

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, January 2019
(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	28,329	3,075	31,404	76,479	15,811	27,948	120,238
Hydrocarbon Gas Liquids	1,115	-	1,115	2,275	75	738	3,088
Natural Gas Liquids	1,115	-	1,115	2,275	75	738	3,088
Normal Butane	655	-	655	745	-	97	842
Isobutane	460	-	460	923	75	423	1,421
Natural Gasoline	-	-	-	607	-	218	825
Other Liquids	-12,752	-30	-12,782	-36,869	-6,615	-12,642	-56,126
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	169	148	317	1,004	414	321	1,739
Hydrogen	103	13	116	719	270	191	1,180
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	66	135	201	261	144	130	535
Fuel Ethanol	66	116	182	162	117	106	385
Renewable Diesel Fuel ²	-	19	19	99	27	24	150
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	24	-	-	24
Unfinished Oils (net)	2,422	-104	2,318	-159	-192	-105	-456
Naphthas and Lighter	1,290	-82	1,208	519	-122	254	651
Kerosene and Light Gas Oils	405	-	405	-242	-163	-91	-496
Heavy Gas Oils	873	-24	849	-39	93	-147	-93
Residuum	-146	2	-144	-397	-	-121	-518
Motor Gasoline Blend.Comp. (MGBC)(net)	-15,343	-74	-15,417	-37,714	-6,837	-12,858	-57,409
Reformulated - RBOB	-9,920	-	-9,920	-7,646	-312	-	-7,958
Conventional	-5,423	-74	-5,497	-30,068	-6,525	-12,858	-49,451
CBOB	-5,042	-75	-5,117	-28,262	-6,626	-12,960	-47,848
GTAB	-	-	-	-	-	-	-
Other	-381	1	-380	-1,806	101	102	-1,603
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	16,692	3,045	19,737	41,885	9,271	16,044	67,200
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	914	100	1,014	2,460	517	903	3,880
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	81.2	102.1	82.9	91.9	94.6	97.9	93.6
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	163	16	179	455	71	166	692
Catalytic Cracking	351	18	369	717	145	217	1,079
Catalytic Hydrocracking	34	-	34	179	53	56	288
Delayed and Fluid Coking	59	-	59	316	60	92	468
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.73	1.62	0.81	1.57	1.83	0.65	1.39
API Gravity, Weighted Average (degrees)	34.43	32.27	34.22	32.37	28.24	38.50	33.19
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	923	4,082
Idle	-	-	-	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, January 2019
(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	20,045	136,557	107,233	6,842	3,918	274,595	19,638	74,397	520,272
Hydrocarbon Gas Liquids	902	4,242	4,496	39	174	9,853	700	3,200	17,956
Natural Gas Liquids	902	4,242	4,496	39	174	9,853	700	3,200	17,956
Normal Butane	458	1,995	1,932	—	—	4,385	393	1,732	8,007
Isobutane	303	1,621	1,637	36	174	3,771	195	676	6,523
Natural Gasoline	141	626	927	3	—	1,697	112	792	3,426
Other Liquids	-9,306	-48,381	-31,012	-1,559	-1,539	-91,797	-5,589	-34,402	-200,696
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	293	2,468	2,035	158	117	5,071	506	1,434	9,067
Hydrogen	12	2,411	1,735	104	50	4,312	195	1,098	6,901
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	281	57	300	54	67	759	311	336	2,142
Fuel Ethanol	221	45	172	35	56	529	288	98	1,482
Renewable Diesel Fuel ²	60	12	128	19	11	230	23	238	660
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	24
Unfinished Oils (net)	-971	-4,256	7,035	-136	-106	1,566	-635	1,862	4,655
Naphthas and Lighter	-131	-6,378	-203	-29	-52	-6,793	-46	-799	-5,779
Kerosene and Light Gas Oils	-6	-664	952	2	-47	237	-300	336	182
Heavy Gas Oils	-923	2,313	5,833	-45	-7	7,171	-206	1,883	9,604
Residuum	89	473	453	-64	—	951	-83	442	648
Motor Gasoline Blend.Comp. (MGBC)(net)	-8,627	-46,593	-40,075	-1,581	-1,550	-98,426	-5,460	-37,698	-214,410
Reformulated - RBOB	-1,244	-12,660	-2,322	—	-716	-16,942	—	-27,514	-62,334
Conventional	-7,383	-33,933	-37,753	-1,581	-834	-81,484	-5,460	-10,184	-152,076
CBOB	-7,195	-30,658	-36,620	-1,537	-896	-76,906	-5,490	-9,638	-144,999
GTAB	—	—	—	—	—	—	—	—	—
Other	-188	-3,275	-1,133	-44	62	-4,578	30	-546	-7,077
Aviation Gasoline Blend. Comp. (net)	-1	—	-7	—	—	-8	—	—	-8
Total Input to Refineries	11,641	92,418	80,717	5,322	2,553	192,651	14,749	43,195	337,532
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	646	4,483	3,569	195	136	9,029	634	2,554	17,111
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	86.7	88.9	96.6	76.2	99.7	91.4	92.3	88.8	91.0
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	143	596	570	31	29	1,369	99	380	2,719
Catalytic Cracking	132	1,260	973	14	34	2,413	157	632	4,650
Catalytic Hydrocracking	49	526	424	18	17	1,034	23	468	1,847
Delayed and Fluid Coking	22	747	505	28	—	1,301	59	422	2,310
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.56	1.51	1.37	1.51	0.72	1.37	1.39	1.30	1.33
API Gravity, Weighted Average (degrees)	40.05	32.70	31.74	30.54	39.48	32.92	33.67	28.35	32.40
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	677	2,875	18,698
Idle	—	35	—	—	—	35	10	—	110
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	15,936	15,936

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, February 2019
(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	19,076	2,646	21,722	62,504	14,090	22,155	98,749
Hydrocarbon Gas Liquids	570	-	570	1,781	49	646	2,476
Natural Gas Liquids	570	-	570	1,781	49	646	2,476
Normal Butane	207	-	207	478	-	42	520
Isobutane	363	-	363	959	49	419	1,427
Natural Gasoline	-	-	-	344	-	185	529
Other Liquids	-8,832	-70	-8,902	-29,116	-6,037	-10,053	-45,206
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	136	126	262	849	389	297	1,535
Hydrogen	83	10	93	591	262	183	1,036
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	53	116	169	238	127	114	479
Fuel Ethanol	53	100	153	154	114	95	363
Renewable Diesel Fuel ²	-	16	16	84	13	19	116
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	20	-	-	20
Unfinished Oils (net)	251	-214	37	-213	-609	-381	-1,203
Naphthas and Lighter	282	-160	122	-313	-144	-14	-471
Kerosene and Light Gas Oils	12	-	12	-281	-248	-248	-777
Heavy Gas Oils	-347	-57	-404	133	-217	118	34
Residuum	304	3	307	248	-	-237	11
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,219	18	-9,201	-29,752	-5,817	-9,969	-45,538
Reformulated - RBOB	-6,375	-	-6,375	-7,072	-150	-	-7,222
Conventional	-2,844	18	-2,826	-22,680	-5,667	-9,969	-38,316
CBOB	-3,125	34	-3,091	-21,636	-5,609	-9,727	-36,972
GTAB	-	-	-	-	-	-	-
Other	281	-16	265	-1,044	-58	-242	-1,344
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	10,814	2,576	13,390	35,169	8,102	12,748	56,019
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	683	95	778	2,221	510	793	3,524
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	60.7	96.9	63.6	82.9	93.2	85.9	85.0
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	126	14	141	417	68	148	633
Catalytic Cracking	255	16	272	693	142	206	1,041
Catalytic Hydrocracking	28	-	28	178	55	55	288
Delayed and Fluid Coking	47	-	47	279	65	77	420
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.70	1.63	0.82	1.44	1.81	0.71	1.33
API Gravity, Weighted Average (degrees)	37.31	32.83	36.68	33.51	28.76	39.03	34.00
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	923	4,082
Idle	-	-	-	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, February 2019
(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	19,227	117,743	93,929	6,140	3,512	240,551	16,927	65,732	443,681
Hydrocarbon Gas Liquids	683	3,448	3,946	19	190	8,286	504	2,274	14,110
Natural Gas Liquids	683	3,448	3,946	19	190	8,286	504	2,274	14,110
Normal Butane	311	1,186	1,657	—	—	3,154	214	1,014	5,109
Isobutane	252	1,584	1,432	16	190	3,474	206	527	5,997
Natural Gasoline	120	678	857	3	—	1,658	84	733	3,004
Other Liquids	-9,149	-42,363	-28,365	-1,108	-1,323	-82,308	-4,509	-30,650	-171,575
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	230	2,060	1,635	153	94	4,172	469	1,294	7,732
Hydrogen	7	2,004	1,455	98	41	3,605	203	977	5,914
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	223	56	180	55	53	567	266	317	1,798
Fuel Ethanol	176	42	153	39	44	454	246	78	1,294
Renewable Diesel Fuel ²	47	14	27	16	9	113	20	239	504
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	20
Unfinished Oils (net)	-172	-2,329	6,896	-143	124	4,376	-172	-416	2,622
Naphthas and Lighter	-136	-5,783	293	-27	93	-5,560	-165	-650	-6,724
Kerosene and Light Gas Oils	-7	-990	604	-6	-6	-405	-213	-510	-1,893
Heavy Gas Oils	209	4,541	6,118	-71	37	10,834	111	943	11,518
Residuum	-238	-97	-119	-39	—	-493	95	-199	-279
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,203	-42,094	-36,905	-1,118	-1,541	-90,861	-4,806	-31,528	-181,934
Reformulated - RBOB	-1,401	-12,465	-1,642	—	-749	-16,257	—	-23,415	-53,269
Conventional	-7,802	-29,629	-35,263	-1,118	-792	-74,604	-4,806	-8,113	-128,665
CBOB	-7,715	-26,919	-32,363	-1,086	-770	-68,853	-4,964	-7,598	-121,478
GTAB	—	—	—	—	—	—	—	—	—
Other	-87	-2,710	-2,900	-32	-22	-5,751	158	-515	-7,187
Aviation Gasoline Blend. Comp. (net)	-4	—	9	—	—	5	—	—	5
Total Input to Refineries	10,761	78,828	69,510	5,051	2,379	166,529	12,922	37,356	286,216
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	684	4,330	3,404	194	127	8,739	606	2,513	16,160
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	91.7	85.9	92.1	75.6	93.5	88.5	88.3	87.4	85.9
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	146	617	574	33	31	1,400	94	392	2,659
Catalytic Cracking	175	1,270	988	10	36	2,480	159	613	4,564
Catalytic Hydrocracking	47	522	410	16	18	1,013	22	468	1,820
Delayed and Fluid Coking	21	699	463	26	—	1,209	68	405	2,149
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.60	1.25	1.30	1.48	0.74	1.21	1.44	1.37	1.25
API Gravity, Weighted Average (degrees)	40.39	33.07	32.96	30.03	38.86	33.65	32.97	28.94	33.09
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	4,820	3,481	256	136	9,439	677	2,875	18,296
Idle	—	222	215	—	—	437	10	—	512
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	11,872	11,872

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, March 2019
(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	25,295	3,006	28,301	73,290	15,988	20,300	109,578
Hydrocarbon Gas Liquids	761	-	761	1,537	63	496	2,096
Natural Gas Liquids	761	-	761	1,537	63	496	2,096
Normal Butane	257	-	257	68	-	-	68
Isobutane	504	-	504	1,135	63	334	1,532
Natural Gasoline	-	-	-	334	-	162	496
Other Liquids	-12,014	170	-11,844	-32,726	-6,207	-8,651	-47,584
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	99	155	254	1,096	440	276	1,812
Hydrogen	39	9	48	743	294	147	1,184
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	60	146	206	320	146	129	595
Fuel Ethanol	60	124	184	210	129	110	449
Renewable Diesel Fuel ²	-	22	22	110	17	19	146
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	33	-	-	33
Unfinished Oils (net)	1,077	-20	1,057	580	-317	-598	-335
Naphthas and Lighter	938	-19	919	31	-144	-132	-245
Kerosene and Light Gas Oils	-872	-	-872	-219	-108	-212	-539
Heavy Gas Oils	723	-3	720	775	-65	-42	668
Residuum	288	2	290	-7	-	-212	-219
Motor Gasoline Blend.Comp. (MGBC)(net)	-13,190	35	-13,155	-34,402	-6,330	-8,329	-49,061
Reformulated - RBOB	-8,022	-	-8,022	-7,865	-224	-	-8,089
Conventional	-5,168	35	-5,133	-26,537	-6,106	-8,329	-40,972
CBOB	-5,059	4	-5,055	-26,005	-5,803	-8,357	-40,165
GTAB	-	-	-	-	-	-	-
Other	-109	31	-78	-532	-303	28	-807
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	14,042	3,176	17,218	42,101	9,844	12,145	64,090
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	817	99	916	2,484	525	656	3,665
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	72.6	100.3	74.8	92.7	96.2	71.1	88.4
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	160	17	177	447	72	116	635
Catalytic Cracking	293	16	309	762	144	169	1,075
Catalytic Hydrocracking	18	-	18	190	53	46	289
Delayed and Fluid Coking	13	-	13	326	67	62	455
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.68	1.61	0.78	1.59	1.79	0.56	1.42
API Gravity, Weighted Average (degrees)	38.46	32.98	37.90	32.76	28.41	39.38	33.31
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	852	4,011
Idle	-	-	-	28	38	70	136
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, March 2019
(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	19,803	132,214	102,953	5,018	4,142	264,130	18,833	73,133	493,975
Hydrocarbon Gas Liquids	562	3,714	2,930	9	188	7,403	466	2,278	13,004
Natural Gas Liquids	562	3,714	2,930	9	188	7,403	466	2,278	13,004
Normal Butane	161	818	716	-	-	1,695	150	709	2,879
Isobutane	267	1,965	1,374	8	188	3,802	220	755	6,813
Natural Gasoline	134	931	840	1	-	1,906	96	814	3,312
Other Liquids	-8,375	-45,106	-29,177	-693	-1,720	-85,071	-5,027	-30,100	-179,626
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	280	2,048	1,852	121	99	4,400	496	1,710	8,672
Hydrogen	6	1,984	1,639	76	44	3,749	198	1,341	6,520
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	274	64	213	45	55	651	298	369	2,119
Fuel Ethanol	214	50	190	38	44	536	264	84	1,517
Renewable Diesel Fuel ²	60	14	23	7	11	115	34	285	602
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	33
Unfinished Oils (net)	-366	-2,496	8,149	-103	-92	5,092	-573	3,223	8,464
Naphthas and Lighter	-332	-5,730	793	48	-15	-5,236	-286	593	-4,255
Kerosene and Light Gas Oils	149	22	2,264	-22	-25	2,388	-167	21	831
Heavy Gas Oils	-382	3,539	4,689	-51	-52	7,743	26	2,102	11,259
Residuum	199	-327	403	-78	-	197	-146	507	629
Motor Gasoline Blend.Comp. (MGBC)(net)	-8,291	-44,658	-39,180	-711	-1,727	-94,567	-4,950	-35,033	-196,766
Reformulated - RBOB	-730	-11,942	-3,440	-	-759	-16,871	-	-27,141	-60,123
Conventional	-7,561	-32,716	-35,740	-711	-968	-77,696	-4,950	-7,892	-136,643
CBOB	-7,609	-28,236	-34,372	-697	-1,031	-71,945	-4,974	-8,967	-131,106
GTAB	-	-	-	-	-	-	-	-	-
Other	48	-4,480	-1,368	-14	63	-5,751	24	1,075	-5,537
Aviation Gasoline Blend. Comp. (net)	2	-	2	-	-	4	-	-	4
Total Input to Refineries	11,990	90,822	76,706	4,334	2,610	186,462	14,272	45,311	327,353
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	635	4,299	3,390	154	138	8,616	608	2,519	16,323
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	85.2	85.3	91.7	60.1	101.2	87.2	88.5	87.6	86.8
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	136	646	597	26	30	1,435	91	410	2,748
Catalytic Cracking	150	1,252	892	5	32	2,332	160	610	4,487
Catalytic Hydrocracking	40	486	451	5	18	999	24	483	1,814
Delayed and Fluid Coking	22	712	450	13	-	1,196	64	432	2,160
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.59	1.50	1.26	1.52	0.76	1.32	1.34	1.39	1.32
API Gravity, Weighted Average (degrees)	40.22	32.76	33.25	29.57	39.37	33.58	33.70	28.70	33.03
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,000	3,696	256	136	9,833	677	2,875	18,621
Idle	-	43	-	-	-	43	10	-	188
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	15,412	15,412

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, April 2019
(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	27,876	2,985	30,861	73,704	15,140	23,456	112,300
Hydrocarbon Gas Liquids	417	-	417	1,155	80	552	1,787
Natural Gas Liquids	417	-	417	1,155	80	552	1,787
Normal Butane	18	-	18	25	-	-	25
Isobutane	399	-	399	818	80	424	1,322
Natural Gasoline	-	-	-	312	-	128	440
Other Liquids	-13,018	128	-12,890	-31,479	-5,433	-9,457	-46,369
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	118	156	274	980	484	219	1,683
Hydrogen	63	11	74	671	263	77	1,011
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	55	145	200	279	221	142	642
Fuel Ethanol	55	119	174	180	151	117	448
Renewable Diesel Fuel ²	-	26	26	99	70	25	194
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	30	-	-	30
Unfinished Oils (net)	1,339	-73	1,266	-1,007	-141	354	-794
Naphthas and Lighter	753	-50	703	102	-176	34	-40
Kerosene and Light Gas Oils	-926	-	-926	130	-84	159	205
Heavy Gas Oils	1,498	-21	1,477	-1,234	119	246	-869
Residuum	14	-2	12	-5	-	-85	-90
Motor Gasoline Blend.Comp. (MGBC)(net)	-14,475	45	-14,430	-31,452	-5,776	-10,030	-47,258
Reformulated - RBOB	-8,810	-	-8,810	-7,473	-207	-	-7,680
Conventional	-5,665	45	-5,620	-23,979	-5,569	-10,030	-39,578
CBOB	-5,280	81	-5,199	-23,734	-5,665	-10,355	-39,754
GTAB	-	-	-	-	-	-	-
Other	-385	-36	-421	-245	96	325	176
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	15,275	3,113	18,388	43,380	9,787	14,551	67,718
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	929	101	1,030	2,457	512	783	3,751
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	82.6	102.5	84.2	91.7	93.6	84.9	90.5
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	177	17	194	457	75	140	672
Catalytic Cracking	361	16	376	695	138	212	1,046
Catalytic Hydrocracking	25	-	25	196	56	27	278
Delayed and Fluid Coking	13	-	13	303	67	64	434
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.73	1.63	0.82	1.44	1.75	0.54	1.29
API Gravity, Weighted Average (degrees)	36.77	32.90	36.38	33.52	29.93	39.43	34.22
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	923	4,082
Idle	-	-	-	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, April 2019
(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	20,404	130,634	103,249	5,301	4,164	263,752	17,078	66,245	490,236
Hydrocarbon Gas Liquids	501	3,093	3,139	10	188	6,931	406	2,328	11,869
Natural Gas Liquids	501	3,093	3,139	10	188	6,931	406	2,328	11,869
Normal Butane	134	643	227	-	-	1,004	94	691	1,832
Isobutane	227	1,637	1,443	7	180	3,494	169	848	6,232
Natural Gasoline	140	813	1,469	3	8	2,433	143	789	3,805
Other Liquids	-8,868	-48,054	-28,359	-937	-1,582	-87,800	-4,357	-29,579	-180,995
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	291	1,904	1,804	92	106	4,197	473	1,535	8,162
Hydrogen	10	1,840	1,583	55	41	3,529	188	1,188	5,990
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	281	64	221	37	65	668	285	347	2,142
Fuel Ethanol	219	51	192	35	53	550	251	82	1,505
Renewable Diesel Fuel ²	62	13	29	2	12	118	34	265	637
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	30
Unfinished Oils (net)	-505	-2,404	9,711	-590	-13	6,199	-37	1,226	7,860
Naphthas and Lighter	-313	-5,128	560	-145	-15	-5,041	35	598	-3,745
Kerosene and Light Gas Oils	-92	-397	1,848	-14	1	1,346	-314	-2,144	-1,833
Heavy Gas Oils	77	2,311	6,351	-346	1	8,394	413	2,314	11,729
Residuum	-177	810	952	-85	-	1,500	-171	458	1,709
Motor Gasoline Blend.Comp. (MGBC)(net)	-8,665	-47,554	-39,868	-439	-1,675	-98,201	-4,793	-32,340	-197,022
Reformulated - RBOB	-593	-12,510	-5,180	-	-807	-19,090	-	-24,848	-60,428
Conventional	-8,072	-35,044	-34,688	-439	-868	-79,111	-4,793	-7,492	-136,594
CBOB	-7,973	-31,709	-32,611	-395	-883	-73,571	-4,857	-9,284	-132,665
GTAB	-	-	-	-	-	-	-	-	-
Other	-99	-3,335	-2,077	-44	15	-5,540	64	1,792	-3,929
Aviation Gasoline Blend. Comp. (net)	11	-	-6	-	-	5	-	-	5
Total Input to Refineries	12,037	85,673	78,029	4,374	2,770	182,883	13,127	38,994	321,110
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	677	4,445	3,559	156	138	8,975	569	2,366	16,691
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	90.9	88.2	96.3	61.0	101.1	90.9	82.9	82.3	88.7
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	139	618	633	22	29	1,440	95	401	2,802
Catalytic Cracking	178	1,159	980	5	34	2,355	162	592	4,531
Catalytic Hydrocracking	47	523	429	3	18	1,020	22	413	1,758
Delayed and Fluid Coking	23	711	484	24	-	1,241	55	403	2,145
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.57	1.49	1.29	1.63	0.75	1.33	1.19	1.26	1.28
API Gravity, Weighted Average (degrees)	40.06	32.45	32.69	28.86	39.74	33.21	33.98	28.47	32.97
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	4,807	3,696	256	136	9,641	677	2,875	18,498
Idle	-	235	-	-	-	235	10	-	310
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	11,895	11,895

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, May 2019
(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	30,654	3,046	33,700	67,871	15,304	26,246	109,421
Hydrocarbon Gas Liquids	383	-	383	1,289	53	553	1,895
Natural Gas Liquids	383	-	383	1,289	53	553	1,895
Normal Butane	-	-	-	8	-	5	13
Isobutane	383	-	383	796	53	409	1,258
Natural Gasoline	-	-	-	485	-	139	624
Other Liquids	-13,172	50	-13,122	-28,081	-5,164	-10,174	-43,419
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	161	153	314	937	486	312	1,735
Hydrogen	92	11	103	698	288	169	1,155
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	69	142	211	221	198	143	562
Fuel Ethanol	69	112	181	141	140	123	404
Renewable Diesel Fuel ²	-	30	30	80	58	20	158
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	18	-	-	18
Unfinished Oils (net)	2,509	-85	2,424	12	-338	-33	-359
Naphthas and Lighter	914	-45	869	563	-175	-214	174
Kerosene and Light Gas Oils	-391	-	-391	762	-168	91	685
Heavy Gas Oils	1,680	-38	1,642	-1,200	5	181	-1,014
Residuum	306	-2	304	-113	-	-91	-204
Motor Gasoline Blend.Comp. (MGBC)(net)	-15,842	-18	-15,860	-29,030	-5,312	-10,453	-44,795
Reformulated - RBOB	-10,185	-	-10,185	-7,486	129	-	-7,357
Conventional	-5,657	-18	-5,675	-21,544	-5,441	-10,453	-37,438
CBOB	-5,790	-22	-5,812	-23,164	-5,569	-10,564	-39,297
GTAB	-	-	-	-	-	-	-
Other	133	4	137	1,620	128	111	1,859
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	17,865	3,096	20,961	41,079	10,193	16,625	67,897
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	990	100	1,090	2,183	505	847	3,536
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	88.0	101.4	89.1	81.5	92.5	91.9	85.3
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	183	15	198	422	70	145	636
Catalytic Cracking	397	16	413	618	141	212	972
Catalytic Hydrocracking	34	-	34	186	66	58	310
Delayed and Fluid Coking	29	-	29	257	63	84	404
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.47	1.68	0.58	1.41	1.81	0.63	1.28
API Gravity, Weighted Average (degrees)	36.68	32.26	36.29	33.82	28.53	39.34	34.33
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,412	509	923	3,843
Idle	-	-	-	266	38	-	304
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, May 2019
(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	22,005	138,255	108,782	7,535	4,320	280,897	20,437	73,848	518,303
Hydrocarbon Gas Liquids	559	3,290	4,087	25	190	8,151	463	2,335	13,227
Natural Gas Liquids	559	3,290	4,087	25	190	8,151	463	2,335	13,227
Normal Butane	170	632	103	-	1	906	101	748	1,768
Isobutane	242	1,848	1,680	22	189	3,981	202	831	6,655
Natural Gasoline	147	810	2,304	3	-	3,264	160	756	4,804
Other Liquids	-9,194	-51,926	-32,086	-1,723	-1,764	-96,693	-5,105	-33,993	-192,332
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	295	2,108	1,850	115	115	4,483	542	1,536	8,610
Hydrogen	3	2,040	1,606	66	49	3,764	210	1,150	6,382
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	292	68	244	49	66	719	332	386	2,210
Fuel Ethanol	233	52	194	48	55	582	280	93	1,540
Renewable Diesel Fuel ²	59	16	50	1	11	137	52	293	670
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	18
Unfinished Oils (net)	123	-3,218	9,757	-296	-188	6,178	-103	606	8,746
Naphthas and Lighter	22	-7,111	379	5	-84	-6,789	-66	243	-5,569
Kerosene and Light Gas Oils	-76	-1,531	1,292	-124	-83	-522	-240	-1,699	-2,167
Heavy Gas Oils	201	3,949	6,065	-80	-21	10,114	376	3,351	14,469
Residuum	-24	1,475	2,021	-97	-	3,375	-173	-1,289	2,013
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,627	-50,816	-43,697	-1,542	-1,691	-107,373	-5,544	-36,135	-209,707
Reformulated - RBOB	-983	-14,492	-6,233	-	-870	-22,578	-	-27,053	-67,173
Conventional	-8,644	-36,324	-37,464	-1,542	-821	-84,795	-5,544	-9,082	-142,534
CBOB	-8,643	-32,226	-36,118	-1,500	-792	-79,279	-5,562	-10,529	-140,479
GTAB	-	-	-	-	-	-	-	-	-
Other	-1	-4,098	-1,346	-42	-29	-5,516	18	1,447	-2,055
Aviation Gasoline Blend. Comp. (net)	15	-	4	-	-	19	-	-	19
Total Input to Refineries	13,370	89,619	80,783	5,837	2,746	192,355	15,795	42,190	339,198
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	700	4,550	3,639	220	139	9,248	659	2,511	17,043
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	93.9	90.3	98.5	85.7	102.1	93.6	96.0	87.3	90.6
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	153	651	630	36	26	1,497	101	406	2,838
Catalytic Cracking	194	1,232	1,030	14	32	2,502	179	716	4,782
Catalytic Hydrocracking	44	540	481	19	18	1,101	26	426	1,897
Delayed and Fluid Coking	27	713	507	26	-	1,273	61	390	2,157
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.60	1.45	1.16	1.51	0.91	1.26	1.38	1.25	1.22
API Gravity, Weighted Average (degrees)	39.67	32.79	32.80	30.47	36.07	33.35	33.12	29.23	33.14
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,042	3,696	256	136	9,876	677	2,875	18,495
Idle	-	-	-	-	-	-	10	-	314
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	11,546	11,546

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, June 2019
(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	28,803	2,250	31,053	74,544	15,585	27,369	117,498
Hydrocarbon Gas Liquids	324	-	324	1,293	34	767	2,094
Natural Gas Liquids	324	-	324	1,293	34	767	2,094
Normal Butane	-	-	-	-	-	8	8
Isobutane	324	-	324	849	34	358	1,241
Natural Gasoline	-	-	-	444	-	401	845
Other Liquids	-12,029	24	-12,005	-32,228	-4,921	-11,821	-48,970
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	156	100	256	972	480	322	1,774
Hydrogen	88	8	96	691	277	191	1,159
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	68	92	160	250	203	131	584
Fuel Ethanol	68	77	145	146	142	115	403
Renewable Diesel Fuel ²	-	15	15	104	61	16	181
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	31	-	-	31
Unfinished Oils (net)	1,798	-114	1,684	-1,405	-127	-253	-1,785
Naphthas and Lighter	844	-82	762	419	-178	-38	203
Kerosene and Light Gas Oils	79	-	79	182	-124	124	182
Heavy Gas Oils	781	-33	748	-1,768	175	0	-1,593
Residuum	94	1	95	-238	-	-339	-577
Motor Gasoline Blend.Comp. (MGBC)(net)	-13,983	38	-13,945	-31,795	-5,274	-11,890	-48,959
Reformulated - RBOB	-8,950	-	-8,950	-7,116	-	-	-7,116
Conventional	-5,033	38	-4,995	-24,679	-5,274	-11,890	-41,843
CBOB	-5,057	24	-5,033	-24,021	-5,440	-11,880	-41,341
GTAB	-	-	-	-	-	-	-
Other	24	14	38	-658	166	-10	-502
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	17,098	2,274	19,372	43,609	10,698	16,315	70,622
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	962	76	1,038	2,480	535	914	3,929
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	85.4	77.6	84.8	92.6	97.9	99.1	94.8
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	178	13	191	484	79	168	731
Catalytic Cracking	354	10	364	686	140	227	1,053
Catalytic Hydrocracking	39	-	39	159	63	59	280
Delayed and Fluid Coking	31	-	31	325	70	86	482
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.71	1.31	0.75	1.46	1.87	0.64	1.33
API Gravity, Weighted Average (degrees)	34.79	34.63	34.78	33.24	28.31	38.18	33.68
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	923	4,082
Idle	-	-	-	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, June 2019
(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	21,280	138,089	103,688	6,981	3,735	273,773	20,312	74,438	517,074
Hydrocarbon Gas Liquids	492	2,776	3,590	31	177	7,066	451	2,159	12,094
Natural Gas Liquids	492	2,776	3,590	31	177	7,066	451	2,159	12,094
Normal Butane	116	229	77	-	-	422	81	588	1,099
Isobutane	262	1,759	1,650	27	177	3,875	207	894	6,541
Natural Gasoline	114	788	1,863	4	-	2,769	163	677	4,454
Other Liquids	-8,866	-48,559	-29,682	-1,224	-1,356	-89,687	-4,907	-31,786	-187,355
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	283	2,148	1,609	117	93	4,250	547	1,732	8,559
Hydrogen	4	2,082	1,409	65	36	3,596	217	1,301	6,369
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	279	66	200	52	57	654	330	431	2,159
Fuel Ethanol	221	52	174	43	48	538	285	99	1,470
Renewable Diesel Fuel ²	58	14	26	9	9	116	45	332	689
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	31
Unfinished Oils (net)	125	-895	11,712	-196	45	10,791	-183	3,903	14,410
Naphthas and Lighter	166	-5,523	288	-9	51	-5,027	-87	-408	-4,557
Kerosene and Light Gas Oils	35	-856	1,651	-123	-52	655	-204	480	1,192
Heavy Gas Oils	-55	3,654	7,685	-22	46	11,308	96	3,168	13,727
Residuum	-21	1,830	2,088	-42	-	3,855	12	663	4,048
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,274	-49,812	-43,012	-1,145	-1,494	-104,737	-5,271	-37,421	-210,333
Reformulated - RBOB	-1,112	-14,889	-7,331	-	-672	-24,004	-	-27,174	-67,244
Conventional	-8,162	-34,923	-35,681	-1,145	-822	-80,733	-5,271	-10,247	-143,089
CBOB	-8,155	-29,935	-33,065	-1,109	-820	-73,084	-5,150	-9,920	-134,528
GTAB	-	-	-	-	-	-	-	-	-
Other	-7	-4,988	-2,616	-36	-2	-7,649	-121	-327	-8,561
Aviation Gasoline Blend. Comp. (net)	0	-	9	-	-	9	-	-	9
Total Input to Refineries	12,906	92,306	77,596	5,788	2,556	191,152	15,856	44,811	341,813
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	711	4,755	3,608	210	125	9,408	678	2,645	17,699
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	95.3	94.3	97.6	81.9	91.7	95.3	98.8	92.0	94.1
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	153	721	598	35	29	1,535	108	415	2,980
Catalytic Cracking	186	1,275	1,068	16	30	2,575	173	718	4,884
Catalytic Hydrocracking	47	506	420	19	17	1,009	28	494	1,850
Delayed and Fluid Coking	25	785	521	25	-	1,355	64	451	2,383
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.58	1.42	0.94	1.65	0.92	1.17	1.45	1.45	1.23
API Gravity, Weighted Average (degrees)	39.82	32.39	33.05	29.88	35.56	33.24	33.10	28.46	32.70
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	677	2,869	18,692
Idle	-	35	-	-	-	35	10	7	117
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	13,561	13,561

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, July 2019
(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	24,354	3,156	27,510	82,069	16,406	28,110	126,585
Hydrocarbon Gas Liquids	273	-	273	1,449	44	805	2,298
Natural Gas Liquids	273	-	273	1,449	44	805	2,298
Normal Butane	4	-	4	14	-	19	33
Isobutane	269	-	269	1,100	44	422	1,566
Natural Gasoline	-	-	-	335	-	364	699
Other Liquids	-9,723	147	-9,576	-35,033	-4,988	-11,623	-51,644
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	184	162	346	1,045	484	342	1,871
Hydrogen	100	10	110	748	268	203	1,219
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	84	152	236	252	216	139	607
Fuel Ethanol	84	122	206	160	159	119	438
Renewable Diesel Fuel ²	-	30	30	92	57	20	169
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	45	-	-	45
Unfinished Oils (net)	1,351	-23	1,328	49	-255	204	-2
Naphthas and Lighter	385	21	406	179	-182	206	203
Kerosene and Light Gas Oils	383	-	383	-110	-71	45	-136
Heavy Gas Oils	433	-40	393	102	-2	7	107
Residuum	150	-4	146	-122	-	-54	-176
Motor Gasoline Blend.Comp. (MGBC)(net)	-11,258	8	-11,250	-36,127	-5,217	-12,169	-53,513
Reformulated - RBOB	-7,812	-	-7,812	-7,927	-	-	-7,927
Conventional	-3,446	8	-3,438	-28,200	-5,217	-12,169	-45,586
CBOB	-2,782	-11	-2,793	-27,976	-5,034	-12,029	-45,039
GTAB	-	-	-	-	-	-	-
Other	-664	19	-645	-224	-183	-140	-547
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	14,904	3,303	18,207	48,485	11,462	17,292	77,239
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	785	103	888	2,644	536	907	4,088
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	69.7	105.1	72.6	98.7	98.2	98.4	98.6
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	155	17	172	499	81	175	755
Catalytic Cracking	288	16	304	825	114	220	1,158
Catalytic Hydrocracking	41	-	41	188	63	63	314
Delayed and Fluid Coking	50	-	50	344	69	93	506
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.88	1.57	0.97	1.59	1.68	0.66	1.40
API Gravity, Weighted Average (degrees)	35.51	32.50	35.13	32.29	29.20	38.97	33.31
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	1,126	98	1,224	2,650	509	923	4,082
Idle	-	-	-	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, July 2019
(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	21,526	142,894	103,189	7,499	4,091	279,199	21,289	77,848	532,431
Hydrocarbon Gas Liquids	345	3,742	3,502	37	167	7,793	455	1,975	12,794
Natural Gas Liquids	345	3,742	3,502	37	167	7,793	455	1,975	12,794
Normal Butane	83	660	104	—	—	847	101	534	1,519
Isobutane	198	1,957	1,384	33	167	3,739	207	883	6,664
Natural Gasoline	64	1,125	2,014	4	—	3,207	147	558	4,611
Other Liquids	-8,637	-50,246	-29,122	-1,498	-1,530	-91,033	-4,679	-32,649	-189,581
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	307	2,244	1,841	125	100	4,617	573	1,705	9,112
Hydrogen	5	2,178	1,603	64	41	3,891	202	1,292	6,714
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	302	66	238	61	59	726	371	413	2,353
Fuel Ethanol	240	53	194	39	50	576	319	89	1,628
Renewable Diesel Fuel ²	62	13	44	22	9	150	52	324	725
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	45
Unfinished Oils (net)	86	265	13,244	-66	-210	13,319	175	3,724	18,544
Naphthas and Lighter	135	-4,456	796	27	-12	-3,510	178	75	-2,648
Kerosene and Light Gas Oils	-79	-1,321	966	23	-84	-495	-308	-192	-748
Heavy Gas Oils	49	4,472	9,727	5	-114	14,139	311	3,152	18,102
Residuum	-19	1,570	1,755	-121	—	3,185	-6	689	3,838
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,038	-52,755	-44,213	-1,557	-1,420	-108,983	-5,427	-38,078	-217,251
Reformulated - RBOB	-1,196	-16,122	-7,383	—	-633	-25,334	—	-28,588	-69,661
Conventional	-7,842	-36,633	-36,830	-1,557	-787	-83,649	-5,427	-9,490	-147,590
CBOB	-7,821	-31,039	-35,518	-1,522	-751	-76,651	-5,567	-9,848	-139,898
GTAB	—	—	—	—	—	—	—	—	—
Other	-21	-5,594	-1,312	-35	-36	-6,998	140	358	-7,692
Aviation Gasoline Blend. Comp. (net)	8	—	6	—	—	14	—	—	14
Total Input to Refineries	13,234	96,390	77,569	6,038	2,728	195,959	17,065	47,174	355,644
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	695	4,780	3,524	217	131	9,347	689	2,674	17,687
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	93.2	94.8	95.3	84.7	96.7	94.7	100.3	93.0	94.0
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	145	698	618	35	27	1,523	114	419	2,984
Catalytic Cracking	184	1,297	1,028	14	30	2,553	183	706	4,905
Catalytic Hydrocracking	47	500	452	20	16	1,036	28	468	1,887
Delayed and Fluid Coking	23	827	510	26	—	1,385	70	459	2,469
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.57	1.44	1.20	1.53	0.92	1.27	1.49	1.49	1.33
API Gravity, Weighted Average (degrees)	39.74	33.11	32.01	30.15	35.44	33.22	32.35	28.79	32.62
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	677	2,869	18,692
Idle	—	35	—	—	—	35	10	7	117
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	14,913	14,913

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, August 2019
(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	23,125	3,110	26,235	81,867	16,479	28,947	127,293
Hydrocarbon Gas Liquids	263	-	263	1,631	59	894	2,584
Natural Gas Liquids	263	-	263	1,631	59	894	2,584
Normal Butane	-	-	-	15	-	4	19
Isobutane	263	-	263	1,178	59	419	1,656
Natural Gasoline	-	-	-	438	-	471	909
Other Liquids	-8,584	114	-8,470	-35,821	-5,241	-12,388	-53,450
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	243	155	398	1,080	463	343	1,886
Hydrogen	98	11	109	766	266	203	1,235
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	145	144	289	265	197	140	602
Fuel Ethanol	145	118	263	175	151	120	446
Renewable Diesel Fuel ²	-	26	26	90	46	20	156
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	49	-	-	49
Unfinished Oils (net)	1,320	-78	1,242	-223	-309	-33	-565
Naphthas and Lighter	594	-50	544	-15	-172	-77	-264
Kerosene and Light Gas Oils	171	-	171	17	-142	-69	-194
Heavy Gas Oils	544	-29	515	307	5	143	455
Residuum	11	1	12	-532	-	-30	-562
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,147	37	-10,110	-36,678	-5,395	-12,698	-54,771
Reformulated - RBOB	-6,988	-	-6,988	-8,127	-	-	-8,127
Conventional	-3,159	37	-3,122	-28,551	-5,395	-12,698	-46,644
CBOB	-2,743	32	-2,711	-28,123	-5,049	-12,775	-45,947
GTAB	-	-	-	-	-	-	-
Other	-416	5	-411	-428	-346	77	-697
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	14,804	3,224	18,028	47,677	11,297	17,453	76,427
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	747	102	848	2,637	542	935	4,114
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	66.3	103.3	69.3	98.5	99.2	101.4	99.2
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	127	16	142	477	79	183	739
Catalytic Cracking	271	16	288	801	120	235	1,156
Catalytic Hydrocracking	41	-	41	199	62	65	326
Delayed and Fluid Coking	47	-	47	362	72	91	526
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.84	1.67	0.93	1.53	1.63	0.64	1.34
API Gravity, Weighted Average (degrees)	33.54	32.00	33.36	32.71	28.40	38.58	33.43
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,650	509	923	4,082
Idle	335	-	335	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, August 2019
(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	21,872	143,259	106,104	6,930	4,017	282,182	21,445	79,047	536,202
Hydrocarbon Gas Liquids	274	4,218	3,804	41	171	8,508	492	1,721	13,568
Natural Gas Liquids	274	4,218	3,804	41	171	8,508	492	1,721	13,568
Normal Butane	-	1,016	172	-	-	1,188	123	470	1,800
Isobutane	250	2,155	1,484	37	171	4,097	198	845	7,059
Natural Gasoline	24	1,047	2,148	4	-	3,223	171	406	4,709
Other Liquids	-9,346	-53,897	-28,165	-1,662	-1,560	-94,630	-5,140	-33,335	-195,025
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	302	2,197	1,819	118	102	4,538	553	1,769	9,144
Hydrogen	6	2,137	1,583	51	38	3,815	206	1,350	6,715
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	296	60	236	67	64	723	347	419	2,380
Fuel Ethanol	231	50	199	44	55	579	301	95	1,684
Renewable Diesel Fuel ²	65	10	37	23	9	144	46	324	696
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	49
Unfinished Oils (net)	-508	-2,094	12,390	-269	-26	9,493	59	2,557	12,786
Naphthas and Lighter	-120	-6,117	409	-121	25	-5,924	73	-525	-6,096
Kerosene and Light Gas Oils	-52	-1,080	1,269	-59	-19	59	-201	-621	-786
Heavy Gas Oils	-168	3,390	7,407	-61	-32	10,536	196	2,783	14,485
Residuum	-168	1,713	3,305	-28	-	4,822	-9	920	5,183
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,149	-54,000	-42,384	-1,511	-1,636	-108,680	-5,752	-37,661	-216,974
Reformulated - RBOB	-770	-14,938	-6,167	-	-878	-22,753	-	-27,547	-65,415
Conventional	-8,379	-39,062	-36,217	-1,511	-758	-85,927	-5,752	-10,114	-151,559
CBOB	-8,316	-34,789	-34,706	-1,508	-696	-80,015	-5,805	-11,078	-145,556
GTAB	-	-	-	-	-	-	-	-	-
Other	-63	-4,273	-1,511	-3	-62	-5,912	53	964	-6,003
Aviation Gasoline Blend. Comp. (net)	9	-	10	-	-	19	-	-	19
Total Input to Refineries	12,800	93,580	81,743	5,309	2,628	196,060	16,797	47,433	354,745
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	705	4,810	3,610	210	130	9,465	695	2,711	17,833
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	94.6	95.4	97.7	82.0	95.6	95.9	101.1	94.3	94.8
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	152	642	625	32	28	1,480	114	408	2,883
Catalytic Cracking	178	1,286	1,064	14	30	2,571	183	713	4,911
Catalytic Hydrocracking	47	491	480	19	10	1,047	26	462	1,903
Delayed and Fluid Coking	23	778	530	12	-	1,343	68	458	2,443
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.57	1.42	1.18	1.43	0.93	1.25	1.50	1.76	1.34
API Gravity, Weighted Average (degrees)	39.84	32.96	33.34	30.39	35.37	33.64	32.29	28.05	32.68
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	677	2,875	18,363
Idle	-	35	-	-	-	35	10	-	445
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	12,834	12,834

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, September 2019
(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	21,627	2,939	24,566	76,350	12,485	27,801	116,636
Hydrocarbon Gas Liquids	526	-	526	1,832	50	956	2,838
Natural Gas Liquids	526	-	526	1,832	50	956	2,838
Normal Butane	227	-	227	172	-	-	172
Isobutane	299	-	299	1,163	50	427	1,640
Natural Gasoline	-	-	-	497	-	529	1,026
Other Liquids	-8,312	142	-8,170	-34,285	-3,891	-12,413	-50,589
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	233	150	383	917	310	336	1,563
Hydrogen	91	11	102	618	128	204	950
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	142	139	281	265	182	132	579
Fuel Ethanol	142	114	256	174	137	112	423
Renewable Diesel Fuel ²	-	25	25	91	45	20	156
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	34	-	-	34
Unfinished Oils (net)	2,041	31	2,072	245	-1,349	-258	-1,362
Naphthas and Lighter	555	61	616	501	-145	44	400
Kerosene and Light Gas Oils	498	3	501	-129	-6	-36	-171
Heavy Gas Oils	504	-36	468	-165	-1,198	72	-1,291
Residuum	484	3	487	38	-	-338	-300
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,586	-39	-10,625	-35,447	-2,852	-12,491	-50,790
Reformulated - RBOB	-6,916	-	-6,916	-7,602	-	-	-7,602
Conventional	-3,670	-39	-3,709	-27,845	-2,852	-12,491	-43,188
CBOB	-3,278	-59	-3,337	-27,149	-3,416	-12,359	-42,924
GTAB	-	-	-	-	-	-	-
Other	-392	20	-372	-696	564	-132	-264
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	13,841	3,081	16,922	43,897	8,644	16,344	68,885
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	722	100	822	2,538	434	928	3,900
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	64.1	101.7	67.2	94.8	79.4	100.6	94.0
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	124	16	140	484	66	182	732
Catalytic Cracking	273	16	289	763	40	231	1,034
Catalytic Hydrocracking	40	-	40	202	38	63	303
Delayed and Fluid Coking	45	-	45	352	40	78	470
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.76	1.71	0.87	1.49	1.35	0.62	1.27
API Gravity, Weighted Average (degrees)	36.02	31.36	35.43	33.61	31.12	38.17	34.40
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,650	509	923	4,082
Idle	335	-	335	28	38	-	66
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, September 2019
(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	21,746	125,980	103,208	6,619	3,485	261,038	19,164	70,689	492,093
Hydrocarbon Gas Liquids	468	4,107	4,004	30	161	8,770	473	1,586	14,193
Natural Gas Liquids	468	4,107	4,004	30	161	8,770	473	1,586	14,193
Normal Butane	107	931	1,176	—	—	2,214	125	414	3,152
Isobutane	224	2,136	1,351	26	161	3,898	195	683	6,715
Natural Gasoline	137	1,040	1,477	4	—	2,658	153	489	4,326
Other Liquids	-9,003	-48,441	-30,426	-1,326	-1,626	-90,822	-4,807	-28,897	-183,285
Hydrogen/Oxygenates/Renewables/Other Hydrocarbons	292	1,912	1,595	136	78	4,013	539	1,705	8,203
Hydrogen	7	1,855	1,387	66	48	3,363	208	1,339	5,962
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	285	57	208	70	30	650	331	366	2,207
Fuel Ethanol	221	47	165	45	19	497	286	90	1,552
Renewable Diesel Fuel ²	64	10	43	25	11	153	45	276	655
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	34
Unfinished Oils (net)	-606	-2,098	9,253	-164	-11	6,374	-28	4,412	11,468
Naphthas and Lighter	-325	-4,955	385	-47	6	-4,936	-258	7	-4,171
Kerosene and Light Gas Oils	104	-1,495	1,053	-16	-5	-359	-220	-437	-686
Heavy Gas Oils	-391	2,677	5,587	-33	-12	7,828	446	4,002	11,453
Residuum	6	1,675	2,228	-68	—	3,841	4	840	4,872
Motor Gasoline Blend.Comp. (MGBC)(net)	-8,710	-48,255	-41,271	-1,298	-1,693	-101,227	-5,318	-35,014	-202,974
Reformulated - RBOB	-872	-13,062	-2,016	—	-828	-16,778	—	-25,993	-57,289
Conventional	-7,838	-35,193	-39,255	-1,298	-865	-84,449	-5,318	-9,021	-145,685
CBOB	-7,606	-29,113	-37,065	-1,259	-955	-75,998	-5,302	-9,158	-136,719
GTAB	—	—	—	—	—	—	—	—	—
Other	-232	-6,080	-2,190	-39	90	-8,451	-16	137	-8,966
Aviation Gasoline Blend. Comp. (net)	21	—	-3	—	—	18	—	—	18
Total Input to Refineries	13,211	81,646	76,786	5,323	2,020	178,986	14,830	43,378	323,001
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	724	4,345	3,599	194	118	8,980	641	2,385	16,728
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	97.1	86.2	97.4	75.7	87.0	90.9	93.3	83.0	88.9
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	153	621	608	32	21	1,435	98	367	2,772
Catalytic Cracking	168	1,299	987	15	25	2,494	181	694	4,693
Catalytic Hydrocracking	45	405	397	17	18	882	28	468	1,722
Delayed and Fluid Coking	24	662	507	26	—	1,219	66	407	2,206
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.53	1.32	1.23	1.57	0.84	1.21	1.42	1.58	1.27
API Gravity, Weighted Average (degrees)	40.13	33.72	33.15	29.09	37.57	34.00	32.70	28.74	33.32
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	677	2,875	18,363
Idle	—	35	—	—	—	35	10	—	445
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	11,657	11,657

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(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	19,466	3,178	22,644	73,629	13,863	25,766	113,258
Hydrocarbon Gas Liquids	441	-	441	2,473	53	726	3,252
Natural Gas Liquids	441	-	441	2,473	53	726	3,252
Normal Butane	272	-	272	579	-	33	612
Isobutane	169	-	169	1,316	53	269	1,638
Natural Gasoline	-	-	-	578	-	424	1,002
Other Liquids	-8,022	114	-7,908	-33,832	-4,775	-11,303	-49,910
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	164	172	336	912	369	304	1,585
Hydrogen	92	14	106	638	190	165	993
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	72	158	230	256	179	139	574
Fuel Ethanol	72	134	206	165	153	119	437
Renewable Diesel Fuel ²	-	24	24	91	26	20	137
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	18	-	-	18
Unfinished Oils (net)	2,495	-119	2,376	-161	-718	-724	-1,603
Naphthas and Lighter	725	-74	651	191	-166	55	80
Kerosene and Light Gas Oils	220	-	220	-168	-223	26	-365
Heavy Gas Oils	1,225	-38	1,187	372	-329	-824	-781
Residuum	325	-7	318	-556	-	19	-537
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,681	61	-10,620	-34,583	-4,426	-10,883	-49,892
Reformulated - RBOB	-7,366	-	-7,366	-7,465	-45	-	-7,510
Conventional	-3,315	61	-3,254	-27,118	-4,381	-10,883	-42,382
CBOB	-2,654	43	-2,611	-26,760	-4,364	-10,966	-42,090
GTAB	-	-	-	-	-	-	-
Other	-661	18	-643	-358	-17	83	-292
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	11,885	3,292	15,177	42,270	9,141	15,189	66,600
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	628	103	731	2,365	459	832	3,656
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	55.8	105.0	59.7	88.3	84.0	90.2	88.2
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	117	15	132	408	68	162	638
Catalytic Cracking	240	16	256	697	75	177	949
Catalytic Hydrocracking	34	-	34	166	49	59	274
Delayed and Fluid Coking	46	-	46	330	43	81	455
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.98	1.68	1.07	1.57	1.15	0.59	1.30
API Gravity, Weighted Average (degrees)	35.50	31.36	34.94	32.95	31.21	38.93	34.06
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,473	509	923	3,905
Idle	335	-	335	205	38	-	243
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, October 2019
(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	21,363	125,930	100,945	7,354	2,918	258,510	16,870	74,825	486,107
Hydrocarbon Gas Liquids	673	5,064	4,130	36	143	10,046	487	2,159	16,385
Natural Gas Liquids	673	5,064	4,130	36	143	10,046	487	2,159	16,385
Normal Butane	247	1,838	1,726	-	-	3,811	163	730	5,588
Isobutane	274	2,109	1,426	34	143	3,986	167	805	6,765
Natural Gasoline	152	1,117	978	2	-	2,249	157	624	4,032
Other Liquids	-9,757	-50,861	-27,965	-1,734	-1,317	-91,634	-4,927	-35,324	-189,703
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	304	1,904	1,753	141	98	4,200	504	1,575	8,200
Hydrogen	6	1,848	1,499	68	59	3,480	201	1,293	6,073
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	298	56	254	73	39	720	303	282	2,109
Fuel Ethanol	233	49	220	47	29	578	279	103	1,603
Renewable Diesel Fuel ²	65	7	34	26	10	142	24	179	506
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	18
Unfinished Oils (net)	-725	-3,611	9,950	-248	-133	5,233	-670	613	5,949
Naphthas and Lighter	-331	-7,377	829	-73	-197	-7,149	-81	-3	-6,502
Kerosene and Light Gas Oils	-74	-1,834	669	35	-68	-1,272	-410	-1,787	-3,614
Heavy Gas Oils	-96	4,089	4,889	-111	132	8,903	176	1,940	11,425
Residuam	-224	1,511	3,563	-99	-	4,751	-355	463	4,640
Motor Gasoline Blend.Comp. (MGBC)(net)	-9,387	-49,154	-39,666	-1,627	-1,282	-101,116	-4,761	-37,512	-203,901
Reformulated - RBOB	-746	-15,202	-3,086	-	-500	-19,534	-	-28,299	-62,709
Conventional	-8,641	-33,952	-36,580	-1,627	-782	-81,582	-4,761	-9,213	-141,192
CBOB	-8,695	-29,513	-34,610	-1,614	-702	-75,134	-5,184	-9,178	-134,197
GTAB	-	-	-	-	-	-	-	-	-
Other	54	-4,439	-1,970	-13	-80	-6,448	423	-35	-6,995
Aviation Gasoline Blend. Comp. (net)	51	-	-2	-	-	49	-	-	49
Total Input to Refineries	12,279	80,133	77,110	5,656	1,744	176,922	12,430	41,660	312,789
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	698	4,210	3,432	208	85	8,633	545	2,563	16,128
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	93.7	83.5	92.9	81.3	62.3	87.4	79.4	89.1	85.8
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	146	513	567	34	10	1,270	82	394	2,517
Catalytic Cracking	164	1,317	995	18	26	2,520	143	689	4,558
Catalytic Hydrocracking	47	319	421	16	12	816	26	449	1,599
Delayed and Fluid Coking	21	627	510	30	-	1,188	45	415	2,149
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.55	1.37	1.24	1.55	0.92	1.25	1.41	1.25	1.26
API Gravity, Weighted Average (degrees)	40.07	33.88	33.30	29.98	35.49	34.11	32.67	28.62	33.20
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,007	3,696	256	136	9,841	629	2,875	18,138
Idle	-	35	-	-	-	35	58	-	670
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	10,830	10,830

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, November 2019
(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	21,257	2,709	23,966	72,716	15,589	26,374	114,679
Hydrocarbon Gas Liquids	654	-	654	2,355	55	665	3,075
Natural Gas Liquids	654	-	654	2,355	55	665	3,075
Normal Butane	377	-	377	806	-	81	887
Isobutane	277	-	277	1,127	55	324	1,506
Natural Gasoline	-	-	-	422	-	260	682
Other Liquids	-9,183	109	-9,074	-35,359	-5,417	-12,346	-53,122
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	168	149	317	1,000	475	315	1,790
Hydrogen	99	13	112	714	288	185	1,187
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	69	136	205	245	187	130	562
Fuel Ethanol	69	114	183	169	171	113	453
Renewable Diesel Fuel ²	-	22	22	76	16	17	109
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	41	-	-	41
Unfinished Oils (net)	2,855	-38	2,817	1,356	-44	-734	578
Naphthas and Lighter	704	-11	693	743	-191	167	719
Kerosene and Light Gas Oils	547	-	547	33	-199	-152	-318
Heavy Gas Oils	922	-29	893	583	346	-473	456
Residuum	682	2	684	-3	-	-276	-279
Motor Gasoline Blend.Comp. (MGBC)(net)	-12,206	-2	-12,208	-37,715	-5,848	-11,927	-55,490
Reformulated - RBOB	-8,143	-	-8,143	-8,748	-198	-	-8,946
Conventional	-4,063	-2	-4,065	-28,967	-5,650	-11,927	-46,544
CBOB	-3,521	-2	-3,523	-28,417	-5,852	-11,865	-46,134
GTAB	-	-	-	-	-	-	-
Other	-542	0	-542	-550	202	-62	-410
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	12,728	2,818	15,546	39,712	10,227	14,693	64,632
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	733	91	824	2,417	536	880	3,832
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	65.1	92.4	67.3	90.3	98.0	95.4	92.4
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	124	15	139	431	71	172	674
Catalytic Cracking	290	15	305	752	124	203	1,079
Catalytic Hydrocracking	36	-	36	171	62	60	293
Delayed and Fluid Coking	56	-	56	348	75	83	506
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	1.00	1.67	1.08	1.59	1.42	0.60	1.34
API Gravity, Weighted Average (degrees)	34.17	31.58	33.87	33.27	30.05	39.10	34.11
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,473	509	923	3,905
Idle	335	-	335	205	38	-	243
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, November 2019
(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	21,943	134,874	97,815	7,546	3,503	265,681	17,723	72,404	494,453
Hydrocarbon Gas Liquids	853	5,407	3,914	45	152	10,371	620	2,771	17,491
Natural Gas Liquids	853	5,407	3,914	45	152	10,371	620	2,771	17,491
Normal Butane	475	2,126	1,722	2	-	4,325	301	1,292	7,182
Isobutane	229	2,196	1,382	39	152	3,998	163	752	6,696
Natural Gasoline	149	1,085	810	4	-	2,048	156	727	3,613
Other Liquids	-10,021	-52,225	-23,096	-1,869	-1,562	-88,773	-4,593	-35,675	-191,237
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	285	2,330	1,834	127	104	4,680	510	1,512	8,809
Hydrogen	8	2,276	1,612	62	51	4,009	236	1,338	6,882
Oxygenates (excluding Fuel Ethanol)	--	--	--	--	--	--	--	--	--
Methyl Tertiary Butyl Ether (MTBE)	--	--	--	--	--	--	--	--	--
All Other Oxygenates ¹	--	--	--	--	--	--	--	--	--
Renewable Fuels (including Fuel Ethanol)	277	54	222	65	53	671	274	174	1,886
Fuel Ethanol	221	44	176	43	45	529	259	91	1,515
Renewable Diesel Fuel ²	56	10	46	22	8	142	15	83	371
Other Renewable Fuels	-	-	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	-	-	-	-	-	41
Unfinished Oils (net)	-11	-2,400	13,313	-222	-16	10,664	126	321	14,506
Naphthas and Lighter	15	-6,744	503	-40	38	-6,228	-54	-636	-5,506
Kerosene and Light Gas Oils	81	-1,540	2,001	-64	-47	431	-165	95	590
Heavy Gas Oils	-173	4,333	6,777	-39	-7	10,891	117	115	12,472
Residuum	66	1,551	4,032	-79	-	5,570	228	747	6,950
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,342	-52,155	-38,257	-1,774	-1,650	-104,178	-5,229	-37,508	-214,613
Reformulated - RBOB	-1,103	-14,316	-1,980	-	-777	-18,176	-	-28,275	-63,540
Conventional	-9,239	-37,839	-36,277	-1,774	-873	-86,002	-5,229	-9,233	-151,073
CBOB	-8,718	-29,384	-34,811	-1,710	-920	-75,543	-5,249	-9,744	-140,193
GTAB	-	-	-	-	-	-	-	-	-
Other	-521	-8,455	-1,466	-64	47	-10,459	20	511	-10,880
Aviation Gasoline Blend. Comp. (net)	47	-	14	-	-	61	-	-	61
Total Input to Refineries	12,775	88,056	78,633	5,722	2,093	187,279	13,750	39,500	320,707
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	729	4,684	3,446	220	117	9,196	591	2,598	17,041
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	97.8	92.9	93.2	85.7	86.3	93.1	86.1	90.4	90.6
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	142	591	575	36	26	1,369	88	352	2,621
Catalytic Cracking	171	1,349	1,022	20	28	2,589	170	708	4,852
Catalytic Hydrocracking	44	434	479	16	17	989	27	450	1,796
Delayed and Fluid Coking	19	759	525	34	-	1,337	65	448	2,411
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.51	1.45	1.24	1.52	0.92	1.28	1.43	1.27	1.29
API Gravity, Weighted Average (degrees)	40.09	33.42	32.45	30.40	35.74	33.62	33.06	28.53	32.93
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,042	3,696	256	136	9,876	629	2,875	18,173
Idle	-	-	-	-	-	-	58	-	635
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-	13,850	13,850

-- = Not Applicable.

- = 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 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2019
(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	21,818	3,101	24,919	78,480	16,136	27,114	121,730
Hydrocarbon Gas Liquids	639	-	639	2,145	68	740	2,953
Natural Gas Liquids	639	-	639	2,145	68	740	2,953
Normal Butane	367	-	367	804	-	152	956
Isobutane	272	-	272	1,098	68	441	1,607
Natural Gasoline	-	-	-	243	-	147	390
Other Liquids	-9,499	35	-9,464	-38,364	-5,812	-12,032	-56,208
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	174	154	328	1,073	455	359	1,887
Hydrogen	102	13	115	799	281	216	1,296
Oxygenates (excluding Fuel Ethanol)	-	-	-	-	-	-	-
Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-	-
All Other Oxygenates ¹	-	-	-	-	-	-	-
Renewable Fuels (including Fuel Ethanol)	72	141	213	254	174	143	571
Fuel Ethanol	72	117	189	180	161	121	462
Renewable Diesel Fuel ²	-	24	24	74	13	22	109
Other Renewable Fuels	-	-	-	-	-	-	-
Other Hydrocarbons	-	-	-	20	-	-	20
Unfinished Oils (net)	3,298	-81	3,217	-515	-131	532	-114
Naphthas and Lighter	706	-32	674	3	-213	69	-141
Kerosene and Light Gas Oils	833	-	833	-134	-67	106	-95
Heavy Gas Oils	1,167	-49	1,118	-127	149	189	211
Residuum	592	0	592	-257	-	168	-89
Motor Gasoline Blend.Comp. (MGBC)(net)	-12,971	-38	-13,009	-38,922	-6,136	-12,923	-57,981
Reformulated - RBOB	-9,087	-	-9,087	-8,486	-242	-	-8,728
Conventional	-3,884	-38	-3,922	-30,436	-5,894	-12,923	-49,253
CBOB	-3,767	-40	-3,807	-29,258	-5,673	-13,085	-48,016
GTAB	-	-	-	-	-	-	-
Other	-117	2	-115	-1,178	-221	162	-1,237
Aviation Gasoline Blend. Comp. (net)	-	-	-	-	-	-	-
Total Input to Refineries	12,958	3,136	16,094	42,261	10,392	15,822	68,475
Atmospheric Crude Oil Distillation							
Gross Input (daily average)	710	102	811	2,530	531	875	3,935
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operable Utilization Rate (percent) ³	63.1	103.3	66.3	94.5	97.1	94.9	94.9
Downstream Processing							
Fresh Feed Input (daily average)							
Catalytic Reforming	119	17	136	445	69	159	674
Catalytic Cracking	281	15	296	759	123	222	1,104
Catalytic Hydrocracking	42	-	42	186	64	65	315
Delayed and Fluid Coking	58	-	58	369	75	89	533
Crude Oil Qualities							
Sulfur Content, Weighted Average (percent)	0.62	1.62	0.74	1.64	1.82	0.68	1.45
API Gravity, Weighted Average (degrees)	37.07	31.87	36.40	33.00	27.20	38.83	33.45
Operable Capacity (daily average)	1,126	98	1,224	2,678	547	923	4,147
Operating	791	98	889	2,473	509	923	3,905
Idle	335	-	335	205	38	-	243
Alaskan Crude Oil Receipts	-	-	-	-	-	-	-

See footnotes at end of table.

Table 18. Refinery Net Input of Crude Oil and Petroleum Products by PAD and Refining Districts, December 2019
(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	22,944	142,130	103,010	7,410	3,534	279,028	20,029	74,863	520,569
Hydrocarbon Gas Liquids	910	5,154	4,500	38	161	10,763	637	3,001	17,993
Natural Gas Liquids	910	5,154	4,500	38	161	10,763	637	3,001	17,993
Normal Butane	553	2,123	1,755	2	—	4,433	354	1,617	7,727
Isobutane	240	2,014	1,467	31	161	3,913	165	616	6,573
Natural Gasoline	117	1,017	1,278	5	—	2,417	118	768	3,693
Other Liquids	-10,545	-52,066	-25,257	-1,754	-1,742	-91,364	-5,539	-34,873	-197,448
Hydrogen/Oxygenates/Renewables/ Other Hydrocarbons	284	2,367	2,010	133	92	4,886	522	1,842	9,465
Hydrogen	6	2,317	1,792	67	45	4,227	237	1,303	7,178
Oxygenates (excluding Fuel Ethanol)	—	—	—	—	—	—	—	—	—
Methyl Tertiary Butyl Ether (MTBE)	—	—	—	—	—	—	—	—	—
All Other Oxygenates ¹	—	—	—	—	—	—	—	—	—
Renewable Fuels (including Fuel Ethanol)	278	50	218	66	47	659	285	539	2,267
Fuel Ethanol	224	45	184	47	37	537	265	92	1,545
Renewable Diesel Fuel ²	54	5	34	19	10	122	20	447	722
Other Renewable Fuels	—	—	—	—	—	—	—	—	—
Other Hydrocarbons	—	—	—	—	—	—	—	—	20
Unfinished Oils (net)	-118	222	14,099	-232	-146	13,825	22	1,228	18,178
Naphthas and Lighter	149	-5,193	607	-68	-15	-4,520	-9	-347	-4,343
Kerosene and Light Gas Oils	-68	-1,360	2,110	41	-101	622	-98	-578	684
Heavy Gas Oils	-234	2,363	7,637	-131	-30	9,605	-3	568	11,499
Residuum	35	4,412	3,745	-74	—	8,118	132	1,585	10,338
Motor Gasoline Blend.Comp. (MGBC)(net)	-10,738	-54,655	-41,369	-1,655	-1,688	-110,105	-6,083	-37,943	-225,121
Reformulated - RBOB	-969	-14,395	-2,417	—	-696	-18,477	—	-27,602	-63,894
Conventional	-9,769	-40,260	-38,952	-1,655	-992	-91,628	-6,083	-10,341	-161,227
CBOB	-9,615	-32,570	-35,428	-1,639	-971	-80,223	-5,909	-9,385	-147,340
GTAB	—	—	—	—	—	—	—	—	—
Other	-154	-7,690	-3,524	-16	-21	-11,405	-174	-956	-13,887
Aviation Gasoline Blend. Comp. (net)	27	—	3	—	—	30	—	—	30
Total Input to Refineries	13,309	95,218	82,253	5,694	1,953	198,427	15,127	42,991	341,114
Atmospheric Crude Oil Distillation									
Gross Input (daily average)	740	4,825	3,527	210	114	9,415	647	2,587	17,395
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operable Utilization Rate (percent) ³	99.2	95.7	95.4	81.8	83.9	95.3	94.2	90.0	92.5
Downstream Processing									
Fresh Feed Input (daily average)									
Catalytic Reforming	153	685	596	34	25	1,494	102	381	2,786
Catalytic Cracking	175	1,315	989	18	28	2,526	163	613	4,702
Catalytic Hydrocracking	44	487	479	15	17	1,041	30	440	1,869
Delayed and Fluid Coking	28	801	548	32	—	1,410	70	479	2,550
Crude Oil Qualities									
Sulfur Content, Weighted Average (percent)	0.63	1.38	1.19	1.62	0.90	1.24	1.45	1.33	1.29
API Gravity, Weighted Average (degrees)	39.76	33.91	32.73	30.28	40.37	34.03	33.11	28.47	33.14
Operable Capacity (daily average)	745	5,042	3,696	256	136	9,876	687	2,875	18,808
Operating	745	5,042	3,696	256	136	9,876	677	2,875	18,221
Idle	—	—	—	—	—	—	10	—	587
Alaskan Crude Oil Receipts	—	—	—	—	—	—	—	13,254	13,254

-- = Not Applicable.

— = 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."