
Peru	380	252	—	4	—	312	312	—	—	—
Philippines	—	—	—	1	—	—	—	—	—	—
Portugal	—	400	—	—	—	—	—	—	—	—
Puerto Rico	—	7	—	0	—	2	2	—	—	—
Romania	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	0	—	0	—	—	—	—	—	—
Serbia	—	—	—	—	—	—	—	—	—	—
Singapore	4,251	0	—	26	—	—	—	—	0	0
South Africa	—	—	—	0	—	0	0	—	—	—
Spain	631	414	—	—	—	—	—	—	—	—
Switzerland	—	—	—	—	—	—	—	—	—	—
Taiwan	5,664	0	—	654	—	2	2	—	—	—
Thailand	1,454	0	—	0	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	17	17	—	—	—
Turkey	—	550	—	—	—	—	—	—	—	—
United Arab Emirates	1,220	—	—	0	—	6	6	—	—	—
United Kingdom	7,478	1,131	—	—	—	—	—	—	0	0
Venezuela	—	158	—	1,035	—	1,648	1,648	1	291	292
Other	642	873	—	173	—	1,033	1,033	1	2	3
Total	77,842	49,508	—	7,082	—	30,610	30,610	7	1,630	1,637

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, December 2018
(Thousand Barrels) — Continued

Destination	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
Argentina	—	—	—	—	—	—	625	—	—	—	625
Australia	0	—	0	—	—	—	—	—	—	—	—
Bahamas	—	0	0	—	—	—	33	—	360	—	393
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	7	0	0	—	—	—	250	—	308	—	558
Belize	—	—	—	—	—	—	0	35	—	—	35
Brazil	—	—	888	—	—	—	4,861	280	352	—	5,493
Canada	—	0	670	44	—	—	587	633	52	—	1,272
Cayman Islands	—	—	—	—	—	—	119	—	—	—	119
Chile	212	—	0	—	—	—	3,145	—	—	—	3,145
China	—	1	0	—	—	—	1	—	—	—	1
Colombia	—	—	69	0	—	—	1,170	—	—	—	1,170
Costa Rica	—	0	0	—	—	—	852	—	—	—	852
Denmark	—	—	—	—	—	—	—	—	—	—	—
Dominican Republic	—	—	0	—	—	—	251	—	—	—	251
Ecuador	—	—	—	—	—	—	530	—	—	—	530
Egypt	—	—	—	—	—	—	—	—	—	—	—
El Salvador	—	—	0	—	—	—	540	207	—	—	747
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	0	0	—	—	—	1,703	—	281	—	1,984
Germany	—	0	—	1	—	—	—	—	—	—	—
Ghana	—	—	—	—	—	—	—	—	—	—	—
Gibraltar	—	—	—	—	—	—	—	65	581	—	646
Greece	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	273	588	—	—	861
Honduras	—	—	—	—	—	—	—	225	150	—	375
Hong Kong	—	0	0	—	—	—	—	—	—	—	—
India	—	—	229	—	—	—	0	—	—	—	0
Indonesia	—	—	0	—	—	—	—	—	—	—	—
Ireland	—	—	0	—	—	—	—	—	—	—	—
Israel	—	0	—	—	—	—	0	—	—	—	0
Italy	—	—	—	—	—	—	—	—	—	—	—
Jamaica	—	—	47	—	—	—	395	—	97	—	491
Japan	—	1,303	0	—	—	—	0	—	—	—	0
Korea, South	—	0	310	—	—	—	2	—	0	—	2
Lebanon	—	—	0	—	—	—	98	—	—	—	98
Mexico	691	1	43	0	—	—	8,805	26	36	—	8,866
Montenegro	—	—	—	—	—	—	—	—	—	—	—
Morocco	—	—	0	—	—	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	0	182	13	—	—	2,048	—	219	—	2,268
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
New Zealand	—	—	—	—	—	—	—	—	—	—	—
Nicaragua	—	—	—	—	—	—	—	155	—	—	155
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Norway	—	0	—	—	—	—	—	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—	—	—	—
Panama	—	—	0	—	—	—	904	315	330	—	1,549
Peru	—	—	126	—	—	—	1,748	—	—	—	1,748
Philippines	—	0	182	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	0	1	—	—	—	0	—	—	—	0
Romania	—	—	—	—	—	—	495	—	—	—	495
Saudi Arabia	—	—	51	—	—	—	—	—	—	—	—
Serbia	—	—	—	—	—	—	—	—	—	—	—
Singapore	0	0	1	0	—	—	—	—	485	—	485
South Africa	—	—	—	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	512	—	—	—	512
Switzerland	—	—	1	3	—	—	—	—	—	—	—
Taiwan	—	—	0	—	—	—	0	—	—	—	0
Thailand	—	0	0	—	—	—	—	—	—	—	—
Trinidad and Tobago	—	—	0	—	—	—	28	—	—	—	28
Turkey	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	—	—	401	—	—	—	—	—	—	—	—
United Kingdom	—	—	126	—	—	—	2,520	—	—	—	2,520
Venezuela	251	—	—	—	—	—	1,359	264	264	—	1,887
Other	0	1	3	—	—	—	794	864	851	—	2,511
Total	1,160	1,306	3,330	61	—	—	34,648	3,657	4,366	—	42,672

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, December 2018
(Thousand Barrels) — Continued

Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
Argentina	0	—	—	248	—	—	—	—
Australia	—	—	—	—	—	—	—	—
Bahamas	—	—	—	135	—	1,547	—	—
Bahrain	—	—	—	—	—	—	—	—
Belgium	—	—	—	—	—	—	—	—
Belize	—	—	—	20	—	—	—	—
Brazil	—	—	—	—	—	—	—	—
Canada	290	—	—	1,436	—	539	—	—
Cayman Islands	—	—	—	12	—	—	—	—
Chile	0	—	—	0	—	—	—	—
China	0	—	—	0	—	1	—	—
Colombia	22	—	—	—	—	—	—	—
Costa Rica	0	—	—	186	—	0	—	—
Denmark	—	—	—	—	—	—	—	—
Dominican Republic	—	—	—	318	—	—	—	—
Ecuador	0	—	—	1	—	379	—	—
Egypt	—	—	—	1	—	—	—	—
El Salvador	0	—	—	165	—	—	—	—
Finland	—	—	—	—	—	0	—	—
France	—	—	—	—	—	0	—	—
Germany	—	—	—	—	—	—	—	—
Ghana	—	—	—	—	—	—	—	—
Gibraltar	—	—	—	—	—	437	—	—
Greece	—	—	—	—	—	—	—	—
Guatemala	0	—	—	166	—	30	—	—
Honduras	0	—	—	132	—	248	—	—
Hong Kong	0	—	—	—	—	—	—	—
India	0	—	—	—	—	—	—	—
Indonesia	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—
Israel	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—
Jamaica	—	—	—	15	—	510	—	—
Japan	—	—	—	—	—	—	—	—
Korea, South	0	—	—	—	—	312	—	—
Lebanon	—	—	—	—	—	537	—	—
Mexico	1	—	—	1,904	—	1,087	—	—
Montenegro	—	—	—	—	—	—	—	—
Morocco	—	—	—	—	—	—	—	—
Mozambique	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	1,082	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—
New Zealand	—	—	—	—	—	—	—	—
Nicaragua	0	—	—	—	—	—	—	—
Nigeria	—	—	—	1	—	—	—	—
Norway	—	—	—	—	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—
Panama	0	—	—	672	—	244	—	—
Peru	—	—	—	233	—	—	—	—
Philippines	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—
Romania	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	—	—	—
Serbia	—	—	—	—	—	—	—	—
Singapore	0	—	—	—	—	254	—	—
South Africa	—	—	—	—	—	—	—	—
Spain	—	—	—	—	—	—	—	—
Switzerland	—	—	—	—	—	—	—	—
Taiwan	—	—	—	—	—	—	—	—
Thailand	—	—	—	—	—	93	—	—
Trinidad and Tobago	0	—	—	331	—	—	—	—
Turkey	—	—	—	—	—	—	—	—
United Arab Emirates	0	—	—	0	—	—	—	—
United Kingdom	—	—	—	—	—	0	—	—
Venezuela	—	—	—	—	—	550	—	—
Other	7	—	—	850	—	324	—	—
Total	320	—	—	6,826	—	8,174	—	—

See footnotes at end of table.

Table 51. Exports of Crude Oil and Petroleum Products by Destination, December 2018
(Thousand Barrels) — Continued

Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Argentina	0	192	—	26	—	1,387	1,387	—	45	45
Australia	1	301	201	5	1	511	511	—	16	16
Bahamas	—	—	2	3	—	2,650	2,650	—	85	85
Bahrain	—	—	—	0	—	0	0	—	0	0
Belgium	0	392	—	380	0	1,338	1,338	—	43	43
Belize	—	—	—	1	—	95	95	—	3	3
Brazil	1	1,668	—	272	1	13,605	14,253	21	439	460
Canada	101	579	193	221	7	15,513	28,873	431	500	931
Cayman Islands	—	—	1	1	—	133	133	—	4	4
Chile	0	—	—	67	0	5,122	5,786	21	165	187
China	2	1,617	2	19	1	3,350	6,369	97	108	205
Colombia	0	0	0	64	0	4,533	4,958	14	146	160
Costa Rica	0	—	61	16	0	1,750	1,750	—	56	56
Denmark	—	331	—	0	—	331	1,750	46	11	56
Dominican Republic	0	—	118	30	—	3,391	3,891	16	109	126
Ecuador	0	—	0	222	—	3,174	3,174	—	102	102
Egypt	—	445	162	10	—	617	617	—	20	20
El Salvador	—	—	0	27	—	1,982	1,982	—	64	64
Finland	—	—	—	4	—	4	4	—	0	0
France	0	309	—	30	—	2,940	3,669	24	95	118
Germany	2	0	0	2	—	7	686	22	0	22
Ghana	—	—	—	0	—	0	0	—	0	0
Gibraltar	—	—	—	—	—	1,660	1,660	—	54	54
Greece	—	377	—	—	—	377	377	—	12	12
Guatemala	—	—	—	12	—	3,014	3,014	—	97	97
Honduras	0	474	61	11	0	2,411	2,411	—	78	78
Hong Kong	0	—	—	1	—	1	1	—	0	0
India	1	2,470	1	17	0	5,111	11,156	195	165	360
Indonesia	0	0	1	0	—	2	2	—	0	0
Ireland	—	74	—	—	0	75	687	20	2	22
Israel	—	318	—	5	0	323	323	—	10	10
Italy	0	1,217	0	49	—	1,567	2,267	23	51	73
Jamaica	—	—	—	7	0	1,294	1,294	—	42	42
Japan	1	1,801	1	34	4	20,546	22,569	65	663	728
Korea, South	0	1,255	0	2	0	4,980	22,264	558	161	718
Lebanon	—	137	—	1	—	773	773	—	25	25
Mexico	14	1,252	224	886	5	33,918	33,918	—	1,094	1,094
Montenegro	—	—	—	—	—	—	—	—	—	—
Morocco	—	1,442	—	0	—	1,442	1,442	—	47	47
Mozambique	—	161	—	0	—	161	161	—	5	5
Netherlands	3	294	1	52	—	5,696	13,171	241	184	425
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
New Zealand	0	—	—	2	—	2	2	—	0	0
Nicaragua	—	202	—	3	—	513	513	—	17	17
Nigeria	—	—	1	127	—	128	128	—	4	4
Norway	0	267	—	0	—	1,061	1,602	17	34	52
Pakistan	—	—	—	0	0	0	0	—	0	0
Panama	—	—	—	24	—	3,626	3,626	—	117	117
Peru	0	0	—	75	0	2,749	3,129	12	89	101
Philippines	—	0	—	1	0	185	185	—	6	6
Portugal	—	359	—	0	—	759	759	—	24	24
Puerto Rico	0	—	0	10	—	20	20	—	1	1
Romania	—	328	—	0	—	824	824	—	27	27
Saudi Arabia	0	10	—	4	—	65	65	—	2	2
Serbia	—	—	—	—	—	—	—	—	—	—
Singapore	0	—	0	1	0	769	5,020	137	25	162
South Africa	0	95	0	41	—	136	136	—	4	4
Spain	0	376	—	2	—	1,303	1,934	20	42	62
Switzerland	—	—	—	0	—	4	4	—	0	0
Taiwan	0	0	0	3	0	661	6,324	183	21	204
Thailand	0	—	0	3	0	96	1,551	47	3	50
Trinidad and Tobago	0	0	—	3	0	380	380	—	12	12
Turkey	0	1,463	—	17	—	2,030	2,030	—	65	65
United Arab Emirates	0	290	—	95	—	792	2,012	39	26	65
United Kingdom	0	275	0	1	0	4,055	11,532	241	131	372
Venezuela	—	1	—	18	—	5,840	5,840	—	188	188
Other	2	269	6	88	3	6,126	6,768	21	200	222
Total	128	21,041	1,036	2,995	22	177,908	255,750	2,511	5,739	8,250

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-December 2018
(Thousand Barrels)

Destination	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
Argentina	305	1	—	1,685	—	2,738	2,738	0	0	0
Australia	133	2,898	—	2	—	1,218	1,218	2	0	2
Bahamas	680	1,238	—	1	—	3,225	3,225	1	1	1
Bahrain	—	—	—	0	—	6	6	—	—	—
Belgium	—	879	—	1,314	—	1	1	—	0	0
Belize	—	—	—	—	—	570	570	—	0	0
Brazil	8,847	23,274	—	7,053	—	14,296	14,296	0	634	634
Canada	138,007	105,798	—	21,438	—	11,538	11,538	—	10,913	10,913
Cayman Islands	—	161	—	0	—	499	499	0	—	0
Chile	4,531	10,472	—	1,583	—	3,999	3,999	1	384	385
China	83,330	29,406	—	2,319	—	62	62	—	—	—
Colombia	8,210	163	—	17,151	—	8,176	8,176	0	150	150
Costa Rica	—	1,558	—	27	—	6,058	6,058	0	1,598	1,599
Denmark	5,584	—	—	0	—	—	—	—	—	—
Dominican Republic	1,957	10,994	—	54	—	4,266	4,266	0	0	0
Ecuador	—	10,546	—	365	—	7,854	7,854	7	1,308	1,316
Egypt	—	4,110	—	0	—	—	—	—	—	—
El Salvador	—	3,140	—	3	—	4,851	4,851	0	0	0
Finland	—	—	—	1	—	0	0	0	—	0
France	6,461	4,144	—	578	—	3	3	—	1	1
Germany	1,029	3	—	32	—	2	2	—	0	0
Ghana	—	629	—	0	—	519	519	—	—	—
Gibraltar	581	2,206	—	629	—	—	—	—	159	159
Greece	1,138	0	—	—	—	0	0	—	—	—
Guatemala	—	5,564	—	19	—	12,492	12,492	0	1	1
Honduras	—	4,453	—	10	—	6,296	6,296	0	—	0
Hong Kong	2,385	588	—	2	—	3	3	—	0	0
India	48,229	26,958	—	1,473	—	0	0	1	0	1
Indonesia	—	15,858	—	20	—	1	1	—	—	—
Ireland	4,162	—	—	596	—	1	1	—	0	0
Israel	—	2	—	9	—	12	12	—	—	—
Italy	45,988	236	—	0	—	301	301	—	—	—
Jamaica	—	1,162	—	1	—	1,332	1,332	—	—	—
Japan	23,370	103,855	—	5,139	—	5	5	13	2	15
Korea, South	86,154	41,569	—	2,556	—	2,218	2,218	2	0	2
Lebanon	—	0	—	0	—	—	—	—	—	—
Mexico	1,051	51,248	—	3,932	—	188,790	188,790	120	4,087	4,206
Montenegro	—	1	—	—	—	—	—	—	—	—
Morocco	—	5,610	—	100	—	941	941	—	—	—
Mozambique	—	—	—	—	—	—	—	—	—	—
Netherlands	53,174	22,401	—	4,824	—	5,321	5,321	—	1,030	1,030
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
New Zealand	—	—	—	0	—	1	1	0	—	0
Nicaragua	2,078	0	—	312	—	1,814	1,814	—	—	—
Nigeria	—	492	—	2	—	1,140	1,140	—	331	331
Norway	13,866	8,661	—	60	—	—	—	—	—	—
Pakistan	—	—	—	0	—	—	—	—	—	—
Panama	504	207	—	129	—	8,294	8,294	0	86	86
Peru	2,393	2,613	—	288	—	6,954	6,954	—	170	170
Philippines	—	1	—	4	—	7	7	—	—	—
Portugal	625	3,312	—	—	—	—	—	—	—	—
Puerto Rico	—	61	—	6	—	34	34	—	2	2
Romania	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	1	—	14	—	1	1	—	—	—
Serbia	—	—	—	—	—	—	—	—	—	—
Singapore	23,185	13,662	—	1,452	—	1,673	1,673	—	0	0
South Africa	2,064	1,078	—	0	—	1,624	1,624	—	—	—
Spain	8,335	9,969	—	0	—	—	—	—	—	—
Switzerland	1,594	3,360	—	304	—	134	134	—	—	—
Taiwan	44,670	6,427	—	4,420	—	4	4	—	0	0
Thailand	14,586	1	—	18	—	500	500	—	0	0
Trinidad and Tobago	—	2	—	35	—	364	364	—	—	—
Turkey	—	8,829	—	0	—	—	—	0	—	0
United Arab Emirates	11,254	1	—	724	—	34	34	—	0	0
United Kingdom	59,772	15,458	—	309	—	7	7	0	1	1
Venezuela	—	1,920	—	19,077	—	9,274	9,274	18	1,910	1,928
Other	21,170	17,525	—	1,213	—	4,805	4,805	5	72	77
Total	731,402	584,705	—	101,283	—	324,258	324,258	170	22,840	23,010

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-December 2018
(Thousand Barrels) — Continued

Destination	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
Argentina	0	0	1	—	—	—	9,251	1,230	1,412	—	11,894
Australia	0	0	1	0	—	—	2	—	0	—	2
Bahamas	—	3	1	0	—	—	1,880	206	3,174	—	5,260
Bahrain	—	—	0	—	—	—	—	—	—	—	—
Belgium	85	0	1	—	—	—	3,469	201	710	—	4,380
Belize	—	—	—	0	—	—	59	709	64	—	832
Brazil	240	0	12,218	—	—	—	49,569	2,989	2,556	—	55,114
Canada	—	4	8,321	1,934	—	—	5,005	3,838	2,552	—	11,395
Cayman Islands	—	—	0	—	—	—	1,083	38	55	—	1,176
Chile	2,482	0	4	3	—	—	39,719	1,839	261	—	41,819
China	0	4	1,259	1	—	—	14	—	8	—	23
Colombia	—	0	1,097	0	—	—	6,119	1	0	—	6,121
Costa Rica	29	0	3	1	—	—	8,101	—	—	—	8,101
Denmark	—	—	0	—	—	—	—	—	—	—	—
Dominican Republic	—	0	7	—	—	—	2,939	806	1,598	—	5,342
Ecuador	—	0	0	—	—	—	11,648	1,376	1,378	—	14,403
Egypt	0	—	2	—	—	—	1	—	—	—	1
El Salvador	—	—	0	0	—	—	2,669	1,727	130	—	4,525
Finland	—	—	0	—	—	—	—	—	—	—	—
France	15	3	32	0	—	—	16,275	95	720	—	17,091
Germany	0	0	1	13	—	—	153	—	—	—	153
Ghana	—	—	—	—	—	—	—	—	470	—	470
Gibraltar	—	—	—	—	—	—	4,504	1,708	1,796	—	8,007
Greece	—	—	—	—	—	—	—	—	—	—	—
Guatemala	—	0	0	—	—	—	7,912	3,845	446	—	12,203
Honduras	—	—	0	—	—	—	2,641	2,621	1,313	—	6,575
Hong Kong	—	0	0	—	—	—	—	—	—	—	—
India	0	0	3,734	0	—	—	548	—	—	—	548
Indonesia	—	0	0	—	—	—	87	—	—	—	87
Ireland	—	0	0	—	—	—	—	—	—	—	—
Israel	—	0	7	—	—	—	5	—	—	—	5
Italy	—	0	0	—	—	—	1,022	248	—	—	1,270
Jamaica	—	—	418	0	—	—	3,397	180	460	—	4,037
Japan	—	11,116	86	0	—	—	7	—	0	—	7
Korea, South	0	1	2,090	—	—	—	18	—	414	—	432
Lebanon	—	0	0	—	—	—	1,002	—	—	—	1,002
Mexico	9,248	6	700	56	—	—	107,611	882	315	—	108,809
Montenegro	—	—	—	—	—	—	0	—	—	—	0
Morocco	—	—	0	—	—	—	5,110	—	—	—	5,110
Mozambique	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	0	1,990	130	—	—	19,311	2,015	2,330	—	23,657
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
New Zealand	—	0	0	—	—	—	1	—	—	—	1
Nicaragua	—	—	0	0	—	—	322	962	922	—	2,206
Nigeria	—	—	513	—	—	—	—	—	—	—	—
Norway	—	0	97	2	—	—	80	—	36	—	115
Pakistan	—	0	1	—	—	—	—	—	—	—	—
Panama	—	0	0	—	—	—	13,905	1,362	2,008	—	17,275
Peru	—	0	1,243	233	—	—	25,854	525	0	—	26,379
Philippines	—	0	1,724	—	—	—	0	—	—	—	0
Portugal	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	0	3	379	0	—	—	2	4	—	—	7
Romania	—	—	—	—	—	—	1,838	—	—	—	1,838
Saudi Arabia	—	0	463	—	—	—	1	—	0	—	1
Serbia	—	—	—	—	—	—	—	—	—	—	—
Singapore	0	5	482	3	—	—	2,759	114	4,556	—	7,430
South Africa	—	0	0	—	—	—	0	—	0	—	0
Spain	—	0	349	—	—	—	3,100	—	—	—	3,100
Switzerland	—	0	117	54	—	—	1,044	132	0	—	1,176
Taiwan	0	0	1	—	—	—	1	—	0	—	2
Thailand	—	0	0	0	—	—	1,218	—	0	—	1,218
Trinidad and Tobago	—	—	0	0	—	—	51	58	0	—	109
Turkey	—	1	0	—	—	—	2	—	—	—	2
United Arab Emirates	—	0	1,637	—	—	—	468	—	—	—	468
United Kingdom	—	0	151	—	—	—	12,889	1	62	—	12,952
Venezuela	1,868	0	0	—	—	—	11,453	435	1,192	—	13,080
Other	16	6	1,846	23	—	—	13,329	6,244	7,928	—	27,496
Total	13,983	11,152	40,976	2,453	—	—	399,448	36,391	38,866	—	474,706

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-December 2018
(Thousand Barrels) — Continued

Destination	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
Argentina	130	—	—	1,493	—	957	—	—
Australia	0	—	—	—	—	—	—	—
Bahamas	1	—	—	799	—	7,962	—	—
Bahrain	—	—	—	—	—	—	—	—
Belgium	1	—	—	—	—	0	—	—
Belize	0	—	—	296	—	—	—	—
Brazil	0	—	—	2,452	—	498	—	—
Canada	825	—	—	18,010	—	6,956	—	—
Cayman Islands	0	—	—	214	—	0	—	—
Chile	9	—	—	2,533	—	315	—	—
China	2	—	—	2	—	244	—	—
Colombia	23	—	—	61	—	1	—	—
Costa Rica	9	—	—	1,754	—	560	—	—
Denmark	—	—	—	75	—	0	—	—
Dominican Republic	0	—	—	2,420	—	391	—	—
Ecuador	0	—	—	44	—	2,938	—	—
Egypt	0	—	—	1	—	0	—	—
El Salvador	13	—	—	563	—	0	—	—
Finland	—	—	—	61	—	0	—	—
France	—	—	—	—	—	0	—	—
Germany	0	—	—	2	—	—	—	—
Ghana	—	—	—	—	—	—	—	—
Gibraltar	—	—	—	300	—	2,858	—	—
Greece	—	—	—	—	—	—	—	—
Guatemala	70	—	—	1,342	—	1,181	—	—
Honduras	1	—	—	798	—	2,894	—	—
Hong Kong	0	—	—	1	—	7	—	—
India	0	—	—	1	—	2	—	—
Indonesia	—	—	—	—	—	—	—	—
Ireland	—	—	—	—	—	—	—	—
Israel	0	—	—	1,641	—	0	—	—
Italy	—	—	—	—	—	—	—	—
Jamaica	0	—	—	1,105	—	5,620	—	—
Japan	1	—	—	0	—	0	—	—
Korea, South	0	—	—	0	—	988	—	—
Lebanon	—	—	—	1	—	5,977	—	—
Mexico	5	—	—	20,447	—	15,229	—	—
Montenegro	—	—	—	—	—	—	—	—
Morocco	—	—	—	—	—	210	—	—
Mozambique	—	—	—	—	—	—	—	—
Netherlands	101	—	—	2,654	—	12,464	—	—
Netherlands Antilles	—	—	—	—	—	—	—	—
New Zealand	—	—	—	—	—	70	—	—
Nicaragua	100	—	—	117	—	—	—	—
Nigeria	—	—	—	594	—	—	—	—
Norway	181	—	—	60	—	—	—	—
Pakistan	—	—	—	—	—	—	—	—
Panama	1	—	—	6,297	—	8,266	—	—
Peru	72	—	—	2,152	—	161	—	—
Philippines	—	—	—	—	—	—	—	—
Portugal	—	—	—	—	—	—	—	—
Puerto Rico	0	—	—	4	—	1	—	—
Romania	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	—	—	—	601	—	—
Serbia	—	—	—	—	—	—	—	—
Singapore	0	—	—	0	—	27,027	—	—
South Africa	0	—	—	—	—	0	—	—
Spain	—	—	—	311	—	361	—	—
Switzerland	—	—	—	—	—	252	—	—
Taiwan	0	—	—	0	—	4	—	—
Thailand	—	—	—	—	—	93	—	—
Trinidad and Tobago	0	—	—	337	—	—	—	—
Turkey	—	—	—	—	—	—	—	—
United Arab Emirates	3	—	—	1	—	247	—	—
United Kingdom	0	—	—	5,110	—	2,752	—	—
Venezuela	—	—	—	87	—	1,840	—	—
Other	98	—	—	7,071	—	5,523	—	—
Total	1,646	—	—	81,211	—	115,450	—	—

See footnotes at end of table.

Table 52. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January-December 2018
(Thousand Barrels) — Continued

Destination	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
Argentina	3	753	228	883	0	20,764	21,069	1	57	58
Australia	5	2,916	297	185	5	7,532	7,665	0	21	21
Bahamas	—	—	24	44	0	18,558	19,238	2	51	53
Bahrain	0	—	—	13	—	19	19	—	0	0
Belgium	0	3,260	67	4,852	6	14,845	14,845	—	41	41
Belize	—	—	—	12	—	1,710	1,710	—	5	5
Brazil	12	16,358	1	3,521	8	135,682	144,529	24	372	396
Canada	1,102	8,285	2,256	3,234	71	212,079	350,085	378	581	959
Cayman Islands	—	—	13	13	—	2,076	2,076	—	6	6
Chile	5	1	313	884	1	64,807	69,338	12	178	190
China	30	19,657	23	354	12	53,399	136,729	228	146	375
Colombia	2	1	2	1,286	4	34,238	42,448	22	94	116
Costa Rica	2	545	652	222	1	21,120	21,120	—	58	58
Denmark	0	1,173	0	1	—	1,250	6,834	15	3	19
Dominican Republic	4	1,401	648	312	1	25,840	27,797	5	71	76
Ecuador	1	1,425	1	1,849	0	40,742	40,742	—	112	112
Egypt	0	4,746	362	89	—	9,312	9,312	—	26	26
El Salvador	0	387	0	245	—	13,728	13,728	—	38	38
Finland	0	267	0	12	—	342	342	—	1	1
France	3	3,517	—	508	0	25,893	32,353	18	71	89
Germany	21	29	9	436	1	702	1,731	3	2	5
Ghana	—	—	0	4	—	1,622	1,622	—	4	4
Gibraltar	—	—	—	26	—	14,186	14,767	2	39	40
Greece	0	4,762	—	25	—	4,787	5,925	3	13	16
Guatemala	2	3,163	0	219	—	36,257	36,257	—	99	99
Honduras	0	2,855	296	124	0	24,303	24,303	—	67	67
Hong Kong	2	249	0	23	2	878	3,263	7	2	9
India	20	18,601	15	1,357	3	52,714	100,942	132	144	277
Indonesia	1	0	14	155	1	16,138	16,138	—	44	44
Ireland	0	959	—	0	1	1,557	5,720	11	4	16
Israel	1	2,078	—	743	0	4,497	4,497	—	12	12
Italy	15	7,466	1	122	1	9,412	55,401	126	26	152
Jamaica	0	7	16	802	1	14,502	14,502	—	40	40
Japan	23	21,430	5	186	46	141,915	165,285	64	389	453
Korea, South	2	3,852	15	106	4	53,836	139,990	236	147	384
Lebanon	0	1,207	—	16	—	8,204	8,204	—	22	22
Mexico	230	25,299	2,387	10,225	159	440,975	442,026	3	1,208	1,211
Montenegro	—	473	—	—	—	473	473	—	1	1
Morocco	—	5,742	1	1	—	17,713	17,713	—	49	49
Mozambique	—	875	—	0	—	875	875	—	2	2
Netherlands	33	3,381	13	925	3	78,926	132,100	146	216	362
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—
New Zealand	0	548	2	11	—	635	635	—	2	2
Nicaragua	0	202	—	55	—	4,808	6,886	6	13	19
Nigeria	—	1	36	1,035	0	4,143	4,143	—	11	11
Norway	0	1,446	0	4	—	10,626	24,492	38	29	67
Pakistan	1	0	1	38	0	41	41	—	0	0
Panama	0	—	274	232	0	41,059	41,563	1	112	114
Peru	1	182	1	844	2	41,293	43,687	7	113	120
Philippines	1	1	—	20	3	1,760	1,760	—	5	5
Portugal	0	1,148	—	1	—	4,461	5,086	2	12	14
Puerto Rico	1	—	3	153	0	654	654	—	2	2
Romania	0	1,223	—	1	—	3,063	3,063	—	8	8
Saudi Arabia	1	287	0	49	2	1,419	1,419	—	4	4
Serbia	—	—	—	—	—	—	—	—	—	—
Singapore	2	311	8	897	0	52,953	76,138	64	145	209
South Africa	1	938	1	549	—	4,192	6,255	6	11	17
Spain	5	6,424	339	16	0	20,875	29,210	23	57	80
Switzerland	0	0	0	1	—	5,397	6,991	4	15	19
Taiwan	3	1	5	55	2	10,923	55,593	122	30	152
Thailand	1	482	3	47	3	2,366	16,953	40	6	46
Trinidad and Tobago	0	1	1	81	0	930	930	—	3	3
Turkey	0	21,324	1	148	—	30,305	30,305	—	83	83
United Arab Emirates	0	952	6	605	0	4,677	15,932	31	13	44
United Kingdom	3	1,767	3	14	1	38,528	98,301	164	106	269
Venezuela	0	192	—	98	0	49,365	49,365	—	135	135
Other	13	8,034	652	878	12	75,284	96,452	58	207	261
Total	1,552	212,584	8,995	39,846	356	2,038,165	2,769,567	2,004	5,584	7,588

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, December 2018
(Thousand Barrels per Day)

Country of Origin	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	2,144	-36	-	118	-	-80	-80	0	86	86
Algeria	87	-	-	97	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	192	-31	-	0	-	-34	-34	-	-	-
Equatorial Guinea	32	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	225	-	-	-	-	-	-	-	-	-
Kuwait	16	-	-	-	-	-	-	-	-	-
Libya	121	-	-	-	-	-	-	-	-	-
Nigeria	167	-	-	-	-	-	-	-	10	10
Qatar	-	0	-	-	-	-	-	-	-	-
Saudi Arabia	842	0	-	0	-	7	7	-	57	57
United Arab Emirates	-39	-	-	55	-	0	0	-	-	-
Venezuela	500	-5	-	-33	-	-53	-53	0	19	19
Non-OPEC	2,444	-1,314	21	153	-	-878	-878	162	199	361
Argentina	47	2	-	-	-	-10	-10	-	-	-
Aruba	-	-	-	-	-	-2	-2	-	-	-
Australia	-	0	-	-	-	0	0	0	-	0
Bahamas	-	-2	-	-	-	-16	-16	-	0	0
Bahrain	-	-	-	-	-	-	-	-	-	-
Belgium	-	0	-	55	-	-	-	-	0	0
Brazil	-5	-47	-	-33	-	-80	-80	-	46	46
Brunei	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-
Canada	3,251	-4	18	-4	-	-28	-28	68	16	85
Chad	-	-	-	-	-	-	-	-	-	-
China	-97	-55	-	0	-	-	-	-	-	-
Colombia	240	-1	-	-62	-	-41	-41	-	19	19
Denmark	-46	-	-	14	-	-	-	-	-	-
Dominican Republic	-16	-60	-	0	-	-26	-26	-	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-	-
France	-24	-19	-	4	-	10	10	19	0	19
Germany	-22	0	-	1	-	-	-	-	-	-
Guatemala	9	-20	-	-	-	-43	-43	-	-	-
Honduras	-	-20	-	-	-	-16	-16	-	-	-
India	-195	-77	-	8	-	-	-	-	44	44
Indonesia	-	-	-	0	-	-	-	-	-	-
Italy	-23	-	-	12	-	-10	-10	-	10	10
Japan	-65	-541	-	-20	-	0	0	0	0	0
Korea, South	-558	-99	-	0	-	0	0	-	-	-
Latvia	-	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	0	-	-	-	-	-	-
Mexico	579	-137	1	-5	-	-461	-461	0	-6	-6
Netherlands	-241	-37	-	-2	-	-10	-10	35	3	38
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	71	-19	-	-	-	-	-	-	-	-
Oman	-	-	-	0	-	-	-	-	-	-
Panama	-	-1	-	0	-	-33	-33	-	-3	-3
Portugal	-	-13	-	-	-	-	-	-	9	9
Puerto Rico	-	0	-	0	-	0	0	-	-	-
Russia	134	-	-	126	-	-	-	-	-	-
Spain	-20	-13	-	1	-	-	-	-	33	33
Sweden	-	6	-	9	-	-	-	-	17	17
Trinidad and Tobago	36	-	-	-	-	-1	-1	-	-	-
United Kingdom	-188	-36	-	33	-	-	-	40	0	40
Vietnam	-	-	-	-	-	-	-	-	0	0
Virgin Islands, U.S.	-	-	-	-	-	0	0	-	0	0
Yemen	-	-	-	-	-	-	-	-	-	-
Other	-423	-121	2	16	-	-111	-111	0	11	10
Total	4,588	-1,351	21	271	-	-958	-958	162	285	447
Persian Gulf²	1,044	0	-	55	-	7	7	-	57	57

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-8	—	-15	—	—	—	-28	-9	-17	—	-53
Algeria	—	—	—	—	—	—	—	—	-8	—	-8
Angola	—	—	—	—	—	—	—	—	—	—	—
Congo (Brazzaville)	—	—	—	—	—	—	—	—	—	—	—
Ecuador	—	—	—	—	—	—	-17	—	—	—	-17
Equatorial Guinea	—	—	—	—	—	—	—	—	—	—	—
Gabon	—	—	—	—	—	—	—	—	—	—	—
Iran	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	—	—	—	—	—	—	—	—
Kuwait	—	—	—	—	—	—	—	—	—	—	—
Libya	—	—	—	—	—	—	—	—	—	—	—
Nigeria	—	—	—	—	—	—	—	—	—	—	—
Qatar	—	—	—	—	—	—	—	—	—	—	—
Saudi Arabia	—	—	-2	—	—	—	23	—	—	—	23
United Arab Emirates	—	—	-13	—	—	—	—	—	—	—	—
Venezuela	-8	—	—	—	—	—	-34	-9	-9	—	-51
Non-OPEC	-29	-36	-85	15	3	—	-922	-99	-113	1	-1,134
Argentina	—	—	—	—	—	—	-20	—	—	—	-20
Aruba	—	—	0	—	—	—	-1	—	—	—	-1
Australia	0	—	0	—	—	—	—	—	—	—	—
Bahamas	—	0	0	—	—	—	-1	—	-6	—	-7
Bahrain	—	—	—	—	—	—	—	—	—	—	—
Belgium	0	0	0	—	—	—	-8	—	-10	—	-18
Brazil	—	6	-20	—	—	—	-157	-9	-11	—	-177
Brunei	—	—	—	—	—	—	—	—	—	—	—
Cameroon	—	—	—	—	—	—	—	—	—	—	—
Canada	—	0	-22	2	—	—	60	-19	1	1	42
Chad	—	—	—	—	—	—	—	—	—	—	—
China	—	0	0	—	—	—	0	—	—	—	0
Colombia	—	—	-2	0	—	—	6	—	—	—	6
Denmark	—	—	—	—	—	—	—	—	—	—	—
Dominican Republic	—	—	0	—	—	—	-8	—	—	—	-8
Estonia	—	—	—	—	—	—	—	—	—	—	—
Finland	—	—	—	—	—	—	—	—	—	—	—
France	—	0	0	2	—	—	-55	—	-9	—	-64
Germany	—	0	—	11	—	—	—	—	—	—	—
Guatemala	—	—	—	—	—	—	-9	-19	—	—	-28
Honduras	—	—	—	—	—	—	—	-7	-5	—	-12
India	—	—	-7	—	—	—	0	—	—	—	0
Indonesia	—	—	0	—	—	—	—	—	—	—	—
Italy	—	—	—	—	—	—	—	—	—	—	—
Japan	—	-42	0	—	—	—	12	—	—	—	12
Korea, South	—	0	-10	1	—	—	0	—	0	—	0
Latvia	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—
Malaysia	—	0	—	—	—	—	—	—	—	—	—
Mexico	-22	0	-1	0	—	—	-284	-1	-1	—	-286
Netherlands	—	0	-6	0	—	—	-66	—	-7	—	-73
Netherlands Antilles	—	—	—	—	—	—	—	—	—	—	—
Norway	—	0	—	—	—	—	—	—	—	—	—
Oman	—	—	—	—	—	—	0	—	—	—	0
Panama	—	—	0	—	—	—	-29	-10	-11	—	-50
Portugal	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	0	0	—	—	—	0	—	—	—	0
Russia	—	—	0	—	—	—	—	9	2	—	11
Spain	—	—	—	—	—	—	-17	—	—	—	-17
Sweden	—	—	—	—	—	—	-3	—	0	—	-3
Trinidad and Tobago	—	—	0	—	—	—	-1	—	—	—	-1
United Kingdom	—	—	-4	—	—	—	-81	—	—	—	-81
Vietnam	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands, U.S.	—	—	0	—	—	—	—	-4	-8	—	-13
Yemen	—	—	—	—	—	—	—	—	—	—	—
Other	-7	0	-13	-1	3	—	-260	-39	-48	0	-346
Total	-37	-36	-99	15	3	—	-950	-108	-130	1	-1,187
Persian Gulf²	—	—	-15	—	—	—	23	—	—	—	23

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
OPEC	0	-	-	2	-	6	-	-
Algeria	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-
Ecuador	0	-	-	0	-	-12	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-
Gabon	0	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-
Iraq	-	-	-	0	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-
Nigeria	-	-	-	0	-	-	-	-
Qatar	-	-	-	-	-	0	-	-
Saudi Arabia	-	-	-	-	-	-	-	-
United Arab Emirates	0	-	-	0	-	-	-	-
Venezuela	-	-	-	2	-	18	-	-
Non-OPEC	-10	0	-	-117	14	-89	18	4
Argentina	0	-	-	-8	-	6	-	-
Aruba	-	-	-	-3	-	-	-	-
Australia	-	-	-	-	-	-	-	-
Bahamas	-	-	-	-4	-	-40	-	-
Bahrain	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	1	-	-	0
Brunei	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-
Canada	-9	0	-	-29	4	43	3	3
Chad	-	-	-	-	-	-	-	-
China	0	-	-	0	-	0	-	-
Colombia	-1	-	-	-	-	10	-	-
Denmark	-	-	-	-	-	-	-	-
Dominican Republic	-	-	-	-10	-	-	-	-
Estonia	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	0	-	-
France	-	-	-	-	-	0	-	-
Germany	-	-	-	-	-	-	-	-
Guatemala	0	-	-	-5	-	-1	-	-
Honduras	0	-	-	-4	-	-8	-	-
India	0	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-
Japan	-	-	-	9	2	-	6	-
Korea, South	0	-	-	68	6	-10	-	-
Latvia	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-
Mexico	0	-	-	-61	-	9	8	-
Netherlands	-	-	-	-	-	-33	-	-
Netherlands Antilles	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-
Panama	0	-	-	-13	-	-8	-	-
Portugal	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-
Trinidad and Tobago	0	-	-	-11	-	-	-	-
United Kingdom	-	-	-	-	-	0	-	-
Vietnam	-	-	-	-	-	-	-	-
Virgin Islands, U.S.	0	-	-	-6	-	-10	-	-
Yemen	-	-	-	-	-	-	-	-
Other	0	0	-	-40	1	-47	1	1
Total	-10	0	-	-115	14	-84	18	4
Persian Gulf²	0	-	-	0	-	0	-	-

See footnotes at end of table.

Table 53. Net Imports of Crude Oil and Petroleum Products into the United States by Country, December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products
OPEC	0	-10	0	-7	-	2	2,145
Algeria	-	-	-	-	-	88	175
Angola	-	-	0	-	-	0	0
Congo (Brazzaville)	-	-	-	-	-	-	-
Ecuador	0	-	0	-7	-	-102	90
Equatorial Guinea	-	-	-	0	-	0	32
Gabon	-	-	0	-	-	0	0
Iran	-	-	-	-	-	-	-
Iraq	-	-	-	0	-	0	226
Kuwait	-	-	0	0	-	0	16
Libya	-	-	-	0	-	0	121
Nigeria	-	-	0	-4	-	6	173
Qatar	-	0	0	8	-	8	8
Saudi Arabia	0	0	-	0	-	86	928
United Arab Emirates	0	-9	-	-3	-	30	-10
Venezuela	-	0	-	-1	-	-113	387
Non-OPEC	2	-652	-13	-51	-1	-3,817	-1,373
Argentina	0	-6	-	-1	-	-36	11
Aruba	-	-	-	0	-	-5	-5
Australia	0	-10	-6	0	0	-16	-16
Bahamas	-	-	0	0	-	-71	-71
Bahrain	-	-	-	2	-	2	2
Belgium	0	-13	-	-12	0	12	12
Brazil	0	-49	-	-9	0	-363	-368
Brunei	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-
Canada	-2	-17	12	-1	0	96	3,348
Chad	-	-	-	-	-	-	-
China	3	-52	0	-1	0	-105	-202
Colombia	0	6	0	-2	0	-67	174
Denmark	-	-11	-	0	-	3	-42
Dominican Republic	0	-	-4	-1	-	-109	-126
Estonia	-	-	-	-	-	-	-
Finland	-	-	-	0	-	0	0
France	0	-10	-	-1	-	-60	-83
Germany	0	0	0	0	-	12	-10
Guatemala	-	-	-	0	-	-97	-88
Honduras	0	-15	-2	0	0	-78	-78
India	0	-80	0	-1	0	-112	-307
Indonesia	0	0	0	2	-	2	2
Italy	0	-39	0	-1	-	-28	-51
Japan	0	-58	0	-1	0	-634	-699
Korea, South	0	-40	0	15	0	-70	-627
Latvia	0	-	-	0	-	0	0
Lithuania	0	-	-	0	-	0	0
Malaysia	1	0	-	0	0	1	1
Mexico	0	-40	-7	-29	0	-1,038	-459
Netherlands	0	-9	0	-2	-	-135	-376
Netherlands Antilles	-	-	-	-	-	-	-
Norway	0	-9	-	0	-	-28	43
Oman	-	0	-	0	-	0	0
Panama	-	-	-	-1	-	-108	-108
Portugal	-	-12	-	0	-	-15	-15
Puerto Rico	0	-	0	0	-	-1	-1
Russia	0	-	0	0	-	137	271
Spain	0	-12	2	0	-	-7	-27
Sweden	0	-	-	0	-	30	30
Trinidad and Tobago	0	0	-	0	0	-12	24
United Kingdom	0	-4	0	0	0	-52	-240
Vietnam	0	-	-	0	-	0	0
Virgin Islands, U.S.	-	-	0	0	-	-29	-29
Yemen	-	-	-	-	-	-	-
Other	0	-172	-8	-7	-1	-836	-1,263
Total	2	-662	-13	-58	-1	-3,815	772
Persian Gulf²	0	-10	0	7	-	125	1,169

- = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

² Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-December 2018
(Thousand Barrels per Day)

Country of Origin	Crude Oil ¹	Natural Gas Liquids	Refinery Olefins	Unfinished Oils	Finished Motor Gasoline			Motor Gasoline Blending Components		
					Reformulated	Conventional	Total	Reformulated	Conventional	Total
OPEC	2,553	-35	-	104	-	-48	-48	0	37	37
Algeria	79	0	-	95	-	-	-	-	1	1
Angola	90	0	-	0	-	-	-	-	4	4
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-
Ecuador	176	-29	-	-1	-	-22	-22	0	-4	-4
Equatorial Guinea	19	-	-	-	-	-	-	-	-	-
Gabon	5	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-
Iraq	519	-	-	2	-	0	0	-	-	-
Kuwait	78	0	-	0	0	0	0	0	-	0
Libya	55	-	-	0	-	-	-	-	-	-
Nigeria	175	-1	-	2	15	-3	-3	-	10	10
Qatar	-	0	-	-3	0	0	0	0	-	0
Saudi Arabia	870	0	-	4	-	2	2	-	8	8
United Arab Emirates	-25	0	-	48	-	0	0	-	0	0
Venezuela	506	-5	-	-48	-	-25	-25	0	18	18
Non-OPEC	3,201	-1,396	23	229	-	-795	-795	177	363	540
Argentina	22	0	-	-5	-	-8	-8	0	2	2
Aruba	-	0	-	0	-	-2	-2	0	0	0
Australia	1	-8	-	0	-	-3	-3	0	0	0
Bahamas	-2	-3	-	0	-	-9	-9	0	0	0
Bahrain	-	-	-	0	-	0	0	-	-	-
Belgium	-	-2	-	40	-	1	1	4	18	22
Brazil	102	-64	-	-10	-	-39	-39	0	19	19
Brunei	15	0	-	-	-	-	-	-	-	-
Cameroon	3	-1	-	2	-	0	0	-	-	-
Canada	3,316	-125	19	-38	-	-19	-19	92	23	115
Chad	20	0	-	-	-	-	-	-	-	-
China	-228	-81	-	-6	-	0	0	-	0	0
Colombia	274	0	-	-46	-	-22	-22	0	16	16
Denmark	-9	-	-	6	-	-	-	0	0	0
Dominican Republic	-5	-30	-	0	-	-12	-12	0	0	0
Estonia	-	-	-	0	-	0	0	-	0	0
Finland	-	-	-	2	-	0	0	1	12	12
France	-18	-11	0	4	-	6	6	12	11	23
Germany	-3	0	-	2	-	0	0	0	1	1
Guatemala	7	-15	-	0	-	-34	-34	0	0	0
Honduras	-	-12	-	0	-	-17	-17	0	-	0
India	-132	-74	-	-1	-	2	2	1	53	55
Indonesia	40	-43	-	0	-	0	0	-	-	-
Italy	-125	-1	-	11	-	1	1	0	9	9
Japan	-64	-285	-	-14	-	0	0	0	3	3
Korea, South	-236	-114	-	-7	-	-4	-4	0	6	6
Latvia	-	0	-	0	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	2	2
Malaysia	-13	0	-	1	-	0	0	0	0	0
Mexico	662	-140	1	-10	-	-517	-517	0	-5	-5
Netherlands	-146	-61	-	-2	-	-11	-11	14	21	35
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-
Norway	15	-21	-	17	-	2	2	4	16	19
Oman	-	0	-	0	-	-	-	-	-	-
Panama	-1	-1	-	0	-	-23	-23	0	0	0
Portugal	-2	-9	-	-	-	3	3	4	21	25
Puerto Rico	-	0	-	0	-	0	0	-	0	0
Russia	73	0	-	235	-	1	1	1	33	34
Spain	-23	-27	-	9	-	1	1	0	39	39
Sweden	-2	-7	-	2	-	3	3	0	6	7
Trinidad and Tobago	7	1	-	1	-	-1	-1	-	-	-
United Kingdom	-107	-41	-	7	-	4	4	44	30	74
Vietnam	2	0	-	0	-	0	0	-	0	0
Virgin Islands, U.S.	-	-3	-	0	-	0	0	-	0	0
Yemen	-	-	-	-	-	-	-	-	-	-
Other	-242	-218	3	29	-	-98	-98	0	27	27
Total	5,753	-1,431	23	333	-	-843	-843	177	401	577
Persian Gulf²	1,441	0	-	52	-	2	2	0	8	8

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Oxygenates		Renewable Fuels				Distillate Fuel Oil				Total
	Methyl Tertiary Butyl Ether (MTBE)	Other Oxygenates	Fuel Ethanol	Biomass-Based Diesel	Other Renewable Diesel	Other Renewable Fuels	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	501 to 2000 ppm	Greater than 2000 ppm	
OPEC	-5	0	-7	-	-	-	-39	-6	-10	0	-56
Algeria	-	-	-	-	-	-	-1	-1	-4	-	-6
Angola	-	-	-	-	-	-	0	-	-	-	0
Congo (Brazzaville)	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	0	0	-	-	-	-32	-4	-4	-	-39
Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	0	-	-	-	-	0	-	-	-	0
Kuwait	-	-	0	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	0	-	-	-	0
Nigeria	-	-	-1	-	-	-	-	-	0	-	0
Qatar	-	-	0	-	-	-	7	-	-	-	7
Saudi Arabia	-	0	-1	-	-	-	16	-	0	-	16
United Arab Emirates	-	0	-4	-	-	-	-1	-	-	-	-1
Venezuela	-5	0	0	-	-	-	-28	-1	-3	0	-32
Non-OPEC	-29	-25	-102	4	11	-	-903	-90	-80	3	-1,070
Argentina	0	0	0	-	-	-	-25	-3	-4	-	-33
Aruba	-	-	0	-	-	-	-1	-	-	-	-1
Australia	0	0	0	0	-	-	0	-	0	-	0
Bahamas	-	0	0	0	-	-	-4	-1	-8	-	-12
Bahrain	-	-	0	-	-	-	-	-	-	-	-
Belgium	0	0	0	-	-	-	-8	-1	-2	-	-10
Brazil	1	3	-30	-	-	-	-134	-8	-7	-	-149
Brunei	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	0	-	-	-	-	-	-	-
Canada	-	0	-23	0	-	-	68	-9	6	0	66
Chad	-	-	-	-	-	-	-	-	-	-	-
China	0	0	-3	0	-	-	4	-	0	-	4
Colombia	-	0	-3	0	-	-	-8	0	0	1	-7
Denmark	-	-	0	-	-	-	-	-	-	-	-
Dominican Republic	-	0	0	-	-	-	-8	-2	-4	-	-15
Estonia	-	-	-	-	-	-	-	-	-	-	-
Finland	-	-	0	-	-	-	-	-	-	-	-
France	0	0	0	1	-	-	-45	0	-2	-	-47
Germany	0	0	0	4	-	-	0	-	-	-	0
Guatemala	-	0	0	-	-	-	-22	-11	-1	-	-33
Honduras	-	-	0	-	-	-	-7	-7	-4	-	-18
India	0	0	-10	0	-	-	8	-	-	-	8
Indonesia	-	0	0	-	-	-	0	-	-	-	0
Italy	-	0	0	-	-	-	-3	-1	-	-	-3
Japan	-	-30	0	0	-	-	1	-	0	-	1
Korea, South	0	0	-6	0	-	-	1	-	-1	-	0
Latvia	-	0	-	-	-	-	0	-	-	-	0
Lithuania	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	0	-2	-	-	-	1	-	-3	-	-2
Mexico	-25	0	-2	0	-	-	-294	-2	0	-	-297
Netherlands	1	2	-5	0	-	-	-51	-6	-6	0	-63
Netherlands Antilles	-	-	-	-	-	-	-	-	-	-	-
Norway	-	0	0	0	-	-	0	-	0	-	0
Oman	-	-	-2	-	-	-	0	-	-	-	0
Panama	-	0	0	-	-	-	-38	-4	-6	-	-47
Portugal	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	0	0	-1	0	-	-	0	0	-	-	0
Russia	1	-	0	-	-	-	9	2	1	0	13
Spain	-	0	-1	-	-	-	-8	-	-	-	-8
Sweden	-	0	0	-	-	-	0	-	0	-	0
Trinidad and Tobago	-	-	0	0	-	-	0	0	0	-	0
United Kingdom	-	0	0	-	-	-	-35	0	0	-	-35
Vietnam	-	0	0	-	-	-	0	-	-	-	0
Virgin Islands, U.S.	-	-	0	-	-	-	-3	-3	-5	-	-11
Yemen	-	-	-	-	-	-	-	-	-	-	-
Other	-7	0	-14	-1	11	-	-301	-34	-34	2	-371
Total	-34	-25	-109	4	11	-	-943	-96	-90	3	-1,126
Persian Gulf²	-	0	-6	-	-	-	22	-	0	-	22

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Kerosene	Finished Aviation Gasoline	Aviation Gasoline Blending Components	Kerosene-Type Jet Fuel	Special Naphthas	Residual Fuel Oil	Petrochemical Feedstocks	
							Naphtha	Other Oils
OPEC	0	-	-	4	0	29	2	-
Algeria	-	-	-	-	-	0	1	-
Angola	-	-	-	-	-	-	-	-
Congo (Brazzaville)	-	-	-	-	-	-	-	-
Ecuador	0	-	-	0	-	-7	-	-
Equatorial Guinea	-	-	-	-	-	-	-	-
Gabon	0	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-
Iraq	0	-	-	0	-	-	-	-
Kuwait	-	-	-	0	-	-	-	-
Libya	-	-	-	-	-	0	-	-
Nigeria	-	-	-	-2	-	-	1	-
Qatar	0	-	-	0	-	0	-	-
Saudi Arabia	-	-	-	0	0	-2	-	-
United Arab Emirates	0	-	-	0	-	-1	-	-
Venezuela	-	-	-	5	-	37	-	-
Non-OPEC	-3	0	-	-100	13	-134	16	4
Argentina	0	-	-	-4	-	0	-	0
Aruba	0	-	-	-2	-	-2	-	-
Australia	0	-	-	-	-	-	-	-
Bahamas	0	-	-	-2	-	-20	-	-
Bahrain	-	-	-	-	-	-	-	-
Belgium	0	-	-	-	0	0	-	-
Brazil	0	-	-	-7	1	1	0	0
Brunei	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-
Canada	-2	0	-	-31	3	32	2	2
Chad	-	-	-	-	-	-	-	-
China	0	-	-	10	-	-1	-	-
Colombia	0	-	-	0	-	8	-	-
Denmark	-	-	-	0	-	0	-	-
Dominican Republic	0	-	-	-7	-	-1	-	-
Estonia	-	-	-	-	-	1	-	-
Finland	-	-	-	0	-	0	-	-
France	-	-	-	-	0	0	0	0
Germany	0	-	-	0	0	-	-	-
Guatemala	0	-	-	-4	-	-3	-	-
Honduras	0	-	-	-2	-	-8	-	-
India	0	-	-	6	0	0	-	-
Indonesia	-	-	-	-	-	-	-	-
Italy	-	-	-	0	-	-	-	-
Japan	0	-	-	11	2	0	3	-
Korea, South	1	-	-	65	6	-3	0	-
Latvia	-	-	-	-	-	-	-	-
Lithuania	-	-	-	0	-	0	-	-
Malaysia	-	-	-	-	-	0	-	-
Mexico	0	-	-	-56	0	-5	7	-
Netherlands	0	0	-	-7	0	-28	0	-
Netherlands Antilles	-	-	-	-	-	-	-	-
Norway	0	-	-	0	-	-	-	-
Oman	-	-	-	-	-	-	-	-
Panama	0	-	-	-16	-	-22	-	-
Portugal	-	-	-	-	0	-	-	-
Puerto Rico	0	-	-	0	-	0	-	-
Russia	-	-	-	0	-	17	-	-
Spain	-	-	-	-1	-	0	-	-
Sweden	0	-	-	0	-	1	-	-
Trinidad and Tobago	0	-	-	-1	-	17	-	-
United Kingdom	0	-	-	-14	-	-7	1	0
Vietnam	0	-	-	0	-	0	-	-
Virgin Islands, U.S.	0	-	-	-2	-	-10	-	-
Yemen	-	-	-	-	-	-	-	-
Other	-2	0	-	-36	1	-101	3	2
Total	-3	0	-	-96	13	-106	18	4
Persian Gulf²	0	-	-	1	0	-2	-	-

See footnotes at end of table.

Table 54. Year-to-Date Net Imports of Crude Oil and Petroleum Products into the United States by Country, January-December 2018
(Thousand Barrels per Day) — Continued

Country of Origin	Waxes	Petroleum Coke	Asphalt and Road Oil	Lubricants	Miscellaneous Products	Total Products	Total Crude Oil and Products
OPEC	0	-9	2	2	0	19	2,571
Algeria	0	0	0	0	—	91	170
Angola	—	—	0	0	—	4	94
Congo (Brazzaville)	—	—	—	—	—	—	—
Ecuador	0	-4	0	-5	0	-110	65
Equatorial Guinea	—	—	0	0	—	0	19
Gabon	—	—	0	0	—	0	5
Iran	—	—	—	0	—	0	0
Iraq	0	—	—	0	—	3	521
Kuwait	0	0	0	0	0	1	79
Libya	—	—	0	0	—	1	56
Nigeria	—	0	0	-3	0	2	178
Qatar	0	-1	-1	9	—	12	12
Saudi Arabia	0	-1	0	0	0	27	897
United Arab Emirates	0	-3	0	1	0	40	15
Venezuela	0	-1	2	0	0	-55	451
Non-OPEC	1	-562	10	-68	-1	-3,431	-231
Argentina	0	1	-1	-2	0	-48	-26
Aruba	—	—	0	0	—	-7	-7
Australia	0	-8	-1	-1	0	-21	-20
Bahamas	—	—	0	0	0	-47	-49
Bahrain	0	—	—	3	—	3	3
Belgium	0	-9	0	-13	0	28	28
Brazil	0	-44	0	-10	0	-327	-225
Brunei	—	0	—	0	—	0	15
Cameroon	—	—	0	0	—	2	5
Canada	-2	-20	23	-1	0	1	3,317
Chad	—	—	—	0	—	0	20
China	2	-53	0	-1	0	-128	-356
Colombia	0	1	0	-4	0	-56	218
Denmark	0	-3	0	0	—	3	-5
Dominican Republic	0	-4	-2	-1	0	-71	-76
Estonia	0	—	—	0	—	1	1
Finland	0	-1	0	0	—	13	13
France	0	-10	—	-1	0	-34	-51
Germany	0	0	0	-1	0	6	3
Guatemala	0	-9	0	-1	—	-99	-92
Honduras	0	-8	-1	0	0	-67	-67
India	0	-51	0	-4	0	-70	-202
Indonesia	0	0	0	2	0	-42	-2
Italy	0	-20	0	1	0	-3	-128
Japan	0	-59	0	0	0	-368	-432
Korea, South	0	-11	0	12	0	-53	-289
Latvia	0	—	—	0	0	0	0
Lithuania	0	0	—	0	—	2	2
Malaysia	0	0	0	0	0	-3	-16
Mexico	-1	-69	-7	-28	0	-1,155	-492
Netherlands	0	-9	0	-3	0	-154	-299
Netherlands Antilles	—	—	—	—	—	—	—
Norway	0	-4	0	0	—	12	27
Oman	0	1	0	0	—	-1	-1
Panama	0	—	-1	-1	0	-110	-112
Portugal	0	-3	—	0	—	16	14
Puerto Rico	0	—	0	0	0	-2	-2
Russia	0	1	0	0	—	302	375
Spain	0	-18	2	0	0	-4	-27
Sweden	0	0	0	0	0	4	2
Trinidad and Tobago	0	0	0	0	0	17	24
United Kingdom	0	-4	0	1	0	-16	-123
Vietnam	0	0	0	0	0	0	2
Virgin Islands, U.S.	—	—	0	0	—	-26	-26
Yemen	—	—	—	0	—	0	0
Other	2	-149	-2	-15	-1	-929	-1,175
Total	1	-571	12	-67	-1	-3,413	2,340
Persian Gulf²	0	-5	-1	13	0	84	1,526

— = No Data Reported.

¹ On December 18, 2015, the U.S. enacted legislation authorizing the export of U.S. crude oil without a license. Exports to embargoed or sanctioned countries continue to require authorization.

² Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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

Sources: U.S. Census Bureau and EIA estimates.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels)

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Crude Oil	11,655	132,102	880,490	21,540	45,146	1,090,933
Refinery	9,464	13,919	47,492	2,283	19,263	92,421
Tank Farms and Pipelines (Includes Cushing, OK)	2,191	118,183	183,859	19,257	22,110	345,600
Cushing, Oklahoma	—	41,895	—	—	—	41,895
Leases	—	—	—	—	—	—
Strategic Petroleum Reserve ¹	—	—	649,139	—	—	649,139
Alaskan In Transit	—	—	—	—	3,773	3,773
Total Stocks, All Oils (excluding Crude Oil)²	154,446	186,032	366,890	22,074	91,167	820,610
Refinery	16,992	50,026	128,868	11,552	51,100	258,538
Bulk Terminal	108,775	98,637	181,604	6,212	35,213	430,442
Pipeline	28,427	35,724	55,059	4,150	4,715	128,075
Natural Gas Processing Plant	252	1,645	1,359	160	139	3,555
Natural Gas Liquids	8,749	49,602	115,078	3,423	3,509	180,361
Refinery	590	3,284	7,324	372	1,297	12,867
Bulk Terminal	6,348	29,178	89,244	806	2,073	127,649
Pipeline	1,559	15,495	17,151	2,085	—	36,290
Natural Gas Processing Plant	252	1,645	1,359	160	139	3,555
Ethane	843	5,191	43,141	465	—	49,640
Refinery	—	—	188	—	—	188
Bulk Terminal	648	2,002	37,127	—	—	39,777
Pipeline	195	3,043	5,719	465	—	9,422
Natural Gas Processing Plant	—	146	107	—	—	253
Propane	5,987	20,659	34,203	1,396	1,413	63,658
Refinery	95	1,024	1,121	56	111	2,407
Bulk Terminal	4,507	15,538	26,460	432	1,290	48,227
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	112	898	257	71	12	1,350
Normal Butane	1,420	11,389	22,325	943	1,658	37,735
Refinery	363	1,488	4,406	224	807	7,288
Bulk Terminal	987	8,510	15,729	366	779	26,371
Pipeline	35	1,176	1,752	318	—	3,281
Natural Gas Processing Plant	35	215	438	35	72	795
Isobutane	194	1,952	5,673	267	404	8,490
Refinery	132	402	1,275	83	378	2,270
Bulk Terminal	—	858	3,393	—	—	4,251
Pipeline	29	506	922	173	—	1,630
Natural Gas Processing Plant	33	186	83	11	26	339
Natural Gasoline	305	10,411	9,736	352	34	20,838
Refinery	—	370	334	9	1	714
Bulk Terminal	206	2,270	6,535	8	4	9,023
Pipeline	27	7,571	2,393	292	—	10,283
Natural Gas Processing Plant	72	200	474	43	29	818
Refinery Olefins	288	429	7,352	37	50	8,156
Refinery	288	418	2,200	37	50	2,993
Bulk Terminal	—	11	5,152	—	—	5,163
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Ethylene	—	—	0	—	—	0
Refinery	—	—	0	—	—	0
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Propylene	121	355	6,457	1	12	6,946
Refinery	121	344	1,305	1	12	1,783
Bulk Terminal	—	11	5,152	—	—	5,163
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Normal Butylene	107	4	895	31	38	1,075
Refinery	107	4	895	31	38	1,075
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Isobutylene	60	70	0	5	0	135
Refinery	60	70	0	5	0	135
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Natural Gas Processing Plant	—	—	—	—	—	—
Other Hydrocarbons	—	21	—	—	—	21
Refinery	—	21	—	—	—	21
Oxygenates (excluding Fuel Ethanol)	—	4	1,547	—	—	1,551
Refinery	—	—	—	—	—	—
Bulk Terminal	—	4	1,547	—	—	1,551
Pipeline	—	—	—	—	—	—

See footnotes at end of table.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
MTBE	—	—	1,358	—	—	1,358
Refinery	—	—	—	—	—	—
Bulk Terminal ³	—	—	1,358	—	—	1,358
Pipeline	—	—	—	—	—	—
Other Oxygenates⁴	—	4	189	—	—	193
Refinery	—	—	—	—	—	—
Bulk Terminal	—	4	189	—	—	193
Pipeline	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	8,116	9,596	6,662	467	4,961	29,803
Refinery	223	119	449	228	457	1,476
Bulk Terminal	7,893	9,477	6,213	236	4,504	28,324
Pipeline	—	—	—	3	—	3
Fuel Ethanol²	6,581	8,679	4,553	353	3,172	23,338
Refinery	220	81	181	116	31	629
Bulk Terminal	6,361	8,598	4,372	234	3,141	22,706
Pipeline	—	—	—	3	—	3
Renewable Diesel Fuel⁵	1,535	917	2,107	114	1,737	6,411
Refinery	3	38	268	112	426	847
Bulk Terminal	1,532	879	1,839	2	1,311	5,564
Pipeline	—	—	—	—	—	—
Other Renewable Fuels	—	—	2	—	52	54
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	2	—	52	54
Pipeline	—	—	—	—	—	—
Unfinished Oils	5,205	12,744	44,960	3,497	19,450	85,856
Naphthas and Lighter	1,554	3,409	10,844	627	3,220	19,654
Refinery	1,414	3,384	9,921	627	3,023	18,369
Bulk Terminal	140	25	923	—	197	1,285
Kerosene and Light Gas Oils	823	2,214	7,259	649	3,592	14,537
Refinery	823	2,214	6,210	649	3,489	13,385
Bulk Terminal	—	—	1,049	—	103	1,152
Heavy Gas Oils	2,241	4,599	21,732	1,751	10,028	40,351
Refinery	2,120	4,575	18,259	1,751	9,744	36,449
Bulk Terminal	121	24	3,473	—	284	3,902
Residuum	587	2,522	5,125	470	2,610	11,314
Refinery	587	2,276	4,877	470	2,581	10,791
Bulk Terminal	—	246	248	—	29	523
Motor Gasoline Blending Components²	59,014	49,585	78,963	5,674	27,306	220,542
Refinery	4,830	14,756	29,948	3,126	13,851	66,511
Bulk Terminal	41,915	25,318	31,285	1,651	10,948	111,117
Pipeline	12,269	9,511	17,730	897	2,507	42,914
Reformulated - RBOB	18,832	6,189	12,316	—	12,764	50,101
Refinery	1,210	1,142	1,643	—	4,897	8,892
Bulk Terminal	13,436	3,547	6,109	—	6,535	29,627
Pipeline	4,186	1,500	4,564	—	1,332	11,582
Conventional	40,182	43,396	66,647	5,674	14,542	170,441
Refinery	3,620	13,614	28,305	3,126	8,954	57,619
Bulk Terminal	28,479	21,771	25,176	1,651	4,413	81,490
Pipeline	8,083	8,011	13,166	897	1,175	31,332
CBOB	26,868	35,482	35,341	4,247	7,205	109,143
Refinery	777	6,486	11,770	1,702	2,370	23,105
Bulk Terminal	18,008	21,112	10,554	1,648	3,666	54,988
Pipeline	8,083	7,884	13,017	897	1,169	31,050
GTAB	1,428	—	1	—	—	1,429
Refinery	—	—	1	—	—	1
Bulk Terminal	1,428	—	—	—	—	1,428
Pipeline	—	—	—	—	—	—
Other	11,886	7,914	31,305	1,427	7,337	59,869
Refinery	2,843	7,128	16,534	1,424	6,584	34,513
Bulk Terminal	9,043	659	14,622	3	747	25,074
Pipeline	—	127	149	—	6	282
Aviation Gasoline Blending Components	—	—	31	—	—	31
Refinery	—	—	31	—	—	31
Bulk Terminal	—	—	—	—	—	—
Finished Motor Gasoline	3,880	6,504	11,651	1,613	2,084	25,732
Refinery	42	1,412	3,878	736	801	6,869
Bulk Terminal	1,485	2,882	4,660	627	1,241	10,895
Pipeline	2,353	2,210	3,113	250	42	7,968
Reformulated	30	—	—	—	14	44
Refinery	—	—	—	—	14	14
Bulk Terminal	30	—	—	—	—	30
Pipeline	—	—	—	—	—	—
Reformulated (Blended with Fuel Ethanol)	30	—	—	—	14	44
Refinery	—	—	—	—	14	14
Bulk Terminal	30	—	—	—	—	30
Pipeline	—	—	—	—	—	—

See footnotes at end of table.

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Reformulated (Other)	—	—	—	—	—	—
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Conventional	3,850	6,504	11,651	1,613	2,070	25,688
Refinery	42	1,412	3,878	736	787	6,855
Bulk Terminal	1,455	2,882	4,660	627	1,241	10,865
Pipeline	2,353	2,210	3,113	250	42	7,968
Conventional (Blended with Fuel Ethanol)	28	176	—	78	—	282
Refinery	—	—	—	77	—	77
Bulk Terminal	28	176	—	1	—	205
Pipeline	—	—	—	—	—	—
Ed55 and Lower	28	176	—	78	—	282
Refinery	—	—	—	77	—	77
Bulk Terminal	28	176	—	1	—	205
Pipeline	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Refinery	—	—	—	—	—	—
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Conventional (Other)	3,822	6,328	11,651	1,535	2,070	25,406
Refinery	42	1,412	3,878	659	787	6,778
Bulk Terminal	1,427	2,706	4,660	626	1,241	10,660
Pipeline	2,353	2,210	3,113	250	42	7,968
Finished Aviation Gasoline	130	166	435	10	215	956
Refinery	—	60	374	10	137	581
Bulk Terminal	130	106	61	—	78	375
Pipeline	—	—	—	—	—	—
Kerosene-Type Jet Fuel	7,876	7,537	15,437	814	9,922	41,586
Refinery	653	1,981	6,578	353	4,046	13,611
Bulk Terminal	3,768	3,604	4,461	338	5,132	17,303
Pipeline	3,455	1,952	4,398	123	744	10,672
Kerosene	2,052	281	187	2	73	2,595
Refinery	158	244	109	2	3	516
Bulk Terminal	1,764	37	3	—	70	1,874
Pipeline	130	—	75	—	—	205
Distillate Fuel Oil²	44,872	33,653	43,188	4,444	13,849	140,006
Refinery	2,811	7,337	16,209	1,873	5,887	34,117
Bulk Terminal	33,400	19,760	14,387	1,779	6,546	75,872
Pipeline	8,661	6,556	12,592	792	1,416	30,017
15 ppm sulfur and Under	37,678	32,934	35,964	4,157	12,863	123,596
Refinery	2,177	6,986	13,148	1,642	5,153	29,106
Bulk Terminal	27,960	19,660	11,517	1,725	6,446	67,308
Pipeline	7,541	6,288	11,299	790	1,264	27,182
Greater than 15 ppm to 500 ppm sulfur	2,602	382	1,682	201	244	5,111
Refinery	197	51	925	145	244	1,562
Bulk Terminal	2,306	78	442	54	—	2,880
Pipeline	99	253	315	2	—	669
Greater than 500 ppm sulfur	4,592	337	5,542	86	742	11,299
Refinery	437	300	2,136	86	490	3,449
Bulk Terminal	3,134	22	2,428	—	100	5,684
Pipeline	1,021	15	978	—	152	2,166
Residual Fuel Oil⁶	6,033	1,280	16,251	236	4,514	28,314
Refinery	520	1,018	3,997	236	2,238	8,009
Bulk Terminal	5,513	262	12,254	—	2,270	20,299
Pipeline	—	—	—	—	6	6
Less than 0.31% Sulfur	901	57	900	25	262	2,145
Refinery	135	54	190	25	—	404
Bulk Terminal	766	3	710	—	262	1,741
0.31% to 1.00% Sulfur	1,429	274	2,539	8	467	4,717
Refinery	43	141	322	8	239	753
Bulk Terminal	1,386	133	2,217	—	228	3,964
Greater than 1.00% Percent Sulfur	3,703	949	12,812	203	3,779	21,446
Refinery	342	823	3,485	203	1,999	6,852
Bulk Terminal	3,361	126	9,327	—	1,780	14,594
Petrochemical Feedstocks	80	565	2,754	—	5	3,404
Refinery	80	565	2,754	—	5	3,404
Naphtha for Petrochemical Feedstock Use	80	427	1,882	—	5	2,394
Other Oils for Petrochemical Feedstock Use	—	138	872	—	—	1,010
Special Naphthas	43	183	1,178	—	57	1,461
Refinery	23	87	1,163	—	57	1,330
Bulk Terminal	20	96	15	—	—	131
Lubricants	1,301	827	10,558	—	1,269	13,955
Refinery	832	359	6,536	—	997	8,724
Bulk Terminal	469	468	4,022	—	272	5,231
Waxes	376	28	272	—	—	676
Refinery	376	28	272	—	—	676
Petroleum Coke	—	1,338	4,896	194	1,471	7,899
Refinery	—	1,338	4,896	194	1,471	7,899
Asphalt and Road Oil	6,397	11,572	5,096	1,647	2,333	27,045
Refinery	588	4,433	2,489	872	867	9,249
Bulk Terminal	5,809	7,139	2,607	775	1,466	17,796

Table 55. Stocks of Crude Oil and Petroleum Products by PAD District, December 2018
(Thousand Barrels) — Continued

Commodity	PAD Districts					U.S. Total
	1	2	3	4	5	
Miscellaneous Products	34	117	394	16	99	660
Refinery	34	117	394	16	99	660
Bulk Terminal	—	—	—	—	—	—
Pipeline	—	—	—	—	—	—
Total Stocks, All Oils	166,101	318,134	1,247,380	43,614	136,313	1,911,543

— = No Data Reported.

Lease stocks were excluded from crude oil stocks beginning with data for July 2016 (see explanatory notes).

¹ Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

² Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Includes stocks held at fuel ethanol production facilities.

³ Includes stocks held by merchant producers.

⁴ Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

⁵ Renewable diesel fuel includes biodiesel and other renewable diesel.

⁶ Sulfur content not available for stocks held by pipelines.

Note: Stocks are reported as of the last day of the month.

Sources: Energy Information Administration (EIA) Forms EIA-22M "Monthly Biodiesel Production Survey", EIA-810, "Monthly Refinery Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report."

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, December 2018
(Thousand Barrels)

Commodity	Motor Gasoline			Motor Gasoline Blending Components ¹			Kerosene
	Reformulated	Conventional	Total	Reformulated	Conventional	Total	
PAD District 1	30	1,497	1,527	14,646	32,099	46,745	1,922
Connecticut	—	—	—	919	98	1,017	44
Delaware	—	—	—	584	413	997	145
District of Columbia	—	—	—	—	—	—	—
Florida	—	508	508	—	5,178	5,178	—
Georgia	—	330	330	—	2,494	2,494	—
Maine	—	—	—	237	282	519	113
Maryland	—	—	—	1,327	412	1,739	105
Massachusetts	5	—	5	1,914	49	1,963	24
New Hampshire	—	—	—	—	—	—	7
New Jersey	—	40	40	5,088	11,125	16,213	431
New York	25	—	25	907	2,128	3,035	637
North Carolina	—	246	246	—	2,274	2,274	230
Pennsylvania	—	24	24	1,057	4,725	5,782	132
Rhode Island	—	—	—	915	—	915	—
South Carolina	—	193	193	—	1,424	1,424	17
Vermont	—	28	28	—	—	—	8
Virginia	—	91	91	1,698	1,399	3,097	29
West Virginia	—	37	37	—	98	98	—
PAD District 2	—	4,294	4,294	4,689	35,385	40,074	281
Illinois	—	330	330	2,565	4,114	6,679	184
Indiana	—	347	347	649	4,362	5,011	—
Iowa	—	183	183	—	1,708	1,708	—
Kansas	—	327	327	—	4,256	4,256	20
Kentucky	—	228	228	374	1,195	1,569	8
Michigan	—	252	252	56	3,297	3,353	—
Minnesota	—	498	498	40	2,634	2,674	—
Missouri	—	248	248	412	666	1,078	—
Nebraska	—	92	92	—	744	744	—
North Dakota	—	69	69	—	929	929	—
Ohio	—	787	787	3	4,077	4,080	15
Oklahoma	—	562	562	—	3,618	3,618	54
South Dakota	—	73	73	—	510	510	—
Tennessee	—	168	168	—	2,057	2,057	—
Wisconsin	—	130	130	590	1,218	1,808	—
PAD District 3	—	8,538	8,538	7,752	53,481	61,233	112
Alabama	—	142	142	—	1,280	1,280	6
Arkansas	—	159	159	8	841	849	—
Louisiana	—	1,623	1,623	250	13,312	13,562	50
Mississippi	—	2,429	2,429	5	2,393	2,398	—
New Mexico	—	93	93	—	646	646	—
Texas	—	4,092	4,092	7,489	35,009	42,498	56
PAD District 4	—	1,363	1,363	—	4,777	4,777	2
Colorado	—	199	199	—	1,349	1,349	—
Idaho	—	265	265	—	99	99	—
Montana	—	308	308	—	1,246	1,246	—
Utah	—	118	118	—	1,358	1,358	2
Wyoming	—	473	473	—	725	725	—
PAD District 5	14	2,028	2,042	11,432	13,367	24,799	73
Alaska	—	852	852	—	—	—	70
Arizona	—	45	45	714	224	938	—
California	14	358	372	10,492	6,683	17,175	3
Hawaii	—	1	1	—	1,057	1,057	—
Nevada	—	194	194	21	324	345	—
Oregon	—	39	39	—	1,146	1,146	—
Washington	—	539	539	205	3,933	4,138	—
U.S. Total	44	17,720	17,764	38,519	139,109	177,628	2,390

See footnotes at end of table.

Table 56. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, December 2018
(Thousand Barrels) — Continued

Commodity	Distillate Fuel Oil ¹				Residual Fuel Oil	Propane
	15 ppm sulfur and under	Greater than 15 ppm to 500 ppm sulfur	Greater than 500 ppm	Total		
PAD District 1	30,137	2,503	3,571	36,211	6,033	4,714
Connecticut	2,772	191	119	3,082	26	—
Delaware	597	39	111	747	865	17
District of Columbia	—	—	—	—	—	—
Florida	2,026	130	—	2,156	998	202
Georgia	1,097	—	—	1,097	485	15
Maine	1,129	4	371	1,504	106	—
Maryland	1,484	287	—	1,771	170	3
Massachusetts	1,144	470	245	1,859	36	—
New Hampshire	587	—	186	773	9	375
New Jersey	6,670	580	907	8,157	2,318	55
New York	4,694	209	502	5,405	446	1,560
North Carolina	1,339	—	13	1,352	—	427
Pennsylvania	3,460	191	751	4,402	488	1,289
Rhode Island	1,090	66	—	1,156	—	—
South Carolina	751	—	—	751	12	701
Vermont	42	—	10	52	—	—
Virginia	1,085	296	356	1,737	74	9
West Virginia	170	40	—	210	—	61
PAD District 2	26,646	129	322	27,097	1,280	17,460
Illinois	3,698	—	—	3,698	246	936
Indiana	3,121	—	95	3,216	87	339
Iowa	2,572	—	—	2,572	3	611
Kansas	2,319	—	—	2,319	22	9,613
Kentucky	824	22	—	846	206	294
Michigan	2,089	26	—	2,115	283	4,162
Minnesota	2,081	—	14	2,095	150	272
Missouri	740	30	5	775	—	171
Nebraska	1,039	—	—	1,039	—	371
North Dakota	902	1	—	903	35	42
Ohio	2,265	—	36	2,301	114	529
Oklahoma	2,154	42	55	2,251	20	44
South Dakota	512	—	—	512	—	28
Tennessee	1,024	—	—	1,024	81	2
Wisconsin	1,306	8	117	1,431	33	46
PAD District 3	24,665	1,367	4,564	30,596	16,251	27,838
Alabama	1,114	5	52	1,171	337	35
Arkansas	953	—	29	982	—	20
Louisiana	5,665	733	1,998	8,396	8,233	1,328
Mississippi	957	358	175	1,490	61	2,582
New Mexico	436	—	—	436	118	3
Texas	15,540	271	2,310	18,121	7,502	23,870
PAD District 4	3,367	199	86	3,652	236	559
Colorado	810	—	—	810	8	27
Idaho	200	—	—	200	—	—
Montana	1,190	71	—	1,261	56	30
Utah	553	57	86	696	48	442
Wyoming	614	71	—	685	124	60
PAD District 5	11,599	244	590	12,433	4,508	1,413
Alaska	1,060	—	61	1,121	114	4
Arizona	750	—	—	750	—	840
California	5,933	244	270	6,447	3,004	335
Hawaii	204	—	253	457	457	53
Nevada	539	—	6	545	—	—
Oregon	855	—	—	855	7	—
Washington	2,258	—	—	2,258	926	181
U.S. Total	96,414	4,442	9,133	109,989	28,308	51,984

— = No Data Reported.

¹ Excludes stocks located in the "Northeast Heating Oil Reserve", "Northeast Regional Refined Petroleum Product Reserve", and "State of New York's Strategic Fuels Reserve Program". For details see Appendix D.

Note: Stocks are reported as of the last day of the month.

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

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-815, "Monthly Bulk Terminal and Blender Report," EIA-816, "Monthly Natural Gas Liquids Report," and EIA-819, "Monthly Oxygenate Report."

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail ¹ Between PAD Districts, December 2018
(Thousand Barrels)

Commodity	From 1 to			From 2 to				From 3 to	
	2	3	5	1	3	4	5	1	2
Crude Oil	215	74	0	3,180	63,439	8,057	5,654	3,584	31,852
Petroleum Products	15,617	234	0	18,843	37,603	7,916	4,692	114,569	16,639
Natural Gas Liquids	7,018	58	0	3,729	24,177	4,403	876	2,518	7,331
Ethane	4,830	0	—	0	9,955	692	—	0	909
Propane	1,117	29	0	2,814	9,238	2,072	336	2,461	1,240
Normal Butane	260	0	0	755	2,253	875	338	40	497
Isobutane	514	29	0	160	1,044	313	202	17	865
Natural Gasoline	297	0	—	0	1,687	451	—	0	3,820
Refinery Olefins	0	0	—	487	466	—	—	0	0
Ethylene	—	—	—	—	—	—	—	—	—
Propylene	0	0	—	487	466	—	—	0	0
Normal Butylene	—	—	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—	—	—
Unfinished Oils	35	0	—	0	650	—	—	177	200
Motor Gasoline Blending Components	5,852	0	0	1,214	1,829	1,325	0	58,775	5,367
Reformulated - RBOB	0	0	0	0	370	—	0	8,638	2,103
Conventional	5,852	0	0	1,214	1,459	1,325	0	50,137	3,264
CBOB	5,852	0	0	1,214	1,237	1,325	0	50,067	3,059
GTAB	—	—	—	—	—	—	—	—	—
Other	0	0	—	0	222	—	—	70	205
Renewable Fuels	0	0	0	10,105	7,235	362	3,625	583	0
Fuel Ethanol	0	0	0	9,792	6,770	327	3,361	556	0
Renewable Diesel Fuel ²	0	0	0	313	465	35	263	27	0
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	69	0	0	466	506	183	0	6,187	135
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	69	0	0	466	506	183	0	6,187	135
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	69	0	0	466	506	183	0	6,187	135
Finished Aviation Gasoline	0	0	—	0	0	—	—	45	10
Kerosene-Type Jet Fuel	284	0	0	161	59	892	0	14,586	1,700
Kerosene	—	0	—	0	0	—	—	315	—
Distillate Fuel Oil	2,359	0	0	1,144	637	751	0	30,293	1,670
15 ppm sulfur and under	2,359	0	0	1,144	637	751	0	28,386	1,517
Greater than 15 ppm to 500 ppm sulfur	0	0	—	0	0	—	—	236	153
Greater than 500 ppm sulfur	—	0	—	0	0	—	—	1,671	—
Residual Fuel Oil	0	176	—	0	1,062	—	—	105	0
Petrochemical Feedstocks	0	0	—	—	119	—	—	—	0
Naphtha for Petrochemical Feedstock Use	0	0	—	—	95	—	—	—	0
Other Oils for Petrochemical Feedstock Use	0	0	—	—	24	—	—	—	0
Special Naphthas	0	0	—	—	0	—	—	—	28
Lubricants	0	0	—	0	0	—	—	276	115
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	0	0	0	918	663	0	0	105	0
Asphalt and Road Oil	0	0	0	619	200	0	192	603	53
Miscellaneous Products	0	0	—	—	0	—	—	—	30
Total	15,832	308	0	22,023	101,043	15,973	10,346	118,153	48,491

See footnotes at end of table.

Table 57. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge, and Rail ¹ Between PAD Districts, December 2018
(Thousand Barrels) — Continued

Commodity	From 3 to		From 4 to				From 5 to		
	4	5	1	2	3	5	1	3	4
Crude Oil	0	23	467	27,528	1,408	91	0	0	0
Petroleum Products	0	4,761	0	13,592	4,068	2,359	0	25	20
Natural Gas Liquids	0	112	0	12,369	3,762	90	0	0	0
Ethane	0	—	0	3,060	1,639	—	0	0	0
Propane	0	0	0	4,957	973	0	0	0	0
Normal Butane	0	88	0	2,055	325	71	0	0	0
Isobutane	0	24	0	865	286	19	0	0	0
Natural Gasoline	0	—	0	1,432	539	—	0	0	0
Refinery Olefins	—	—	0	0	0	—	0	0	—
Ethylene	—	—	—	—	—	—	—	—	—
Propylene	—	—	0	0	0	—	0	0	—
Normal Butylene	—	—	—	—	—	—	—	—	—
Isobutylene	—	—	—	—	—	—	—	—	—
Unfinished Oils	—	—	0	0	0	—	0	0	—
Motor Gasoline Blending Components	0	3,282	0	202	0	1,158	0	0	0
Reformulated - RBOB	—	2,135	0	0	0	0	0	0	—
Conventional	0	1,147	0	202	0	1,158	0	0	0
CBOB	0	1,147	0	202	0	1,158	0	0	0
GTAB	—	—	—	—	—	—	—	—	—
Other	—	—	0	0	0	—	0	0	—
Renewable Fuels	0	506	0	0	0	27	0	0	0
Fuel Ethanol	0	196	0	0	0	27	0	0	0
Renewable Diesel Fuel ²	0	310	0	0	0	0	0	0	0
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	0	0	0	364	0	406	0	0	0
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	0	0	0	364	0	406	0	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	0	0	0	364	0	406	0	0	0
Finished Aviation Gasoline	—	—	0	0	0	—	0	0	—
Kerosene-Type Jet Fuel	0	143	0	22	0	10	0	0	0
Kerosene	—	—	0	—	0	—	0	0	—
Distillate Fuel Oil	0	578	0	381	0	411	0	0	0
15 ppm sulfur and under	0	578	0	381	0	411	0	0	0
Greater than 15 ppm to 500 ppm sulfur	—	—	0	0	0	—	0	0	—
Greater than 500 ppm sulfur	—	—	0	—	0	—	0	0	—
Residual Fuel Oil	—	—	0	0	0	—	0	0	—
Petrochemical Feedstocks	—	—	—	0	0	—	—	0	—
Naphtha for Petrochemical Feedstock Use	—	—	—	0	0	—	—	0	—
Other Oils for Petrochemical Feedstock Use	—	—	—	0	0	—	—	0	—
Special Naphthas	—	—	—	0	0	—	—	0	—
Lubricants	—	—	0	0	0	—	0	0	—
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	0	0	0	68	175	45	0	25	0
Asphalt and Road Oil	0	140	0	186	131	211	0	0	20
Miscellaneous Products	—	—	—	0	0	—	—	0	—
Total	0	4,784	467	41,120	5,476	2,450	0	25	20

— = No Data Reported.

¹ Movements of crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil include movements by rail. Movements of other products are by pipeline, tanker and barge only.

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, December 2018
(Thousand Barrels)

Commodity	From 1 to		From 2 to			From 3 to			
	2	3	1	3	4	1	2	4	5
Crude Oil	189	74	214	60,674	8,057	164	31,852	0	-
Petroleum Products	15,247	0	3,423	25,691	7,554	88,540	15,273	0	4,003
Natural Gas Liquids	6,683	0	1,372	23,286	4,403	2,361	6,903	0	-
Ethane	4,830	0	0	9,955	692	0	909	0	-
Propane	1,060	0	1,372	8,530	2,072	2,361	1,104	0	-
Normal Butane	147	0	0	2,183	875	0	285	0	-
Isobutane	349	0	0	931	313	0	785	0	-
Natural Gasoline	297	0	0	1,687	451	0	3,820	0	-
Motor Gasoline Blending Components	5,852	0	824	1,607	1,325	45,972	5,162	0	3,282
Reformulated - RBOB	0	0	0	370	-	8,403	2,103	-	2,135
Conventional	5,852	0	824	1,237	1,325	37,569	3,059	0	1,147
CBOB	5,852	0	824	1,237	1,325	37,569	3,059	0	1,147
GTAB	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Renewable Fuels	-	-	-	-	-	-	-	-	-
Fuel Ethanol	-	-	-	-	-	-	-	-	-
Renewable Diesel Fuel ¹	-	-	-	-	-	-	-	-	-
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Finished Motor Gasoline	69	0	433	102	183	2,243	135	0	0
Reformulated	-	-	-	-	-	-	-	-	-
Reformulated Blended with Fuel Ethanol	-	-	-	-	-	-	-	-	-
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	69	0	433	102	183	2,243	135	0	0
Conventional Blended with Fuel Ethanol	-	-	-	-	-	-	-	-	-
Ed55 and Lower	-	-	-	-	-	-	-	-	-
Greater than Ed55	-	-	-	-	-	-	-	-	-
Conventional Other	69	0	433	102	183	2,243	135	0	0
Finished Aviation Gasoline	-	-	-	-	-	-	-	-	-
Kerosene-Type Jet Fuel	284	0	137	59	892	11,659	1,625	0	143
Kerosene	-	0	0	0	-	315	-	-	-
Distillate Fuel Oil	2,359	0	657	637	751	25,990	1,448	0	578
15 ppm sulfur and under	2,359	0	657	637	751	24,083	1,295	0	578
Greater than 15 ppm to 500 ppm sulfur	0	0	0	0	-	236	153	-	-
Greater than 500 ppm sulfur	-	0	0	0	-	1,671	-	-	-
Residual Fuel Oil	-	-	-	-	-	-	-	-	-
Miscellaneous Products	-	-	-	-	-	-	-	-	-
Total	15,436	74	3,637	86,365	15,611	88,704	47,125	0	4,003

See footnotes at end of table.

Table 58. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, December 2018
(Thousand Barrels) — Continued

Commodity	From 4 to				From 5 to	
	1	2	3	5	3	4
Crude Oil	0	27,528	353	—	0	0
Petroleum Products	0	13,338	3,762	1,985	0	0
Natural Gas Liquids	0	12,369	3,762	—	0	0
Ethane	0	3,060	1,639	—	0	0
Propane	0	4,957	973	—	0	0
Normal Butane	0	2,055	325	—	0	0
Isobutane	0	865	286	—	0	0
Natural Gasoline	0	1,432	539	—	0	0
Motor Gasoline Blending Components	0	202	0	1,158	0	0
Reformulated - RBOB	0	0	0	0	0	—
Conventional	0	202	0	1,158	0	0
CBOB	0	202	0	1,158	0	0
GTAB	—	—	—	—	—	—
Other	—	—	—	—	—	—
Renewable Fuels	—	—	—	—	—	—
Fuel Ethanol	—	—	—	—	—	—
Renewable Diesel Fuel ¹	—	—	—	—	—	—
Other Renewable Fuels	—	—	—	—	—	—
Finished Motor Gasoline	0	364	0	406	0	0
Reformulated	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—
Conventional	0	364	0	406	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Conventional Other	0	364	0	406	0	0
Finished Aviation Gasoline	—	—	—	—	—	—
Kerosene-Type Jet Fuel	0	22	0	10	0	0
Kerosene	0	—	0	—	0	—
Distillate Fuel Oil	0	381	0	411	0	0
15 ppm sulfur and under	0	381	0	411	0	0
Greater than 15 ppm to 500 ppm sulfur	0	0	0	—	0	—
Greater than 500 ppm sulfur	0	—	0	—	0	—
Residual Fuel Oil	—	—	—	—	—	—
Miscellaneous Products	—	—	—	—	—	—
Total	0	40,866	4,115	1,985	0	0

— = No Data Reported.

¹ Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report."

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, December 2018
(Thousand Barrels)

Commodity	From 1 to			From 2 to		
	2	3	5	1	3	5
Crude Oil	26	0	—	374	1,893	—
Petroleum Products	35	176	0	1,036	3,302	0
Natural Gas Liquids	—	0	—	0	0	—
Ethane	—	—	—	—	—	—
Propane	—	0	—	0	0	—
Normal Butane	—	—	—	—	—	—
Isobutane	—	—	—	—	—	—
Natural Gasoline	—	—	—	—	—	—
Unfinished Oils	35	0	—	0	650	—
Motor Gasoline Blending Components	0	0	—	390	222	—
Reformulated - RBOB	—	0	—	0	0	—
Conventional	0	0	—	390	222	—
CBOB	0	0	—	390	0	—
GTAB	—	—	—	—	—	—
Other	0	0	—	0	222	—
Renewable Fuels	0	0	0	102	812	0
Fuel Ethanol	0	0	—	102	751	—
Renewable Diesel Fuel ¹	0	0	0	0	61	0
Other Renewable Fuels	—	—	—	—	—	—
Finished Motor Gasoline	0	0	—	33	404	—
Reformulated	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—
Conventional	0	0	—	33	404	—
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—
Conventional Other	0	0	—	33	404	—
Finished Aviation Gasoline	0	0	—	0	0	—
Kerosene-Type Jet Fuel	0	0	—	24	0	—
Kerosene	—	—	—	—	—	—
Distillate Fuel Oil	0	0	—	487	0	—
15 ppm sulfur and under	0	0	—	487	0	—
Greater than 15 ppm to 500 ppm sulfur	—	—	—	—	—	—
Greater than 500 ppm sulfur	—	—	—	—	—	—
Residual Fuel Oil	0	176	—	0	1,062	—
Less than 0.31 percent sulfur	0	0	—	—	33	—
0.31 to 1.00 percent sulfur	0	0	—	—	65	—
Greater than 1.00 percent sulfur	0	176	—	0	964	—
Petrochemical Feedstocks	0	0	—	—	119	—
Naphtha for Petrochemical Feedstock Use	0	0	—	—	95	—
Other Oils for Petrochemical Feedstock Use	0	0	—	—	24	—
Special Naphthas	0	0	—	—	0	—
Lubricants	0	0	—	0	0	—
Waxes	—	—	—	—	—	—
Marketable Petroleum Coke	—	—	—	—	—	—
Asphalt and Road Oil	0	0	—	0	33	—
Miscellaneous Products	0	0	—	—	0	—
Total	61	176	0	1,410	5,195	0

See footnotes at end of table.

Table 59. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, December 2018
(Thousand Barrels) — Continued

Commodity	From 3 to						From 5 to		
	1	New England	Central Atlantic	Lower Atlantic	2	5	1	2	3
Crude Oil	3,380	—	3,380	—	0	—	0	0	0
Petroleum Products	25,582	591	470	24,521	918	310	0	0	0
Natural Gas Liquids	44	—	—	44	—	—	0	—	0
Ethane	—	—	—	—	—	—	—	—	—
Propane	44	—	—	44	—	—	0	—	0
Normal Butane	—	—	—	—	—	—	—	—	—
Isobutane	—	—	—	—	—	—	—	—	—
Natural Gasoline	—	—	—	—	—	—	—	—	—
Unfinished Oils	177	—	177	—	200	—	0	0	0
Motor Gasoline Blending Components	12,803	235	70	12,498	205	—	0	0	0
Reformulated - RBOB	235	235	—	—	—	—	0	—	0
Conventional	12,568	—	70	12,498	205	—	0	0	0
CBOB	12,498	—	—	12,498	0	—	0	0	0
GTAB	—	—	—	—	—	—	—	—	—
Other	70	—	70	—	205	—	0	0	0
Renewable Fuels	583	—	27	556	0	310	0	0	0
Fuel Ethanol	556	—	—	556	0	—	0	0	0
Renewable Diesel Fuel ¹	27	—	27	—	0	310	0	0	0
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Finished Motor Gasoline	3,944	—	—	3,944	0	—	0	0	0
Reformulated	—	—	—	—	—	—	—	—	—
Reformulated Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Reformulated Other	—	—	—	—	—	—	—	—	—
Conventional	3,944	—	—	3,944	0	—	0	0	0
Conventional Blended with Fuel Ethanol	—	—	—	—	—	—	—	—	—
Ed55 and Lower	—	—	—	—	—	—	—	—	—
Greater than Ed55	—	—	—	—	—	—	—	—	—
Conventional Other	3,944	—	—	3,944	0	—	0	0	0
Finished Aviation Gasoline	45	—	—	45	10	—	0	0	0
Kerosene-Type Jet Fuel	2,927	—	—	2,927	75	—	0	0	0
Kerosene	—	—	—	—	—	—	—	—	—
Distillate Fuel Oil	4,303	356	—	3,947	222	—	0	0	0
15 ppm sulfur and under	4,303	356	—	3,947	222	—	0	0	0
Greater than 15 ppm to 500 ppm sulfur	—	—	—	—	—	—	—	—	—
Greater than 500 ppm sulfur	—	—	—	—	—	—	—	—	—
Residual Fuel Oil	105	—	105	—	0	—	0	0	0
Less than 0.31 percent sulfur	—	—	—	—	0	—	—	0	0
0.31 to 1.00 percent sulfur	—	—	—	—	0	—	—	0	0
Greater than 1.00 percent sulfur	105	—	105	—	0	—	0	0	0
Petrochemical Feedstocks	—	—	—	—	0	—	—	0	0
Naphtha for Petrochemical Feedstock Use	—	—	—	—	0	—	—	0	0
Other Oils for Petrochemical Feedstock Use	—	—	—	—	0	—	—	0	0
Special Naphthas	—	—	—	—	28	—	—	0	0
Lubricants	276	—	91	185	115	—	0	0	0
Waxes	—	—	—	—	—	—	—	—	—
Marketable Petroleum Coke	—	—	—	—	—	—	—	—	—
Asphalt and Road Oil	375	—	—	375	33	—	0	0	0
Miscellaneous Products	—	—	—	—	30	—	—	0	0
Total	28,962	591	3,850	24,521	918	310	0	0	0

— = No Data Reported.

¹ Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movements Report."

Table 60. Movements of Crude Oil and Selected Products by Rail Between PAD Districts, December 2018
(Thousand Barrels)

Commodity	From 1 to				From 2 to			
	2	3	4	5	1	3	4	5
Crude Oil	0	0	0	0	2,592	872	0	5,654
Propane	57	29	0	0	1,442	708	0	336
Propylene	0	0	–	–	487	466	–	–
Normal Butane	113	0	0	0	755	70	0	338
Isobutane	165	29	0	0	160	113	0	202
Fuel Ethanol	0	0	0	0	9,690	6,019	327	3,361
Biodiesel	0	0	0	0	313	404	35	263
Marketable Petroleum Coke	0	0	0	0	918	663	0	0
Asphalt and Road Oil	0	0	0	0	619	167	0	192

Commodity	From 3 to				From 4 to			
	1	2	4	5	1	2	3	5
Crude Oil	40	0	0	23	467	0	1,055	91
Propane	56	136	0	0	0	0	0	0
Propylene	0	0	–	–	0	0	0	–
Normal Butane	40	212	0	88	0	0	0	71
Isobutane	17	80	0	24	0	0	0	19
Fuel Ethanol	0	0	0	196	0	0	0	27
Biodiesel	0	0	0	0	0	0	0	0
Marketable Petroleum Coke	105	0	0	0	0	68	175	45
Asphalt and Road Oil	228	20	0	140	0	186	131	211

Commodity	From 5 to			
	1	2	3	4
Crude Oil	0	0	0	0
Propane	0	0	0	0
Propylene	0	0	0	–
Normal Butane	0	0	0	0
Isobutane	0	0	0	0
Fuel Ethanol	0	0	0	0
Biodiesel	0	0	0	0
Marketable Petroleum Coke	0	0	25	0
Asphalt and Road Oil	0	0	0	20

– = No Data Reported.

Source: Rail Movements are estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 61. Movements of Crude Oil by Pipeline, Tanker, Barge and Rail between PAD Districts, December 2018
(Thousand Barrels)

PADD	Pipeline	Tanker and Barge	Rail	Total
From 1 to				
2	189	26	0	215
3	74	0	0	74
4	0	—	0	0
5	—	—	0	0
From 2 to				
1	214	374	2,592	3,180
3	60,674	1,893	872	63,439
4	8,057	—	0	8,057
5	—	—	5,654	5,654
From 3 to				
1	164	3,380	40	3,584
2	31,852	0	0	31,852
4	0	—	0	0
5	—	—	23	23
From 4 to				
1	0	0	467	467
2	27,528	0	0	27,528
3	353	0	1,055	1,408
5	—	—	91	91
From 5 to				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	—	0	0

— = No Data Reported.

Sources: Energy Information Administration (EIA) Forms EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail ¹ Between PAD Districts, December 2018
(Thousand Barrels)

Commodity	PAD District 1			PAD District 2			PAD District 3		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	7,231	289	6,942	59,595	80,330	-20,735	64,921	35,459	29,462
Petroleum Products	133,411	15,851	117,560	45,848	69,055	-23,206	41,930	135,969	-94,039
Natural Gas Liquids	6,247	7,076	-829	26,718	33,185	-6,467	27,997	9,961	18,036
Ethane	0	4,830	-4,830	8,799	10,647	-1,848	11,594	909	10,685
Propane	5,275	1,146	4,129	7,314	14,460	-7,146	10,240	3,701	6,539
Normal Butane	795	260	535	2,812	4,221	-1,409	2,578	625	1,953
Isobutane	177	543	-366	2,244	1,719	525	1,359	906	453
Natural Gasoline	0	297	-297	5,549	2,138	3,411	2,226	3,820	-1,594
Refinery Olefins	487	0	487	0	953	-953	466	0	466
Ethylene	0	0	-	-	-	-	0	0	-
Propylene	487	0	487	0	953	-953	466	0	466
Normal Butylene	0	0	-	0	0	-	0	0	-
Isobutylene	0	0	-	0	0	-	0	0	-
Unfinished Oils	177	35	142	235	650	-415	650	377	273
Motor Gasoline Blending Components	59,989	5,852	54,137	11,421	4,368	7,053	1,829	67,424	-65,595
Reformulated - RBOB	8,638	0	8,638	2,103	370	1,733	370	12,876	-12,506
Conventional	51,351	5,852	45,499	9,318	3,998	5,320	1,459	54,548	-53,089
CBOB	51,281	5,852	45,429	9,113	3,776	5,337	1,237	54,273	-53,036
GTAB	0	0	-	-	-	-	0	0	-
Other	70	0	70	205	222	-17	222	275	-53
Renewable Fuels	10,688	0	10,688	0	21,327	-21,327	7,235	1,089	6,146
Fuel Ethanol	10,348	0	10,348	0	20,251	-20,251	6,770	752	6,018
Renewable Diesel Fuel ²	340	0	340	0	1,076	-1,076	465	337	128
Other Renewable Fuels	-	-	-	-	-	-	0	0	-
Finished Motor Gasoline	6,653	69	6,584	568	1,155	-587	506	6,322	-5,816
Reformulated	0	0	-	0	0	-	0	0	-
Reformulated Blended with Fuel Ethanol	0	0	-	0	0	-	0	0	-
Reformulated Other	-	-	-	-	-	-	-	-	-
Conventional	6,653	69	6,584	568	1,155	-587	506	6,322	-5,816
Conventional Blended with Fuel Ethanol	0	0	-	0	0	-	0	0	-
Ed55 and Lower	0	0	-	0	0	-	0	0	-
Greater than Ed55	0	0	-	0	0	-	0	0	-
Conventional Other	6,653	69	6,584	568	1,155	-587	506	6,322	-5,816
Finished Aviation Gasoline	45	0	45	10	0	10	0	55	-55
Kerosene-Type Jet Fuel	14,747	284	14,463	2,006	1,112	894	59	16,429	-16,370
Kerosene	315	0	315	0	0	-	0	315	-315
Distillate Fuel Oil	31,437	2,359	29,078	4,410	2,532	1,878	637	32,541	-31,904
15 ppm sulfur and under	29,530	2,359	27,171	4,257	2,532	1,725	637	30,481	-29,844
Greater than 15 ppm to 500 ppm sulfur	236	0	236	153	0	153	0	389	-389
Greater than 500 ppm sulfur	1,671	0	1,671	0	0	-	0	1,671	-1,671
Residual Fuel Oil	105	176	-71	0	1,062	-1,062	1,238	105	1,133
Petrochemical Feedstocks	0	0	-	0	119	-119	119	0	119
Naphtha for Petrochemical Feedstock Use	0	0	-	0	95	-95	95	0	95
Other Oils for Petrochemical Feedstock Use	-	-	-	0	24	-24	24	0	24
Special Naphthas	0	0	-	28	0	28	0	28	-28
Lubricants	276	0	276	115	0	115	0	391	-391
Waxes	0	0	-	0	0	-	0	0	-
Marketable Petroleum Coke	1,023	0	1,023	68	1,581	-1,513	863	105	758
Asphalt and Road Oil	1,222	0	1,222	239	1,011	-772	331	797	-465
Miscellaneous Products	0	0	-	30	0	30	0	30	-30
Total	140,642	16,140	124,502	105,443	149,384	-43,941	106,851	171,428	-64,577

See footnotes at end of table.

Table 62. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, Barge and Rail ¹ Between PAD Districts, December 2018
(Thousand Barrels) — Continued

Commodity	PAD District 4			PAD District 5		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil	8,057	29,493	-21,436	5,767	0	5,767
Petroleum Products	7,936	20,019	-12,084	11,813	44	11,769
Natural Gas Liquids	4,403	16,221	-11,818	1,078	0	1,078
Ethane	692	4,699	-4,007	0	0	—
Propane	2,072	5,930	-3,858	336	0	336
Normal Butane	875	2,451	-1,576	497	0	497
Isobutane	313	1,170	-857	245	0	245
Natural Gasoline	451	1,971	-1,520	0	0	—
Refinery Olefins	0	0	—	0	0	—
Ethylene	—	—	—	—	—	—
Propylene	0	0	—	0	0	—
Normal Butylene	0	0	—	0	0	—
Isobutylene	0	0	—	0	0	—
Unfinished Oils	0	0	—	0	0	—
Motor Gasoline Blending Components	1,325	1,360	-35	4,440	0	4,440
Reformulated - RBOB	—	—	—	2,135	0	2,135
Conventional	1,325	1,360	-35	2,305	0	2,305
CBOB	1,325	1,360	-35	2,305	0	2,305
GTAB	—	—	—	—	—	—
Other	0	0	—	0	0	—
Renewable Fuels	362	27	335	4,158	0	4,158
Fuel Ethanol	327	27	299	3,585	0	3,585
Renewable Diesel Fuel ²	35	0	35	573	0	573
Other Renewable Fuels	—	—	—	0	0	—
Finished Motor Gasoline	183	770	-587	406	0	406
Reformulated	—	—	—	0	0	—
Reformulated Blended with Fuel Ethanol	—	—	—	0	0	—
Reformulated Other	—	—	—	—	—	—
Conventional	183	770	-587	406	0	406
Conventional Blended with Fuel Ethanol	0	0	—	0	0	—
Ed55 and Lower	0	0	—	0	0	—
Greater than Ed55	0	0	—	0	0	—
Conventional Other	183	770	-587	406	0	406
Finished Aviation Gasoline	0	0	—	0	0	—
Kerosene-Type Jet Fuel	892	32	860	153	0	153
Kerosene	0	0	—	0	0	—
Distillate Fuel Oil	751	792	-41	989	0	989
15 ppm sulfur and under	751	792	-41	989	0	989
Greater than 15 ppm to 500 ppm sulfur	0	0	—	0	0	—
Greater than 500 ppm sulfur	0	0	—	0	0	—
Residual Fuel Oil	0	0	—	0	0	—
Petrochemical Feedstocks	—	—	—	0	0	—
Naphtha for Petrochemical Feedstock Use	—	—	—	0	0	—
Other Oils for Petrochemical Feedstock Use	—	—	—	—	—	—
Special Naphthas	—	—	—	0	0	—
Lubricants	0	0	—	0	0	—
Waxes	0	0	—	0	0	—
Marketable Petroleum Coke	0	289	-289	45	25	21
Asphalt and Road Oil	20	528	-509	543	20	524
Miscellaneous Products	0	0	—	0	0	—
Total	15,993	49,512	-33,520	17,580	44	17,535

— = No Data Reported.

¹ Movements of crude oil, propane, normal butane, isobutane, propylene, ethanol, biodiesel, marketable petroleum coke, and asphalt and road oil include movements by rail. Movements of other products are by pipeline, tanker and barge only.

² Renewable diesel fuel includes biodiesel and other renewable diesel.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-817, "Monthly Tanker and Barge Movements Report." Rail net movements estimates based on EIA analysis of data from the Surface Transportation Board and other information.

Appendix A

District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

PAD District I

East Coast: The District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian No. 1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

Sub-PAD District I

New England: The States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Central Atlantic: The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

Lower Atlantic: The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

PAD District II

Indiana-Illinois-Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

Minnesota-Wisconsin-North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma-Kansas-Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana-Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

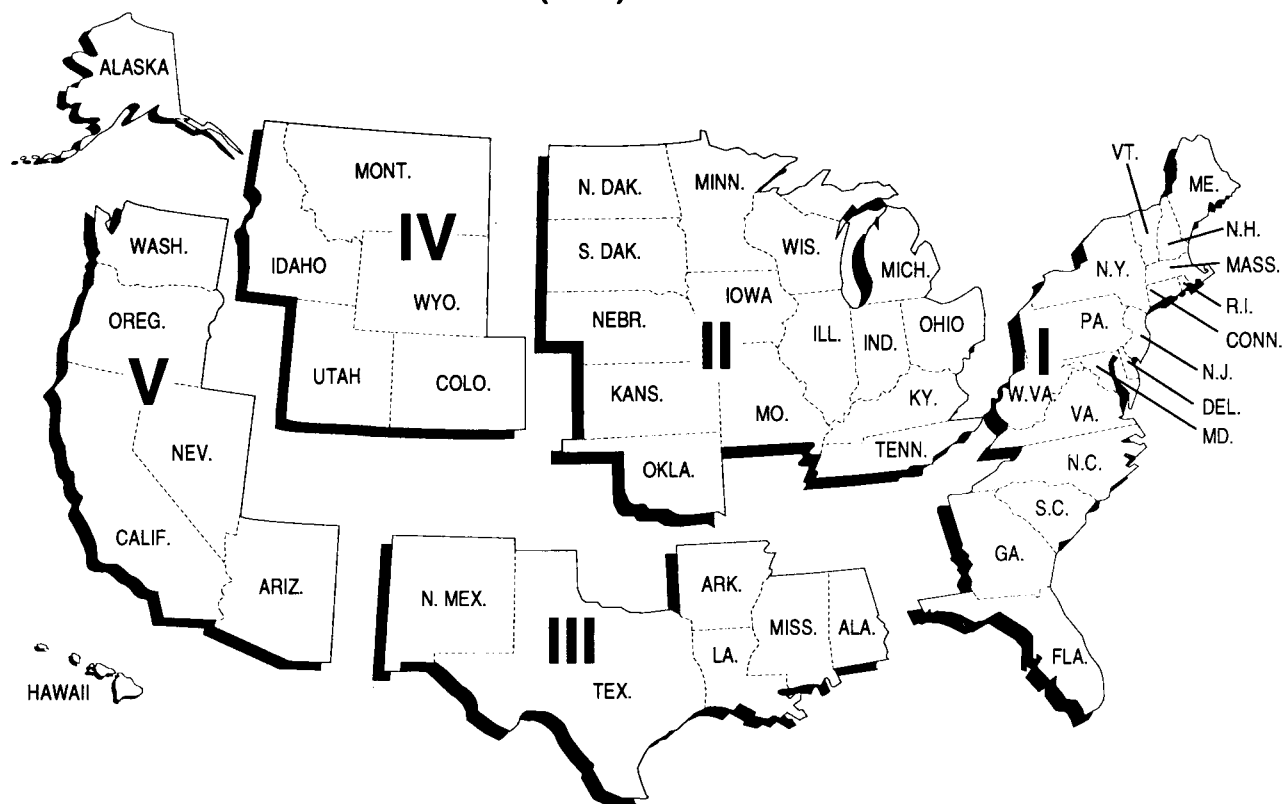
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

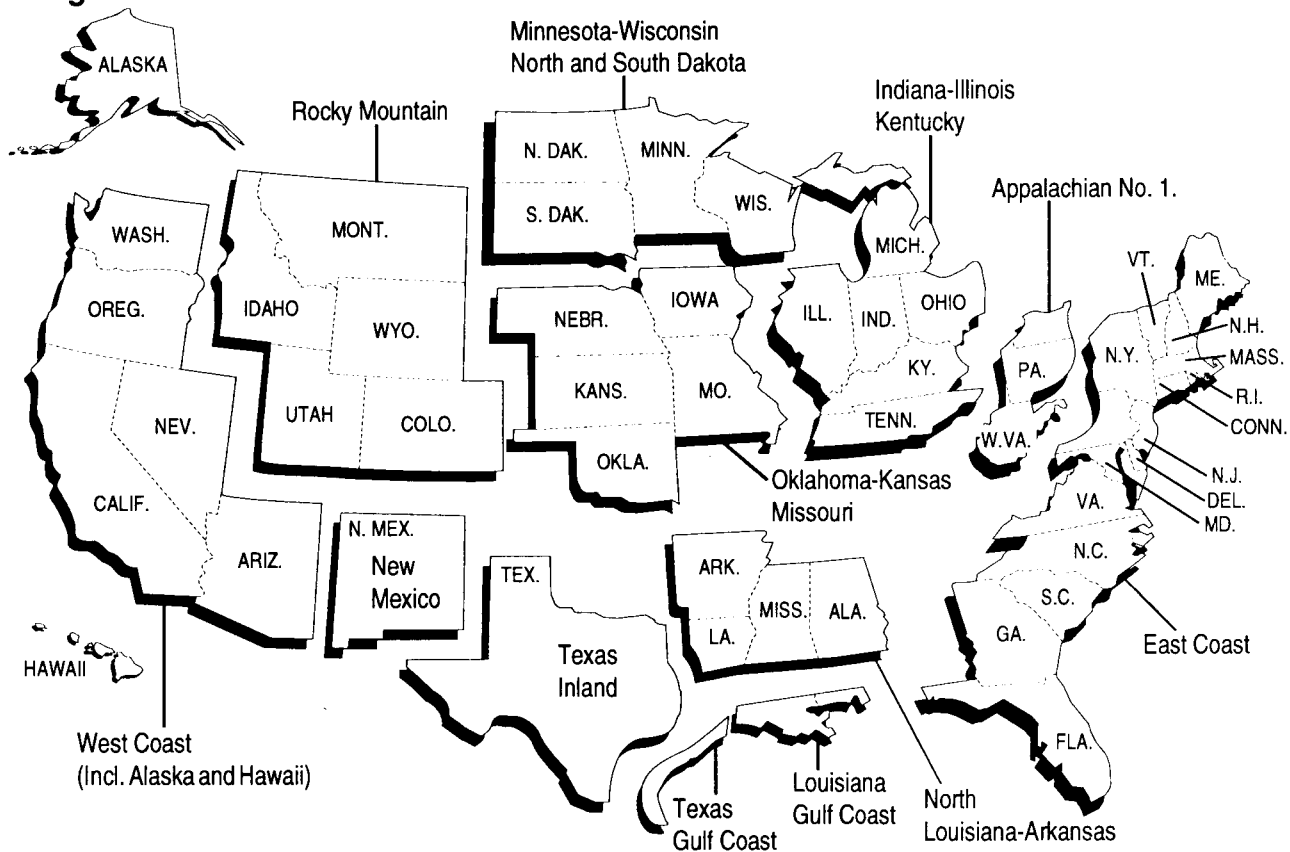
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

Petroleum Administration for Defense (PAD) Districts



Refining Districts



PSM Explanatory Notes

Preface

The *Petroleum Supply Monthly (PSM)* is the monthly component of a series of three publications concerning the supply and disposition of crude oil and petroleum products produced by the Petroleum Division of the Energy Information Administration (EIA). The other two components are the *Weekly Petroleum Status Report (WPSR)* and the *Petroleum Supply Annual (PSA)*. Together these publications present a comprehensive snapshot of petroleum supply data on a weekly, monthly and yearly basis.

Data presented in the PSM describe the supply and disposition of petroleum products in the United States and major U.S. geographic regions. The data series describe production, imports and exports, inter-Petroleum Administration for Defense (PAD) District movements, and inventories by the primary suppliers of petroleum products in the United States (50 States and the District of Columbia). The reporting universe includes those petroleum sectors in primary supply: petroleum refiners, motor gasoline blenders, operators of natural gas processing plants and fractionators, inter-PAD District transporters, importers, and major inventory holders of petroleum products and crude oil. When aggregated, the data reported by these sectors approximately represent the consumption of petroleum products in the United States.

The PSM tables present statistics for the most current month available as well as year-to-date. In most cases, the statistics are presented for several geographic areas - the United States (50 States and the District of Columbia), five PAD Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented. The statistics are developed from monthly survey forms submitted by respondents to the EIA and from data provided from other sources.

Final statistics for the data series published in the *PSM* are published in the *PSA*. The *PSA* is published approximately five months after the end of the report year.

Appendix B. Explanatory Notes

1. Overview

A. The Energy Information Administration's Quality Guidelines

The data contained in the *Petroleum Supply Monthly (PSM)* are subject to separate information quality guidelines issued by the Office of Management and Budget (OMB), the Department of Energy (DOE), and Energy Information Administration (EIA). With available resources, EIA continually works to improve its systems in order to provide high quality information needed by public and private policymakers and decision makers. EIA has performance standards to ensure the quality (i.e., objectivity, utility, and integrity) of information it disseminates to the public. Quality is ensured and maximized at levels appropriate to the nature and timeliness of the disseminated information.

B. Concepts of Product Supply and Demand

Petroleum supply estimates contained in the PSM are often interpreted as an approximation of petroleum demand measured as product supplied. Product supplied is often called “implied” demand because it is a measure of demand that is implied by disappearance of petroleum products from facilities and activities in the “primary” supply chain. Facilities and activities in the primary supply chain include refineries and blending terminals, gas processing plants and fractionators, oxygenate producers, biodiesel producers, imports, exports, bulk storage terminals, and pipelines. Total product supplied in the PSM at the U.S. level is equal to the sum of field production, plus refinery and blender net production, plus renewable fuels, and oxygenate plant net production, plus imports, plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports. Net receipts are added as a component of supply at the PAD District level. Crude oil product supplied is normally zero because crude oil is processed in refineries and rarely, if ever, used directly.

The secondary system is that portion of the overall distribution network that falls between producers and end-users. Product typically flows in bulk from the primary supply system into the secondary system before delivery in small quantities to consumers (the tertiary system). The secondary system includes storage at bulk plants; at retail motor fuel outlets, such as service stations, truck stops, and convenience stores; and at retail fuel oil dealers. Bulk plants are wholesale storage facilities that have less than 50,000 barrels of storage capacity and, by definition, receive product only by tank car or truck, not by barge, tanker, or pipeline. Tertiary inventories are held by end users and include fuel in vehicle tanks, heating oil in residential tanks, fuel oil held by utilities, jet fuel stored in facilities operated by end users, and certain proprietary storage of raw materials (e.g. propane) for the chemical industry.

Data users sometimes consider demand as sales to the ultimate consumer or as the actual consumption of the product. Since there may be time delays between the movement of product into the primary market and its ultimate purchase or consumption, these definitions of demand require data on changes in secondary and/or tertiary stocks or the assumption that these values either remain constant or are small

compared to primary supply. The most recent study of secondary stocks was done by the National Petroleum Council in 1989. This study revealed that secondary distillate stocks were equal to about 6.9 percent of distillate stocks and 6.7 percent of distillate storage capacity.

C. Components of Supply and Disposition

The detailed statistics tables in the PSM provide complete supply and disposition information for the current month and year to date. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District supply and disposition data at the front followed by tables that contain detailed information on supply and disposition. These include tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following discussion of supply, disposition, and ending stocks as shown in Tables 1– 25 is provided. The categories and products are defined in the EIA Glossary.

(1.) Supply

a. Field Production - Total Field Production is the sum of crude oil production and natural gas plant liquids and liquefied refinery gases production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to “Domestic Crude Oil Production” in Section 2C (1) for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs).

b. Renewable Fuels and Oxygenate Plant Net Production - Renewable Fuels and Oxygenate Plant Net Production are reported on Forms EIA-819 and EIA-22M. Production includes oxygenates (fuel ethanol, ETBE, MTBE, and other oxygenates) plus negative production of pentanes plus, finished motor gasoline, and motor gasoline blending components added to fuel ethanol as denaturants as well as biodiesel. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reported as input during the same month.

c. Refinery and Blender Net Production – Refinery and Blender Net Production is reported on Form EIA-810 and EIA-815. Refinery and Blender Net Production equals refinery and blenders production minus refinery and blender net inputs. Negative production of finished petroleum products will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the

same month.

d. Imports - Imports include receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

e. Net Receipts – Net Receipts data are included in tables containing PAD District-level data to account for inter-PAD District movements of crude oil and petroleum products. Net receipts for a PAD District are calculated by subtracting shipments out of the PAD District from receipts into the PAD District. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge, and Rail between PAD Districts are shown in Table 60.

f. Adjustments – This column includes adjustment quantities for crude oil, fuel ethanol, motor gasoline blending components, biodiesel (included in “Renewable Fuels Except Fuel Ethanol”) and distillate fuel oil. Adjustment quantities are derived either to balance supply and disposition for selected products or to reclassify one product to another product. Product supplied is the balancing item for most products and is interpreted as an implied measure of petroleum demand. Adjustments are used in cases where it does not make sense to interpret the balancing item as demand. Reclassifications reported in the adjustments column may be implied by the supply and disposition balance or reported on surveys. Recall that supply at the U.S. level is equal to the sum of field production, renewable fuels and oxygenate plant net production, refinery and blender net production, imports, and adjustments. Disposition at the U.S. level is equal to the sum of stock change, refinery and blender net inputs, exports, and products supplied. At the PAD District level, supply components include net receipts equal to gross receipts from other PAD Districts minus gross shipments to other PAD Districts. In every case, supply must equal disposition. Applicable components of supply and disposition vary depending on the product or product group. Unless otherwise noted in Section 2C, adjustment calculations that balance supply and disposition equal disposition minus supply for the U.S. and for each PAD District.

(2.) Disposition

a. Stock Change – Stock Change is calculated as the difference between the current month Ending Stocks column and the Ending Stocks column in the prior month’s publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

b. Refinery and Blender Net Inputs – Refinery and Blender Net Inputs are inputs of crude oil and intermediate materials (unfinished oils, motor and aviation gasoline blending components, liquefied petroleum gases, pentanes plus, hydrogen, oxygenates, renewable fuels, and other hydrocarbons) that are processed at refineries or blended at terminals to produce finished petroleum products.

Crude oil input represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (e.g. vacuum distillation units).

Inputs of natural gas plant liquids are refinery input of natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas plant liquids are reported on a gross basis.

Inputs of unfinished oils, motor gasoline blending components, and aviation gasoline blending components are published on a net basis (i.e., refinery input minus refinery production). Negative inputs of unfinished oils and motor and aviation gasoline blending components will occur when the amount of a product produced during the month is greater than the amount of that same product that is input or reclassified to become another product during the same month.

c. Exports - Exports include shipments from the 50 States and the District of Columbia to Puerto Rico, the Virgin Islands, other U.S. possessions and territories and to foreign countries.

d. Products Supplied - Products supplied is equal to field production, plus renewable fuels and oxygenate plant net production, plus refinery and blender net production, plus imports, (plus net receipts on a PAD District basis), plus adjustments, minus stock change, minus refinery and blender net inputs, minus exports.

Product supplied value indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of inter-PAD movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Beginning with data for January 2010, product supplied for crude oil is assumed equal to zero. Prior to January 1983, crude oil burned on leases and by pipelines as fuel was reported as either distillate or residual fuel oil and was included in product supplied for these products. From January 1983 through December 2009, crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 “Monthly Crude Oil Report.” Reporting of crude oil used directly was discontinued on Form EIA-813 after December 2009.

(3.) Ending Stocks

Ending stocks are primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals.

Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary

Crude oil that is in-transit by water from Alaska and crude oil stored in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage. Primary stocks of petroleum products also exclude secondary stocks held by dealers and jobbers and tertiary stocks held by consumers. Product stocks held as reserves by federal and state agencies are excluded from primary stock quantities reported by EIA, but quantities held in selected government reserves are provided in Appendix D.

Primary stocks of crude oil included barrels held on producing sites (lease stocks) until June 2016. Primary stocks of crude oil excluded lease stocks beginning with release of PSM data for July 2016 on September 30, 2016. Historical crude oil stocks in Petroleum Navigator were revised beginning with data for January 2005 to exclude lease stocks. Petroleum Navigator data may be accessed from the following locations on the EIA web site.

http://www.eia.gov/dnav/pet/pet_sum_snd_d_nus_mbbbl_m_cur.htm

http://www.eia.gov/dnav/pet/pet_sum_crdsnd_k_m.htm

http://www.eia.gov/dnav/pet/pet_stoc_typ_c_nus_EPC0_mbbbl_m.htm

2. Components - Forms Discussions

The data presented in the PSM include data collected by the EIA on nine monthly petroleum supply surveys, export data obtained from the U. S. Bureau of the Census, and crude production data obtained from State conservation agencies and the Minerals Management Service of the U. S. Department of Interior.

A. Petroleum Supply Reporting System

The nine monthly petroleum supply surveys are part of the Petroleum Supply Reporting System (PSRS). The PSRS tracks the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. The PSRS is organized into two data collection subsystems: the Weekly Petroleum Supply Reporting System (WPSRS) and the Monthly Petroleum Supply Reporting System (MPSRS). The WPSRS processes the data from the seven weekly surveys. The MPSRS includes nine monthly surveys and one annual survey. The survey forms that comprise the PSRS are:

1. EIA-800, "Weekly Refinery Report,"
2. EIA-802, "Weekly Product Pipeline Report,"
3. EIA-803, "Weekly Crude Oil Stocks Report,"
4. EIA-804, "Weekly Imports Report,"
5. EIA-805, "Weekly Terminal Blender Report,"
6. EIA-809, "Weekly Oxygenate Report,"
8. EIA-22M, "Monthly Biodiesel Production Survey,"
9. EIA-810, "Monthly Refinery Report,"
10. EIA-812, "Monthly Product Pipeline Report,"
11. EIA-813, "Monthly Crude Oil Report,"
12. EIA-814, "Monthly Imports Report,"
13. EIA-815, "Monthly Terminal Blender Report,"
14. EIA-816, "Monthly Natural Gas Liquids Report"
15. EIA-817, "Monthly Tanker and Barge Movement Report"
16. EIA-819, "Monthly Oxygenate Report"

17. EIA-820, "Annual Refinery Report."

Both weekly and monthly surveys are administered at six key points along the petroleum production and supply chain including refineries, fractionators, natural gas processing plants, bulk product storage and blending terminals, crude oil and product pipelines, crude oil stock holders, importers, and renewable fuel (biodiesel and fuel ethanol) and oxygenate producing plants. Monthly surveys also include inter-PAD District movements by pipelines, tankers, and barges. Weekly surveys do not capture petroleum movements. Respondents reporting on weekly surveys are sampled from among the respondents reporting on monthly surveys.

Annual U.S. refinery capacity data are collected on the Form EIA-820, "Annual Refinery Report." The EIA-820 data are published in the annual "Refinery Capacity Report."

B. Monthly Supply Survey Description and Methodology

(1.) Description of Surveys Forms

Copies of the survey forms and instructions can be found at: http://www.eia.doe.gov/oil_gas/petroleum/survey_forms/pet_survey_forms.html

The Form EIA-22M "Monthly Biodiesel Production Survey" collects data on biodiesel plant location, operating status, annual production capacity, monthly biodiesel and co-product production, stocks, input of feedstocks, alcohol, and catalysts, and biodiesel sales.

The Form EIA-810, "Monthly Refinery Report," collects data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products. Working and shell storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-812, "Monthly Product Pipeline Report," collects data on end-of-month stocks and movements of petroleum products transported by pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included. Product pipeline tank storage capacity for selected products is collected on a semi-annual basis.

The Form EIA-813, "Monthly Crude Oil Report," collects data on end-of-month stock levels of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis. Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks. Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts

are not included. Crude oil storage capacity of tank farms is collected on a semi-annual basis.

The Form EIA-814, “Monthly Imports Report,” collects data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia. The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, and gasoline blending components only.

The Form EIA-815, “Monthly Terminal Blender Report,” collects data on the operations of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U. S. possessions. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and fuel use and losses during the month are collected from operators of terminals. Working and shell storage capacity is collected on a semi-annual basis.

The Form EIA-816, “Monthly Natural Gas Liquids Report,” collects data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, “Monthly Tanker and Barge Movement Report,” collects data on the movements of crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819, “Monthly Oxygenate Report” collects facility-level data on oxygenate inputs, production, gasoline blending at ethanol plants, and end-of-month stocks. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Fuel ethanol storage capacity is collected on a semi-annual basis.

(2.) Frame

EIA maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities

currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of “Who Must Submit” participate in the survey.

The activities for frames maintenance are conducted on an ongoing basis. Monthly frames maintenance procedures focus on examining industry periodicals that report changes in status (births, deaths, sales, mergers, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. Augmenting these sources are articles in newspapers, notices from respondents, and information received from survey systems operated by other offices. Survey managers review these sources regularly to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Respondents to Form EIA-22M “Monthly Biodiesel Production Survey” include operators of plants that produce biodiesel meeting ASTM D 6751-07B specifications and used for commercial purposes.

Respondents to Form EIA-810, “Monthly Refinery Report” include operators 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.

Respondents to Form EIA-812, “Monthly Product Pipeline Report” include all product pipeline companies that carry petroleum products (including interstate, intrastate, and intra-company pipelines) in the 50 States and the District of Columbia.

Respondents to Form EIA-813, “Monthly Crude Oil Report” include all companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intra-company pipelines), crude oil tank farm operators, and companies transporting Alaskan crude oil by water (to U.S. ports) in the 50 States and the District of Columbia.

Respondents to Form EIA-814, “Monthly Imports Report” include each importer of record (or Ultimate consignee in some situations regarding Canadian imports) that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), (3) into Foreign Trade Zones located in the 50 States and the District of Columbia and (4) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity.

Respondents to Form EIA-815, “Monthly Terminal Blender Report” include operators of all bulk terminals located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands,

Guam, and other U. S. possessions must report. A bulk terminal is primarily used for storage, marketing, and often blending of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included.

Respondents to Form EIA-816, “Monthly Natural Gas Liquids Report” include operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator).

Respondents to Form EIA-817, “Monthly Tanker and Barge Movement Report” include all companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense Districts and all companies that have custody of crude oil or petroleum products originating from a PAD District and transported to the Panama Canal with the intent that the crude oil or petroleum products be further transported to another PAD District.

For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies that lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts are considered to have custody.

Respondents to Form EIA-819, “Monthly Oxygenate Report” include all operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations located in the 50 States and the District of Columbia.)

(3.) Collection

Survey data for the MPSRS are collected by facsimile, email, Internet using secure file transfer, and electronic transmission. All respondents must submit their data by the 20th calendar day following the end of the report month. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA by certified letter.

(4.) 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. These tables show U.S. and PAD District estimates for the current month and the prior 4 years. Anomalies

result in further review of respondent data which in turn may result in additional flagged data and imputation.

(5.) Estimation and Imputation

The nine monthly supply surveys are census surveys. As such, the estimates using these data are the sum of the edited, reported data. Imputation is performed for companies that fail to file Forms EIA-22M, 810, 812, 813, 815, 816, and 819. For these companies, previous monthly values and values reported on the weekly survey forms are used if available. Data for nonrespondents to the Forms EIA-814 and 817 are not imputed because respondent-level data for these surveys are highly variable.

Adjustments are made to aggregate data from time to time. For example, unusual industry conditions, including fuel transitions, business practice shifts, or hurricane dislocations, may generate reporting anomalies and require adjustments. Measurement error and frame deficiencies may occasionally result in inconsistencies when individual respondent data are aggregated to publication levels and require adjustment. Monthly supply data are reviewed throughout the year and some estimates may be replaced with newly available or resubmitted respondent data in the *Petroleum Supply Annual (PSA)*.

(6.) Macro Editing

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the EIA is performed on an ongoing basis. Results of selected data comparisons are published once a year in the feature article, “Comparison of Independent Statistics on Petroleum Supply.” Additional comparisons are made between survey data and model results. Data reported in the Petroleum Supply Monthly and Petroleum Supply Annual are routinely imputed to correct for cases where comparison with other data suggests errors in survey data.

(7.) Dissemination

The *PSM* data are normally released within 60 days of the close of the reference month. The *PSM* is available on the web at:

<http://www.eia.gov/petroleum/supply/monthly/>

Much of the *PSM* data are available on the web product, Petroleum Navigator. Petroleum Navigator provides an interface for accessing a comprehensive set of EIA’s petroleum data. Features include: downloadable spreadsheets containing complete data history, data tables which “pivot” to present different perspectives, and selection boxes to easily change the product, area, process, period, and unit of measure. Petroleum Navigator can be accessed at: <http://www.eia.gov/petroleum/data.cfm>

C. Derived Data

Due to the time constraints in publishing monthly petroleum supply statistics and the desire to reduce industry response burden, some of the statistics published in the PSM are obtained from sources other than the monthly supply surveys. These other sources include models to data and data from supplemental sources such as the Bureau of the Census.

(1.) Domestic Crude Oil Production

The interim estimate of U.S., PAD District, and state oil production for the current reference month, published in Tables 1 through 26 of the PSM, are based on:

- (a.) crude oil production data from state government agencies and the Department of the Interior, Bureau of Safety and Environmental Enforcement;
- (b.) crude oil production data reported on Form EIA-914, "Monthly Crude Oil, Lease Condensate, and Natural Gas Production Report." For some states, EIA uses current reported data from the state (chiefly Alaska). For the states of Arkansas, California, Colorado, Kansas, Louisiana, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, Wyoming, and the Federal Gulf of Mexico, EIA calculates an estimate by modeling the relationship between final state-level data from DrillingInfo, a third-party vendor of well-level data collected by state agencies, and data reported on the EIA-914 survey using weighted least squares (WLS) linear regression. Additional explanation of the WLS estimation methodology is available. Estimates have to be made for crude oil production because complete and correct data from states may take from several months to over two years.
- (c.) first purchase data reported on Form EIA-182 "Domestic Crude Oil First Purchase Report." For the remaining states and areas (Alabama, Arizona, Federal Pacific Offshore, Florida, Idaho, Illinois, Indiana, Kentucky, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New York, Oregon, South Dakota, Tennessee, and Virginia) EIA calculates an estimate by using the average lagged ratio (ALR) of the state reported data to EIA-182 data, applied to the current EIA-182 data. Additional explanation of the ALR estimation methodology is available.

State-level production estimates are published in Table 26, "Production of Crude Oil by PAD District and State." Table 26 contains estimates for crude oil production for state and federal offshore areas reported by state agencies and the Bureau of Safety and Environmental Enforcement or estimated by EIA using the ALR or WLS methods discussed above. Every month, the monthly crude oil production estimates are updated in Table 26 of the Petroleum Supply Monthly (<http://www.eia.gov/petroleum/supply/monthly/>) using reports from state agencies and the Bureau of Safety and Environmental Enforcement. The estimates are reported in the Petroleum

Navigator and the Petroleum Supply Monthly roughly 60 days after the production month.

(2.) Exports

The U.S. Bureau of the Census compiles the official U.S. export statistics. Exporters are required to file a "Shipper's Export Declaration Document" with the U.S. Census Bureau. Each month the EIA receives aggregated export statistics from the U.S. Bureau of the Census (EM-522 and EM-594). Census export statistics used in the PSM reflect both government and non-governmental exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

(3.) Movements of crude oil by railroad

The volume of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane moving by railroad is calculated using several data sources including Carload Waybill Sample (CWS) data from the U.S. Surface Transportation Board (STB), data from the National Energy Board of Canada (NEB), data in EIA's Oil and Gas Supply Module (OGSM) within the National Energy Modeling system (NEMS) for data prior to 2015, the EIA-915 survey starting in January 2015, and an estimation procedure developed by EIA for months in which data these data are not available.

Once the data necessary for calculating rail movements become available, which may take as long as 60 days after the end of a calendar quarter, EIA will revise the estimates made.

Movements of crude oil, ethanol, biodiesel, propane, propylene, normal butane, and isobutane by rail are based on EIA analysis of carload data from the STB CWS. Additional data from the NEB, OGSM, and the EIA-915 are used for estimating factors for converting carloads to barrels of crude oil. Carloads of ethanol, biodiesel, propane, propylene, normal butane, and isobutane are converted to barrels using data from the CWS.

Carload data from the STB are available approximately 60 days after the end of each quarter. For example, carload data for the first quarter of each year are typically available by about June 1. Therefore, recent-month rail movements reported by EIA in the Petroleum Supply Monthly and Petroleum Navigator are modeled based on historical rail movement averages, medians, or correlations of rail movements derived from actual carload data with other regional supply data collected by EIA or other sources including field production, imports, refinery and blender inputs, movements other than rail, exports, and supply adjustments.

Estimates of rail movements are subject to revision on a monthly basis as new, more complete, and more accurate data become available. Monthly revisions will typically affect data available through Petroleum Navigator on the EIA web site for the current year and up to two prior years. To the extent that revisions are needed to data more than 2 years in the past, these revisions will be made once a year at the time when Petroleum Navigator tables are updated with final data for a year from the Petroleum Supply Annual. Petroleum Supply Monthly and Petroleum Supply Annual tables released as PDF files will not be revised.

(4.) Stocks of Crude Oil held on Producing Sites (Lease Stocks)

The adjustment for lease stocks was discontinued beginning with PSM data for July 2016 released on September 30, 2016 because EIA discontinued reporting crude oil stocks held on producing sites (lease stocks). The lease stock adjustment remains in all historical EIA lease stocks data.

This adjustment corrects for incomplete survey coverage of companies that store crude oil on leases. Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states - Texas, New Mexico, and Montana. To calculate the “lease adjustment,” a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the “lease adjustment” could no longer be calculated on a state basis and was changed to a PAD District level. To adjust for this incomplete coverage, 10,300 thousand barrels of crude oil are added to PAD District 3 stocks and 330 thousand barrels are added to PAD District 4 stocks.

(5.) Trans-Alaska Pipeline System (TAPS) Natural Gas Plant Liquids (NGPL Adjustment)

The TAPS-NGPL adjustment corrects for overstatement of crude oil receipts and input at refineries due to NGPL injection into Alaskan crude oil transported in TAPS. Natural gas

processing plants in Alaska produce substantial volumes of NGPL that are added to crude oil transported through TAPS. Refiners have been unable to separate the volume of NGPL from Alaskan crude oil when reporting crude oil receipts and inputs to EIA. The TAPS-NGPL adjustment subtracts Alaskan NGPL production reported by selected gas processing plant operators from crude oil receipts and inputs reported by refiners. Adjusted NGPL production is added to refinery receipts and inputs of NGPL. The adjusted NGPL barrels are allocated to PAD Districts based on the regional distribution of receipts of Alaskan crude oil. Data most affected by the TAPS-NGPL adjustment are receipts and inputs of crude oil in PAD District 5 and receipts, inputs, and product supplied of butane and pentanes plus also in PAD District 5.

NGPL injections into crude oil transported in the TAPS started in 1987. The TAPS-NGPL adjustment was first applied to revised data reported in the Petroleum Supply Annual (PSA) for 1988.

(6.) Finished Motor Gasoline Adjustment

Adjustment quantities for finished motor gasoline are the sum of motor gasoline blending components, fuel ethanol, and methyl tertiary butyl ether (MTBE) adjustments reclassified to finished motor gasoline. Finished motor gasoline adjustment quantities are assumed to reflect gasoline blending activity that was not reported on surveys.

Note on MTBE Adjustment: The MTBE portion of the gasoline adjustment described in this section was only applied to Petroleum Supply Monthly (PSM) data for 2009. The MTBE portion of the gasoline adjustment was discontinued after further examination of the issue made clear the MTBE adjustment was not helpful in forming an accurate statistical representation of U.S. and regional gasoline supplies. The MTBE adjustment was not applied to gasoline supply and disposition data in years prior to 2009, nor was it applied to revised data for 2009 published in the Petroleum Supply Annual or in years after 2009. This note only applies to MTBE adjustments. MTBE blending that was reported on EIA surveys is reflected in U.S. and regional gasoline supply and disposition data. Other adjustments to gasoline supply and disposition data to account for motor gasoline blending components and fuel ethanol remain as described in this section.

- Adjustment quantities for finished reformulated motor gasoline include adjustments for reformulated blendstock for oxygenate blending (RBOB) plus a percentage of gasoline treated as blendstock (GTAB), “other” motor gasoline blending components, fuel ethanol, and MTBE. The quantity of GTAB and “other” motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline is based on the ratio of finished reformulated motor gasoline net production divided by total finished motor gasoline net production reported on surveys by refiners and blenders in each

PAD District. Motor gasoline blending components adjustments reclassified to finished reformulated motor gasoline are further classified as blended with alcohol (i.e. fuel ethanol), blended with ether (i.e. MTBE), or non-oxygenated during 2009.

Starting with data for January 2010, motor gasoline blending component adjustment quantities were classified only as blended with fuel ethanol and “other”. During 2009, RBOB adjustment quantities were classified based on the product description that included reference to the oxygenate to be blended. Beginning with data for January 2010, all RBOB is reported in one product category without reference to specific oxygenates, and all RBOB adjustment quantities are assumed blended with fuel ethanol. During 2009, adjustment quantities for GTAB and “other” motor gasoline blending components reclassified to finished reformulated gasoline were further classified as blended with ether, blended with alcohol, or non-oxygenated based on the ratio of production of these products in reported survey data. After determining adjustment quantities of motor gasoline blending components reclassified to each type of finished reformulated motor gasoline, portions of the fuel ethanol and MTBE adjustments were reclassified to reformulated motor gasoline. The fuel ethanol quantity reclassified to finished reformulated motor gasoline was determined using the ratio of fuel ethanol blended into finished motor gasoline calculated from fuel ethanol blending data reported on survey forms by PAD District. For example, if the calculated volumetric fuel ethanol blend ratio was 10%, then a quantity of the fuel ethanol adjustment sufficient to make a 10% blend with the available motor gasoline blending components is reclassified to finished reformulated motor gasoline, but the quantity of fuel ethanol cannot exceed the total quantity of the fuel ethanol adjustment. During 2009, a similar process was followed for allocating the MTBE adjustment to reformulated motor gasoline except the blend ratio was assumed to be 12% in all PAD Districts. Starting with data for January 2010, the entire MTBE adjustment quantity is assumed to be blended with finished conventional motor gasoline.

- Adjustment quantities for finished conventional motor gasoline include adjustments for conventional blendstock for oxygenate blending (CBOB) plus the portion of GTAB, “other” motor gasoline blending components, fuel ethanol and MTBE adjustments that were not reclassified to finished reformulated motor gasoline. The total adjustment to finished conventional motor gasoline is further classified as finished conventional gasoline blended with fuel ethanol and “other” finished conventional motor gasoline. The quantity of the finished conventional motor gasoline adjustment reclassified as finished conventional motor gasoline blended with fuel ethanol is determined using the quantity of the fuel ethanol adjustment allocated

to finished conventional motor gasoline and the fuel ethanol blend ratio calculated from fuel ethanol blending reported on surveys by PAD District. For example, if the fuel ethanol blend ratio calculated from survey data was 10% in a PAD District, then the total adjustment quantity of finished conventional motor gasoline in that PAD District would be 10 times the fuel ethanol adjustment quantity allocated to finished conventional gasoline (i.e. the adjustment to finished conventional motor gasoline blended with fuel ethanol includes 10% fuel ethanol and 90% gasoline from the motor gasoline blending components adjustment). The MTBE adjustment allocated to finished conventional motor gasoline is simply added to the adjustment for “other” finished conventional motor gasoline.

- Fuel ethanol adjustment quantities frequently exceed the volume of fuel ethanol needed to achieve a blend ratio implied by blending activity reported by refiners and blenders on surveys when considering only the gasoline barrels available from the motor gasoline blending components adjustment. In this case, “other” finished conventional motor gasoline is reclassified by the adjustment to finished conventional motor gasoline blended with alcohol in order to maintain an ethanol blend ratio equal to the fuel ethanol blend ratio reported by refiners and blenders in each PAD District.

(7.) Motor Gasoline Blending Components Adjustment

Adjustment quantities for motor gasoline blending components at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports and renewable fuels and oxygenate plant net production (i.e. motor gasoline blending components use as denaturant for fuel ethanol production). Adjustment quantities by PAD District equal the sum of stock change, refinery and blender net input, and exports minus the sum of imports, renewable fuels and oxygenate plant net production, and net receipts. Motor gasoline blending components adjustments are calculated for reformulated blendstock for oxygenate blending (RBOB), conventional blendstock for oxygenate blending (CBOB), gasoline treated as blendstock (GTAB), and “other” motor gasoline blending components. Product supplied for motor gasoline blending components is assumed to always equal zero because there is no end-user demand for motor gasoline blending components as anything other than finished motor gasoline. Motor gasoline blending components adjustment quantities are assumed to reflect finished motor gasoline blending implied by the supply and disposition balance but not reported on surveys. Adjustment quantities for motor gasoline blending components are reclassified to finished motor gasoline and added to the finished motor gasoline adjustment.

(8.) Renewable Fuels including Fuel Ethanol Adjustment

Adjustment quantities for renewable fuels (including fuel ethanol) at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum

of renewable fuels and oxygenate plant net production and imports. Calculation of adjustment quantities by PAD District depends on the product. Individual products include fuel ethanol, biomass based diesel fuel (including biodiesel), “other” renewable diesel fuel, and “other” renewable fuels (e.g. bio-jet fuel). Product supplied for renewable fuels (including fuel ethanol) is assumed equal to zero. Adjustments for fuel ethanol and “other” renewable fuels are discussed separately below.

- Fuel ethanol adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of fuel ethanol between PAD Districts, and so allocation of fuel ethanol adjustments to PAD Districts is based on the ratio of fuel ethanol blending reported on surveys in each PAD District divided by fuel ethanol blending reported on surveys for the entire U.S. In this case, Fuel ethanol implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Fuel ethanol implied net receipts are the balancing item between total supply and disposition in each PAD District. Fuel ethanol adjustment quantities are assumed to reflect blending of fuel ethanol into finished motor gasoline that is implied by the available supply of fuel ethanol but not reported on surveys. Fuel ethanol adjustment volumes are reclassified to finished reformulated motor gasoline and finished conventional motor gasoline through finished motor gasoline adjustments.

- The product category called “renewable fuels except fuel ethanol” includes biomass-based diesel fuel (including biodiesel), “other” renewable diesel fuel, and “other” renewable fuels (e.g. bio-jet fuel). For PSM data prior to January 2012, renewable fuels except fuel ethanol adjustment quantities at the U.S. and PAD District levels were calculated as the sum of stock change, refinery and blender net input, and exports minus imports. Data for production of Renewable Fuels except Fuel Ethanol was unavailable and was excluded from Renewable Fuels and Oxygenate Plant Net Production. Therefore the calculation of adjustments to Renewable Fuels except Fuel Ethanol caused production to be included in the adjustment. Similarly, the calculation caused net inter-PAD District movements (i.e. net receipts) by rail and truck to also be included in adjustments to renewable fuels except fuel ethanol.

- Beginning with PSM data for January 2012, production of biodiesel reported on Form EIA-22M was included under the heading of “renewable fuels and oxygenate plant net production” in petroleum

supply and disposition balances for “renewable fuels except fuel ethanol”. As a result, the adjustment for “renewable fuels except fuel ethanol” no longer includes production of biodiesel. This change will also be made to revised monthly data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

- Biodiesel adjustment quantities at the U.S. level equal the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. There are no survey data available for rail movements of biodiesel between PAD Districts, and so allocation of fuel biodiesel adjustments to PAD Districts is based on the ratio of biomass-based diesel blending reported on surveys in each PAD District divided by biomass-based diesel fuel blending reported on surveys for the entire U.S. Biodiesel implied net receipts are calculated for each PAD District as the sum of stock change, refinery and blender net input, and exports minus the sum of renewable fuels and oxygenate plant net production, imports, and adjustments. Biodiesel implied net receipts are the balancing item between total supply and disposition in each PAD District. Biodiesel adjustment quantities are assumed to reflect blending of biodiesel into distillate fuel oil that is implied by the available supply of biodiesel but not reported as input on surveys. Biodiesel adjustment volumes are reclassified to distillate fuel oil (15 ppm sulfur and under) through distillate fuel oil adjustments.

(9.) Distillate Fuel Oil Adjustment

Adjustment quantities for distillate fuel oil show reclassification by pipeline operators of distillate fuel oil with sulfur content of 15 ppm and under to distillate fuel oil with sulfur content greater than 15 ppm to 500 ppm (inclusive). Reclassification may occur when distillate product with sulfur content of 15 ppm and under becomes mixed with products having higher sulfur content during pipeline transportation, storage, or handling. Adjustment quantities are reported by pipeline operators on Form EIA-812 “Monthly Product Pipeline Report.” This adjustment was discontinued after publication of data for December 2010

Beginning with PSM data for January 2012, distillate fuel oil adjustments equal the opposite of biodiesel adjustments described above in section 7. Biodiesel adjustments are added to distillate fuel oil (15 ppm sulfur and under) and to total distillate fuel oil. Distillate fuel oil adjustment quantities are assumed to reflect biodiesel blending activity implied by biodiesel supply and disposition but not reported on surveys. Distillate fuel oil adjustments for biodiesel will also be added to revised data for January-December 2011 when the 2011 Petroleum Supply Annual is released.

(10.) Crude Oil Adjustment

Adjustment quantities for crude oil are derived to balance crude oil supply and disposition. Crude oil product supplied was equal to crude oil used directly as reported on Form EIA-813 “Monthly Crude Oil Report” in data through December 2009. Reporting crude oil used directly was discontinued on Form EIA-813 after collection of data for December 2009. Crude oil product supplied is assumed equal to zero beginning with data for January 2010. Undercounting crude oil imports in survey data is one example of a typical cause of crude oil adjustments. This results in a positive crude oil adjustment because crude oil disposition (i.e. the sum of stock change, refiner inputs, and exports) will exceed available supply (i.e. the sum of field production and imports) due to import undercounting. Crude oil losses are included in crude oil adjustment quantities. The crude oil adjustment was formerly called unaccounted-for crude oil. The name change was effective with data for January 2005.

(11.) Other Hydrocarbon Adjustment

Adjustment quantities for “other” hydrocarbons equal the sum of stock change, refinery and blender net inputs and exports minus imports. “Other” hydrocarbons product supplied is assumed equal to zero. Adjustment quantities account for “other” hydrocarbons produced outside of refineries. There are no movements data collected on surveys for “other” hydrocarbons. Therefore, adjustment quantities include any net receipts of “other” hydrocarbons resulting from inter-PAD District movements.

(12.) Hydrogen Adjustment

Adjustment quantities for hydrogen equal refinery and blender net input of hydrogen. Hydrogen product supplied is assumed equal to zero. Adjustment quantities account for hydrogen supplied to U.S. refineries from non-refinery sources. There are no movements data collected on surveys for hydrogen. Therefore, adjustment quantities at the PAD District level include any net receipts of hydrogen resulting from inter-PAD District movements.

(13.) Oxygenates (excluding fuel ethanol) Adjustment

Adjustment quantities for oxygenates (excluding fuel ethanol) equal the sum of stock change, refinery and blender net inputs, and exports minus the sum of renewable fuels and oxygenate plant net production and imports. Product supplied for oxygenates (excluding fuel ethanol) is assumed equal to zero. Methyl tertiary butyl ether (MTBE) is the single largest component of oxygenates (excluding fuel ethanol).

3. Quality

A. General Discussion

(1.) Response Rates

The response rate is generally 98 to 100 percent. Average response rates for the monthly and weekly surveys are published in the annual PSM article “Accuracy of Petroleum Supply Data.” Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

(2.) Non-sampling Errors

There are two types of errors usually associated with data produced from a survey; sampling errors and nonsampling errors. Because the estimates for the monthly surveys are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to non-sampling errors. Non-sampling errors may arise from a number of sources including: (1) the inability to obtain data from all companies in the frame (non-response) and the method used to account for non-response, (2) response errors, (3) differences in the interpretation of questions or definitions, (4) mistakes in recording or coding of the data obtained from respondents, and (5) other errors of collection, response, coverage, processing, and estimation.

(3.) Resubmissions

Throughout the year, EIA accepts data revisions of monthly data. If a revision to a monthly submission is made after the PSM has been published, it is referred to as a resubmission. The final monthly values for the previous year are published in the PSA. These values reflect all PSM resubmissions and other data corrections. The values contained in the PSA are EIA’s most accurate measure of petroleum supply activity.

(4.) Revision Policy

EIA will publish revised monthly crude oil production estimates going back to the Previously published Petroleum Supply Annual every month in the Petroleum Supply Navigator (<http://www.eia.gov/petroleum/supply/monthly/>). Once a year with the release of the Petroleum Supply Annual, EIA will revise up to 10 years of historical production estimates in the Petroleum Supply Navigator.

B. Data Assessment

The principal objective of the PSRS is to provide an accurate picture of petroleum industry activities and of the availability of petroleum products nationwide from primary distribution channels. The PSM preliminary monthly data serve as leading indicators of the final monthly data published in the PSA. The PSM monthly data are not expected to have the same level of accuracy as the final monthly data published in the PSA. However, the preliminary monthly data are expected to exhibit like trends and product flow characteristic of the final monthly data.

To assess the accuracy of monthly statistics, initial monthly estimates published in the PSM are compared with the final monthly aggregates published in the PSA. Although final monthly data are still subject to error, they have been thoroughly reviewed and edited, they reflect all revisions made during the year, and they are considered to be the most accurate data available. The mean absolute percent error provides a measure of the average revisions relative to the aggregates being measured for a variable. The mean absolute percent error for 2007 monthly data was less than 1 percent for 50 of the 66 major petroleum variables analyzed.

4. Provisions Regarding Disclosure of Information

All PSRS survey forms, with the exception of the Form EIA-814, "Monthly Imports Report," have the same general disclosure information statement. The information reported on Form EIA-814 will be considered "public information" and may be publicly released in company or individually identifiable form, and will not be protected from disclosure in identifiable form.

The information reported on Forms EIA-810 through 813, 815 through 817, 819, and 820 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 Department of Energy (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 DOE component; to any Committee of Congress, the Government 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.

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.

In addition to the use of the information by EIA for statistical purposes, the information may be made available, upon request, to other Federal agencies authorized by law to receive such information 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.

Northeast Reserves

Reserves inventories are not considered to be in the commercial sector and are excluded from EIA's commercial motor gasoline and distillate fuel oil supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

Northeast Home Heating Oil Reserve classified as ultra-low sulfur distillate (15 parts per million)

Terminal Operator	Location	Thousand Barrels
Buckeye Partners LP	Port Reading, NJ	300
Buckeye Partners LP	Groton, CT	300
Global Companies LLC	Revere, MA	400

Source: U. S. Energy Information Administration

Northeast Regional Refined Petroleum Product Reserve motor gasoline products

Terminal Operator	Location	Thousand Barrels
Kinder Morgan Liq Terminals LLC	Carteret, NJ	200
Buckeye Terminals LLC	Port Reading, NJ	0
Buckeye Terminals LLC	Raritan Bay, NJ	500
Global Companies LLC	Revere, MA	200
South Portland Terminal LLC	South Portland, ME	99

Source: U. S. Energy Information Administration

Other reserves information from the U.S. Department of Energy, Office of Petroleum Reserves can be found at <http://energy.gov/fe/services/petroleum-reserves/>

State of New York's Strategic Fuels Reserve Program

State reserve inventories are also not considered to be in the commercial sector and are excluded from EIA's commercial inventories and are excluded from supply and disposition statistics, such as those reported in the *Weekly Petroleum Status Report*, *Petroleum Supply Monthly*, and *This Week In Petroleum*.

Product	Location	Thousand Barrels
Motor Gasoline Blending Components	NY	88
Fuel Ethanol	NY	10
Distillate Fuel Oil, 15 ppm Sulfur and Under	NY	34

Source: New York State Energy Research & Development Authority

Definitions of Petroleum Products and Other Terms

(Revised May 2010)

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$ (e.g., methanol, ethanol, and tertiary butyl alcohol).

Alkylate. The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

Alkylation. A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

All Other Motor Gasoline Blending Components. See Motor Gasoline Blending Components.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{\text{sp. gr. @ } 60^\circ \text{ F}} - 131.5$$

The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

Asphalt. A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing; used primarily for road construction. It includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. Note: The conversion factor for asphalt is 5.5 barrels per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Atmospheric Crude Oil Distillation. The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600 degrees Fahrenheit to 750 degrees Fahrenheit (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

Aviation Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating

engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. Note: Data on blending components are not counted in data on finished aviation gasoline.

Aviation Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformat, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

Barrel. A unit of volume equal to 42 U.S. gallons.

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

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and

the reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.

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

Benzene (C_6H_6). An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

Biomass-Based Diesel Fuel. Biodiesel and other renewable diesel fuel or diesel fuel blending components derived from biomass, but excluding renewable diesel fuel coprocessed with petroleum

feedstocks.

Blending Components. See *Motor or Aviation Gasoline Blending Components*.

Blending Plant. A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

Bonded Petroleum Imports. Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

BTX. The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

Bulk Station. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

Bulk Terminal. A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

Butane (C_4H_{10}). A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes normal butane and refinery-grade butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Normal Butane (C_4H_{10}). A normally gaseous straight-chain hydrocarbon that is a colorless paraffinic gas which boils at a temperature of 31.1 degrees Fahrenheit and is extracted from natural gas or refinery gas streams.

Refinery-Grade Butane (C_4H_{10}). A refinery-produced stream that is composed predominantly of normal butane and/or isobutane and may also contain propane and/or natural gasoline. These streams may also contain significant levels of olefins and/or fluorides contamination.

Butylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes.

Captive Refinery Oxygenate Plants. Oxygenate production facilities located within or adjacent to a refinery complex.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

Fresh Feeds. Crude oil or petroleum distillates which are being fed to processing units for the first time.

Recycled Feeds. Feeds that are continuously fed back for additional processing.

Catalytic Hydrocracking. A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

Catalytic Hydrotreating. A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

Catalytic Reforming. A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

Low Pressure. A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

High Pressure. A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

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

Coal. A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Commercial Kerosene-Type Jet Fuel. See *Kerosene-Type Jet Fuel*.

Conventional Blendstock for Oxygenate Blending (CBOB). See *Motor Gasoline Blending Components*.

Conventional Gasoline. See *Motor Gasoline (Finished)*.

Crude Oil. A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include:

Small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled

with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included;

Small amounts of nonhydrocarbons produced from oil, such as sulfur and various metals;

Drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude oil is considered as either domestic or foreign, according to the following:

Domestic. Crude oil produced in the United States or from its Outer continental shelf as defined in 43 USC 1331.

Foreign. Crude oil produced outside the United States. Imported Athabasca hydrocarbons (tar sands from Canada) are included.

Crude Oil, Refinery Receipts. Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

Crude Oil Losses. Represents the volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

Crude Oil Production. The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

Crude Oil Qualities. Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

Delayed Coking. A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

Desulfurization. The removal of sulfur, as from molten metals, petroleum oil, or flue gases. Petroleum desulfurization is a process that removes sulfur and its compounds from various streams during the refining process. Desulfurization processes include catalytic hydrotreating and other chemical/physical processes such

as adsorption. Desulfurization processes vary based on the type of stream treated (e.g., naphtha, distillate, heavy gas oil, etc.) and the amount of sulfur removed (e.g., sulfur reduction to 10 ppm). See **Catalytic Hydrotreating**.

Disposition. The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

No. 1 Distillate. A light petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 1 Diesel Fuel. A light distillate fuel oil that has a distillation temperature of 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high speed diesel engines generally operated under frequent speed and load changes, such as those in city buses and similar vehicles. See **No. 1 Distillate**.

No. 1 Fuel Oil. A light distillate fuel oil that has distillation temperatures of 400 degrees Fahrenheit at the 10-percent recovery point and 550 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used primarily as fuel for portable outdoor stoves and portable outdoor heaters. See **No. 1 Distillate**.

No. 2 Distillate. A petroleum distillate that can be used as either a diesel fuel or a fuel oil.

No. 2 Diesel Fuel. A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 975. It is used in high-speed diesel engines that are generally operated under uniform speed and load conditions, such as those in railroad locomotives, trucks, and automobiles. See **No. 2 Distillate**.

Low Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level no higher than 0.05 percent by weight. It is used primarily in motor vehicle diesel engines for on-highway use.

High Sulfur No. 2 Diesel Fuel. No. 2 diesel fuel that has a sulfur level above 0.05 percent by weight.

No. 2 Fuel Oil (Heating Oil). A distillate fuel oil that has a distillation temperature of 640 degrees Fahrenheit at the 90-percent recovery point and meets the specifications defined in ASTM Specification D 396. It is used in

atomizing type burners for domestic heating or for moderate capacity commercial/industrial burner units. See **No. 2 Distillate**.

No. 4 Fuel. A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms to ASTM Specification D 396 or Federal Specification VV-F-815C and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities. It also includes No. 4 diesel fuel used for low- and medium-speed diesel engines and conforms to ASTM Specification D 975.

No. 4 Diesel Fuel. See **No. 4 Fuel**.

No. 4 Fuel Oil. See **No. 4 Fuel**.

Electricity (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ending Stocks. Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

ETBE (Ethyl tertiary butyl ether) (CH₃)₃COC₂H₅. An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

Ethane (C₂H₆). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 127.48 degrees Fahrenheit. It is extracted from natural gas and refinery gas streams.

Ether. A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

Ethylene (C₂H₄). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes. Ethylene is used as a petrochemical feedstock for numerous chemical applications and the production of consumer goods.

Exports. Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

Flexicoking. A thermal cracking process which converts heavy

hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

Fluid Coking. A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

Fresh Feed Input. Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

(1.) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.

(2.) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

Fuel Ethanol (C₂H₅OH). An anhydrous alcohol (ethanol with less than 1% water) intended for gasoline blending as described in Oxygenates definition.

Fuels Solvent Deasphalting. A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

Gasohol. A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration of 10 percent or less by volume. Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside carbon monoxide nonattainment areas are included in data on oxygenated gasoline. See **Oxygenates**.

Gasoline Blending Components. Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Gasoline Treated as Blendstock (GTAB). See **Motor Gasoline Blending Components**.

Gross Input to Atmospheric Crude Oil Distillation Units. Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Heavy Gas Oil. Petroleum distillates with an approximate boiling

range from 651 degrees Fahrenheit to 1000 degrees Fahrenheit.

High-Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content greater than 500 ppm.

Hydrogen. The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

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

Imported Crude Oil Burned As Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Imports. Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Isobutane (C_4H_{10}). A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams.

Isobutylene (C_4H_8). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isohexane (C_6H_{14}). A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2 degrees Fahrenheit.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C_4), an alkylation process feedstock, and normal pentane and hexane into isopentane (C_5) and isohexane (C_6), high-octane gasoline components.

Isopentane. See *Natural Gasoline and Isopentane*.

Kerosene. A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil. See *Kerosene-Type Jet Fuel*.

Kerosene-Type Jet Fuel. A kerosene-based product having a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

Commercial. Kerosene-type jet fuel intended for use in commercial aircraft.

Military. Kerosene-type jet fuel intended for use in military aircraft.

Lease Condensate. A mixture consisting primarily of pentanes and heavier hydrocarbons which is recovered as a liquid from natural gas in lease separation facilities. This category excludes natural gas liquids, such as butane and propane, which are recovered at downstream natural gas processing plants or facilities. See *Natural Gas Liquids*.

Light Gas Oils. Liquid Petroleum distillates heavier than naphtha, with an approximate boiling range from 401 degrees Fahrenheit to 650 degrees Fahrenheit.

Liquefied Petroleum Gases (LPG). A group of hydrocarbon-based gases derived from crude oil refining or natural gas fractionation. They include: ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene. For convenience of transportation, these gases are liquefied through pressurization.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

Low-Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content greater than 15 ppm to 500 ppm. Low sulfur distillate fuel oil also includes product with sulfur content equal to or less than 15 ppm if the product is intended for pipeline shipment and the pipeline has a sulfur specification below 15 ppm.

Lubricants. Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacture of other products, or used as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Lubricants include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

Merchant Oxygenate Plants. Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

Methanol (CH_3OH). A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

Middle Distillates. A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

Military Kerosene-Type Jet Fuel. See *Kerosene-Type Jet Fuel*.

Miscellaneous Products. Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils). Note:

Beginning with January 2004 data, naphtha-type jet fuel is included in Miscellaneous Products.

Motor Gasoline (Finished). A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10 percent recovery point to 365 to 374 degrees Fahrenheit at the 90 percent recovery point. "Motor Gasoline" includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline. Note: E85 is included only in volumetric data on finished motor gasoline production and other components of product supplied.

Conventional Gasoline. Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Ed 55 and Lower. Finished conventional motor gasoline blended with a maximum of 55 volume percent denatured fuel ethanol.

Greater than Ed55. Finished conventional motor gasoline blended with denatured fuel ethanol where the volume percent of denatured fuel ethanol exceeds 55%.

OPRG. "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area.

Oxygenated Gasoline (Including Gasohol). Oxygenated gasoline includes all finished motor gasoline, other than reformulated gasoline, having oxygen content of 2.0 percent or higher by weight. Gasohol containing a minimum 5.7 percent ethanol by volume is included in oxygenated gasoline. Oxygenated gasoline was reported as a separate product from January 1993 until December 2003 inclusive. Beginning with monthly data for January 2004, oxygenated gasoline is included in conventional gasoline. Historical data for oxygenated gasoline excluded Federal Oxygenated Program Reformulated Gasoline (OPRG). Historical oxygenated gasoline data also excluded other reformulated gasoline with a seasonal oxygen requirement regardless of season.

Reformulated Gasoline. Finished gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. It includes gasoline produced to meet or exceed emissions performance and benzene content standards of federal-program reformulated gasoline even though the gasoline

may not meet all of the composition requirements (e.g., oxygen content) of federal-program reformulated gasoline. Note: This category includes Oxygenated Fuels Program Reformulated Gasoline (OPRG). Reformulated gasoline excludes Reformulated Blendstock for Oxygenate Blending (RBOB) and Gasoline Treated as Blendstock (GTAB).

Reformulated (Blended with Alcohol). Reformulated gasoline blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content.

Reformulated (Blended with Ether). Reformulated gasoline blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content.

Reformulated (Non-Oxygenated). Reformulated gasoline without added ether or alcohol components.

Motor Gasoline Blending. Mechanical mixing of motor gasoline blending components, and oxygenates when required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components. Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: Oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Conventional Blendstock for Oxygenate Blending (CBOB). Conventional gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. CBOB must become conventional gasoline after blending with oxygenates. Motor gasoline blending components that require blending other than with oxygenates to become finished conventional gasoline are reported as All Other Motor Gasoline Blending Components. Excludes reformulated blendstock for oxygenate blending (RBOB).

Gasoline Treated as Blendstock (GTAB). Non-certified Foreign Refinery gasoline classified by an importer as blendstock to be either blended or reclassified with respect to reformulated or conventional gasoline. GTAB was classified on EIA surveys as either reformulated or conventional based on emissions performance and the intended end use in data through the end of December 2009. Designation of GTAB as reformulated or conventional was discontinued beginning with data for January 2010. GTAB was reported as a single product beginning with data for January 2010. GTAB data for January 2010 and later months is presented as conventional

motor gasoline blending components when reported as a subset of motor gasoline blending components.

Reformulated Blendstock for Oxygenate Blending (RBOB). Specially produced reformulated gasoline blendstock intended for blending with oxygenates downstream of the refinery where it was produced. Includes RBOB used to meet requirements of the Federal reformulated gasoline program and other blendstock intended for blending with oxygenates to produce finished gasoline that meets or exceeds emissions performance requirements of Federal reformulated gasoline (e.g., California RBOB and Arizona RBOB). Excludes conventional gasoline blendstocks for oxygenate blending (CBOB).

RBOB for Blending with Alcohol. Motor gasoline blending components intended to be blended with an alcohol component (e.g., fuel ethanol) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

RBOB for Blending with Ether. Motor gasoline blending components intended to be blended with an ether component (e.g., methyl tertiary butyl ether) at a terminal or refinery to raise the oxygen content. RBOB product detail by type of oxygenate was discontinued effective with data for January 2010. Beginning with data for January 2010, RBOB was reported as a single product.

All Other Motor Gasoline Blending Components. Naphthas (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. Includes receipts and inputs of Gasoline Treated as Blendstock (GTAB). Excludes conventional blendstock for oxygenate blending (CBOB), reformulated blendstock for oxygenate blending, oxygenates (e.g. fuel ethanol and methyl tertiary butyl ether), butane, and pentanes plus.

MTBE (Methyl tertiary butyl ether) $(CH_3)_3COCH_3$. An ether intended for gasoline blending as described in Oxygenate definition.

Naphtha. A generic term applied to a petroleum fraction with an approximate boiling range between 122 degrees Fahrenheit and 400 degrees Fahrenheit.

Naphtha Less Than 401° F. See *Petrochemical Feedstocks*.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range having an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds. Note: Beginning with January 2004 data, naphtha-type jet fuel is included in *Miscellaneous Products*.

Natural Gas. A gaseous mixture of hydrocarbon compounds, the primary one being **methane**.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

Natural Gas Liquids. Those hydrocarbons in natural gas that are separated from the gas as liquids through the process of absorption, condensation, adsorption, or other methods in gas processing or cycling plants. Generally such liquids consist of propane and heavier hydrocarbons and are commonly referred to as lease condensate, natural gasoline, and liquefied petroleum gases. Natural gas liquids include natural gas plant liquids (primarily ethane, propane, butane, and isobutane; see *Natural Gas Plant Liquids*) and lease condensate (primarily pentanes produced from natural gas at lease separators and field facilities; see *Lease Condensate*).

Natural Gas Plant Liquids. Those hydrocarbons in natural gas that are separated as liquids at natural gas processing plants, fractionating and cycling plants, and, in some instances, field facilities. Lease condensate is excluded. Products obtained include ethane; liquefied petroleum gases (propane, butanes, propane-butane mixtures, ethane-propane mixtures); isopentane; and other small quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Natural Gas Processing Plant. Facilities designed to recover natural gas liquids from a stream of natural gas that may or may not have passed through lease separators and/or field separation facilities. These facilities control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C_5H_{12}) , obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Receipts. The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

Normal Butane. See *Butane*.

OPEC. An intergovernmental organization whose stated objective is to coordinate and unify petroleum policies of member countries. It was created at the Baghdad Conference on September 10–14, 1960. Current members (with years of membership) include Algeria (1969-present), Angola (2007-present), Ecuador (1973-1992 and 2007-present), Gabon (1975-1994 and July, 2016-present), Indonesia (1962-2008 and January, 2016-November, 2016), Iran (1960-present), Iraq (1960-present), Kuwait (1960-present), Libya (1962-present), Nigeria (1971-present), Qatar (1961-present), Saudi Arabia (1960-present), United Arab Emirates (1967-present), and Venezuela (1960-present).

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

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

Operating Capacity. The component of operable capacity that is in operation at the beginning of the period.

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

Other Hydrocarbons. Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives and gilsonite. Excludes natural gas used for fuel or hydrogen feedstock.

Other Oils Equal To or Greater Than 401° F. See *Petrochemical Feedstocks*.

Other Oxygenates. Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

Oxygenated Gasoline. See *Motor Gasoline (Finished)*.

Oxygenates. Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Fuel Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

Fuel Ethanol. Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the “gasohol waiver”).

Methanol. Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the “ARCO” waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the “DuPont” waiver).

MTBE (Methyl tertiary butyl ether). Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that

the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the “Sun” waiver).

Pentanes Plus. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Persian Gulf. The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

Petrochemical Feedstocks. Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are “Naphtha Less Than 401° F” and “Other Oils Equal To or Greater Than 401° F.”

Naphtha Less Than 401° F. A naphtha with a boiling range of less than 401 degrees Fahrenheit that is intended for use as a petrochemical feedstock.

Other Oils Equal To or Greater Than 401° F. Oils with a boiling range equal to or greater than 401 degrees Fahrenheit that are intended for use as a petrochemical feedstock.

Petroleum Administration for Defense (PAD) Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

Petroleum Coke. A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (of 42 U.S. gallons each) per short ton. Coke from petroleum has a heating value of 6.024 million Btu per barrel.

Catalyst Coke. In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This “green” coke may be sold as is or further purified by calcining.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Pipeline (Petroleum). Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Processing Gain. The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

Processing Loss. The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

Product Supplied, Crude Oil. Crude oil burned on leases and by pipelines as fuel.

Production Capacity. The maximum amount of product that can be produced from processing facilities.

Products Supplied. Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

Propane (C_3H_8). A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of - 43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene (C_3H_6). An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Propylene (C_3H_6) (nonfuel use). Propylene that is intended for use in nonfuel applications such as petrochemical manufacturing. Nonfuel use propylene includes chemical-grade propylene, polymer-grade propylene, and trace amounts of propane. Nonfuel use propylene also includes the propylene component of propane/propylene mixes where the propylene will be separated from the mix in a propane/propylene splitting process. Excluded is the propylene component of propane/propylene mixes where the propylene component of the mix is intended for sale into the fuel market.

Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

Refinery-Grade Butane. See *Butane*.

Refinery Input, Crude Oil. Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

Refinery Input, Total. The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

Refinery Production. Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

Refinery Yield. Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

Reformulated Blendstock for Oxygenate Blending (RBOB). See *Motor Gasoline Blending Components*.

Reformulated Gasoline. See *Motor Gasoline (Finished)*.

Renewable Fuels (Other). Fuels and fuel blending components, except biomass-based diesel fuel, renewable diesel fuel, and fuel ethanol, produced from renewable biomass.

Residual Fuel Oil. A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

Residuum. Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000 degrees Fahrenheit.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Shell Storage Capacity. The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity. Special Naphthas. All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

Stock Change. The difference between stocks at the beginning of the reporting period and stocks at the end of the reporting period. Note: A negative number indicates a decrease (i.e., a drawdown) in stocks and a positive number indicates an increase (i.e., a buildup) in stocks during the reporting period.

Strategic Petroleum Reserve (SPR). Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Sulfur. A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

Supply. The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

TAME (Tertiary amyl methyl ether) $(CH_3)_2(C_2H_5)COCH_3$. An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

Tank Farm. An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

Tanker and Barge. Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal

to a PAD District.

TBA (Tertiary butyl alcohol) $(CH_3)_3COH$. An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

Toluene $(C_6H_5CH_3)$. Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

Ultra-Low Sulfur Distillate Fuel Oil. Distillate fuel oil having sulfur content of 15 ppm or lower. Ultra-low sulfur distillate fuel oil that will be shipped by pipeline must satisfy the sulfur specification of the shipping pipeline if the pipeline specification is below 15 ppm. Distillate fuel oil intended for pipeline shipment that fails to meet a pipeline sulfur specification that is below 15 ppm will be classified as low-sulfur distillate fuel oil.

Unaccounted for Crude Oil. Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils. All oils requiring further processing, except those requiring only mechanical blending. Unfinished oils are produced by partial refining of crude oil and include naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

United States. The United States is defined as the 50 States and the District of Columbia.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

Wax. A solid or semi-solid material at 77 degrees Fahrenheit consisting of a mixture of hydrocarbons obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in which the straight-chained paraffin series predominates. This includes all marketable wax, whether crude or refined, with a congealing point

(ASTM D 938) between 80 (or 85) and 240 degrees Fahrenheit and a maximum oil content (ASTM D 3235) of 50 weight percent.

Working Storage Capacity. The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

Xylene ($C_6H_4(CH_3)_2$). Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.