



Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating			Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d				
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd					Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd		
BRAZIL	Distribuidora de Petróleo SA (Atem)—Ream Participações SA—REMAN—Manaus, Amazonas	46,000	6,635	0	0	0	0	2,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,100
	Mubadala Capital—MC Brazil Downstream Participações—Acelen—Refinaria de Mataripe—Mataripe, Bahia	279,000	126,058	0	0	0	0	87,888	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,221	2.0	0	72	2,300
	Petroleo Brasileiro SA—LUBNOR—Fortalez a, Ceara	8,000	6,032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,076	1.0	0	0	3,500	
	Petroleo Brasileiro SA—RECAP—Capuava, Maua, Sao Paulo	57,000	0	0	0	0	0	17,578	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	
	Petroleo Brasileiro SA—REDUC—Duque de Caxias, Rio de Janeiro	239,000	112,186	0	0	0	0	49,717	0	11,132	0	0	0	0	0	0	0	33,340	0	0	0	0	0	0	0	3,145	0	0	0	0	13,712	18.0	1,481	70	0	
	Petroleo Brasileiro SA—REFAP—Canoas, Rio Grande do Sul	201,000	33,173	0	0	0	0	18,163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	2,600	
	Petroleo Brasileiro SA—REGAP—Betim, Minas Gerais	157,000	77,203	0	22,265	0	0	40,269	0	0	0	0	0	0	0	0	10,547	10,547	35,679	0	0	0	0	0	0	0	0	0	0	0	0	20.0	1,062	73	6,000	
	Petroleo Brasileiro SA—REPAR—Araucaria, Parana	208,000	89,869	0	0	0	0	53,904	0	0	0	0	0	0	0	0	0	0	29,249	0	0	0	0	0	0	0	0	0	0	0	0	10.0	0	70	5,000	
	Petroleo Brasileiro SA—REPLAN—Paulinia, Sao Paulo	434,000	155,010	0	62,000	0	0	93,747	0	0	0	0	0	0	0	0	0	0	66,679	0	0	0	0	0	0	0	0	0	0	0	35.0	2,950	212	4,000		
	Petroleo Brasileiro SA—REVAP—Sao Jose dos Campos, Sao Paulo	252,000	120,768	0	0	0	0	82,029	0	0	0	0	0	0	0	0	20,507	17,578	35,094	0	0	0	0	0	0	0	0	0	0	0	0	10.0	0	173	2,600	
Petroleo Brasileiro SA—RNEST—Ipojuca, Pernambuco	88,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Petroleo Brasileiro SA—RPBC—Cubatão, Sao Paulo	170,000	77,806	0	31,054	0	0	55,662	0	10,254	0	0	0	0	0	0	10,528	0	0	0	0	0	0	0	0	0	3,145	0	0	0	0	30.0	1,481	70	0		
Petroleo Brasileiro SA—RPCC—Guamaré, Rio Grande do Norte	38,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Total</b>	<b>2,177,000</b>	<b>804,740</b>	<b>0</b>	<b>115,319</b>	<b>0</b>	<b>0</b>	<b>501,887</b>	<b>0</b>	<b>21,386</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,528</b>	<b>31,054</b>	<b>28,125</b>	<b>200,041</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,290</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,009</b>	<b>126.0</b>	<b>6,974</b>	<b>771</b>	<b>27,100</b>	
<b>BRUNEI</b>																																				
Brunel Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	0	0	0	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hengyi Industries Sdn. Bhd.—Muara, Negara	160,658	0	18,795	0	0	0	0	0	0	0	42,192	0	0	0	0	63,611	0	28,137	44,904	0	0	0	0	0	0	29,860	0	0	0	0	0	0	0	1,992	0	
<b>Total</b>	<b>169,258</b>	<b>0</b>	<b>18,795</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,700</b>	<b>0</b>	<b>42,192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,611</b>	<b>0</b>	<b>28,137</b>	<b>44,904</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29,860</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,992</b>	<b>0</b>		
<b>BULGARIA</b>																																				
Lukoil Neftochim Bourgas AD—Bourgas	139,000	76,900	26,400	0	0	0	37,100	0	14,400	0	0	0	0	39,000	158,000	0	0	0	0	0	0	0	0	0	6,900	0	1,700	0	0	0	91.3	0	509	5,400		
<b>Total</b>	<b>139,000</b>	<b>76,900</b>	<b>26,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37,100</b>	<b>0</b>	<b>14,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39,000</b>	<b>158,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,900</b>	<b>0</b>	<b>1,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>91.3</b>	<b>0</b>	<b>509</b>	<b>5,400</b>			
<b>CAMEROON</b>																																				
Societe Nationale de Raffinage—Cape Limboh, Limbe	42,000	22,966	0	0	0	0	0	0	8,000	0	0	0	0	0	10,000	0	0	17,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>42,000</b>	<b>22,966</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>17,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>CANADA</b>																																				
Enovus Energy Inc.—Husky Energy Inc.—Lloydminster, Alta.	29,000	22,600	6,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	961	339	12,000		
Federated Co-operatives Ltd.—Regina, Sask.	130,000	37,700	0	2,400	0	0	47,800	0	9,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125.0	300	430	4,400			
Imperial Oil Ltd.—Nanticoke, Ont.	107,350	0	0	0	0	0	44,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Imperial Oil Ltd.—Sarnia, Ont.	113,050	0	27,900	0	0	0	27,000	0	0	0	0	18,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Imperial Oil Ltd.—Strathcona, Alta.	186,200	0	0	0	0	0	58,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Irving Oil Ltd.—St. John, Newf.	320,000	100,000	0	0	20,000	0	95,000	0	35,000	0	34,000	0	0	0	48,000	0	30,000	0	0	0	0	0	0	0	14,000	16,000	0	10,000	0	0	47.0	0	200	0		
Parkland Fuel Corp.—Burnaby, BC	55,000	11,800	0	0	0	0	17,800	0	0	9,400	0	0	0	0	15,000	0	0	16,500	0	0	0	0	0	0	14,000	0	3,000	0	10,000	0	0	0	22,000	2,000		
Shell Canada Ltd.—Sarnia, Ont.	80,750	0	0	0	0	0	18,900	0	0	0	9,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Shell Canada Ltd.—Scottford, Alta.	95,000	0	0	0	0	0	0	0	0	0	0	0	74,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Suncor Energy Inc.—Edmonton, Alta.	146,000	51,800	0	18,000	0	0	40,900	0	11,900	0	0	21,400	0	0	34,600	0	0	62,700	0	0	0	0	0	0	14,300	14,800	0	8,500	0	0	20.0	800	370	0		
Suncor Energy Inc.—Montreal, Que.	137,000	54,000	0	0	0	0	32,000	0	24,000	12,000	0	22,000	0	0	40,000	29,000	19,500	33,000	0	0	0	0	0	0	0	4,000	21,000	0	0	0	48.0	0	0	30,000		
Suncor Energy Inc.—Sarnia, Ont.	85,000	26,700	0	0	0	0	16,700	0	23,000	0	0	32,100	0	0	25,800	9,600	6,000	43,600	0	0	0	0	0	0	4,900	13,200	0	0	0	41.0	0	180	5,200			



Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating							Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d						
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/jet desulfurization b/cd	Diesel desulfurization b/cd	Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd				
	China National Petroleum Corp.—PetroChina Liaoyang Petrochemical Co.—Liaoyang, Liaoning	200,820	0	0	0	0	0	0	0	3,000	0	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	China National Petroleum Corp.—PetroChina Ningxia Petrochemical Co.—Yingchuan, Ningxia Hui Autonomous Region	100,411	0	0	0	0	0	52,214	0	12,049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	China National Petroleum Corp.—PetroChina North China Petrochemical Co.—Renqiu, Hebei	200,820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	China National Petroleum Corp.—PetroChina Sichuan Petrochemical Co., Ltd.—Chengdu, Sichuan	202,400	0	0	0	0	0	0	0	40,164	0	0	50,205	0	44,181	0	0	0	70,288	0	60,247	0	0	0	1,305	0	0	0	0	0	0	0	0	0	0	0		
	China National Petroleum Corp.—PetroChina Urumqi Petrochemical Co.—Urumqi, Xinjiang Uygur Autonomous Region	120,493	0	0	24,099	0	0	0	0	8,033	0	0	0	0	0	30,123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	803	0	
	China National Petroleum Corp.—PetroChina Yunnan Petrochemical Co.—Kunming, Yunnan	263,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	CNOOC Huizhou Petrochemicals Co. Ltd.—Huizhou, Guangdong	440,000	167,448	0	84,000	0	0	24,000	0	0	40,200	152,000	0	0	0	37,000	0	0	71,637	0	0	51,419	0	3,200	34,600	0	0	0	0	0	0	178.0	0	164	0	0		
	Dongying Yatong Petrochemical Co. Ltd.—Dongying, Dongying Port Economic Development Zone, Shandong	74,460	0	0	19,250	0	0	21,660	0	28,670	0	24,500	15,150	0	0	37,370	10,340	0	24,500	0	0	0	0	2,400	0	0	0	0	0	0	0	0	0	900	40	0	0	
	Fujian Refining and Petrochemical Co. Ltd.—Quanzhou, Fujian	240,985	0	0	0	0	9,000	40,500	0	0	0	0	0	0	42,300	0	0	0	0	0	0	0	0	6,930	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Hebei Xinhai Chemical Group Co. Ltd.—Changzhou, Hebei	98,630	0	0	16,603	0	0	0	0	12,233	0	15,342	0	0	0	0	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,792	0	
	Hengli Petrochemical (Dalian) Co. Ltd.—Hengli Petrochemical Industrial Park, Changning Island Harbor Industrial Zone, Dalian, Liaoning	401,643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,452	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Panjin North Asphalt Fuel Co., Ltd.—Panjin, Liaoning	290,000	200,000	0	56,000	0	0	38,000	1,000	59,000	0	17,000	0	23,000	0	42,000	20,000	0	29,000	0	23,000	0	0	32,000	12,000	2,000	2,000	2,000	2,000	11,000	100.0	1,500	400	10,000	0			
	Shandong Dongming Petrochemical Group Co. Ltd.—Heze City, Shandong	298,315	183,935	0	92,411	0	0	80,650	12,914	64,809	0	0	0	0	0	60,329	39,161	0	166,018	0	0	0	39,252	27,391	0	17,616	0	320	0	0	0	0.6	4,340	693	50,394	0		
	Shenghong Petrochemical Group Co. Ltd.—Shenghong Refining & Chemical (Lianyungang) Co. Ltd.—Lianyungang, Jiangsu	321,315	0	0	37,590	0	0	67,120	69,040	78,290	78,290	66,165	0	61,370	0	0	0	0	0	0	0	63,290	0	0	57,530	9,890	55,690	0	0	0	0	0	0	0	0	1,645	0	0
	Sinochem Holdings Corp. Ltd.—ChemChina Petrochemical Co. Ltd.—Shandong Changyi Petrochemical Co. Ltd.—Changyi, Shandong	160,000	10,000	0	30,100	0	0	49,500	0	24,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sinochem Holdings Corp. Ltd.—ChemChina Petrochemical Co. Ltd.—Shandong Huaxing Petrochemical Group Co. Ltd.—Dongying, Shandong	140,000	82,000	0	24,000	0	0	55,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sinochem Holdings Corp. Ltd.—ChemChina Petrochemical Co. Ltd.—Zhenghe Group Co. Ltd.—Dongying, Shandong	100,000	35,000	0	20,000	0	0	33,000	0	0	0	0	0	0	13,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sinochem Hongrun Petrochemical Co. Ltd.—Weifang	100,410	0	0	28,100	0	0	12,000	0	0	0	0	0	0	0	0	12,000	0	0	0	0	0	0	24,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sinochem Quanzhou Petrochemical Co. Ltd.—Quanzhou	240,986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sinopec Corp.—Anqing Co.—Anqing, Anhui	160,658	0	0	30,123	0	0	42,173	0	4,418	0	0	0	0	0	0	32,132	0	0	0	0	0	0	44,181	8,400	0	0	0	0	0	0	0	0	0	0	225	803	0

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	Sinopec Corp.—Beihai Refining & Chemical Co. Ltd.—Beihai, Guangxi	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Sinopec Corp.—Beijing Yanshan Co.—Beijing	220,904	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Sinopec Corp.—Cangzhou Co.—Cangzhou, Hebei	70,288	0	0	24,099	0	0	24,099	0	3,012	0	0	0	0	0	0	0	0	32,132	0	32,132	0	0	0	0	0	0	0	0	0	0	0	0	0	4,016					
	Sinopec Corp.—Changling Petrochemical Co.—Yueyang, Hunan	230,945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Sinopec Corp.—Gaoqiao Co.—Shanghai	261,068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	Sinopec Corp.—Guangzhou Petrochemical Co.—Guangzhou, Guangdong	265,085	0	0	0	20,000	0	44,000	0	8,000	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	Sinopec Corp.—Hainan Petrochemical Co. Ltd.—Yangpu Economic Development Zone, Hainan	184,756	0	0	0	0	0	56,230	0	24,099	0	24,099	0	0	62,255	0	20,082	40,164	0	0	0	0	0	0	0	0	0	0	4,016	0	0	0	0	0	219	0				
	Sinopec Corp.—Jinan Co.—Jinan City, Shandong	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	Sinopec Corp.—Jingmen Co.—Jingmen City, Hubei	120,493	0	0	8,000	0	0	20,000	0	3,000	0	8,000	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000	0.0	270	0	0				
	Sinopec Corp.—Jinling Petrochemical Co.—Nanjing, Jiangsu	421,726	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Sinopec Corp.—Jiujiang Co.—Jiujiang City, Jiangxi	160,658	0	0	0	8,000	0	24,000	0	3,000	0	0	0	0	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Sinopec Corp.—Luoyang Co.—Luoyang, Henan	160,658	0	0	28,115	0	0	56,230	0	14,000	0	16,066	0	0	0	0	0	52,214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	803	0		
	Sinopec Corp.—Maoming Co.—Maoming, Guangdong	471,932	0	0	12,000	0	0	32,000	0	14,058	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000	0.0	400	0	0				
	Sinopec Corp.—Qilu Petrochemical Corp.—Zibo, Shandong	281,151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	Sinopec Corp.—Qingdao Refining and Chemical Co. Ltd.—Qingdao, Shandong	240,986	0	0	0	0	0	0	0	22,000	0	133,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	602	0		
	Sinopec Corp.—Shanghai Petrochemical Co. Ltd.—Shanghai	321,315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Sinopec Corp.—Shijiazhuang Refining & Chemical Co.—Shijiazhuang City, Hebei	200,822	0	0	16,066	0	0	40,164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Sinopec Corp.—Tahle Co.—Dongcheng District of Kuche County, Xinjiang Autonomous Region	100,411	0	52,214	0	0	0	0	0	3,012	0	0	0	0	0	0	0	48,197	0	48,197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	8,033	
	Sinopec Corp.—Tianjin Co.—Binhai New Area, Tianjin	277,134	0	0	0	0	0	35,000	0	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sinopec Corp.—Wuhan Petrochemical Co. Ltd.—Wuhan City, Hubei	160,658	0	0	0	8,000	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sinopec Corp.—Yangzi Petrochemical Co. Ltd.—Nanjing, Jiangsu	281,151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sinopec Corp.—Zhenhai Refining & Chemical Co.—Ningbo City, Zhejiang	461,890	200,000	0	27,000	0	0	90,000	0	60,000	0	20,000	0	0	250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sinopec Corp.—Zhongke (Guangdong) Refining & Petrochemical Co. Ltd.—Zhanjiang City, Guangdong	200,822	0	0	0	0	0	80,547	0	44,038	0	0	0	0	0	0	0	38,356	0	46,027	0	38,356	0	84,384	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Wudi Xinyue Chemical Co. Ltd.—Shandong	161,000	60,300	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	20,100	0	16,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Yangchang Petroleum (Group) Co. Ltd.—Yanan	160,658	0	0	0	0	0	0	0	24,099	0	28,115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Yangchang Petroleum (Group) Co. Ltd.—Yongping	90,370	34,140	0	0	0	0	0	0	3,012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Yangchang Petroleum (Group) Co. Ltd.—Yulin	200,822	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating			Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d			
				Fluid coking (incl.) b/cd	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd					Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd	
	Zhejiang Petroleum & Chemical Co. Ltd. (Phase 1)—Zhoushan, Zhejiang	400,000	400,000	0	60,000	0	0	86,300	0	186,000	0	76,712	143,835	95,890	0	69,041	38,365	26,849	0	0	0	0	0	17,328	79,560	28,000	0	0	170	0	1,080	0			
	Zhejiang Petroleum & Chemical Co. Ltd. (Phase 2)—Zhoushan, Zhejiang	400,000	400,000	0	60,000	0	0	86,300	0	186,000	0	76,712	143,835	95,890	0	69,041	38,365	26,849	0	0	0	0	0	17,328	79,560	28,000	0	0	170	0	1,080	0			
<b>Total</b>		<b>13,302,248</b>	<b>1,412,823</b>	<b>52,214</b>	<b>731,351</b>	<b>0</b>	<b>0</b>	<b>1,557,644</b>	<b>82,954</b>	<b>900,709</b>	<b>118,490</b>	<b>655,204</b>	<b>209,190</b>	<b>180,260</b>	<b>0</b>	<b>655,118</b>	<b>318,044</b>	<b>46,931</b>	<b>661,785</b>	<b>0</b>	<b>330,921</b>	<b>143,797</b>	<b>39,252</b>	<b>290,619</b>	<b>114,030</b>	<b>263,943</b>	<b>41,422</b>	<b>2,320</b>	<b>2,000</b>	<b>29,000</b>	<b>475.6</b>	<b>10,760</b>	<b>8,315</b>	<b>83,235</b>	
<b>CHINA (TAIWAN)</b>																																			
	Chinese Petroleum Corp.—Kaohsiung	270,000	75,500	0	15,000	0	0	25,000	0	0	15,000	0	0	0	0	0	0	0	0	0	0	30,000	25,000	0	0	14,000	0	0	10,000	0	0.0	2,722	900	12,120	
	Chinese Petroleum Corp.—TaLin	300,000	0	0	0	0	0	25,000	0	0	55,000	0	0	0	0	0	0	0	0	0	0	60,000	0	0	0	0	0	0	10,000	5,300	0.0	0	250	0	
	Chinese Petroleum Corp.—Tao-Yuan	200,000	36,000	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	0	45,000	0	0	0	0	0	0	6,000	0	52.0	0	595	0	
	Formosa Petrochemical Co.—Malliao	540,000	137,000	0	36,000	0	0	167,900	0	0	0	0	25,000	0	0	96,500	42,000	126,000	0	0	0	161,000	52,000	0	0	14,200	0	0	0	0	10,000	289.0	1,800	2,000	3,150
<b>Total</b>		<b>1,310,000</b>	<b>248,500</b>	<b>0</b>	<b>51,000</b>	<b>0</b>	<b>0</b>	<b>217,900</b>	<b>0</b>	<b>0</b>	<b>90,000</b>	<b>0</b>	<b>0</b>	<b>25,000</b>	<b>0</b>	<b>96,500</b>	<b>42,000</b>	<b>126,000</b>	<b>0</b>	<b>0</b>	<b>296,000</b>	<b>77,000</b>	<b>0</b>	<b>0</b>	<b>14,200</b>	<b>14,000</b>	<b>0</b>	<b>0</b>	<b>26,000</b>	<b>15,300</b>	<b>341.0</b>	<b>4,522</b>	<b>3,745</b>	<b>15,270</b>	
<b>COLOMBIA</b>																																			
	Ecopetrol SA—Apjay, Meta	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Ecopetrol SA—Barrancabermeja, Santander	218,600	101,000	0	0	33,000	0	64,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19,800	2,100	2,200	0	0	0	1,400	18.0	0	0	0	0
	Ecopetrol SA—Orito, Putumayo	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Ecopetrol SA—Refineria de Cartagena SA—Cartagena, Zona Industrial de Mamonal	155,000	40,000	0	0	19,000	0	26,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
<b>Total</b>		<b>378,600</b>	<b>141,000</b>	<b>0</b>	<b>0</b>	<b>52,000</b>	<b>0</b>	<b>90,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,800</b>	<b>2,100</b>	<b>2,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,400</b>	<b>18.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>CONGO, REPUBLIC OF</b>																																			
	Société Nationales des Pétroles Congolais—La Congolaise de Raffinage (CORAF)—M'bota Raffinerie—Pointe Noire	21,000	8,000	0	0	0	0	0	0	2,000	0	2,000	0	0	0	3,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
<b>Total</b>		<b>21,000</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>COSTA RICA</b>																																			
	Refinadora Costarricense de Petroleo SA—Limon	24,000	600	0	0	0	6,500	0	0	1,200	0	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
<b>Total</b>		<b>24,000</b>	<b>600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,500</b>	<b>0</b>	<b>0</b>	<b>1,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CROATIA</b>																																			
	Ina-Industrija Nafta d.d.—Rijeka	90,370	38,000	0	0	12,001	0	20,002	0	14,454	0	0	12,264	0	0	0	0	22,776	0	0	0	0	0	0	0	0	0	0	4,660	0	0.0	0	60	0	
	Ina-Industrija Nafta d.d.—Sisak	44,181	16,000	0	5,000	0	0	10,000	0	15,000	0	0	0	0	0	15,000	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0.0	200	0	0	
<b>Total</b>		<b>134,551</b>	<b>54,000</b>	<b>0</b>	<b>5,000</b>	<b>12,001</b>	<b>0</b>	<b>30,002</b>	<b>0</b>	<b>29,454</b>	<b>0</b>	<b>0</b>	<b>12,264</b>	<b>0</b>	<b>0</b>	<b>15,000</b>	<b>0</b>	<b>0</b>	<b>28,476</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,660</b>	<b>0</b>	<b>0.0</b>	<b>200</b>	<b>0</b>	<b>0</b>	
<b>CUBA</b>																																			
	Unión Cuba-Petróleo (Cupet)—Refinería Camilo Cienfuegos, Cienfuegos	65,000	0	0	0	0	0	0	0	9,600	0	0	0	0	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Unión Cuba-Petróleo (Cupet)—Refinería Hermanos Díaz, Santiago de Cuba	30,000	2,700	0	0	0	0	0	0	12,500	0	0	0	0	0	7,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Unión Cuba-Petróleo (Cupet)—Refinería Nico López, Bahía de la Habana	36,400	18,000	0	0	0	0	12,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Unión Cuba-Petróleo (Cupet)—Refinería Sergio Soto, Cabaiguán, Sancti Spiritus	2,800	1,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
<b>Total</b>		<b>134,200</b>	<b>22,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,500</b>	<b>0</b>	<b>22,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CZECH REPUBLIC</b>																																			
	PNK Orlen SA—Unipetrol—Czech Refining Co.—Kralupy	66,000	13,000	0	0	0	0	24,000	0	7,480	0	0	0	0	0	17,120	4,500	6,000	18,410	0	0	0	0	0	0	0	0	0	4,510	0	0	8.0	0	24	0
	PNK Orlen SA—Unipetrol—Czech Refining Co.—Litvinov	110,000	58,870	0	0	14,000	0	0	0	9,370	10,620	30,000	0	6,000	0	20,750	6,000	25,000	0	0	0	0	0	0	0	660	0	0	2,700	1,880	104.0	0	120	7,880	
<b>Total</b>		<b>176,000</b>	<b>71,870</b>	<b>0</b>	<b>0</b>	<b>14,000</b>	<b>0</b>	<b>24,000</b>	<b>0</b>	<b>16,850</b>	<b>10,620</b>	<b>30,000</b>	<b>0</b>	<b>6,000</b>	<b>0</b>	<b>37,870</b>	<b>4,500</b>	<b>12,000</b>	<b>43,410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>660</b>	<b>0</b>	<b>4,510</b>	<b>2,700</b>	<b>1,880</b>	<b>112.0</b>	<b>0</b>	<b>144</b>	<b>7,880</b>	
<b>DENMARK</b>																																			
	Klesch Group—Kalundborg Refinery—Kalundborg	110,452	22,000	0	0	28,000	0	0	0	8,600	0	0	0	0	0	8,600	0	0	0	0	0	0	0	11,400	0	0	0	0	0	0.0	0	0	0	8,000	
	PL ESG Denmark Co APS—Fredericia	68,280	0	0	0	0	39,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>178,732</b>	<b>22,000</b>	<b>0</b>	<b>0</b>	<b>28,000</b>	<b>39,600</b>	<b>0</b>	<b>0</b>	<b>8,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,000</b>
<b>DOMINICAN REPUBLIC</b>																																			
	Falconbridge Dominicana SA—Bonao, Monseñor Nouet	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,213	0	0	0	0	0	0.6	0	0	0	0	
	Refinería Dominicana de Petróleo SA—Haina, San Cristóbal	34,000	0	0	0	0	0	0	0	8,200	0	0	0	0	0	14,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
<b>Total</b>		<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,200</b>	<b>0</b>	<b>0</b>	<b></b>																						

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	Other desulfurization b/cd	Other hydrotreating b/cd	Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd												C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd					
ECUADOR	Empresa Pública Petroecuador—Refinería Estatal de Esmeraldas, Esmeraldas	110,000	45,300	0	0	31,500	0	20,000	0	0	10,000	0	0	0	0	13,000	0	0	24,500	0	0	0	34,612	0	0	0	3,600	0	0	0	0.0	0	63	0
	Empresa Pública Petroecuador—Refinería La Libertad, Santa Elena	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	Empresa Pública Petroecuador—Refinería Shushufindi, Sucumbios	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	<b>Total</b>	<b>175,000</b>	<b>45,300</b>	<b>0</b>	<b>0</b>	<b>31,500</b>	<b>0</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,000</b>	<b>0</b>	<b>0</b>	<b>24,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34,612</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>63</b>	<b>0</b>
EGYPT	Alexandria Petroleum Co.—Alexandria (El-Mex)	100,411	22,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,436	0	884	0	0	0	1,436	1.0	1	0	2,010	
	Amreya Petroleum Refining Co.—Alexandria	80,329	15,000	0	0	0	0	0	12,000	0	0	0	0	0	0	37,500	0	0	0	0	0	0	0	0	9,000	700	0	0	2,000	4.0	0	0	0	
	Assiut Petroleum Refining Co.—Assiut	90,370	0	0	0	0	0	0	7,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Cairo Petroleum Refining Co.—Mostorod	160,658	0	0	0	0	0	0	9,000	0	0	0	0	0	0	26,100	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Cairo Petroleum Refining Co.—Tanta	40,164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Egyptian Refining Co.—Mostorod	0	80,335	0	25,000	0	0	0	15,900	0	0	0	0	40,800	22,600	0	0	0	32,100	0	0	0	0	0	0	0	0	0	0	78.0	1,270	266	0	
	El-Nasr Petroleum Co.—Suez	130,534	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32,000	0	0	0	0	0.0	0	0	0	6,025	
	Middle East Oil Refinery (MIDOR)—Alexandria	100,000	0	0	25,650	0	0	0	21,700	0	33,500	0	0	0	32,400	0	28,600	0	0	0	0	0	0	0	0	0	0	0	0	54.2	1,060	290	0	
	Suez Oil Processing Co.—Suez	60,247	9,500	0	16,470	0	0	0	12,540	0	0	0	0	0	28,766	0	0	0	0	0	0	0	0	0	0	0	0	1,005	3.5	540	0	0		
<b>Total</b>	<b>762,713</b>	<b>127,335</b>	<b>0</b>	<b>67,120</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78,140</b>	<b>0</b>	<b>33,500</b>	<b>0</b>	<b>0</b>	<b>40,800</b>	<b>147,366</b>	<b>0</b>	<b>28,600</b>	<b>32,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54,436</b>	<b>9,000</b>	<b>1,584</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,441</b>	<b>140.7</b>	<b>2,871</b>	<b>556</b>	<b>8,035</b>		
EL SALVADOR	Puma Energy International—Refinería Petrolera Acajutla Ltd.—Acajutla	22,000	4,000	0	0	0	0	3,000	0	0	0	0	0	5,500	0	2,500	0	0	0	0	0	0	7,500	0	0	0	0	0	0.0	0	0	0		
	<b>Total</b>	<b>22,000</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,500</b>	<b>0</b>	<b>2,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
ERITREA	Petroleum Corp. of Eritrea—Assab	14,564	2,219	0	0	0	0	1,465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	<b>Total</b>	<b>14,564</b>	<b>2,219</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,465</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
FINLAND	Neste Corp.—Kilpislahti Industrial Area, Porvoo	206,000	146,085	0	0	8,370	0	43,100	13,590	0	50,060	56,110	34,000	0	0	75,650	6,270	5,795	98,320	0	0	63,640	0	7,750	0	0	0	5,280	160.0	0	540	0		
	<b>Total</b>	<b>206,000</b>	<b>146,085</b>	<b>0</b>	<b>0</b>	<b>8,370</b>	<b>0</b>	<b>43,100</b>	<b>13,590</b>	<b>0</b>	<b>50,060</b>	<b>56,110</b>	<b>34,000</b>	<b>0</b>	<b>0</b>	<b>75,650</b>	<b>6,270</b>	<b>5,795</b>	<b>98,320</b>	<b>0</b>	<b>0</b>	<b>63,640</b>	<b>0</b>	<b>7,750</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,280</b>	<b>160.0</b>	<b>0</b>	<b>540</b>	<b>0</b>		
FRANCE	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Fos sur Mer	126,350	0	0	0	0	0	27,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0			
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Gravenchon	231,800	0	0	0	0	0	38,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,700	0.0	0	0	0		
	Petrolnecs Refining Ltd.—Lavera	207,100	72,200	0	0	21,600	0	27,900	0	10,800	0	16,200	0	0	0	25,200	48,600	0	0	0	0	0	0	0	0	0	0	15,300	0	30.0	0	0	13,500	
	TotalEnergies SE—Donges	219,000	97,008	0	0	26,005	0	50,536	0	23,099	0	0	0	0	51,536	0	0	74,108	0	0	0	0	6,736	0	0	0	0	0	0.0	0	199	5,760		
	TotalEnergies SE—Feyzin	109,000	38,364	0	0	0	0	29,100	0	11,026	0	0	0	0	11,892	0	0	42,979	0	0	17,375	0	4,755	0	0	0	0	0.0	0	102	6,000			
	TotalEnergies SE—Gonfreville l'Orcher	253,000	83,400	0	0	21,891	0	38,300	0	63,882	0	0	0	0	110,700	0	43,062	79,300	0	0	0	0	0	0	5,000	0	0	0	106.0	0	393	8,000		
	<b>Total</b>	<b>1,146,250</b>	<b>290,972</b>	<b>0</b>	<b>0</b>	<b>69,496</b>	<b>0</b>	<b>173,236</b>	<b>0</b>	<b>60,126</b>	<b>23,099</b>	<b>80,082</b>	<b>0</b>	<b>0</b>	<b>174,128</b>	<b>25,200</b>	<b>91,662</b>	<b>196,387</b>	<b>0</b>	<b>0</b>	<b>17,375</b>	<b>0</b>	<b>11,491</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>15,300</b>	<b>11,700</b>	<b>136.0</b>	<b>0</b>	<b>694</b>	<b>33,260</b>		
	<b>GABON</b>																																	
GERMANY	Ste. Gabonaise de Raffinage—Port Gentil	25,000	0	0	0	0	9,220	0	1,400	0	0	0	0	0	4,870	0	0	4,560	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	<b>Total</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,220</b>	<b>0</b>	<b>1,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,870</b>	<b>0</b>	<b>0</b>	<b>4,560</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
	AB Nynas Petroleum NV—Harburg	58,000	44,000	0	0	14,000	0	15,000	0	16,000	0	0	0	0	29,000	0	0	0	0	0	0	0	18,000	0	0	4,000	0	5,620	0.0	0	80	5,250		
	Bayernoil Raffinerie GMBH—Vohburg/Ingolstadt/Neustadt	206,846	87,800	0	0	38,900	9,900	61,000	0	38,000	17,800	0	0	0	93,600	25,200	8,600	75,000	0	0	0	0	0	0	0	0	14,200	0	84.0	0	194	12,000		
	BP PLC—BP Gelsenkirchen GMBH—Gelsenkirchen	251,510	146,525	0	27,279	17,469	0	26,777	0	28,764	0	0	51,056	0	45,562	18,422	10,944	51,998	0	0	31,374	0	0	12,780	0	0	0	0	266.0	1,200	711	0		
	BP PLC—BP Lingen GMBH—Lingen	91,867	42,915	0	22,443	0	0	0	27,299	0	26,917	0	0	0	19,949	0	7,231	32,906	0	0	0	0	14,120	0	8,367	0	8,382	0	127.8	670	147	0		
	ExxonMobil Corp.—Mineraloelraffinerie Oberheim GMBH—Karlsruhe	294,500	0	0	0	27,900	0	77,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d							
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd			Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd						Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd		
	Gunvor Group Ltd.—Gunvor Raffinerie Ingolstadt GMBH—Ingolstadt	110,000	39,000	0	0	0	0	28,000	0	19,000	0	0	0	0	0	35,000	0	18,000	42,000	0	0	0	0	0	0	0	0	0	0	7,000	0	0	11.0	0	66	3,800
	Holborn Europa Raffinerie GMBH—Harburg	100,410	15,000	0	0	0	0	18,750	0	14,700	0	0	0	0	0	31,700	0	0	0	0	0	0	0	41,900	0	0	0	0	0	0	0.0	0	0	0	0	
	Kiesch & Co.—Raffinerie Heide GMBH—Heide Refinery, Hemmingstedt	90,000	37,000	0	0	15,000	0	0	0	18,000	0	16,000	0	0	0	25,000	0	0	0	0	0	0	1,000	0	6,000	0	6,000	0	0	0	28.0	0	60	4,380		
	OMV AG—OMV Aktiengesellschaft—Burg hausen	74,575	0	0	29,880	0	0	0	0	0	0	0	0	0	0	8,730	0	0	34,380	0	0	0	8,793	0	0	6,600	0	0	0	0.0	746	33	0	0		
	PCK Raffinerie GMBH—Schwedt	216,888	110,452	0	0	48,866	0	54,658	0	0	0	0	0	0	0	0	42,192	0	101,644	0	0	63,288	0	0	10,397	4,575	0	15,753	0	0	30.0	0	438	6,973		
	Shell PLC—Deutsche Shell AG—Rheinland	336,300	0	0	0	0	44,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	TotalEnergies SE—Leuna, Spergau	227,000	99,044	0	0	26,500	0	59,311	0	24,896	0	0	0	0	0	45,775	0	30,500	94,615	0	0	68,654	0	0	10,045	0	0	0	0	0.0	0	478	0	0		
<b>GHANA</b>	<b>Total</b>	<b>2,057,896</b>	<b>621,736</b>	<b>0</b>	<b>79,602</b>	<b>188,635</b>	<b>54,000</b>	<b>340,896</b>	<b>0</b>	<b>186,649</b>	<b>17,800</b>	<b>42,917</b>	<b>51,056</b>	<b>0</b>	<b>110,343</b>	<b>334,316</b>	<b>85,814</b>	<b>75,275</b>	<b>432,543</b>	<b>0</b>	<b>0</b>	<b>163,316</b>	<b>8,793</b>	<b>75,020</b>	<b>20,442</b>	<b>38,322</b>	<b>0</b>	<b>41,135</b>	<b>14,200</b>	<b>5,620</b>	<b>546.8</b>	<b>2,616</b>	<b>2,207</b>	<b>32,403</b>		
	Terna Oil Refinery Co. Ltd.—Terna	45,000	0	0	0	0	0	14,000	0	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0		
<b>GREECE</b>	<b>Total</b>	<b>45,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,000</b>	<b>0</b>	<b>65,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
	Hellenic Petroleum SA—Aspropyrgos	148,000	68,000	0	0	23,000	0	44,700	0	24,900	0	0	0	0	0	40,200	0	15,000	35,000	0	0	43,800	0	0	47,535	0	0	0	10,000	0	0	8.6	0	240	7,500	
	Hellenic Petroleum SA—Elefsis	106,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	0	26	0	0		
	Hellenic Petroleum SA—Thessaloniki	90,000	12,000	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	10,000	20,000	0	0	0	0	16,500	0	0	0	8,300	0	0	5.2	0	40	4,150		
	Motor Oil (Hellas) Corinth Refineries SA—Agioi Theodoroi, Corinth	185,000	72,000	0	0	26,000	0	30,850	0	14,300	0	43,900	0	0	0	21,300	18,000	0	70,600	0	0	0	0	23,700	2,400	9,100	0	5,350	0	4,661	5.5	0	213	5,300		
<b>HUNGARY</b>	<b>Total</b>	<b>529,000</b>	<b>152,000</b>	<b>0</b>	<b>0</b>	<b>49,000</b>	<b>0</b>	<b>75,550</b>	<b>0</b>	<b>49,200</b>	<b>0</b>	<b>43,900</b>	<b>0</b>	<b>0</b>	<b>61,500</b>	<b>18,000</b>	<b>25,000</b>	<b>125,600</b>	<b>0</b>	<b>0</b>	<b>43,800</b>	<b>0</b>	<b>87,735</b>	<b>2,400</b>	<b>9,100</b>	<b>0</b>	<b>23,650</b>	<b>0</b>	<b>4,661</b>	<b>23.5</b>	<b>0</b>	<b>519</b>	<b>16,950</b>			
	MOL Group—Danube (Duna) Refinery, Százhalombatta	175,500	77,500	0	16,900	14,000	0	24,000	0	29,600	0	0	0	0	0	30,000	0	9,000	41,000	0	0	35,000	0	5,700	3,300	12,000	0	0	3,500	6,100	76.2	600	226	6,300		
<b>INDIA</b>	<b>Total</b>	<b>175,500</b>	<b>77,500</b>	<b>0</b>	<b>16,900</b>	<b>14,000</b>	<b>0</b>	<b>24,000</b>	<b>0</b>	<b>29,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,000</b>	<b>0</b>	<b>9,000</b>	<b>41,000</b>	<b>0</b>	<b>0</b>	<b>35,000</b>	<b>0</b>	<b>5,700</b>	<b>3,300</b>	<b>12,000</b>	<b>0</b>	<b>0</b>	<b>3,500</b>	<b>6,100</b>	<b>76.2</b>	<b>600</b>	<b>226</b>	<b>6,300</b>			
	Bharat Oman Refineries Ltd.—Bina, Madhya Pradesh	156,641	80,555	0	34,244	0	0	0	0	20,478	0	50,343	45,548	0	0	29,784	0	11,507	0	0	0	0	0	0	0	0	0	0	15,619	0	0	127.5	0	735	0	
	Bharat Petroleum Corp. Ltd.—Kochi, Cochin, Kerala	311,274	153,363	0	63,755	0	0	73,644	0	40,368	0	0	90,137	0	0	66,449	0	17,784	131,101	0	0	0	0	0	0	2,813	0	8,955	0	0	178.4	3,686	898	6,836		
	Bharat Petroleum Corp. Ltd.—Mumbai, Maharashtra	240,984	93,879	0	0	0	0	38,356	0	28,543	0	0	40,274	0	0	34,201	17,260	0	92,054	0	0	0	0	0	0	5,304	0	14,551	0	4,887	81.3	0	300	13,282		
	Chennai Petroleum Corp. Ltd.—Manali, Chennai, Tamilnadu	210,863	102,781	0	41,348	22,553	0	14,959	0	7,431	0	0	43,151	0	0	15,459	12,600	7,844	90,904	0	0	6,156	0	5,606	0	497	0	2,685	0	5,075	132.6	2,640	467	8,301		
	Essar Oil Ltd.—Vadinar	401,643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	HCPL-Mittal Energy Ltd.—Bathinda	180,739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Hindustan Petroleum Corp. Ltd.—Mumbai, Maharashtra	190,781	88,695	0	0	0	0	43,649	0	18,007	0	0	0	0	0	26,242	11,852	0	77,383	0	0	0	0	0	0	0	0	8,235	0	10,562	87.6	0	237	0		
	Hindustan Petroleum Corp. Ltd.—Visakhapatnam, Andhra Pradesh	166,682	74,430	0	0	18,795	0	41,425	0	25,420	0	0	0	0	0	28,767	17,132	0	101,452	0	0	0	0	0	0	0	0	5,718	0	0	73.0	0	452	3,736		



Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating							Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d		
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosine/Jet desulfurization b/cd	Diesel desulfurization b/cd	Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd
	Indian Oil Corp. Ltd.—Barauni, Bihar	124,938	43,728	0	10,668	0	0	27,790	0	0	8,007	0	0	0	0	15,912	0	56,745	0	0	0	0	0	0	0	0	0	3,904	0	0	91.4	593	30	2,101
	Indian Oil Corp. Ltd.—Bongaigaon, Assam	59,373	0	0	20,580	0	0	15,540	0	0	4,286	0	0	0	8,295	6,552	0	33,600	0	0	0	0	0	0	0	0	3,213	0	0	34.9	0	30	0	
	Indian Oil Corp. Ltd.—Digboi, Tinsukia, Assam	14,294	5,083	0	3,499	0	0	0	0	0	2,411	0	0	0	3,691	0	0	6,930	0	0	0	0	0	1,235	0	0	1,253	0	0	9.4	91	3	4,322	
	Indian Oil Corp. Ltd.—Guwahati, Assam	22,012	0	0	9,433	0	0	3,153	0	0	0	0	0	0	1,120	735	0	18,150	0	0	0	0	0	0	0	0	0	2,451	0	14.2	0	5	0	
	Indian Oil Corp. Ltd.—Haldia, West Bengal	160,658	77,058	0	31,951	9,247	0	13,425	0	0	5,285	0	32,603	11,699	0	11,430	3,836	11,075	55,425	0	0	0	0	0	0	0	2,340	0	2,864	117.9	1,366	360	4,151	
	Indian Oil Corp. Ltd.—Koyali, Vadodara, Gujarat	286,200	130,992	0	68,531	29,635	0	28,350	0	18,807	7,957	0	22,680	0	38,796	13,243	0	133,472	0	0	51,597	0	0	0	0	0	8,570	0	0	217.7	2,677	540	8,181	
	Indian Oil Corp. Ltd.—Mathura, Uttar Pradesh	160,658	56,384	0	0	18,795	0	28,767	0	11,401	0	0	23,014	0	21,019	10,068	0	58,493	0	0	0	0	0	0	0	0	11,117	0	0	106.7	0	240	12,452	
	Indian Oil Corp. Ltd.—Panipat, Haryana	325,348	163,873	0	53,915	7,189	0	18,436	0	16,320	0	0	73,840	0	28,223	9,834	0	142,364	0	0	0	0	0	0	12,750	0	11,266	0	0	292.2	0	1,130	8,986	
	Indian Oil Corp. Ltd.—Paradip, Odisha	301,233	182,307	0	77,058	0	0	80,730	0	73,128	0	0	0	0	93,395	0	0	122,304	0	0	103,562	0	0	20,479	0	8,102	0	0	0.0	4,085	1,050	0		
	Mangalore Refinery & Petrochemicals Ltd.—Mangalore, Karnataka	301,233	135,978	0	56,384	28,192	0	42,192	0	22,233	0	0	63,288	0	17,721	15,342	46,104	104,393	0	0	12,466	0	0	0	30,671	0	17,126	0	0	172.4	2,438	870	1,900	
	Numaligarh Refinery Ltd.—Numaligarh, Golaghat, Assam	60,894	24,549	0	6,241	0	0	0	0	5,703	0	32,429	0	0	7,714	0	0	13,829	0	0	0	0	0	0	0	0	2,745	0	0	60.3	0	18	0	
	Oil & Natural Gas Corp. Ltd.—Andhra, Pradesh	13,254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Reliance Industries Ltd.—SEZ, Jamnagar	542,219	305,000	0	0	0	0	200,000	0	0	0	111,000	0	0	0	0	0	0	0	0	0	0	0	85,000	0	0	0	0	0	0.0	0	0	0	
	Reliance Petroleum Ltd.—Jamnagar	662,712	0	124,700	0	0	0	130,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	5,495	0	0		
<b>INDONESIA</b>	<b>Total</b>	<b>4,894,632</b>	<b>1,718,654</b>	<b>124,700</b>	<b>477,605</b>	<b>134,405</b>	<b>0</b>	<b>800,416</b>	<b>0</b>	<b>282,135</b>	<b>33,648</b>	<b>161,343</b>	<b>466,962</b>	<b>11,699</b>	<b>432,307</b>	<b>134,366</b>	<b>94,314</b>	<b>1,238,599</b>	<b>0</b>	<b>0</b>	<b>173,781</b>	<b>0</b>	<b>6,841</b>	<b>105,479</b>	<b>52,035</b>	<b>8,102</b>	<b>117,296</b>	<b>2,451</b>	<b>23,388</b>	<b>1,797.5</b>	<b>23,071</b>	<b>7,366</b>	<b>74,247</b>	
	PT Pertamina—Balikpapan, Kalimantan	247,000	89,110	0	0	0	0	0	0	18,720	0	49,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	PT Pertamina—Balongan	125,000	0	0	0	0	0	83,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	PT Pertamina—Cepu	3,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	PT Pertamina—Cilacap, Central Java	348,000	37,600	0	0	50,040	0	62,000	0	30,960	0	0	0	0	0	0	0	0	0	0	0	0	12,000	0	0	0	0	0	0	0.0	0	0	0	
	PT Pertamina—Dumai, Central Sumatra	120,000	87,970	0	32,580	0	0	0	0	12,870	0	50,220	0	0	11,430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	PT Pertamina—Musir, South Sumatra	118,000	51,300	0	0	0	0	18,450	0	30,690	0	0	0	0	0	0	0	0	0	0	0	0	0	16,200	0	0	0	0	0	0.0	0	0	0	

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosine/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating			Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d			
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd					Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd	
	PT Pertamina—Sungai Pakning, Central Sumatra	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	PT Pertamina—Tuban, East Java	100,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
<b>Total</b>	<b>IRAN</b>	<b>1,111,620</b>	<b>265,980</b>	<b>0</b>	<b>32,580</b>	<b>50,040</b>	<b>0</b>	<b>163,450</b>	<b>0</b>	<b>93,240</b>	<b>0</b>	<b>99,720</b>	<b>0</b>	<b>0</b>	<b>11,430</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
	National Iranian Oil Co.—Abadan	374,000	55,000	0	0	80,000	0	35,000	0	24,000	0	0	0	0	26,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000			
	National Iranian Oil Co.—Arak	242,000	71,000	0	0	0	0	0	0	21,600	0	24,500	0	0	21,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,500			
	National Iranian Oil Co.—Bandar Abbas	344,000	126,000	0	0	31,000	0	0	0	36,000	0	28,000	0	0	36,000	0	25,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000			
	National Iranian Oil Co.—Borzuyeh	240,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	National Iranian Oil Co.—Isafahan	375,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	National Iranian Oil Co.—Kermanshah	22,000	0	0	0	0	0	0	0	2,600	0	0	0	0	3,000	0	3,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	National Iranian Oil Co.—Lavan Island	48,000	0	0	0	0	0	0	0	6,200	0	0	0	0	7,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	National Iranian Oil Co.—Qeshm	120,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	National Iranian Oil Co.—Shiraz	82,000	18,400	0	0	9,000	0	0	0	6,200	0	9,000	0	0	3,100	0	3,800	0	0	0	0	0	0	0	0	0	0	0	0	0	17.0	30	1,500		
	National Iranian Oil Co.—Tabriz	110,000	50,000	0	0	0	0	0	0	11,200	0	15,000	0	0	11,100	0	13,200	0	0	0	0	0	0	0	0	0	0	0	0	0	34.0	80	5,000		
	National Iranian Oil Co.—Tehran	245,000	120,000	0	0	35,000	0	0	0	27,300	0	30,000	0	0	27,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,700	65.0	100	8,800		
<b>Total</b>	<b>IRAN</b>	<b>2,202,000</b>	<b>440,400</b>	<b>0</b>	<b>0</b>	<b>155,000</b>	<b>0</b>	<b>35,000</b>	<b>0</b>	<b>135,100</b>	<b>0</b>	<b>106,500</b>	<b>0</b>	<b>0</b>	<b>135,060</b>	<b>0</b>	<b>45,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,700</b>	<b>216.0</b>	<b>0</b>	<b>400</b>	<b>26,800</b>	
	Lanaz Co.—Erbil	160,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Midland Refineries Co.—Daura, Bagdad	140,000	20,000	0	0	0	0	0	0	15,000	5,000	18,000	5,000	13,241	31,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,420	0.0	0	0	838	
	Midland Refineries Co.—Diwania	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Midland Refineries Co.—Najaf	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Midland Refineries Co.—Samawa	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	North Refineries Co.—Kirkuk	56,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	North Refineries Co.—Bajji	140,000	0	0	0	0	0	0	0	46,000	0	38,000	0	0	182,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	North Refineries Co.—Haditha	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	North Refineries Co.—Kask	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	North Refineries Co.—Qayarah, Mosul	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,900		
	North Refineries Co.—Sainia	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Qaiwan Group—Bazyan	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	South Refineries Co.—Basra	350,000	20,000	0	0	0	0	0	0	16,000	0	0	0	0	70,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000	0.0	0	7,000	
	South Refineries Co.—Missan	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	South Refineries Co.—Nasirah	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Total</b>	<b>IRAQ</b>	<b>1,116,000</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>77,000</b>	<b>5,000</b>	<b>56,000</b>	<b>5,000</b>	<b>13,241</b>	<b>283,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,738</b>	
	Irving Oil Ltd.—Whitegate, Cork	71,000	0	0	0	0	0	0	0	11,000	0	0	0	0	11,000	0	0	0	26,000	9,000	0	0	0	0	0	0	0	0	0	0	0	10.3	0	10	0
<b>Total</b>	<b>ISRAEL</b>	<b>71,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,000</b>	<b>9,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10.3</b>	<b>0</b>	<b>10</b>	<b>0</b>
	Oil Refineries Ltd.—Haifa	130,000	73,000	0	0	41,000	0	22,000	0	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,700	
	Paz Oil Co. Ltd.—Ashdod	90,000	45,000	0	0	25,000	0	27,500	0	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>ISRAEL</b>	<b>220,000</b>	<b>118,000</b>	<b>0</b>	<b>0</b>	<b>66,000</b>	<b>0</b>	<b>49,500</b>	<b>0</b>	<b>26,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,700</b>

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d							
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd			Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd						Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd		
ITALY	Api Faffneria di Ancona SPA—Falconara, Marittima	82,900	37,500	0	0	24,500	0	0	0	0	14,000	0	0	0	0	0	0	0	44,100	0	0	0	0	0	0	0	0	0	0	15,000	0	0	7.2	0	120	0
	Eni SPA—Livorno	84,000	36,000	0	0	0	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,000	0	0	10,000	0.0	0	0	0	3,500		
	Eni SPA—Sannazzaro, Pavia	200,000	84,500	0	0	29,000	0	34,000	0	28,700	0	30,000	0	0	0	12,000	0	0	0	0	0	0	0	0	68,000	3,200	0	12,000	0	0	0	35.0	0	0	2,500	
	Eni SPA—Taranto	104,000	60,590	0	0	0	0	0	0	17,000	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	67,000	0	0	0	6,000	0	0	39.5	0	0	2,500	
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—S. Martino Di Trecate	125,400	0	0	0	0	0	31,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Ipiom SPA—Bussalla	34,500	19,500	0	0	0	0	0	0	0	0	0	0	0	0	0	10,500	0	0	0	0	0	0	0	9,500	0	0	0	0	0	6.8	0	37	0		
	ISAB SRL—Priolo, Sicily	320,000	120,800	0	0	24,000	75,000	38,000	0	41,000	0	90,000	0	0	0	226,900	0	0	0	0	0	0	0	0	33,200	0	5,000	0	18,000	0	0	16.5	0	640	33,000	
	Raffineria di Milazzo SPA—Milazzo, Messina	200,000	69,700	0	0	0	0	44,500	0	12,900	0	33,900	0	0	23,400	0	28,000	0	0	0	0	0	0	0	21,000	5,130	0	0	0	0	82.7	0	412	0		
Saras SPA—Saroeh	300,000	105,000	0	0	41,000	0	90,000	0	50,000	0	120,000	0	0	0	26,500	26,500	0	39,000	39,000	0	0	0	0	20,000	9,000	5,000	0	0	0	75,000.0	0	440	0			
Sonatrach SPA—Agusta, Siracusa	198,000	92,500	0	0	0	0	50,000	0	23,000	0	0	0	0	0	24,000	13,500	22,000	36,500	0	0	0	0	21,500	9,000	0	5,000	0	0	14,000	0.0	0	200	0			
<b>Total</b>	<b>1,848,800</b>	<b>626,090</b>	<b>0</b>	<b>0</b>	<b>118,500</b>	<b>75,000</b>	<b>288,000</b>	<b>0</b>	<b>200,600</b>	<b>0</b>	<b>293,900</b>	<b>0</b>	<b>0</b>	<b>23,400</b>	<b>314,400</b>	<b>78,500</b>	<b>22,000</b>	<b>119,600</b>	<b>39,000</b>	<b>0</b>	<b>0</b>	<b>21,500</b>	<b>33,200</b>	<b>266,700</b>	<b>31,330</b>	<b>5,000</b>	<b>41,000</b>	<b>21,000</b>	<b>0</b>	<b>14,000</b>	<b>75,187.7</b>	<b>0</b>	<b>1,849</b>	<b>41,500</b>		
IVORY COAST	Societe Ivoirienne de Raffinage—Vridi District, Abidjan	76,312	28,979	0	0	0	0	0	15,000	0	17,000	0	0	0	18,600	0	0	14,220	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	5,000		
	<b>Total</b>	<b>76,312</b>	<b>28,979</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,000</b>	<b>0</b>	<b>17,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,600</b>	<b>0</b>	<b>0</b>	<b>14,220</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,000</b>		
JAMAICA	Petrojam Ltd.—Kingston	36,000	1,800	0	0	0	0	0	3,700	0	0	0	0	0	6,800	0	7,500	9,500	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	850		
	<b>Total</b>	<b>36,000</b>	<b>1,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,800</b>	<b>0</b>	<b>7,500</b>	<b>9,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>850</b>			
JAPAN	Cosmo Oil Co. Ltd.—Chiba	177,000	60,000	0	0	0	0	40,000	0	36,500	0	0	0	0	0	24,000	0	0	0	72,000	35,000	139,000	0	0	0	6,000	0	0	0	76.9	0	480	0			
	Cosmo Oil Co. Ltd.—Sakai	100,000	45,000	0	31,000	0	0	24,000	0	9,000	0	0	0	0	11,000	14,000	15,000	0	0	42,500	21,000	0	0	42,000	8,000	0	0	0	58.9	0	323	0				
	Cosmo Oil Co. Ltd.—Yokkaichi	86,000	74,000	0	0	0	0	31,000	0	21,500	0	0	0	0	7,000	18,000	65,000	0	0	0	0	0	0	37,350	0	23,300	0	0	6,650	13.3	0	200	1,300			
	ENEOS Holdings Inc.—ENEOS Corp.—Kashima Oil Co. Ltd.—Kashima Refinery, Kamisu City, Ibaraki	203,100	50,000	0	0	0	0	35,500	0	22,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Kawasaki Refinery, Kawasaki City, Kanagawa	247,000	123,000	0	0	0	0	92,000	0	56,000	0	0	0	0	0	0	0	0	0	0	34,500	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Marifu Refinery, Kuga District, Yamaguchi	120,000	75,000	0	0	22,000	0	30,000	0	27,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,000	0	0	0	0.0	450	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Mizushima Refinery, Kurashiki City, Okayama	350,200	186,000	30,000	0	0	0	95,000	0	78,600	0	13,000	0	0	0	0	0	0	0	0	0	0	0	0	18,300	37,600	0	0	0	11,000	186.2	0	3,911	22,000		
	ENEOS Holdings Inc.—ENEOS Corp.—Nagashi Refinery, Ito-ku, Yokohama	150,000	130,000	0	0	0	0	80,000	0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0		

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating		Other desulfurization	Other hydrotreating	Alkylation	Aromatics	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d					
				Fluid coking (incl.) b/cd	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd					Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating Other distillate desulfurization b/cd						Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd
	ENEOS Holdings Inc.—ENEOS Corp.—Oita Refinery, Oita City, Oita	136,000	66,000	0	0	0	0	26,000	0	0	30,000	0	0	0	0	9,200	0	0	0	0	0	0	0	0	0	12,300	0	0	0	0.0	0	0	0	
	ENEOS Holdings Inc.—ENEOS Corp.—Osaka International Refining Co. Ltd.—Chiba Refinery, Keijo Seaside Industrial Zone, Ichihara, Chiba	129,000	83,000	0	0	0	0	34,000	0	28,000	0	0	0	0	0	0	0	0	0	0	0	0	111,500	0	0	0	0	0	0.0	0	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Sakai Refinery, Sakai Senboku Seaside Industrial Zone, Osaka	141,000	70,000	0	0	0	0	46,000	0	34,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Sendai Refinery, Sendai City, Miyagi	145,000	60,000	0	0	0	0	43,000	0	36,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	ENEOS Holdings Inc.—ENEOS Corp.—Wakayama Refinery, Arida City, Wakayama	120,400	74,000	0	0	0	0	39,000	0	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Fuji Oil Co. Ltd.—Sodegaura, Chiba	143,000	0	0	0	0	0	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Idemitsu Kosan Co. Ltd.—Chita City, Aichi	160,000	16,000	0	0	0	0	50,000	0	20,000	0	0	0	0	30,000	15,800	49,000	34,000	0	0	0	0	60,000	0	10,000	0	0	10,000	0	0	0.0	0	436	0
	Idemitsu Kosan Co. Ltd.—Ichihara City, Chiba	190,000	66,000	0	0	0	0	45,000	0	17,000	0	0	0	0	5,020	0	60,000	0	0	0	0	0	40,000	0	11,600	0	8,200	0	0	0	2,000	0.0	0	0
	Idemitsu Kosan Co. Ltd.—Showa Yokkaichi Sekiyu Co. Ltd.—Seibu Oil Co. Ltd.—Sanyo-Onoda City, Yamaguchi	120,000	44,000	0	0	0	0	28,000	0	27,500	0	0	0	0	34,000	13,000	32,000	30,000	0	0	0	0	51,500	0	0	6,425	6,800	0	0	0	28.3	0	340	0
	Idemitsu Kosan Co. Ltd.—Showa Yokkaichi Sekiyu Co. Ltd.—Yokkaichi City, Mie	255,000	0	0	0	0	0	61,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Idemitsu Kosan Co. Ltd.—TOA Oil Co. Ltd.—Keihin, Kawasaki City, Kanagawa	70,000	58,000	0	0	0	27,000	42,000	0	9,500	0	0	0	0	17,000	0	15,000	20,000	0	0	0	0	46,000	0	0	0	0	0	0.0	0	0	0	0	
	Idemitsu Kosan Co. Ltd.—Tomakomai City, Hokkaido	150,000	24,000	0	0	0	0	33,000	0	18,000	0	0	0	0	27,000	14,500	36,500	27,000	0	0	0	0	42,000	0	0	0	0	0	0.0	0	0	395	0	
	Taiyo Oil Co. Ltd.—Shikoku, Imabari City, Ehime	138,000	30,000	0	0	0	0	19,000	0	37,000	0	0	0	32,000	0	43,000	17,000	0	0	0	0	0	52,000	0	17,200	64,500	0	0	0	0	109.5	0	0	0
<b>JORDAN</b>	<b>Total</b>	<b>3,330,700</b>	<b>1,334,000</b>	<b>30,000</b>	<b>31,000</b>	<b>22,000</b>	<b>27,000</b>	<b>925,500</b>	<b>28,000</b>	<b>572,600</b>	<b>30,000</b>	<b>13,000</b>	<b>0</b>	<b>32,000</b>	<b>80,500</b>	<b>183,220</b>	<b>116,300</b>	<b>272,500</b>	<b>111,000</b>	<b>0</b>	<b>187,300</b>	<b>426,000</b>	<b>348,500</b>	<b>90,950</b>	<b>62,500</b>	<b>165,325</b>	<b>12,800</b>	<b>10,000</b>	<b>0</b>	<b>19,650</b>	<b>473.1</b>	<b>450</b>	<b>6,085</b>	<b>23,300</b>
	Jordan Petroleum Refinery Co.—Zarga	90,400	21,500	0	0	0	0	4,000	0	10,900	0	5,220	0	0	0	17,300	0	0	0	0	0	0	0	0	0	0	0	0	16.0	0	0	0	4,250	
<b>KAZAKHSTAN</b>	<b>Total</b>	<b>90,400</b>	<b>21,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,000</b>	<b>0</b>	<b>10,900</b>	<b>0</b>	<b>5,220</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,250</b>	
	KazakOil Aktobe LLP—Atyrau	100,000	27,064	0	13,720	0	0	0	0	8,808	0	0	0	0	0	9,200	0	0	0	0	0	0	0	0	0	0	0	0.0	500	0	0	0	0	
	KazakOil Aktobe LLP—Pavlodar	120,000	93,973	0	11,277	30,071	0	38,356	0	26,178	0	0	0	0	0	27,200	0	0	0	0	0	0	46,027	0	49,863	0	0	0	0	21.5	500	64	8,550	
	PetroKazakhstan—Shymkent	120,000	0	0	0	22,000	0	0	0	16,600	0	0	0	0	0	16,600	0	9,100	19,900	0	0	0	0	0	0	0	0	0.0	0	0	60	0	0	
<b>KENYA</b>	<b>Total</b>	<b>340,000</b>	<b>121,037</b>	<b>0</b>	<b>24,997</b>	<b>52,071</b>	<b>0</b>	<b>38,356</b>	<b>0</b>	<b>51,586</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,000</b>	<b>0</b>	<b>9,100</b>	<b>19,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46,027</b>	<b>0</b>	<b>49,863</b>	<b>0</b>	<b>0</b>	<b>21.5</b>	<b>1,000</b>	<b>124</b>	<b>8,550</b>			
	Kenya Petroleum Refineries Ltd.—Mombasa	90,000	1,700	0	0	0	0	0	0	8,260	0	0	0	0	0	36,000	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1,000	
<b>KUWAIT</b>	<b>Total</b>	<b>90,000</b>	<b>1,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,260</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,000</b>		
	Kuwait Integrated Petroleum Industries Co.—Al-Zour	615,000	0	0	0	0	0	0	0	0	0	0	0	0	0	36,400	0	159,000	186,000	0	0	0	0	0	9,100	0	0	0	0	0.0	0	0	0	0
	Kuwait National Petroleum Co.—Mina Abdulla	454,000	142,500	0	72,000	0	0	0	0	0	0	38,250	0	0	0	0	0	36,000	36,000	0	0	0	0	0	9,000	0	0	0	0	232.6	2,800	1,200	0	0
	Kuwait National Petroleum Co.—Mina Al-Ahmadi	346,000	80,750	0	0	0	0	36,000	0	32,400	0	36,900	0	0	0	51,300	0	18,720	118,440	0	0	0	0	0	0	5,616	0	0	287.0	0	1,600	0	0	
<b>KYRGYZSTAN</b>	<b>Total</b>	<b>1,415,000</b>	<b>223,250</b>	<b>0</b>	<b>72,000</b>	<b>0</b>	<b>0</b>	<b>36,000</b>	<b>0</b>	<b>32,400</b>	<b>0</b>	<b>75,150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87,700</b>	<b>0</b>	<b>213,720</b>	<b>118,440</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,000</b>	<b>14,716</b>	<b>0</b>	<b>0</b>	<b>519.6</b>	<b>2,800</b>	<b>2,800</b>	<b>0</b>	<b>0</b>	
	Kyrgyz Petroleum Co.—Dzhalalabad	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	
<b>Total</b>	<b>Total</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Country	Company operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d							
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd			Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd						Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd		
<b>LAOS</b>	Lao Petroleum & Chemical Co. Ltd. (aka Lao-China Dongyan Petrochemical Co. Ltd., Lao Petrochemical Co. Ltd., or Laos Petrochemical Co. Ltd.)—Vientiane Saysettha Development Zone, Vientiane	20,000	0	0	0	0	0	0	0	7,340	0	0	0	0	0	0	0	9,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
<b>Total</b>		<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,340</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,590</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	
<b>LIBERIA</b>																																				
	Liberia Petroleum Refining Co.—Monrovia	15,000	1,000	0	0	0	0	0	0	2,000	0	0	0	0	0	0	0	2,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	
<b>Total</b>		<b>15,000</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>	
<b>LIBYA</b>																																				
	Azzawiya Oil Refining Co.—Azzawiya and Benghazi	120,000	3,775	0	0	0	0	0	0	15,750	0	0	0	0	0	0	0	16,604	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,432	
	Ras Lanuf Oil & Gas Processing Co.—Ras Lanuf	220,000	0	0	0	0	0	0	0	3,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sarir Refining Co.—Sarir	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sirte Oil Co.—Brega	10,000	0	0	0	0	0	0	0	1,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Tobruk Refining Co.—Tobruk	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Total</b>		<b>380,000</b>	<b>3,775</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,604</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,432</b>	
<b>LITHUANIA</b>																																				
	PKN Orlen SA—AB Orlen—Lietuva, Mazeikiai	208,000	89,300	0	0	28,800	0	43,200	0	45,900	0	0	0	0	0	0	0	0	18,900	81,000	0	0	0	0	0	0	0	0	0	0	0	0	25.0	0	320	
<b>Total</b>		<b>208,000</b>	<b>89,300</b>	<b>0</b>	<b>0</b>	<b>28,800</b>	<b>0</b>	<b>43,200</b>	<b>0</b>	<b>45,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,900</b>	<b>81,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,900</b>	<b>0</b>	<b>0</b>	<b>25.0</b>	<b>0</b>	<b>320</b>
<b>MALAYSIA</b>																																				
	Kemaman Bitumen Co. Sdn. Bhd.—Kemaman, Terengganu	30,000	25,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21,600		
	Petron Corp.—Port Dickson	88,000	0	0	0	0	0	0	0	8,000	0	0	0	0	0	0	0	28,000	0	12,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Petroleum Nasional Berhad (Petronas)—Kertih, Terengganu	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Petroleum Nasional Berhad (Petronas)—Melaka I	92,832	0	0	0	0	0	0	0	23,500	0	0	0	0	0	0	0	0	19,016	23,357	0	0	0	0	0	0	0	0	0	0	0	73.6	975	200	0	
	Petroleum Nasional Berhad (Petronas)—Melaka II	126,000	68,000	0	24,000	0	0	0	0	27,500	0	0	0	36,000	0	0	0	0	18,000	40,000	0	0	0	0	0	0	0	0	0	0	0	73.6	1,270	260	4,000	
	Petroleum Nasional Berhad (Petronas)—PETRONAS Refinery & Petrochemical Corp. Sdn. Bhd.—Johor	300,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Sarawak Shell Bhd.—Lutong	45,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Shandong Hengyuan Petrochemical Co. Ltd.—Malaysia Hengyuan International Ltd.—Port Dickson	107,000	8,000	0	0	0	0	39,000	0	16,070	0	0	0	0	0	0	0	26,600	0	0	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	4,000	
<b>Total</b>		<b>828,832</b>	<b>101,000</b>	<b>0</b>	<b>24,000</b>	<b>0</b>	<b>0</b>	<b>39,000</b>	<b>0</b>	<b>16,070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,000</b>	<b>0</b>	<b>0</b>	<b>26,600</b>	<b>0</b>	<b>49,016</b>	<b>10,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>147.2</b>	<b>2,245</b>	<b>460</b>	<b>29,600</b>	
<b>MARTINIQUE</b>																																				
	Societe Anonyme de la Raffinerie des Antilles—Fort de France, Lamentin	16,000	0	0	0	0	0	0	0	2,862	0	0	0	0	0	0	0	5,134	0	3,875	5,260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>16,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,862</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,134</b>	<b>0</b>	<b>3,875</b>	<b>5,260</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>MEXICO</b>																																				
	Petróleos Mexicanos—Ing. Héctor R. Lara Sosa, Cadereyta, Nuevo León	275,000	123,900	0	50,000	0	0	90,000	0	46,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	0	
	Petróleos Mexicanos—Francisco I. Madero, Ciudad Madero, Tamaulipas	190,000	91,300	0	50,000	0	0	60,500	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	
	Petróleos Mexicanos—Gral. Lázaro Cárdenas del Río, Minatitlán, Veracruz	285,000	129,000	0	56,000	0	0	72,000	0	49,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248	0	
	Petróleos Mexicanos—Ing. Antonio M. Amor, Salamanca, Guanajuato	245,000	119,000	0	0	0	0	40,000	0	39,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,600	0	0	117	0	

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating			Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d				
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Diablate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd					Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd		
	Petróleos Mexicanos—Ing. Antonio Dávalos Jaime, Salina Cruz, Oaxaca	330,000	165,000	0	0	50,000	0	80,000	0	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215,000	27,860	0	0	0	0	0.0	0	88	0		
	Petróleos Mexicanos—Miguel Hidalgo, Tula, Hidalgo	315,000	144,000	0	0	41,000	0	80,000	0	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	249,350	25,177	0	0	0	0	0.0	0	58	0		
<b>Total</b>		<b>1,840,000</b>	<b>772,200</b>	<b>0</b>	<b>156,000</b>	<b>91,000</b>	<b>0</b>	<b>422,500</b>	<b>0</b>	<b>279,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,229,950</b>	<b>154,277</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,600</b>	<b>0</b>	<b>786</b>	<b>0</b>	
<b>MYANMAR</b>																																				
	Myanma Petrochemical Enterprise—Chauk	6,000	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0		
	Myanma Petrochemical Enterprise—Thanlyin	26,000	2,000	0	5,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	0.0	120	0	0		
	Myanma Petrochemical Enterprise—Thanlyayaka n	25,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
<b>Total</b>		<b>57,000</b>	<b>4,000</b>	<b>0</b>	<b>5,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>120</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NETHERLANDS</b>																																				
	BP PLC—BP Raffinaderij Rotterdam BV—Rotterdam	379,717	86,038	0	0	30,566	0	60,263	0	29,890	0	0	0	0	62,729	0	160,302	82,874	14,943	0	0	0	0	0	8,694	7,336	0	0	0	0	36.5	0	228	0		
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Rotterdam	182,400	0	0	0	0	36,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,200	0.0	0	0	0		
	Shell PLC—Shell Nederland Raffinaderij BV—Pernis	420,850	0	0	0	0	0	47,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Smid & Hollander Raffinaderij BV—Amsterdam	10,000	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	5,800		
	Zeeland Refinery NV—Vissingen	148,000	68,000	0	0	0	0	0	0	28,600	0	77,100	0	0	22,693	0	160,302	47,700	14,943	0	0	0	0	0	0	0	0	0	0	12,300	0	0	105.0	0	289	0
<b>Total</b>		<b>1,140,967</b>	<b>162,038</b>	<b>0</b>	<b>0</b>	<b>30,566</b>	<b>36,900</b>	<b>107,963</b>	<b>0</b>	<b>58,490</b>	<b>0</b>	<b>77,100</b>	<b>0</b>	<b>0</b>	<b>85,422</b>	<b>0</b>	<b>160,302</b>	<b>130,574</b>	<b>14,943</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,694</b>	<b>7,336</b>	<b>12,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,200</b>	<b>141.5</b>	<b>0</b>	<b>517</b>	<b>5,800</b>	
<b>NETHERLANDS ANTILLES</b>																																				
	Refineria Isla Curacao SA—Ermastad	320,000	195,000	0	0	0	80,000	50,000	0	20,000	0	0	0	0	53,000	0	0	37,000	0	0	0	0	0	0	3,500	9,000	0	0	0	0	12,000	54.6	0	300	26,000	
<b>Total</b>		<b>320,000</b>	<b>195,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80,000</b>	<b>50,000</b>	<b>0</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,000</b>	<b>0</b>	<b>0</b>	<b>37,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,500</b>	<b>9,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,000</b>	<b>54.6</b>	<b>0</b>	<b>300</b>	<b>26,000</b>		
<b>NICARAGUA</b>																																				
	Puma Energy International—Puma Energy Bahamas SA—Managua	19,950	1,425	0	0	0	0	0	0	2,700	0	0	0	0	4,950	0	3,555	0	0	0	0	0	0	0	5,580	0	0	0	0	0	0.0	0	0	378		
<b>Total</b>		<b>19,950</b>	<b>1,425</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,950</b>	<b>0</b>	<b>3,555</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,580</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>378</b>		
<b>NIGERIA</b>																																				
	Niger Delta Exploration & Production PLC—Niger Delta Petroleum Resources Ltd.—Ogbele	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Nigerian National Petroleum Corp.—Kaduna Refinery & Petrochemical Co.—Kaduna	104,500	36,290	0	0	0	0	18,000	0	15,300	0	0	0	0	21,600	0	0	0	0	0	0	0	0	0	0	16,286	0	291	0	0	0	3,878	0.0	0	0	14,850
	Nigerian National Petroleum Corp.—Port Harcourt Refining Co.—Alesa Eleme	57,000	0	0	0	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Nigerian National Petroleum Corp.—Port Harcourt Refining Co.—Port Harcourt	142,500	54,000	0	0	0	0	40,000	0	33,000	0	0	0	0	33,000	0	0	0	0	0	0	0	0	0	0	14,500	7,020	0	3,610	0	0	0	0.0	0	0	0
	Nigerian National Petroleum Corp.—Warri Refinery & Petrochemical Co.—Warri	118,750	34,200	0	0	0	0	24,700	0	15,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23,845	2,850	0	0	0	0	0.0	0	0	0	
	Waltersmith Refining & Petrochemical Ltd.—Ijegbe, Ohaji Eghema Local Government Area, Imo	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>437,750</b>	<b>124,490</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82,700</b>	<b>0</b>	<b>70,070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54,631</b>	<b>9,870</b>	<b>291</b>	<b>3,610</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,878</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>14,850</b>

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	Other desulfurization b/cd	Other hydrotreating b/cd	Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d		
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd												C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd							
<b>NORTH KOREA</b>																																				
	North Korean Government—Ponghwa Chemical Factory—Sinuiju, Huich'on-kun, North Pyongan	29,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	North Korean Government—Sembong-gun, Rason Special Economic Zone	42,000	0	0	0	0	0	0	0	7,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>71,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>NORWAY</b>																																				
	Mongstad Refining Co.—Mongstad	203,000	0	0	23,000	0	0	0	55,000	24,400	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>203,000</b>	<b>0</b>	<b>0</b>	<b>23,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55,000</b>	<b>24,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OMAN</b>																																				
	Oman Refinery Co.—Mina Al Fahal	85,000	0	0	0	0	0	0	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>85,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PAKISTAN</b>																																				
	Attock Refinery Ltd.—Rawalpindi	42,000	5,415	0	0	0	0	0	0	4,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Boscor Refinery Ltd.—Karachi	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Dhodak Refinery Ltd.—Dera Ghazi, Khan Enar Petrotech Services Ltd.—Karachi	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	National Refinery Ltd.—Korangi, Karachi	62,050	14,400	0	0	0	0	0	0	3,800	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,200
	Pakistan Refinery Ltd.—Karachi, Sindh	55,000	0	0	0	0	0	0	0	0	3,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>194,196</b>	<b>19,815</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,300</b>	<b>3,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,200</b>	
<b>PAPUA NEW GUINEA</b>																																				
	Puma Energy PNG Refining Ltd.—Port Moresby	32,000	0	0	0	0	0	0	0	3,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>32,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PARAGUAY</b>																																				
	Petroleos Paraguayos—Villa Elisa	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>7,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PERU</b>																																				
	Maple Gas Corp.—Pucallpa	3,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Petroperu SA—Conchan, Lima	13,500	9,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Petroperu SA—Iquitos, Loreto	10,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Petroperu SA—El Milagro, Amazonas	1,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Petroperu SA—Talara, Piura	62,000	24,500	0	0	0	0	0	18,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Repso SA—La Pampilla, Lima	117,000	60,000	0	0	25,700	0	15,500	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,800	
<b>Total</b>		<b>207,950</b>	<b>94,000</b>	<b>0</b>	<b>0</b>	<b>25,700</b>	<b>0</b>	<b>33,500</b>	<b>0</b>	<b>2,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,800</b>		
<b>PHILIPPINES</b>																																				
	Petron Corp.—Limay, Bataan	180,000	40,000	0	0	0	0	18,000	0	31,000	0	0	0	0	0	0	0	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>180,000</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,000</b>	<b>0</b>	<b>31,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>POLAND</b>																																				
	PKN Orlen SA—Grupa Lotos SA—Gdansk	210,860	60,000	0	0	0	0	0	0	25,000	0	32,000	0	0	0	0	0	18,000	0	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,000
	PKN Orlen SA—ORLEN Poludnie—Plock (Plock, Trezbinia, & Jedlicze)	330,000	205,123	0	0	0	0	32,985	0	42,514	0	74,326	0	39,582	0	0	0	101,740	0	0	102,767	0	0	0	0	0	0	0	0	0	0	0	0	0	560	15,371
<b>Total</b>		<b>540,860</b>	<b>265,123</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32,985</b>	<b>0</b>	<b>67,514</b>	<b>0</b>	<b>106,326</b>	<b>0</b>	<b>39,582</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119,740</b>	<b>0</b>	<b>0</b>	<b>122,767</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>560</b>	<b>33,371</b>	
<b>PORTUGAL</b>																																				
	Galp Energia SGPS SA—Petróleos de Portugal SA (Petrogal)—Sines, Setúbal	220,000	71,393	45,000	0	36,540	0	40,500	0	24,750	0	0	43,000	0	0	0	0	24,750	24,300	62,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>220,000</b>	<b>71,393</b>	<b>45,000</b>	<b>0</b>	<b>36,540</b>	<b>0</b>	<b>40,500</b>	<b>0</b>	<b>24,750</b>	<b>0</b>	<b>0</b>	<b>43,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24,750</b>	<b>24,300</b>	<b>62,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>QATAR</b>																																				
	Qatar Petroleum—Umm Said	137,000	0	0	0	0	0	60,000	0	29,400	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Qatargas Operating Co. Ltd.—Ras Laffan	300,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141,300	0	116,000	51,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>437,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>29,400</b>	<b>0</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,300</b>	<b>0</b>	<b>116,000</b>	<b>51,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>ROMANIA</b>																																				
	OMV AG—OMV Petrom SA—Brazi	90,369	48,637	0	18,186	0	0	31,211	0	11,731	0	0	0	0	0	0	0	18,310</																		





Country	Company operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	Other desulfurization b/cd	Other hydrotreating b/cd	Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d	
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd												C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd						
	PJSC Rosneft—RN-Komsomolsky Refinery LLC, Komsomolsk-on-Amur, Khabarovsk Territory	166,682	137,161	0	0	11,300	9,679	0	0	8,100	0	0	0	0	19,000	0	0	0	0	0	0	0	0	0	0	0	2,700	0	0	0	0.0	0	0	0	
	PJSC Rosneft—RN-Tuapsinsky Refinery LLC, Tuapse, Krasnodar Region	240,986	0	0	0	0	0	0	0	7,829	0	0	0	0	8,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	PJSC Slavneft-Yanos—Yaroslavl City, Yaroslavl Region	282,757	270,305	0	0	12,404	0	28,384	0	30,093	0	0	0	0	0	0	0	0	0	0	0	0	0	77,671	1,786	1,551	0	0	3,542	3,947	0.0	0	82	10,460	
	PJSC Surgutneftegas—LLC KINEF—Kirovskiy, Leningradskaya Region	403,652	92,093	0	0	35,709	0	0	0	56,840	0	0	0	0	67,900	0	0	0	0	0	0	0	0	104,800	0	5,172	0	0	7,085	0	15.1	0	205	16,603	
	PJSC Tatneft—JSC Taneco—Nizhnekamsk, Tatarstan	200,820	0	0	73,179	45,107	0	21,096	0	0	0	0	0	0	0	0	0	70,959	0	0	0	16,301	0	0	0	0	0	0	752	29.7	0	50	767		
	PJSC Tatneft—JSC Tatneftegazpererabotka—Yelkhovsky, Samara Region	9,640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0		
<b>Total</b>		<b>5,410,727</b>	<b>1,956,861</b>	<b>128,917</b>	<b>215,636</b>	<b>236,660</b>	<b>64,371</b>	<b>447,975</b>	<b>0</b>	<b>671,608</b>	<b>21,775</b>	<b>84,378</b>	<b>0</b>	<b>0</b>	<b>629,133</b>	<b>0</b>	<b>0</b>	<b>113,151</b>	<b>0</b>	<b>64,000</b>	<b>16,301</b>	<b>19,200</b>	<b>1,339,425</b>	<b>24,878</b>	<b>49,187</b>	<b>45,800</b>	<b>8,219</b>	<b>10,627</b>	<b>58,959</b>	<b>381.3</b>	<b>3,238</b>	<b>4,702</b>	<b>166,653</b>		
<b>SAUDI ARABIA</b>																																			
	Saudi Arabian Oil Co. (Saudi Aramco)—Jubail Industrial City, Jazan	400,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Saudi Arabian Oil Co. (Saudi Aramco)—Rabigh	400,000	0	0	0	0	0	0	0	0	0	0	0	0	47,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.0	0	0	0	0	
	Saudi Arabian Oil Co. (Saudi Aramco)—Ras Tanura	550,000	135,000	0	0	60,000	0	0	0	107,000	0	50,000	0	0	54,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Saudi Arabian Oil Co. (Saudi Aramco)—Riyadh	130,000	40,000	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	94,000	0	0	0	0	0	0	0	0	0	0	0	0
	Saudi Aramco Jubail Refinery Co. (SASREF)—Al-Jubail	305,000	82,200	0	0	0	61,000	0	0	18,800	0	45,000	0	0	20,000	0	54,000	0	0	0	0	0	48,400	8,000	6,500	0	0	0	0	98.0	0	0	0	0	
	Saudi Aramco Mobil Refinery Company Ltd. (SAMREF)—Yanbu	252,000	142,400	0	0	0	45,900	86,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Saudi Aramco Total Refinery & Petrochemicals Co. (SATORP)—Jubail	460,000	223,100	0	118,500	0	0	37,500	0	66,600	0	132,700	0	0	96,000	0	61,000	151,600	0	0	0	0	0	13,800	14,000	0	0	0	0	0.0	6,500	1,100	0	0	
	Yanbu Aramco Sinopec Refining Co. Ltd. (YASREF)—Yanbu Industrial City	430,000	0	0	114,000	0	0	96,000	0	85,000	0	0	0	0	84,000	0	0	177,000	0	0	0	0	15,000	0	0	20,000	0	0	0	263.0	6,200	1,200	0	0	
<b>Total</b>		<b>2,927,000</b>	<b>622,700</b>	<b>0</b>	<b>232,500</b>	<b>60,000</b>	<b>106,900</b>	<b>219,900</b>	<b>0</b>	<b>307,400</b>	<b>0</b>	<b>227,700</b>	<b>0</b>	<b>0</b>	<b>301,000</b>	<b>0</b>	<b>115,000</b>	<b>328,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>157,400</b>	<b>21,800</b>	<b>20,500</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>373.0</b>	<b>12,700</b>	<b>2,300</b>	<b>0</b>	<b>0</b>	
<b>SENEGAL</b>																																			
	Ste. Africaine de Raffinage—M'Bao, Dakar	24,000	7,192	0	0	0	0	0	0	3,000	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>24,000</b>	<b>7,192</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>SERBIA &amp; MONTENEGRO</b>																																			
	NIS-Oil Refinery Novi Sad—Novi Sad	116,826	10,483	0	0	0	0	0	0	10,902	0	0	0	0	14,300	0	0	5,200	0	0	0	0	9,500	0	0	0	0	0	300	0.5	0	0	0	2,400	
	NIS-Rafinerija Nafte Pancevo—Pancevo	63,058	40,100	0	0	20,340	0	7,671	0	5,627	0	0	0	0	0	0	0	0	0	0	0	0	20,521	3,070	200	0	0	0	0	0.0	0	27	0	0	
<b>Total</b>		<b>179,884</b>	<b>50,583</b>	<b>0</b>	<b>0</b>	<b>20,340</b>	<b>0</b>	<b>7,671</b>	<b>0</b>	<b>16,529</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,300</b>	<b>0</b>	<b>0</b>	<b>5,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30,021</b>	<b>3,070</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>300</b>	<b>0.5</b>	<b>0</b>	<b>27</b>	<b>2,400</b>	<b>0</b>	<b>0</b>	
<b>SIERRA LEONE</b>																																			
	Sierra Leone Petroleum Refining Co. Ltd.—Freetown	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>SINGAPORE</b>																																			
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Jurong/Pulau Ayer, Chawan	562,400	0	0	0	43,200	0	0	0	0	0	30,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40,500	0.0	0	0	0	0	
	Shell PLC—Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	288,800	0	0	0	0	72,900	34,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
	Singapore Refining Co. Private Ltd.—Pulau Merlimau	145,000	87,400	0	0	16,000	0	23,000	0	0	19,800	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
<b>Total</b>		<b>996,200</b>	<b>87,400</b>	<b>0</b>	<b>0</b>	<b>59,200</b>	<b>72,900</b>	<b>57,200</b>	<b>0</b>	<b>0</b>	<b>19,800</b>	<b>30,600</b>	<b>16,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40,500</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SLOVAKIA</b>																																			
	Slovnaft PLC—Bratislava	124,000	55,000	0	0	0	0	18,000	0	21,000	0	19,000	23,000	0	16,000	0	0	29,000	0	0	0	0	22,000	0	0	0	0	0	0	0.0	3,900	270	2,600	0	
<b>Total</b>		<b>124,000</b>	<b>55,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,000</b>	<b>0</b>	<b>21,000</b>	<b>0</b>	<b>19,000</b>	<b>23,000</b>	<b>0</b>	<b>16,000</b>	<b>0</b>	<b>0</b>	<b>29,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>3,900</b>	<b>270</b>	<b>2,600</b>	<b>0</b>	<b>0</b>	

Country	Company operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d									
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd			Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd						Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd				
<b>SOUTH AFRICA</b>																																						
	Astron Energy (Pty) Ltd.—Cape Town	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	National Petroleum Refiners of South Africa Pty Ltd.—Sasolburg	105,000	72,200	0	0	0	0	24,535	0	17,900	0	13,000	0	0	0	0	0	15,740	0	0	28,600	0	14,739	0	0	0	0	0	4,565	0	0	0	0	35.2	0	139	889	
<b>Total</b>		<b>100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24,535</b>	<b>0</b>	<b>17,900</b>	<b>0</b>	<b>13,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,740</b>	<b>0</b>	<b>0</b>	<b>28,600</b>	<b>0</b>	<b>14,739</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,565</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35.2</b>	<b>0</b>	<b>139</b>	<b>889</b>		
<b>SOUTH KOREA</b>																																						
	GS Caltex Corp.—Yeosu, Jeollanam-do	800,000	167,000	0	0	0	0	151,000	0	98,350	10,000	0	62,000	66,000	0	0	0	119,700	58,000	60,000	222,000	0	0	0	0	0	0	34,650	17,000	58,870	0	0	65,853	26,500	290.4	0	1,753	32,000
	Hanwha Total Petrochemicals Co. Ltd.—Daesan	186,000	0	0	0	0	0	102,220	0	0	0	0	0	0	0	0	0	148,300	0	35,600	21,900	0	0	0	0	0	0	0	0	66,500	0	0	0	0	0	69	0	
	Hyundai Oilbank Corp.—Daesan, Chungcheongnam-do	520,000	99,000	0	50,000	0	0	86,000	0	4,600	0	0	0	77,500	0	0	0	12,000	41,000	70,000	151,000	0	65,000	0	0	0	0	25,000	0	0	0	0	204.0	3,843	1,790	0		
	SK Innovation Co. Ltd.—SK Incheon Petrochem Co. Ltd.—Seo-gu, Incheon	375,000	20,000	0	0	0	0	0	0	4,000	73,000	0	0	0	0	0	0	114,000	0	0	90,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	0	
	SK Innovation Co. Ltd.—SK Energy Co. Ltd.—Ulsan	840,000	87,000	0	0	0	0	164,000	0	8,000	0	0	0	45,000	0	0	0	29,000	71,000	59,000	200,000	0	0	0	0	0	0	31,000	0	0	0	0	0	0	0	0		
	S-Oil Corp.—Onsan	669,000	168,000	0	0	0	0	151,200	0	105,000	0	75,000	0	0	0	0	0	122,300	53,770	70,000	50,000	0	254,000	0	0	0	0	23,640	0	0	0	0	44,700	0	0	21,400		
<b>Total</b>		<b>3,390,000</b>	<b>541,000</b>	<b>0</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>388,200</b>	<b>266,220</b>	<b>219,950</b>	<b>83,000</b>	<b>75,000</b>	<b>62,000</b>	<b>188,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>545,300</b>	<b>223,770</b>	<b>294,600</b>	<b>734,900</b>	<b>0</b>	<b>319,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34,650</b>	<b>96,640</b>	<b>125,370</b>	<b>0</b>	<b>0</b>	<b>65,853</b>	<b>71,200</b>	<b>494.4</b>	<b>3,843</b>	<b>3,812</b>	<b>53,400</b>	
<b>SPAIN</b>																																						
	BP PLC—BP Oil Espana SA—Castellon	104,500	44,745	0	22,050	0	0	27,000	0	0	14,850	0	0	0	0	0	0	42,120	9,630	19,800	30,150	29,430	0	0	0	0	0	3,116	0	0	17,100	0	0	37.0	1,175	65	0	
	Cia. Espanola de Petroles SA—Cadiz	240,000	40,000	0	0	38,000	0	40,000	0	36,000	0	0	0	0	0	0	0	35,000	0	0	54,000	0	0	0	0	0	0	5,600	11,500	0	5,500	0	2,300	4.8	0	246	0	
	Cia. Espanola de Petroles SA—Cadiz	100,000	38,000	0	0	9,000	0	19,000	0	17,000	0	17,000	0	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	14,300	0	0	2,600	33.5	0	115	5,500		
	Cia. Espanola de Petroles SA—Tenerife	87,000	8,000	0	0	35,000	0	0	0	16,000	0	0	0	0	0	0	0	16,000	0	15,000	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	4,500	
	Petronor SA—Muskiz, Abanto-Zierbena, Basque County	220,000	89,500	0	0	39,600	0	43,100	0	28,900	0	0	0	0	33,100	0	0	40,500	19,700	0	89,100	0	0	0	0	0	0	4,800	0	0	2,600	0	0	38.7	0	346	4,500	
	Repsol SA—Cartagena, Murcia	220,000	14,500	0	0	0	0	0	0	26,000	0	0	0	0	0	0	0	26,000	0	0	31,800	0	0	0	0	0	0	0	0	800	0	0	2,600	1.4	0	70	5,200	
	Repsol SA—La Coruna	120,000	52,000	0	19,000	0	0	31,600	0	19,700	0	0	0	0	0	0	0	19,700	0	0	43,400	0	0	0	0	0	0	0	0	1,200	0	0	0	40.3	1,050	251	1,700	
	Repsol SA—Puertollano, Ciudad Real	150,000	55,500	0	24,100	0	0	30,600	0	16,300	0	34,500	0	0	0	0	0	16,300	0	0	83,100	0	0	0	0	0	0	3,000	3,400	0	1,900	0	0	2,100	57.1	1,340	381	5,200
	Repsol SA—Tarragona	186,000	72,000	0	0	27,600	0	0	0	22,000	0	46,900	0	0	0	0	0	22,000	0	0	67,900	0	0	0	0	0	0	0	0	6,900	0	0	0	79.8	0	243	0	
<b>Total</b>		<b>1,427,500</b>	<b>414,245</b>	<b>0</b>	<b>65,150</b>	<b>149,200</b>	<b>0</b>	<b>191,300</b>	<b>0</b>	<b>181,900</b>	<b>14,850</b>	<b>88,400</b>	<b>0</b>	<b>0</b>	<b>33,100</b>	<b>0</b>	<b>0</b>	<b>217,620</b>	<b>29,330</b>	<b>34,800</b>	<b>443,450</b>	<b>29,430</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,000</b>	<b>16,916</b>	<b>25,800</b>	<b>10,800</b>	<b>25,200</b>	<b>0</b>	<b>9,600</b>	<b>292.6</b>	<b>3,565</b>	<b>1,762</b>	<b>26,600</b>		
<b>SRI LANKA</b>																																						
	Ceylon Petroleum Corp.—Sapugaskanda	40,000	24,000	0	0	12,500	0	0	0	5,300	0	0	0	0	0	0	0	9,885	0	0	9,410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	
<b>Total</b>		<b>40,000</b>	<b>24,000</b>	<b>0</b>	<b>0</b>	<b>12,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,885</b>	<b>0</b>	<b>0</b>	<b>9,410</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,000</b>	
<b>SUDAN</b>																																						
	Khartoum Refinery Co. Ltd.—El Gily	50,205	0	0	37,589	0	0	34,521	0	9,786	0	0	0	0	0	0	0	0	0	23,013	0	9,589	0	0	0	0	0	0	0	0	0	0	0	0	822	0	0	
	Regional Petroleum Products Corp.—Port Sudan	21,700	0	0	0	0	0	0	0	1,900	0	0	0	0	0	0	0	8,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>71,905</b>	<b>0</b>	<b>0</b>	<b>37,589</b>	<b>0</b>	<b>0</b>	<b>34,521</b>	<b>0</b>	<b>11,686</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,100</b>	<b>0</b>	<b>0</b>	<b>9,589</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>822</b>	<b>0</b>	<b>0</b>	
<b>SURINAME</b>																																						
	Staatsolie Maatschappij Suriname NV—Tout Lui Faut	15,000	7,000	0	0	2,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Total</b>		<b>15,000</b>	<b>7,000</b>	<b>0</b>	<b>0</b>	<b>2,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>SWEDEN</b>																																						
	AB Nynas Petroleum NV—Gothenburg	13,000	13,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,700		
	AB Nynas Petroleum NV—Nynashamn	28,000	28,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,400	0	0	0	0	0	8.1	0	22	18,760	
	Preem Raffinaderi AB—Brofjorden, Lysekil	210,000	64,600	0	0	37,800	0	29,700	0	32,400	0	0	0	0	48,600	0	0	0	0	0	0	0	0	0	0	0	0	94,500	0	0	0	14,400	0	9.7	0	200	0	
	Preem Raffinaderi AB—Gothenburg	106,000	0	0	0	0	0	0	0	20,500	0	0	0	0	0	0	0	46,000	0	0	0	0	0	0	0	0	0	57,500	0	0	0	10,000	0	36.0	0	112	0	
	Shell Raffinaderi AB—Gothenburg	80,000	30,000	0	0	0	29,000	0	0	17,760	0	0	0	0	0	0	0	28,140	0	5,000	0	0	0	0	0	0	0	28,000	0	0	0	4,130	0	0	0	0	0	
<b>Total</b>		<b>437,000</b>	<b>135,600</b>	<b>0</b>	<b>0</b>	<b>37,800</b>	<b>29,000</b>	<b>29,700</b>	<b>0</b>	<b>70,660</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48,600</b>	<b>0</b>	<b>0</b>	<b>74,140</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0&lt;/</b>														

Country	Company operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Catalytic Hydrotreating Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	Other desulfurization b/cd	Other hydrotreating b/cd	Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d				
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd												C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd									
THAILAND	Bangchak Corp. PLC—Phra Khanong, Bangkok	120,000	37,050	0	0	0	0	0	0	13,500	0	0	0	0	22,500	19,170	0	0	38,700	0	0	0	0	0	0	0	0	0	0	0	6,750	0	0	40.0	0	80	0	
	ExxonMobil Corp.—Esso (Thailand) Public Co. Ltd.—Laem Chabang, Sriracha, Chon Buri	158,650	0	0	0	0	0	36,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PTT PLC—IRPC PLC—Choeng Noen, Rayong	215,000	0	0	0	0	0	24,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,965	0	0	0	0	7,140	0.0	0	0	9,960
	PTT Group—PTT Global Chemical PLC—Map Ta Phut, Rayong	280,000	0	0	0	22,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48,115	0	0	0	14.9	0	0	0		
	Star Petroleum Refining PLC—Map Ta Phut, Rayong	175,000	65,000	0	0	0	0	42,000	0	0	0	19,000	0	0	0	0	20,000	0	20,000	69,400	0	0	35,000	28,000	49,000	0	0	0	0	0	0	0	0	0.0	0	234	4,671	
<b>Total</b>		<b>1,223,650</b>	<b>197,050</b>	<b>0</b>	<b>0</b>	<b>41,000</b>	<b>0</b>	<b>113,300</b>	<b>0</b>	<b>25,000</b>	<b>25,000</b>	<b>18,460</b>	<b>24,613</b>	<b>0</b>	<b>6,927</b>	<b>85,000</b>	<b>0</b>	<b>20,000</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,670</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,310</b>	<b>28.8</b>	<b>0</b>	<b>420</b>	<b>5,810</b>				
TUNISIA	Ste. Tunisienne Industries des Raffinage—Bizerte	34,000	0	0	0	0	0	0	0	3,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0			
	<b>Total</b>	<b>34,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>				
TURKEY	Ersan Petrol Sanayii AS—Narli, Kahramanmaraş, Pazarcik	3,800	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	44	3,000				
	STAR Rafineri AS—Izmir, Aliaga	238,980	0	0	40,000	0	0	0	0	28,000	0	0	0	0	66,000	20,000	0	26,000	68,000	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Türkiye Petrol Rafinerileri AS (Tüpraş)—Aliaga, Izmir	220,000	75,490	0	0	18,870	0	15,095	0	9,810	0	16,360	0	0	0	11,320	0	11,320	0	0	0	0	34,415	0	0	0	0	0	0	0	5,870	122.9	0	98	472			
	Türkiye Petrol Rafinerileri AS (Tüpraş)—Batman, Siirt	28,115	2,140	0	0	0	4,720	0	0	1,302	0	0	0	0	0	1,302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	2,139			
	Türkiye Petrol Rafinerileri AS (Tüpraş)—Izmit	226,930	89,947	0	0	0	0	13,840	0	6,920	0	0	0	50,000	0	20,760	0	27,050	0	0	0	39,000	0	52,212	0	0	0	0	0	0	5,030	0	50.7	180	137	9,435		
	Türkiye Petrol Rafinerileri AS (Tüpraş)—Kırıkkale	108,445	30,190	0	0	0	0	0	0	20,130	0	14,500	0	0	0	20,130	0	0	15,096	0	0	0	0	0	0	0	0	0	0	0	9,025	0	43.9	0	80	5,170		
<b>Total</b>		<b>826,270</b>	<b>201,767</b>	<b>0</b>	<b>40,000</b>	<b>18,870</b>	<b>4,720</b>	<b>28,935</b>	<b>0</b>	<b>66,162</b>	<b>0</b>	<b>30,860</b>	<b>0</b>	<b>50,000</b>	<b>66,000</b>	<b>73,512</b>	<b>0</b>	<b>64,370</b>	<b>83,096</b>	<b>0</b>	<b>0</b>	<b>39,000</b>	<b>0</b>	<b>86,627</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,055</b>	<b>5,870</b>	<b>217.5</b>	<b>180</b>	<b>359</b>	<b>20,216</b>				
TURKMENISTAN	Turkmenbashi Complex of Oil Refineries (TCOR)—Turkmenbashi-Seydi	200,820	40,900	0	28,568	0	0	15,151	0	28,074	0	0	0	0	0	38,600	0	0	0	0	0	0	0	1,028	0	0	0	0	0	2,000	0.0	1,040	0	415				
	<b>Total</b>	<b>200,820</b>	<b>40,900</b>	<b>0</b>	<b>28,568</b>	<b>0</b>	<b>0</b>	<b>15,151</b>	<b>0</b>	<b>28,074</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,028</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>0.0</b>	<b>1,040</b>	<b>0</b>	<b>415</b>					
UNITED ARAB EMIRATES	Alliance Oil Co. Ltd.—JSC NNK-Khabarovsk Oil Refinery—Khabarovsk City, Khabarovsk Region	100,000	43,000	0	12,000	0	0	0	0	16,637	0	0	0	0	0	13,041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	340	0	5,811				
	PJSC Ukrtatnafta—Kremenchug	373,529	119,997	0	0	0	0	29,600	0	44,400	0	0	0	7,200	0	0	0	0	65,999	0	0	0	0	0	0	1,594	0	9,589	0	500	0.0	0	86	0				
<b>Total</b>		<b>473,529</b>	<b>162,997</b>	<b>0</b>	<b>12,000</b>	<b>0</b>	<b>0</b>	<b>29,600</b>	<b>0</b>	<b>61,037</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,200</b>	<b>0</b>	<b>13,041</b>	<b>0</b>	<b>0</b>	<b>65,999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,594</b>	<b>0</b>	<b>9,589</b>	<b>0</b>	<b>500</b>	<b>0.0</b>	<b>340</b>	<b>86</b>	<b>0</b>	<b>5,811</b>					
UNITED KINGDOM	Abu Dhabi Oil Refining Co.—Ruweis	817,000	56,680	0	0	0	0	19,150	0	0	0	31,050	57,000	0	0	69,000	0	108,000	75,000	0	0	0	0	82,987	37,000	0	0	0	26,000	0	0	53.0	0	0	0			
	Abu Dhabi Oil Refining Co.—Umm Al-Nar	85,000	0	0	0	0	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	46,000	0	0	0	0	0	0.0	0	35	0					
	Emirates National Oil Co.—Jebel Ali	210,000	0	0	0	0	0	0	0	36,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	6	0					
	Vitol Group—Fujairah Refinery Ltd.—Fujairah	160,000	17,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0				
<b>Total</b>		<b>1,272,000</b>	<b>73,680</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,150</b>	<b>0</b>	<b>50,000</b>	<b>0</b>	<b>31,050</b>	<b>57,000</b>	<b>0</b>	<b>69,000</b>	<b>0</b>	<b>108,000</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>128,987</b>	<b>37,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,000</b>	<b>0</b>	<b>0</b>	<b>53.0</b>	<b>0</b>	<b>41</b>	<b>0</b>				
UNITED KINGDOM	AB Nynas Petroleum NV—Eastham Refinery Ltd.—Eastham, England	27,000	27,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	18,000				
	Essar Energy PLC—Essar UK Ltd.—Stanlow, Cheshire, England	195,000	130,000	0	0	0	0	68,000	0	27,000	30,000	0	0	0	0	60,000	0	0	0	0	0	0	0	97,298	11,000	8,700	5,738	0	0	4,999	0.0	0	3	0				
	ExxonMobil Corp.—Esso UK Ltd.—Fawley, Hampshire, England	248,900	0	0	0	0	0	33,300	80,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,100	0.0	0	0	0			
	Ineos AG—Petrobrins Refining Ltd.—Grangemouth, Firth of Forth, Lothian, Scotland	145,000	64,600	0	0	0	0	0	0	39,600	0	36,000	0	0	0	0	0	0	0	0	0	0	0	56,700	4,500	0	0	0	0	0	49.0	0	0	0				

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/cd					
				Fluid coking (incl.) b/cd	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Dissilante b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosine/Jet desulfurization b/cd	Diesel desulfurization b/cd			Other dissilante b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd						Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd
	Phillips 66 Co.—Phillips 66 Ltd.—Humber, North Lincolnshire, England	221,000	156,912	0	67,860	0	55,016	53,758	0	53,856	0	0	0	0	0	7,254	0	0	175,655	0	30,744	0	39,831	11,880	4,500	8,352	13,158	0	0	0.0	2,400	140	0	
	Prax Petroleum Ltd.—State Oil Refinery Ltd.—Grimsby, Killingholme, North Lincolnshire, England	120,582	78,868	0	0	20,377	0	47,126	0	0	16,669	0	0	0	0	36,683	0	0	36,683	0	0	0	0	6,792	0	7,065	0	0	0	22.4	0	147	4,810	
	Valero Energy Corp.—Valero Energy Ltd.—Pembroke, Wales	199,500	95,000	0	0	26,000	0	90,000	0	39,000	0	0	0	0	48,300	49,500	0	60,000	0	0	0	0	0	0	0	19,900	0	0	0	8.0	0	160	0	
<b>Total</b>		<b>1,156,982</b>	<b>552,380</b>	<b>0</b>	<b>67,860</b>	<b>46,377</b>	<b>88,316</b>	<b>338,984</b>	<b>0</b>	<b>159,456</b>	<b>46,669</b>	<b>36,000</b>	<b>0</b>	<b>0</b>	<b>144,983</b>	<b>56,754</b>	<b>0</b>	<b>96,683</b>	<b>175,655</b>	<b>0</b>	<b>61,420</b>	<b>0</b>	<b>193,829</b>	<b>66,672</b>	<b>13,200</b>	<b>41,055</b>	<b>13,158</b>	<b>0</b>	<b>13,099</b>	<b>79.4</b>	<b>2,400</b>	<b>450</b>	<b>22,810</b>	
<b>URUGUAY</b>																																		
	Administración Nacional de Combustibles Alcohol y Portland (ANCAP)—Eduardo Acevedo Vázquez Refinery, La Teja, Montevideo	50,000	25,000	0	0	7,000	0	12,000	0	12,000	0	0	0	0	12,000	0	5,000	0	0	0	0	0	6,000	0	0	0	0	0	0.0	0	0	0	0	
<b>Total</b>		<b>50,000</b>	<b>25,000</b>	<b>0</b>	<b>0</b>	<b>7,000</b>	<b>0</b>	<b>12,000</b>	<b>0</b>	<b>12,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,000</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>UZBEKISTAN</b>																																		
	Sanoat Energetika Guruhi LLC (SEG)—Fergana Oil Refinery LLC—Fergana	110,452	45,671	0	17,667	0	0	0	0	23,487	0	0	0	0	23,900	0	0	0	0	0	0	0	6,904	0	0	0	0	0	9.397	0.0	650	0	4,151	
	Uzbekneftegaz—Bukhara	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
<b>Total</b>		<b>160,452</b>	<b>45,671</b>	<b>0</b>	<b>17,667</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,487</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,904</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9.397</b>	<b>0.0</b>	<b>650</b>	<b>0</b>	<b>4,151</b>	
<b>VENEZUELA</b>																																		
	Petroleos de Venezuela SA—Refineria El Palito—Puerto Cabello, Carabobo	187,000	71,200	0	0	0	0	51,700	0	9,000	0	0	0	0	9,000	0	0	0	0	0	0	0	20,300	2,000	0	0	0	0	6.8	0	0	0	0	
	Petroleos de Venezuela SA—Centro de Refinacion Paraguana—Amuay and Cardon, Falcon	940,000	503,975	0	87,300	0	57,600	166,500	0	40,500	0	0	0	0	54,000	2,700	0	0	0	0	0	184,500	0	139,500	41,400	0	20,700	0	0	12,020	141.0	5,200	1,454	36,000
	Petroleos de Venezuela SA—Refineria Bajo Grande—Bajo Grande, Zulia	16,000	8,835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Petroleos de Venezuela SA—Refineria Puerto la Cruz—Puerto de la Cruz, Anzoategui	310,000	0	0	0	0	0	13,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,100	0	0	0	0	0	0.0	0	0	17	0	
	Petroleos de Venezuela SA—Refineria San Roque—San Roque, Anzoategui	5,000	1,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>1,458,000</b>	<b>585,780</b>	<b>0</b>	<b>87,300</b>	<b>0</b>	<b>57,600</b>	<b>231,800</b>	<b>0</b>	<b>49,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,000</b>	<b>2,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>184,500</b>	<b>0</b>	<b>139,500</b>	<b>65,800</b>	<b>2,000</b>	<b>20,700</b>	<b>0</b>	<b>12,020</b>	<b>147.8</b>	<b>5,200</b>	<b>1,471</b>	<b>36,000</b>	
<b>VIETNAM</b>																																		
	Binh Son Refining & Petrochemical Co. Ltd.—Dung Quat	130,534	0	0	0	0	0	62,730	0	18,900	0	18,900	0	0	18,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	39	0	0	
	Nghi Son Refinery & Petrochemical LLC—Nghi Son District, Thanh Hoa	200,000	0	0	0	0	0	0	80,000	0	0	0	0	0	0	0	0	0	0	105,000	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
<b>Total</b>		<b>330,534</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62,730</b>	<b>80,000</b>	<b>18,900</b>	<b>0</b>	<b>18,900</b>	<b>0</b>	<b>0</b>	<b>18,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>105,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>
<b>YEMEN</b>																																		
	Aden Refinery Co.—Little Aden	130,000	10,500	0	0	0	0	0	0	12,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	3,000	
	Yemen Oil Co.—Marib	10,000	0	0	0	0	0	0	0	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
<b>Total</b>		<b>140,000</b>	<b>10,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,000</b>	
<b>ZAMBIA</b>																																		
	Ministry of Energy & Water Development—Indeni Petroleum Refinery Co. Ltd.—Bwana Nkubwa Area, N'dola	24,000	2,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,550	0	0	0	0	0	0.0	0	0	0	104	
<b>Total</b>		<b>24,000</b>	<b>2,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,550</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>104</b>	





Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating							Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d			
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd	C8 feed b/cd	
	Placid Refining Co. LLC—Port Allen	78,375	27,000	0	0	0	0	25,000	1,000	11,000	0	0	0	0	0	11,000	20,000	0	25,000	0	0	0	0	0	0	7,500	0	0	0	0	0	0	0	50	0
	Shell PLC—Norco	237,500	0	0	0	0	26,100	107,100	0	0	0	0	0	0	39,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Valero Energy Corp.—Valero Refining Meraux LLC—Meraux	118,750	57,000	0	0	0	0	0	0	28,800	0	0	43,830	0	0	33,930	0	14,760	36,000	0	0	0	0	0	0	0	0	0	0	0	0	0	203	0	
	Valero Energy Corp.—Valero Refining New Orleans LLC—St. Charles Refinery, Norco	204,250	152,000	0	75,600	0	0	90,000	0	24,750	0	25,200	63,000	0	0	39,600	54,000	10,800	45,000	39,600	0	21,600	0	0	18,900	2,700	0	0	0	100.0	3,536	798	0		
<b>Total</b>	<b>Michigan</b>	<b>2,774,097</b>	<b>1,150,635</b>	<b>0</b>	<b>493,300</b>	<b>0</b>	<b>72,800</b>	<b>871,100</b>	<b>3,700</b>	<b>406,790</b>	<b>59,580</b>	<b>50,200</b>	<b>272,990</b>	<b>0</b>	<b>56,100</b>	<b>468,710</b>	<b>561,710</b>	<b>112,460</b>	<b>699,650</b>	<b>39,600</b>	<b>0</b>	<b>186,990</b>	<b>34,600</b>	<b>167,400</b>	<b>146,930</b>	<b>21,510</b>	<b>21,900</b>	<b>83,798</b>	<b>0</b>	<b>33,550</b>	<b>359.0</b>	<b>22,995</b>	<b>4,912</b>	<b>44,319</b>	
	Marathon Petroleum Co. LP—Michigan Refining Division—Detroit	140,000	86,000	0	36,100	0	0	41,800	0	20,400	0	0	0	0	0	33,700	0	6,700	45,600	0	0	42,300	0	0	8,100	0	0	0	0	59.0	2,214	397	30,400		
<b>Total</b>	<b>Minnesota</b>	<b>140,000</b>	<b>86,000</b>	<b>0</b>	<b>36,100</b>	<b>0</b>	<b>0</b>	<b>41,800</b>	<b>0</b>	<b>20,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,700</b>	<b>0</b>	<b>6,700</b>	<b>45,600</b>	<b>0</b>	<b>0</b>	<b>42,300</b>	<b>0</b>	<b>0</b>	<b>8,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59.0</b>	<b>2,214</b>	<b>397</b>	<b>30,400</b>		
	Flint Hills Resources LP—Flint Hills Resources Pine Bend LLC—Rosemount	335,000	222,300	0	74,000	0	0	90,200	0	34,000	10,000	59,000	0	0	0	46,170	46,080	39,150	55,800	0	0	115,200	0	0	12,600	0	0	16,200	0	0	179.1	25,560	1,106	40,500	
	Marathon Petroleum Co. LP—Minnesota Refining Division—St. Paul	105,000	47,500	0	0	0	4,300	29,500	0	0	22,300	0	0	0	0	23,800	0	9,500	30,400	0	0	29,500	0	0	6,700	0	0	14,700	0	0	9.5	0	106	16,200	
<b>Total</b>	<b>Mississippi</b>	<b>440,000</b>	<b>269,800</b>	<b>0</b>	<b>74,000</b>	<b>0</b>	<b>4,300</b>	<b>119,700</b>	<b>0</b>	<b>34,000</b>	<b>32,300</b>	<b>59,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>69,970</b>	<b>46,080</b>	<b>48,650</b>	<b>86,200</b>	<b>0</b>	<b>0</b>	<b>144,700</b>	<b>0</b>	<b>0</b>	<b>19,300</b>	<b>0</b>	<b>0</b>	<b>30,900</b>	<b>0</b>	<b>0</b>	<b>188.6</b>	<b>25,560</b>	<b>1,212</b>	<b>56,700</b>	
	Chevron Corp.—Chevron USA Inc.—Pascagoula	375,200	313,500	0	93,600	0	0	79,200	0	55,400	36,000	0	107,100	0	0	54,720	0	30,600	31,950	0	0	93,600	45,000	45,000	19,350	14,040	0	0	22,500	229.0	31,950	1,138	0		
	Ergon Inc.—Ergon Refining Inc.—Vicksburg	25,935	17,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,980	0	0	0	18,720	22,000	0	0	0	0	20,700	13.0	0	0	9,000			
	Hunt Consolidated Inc.—Hunt Southland Refining Co.—Sandersville	11,875	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,513		
<b>Total</b>	<b>Montana</b>	<b>413,010</b>	<b>330,600</b>	<b>0</b>	<b>93,600</b>	<b>0</b>	<b>0</b>	<b>79,200</b>	<b>0</b>	<b>55,400</b>	<b>36,000</b>	<b>0</b>	<b>107,100</b>	<b>0</b>	<b>0</b>	<b>54,720</b>	<b>0</b>	<b>30,600</b>	<b>33,930</b>	<b>0</b>	<b>0</b>	<b>93,600</b>	<b>63,720</b>	<b>67,000</b>	<b>19,350</b>	<b>14,040</b>	<b>0</b>	<b>0</b>	<b>43,200</b>	<b>242.0</b>	<b>31,950</b>	<b>1,138</b>	<b>14,513</b>		
	Calumet Specialty Products Partners LP—Calumet Montana Refining LLC—Great Falls	25,000	19,000	0	0	0	0	2,700	0	0	1,350	0	21,600	0	0	2,475	0	5,400	5,400	0	0	0	0	0	720	0	0	1,350	0	0	20.0	0	0	9,000	
	CHS Inc.—Laurel	62,000	30,590	0	14,440	0	0	14,850	0	11,250	0	0	0	0	0	15,300	0	0	0	22,500	0	18,000	0	0	3,600	0	1,125	0	0	70.0	655	219	17,820		
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Billings	59,755	27,455	9,000	0	0	0	21,000	0	0	11,250	6,000	0	0	0	12,510	18,450	6,840	9,900	0	0	0	7,110	0	4,590	0	0	0	0	23.0	544	0	13,050		
	Phillips 66 Co.—Billings Refinery—Billings	66,000	42,900	0	16,900	0	0	21,000	0	0	10,200	0	0	0	0	0	0	0	24,500	27,000	0	23,500	0	0	6,500	0	3,800	0	0	45.5	1,070	295	0		
<b>Total</b>	<b>New Jersey</b>	<b>212,755</b>	<b>119,945</b>	<b>9,000</b>	<b>31,340</b>	<b>0</b>	<b>0</b>	<b>59,550</b>	<b>0</b>	<b>11,250</b>	<b>22,800</b>	<b>6,000</b>	<b>21,600</b>	<b>0</b>	<b>0</b>	<b>30,285</b>	<b>18,450</b>	<b>12,240</b>	<b>39,800</b>	<b>49,500</b>	<b>0</b>	<b>41,500</b>	<b>7,110</b>	<b>0</b>	<b>15,410</b>	<b>0</b>	<b>4,925</b>	<b>1,350</b>	<b>0</b>	<b>158.5</b>	<b>2,289</b>	<b>514</b>	<b>39,870</b>		
	PBF Energy Co. LLC—Paulsboro Refining Co. LLC—Paulsboro	100,000	81,700	0	0	0	0	0	0	0	0	0	0	0	0	28,800	0	26,190	0	0	0	0	0	0	0	0	0	0	10,800	9.0	0	290	18,900		
	Phillips 66 Co.—Bayway Refinery—Linden	258,500	71,250	0	0	0	0	130,500	0	0	32,300	0	0	0	0	30,500	58,500	0	97,200	0	0	0	0	6,000	16,500	0	4,000	0	0	0	32.2	0	0	0	
<b>Total</b>	<b>New Mexico</b>	<b>358,500</b>	<b>152,950</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>130,500</b>	<b>0</b>	<b>0</b>	<b>32,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59,300</b>	<b>58,500</b>	<b>26,190</b>	<b>97,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,000</b>	<b>16,500</b>	<b>0</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>10,800</b>	<b>41.2</b>	<b>0</b>	<b>290</b>	<b>18,900</b>	
	HollyFrontier Corp.—HollyFrontier Navajo Refining LLC—Artesia	117,800	32,585	0	0	0	0	27,000	0	21,600	0	16,200	0	0	0	37,800	0	13,500	38,700	0	0	16,200	0	0	9,270	0	0	12,600	0	0	38.0	0	203	6,300	
<b>Total</b>	<b>North Dakota</b>	<b>117,800</b>	<b>32,585</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27,000</b>	<b>0</b>	<b>21,600</b>	<b>0</b>	<b>16,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37,800</b>	<b>0</b>	<b>13,500</b>	<b>38,700</b>	<b>0</b>	<b>0</b>	<b>16,200</b>	<b>0</b>	<b>0</b>	<b>9,270</b>	<b>0</b>	<b>0</b>	<b>12,600</b>	<b>0</b>	<b>0</b>	<b>38.0</b>	<b>0</b>	<b>203</b>	<b>6,300</b>	
	Marathon Petroleum Co. LP—Mandan Refining Division—Mandan	71,000	0	0	0	0	0	26,600	0	0	11,900	0	0	0	0	12,400	15,800	6,700	22,600	0	0	0	0	0	4,800	0	0	0	0	0.0	0	15	0		
<b>Total</b>	<b>Ohio</b>	<b>71,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26,600</b>	<b>0</b>	<b>0</b>	<b>11,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,400</b>	<b>15,800</b>	<b>6,700</b>	<b>22,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>15</b>	<b>0</b>		
	bp-Husky Refining LLC—Toledo	152,000	68,875	0	32,400	0	0	49,500	0	37,800	0	28,620	0	0	0	37,800	0	0	20,250	0	0	47,700	0	0	10,350	0	0	0	0	0.0	2,060	413	8,100		
	Canopus Energy Inc.—Husky Energy Inc.—Lima Refining Co.—Lima	175,750	50,350	0	20,700	0	0	40,770	0	0	49,500	0	23,400	0	0	56,700	31,500	21,600	32,400	0	0	0	0	0	8,280	4,050	16,830	0	0	0.0	571	100	0		
	Marathon Petroleum Co. LP—Ohio Refining Division—Canton	100,000	33,300	0	0	0	0	22,800	0	22,300	0	0	0	0	0	32,800	0	12,800	24,200	0	0	21,400	0	0	8,100	0	0	0	0	0.0	0	89	16,200		
	PBF Energy Co. LLC—Toledo Refining Co. LLC—Toledo	178,600	0	0	0	0	0	71,100	0	0	40,500	40,500	0	0	0	0	0	0	0	0	0	0	0	85,500	9,000	14,670	0	0	0.0	0	105	0			
<b>Total</b>	<b>Oklahoma</b>	<b>606,350</b>	<b>152,525</b>	<b>0</b>	<b>53,100</b>	<b>0</b>	<b>0</b>	<b>184,170</b>	<b>0</b>	<b>60,100</b>	<b>90,000</b>	<b>40,500</b>	<b>52,020</b>	<b>0</b>	<b>0</b>	<b>127,300</b>	<b>31,500</b>	<b>34,400</b>	<b>76,850</b>	<b>0</b>	<b>0</b>	<b>69,100</b>	<b>0</b>	<b>85,500</b>	<b>27,450</b>	<b>22,950</b>	<b>4,050</b>	<b>16,830</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>2,631</b>	<b>707</b>	<b>24,300</b>	
	CVR Refining LP (CVR Energy Inc.)—Wynnewood Refining Co.—Wynnewood	74,100	38,285	0	0	0	0	19,980	0	16,200	0	16,380	0	0	0	24,210	13,500	0	23,400	0	0	0	0	0	4,950	18,900	0	0	0	10.0	0	50	6,300		
	HollyFrontier Corp.—HollyFrontier Tulsa Refining LLC—Tulsa	158,194	56,050	0	9,900	0	0	22,500	1,800	20,700	0	0	0	0	0	45,000	26,100	0	40,500	0	0	0	19,440	0	4,950	0	810	11,700</							

Country	Company, operator, refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes				Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating							Alkylation b/cd	Aromatics b/cd	Isomerization			Lubes b/cd	Hydrogen MMcf/d	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d	
				Fluid coking (incl. b/cd)	Delayed coking b/cd	Visbreaking b/cd	Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low-pressure b/cd	High-pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed desulfurization b/cd	Gasoline desulfurization b/cd	Kerosene/Jet desulfurization b/cd	Diesel desulfurization b/cd	Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd			Other desulfurization b/cd	Other hydrotreating b/cd	C4 feed b/cd						C5/C6 feed b/cd
	Phillips 66 Co.—Ponca City Refinery—Ponca City	216,700	80,000	0	23,700	0	0	61,600	0	0	44,300	0	0	0	44,300	35,600	16,800	64,300	0	0	19,800	0	13,900	14,600	0	6,800	15,400	0	0	59.1	1,150	200	0
	Valero Energy Corp.—Valero Refining Co. Oklahoma—Ardmore	81,700	30,400	0	0	0	0	27,000	0	18,450	0	12,600	0	0	24,300	0	0	28,800	0	0	31,005	0	0	6,311	0	0	0	0	27.0	0	226	13,243	
<b>Total</b>		<b>530,694</b>	<b>204,735</b>	<b>0</b>	<b>33,600</b>	<b>0</b>	<b>0</b>	<b>131,080</b>	<b>1,800</b>	<b>55,350</b>	<b>44,300</b>	<b>12,600</b>	<b>16,380</b>	<b>0</b>	<b>137,810</b>	<b>75,200</b>	<b>16,800</b>	<b>157,000</b>	<b>0</b>	<b>0</b>	<b>50,805</b>	<b>19,440</b>	<b>13,900</b>	<b>30,811</b>	<b>18,900</b>	<b>7,610</b>	<b>27,100</b>	<b>0</b>	<b>9,000</b>	<b>96.1</b>	<b>1,524</b>	<b>544</b>	<b>39,073</b>
<b>Pennsylvania</b>																																	
	American Refining Group Inc.—American Refining Group Inc.—Bradford	11,210	0	0	0	0	0	0	0	0	1,980	0	0	0	3,240	0	0	0	0	0	0	0	0	0	0	0	0	2,651	0.0	0	0	59	
	Delta Air Lines Inc.—Monroe Energy LLC—Trainer	204,000	71,000	0	0	0	0	52,000	0	0	48,000	0	22,000	0	60,000	42,000	20,000	26,000	28,000	0	0	0	0	14,000	0	0	0	0	0.0	0	135	0	
	Red Apple Group Inc.—United Refining Co.—Warren	66,500	38,000	0	0	0	0	22,500	900	0	12,600	0	0	0	21,600	4,500	4,500	15,300	0	0	0	0	0	4,050	0	0	7,650	0	0.0	0	61	19,800	
<b>Total</b>		<b>281,710</b>	<b>109,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>74,500</b>	<b>900</b>	<b>0</b>	<b>62,580</b>	<b>0</b>	<b>22,000</b>	<b>0</b>	<b>84,840</b>	<b>46,500</b>	<b>4,500</b>	<b>41,300</b>	<b>28,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,050</b>	<b>0</b>	<b>0</b>	<b>7,650</b>	<b>0</b>	<b>2,651</b>	<b>0.0</b>	<b>0</b>	<b>196</b>	<b>19,859</b>	
<b>Tennessee</b>																																	
	Valero Energy Corp.—Premcor Refining Group Inc.—Memphis	171,000	0	0	0	0	0	63,000	0	32,400	0	23,850	0	0	46,800	35,100	0	34,200	0	0	0	0	0	11,430	26,100	0	0	0	30.0	0	105	0	
<b>Total</b>		<b>171,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>63,000</b>	<b>0</b>	<b>32,400</b>	<b>0</b>	<b>23,850</b>	<b>0</b>	<b>0</b>	<b>46,800</b>	<b>35,100</b>	<b>0</b>	<b>34,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,430</b>	<b>26,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30.0</b>	<b>0</b>	<b>105</b>	<b>0</b>	
<b>Texas</b>																																	
	Chevron Corp.—Pasadena	112,229	36,100	0	0	0	0	46,800	0	20,700	0	0	0	0	20,700	40,500	0	0	14,400	0	0	0	0	11,250	0	0	0	0.0	0	25	0		
	Delek Group Ltd.—Delek Refining Ltd.—Tyler	72,200	26,600	0	5,850	0	0	18,225	0	11,700	4,050	0	0	0	25,200	11,700	0	32,400	0	0	0	0	0	4,230	0	0	0	0.0	204	35	0		
	Delek US Holdings Inc.—Big Spring	70,300	22,800	0	0	0	0	22,500	0	18,900	0	0	0	0	22,950	0	4,500	20,700	0	0	5,850	0	0	4,500	900	0	0	0.0	0	136	6,840		
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Baytown	554,800	282,150	37,800	48,600	0	0	193,500	7,200	111,150	0	27,000	0	0	139,950	176,400	119,430	131,670	0	0	105,300	41,850	0	33,300	0	0	0	28,000	0.0	3,094	1,658	0	
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Beaumont	365,180	141,360	0	44,000	0	0	110,000	0	131,400	0	62,000	0	0	143,820	22,500	45,900	37,800	0	0	0	21,240	0	13,410	0	10,080	23,220	0	0	0.0	2,045	535	0
	Flint Hills Resources LP—Flint Hills Resources Corpus Christi LLC—Corpus Christi (East)	73,500	0	0	0	0	0	44,365	0	0	0	0	0	0	29,700	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	92	0		
	Flint Hills Resources LP—Flint Hills Resources Corpus Christi LLC—Corpus Christi (West)	265,000	83,125	0	0	0	0	50,786	0	53,100	0	14,700	0	0	54,000	64,800	28,800	76,500	0	0	0	0	13,950	27,180	0	0	0	0.0	0	144	0		
	LyondellBasell Industries NV (Access Industries Inc.)—Houston Refining LP—Houston	274,550	191,900	0	89,550	0	0	99,000	0	0	0	0	0	0	54,450	68,400	39,150	82,958	0	0	104,490	4,680	0	10,125	17,370	0	0	3,506	0.0	4,060	1,019	0	
	Marathon Petroleum Co. LP—Galveston Bay Refining Division—Texas City	593,000	246,600	0	28,600	0	18,500	207,200	0	139,200	0	75,500	0	80,300	122,100	144,500	72,200	57,000	0	0	103,100	0	0	62,200	34,700	0	0	0	9.5	2,053	1,375	0	
	Marathon Petroleum Co. LP—El Paso Refining Division—El Paso	133,000	52,700	0	0	0	0	33,300	0	28,000	0	0	0	0	38,000	33,700	9,000	46,600	0	0	0	0	11,900	0	3,800	0	0	0	9.5	0	0	3,800	
	Motiva Enterprises LLC—Port Arthur	607,715	309,000	0	150,000	0	0	88,000	0	0	106,000	98,700	0	0	147,500	52,000	75,000	142,000	0	0	45,000	0	19,000	19,000	0	41,925	0	34,125	40.0	8,862	1,509	0	
	PDV America Inc. (Petroleos de Venezuela SA)—Cito Refining & Chemical Inc.—Corpus Christi	165,300	81,035	0	40,410	0	0	75,420	0	46,350	0	0	0	0	47,520	32,850	0	83,340	0	0	64,710	0	0	21,600	14,580	0	0	0	0.0	2,334	334	0	
	Petroleos Mexicanos—Deer Park Refining LP—Deer Park	323,000	171,000	0	82,000	0	0	68,000	4,500	40,500	22,050	0	53,000	0	67,950	38,700	36,000	0	40,500	44,550	72,000	38,700	0	16,650	0	0	0	0.0	4,771	984	0		
	Phillips 66 Co.—Sweeny Refinery—Sweeny	264,500	125,500	0	70,900	0	0	100,000	0	37,900	0	0	0	0	66,100	60,000	0	0	113,700	0	99,200	0	16,000	21,600	18,500	0	9,100	0	0	140.0	4,000	698	0
	Startlight Relativity Acquisition Co. LLC—San Antonio	19,950	0	0	0	0	0	0	0	0	5,400	0	0	0	5,400	0	0	6,300	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	TotalEnergies SE—Total Petrochemicals & Refining USA Inc.—Port Arthur	238,000	106,300	0	54,082	0	0	74,800	0	39,700	0	0	0	0	54,507	33,462	29,800	72,600	0	0	51,568	0	0	6,200	7,100	0	7,522	0	0.0	2,800	683	0	
	Valero Energy Corp.—McKee Refinery, Sunray	185,250	47,500	0	0	0	0	49,050	0	26,100	16,200	0	24,300	0	38,700	35,640	0	42,750	0	0	0	0	0	8,820	0	2,700	0	0	30.0	0	68	10,800	



