

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
ALBANIA																		
Albpetrol—																		
Ballshi	17,800	4,500	212,000	....	....	3,500	....	17,400	....	....	600	....	700	....	6.5	700	60	....
Fieri	8,500	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	26,300	10,500	12,000	0	0	3,500	0	17,400	0	0	600	0	700	0	6.5	700	60	0
ALGERIA																		
Naftec SPA—Algiers	60,000	....	....	....	....	115,000	....	114,400	....	....	....	....	....	....	....	....	....	....
Arzew	60,000	5,447	....	....	....	111,500	....	17,380	....	....	....	....	....	....	....	....	....	....
								113,470										
Hassi-Messaoud	30,000	....	....	....	....	12,400	....	12,700	....	....	....	....	....	....	....	....	....	....
Skikda	300,000	5,447	....	....	....	160,000	....	154,000	....	....	....	....	....	....	....	....	....	....
Total	450,000	10,894	0	0	0	88,900	0	81,950	0	0	0	0	0	0	0.0	0	0	0
ANGOLA																		
Fina Petroleos de Angola—																		
Luanda	39,000	2,500	....	....	....	11,900	....	13,800	....	....	....	....	....	....	....	....	....	950
								2,800										
Total	39,000	2,500	0	0	0	1,900	0	6,600	0	0	0	0	0	0	0.0	0	0	950
ARGENTINA																		
Destileria Argentina de Petroleo																		
SA—Dock Sud	4,000	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lomas de Zamora	8,000	1,300	....	....	....	....	....	....	....	....	....	....	900	....	....	....	....	600
Esso SA Petrolera Argentina—																		
Campana	84,500	48,000	224,000	....	126,000	111,000	....	110,000	....	....	....	....	....	....	....	1,000	....	....
								37,500										
								714,000										
Petroleo Brasileiro SA—																		
Bahia Blanca	28,975	11,875	....	23,420	17,110	15,400	....	27,920	....	....	....	32,700	....	....	....	....	....	....
Refineria San Lorenzo SA—																		
San Lorenzo	37,600	16,100	....	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
				212,500														
Refinor SA—Campo Duran	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Repsol YPF SA—La Plata	189,000	67,000	140,000	....	168,000	112,000	....	112,000	....	....	....	39,000	5,500	....	....	1,500	30	8,300
								220,400										
								518,900										
								115,400										
Lujan de Cuyo	120,000	65,000	140,000	....	141,500	19,500	121,000	111,600	23,150	....	....	33,500	....	11,000	118.0	1,550	30	....
								516,000										
Plaza Huincul	25,000	....	....	....	....	13,000	....	13,000	....	....	....	....	....	....	....	....	....	....
Shell Cia. Argentina de																		
Petroleo SA—																		
Buenos Aires	110,000	38,500	36,500	218,900	126,000	117,900	....	218,200	21,700	1500	....	....	1,500	....	....	....	....	4,200
								7500										
Total	639,075	248,775	110,500	38,320	168,610	58,800	21,000	152,420	4,850	500	0	15,200	7,900	1,000	18.0	4,050	60	13,100
ARUBA																		
Coastal Aruba Refining Co. NV—																		
San Nicolas	280,000	160,000	264,000	248,000	....	....	160,000	130,000	....	....	....	....	....	....	295.0	4,000	300	1,000
								665,000										
Total	280,000	160,000	64,000	48,000	0	0	60,000	195,000	0	0	0	0	0	0	95.0	4,000	300	1,000
AUSTRALIA																		
BP PLC—Bulwer Island	69,825	14,820	....	....	118,450	111,880	....	111,880	22,160	....	....	....	1,800	....	26.0	....	35	1,980
Kwinana	158,500	20,000	....	....	135,000	222,600	....	136,000	23,775	12,100	....	115,000	3,650	....	....	....	70	2,000
								518,000										

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Caltex Refineries (NSW) Ltd.— Kurnell	114,000	23,400	....	....	140,950	127,180	....	227,180 714,400	....	....	....	....	3,429	....	....	400	24	3,465
Lytton	105,500	....	....	....	136,160	326,000	....	126,000 139,600	23,300	11,600	....	38,200	....	....	550.2 77.0	....	....	....
Inland Oil Refiners (Qld.) Pty. Ltd.—Eromanga	1,425	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ExxonMobil Refining & Supply Co.—Port Stanvac, Adelaide.....	74,000	25,500	....	....	....	124,000	....	757,000	....	....	....	310,000	6,500	....	....	....	31	4,500
Altona	130,000	83,500	....	....	128,500	136,000	....	151,000 56,500	13,000	....	....	....	....	....	....	....	7	3,000
Shell Refining (Australia) Pty. Ltd.—Clyde.....	85,000	21,000	....	....	135,000	320,000	....	37,000 7,000	23,000	12,100	....	....	....	....	....	....	....	3,000
Geelong	110,000	10,000	....	....	140,000	111,000 320,000	....	54,000 14,000 134,000 3,000	24,500	12,700	....	38,000	2,800	....	....	....	....	3,000
Total	848,250	198,220	0	0	234,060	198,660	0	376,560	19,735	8,500	0	41,200	18,179	0	83.2	400	167	20,945
AUSTRIA																		
OMV AG—Schwechat.....	208,600	65,000	....	216,875	126,250	132,725	....	146,400 24,800 37,300 38,300 12,600	....	....	....	314,400	....	11,600	....	....	180	1,470
Total	208,600	65,000	0	16,875	26,250	32,725	0	139,400	0	0	0	14,400	0	1,600	0.0	0	180	1,470
AZERBAIJAN																		
Azneftiyag—Baku.....	238,978	66,157	....	....	....	....	....	....	....	....	....	....	16,200	....	....	....	....	4,151
Azneftyanajag—New Baku.....	202,830	71,043	238,529	....	157,750	324,466	....	125,300 842,192	1930	....	....	....	....	....	....	1,400	....	....
Total	441,808	137,200	38,529	0	57,750	24,466	0	67,492	930	0	0	0	16,200	0	0.0	1,400	0	4,151
BAHRAIN																		
Bahrain Petroleum Co.—Sitra	248,900	189,810	....	219,800	141,400	114,175	148,600	116,200 623,400	....	13,330	....	....	....	....	134.0	....	190	6,570
Total	248,900	189,810	0	19,800	41,400	14,175	48,600	39,600	0	3,330	0	0	0	0	34.0	0	190	6,570
BANGLADESH																		
Eastern Refinery Ltd.— Chittagong.....	33,000	4,000	....	210,000	....	11,800	11,200	12,000	....	....	....	....	....	....	11.0 41.0	....	....	....
Total	33,000	4,000	0	10,000	0	1,800	1,200	2,000	0	0	0	0	0	0	2.0	0	0	0
BELARUS																		
P.O. Naftan Refinery— Novopolotsk.....	170,000	50,000	....	....	....	144,000	....	134,500 115,000	....	....	12,785	....	3,760	....	17.6 57.6	....	....	....
Slavneft—Mozyr	323,323	55,800	....	....	....	124,000 324,000	130,000	150,600 62,000	....	....	....	....	....	....	....	....	85	9,630
Total	493,323	105,800	0	0	0	92,000	30,000	262,100	0	0	2,785	0	3,760	0	15.2	0	85	9,630
BELGIUM																		
AB Nynas Petroleum NV— Antwerp.....	21,000	21,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Belgian Refining Corp. NV— Antwerp.....	109,013	54,625	....	220,300	....	29,900	....	985,540	....	....	....	32,250	....	....	....	....	97	....
ExxonMobil Refining & Supply Co.—Antwerp.....	263,000	124,000	....	....	134,000	235,000	....	167,000 444,000 557,000 986,000	17,500	....	....	....	....	....	144.0	....	355	3,100
Fina Raffinaderij Antwerpen— Antwerp.....	308,000	96,000	....	243,000	179,500	352,000	....	286,300 75,000 1070,000	26,700	....	....	....	....	14,500	....	....	650	11,300
Petroplus—Antwerp	90,000	....	....	....	....	11,400	....	222,000 11,000	....	....	....	....	....	....	....	....	30	....
Total	791,013	295,625	0	63,300	113,500	98,300	0	603,840	14,200	0	0	2,250	0	4,500	44.0	0	1,132	28,400

BOLIVIA

Empresa Boliviana de Refinacion—Cochabamba.....	40,000	1,800	....	....	....	18,160	....	18,160	....	....	....	....	750	....	....	....	....	232
Santa Cruz de la Sierra	20,000	....	....	....	....	16,400	....	16,400	....	....	....	....	....	....	....	....	....	....
Repsol-YPF—Sucre.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	63,000	1,800	0	0	0	14,560	0	14,560	0	0	0	0	750	0	0.0	0	0	232

BRAZIL

Petroleo Brasileiro SA— Araucaria, Parana	180,945	89,869	....	....	153,904	....	....	....	....	....	....	....	....	....	....	....	60	5,000
Betim, Minas Gerais	144,756	77,203	222,265	....	136,327	....	....	410,547 515,234 1210,547	....	....	....	....	....	....	8.0	1,062	69	6,000
Canoas, Rio Grande do Sul	180,945	33,173	....	....	118,163	....	....	....	....	....	....	....	....	....	....	....	5	2,600
Capuava, Maua, Sao Paulo.....	51,268	....	....	....	117,578	....	....	....	....	....	....	....	....	....	....	....	9	....
Cubatão, Sao Paulo	162,851	77,806	231,054	....	155,662	110,254	....	829,249	23,145	....	....	....	....	11,580	30.0	....	70	....
Duque de Caxias, Rio de Janeiro	232,213	112,186	....	....	143,944	111,132	....	532,225 829,921	....	....	....	....	13,712	11,140	10.0	....	52	2,300
Fortaleza, Ceara .....	....	6,032	....	....	....	....	....	....	....	....	....	....	1,076	....	1.0	....	....	3,500
Manaus, Amazonas	44,030	6,635	....	....	12,930	....	....	....	....	....	....	....	....	....	....	....	....	1,100
Mataripe, Bahia.....	283,734	126,058	....	....	187,888	....	....	....	....	....	....	....	5,221	....	1.0	....	72	2,300
Paulinia, Sao Paulo.....	337,764	155,010	232,811	....	193,747	....	....	529,296	....	....	....	....	....	11,900	28.0	1,565	70	4,000
Sao Jose dos Campos, Sao Paulo	217,134	102,536	....	....	170,310	....	....	420,507 538,085 1217,578	....	....	....	....	....	11,400	10.0	....	50	2,600
Refinaria de Petroleo Ipiranga SA—Rio Grande do Sul	17,000	5,000	....	....	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinaria de Petroleos de Manguinhos SA— Rio de Janeiro.....	12,500	....	....	15,000 27,000	....	13,000	....	13,000	....	....	....	....	....	....	....	....	....	....
Total	1,865,140	791,508	86,130	12,000	483,953	24,386	0	236,189	3,145	0	0	0	20,009	6,020	88.0	2,627	457	29,400

BRUNEI

Brunei Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	....	....	....	....	15,700	....	....	....	....	....	....	....	....	....	....	....	....
Total	8,600	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0.0	0	0	0

BULGARIA

Neftochim—Burgas	115,240	49,900	120,600	123,300	14,060	17,600	12,600	12,000	1790	18.4	63	1,500
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WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
								³ 2,600 30,700 ⁸ 23,300							51.9			
Total	115,240	49,900	0	20,600	23,300	4,060	0	64,200	2,600	0	2,000	0	0	790	10.3	0	63	1,500
CAMEROON																		
Societe Nationale de Raffinage—Cape Limboh Limbe.....	42,000	....	....	....	....	47,000	....	19,500 10,500	....	....	....	....	....	....	....	....	....	....
Total	42,000	0	0	0	0	7,000	0	20,000	0	0	0	0	0	0	0.0	0	0	0
CANADA																		
Alberta																		
Husky Oil Operations Ltd.— Lloydminster	23,500	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Imperial Oil—Edmonton	184,300	66,100	....	....	¹ 54,625	¹ 20,900	....	² 50,400 ⁷ 22,800	² 15,700	....	....	¹ 6,600	2,600	....	⁶ 20.0	....	40	10,400
Parkland Refining Ltd.— Bowden	6,000	....	....	....	....	¹ 2,800	....	¹ 2,800 ² 2,800	....	....	....	³ 2,800	....	....	....	....	....	....
Petro-Canada Products Ltd.— Edmonton.....	125,200	27,000	² 7,500	....	¹ 34,300	¹ 15,300	¹ 48,700	⁷ 8,000	² 12,600	....	....	¹ 3,100 ³ 12,000	....	....	¹ 30.8	371	56	....
Shell Canada Ltd.—Scotford	97,900	....	....	....	....	³ 21,500	¹ 40,500	² 21,500 ⁴ 21,000	....	....	¹ 5,300 ³ 270	....	....	....	....	....	11	....
Total	436,900	108,100	7,500	0	88,925	60,500	59,200	129,300	28,300	0	5,570	24,500	2,600	0	50.8	371	107	22,400
British Columbia																		
ChevronTexaco Corp.—Burnaby	52,000	11,000	....	....	¹ 18,000	¹ 10,000	....	¹ 10,000 ² 5,000	¹ 3,000	¹ 2,000	....	³ 10,000	....	....	....	....	15	2,000
Husky Oil Operations Ltd.— Prince George.....	10,250	....	....	....	¹ 3,300	¹ 1,600	....	⁵ 14,000	....	....	....	³ 900	....	....	....	....	7	....
Total	62,250	11,000	0	0	21,300	11,600	0	29,000	3,000	2,000	0	10,900	0	0	0.0	0	22	2,000
New Brunswick																		
Irving Oil Ltd.—St. John	250,000	100,000	....	² 20,000	¹ 95,000	¹ 35,000	¹ 34,000	¹ 48,000 ³ 14,000 ⁴ 30,000	¹ 16,000	....	....	¹ 10,000	....	....	¹ 47.0	....	200	....
Total	250,000	100,000	0	20,000	95,000	35,000	34,000	92,000	16,000	0	0	10,000	0	0	47.0	0	200	0
Newfoundland																		
North Atlantic Refining Ltd.— Come By Chance	105,000	52,250	....	² 16,200	....	¹ 23,400	¹ 31,500	² 18,900 ¹ 6,200	....	....	....	....	....	....	¹ 66.0	....	200	....
Total	105,000	52,250	0	16,200	0	23,400	31,500	35,100	0	0	0	0	0	0	66.0	0	200	0
Nova Scotia																		
Imperial Oil—Dartmouth.....	82,200	40,000	....	....	¹ 28,800	¹ 10,500	....	¹ 10,500 ⁴ 14,200 ⁷ 19,400	....	¹ 4,100	....	....	....	....	....	....	40	1,400
Total	82,200	40,000	0	0	28,800	10,500	0	44,100	0	4,100	0	0	0	0	0.0	0	40	1,400
Ontario																		
Imperial Oil—Nanticoke.....	112,000	47,500	....	....	¹ 47,500	³ 27,400	....	¹ 28,500 ⁵ 28,500 ⁷ 11,800	¹ 11,875	....	....	....	....	....	....	....	80	4,300
Sarnia	120,800	30,800	¹ 23,300	....	¹ 26,030	¹ 17,100 ² 16,800	¹ 37,400	⁵ 12,200 ⁷ 20,700 ¹ 15,900 ¹ 353,000	....	....	¹ 5,550	....	5,000	....	¹ 27.4 ⁴ 27.4 ⁵ 57.4	850	170	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Nova Chemicals (Canada) Ltd.— Corunna.....	80,000	33,000	....	167,000	....	....	....	1317,000	....	....	110,200	....	....	....	....	....	....	....
Petro-Canada Products Ltd.— Mississauga .....	....	....	....	....	....	39,000	310,300	110,300	....	....	....	....	11,700	....	113.3	....	41	....
Oakville.....	83,000	38,100	....	....	125,400	111,600	....	113,300	13,300	....	....	37,100	....	....	....	....	44	15,100
Shell Canada Ltd.—Sarnia.....	71,400	24,700	....	24,050	114,400	121,000	16,750	115,000 56,300	....	11,600	12,700	....	....	....	....	....	55	....
Suncor Energy Products— Sarnia	78,000	17,600	....	26,700	217,000	125,600	124,100	125,000 45,500	25,500	....	110,200	....	....	....	141.0	....	52	3,500
Total	545,200	191,700	23,300	77,750	130,330	128,500	58,550	259,500	20,675	1,600	28,650	7,100	16,700	0	166.5	850	442	22,900
Quebec																		
Petro-Canada Products Ltd.— Montreal.....	105,000	42,300	....	112,600	127,100	130,200	123,600 117,100	125,700 10,500	12,700	1800	19,800 24,100	....	....	....	143.7	....	....	24,800
Shell Canada Ltd.—Montreal.....	129,900	49,500	....	212,000	124,000	120,700	111,700	234,200 427,000	22,500	....	....	36,800	3,060	....	....	....	....	7,200
Valero Energy Corp. ^H — St. Romuald	215,000	45,000	....	....	160,000	119,000	....	121,000 219,700 525,000	....	15,200	....	319,300	....	....	....	....	50	24,000
Total	449,900	136,800	0	24,600	111,100	69,900	32,400	163,100	5,200	6,000	13,900	26,100	3,060	0	43.7	0	50	56,000
Saskatchewan																		
Consumers' Cooperative Refineries Ltd.—Regina.....	52,000	25,000	29,000	....	119,000	19,500	116,000 230,000	110,000 24,300 58,500	....	12,200	....	34,000	....	....	160.0 430.0	385	270	....
Total	52,000	25,000	9,000	0	19,000	9,500	46,000	22,800	0	2,200	0	4,000	0	0	90.0	385	270	0

CHILE

ENAP—Gregorio-Magallanes	9,859	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrox SA—Talcahuano.....	100,640	46,320	....	1810 210,000	120,757	24,497	129,000	24,497	....	....	....	....	....	....	....	....	....	....
Refineria de Petroleo Concon SA—Concon.....	94,350	47,000	....	210,000	131,500	112,000	110,000	112,000	11,100	....	....	1400 35,000	....	....	....	....	30	10,000
Total	204,849	93,320	0	20,810	52,257	16,497	19,000	16,497	1,100	0	0	5,400	0	0	0.0	0	30	10,000

CHINA

China National Petroleum Corp.—Anshan.....	50,200	....	....	....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Dalian.....	142,600	....	....	....	70,000	3,000	....	6,000	22,000	....	....	....	6,000	....	....	....	....	....
Dandong.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Daqing	70,300	....	213,000	....	14,000	4,000	8,000	12,000	21,000	....	....	....	10,000	....	....	325	....	....
Daqing	120,500	....	313,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dushanzi.....	120,500	....	28,000	....	12,000	6,000	....	8,000	....	....	....	....	2,000	....	....	450	....	....
Fushun.....	184,800	....	36,000	....	66,000	23,000	8,000	5,000	13,000	....	....	....	1,000	....	....	825	....	....
Golmud.....	20,000	....	235,000	....	....	3,000	....	3,000	....	....	....	....	....	....	....	....	....	....
Harbin.....	30,000	....	31,000	....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang.....	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang.....	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Huhot.....	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	90,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Jilin	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinxi	100,400	....	31,000	....	24,000	3,000	....	5,000	....	....	....	....	4,000	....	....	....	....	....
Jinzhou	110,500	....	220,000	....	16,000	6,000	....	8,000	....	....	....	....	....	....	....	500	....	....
Karamay	66,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lanzhou	110,500	....	315,000	....	24,000	2,000	....	3,000	11,000	....	....	....	7,000	....	....	....	....	....
Lanzhou	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaohu	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoning	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoyang	80,300	....	....	....	....	3,000	....	1,000	....	....	....	....	....	....	....	....	....	....
Linyuan	50,200	....	....	....	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Qianguo	50,200	....	....	....	24,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Qinghai	27,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sichuan	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Urumqi	50,200	....	28,000	....	16,000	3,000	....	....	....	....	....	....	....	....	....	200	....	....
Xianyang	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yanchang	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yumen	80,300	....	....	....	....	6,000	....	3,000	....	....	....	....	....	....	....	....	....	....
Zepu	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sinopec—Anqing	56,200	....	28,000	....	24,000	....	....	4,000	21,000	....	....	....	....	....	....	225	....	....
Baling	100,400	....	212,000	....	50,000	3,000	....	22,000	12,000	....	....	....	....	....	....	300	....	....
Baoding	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Beihai	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Binzhou	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cangzhou	20,000	....	....	....	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Changyi	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dagang	60,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dongming	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fujian	80,300	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Gaoqiao	150,600	....	310,000	....	38,000	4,000	....	2,000	21,000	....	....	....	6,000	....	....	....	....	....
Guangrao	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Guangzhou	104,400	....	320,000	....	44,000	8,000	....	20,000	21,000	....	....	....	....	....	....	....	....	....
Hangzhou	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Henan	2,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Huabei	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jiangnan	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jianhu	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinan	80,300	....	....	....	22,000	....	....	4,000	....	....	....	....	1,000	....	....	....	....	....
Ji'nan	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jingmen	100,400	....	28,000	....	20,000	3,000	8,000	14,000	....	....	....	....	2,000	....	....	270	....	....
Jinling	140,600	....	212,000	....	44,000	3,000	16,000	3,000	21,000	....	....	....	....	....	....	490	....	....
Jiujiang	50,200	....	38,000	....	24,000	3,000	....	8,000	....	....	....	....	....	....	....	....	....	....
Kenli	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lijin	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Linyo	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Luoyang	100,400	....	....	....	40,000	14,000	....	16,000	22,000	....	....	....	....	....	....	....	....	....
Luoyang	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Maoming	170,700	....	212,000	....	32,000	3,000	16,000	216,000	21,000	....	....	....	5,000	....	....	400	....	....
Nandagang	2,000	....	312,000	....	....	....	422,800	....	....	....	....	....	....	....	....	....	....	....
Nanyang	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qilu	160,700	....	216,000	....	46,000	3,000	42,000	22,000	13,000	....	....	....	....	....	....	400	....	....
Qingdao	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qingdao	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shanghai	106,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shengli	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shengli	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shijiazhuang	50,200	....	....	....	24,000	....	....	....	21,000	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Shouguang.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Taizhou	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tianjin.....	120,500	....	....	....	35,000	4,000	....	....	21,000	....	....	....	....	....	....	....	....	....
Wuhan	50,200	....	38,000	....	20,000	....	....	....	21,000	....	....	....	....	....	....	....	....	....
Wuxi.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Xi'an.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yan'an.....	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yancheng.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yangzhou.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yangzi	120,500	....	320,000	....	....	21,000	24,000	....	....	....	....	....	....	....	....	....	....	....
Yanshan.....	190,800	....	....	....	48,000	3,000	....	5,000	21,000	....	....	....	5,000	....	....	....	....	....
Yongping	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhanjiang	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhenhai.....	342,000	....	224,000	....	28,000	9,000	....	857,600	21,000	....	....	....	....	....	....	200	....	....
Zhongjie	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhongyuan	26,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
West Pacific Petrochemical Corp.—Dalian.....	100,000	40,000	....	....	37,000	114,000	....	17,000 24,000 19,000 1035,000	12,500	....	....	....	....	1900	....	....	300	....
Total	4,528,100	40,000	306,000	0	892,000	157,000	122,000	355,400	26,500	0	0	0	49,000	900	0.0	4,585	300	0

CHINA, TAIWAN

Chinese Petroleum Corp.— Kaohsiung	270,000	75,500	215,000	....	125,000	215,000	....	220,000 825,000 1030,000	....	....	114,000	310,000	....	33,616	....	2,722	900	12,120
Ta-Lin	300,000	....	....	....	125,000	355,000	....	1060,000	....	....	....	310,000	5,300	....	....	....	250	....
Tao-Yuan.....	200,000	36,000	....	....	....	220,000 225,000	....	1045,000	....	....	....	36,000	....	....	452.0	....	595	....
Formosa Petrochemical Co.— Mailiao.....	150,000	....	....	....	173,000	....	....	763,000 1070,000	....	....	....	....	....	14,500	190.0	....	....	....
Total	920,000	111,500	15,000	0	123,000	115,000	0	313,000	0	0	14,000	26,000	5,300	8,116	142.0	2,722	1,745	12,120

COLOMBIA

Empresa Colombiana de Petroleos—Apiay.....	2,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barrancabermeja-Santander.....	205,000	101,000	....	233,000	164,000	....	....	819,800	12,100	....	11,600 3600	....	1,400	....	118.0	....	....	....
Cartagena, Bolivar.....	75,000	40,000	....	219,000	126,000	....	....	....	....	12,100	....	....	....	....	....	....	....	....
Orito, Putumayo	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tibu, N. de Santander.....	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	285,850	141,000	0	52,000	90,000	0	0	19,800	2,100	2,100	2,200	0	1,400	0	18.0	0	0	0

CONGO, BRAZZAVILLE

Coraf—Pointe-Noire	21,000	8,000	....	....	....	12,000	12,000	3,500	....	....	....	....	....	....	....	....	....	....
Total	21,000	8,000	0	0	0	2,000	2,000	3,500	0	0	0	0	0	0	0.0	0	0	0

CONGO, ZAIRE

Sozir—Moanda	15,000	....	....	....	....	13,500	....	25,000	....	....	....	....	....	....	....	....	....	....
Total	15,000	0	0	0	0	3,500	0	5,000	0	0	0	0	0	0	0.0	0	0	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
COSTA RICA																		
Refinadora Costarricense de Petroleo SA—Limon	15,000	600	....	16,500	....	11,200	....	2,000	....	....	....	....	....	....	....	....	....	....
Total	15,000	600	0	6,500	0	1,200	0	2,000	0	0	0	0	0	0	0.0	0	0	0
CROATIA																		
Ina-Industrija Nafta d.d. — Rijeka	100,000	34,500	....	212,000	120,000	114,600	m111,200	114,800	....	....	....	....	....	....	....	....	60	....
Sisak	80,000	16,000	24,800	....	110,000	115,000	....	20,000	....	....	....	....	....	....	....	170	....	....
Zagreb	80,337	37,044	....	211,525	121,000	119,914	....	24,400	....	....	19,438	....	470	....	....	....	63	....
Total	260,337	87,544	4,800	23,525	51,000	49,514	11,200	77,580	0	0	9,438	0	470	0	0.0	170	123	0
CUBA																		
Cuba Petroleos—Cienfuegos	76,000	....	....	....	....	17,500	....	17,700	....	....	....	....	....	....	....	....	....	....
Ermonos Dias, Santiago	101,500	37,500	....	....	....	17,500	....	17,700	....	....	....	....	....	....	5.0	....	....	540
Niko Lopes, Habana	121,800	38,200	....	....	114,700	15,000	....	22,000	....	....	....	....	....	....	....	....	....	540
Serhio Soto, Cabaiguan	2,100	....	....	....	....	....	....	13,200	....	....	....	....	....	....	....	....	....	....
Total	301,400	75,700	0	0	14,700	20,000	0	55,850	0	0	0	0	0	0	5.0	0	0	1,080
CYPRUS																		
Cyprus Petroleum Refinery Ltd.—Larnaca	27,000	2,600	....	....	....	15,100	....	11,000	....	....	....	....	....	....	....	....	....	1,400
Total	27,000	2,600	0	0	0	5,100	0	11,000	0	0	0	0	0	0	0.0	0	0	1,400
CZECH REPUBLIC																		
Czech Refining Co.—Kralupy	68,000	13,500	....	....	126,000	19,440	....	117,400	....	....	....	24,300	....	12,300	a28.5	....	24	....
					127,740			46,700										
								516,500										
								124,500										
Litvinov	110,000	50,200	....	215,700	....	19,400	c125,000	122,100	....	....	1670	32,300	....	....	a223.0	....	185	8,800
						39,300	c37,300	46,800										
								526,600										
Koramo Kolin—Kolin .....	....	....	....	....	....	....	....	....	....	....	....	....	2,500	....	....	....	....	....
Paramo AS—Pardubice	20,000	7,000	....	....	....	....	....	6,000	....	....	....	....	300	....	....	....	....	3,000
Total	198,000	70,700	0	15,700	53,740	28,140	32,300	106,600	0	0	670	6,600	2,800	2,300	31.5	0	209	11,800
DENMARK																		
AS Dansk Shell—Fredericia	70,000	....	....	125,000	....	112,900	....	222,500	....	....	....	36,000	....	....	....	....	....	....
Dansk Statoil AS—Kalundborg	106,400	22,000	....	228,000	....	18,600	....	18,600	....	....	....	....	....	....	....	....	....	8,000
								711,400										
Total	176,400	22,000	0	53,000	0	21,500	0	42,500	0	0	0	6,000	0	0	0.0	0	0	8,000
DOMINICAN REPUBLIC																		
Falconbridge Dominicana C por A—Bonao	16,000	....	....	....	....	....	....	26,213	....	....	....	....	....	....	20.6	....	....	....
Refineria Dominicana de Petroleo SA—Haina	32,300	....	....	....	....	17,560	....	114,670	....	....	....	....	....	....	....	....	....	....
Total	48,300	0	0	0	0	7,560	0	20,883	0	0	0	0	0	0	0.6	0	0	0
ECUADOR																		
Petroecuador—Esmeraldas	110,000	45,300	....	231,500	118,000	12,800	....	24,500	....	....	....	....	....	....	....	....	....	....
						310,000												

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
La Libertad	46,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shushufindi	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	176,000	45,300	0	31,500	18,000	12,800	0	24,500	0	0	0	0	0	0	0.0	0	0	0

EGYPT

Alexandria Petroleum Co.— Alexandria (El-Mex)	100,000	22,500	....	....	....	....	....	¹¹ 1,436 ¹² 21,000	....	....	¹⁶ 03 ²² 81	....	1,436	....	¹¹ 0	1	....	2,010
Ameriya Petroleum Refining Co.—Alexandria	78,000	15,000	....	....	....	¹¹ 2,000	....	²¹ 4,000 4,000 7,000 10,000 ¹³ 700 ¹¹ 1,800	²⁹ 000	....	¹⁷ 00	....	2,000	....	²⁴ 0	....	....	....
Assiut Petroleum Refining Co.—Assiut	47,000	....	....	....	....	³⁷ 000	....	....	....	....	....	....	....	....	....	....	....	....
Cairo Petroleum Refining Co.— Mostorod	145,000	....	....	....	....	¹⁹ 000	....	¹¹ 1,700 14,400	....	....	....	....	....	....	....	....	....	....
Tanta	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
El-Nasr Petroleum Co.— El-Suez	146,300	....	....	....	....	....	....	¹³ 32,000	....	....	....	....	....	....	....	....	....	2,613
Wadi-Feran	8,550	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Middle East Oil Refinery— Alexandria	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Suez Petroleum Processing Co.—El-Suez	66,400	9,500	²¹ 6,470	....	....	¹¹ 2,540	....	¹¹ 6,660 10,800 ¹¹ 1,306	....	....	....	....	1,005	....	⁷³ 5	540	....	....
Total	726,250	47,000	16,470	0	0	40,540	0	146,802	9,000	0	1,584	0	4,441	0	8.5	541	0	4,623

EL SALVADOR

Esso Caribbean and Central America—Acajutla	22,000	2,000	....	....	....	¹³ 200	....	¹⁵ 000 ⁴³ 000 77,000	....	....	....	....	....	....	....	....	....	....
Total	22,000	2,000	0	0	0	3,200	0	15,000	0	0	0	0	0	0	0.0	0	0	0

ERITREA

Petroleum Corp. of Eritrea— Assab	14,564	2,219	....	....	....	¹¹ 465	....	⁸² 742	....	....	....	....	....	....	....	....	....	....
Total	14,564	2,219	0	0	0	1,465	0	2,742	0	0	0	0	0	0	0.0	0	0	0

FINLAND

Fortum Oil and Gas Oy— Naantali	51,800	28,100	....	²⁷ 380	²¹ 2,900	³⁶ 930	....	¹⁸ 100 44,320 ⁵¹ 6,200 86,030 ¹²⁴ 500	....	¹⁵ 40	....	....	....	....	....	....	60	5,700
Porvoo	200,000	70,100	....	¹²³ 400	¹³⁸ 100	³³⁷ 500	¹¹⁹ 400	¹⁶⁰ 400 ⁵⁶² 900 ⁸⁴⁰ 500	²⁶ 980	....	....	....	4,000	¹² 560 ³² 590	¹²⁰ 0	....	360	....
Total	251,800	98,200	0	30,780	51,000	44,430	19,400	202,950	6,980	540	0	0	4,000	5,150	20.0	0	420	5,700

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
FRANCE																		
BP PLC—Lavera	210,000	74,100	....	221,600	127,900	110,800	115,300	224,300 39,600	....	....	....	313,500	....	....	130.0	....	....	13,500
Cie. de Raffinage et de Distribution Total France— Dunkirk	133,700	36,200	....	....	135,100	121,500	....	140,200 28,200	....	....	....	31,840	....	2130	....	....	105	....
Gonfreville l'Orcher	323,643	68,981	....	120,451	240,950	142,300	....	130,128 269,943 107,979 112,813 131,719	....	13,087 23,031	13,040	15,051 317,486	9,846	21,371	60.4	....	215	4,737
La Mede.....	145,150	69,180	....	220,330	133,500	127,570	....	....	13,950	....	....	320,350	....	....	....	....	200	....
Cie. Rhenane de Raffinage— Reichstett-Vendenheim	78,000	34,200	....	216,000	114,000	114,400	....	222,500 15,300	....	....	....	....	....	....	....	....	....	7,200
ExxonMobil Refining & Supply Co.—Dunkirk .....	....	21,000	....	....	....	....	....	114,300	....	....	....	....	6,400	....	....	....	....	....
Fos sur Mer	119,000	38,000	....	....	128,000	121,000	....	134,000 422,000 551,000	....	....	....	....	....	....	....	....	110	....
Port Jerome/NDG	233,000	101,000	....	....	134,000	133,000	....	131,000 228,000 434,000 579,000 116,500	17,300	....	....	36,300	17,400	....	67.5	....	230	6,900
Ste. des Petroles Shell— Berre l'Etaing	82,000	52,000	....	....	134,000	119,000	....	237,000	....	....	....	....	....	....	....	....	....	6,000
Petit Couronne	141,000	76,000	....	212,000	120,000	128,000	....	248,000	....	....	....	....	6,200	....	110.0	....	....	11,000
TotalFinaElf—Donges	234,000	119,950	....	233,380	149,400	129,280	....	142,860 36,430 13,000	24,300	....	....	34,900	....	....	....	320	....	....
Feyzin.....	114,000	36,200	....	215,730	124,940	19,200	....	114,190 834,630	....	....	12,200	....	....	11,400 31,250	....	173	....	....
Grandpuits	90,000	49,900	....	214,860	130,720	114,800	....	127,860 28,875	23,150	....	....	....	....	....	....	208	....	....
Total	1,903,493	776,711	0	154,351	372,510	270,850	15,300	965,327	18,700	6,118	5,240	69,427	39,846	4,151	47.9	701	860	49,337
GABON																		
Ste. Gabonaise de Raffinage— Port Gentil	17,300	....	....	17,200	....	11,400	....	5,000	....	....	....	....	....	....	....	....	....	....
Total	17,300	0	0	7,200	0	1,400	0	5,000	0	0	0	0	0	0	0.0	0	0	0
GEORGIA																		
Batumi Oil Refinery—Batumi	106,436	24,809	....	....	....	110,276	....	110,800	....	....	....	....	....	....	....	....	....	3,819
Total	106,436	24,809	0	0	0	10,276	0	10,800	0	0	0	0	0	0	0.0	0	0	3,819
GERMANY																		
Addinol Mineralol GMBH— Krumpa.....	....	4,533	....	....	....	....	....	....	....	....	....	....	3,800	....	....	....	....	....
Bayernoil Raffineriegesellschaft GMBH—Vohburg/ Ingolstadt/Neustadt	262,300	87,800	....	19,900 238,900	160,000	138,000 317,800	....	193,600 48,600 567,600 718,700	....	....	....	314,200	....	1900	584.0	....	199	12,000
BP Lubes Services GMBH— Hamburg .....	....	15,000	....	....	....	....	3800	111,620	....	....	....	....	4,800	....	a1440.0 4440.0	....	....	....
DEA Mineraloel AG— Heide/Grasbrook	80,000	37,000	....	214,000	....	218,000	115,000	125,000	....	27,000	15,800	....	....	1280	....	....	55	4,300

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Wesseling	140,000	50,000	....	226,000	....	221,000	137,000	121,000 26,100	....	12,000	110,000	....	....	11,500	....	....	240	....
Deutsche BP AG Erdol Raffinerie GMBH—Lingen.....	86,000	38,000	223,400	....	....	16,300 25,000	226,500	118,200 29,300 410,000 531,500	....	....	18,600 22,200 37,000	310,000	....	....	144.0 444.0 550.0	550	112	....
Deutsche Shell AG—Godorf	162,000	73,000	....	118,000 27,000	....	117,000 21,000	136,000	252,000 334,000 32,000 12,000	....	....	117,000 23,000	38,000	....	....	....	....	....	12,000
Harburg	97,000	44,000	....	214,000	116,000	317,000	....	229,000 32,000 16,000	....	....	....	32,800	6,000	....	....	....	....	5,900
ExxonMobil Refining & Supply Co.—Ingolstadt	106,000	39,000	....	....	128,000	120,000	....	135,000 418,000 554,000	....	....	....	37,000	....	....	....	....	66	3,800
H & R Chemisch-Pharmazeutische Spezialaten GMBH— Salzbergen .....	....	6,800	....	....	....	....	....	113,700 131,050	....	....	....	....	....	....	....	....	....	....
Holborn Europa Raffinerie GMBH—Harburg.....	78,000	15,000	....	....	118,750	114,700	....	131,700 33,500 38,400	....	....	....	....	....	....	....	....	....	....
Mineraloelraffinerie Oberrhein GMBH—Karlsruhe	285,000	130,000	226,000	224,000	187,000	131,000 22,000	....	153,000 276,000 120,000 74,000	212,000	....	....	316,000	....	14,000	....	1,200	360	14,000
Mitteldeutsche Erdoel-Raffinerie GMBH—Leuna, Spergau.....	222,800	96,000	....	226,400	156,700	324,000	....	140,000 484,000 865,000	17,700	....	....	....	....	....	a3138.0 448.0 790.0	....	410	....
OMV AG—Burghausen	72,000	....	227,500	....	....	....	....	....	....	....	22,300	....	....	....	....	690	34	....
PCK Raffinerie GMBH— Schwedt.....	210,000	140,000	....	120,000 27,000	151,000	116,000 318,000	116,000	135,000 215,000 420,000 580,000 853,000	27,300	....	15,000	315,000	....	11,950	130.0	....	480	8,000
Veba Oel AG—Gelsenkirchen	246,000	148,010	229,376	217,883	126,415	327,927	c132,895	238,534 411,736 550,067 929,256	....	....	14,023 33,245 49,482	....	....	....	123.7 36.1	1,250	576	16,450
Wilhelmshavener Raffinerie Gesellschaft GMBH— Wilhelmshaven.....	220,000	....	....	....	....	142,500	312,000	176,000 582,000	....	....	....	39,000	....	....	....	....	50	....
Total	2,267,100	924,143	106,276	243,083	343,865	397,227	176,195	1,676,163	27,000	9,000	77,650	82,000	14,600	8,630	1,437.8	3,690	2,582	76,450

GHANA

Tema Oil Refinery Co. Ltd.—

Tema	45,000	....	....	....	....	15,850	....	....	....	....	....	....	....	....	....	....	....	....
Total	45,000	0	0	0	0	5,850	0	0	0	0	0	0	0	0	0.0	0	0	0

GREECE

Hellenic Petroleum SA—

Aspropyrgos	140,000	68,000	....	223,000	142,300	19,800 21,400	m42,300	136,000 436,000	....	27,450	....	39,800	....	11,350	19.6	....	240	7,500
Thessaloniki*	66,500	8,100	....	....	....	110,000	....	216,500	....	....	....	37,470	....	....	a15.2	....	40	2,800

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Motor Oil (Hellas) Corinth Refineries SA—Aghii Theodori.....	100,000	61,000	....	226,000	130,000	313,500	....	49,000 518,000	22,400	21,500	39,500	35,350	3,500	11,100	12.1	....	85	4,550
Petrola Hellas—Elefsis.....	100,000	....	....	....	....	....	....	530,200 114,500 1210,700 1335,500 517,500	....	....	....	....	....	....	74.2	....	26	....
Total	406,500	137,100	0	49,000	72,300	54,700	42,300	234,100	2,400	8,950	9,500	22,620	3,500	2,450	21.1	0	391	14,850

GUATEMALA

ChevronTexaco Corp.— Escuintla	16,000	....	....	....	....	¹ 3,000	....	¹ 3,000 ⁴ 2,000	....	....	....	....	....	....	....	....	....	....
Total	16,000	0	0	0	0	3,000	0	5,000	0	0	0	0	0	0	0.0	0	0	0

HUNGARY

MOL Hungarian Oil & Gas Co.— Szazhalombatta	161,000	77,500	² 16,900	² 14,000	¹ 24,000	¹ 16,000 ³ 13,600	....	¹ 30,000 ² 700 ⁴ 9,000 ⁵ 41,000 ⁸ 35,000 ¹ 13,800 ¹ 31,200 ⁵ 14,000	² 3,300	....	¹ 12,000	³ 3,500	6,100	¹ 1,200	¹ 25.4 ⁴ 50.8	600	226	6,300
Tiszaujvaros .....	....	....	....	....	....	....	....	⁵ 14,000	....	....	....	....	....	¹ 700	....	....	21	....
Total	161,000	77,500	16,900	14,000	24,000	29,600	0	134,700	3,300	0	12,000	3,500	6,100	1,900	76.2	600	247	6,300

INDIA

Bharat Petroleum Co. Ltd.— Mahul, Bombay	120,000	39,000	....	....	¹ 28,755	¹ 5,503	....	....	....	....	¹ 2,175	....	....	....	....	....	....	10,000
Numaligarh, Assam.....	60,000	....	8,400	....	....	2,000	22,000	29,000	....	....	....	....	....	....	....	71	4	....
Bongaigaon Refinery & Petrochemicals Ltd.— Bongaigaon Assam	27,110	....	² 9,675	....	....	¹ 1,833	....	¹ 1,833	....	....	¹ 694	....	....	....	....	203	....	....
Chennai Refinery—Madras.....	130,660	66,866	....	....	¹ 11,250	¹ 2,138	....	¹ 2,138 ⁴ 22,612 ⁷ 5,110	....	....	....	....	5,110	....	¹ 10.0	....	17	3,877
Hindustan Petroleum Corp. Ltd.— Mahul, Bombay	131,085	63,420	....	....	¹ 14,000	....	....	⁵ 34,275	....	....	....	....	7,490	....	^a 217.5	....	138	....
Visakhapatnam	164,250	....	....	² 20,580	¹ 32,900	....	....	⁵ 47,104	....	....	¹ 3,123	....	....	¹ 1,396	¹ 21.2	....	162	4,091
Indian Oil Co. Ltd.— Barauni, Bihar	65,800	23,700	² 20,000	....	....	....	....	....	....	....	....	....	....	....	....	540	....	....
Digboi, Assam	11,700	....	² 850	....	....	....	....	....	....	....	....	....	30	....	....	26	....	400
Gawahati, Assam.....	19,920	....	² 6,000	....	....	....	....	....	....	....	....	....	....	....	....	145	....	....
Koyali, Gujarat	185,100	98,000	....	² 19,500	¹ 20,000	¹ 8,300	....	¹ 8,300	....	....	¹ 1,450	....	....	....	² 42.7	....	....	4,400
Haldia, West Bengal.....	61,000	27,000	....	² 9,600	....	¹ 5,300	....	¹ 5,300 ¹ 3,400 ¹ 13,100	....	....	....	....	3,100	....	....	....	....	7,500
Mathura, Uttar Pradesh.....	156,000	47,000	....	² 18,000	¹ 20,000	....	....	....	....	....	....	....	....	....	....	....	....	7,500
Panipat.....	120,000	62,000	....	² 6,500	¹ 13,400	³ 12,000	³ 2,600	....	....	....	....	....	....	....	....	....	84	....
Kochi Refineries Ltd.— Ambalamugal	152,000	80,000	....	² 19,000	¹ 27,000	¹ 4,599	....	² 5,913 ⁴ 8,541 ⁵ 41,391	....	....	¹ 2,300	....	....	....	¹ 21.0 ⁴ 21.0	....	120	....
Madras Refineries Ltd.— Cauvery Basin	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Mangalore Refinery & Petrochemicals Ltd. — Mangalore	180,000	....	....	....	....	....	....	....	....	....	...	....	....	....	....	....	....	....
Reliance Petroleum Ltd. — Jamnagar	540,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	2,134,625	506,986	44,925	93,180	167,305	41,673	54,600	228,017	0	0	9,742	0	15,730	1,396	133.4	985	525	37,768

INDONESIA

Pertamina—																		
Balikpapan, Kalimantan	240,920	89,110	....	....	....	³ 18,720	¹ 49,500	....	....	....	....	....	....	....	....	....	....	....
Balongan	125,000	....	....	....	¹ 83,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Cepu	3,420	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cilacap, Central Java	348,000	37,600	....	² 50,040	....	³ 30,690	....	¹¹ 12,000	....	....	....	....	....	....	....	....	....	....
Dumai, Central Sumatra	114,000	87,970	² 32,580	....	....	³ 12,870	¹ 50,220	11,430	....	....	....	....	....	....	....	....	....	....
Musi, South Sumatra	109,155	51,300	....	¹ 8,820	¹ 18,450	³ 30,690	....	....	¹ 16,200	....	....	....	....	....	....	....	....	....
Pangkalan Brandan, North Sumatra	4,750	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sungai Pakning, Central Sumatra	47,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	992,745	265,980	32,580	58,860	101,450	92,970	99,720	23,430	16,200	0	0	0	0	0	0.0	0	0	0

IRAN

National Iranian Oil Co.—																		
Abadan	400,000	....	....	² 80,000	¹ 30,000	126,000	....	126,000	....	....	....	....	1,500	....	....	....	....	1,000
Arak	150,000	71,000	....	¹ 27,300	....	² 21,600	¹ 24,500	121,600	....	....	....	....	....	² 50.0	....	....	60	5,500
Bandar Abbas	232,000	126,000	....	² 31,000	....	³ 36,000	¹ 28,000	136,000	....	....	....	....	....	150.0	....	....	130	5,000
Isfahan	265,000	119,000	....	² 38,000	....	129,600	¹ 30,000	129,600	....	....	....	....	26,640	....	170.0	....	70	5,500
Kermanshah	30,000	....	....	....	....	12,775	....	12,775	....	....	....	....	....	....	....	....	....	....
Lavan Island	20,000	....	....	....	....	17,000	....	17,000	....	....	....	....	....	....	....	....	....	....
Shiraz	40,000	18,400	....	² 9,000	....	16,200	¹ 9,280	16,200	....	....	....	....	....	....	117.0	....	30	1,500
Tabriz	112,000	50,000	....	¹ 16,500	....	111,120	¹ 18,000	111,100	....	....	....	....	....	....	134.0	....	80	5,000
Tehran	225,000	120,000	....	² 35,000	....	127,260	¹ 30,000	127,260	....	....	....	....	3,760	....	165.0	....	100	20,000
Total	1,474,000	504,400	0	236,800	30,000	167,555	139,780	212,635	0	0	0	0	31,900	0	286.0	0	470	43,500

IRAQ

Iraqi Co. for Oil Operations—																		
Kirkuk	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Oil Refineries Administration—																		
Baiji	150,000	65,000	....	....	....	38,500	38,000	31,000 28,000 41,000	....	....	....	....	....	....	64.0	....	....	....
Basra	140,000	17,650	....	....	....	....	....	....	....	....	....	....	2,008	....	....	....	....	....
Daura	100,000	....	....	....	....	5,000	....	13,000	....	....	....	....	8,160	....	....	....	....	1,815
K3-Haditha	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Khanagin	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Muthia	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qaiyarah Mosul	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,900
Total	417,500	82,650	0	0	0	43,500	38,000	113,000	0	0	0	0	10,168	0	64.0	0	0	6,715

IRELAND

Phillips 66 Co.—Whitegate	71,250	....	....	....	....	² 10,800	....	¹ 10,800 ² 5,400 ⁵ 13,500	....	....	....	³ 5,400	....	....	....	....	4	....
Total	71,250	0	0	0	0	10,800	0	29,700	0	0	0	5,400	0	0	0.0	0	4	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
ISRAEL																		
Oil Refineries Ltd.—Ashdod	90,000	45,000	....	225,000	127,500	111,500	....	220,000	....	....	....	....	....	1750	....	....	....	....
Haifa.....	130,000	73,000	....	241,000	122,000	115,000	....	216,000	....	22,200	....	....	....	....	....	....	....	2,700
								30,000										
								30,000										
Total	220,000	118,000	0	66,000	49,500	26,500	0	96,000	0	2,200	0	0	0	750	0.0	0	0	2,700
ITALY																		
AgipPetroli SPA— Livorno	84,000	36,000	....	....	....	314,000	....	222,000	....	....	....	36,000	10,000	....	....	....	....	3,500
								31,700										
Porto Marghera.....	80,000	38,000	....	113,500	....	315,000	....	216,000	....	....	....	36,000	....	....	....	....	....	3,500
				227,000				27,000										
Sannazzaro, Pavia.....	200,000	84,500	....	232,000	134,000	212,000	130,000	112,000	23,200	....	....	212,000	....	1920	235.0	....	....	2,500
						316,700		227,000										
								41,000										
Taranto.....	84,000	60,590	....	127,000	....	217,000	115,500	224,000	....	....	....	36,000	....	....	239.5	....	....	2,500
				237,250				43,000										
Api Raffineria di Ancona SPA— Falconara, Marittima*	82,900	37,500	....	136,500	....	114,000	....	225,000	....	....	....	315,000	....	....	172	....	120	....
				224,500				540,200							47.2			
Arcola Petrolifera SPA— La Spezia	33,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ExxonMobil Refining & Supply Co.—Augusta, Siracusa	190,000	93,000	....	....	146,000	122,000	....	124,000	28,700	....	....	12,400	17,800	....	....	....	200	....
								412,000										
								531,000										
								819,000										
								1124,000										
Iplom SPA—Busalla.....	40,000	19,000	....	....	....	....	....	59,800	....	....	....	....	....	....	a16.8	....	30	....
								59,000							46.8			
Isab SPA—Priolo Gargallo	235,000	102,700	....	133,000	....	238,000	m165,000	264,000	....	....	....	39,000	....	....	220.3	....	315	....
				245,000				72,000							63.6			
								724,400										
Italiana Energia E Servizi SPA— Mantova	56,600	20,100	....	19,400	....	18,200	....	214,800	....	....	....	33,300	....	....	....	....	60	....
				224,200				19,000										
								78,000										
Praoil—Gela, Ragusa.....	105,000	52,500	245,000	....	135,000	213,850	....	116,500	210,000	....	16,700	18,050	....	11,100	317.0	2,000	....	....
								42,500			2700			31,200	58.0			
								35,000										
Priolo, Siracusa.....	220,000	50,000	....	225,000	132,000	29,000	....	19,000	14,000	....	112,000	....	....	11,050	....	....	....	....
								18,000			22,300							
Raffineria di Milazzo SPA— Milazzo, Messina	241,300	68,700	....	....	146,100	113,500	c133,800	120,100	14,100	....	....	....	....	11,200	135.6	....	407	....
							225,400	562,600							244.9			
															49.7			
Raffineria di Roma SPA—Rome	85,000	11,500	....	231,600	....	114,300	....	221,000	....	....	....	37,100	....	....	....	....	42	9,620
								32,000										
								21,500										
Saras SPA—Sarroch	300,000	108,000	....	241,000	185,000	327,000	m1100,000	127,000	27,200	....	....	....	....	35,800	a332.2	....	440	....
								426,000							425.8			
								550,000										
Sarpom—S. Martino Di Trecate	174,000	28,000	....	....	129,000	118,000	....	167,000	....	11,600	....	311,900	....	....	....	....	84	....
						28,000		418,000										
								540,000										
Tamoil Raffinazione SPA — Cremona.....	90,000	....	....	233,000	....	18,600	46,000	131,600	....	....	....	310,500	....	....	45.5	....	....	....
						315,000		31,800										
								426,900										
Total	2,300,800	810,090	45,000	439,950	307,100	284,150	275,700	1,176,400	37,200	1,600	21,700	97,250	27,800	11,270	305.1	2,000	1,698	21,620

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
IVORY COAST																		
Societe Ivoirienne de Raffinage — Abidjan	65,200	26,490	....	....	....	112,827	114,934	114,184 419,409	....	....	....	....	....	....	149.0 30.0 10.0	....	....	....
Total	65,200	26,490	0	0	0	12,827	14,934	33,593	0	0	0	0	0	0	89.0	0	0	0
JAMAICA																		
Petrojam Ltd.— Kingston	34,200	1,283	....	....	....	13,240	....	16,400 46,000 57,200	....	....	....	....	....	....	....	....	....	1,350
Total	34,200	1,283	0	0	0	3,240	0	19,600	0	0	0	0	0	0	0.0	0	0	1,350
JAPAN																		
Cosmo Oil Co. Ltd.— Chiba*	228,000	57,000	....	....	133,300	132,850	....	134,200 456,700 563,900 931,500 1064,800	....	....	....	....	....	....	179.2	....	540	....
Sakai*	72,000	30,600	....	....	120,700	17,200	....	19,900 426,100 522,500 918,000	17,200	....	....	....	....	11,465	19.9	....	126	....
Sakaide*	114,000	39,425	....	....	117,100	112,600	....	112,600 421,600 536,000 915,480 1027,000	....	....	....	....	....	....	130.6	....	239	....
Yokkaichi*	147,250	70,300	....	....	122,500	15,400 312,150	....	117,550 431,500 527,000 936,900	....	....	....	....	....	....	110.8	....	180	....
Fuji Oil Co. Ltd.—Sodegaura	192,000	55,000	324,000	....	118,000	328,000	....	143,000 443,500 535,000 947,000	12,400	....	121,000 2,100	....	....	....	....	1,223	360	....
Idemitsu Kosan Co. Ltd.— Chita, Aichi	152,000	....	....	....	147,500	316,200	....	123,400 444,100 527,000 1049,500	15,400	....	....	....	....	....	260.4	....	360	....
Himeji, Hyogo	76,000	....	....	....	....	115,300	....	125,200 431,500 522,500 1036,000	....	....	....	....	....	....	31.9	....	207	....
Ichihara, Chiba	209,000	62,700	....	....	142,750	115,300	310,440	122,500 451,300 554,000 835,100 1036,000	....	....	....	....	9,450	....	246.3	....	540	....
Tokuyama, Yamaguchi	114,000	52,250	....	....	124,700	318,000	....	118,000 431,500 518,000 840,500 1036,000	....	....	....	....	....	....	217.1	....	176	....
Tomakomai, Hokkaido	133,000	22,800	....	....	128,500	116,200	113,500	124,300 427,000 522,500 1034,200	....	....	....	....	....	....	253.7	....	356	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Japan Energy Co.— Chita, Aichi* .....	....	....	....	....	....	² 21,150	....	¹ 35,100	....	....	^{17,754} ^{31,886}	....	....	....	^{126.1} ^{54.6}	....	2	....
Mizushima, Okayama*	190,190	103,550	² 23,400	....	¹ 43,200	¹ 18,000 ² 21,600	^{c2} 27,900	¹ 36,000 ⁴ 42,210 ⁵ 55,800 ⁶ 63,000 ¹² 3,150 ¹¹ 5,850	^{14,590}	....	^{11,700} ^{22,095}	....	5,513	....	^{127.0} ^{255.9} ^{53.3}	....	610	9,000
Kashima Oil Co. Ltd.— Kashima, Ibaragi	171,000	39,900	....	....	¹ 29,700	³ 19,800	....	¹ 20,700 ⁴ 41,400 ⁵ 44,100 ⁹ 22,500 ¹⁰ 27,000	....	....	^{15,123}	....	....	^{11,397}	^{a1} 22.5	....	240	....
Kyokuto Petroleum Ltd.— Ichihara, Chiba	175,000	83,000	....	....	¹ 34,000	¹ 27,000	^{m1} 38,500	¹ 27,500 ⁴ 33,500 ⁵ 45,000	....	....	^{16,500}	....	....	....	^{a2} 30.0 ^{420.0} ^{68.5}	....	220	....
Kyushu Oil Co. Ltd.—Oita	130,000	66,000	....	....	¹ 16,500	¹ 8,000	....	^{19,000} ^{27,000} ^{33,000}	....	....	....	....	....	....	⁷ 14.9	....	....	....
Nansei Sekiyu KK—Okinawa	90,000	....	....	....	....	¹ 1,200	....	^{121,500} ^{417,000}	....	....	....	....	....	....	⁶ 4.5	....	....	....
Nihonkai Oil Co. Ltd.— Toyama*	57,000	10,450	....	....	....	¹ 5,400	....	....	....	....	....	....	....	....	....	....	40	....
Nippon Oil Co. Ltd.— Mizushima	230,000	77,000	....	....	¹ 46,000	¹ 19,000 ² 20,000	^{c1} 13,000	¹ 45,000 ^{34,300} ⁴ 40,000 ⁵ 40,000 ⁹ 37,000 ¹⁰ 45,000 ¹¹ 4,100	^{14,400}	^{12,100}	^{114,000}	....	3,100	....	^{255.2} ^{64.0}	....	570	4,600
Muroran	180,000	65,000	....	....	¹ 30,000	³ 36,000	^{c12} 5,000	¹ 69,500 ⁴ 37,000 ⁵ 22,000 ⁹ 45,000 ¹⁰ 16,000	....	....	^{11,500}	....	....	....	^{a2} 35.0	....	350	28,000
Negishi	360,000	130,000	....	....	¹ 78,000	¹ 20,000 ³ 30,000	....	⁴ 78,000 ⁵ 59,000 ⁹ 81,000 ¹⁰ 33,000 ¹¹ 4,400	^{15,700}	....	^{12,200}	....	4,000	^{11,800}	^{a1} 24.2 ^{a2} 29.8	....	660	5,500
Nippon Oil Co. Ltd. ^D —Sendai	145,000	60,000	....	....	¹ 40,000	¹ 18,000	....	¹ 18,000 ⁴ 29,000 ⁹ 35,000 ¹⁰ 52,000	^{14,600}	....	....	....	....	....	² 62.2	....	510	3,600
Nippon Oil Co. Ltd. ^E — Takaishi, Osaka	125,000	60,000	....	....	¹ 27,000	¹ 14,000	....	¹ 22,000 ⁴ 25,000 ⁵ 21,000 ⁹ 21,000	^{13,600}	....	^{12,050}	....	....	....	....	....	100	....
Nippon Oil Co. Ltd. ^E — Yamaguchi*	127,000	64,000	² 19,000	....	¹ 28,000	³ 24,000	....	¹ 32,000 ⁴ 22,000 ⁵ 18,000 ⁹ 48,000	....	....	^{16,670}	....	....	....	² 8.5	600	225	1,000
Okinawa Sekiyu Seisei— Yonashiro, Okinawa	100,000	....	....	....	....	³ 15,000	....	¹ 15,000 ^{23,000} ^{20,000} ¹⁰ 38,000	....	....	....	....	....	....	² 22.0	....	300	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Seibu Oil Co. Ltd.— Yamaguchi.....	110,000	40,000	....	....	122,000	117,000	....	126,000 36,000 30,000 1050,000	....	23,000	....	25,700	....	....	242.4 617.7	....	340	30,000
Showa Yokkaichi Sekiyu Co. Ltd.—Yokkaichi.....	222,000	96,300	....	....	122,600	140,600	....	261,500 39,200 35,600 36,900	....	....	15,500	39,200	5,500	....	128.3	....	....	6,300
Taiyo Oil Co. Ltd.— Kikuma, Ehime.....	102,000	27,000	....	....	....	333,000	119,000	137,000 418,000 530,000	....	....	124,300 210,200	....	....	....	218.0 4108.0	....	....	....
Toa Oil Co. Ltd.— Mizue Factory, Kawasaki.....	65,000	57,000	124,000	....	133,000	18,000	....	117,000 29,500 413,000 520,000 7750 846,000 1310,700	....	12,040	210,200	....	....	....	132.8 613.0	....	380	....
Ohgimachi Factory, Kawasaki....	120,000	30,000	....	....	....	321,500	....	128,000 421,000 527,000 916,000	....	....	115,000	36,000	....	....	....	....	100	17,000
Toho Oil Co. Ltd.— Owase.....	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tonen/General Sekiyu Seisei KK— Kawasaki.....	296,000	94,500	....	....	187,000	118,500 328,500	222,500	159,000 468,000 581,000 877,000	17,000	....	....	....	....	....	246.0 613.5	....	525	....
Sakai	139,500	47,500	....	....	137,500	127,500	....	142,500 430,500 543,500 835,000	....	....	122,000	....	....	....	118.5 69.0	....	330	....
Wakayama.....	160,000	71,000	....	....	138,000	142,000	....	142,000 443,500 541,000 828,500 1111,000	13,500	....	....	....	7,000	....	117.0 57.0 610.0	....	175	....
Wakayama Petroleum Refining Co. Ltd.— Kainan City, Wakayama.....	....	30,000	....	....	....	....	....	20,000 119,000	....	....	....	....	8,500	....	2135.0	....	....	....
Total	4,766,940	1,642,275	90,400	0	867,550	733,950	169,840	4,405,090	48,390	7,140	171,778	20,900	43,063	4,662	1,314.3	1,823	8,761	105,000

JORDAN

Jordan Petroleum Refinery— Zerka.....	90,400	21,500	....	....	14,000	110,900	14,350	117,300	....	....	....	....	....	....	28.0 48.0	....	....	4,250
Total	90,400	21,500	0	0	4,000	10,900	4,350	17,300	0	0	0	0	0	0	16.0	0	0	4,250

KAZAKHSTAN

Hurricane Hydrocarbons Ltd.— Shymkent	160,000	....	....	....	....	124,466	....	125,200 49,863	....	....	....	....	....	....	....	....	60	....
Kazakoiil— Atyrau	104,427	27,064	213,720	....	....	18,808	....	19,200	....	....	....	....	....	....	....	500	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Pavlodar.....	162,666	93,973	211,277	230,071	138,356	126,178	....	127,200 49,863 846,027	....	....	....	....	....	....	121.5	500	64	8,550
Total	427,093	121,037	24,997	30,071	38,356	59,452	0	207,353	0	0	0	0	0	0	21.5	1,000	124	8,550
KENYA																		
Kenya Petroleum Refineries Ltd.—Mombasa	90,000	....	....	....	....	19,300	....	30,000 6,000	....	....	....	....	....	....	....	....	....	1,100
Total	90,000	0	0	0	0	9,300	0	36,000	0	0	0	0	0	0	0.0	0	0	1,100
KUWAIT																		
Kuwait National Petroleum Co.—Mina Abdulla*	256,500	142,500	268,400	....	....	....	c136,000	26,750 433,300 531,500 1090,900	....	....	....	....	....	....	a1182.0	2,600	810	....
Mina Al-Ahmadi*	442,700	80,750	....	....	141,400	....	c138,700	418,720 5118,440 10118,800	15,616	....	....	....	....	16,561	1198.0 456.5	....	1,334	....
Shuaiba*	190,000	104,500	....	....	....	113,500	140,500 248,600	123,400 431,500 527,000	....	....	....	....	....	....	1210.0	....	1,000	....
Total	889,200	327,750	68,400	0	41,400	13,500	163,800	500,310	5,616	0	0	0	0	6,561	646.5	2,600	3,144	0
KYRGYZSTAN																		
Kyrgoil—Dzhalalabad	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
LEBANON																		
Tripoli Oil Installations— Tripoli	20,000	12,730	....	....	17,250	14,392	....	7,392	....	....	....	....	....	....	....	....	....	409
Zahrani Oil Installations— Sidon	17,500	....	....	....	....	13,050	....	13,050	....	....	....	....	....	....	....	....	....	....
Total	37,500	12,730	0	0	7,250	7,442	0	10,442	0	0	0	0	0	0	0.0	0	0	409
LIBERIA																		
Liberia Petroleum Refining— Monrovia	15,000	1,000	....	....	....	12,000	....	12,300 1,000	....	....	....	....	....	....	....	....	....	200
Total	15,000	1,000	0	0	0	2,000	0	3,300	0	0	0	0	0	0	0.0	0	0	200
LIBYA																		
Azzawiya Oil Refining Co.— Azzawiya and Benghazi	115,000	3,775	....	....	....	115,750	....	116,604 619,926	....	....	....	....	635	....	....	....	....	3,432
Ras Lanuf Oil & Gas Processing Co.—Ras Lanuf	220,000	....	....	....	....	13,300	....	25,600	....	....	....	....	....	....	....	....	....	....
Sirte Oil Co.—Brega	8,400	....	....	....	....	11,200	....	21,200	....	....	....	....	....	....	....	....	....	....
Total	343,400	3,775	0	0	0	20,250	0	43,330	0	0	0	0	635	0	0.0	0	0	3,432
LITHUANIA																		
JSC Mazeikiu Nafta— Mazeikiai	263,420	83,223	....	229,525	143,692	125,741	....	151,482 11,937 842,511	....	16,800	....	18,000	....	1125	162.5	....	198	....
Total	263,420	83,223	0	29,525	43,692	25,741	0	105,930	0	6,800	0	18,000	0	125	62.5	0	198	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
MACEDONIA																		
Okta Crude Oil Refinery— Skopje.....	56,730	....	....	....	....	110,860	....	115,930 56,120	....	....	....	34,390	....	....	....	....	....	....
Total	56,730	0	0	0	0	10,860	0	22,050	0	0	0	4,390	0	0	0.0	0	0	0
MADAGASCAR																		
Galana Raffinerie Terminal ^K — Toamasina.....	15,000	1,500	....	26,000	....	22,000	....	53,600 74,500	....	....	....	....	....	....	....	....	....	....
Total	15,000	1,500	0	6,000	0	2,000	0	8,100	0	0	0	0	0	0	0.0	0	0	0
MALAYSIA																		
Esso Malaysia Bhd.— Port Dickson	86,000	....	....	....	....	119,000	....	125,500 411,000	....	....	....	....	....	....	....	....	....	....
Petronas—Kertih.....	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Melaka I.....	95,000	....	....	....	....	218,000	....	118,000	....	....	....	....	....	....	112.0 461.6	975	200	....
Melaka II.....	95,000	58,900	218,900	....	....	223,400	128,500	123,400 531,500	....	....	....	38,100	....	....	112.0 461.6	....	....	....
Sarawak Shell Bhd.—Lutong.....	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shell Refining Co. Bhd.— Port Dickson	155,000	7,000	....	....	....	14,000 313,000	....	232,000 5,000	....	....	....	....	....	....	....	....	....	4,000
Total	516,000	65,900	18,900	0	0	77,400	28,500	146,400	0	0	0	8,100	0	0	147.2	975	200	4,000
MARTINIQUE																		
Societe Anonyme de la Raffinerie des Antilles— Fort-de-France.....	17,000	....	....	....	....	43,019	....	15,176 8,977	....	....	....	....	....	....	....	....	15	....
Total	17,000	0	0	0	0	3,019	0	14,153	0	0	0	0	0	0	0.0	0	15	0
MEXICO																		
Petroleos Mexicanos— Cadereyta	275,000	137,000	50,000	....	190,000	146,000	....	186,000	22,900	....	....	....	....	12,200	60.0	....	....	5,000
Cd. Madero.....	320,000	156,000	....	....	161,000	145,000	....	147,700	212,700	....	....	....	....	2,000	42.0	....	....	18,000
Minatitlan.....	194,000	81,000	....	....	124,000	131,000	....	100,000	15,000	....	117,000	....	....	....	....	....	....	....
Salamanca.....	245,000	147,000	....	....	140,000	147,300	218,000	121,000	15,434	....	....	....	17,000	880	60.0	....	....	15,000
Salina Cruz	330,000	165,000	50,000	....	180,000	350,000	....	161,000	29,400	....	....	....	....	1,800	....	....	....	....
Tula Hidalgo.....	320,000	159,000	141,000	....	180,000	165,000	....	268,400	22,677	....	....	....	....	3,600	....	....	....	....
Total	1,684,000	845,000	141,000	0	375,000	284,300	18,000	984,100	118,111	0	17,000	0	17,000	10,480	162.0	0	0	38,000
MOROCCO																		
Societe Anonyme Marocaine de L'Industrie du Raffinage— Mohammedia.....	125,230	17,465	....	....	....	121,830	....	121,830 78,670 112,510	....	....	....	....	2,460	....	....	....	....	5,630
Sidi Kacem*	29,671	7,456	....	....	25,040	12,529	....	12,529	....	....	....	....	....	....	....	....	....	....
Total	154,901	24,921	0	0	5,040	24,359	0	35,539	0	0	0	0	2,460	0	0.0	0	0	5,630

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
MYANMAR																		
Myanma Petrochemical																		
Enterprise—Chauk.....	6,000	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Thanlyin.....	26,000	2,000	25,200	....	....	....	....	....	....	....	....	....	500	....	....	120	....	....
Thanbayakan.....	25,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	57,000	4,000	5,200	0	0	0	0	0	0	0	0	0	500	0	0.0	120	0	0
NETHERLANDS																		
ExxonMobil Refining & Supply																		
Co.—Rotterdam	182,000	79,000	339,000	....	....	229,000	146,000	129,000	....	....	129,000	....	....	....	124.0	....	485	....
								212,000			35,700							
								435,000										
								540,000										
								919,000										
Kuwait Petroleum Europoort																		
BV—Rotterdam	75,500	37,600	....	19,200	....	322,600	....	141,200	....	....	....	36,500	4,500	....	42.0	....	72	3,320
				26,800				410,000										
								521,800										
								115,900										
Netherlands Refining Co.—																		
Europoort	400,000	88,000	....	236,700	162,600	131,400	....	4166,100	28,800	....	....	....	....	12,400	15.0	....	217	....
								591,100										
								1324,200										
Shell Nederland Raffinaderij																		
BV—Pernis.....	390,000	148,000	....	245,000	151,000	342,000	274,000	2138,000	26,800	....	....	....	7,100	12,550	159.0	....	....	5,500
								38,000										
								11300										
								86,000										
Smid & Hollander Raffinaderij																		
BV—Amsterdam	10,000	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5,800
Total Raffinaderij Nederland																		
NV—Vlissingen	149,342	54,610	....	....	....	325,223	145,653	217,081	....	....	125,618	....	....	....	162.9	....	205	....
								28,959										
Total	1,206,842	415,210	39,000	97,700	113,600	150,223	165,653	773,640	15,600	0	60,318	6,500	11,600	4,950	162.9	0	979	14,620
NETHERLANDS ANTILLES																		
Refineria Isla Curazao SA—																		
Emmestad	320,000	195,000	....	180,000	150,000	120,000	....	153,000	26,500	12,900	....	....	12,000	....	....	....	160	22,000
								37,000										
								814,000										
								113,000										
Total	320,000	195,000	0	80,000	50,000	20,000	0	107,000	6,500	2,900	0	0	12,000	0	0.0	0	160	22,000
NEW ZEALAND																		
New Zealand Refining Co. Ltd.—																		
Marsden Point, Northland	106,000	46,100	....	....	....	127,672	129,235	140,180	....	....	....	....	....	....	158.0	....	159	4,850
								414,800										
								56,600										
Total	106,000	46,100	0	0	0	27,672	29,235	61,580	0	0	0	0	0	0	58.0	0	159	4,850
NICARAGUA																		
Esso Caribbean and Central																		
America—Managua.....	20,000	1,500	....	....	....	12,900	....	15,500	....	....	....	....	....	....	....	....	....	....
								44,000										
								75,500										
Total	20,000	1,500	0	0	0	2,900	0	15,000	0	0	0	0	0	0	0.0	0	0	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
NIGERIA																		
Kaduna Refinery & Petrochemical Co. (NNPC)— Kaduna	110,000	36,290	....	....	118,000	115,300	....	121,600 15,750 13536	....	....	2291	....	3,878	....	....	....	....	14,850
Port Harcourt Refining Co. (NNPC)—Port Harcourt, Alesa Eleme	60,000	....	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....
Port Harcourt, Rivers State	150,000	54,000	....	....	140,000	433,000	....	133,000 714,500	27,020	22,274	....	13,610	....	....	....	....	....	....
Warri Refinery & Petrochemical Co. (NNPC)—Warri	118,750	34,200	....	....	124,700	115,770	....	215,770 68,075	22,850	....	....	....	....	....	....	....	....	....
Total	438,750	124,490	0	0	82,700	70,070	0	109,231	9,870	2,274	291	3,610	3,878	0	0.0	0	0	14,850
NORTH KOREA																		
Government	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Government—Ungi	42,000	....	....	....	....	17,300	....	17,400	....	....	11,000	....	....	11,000	....	....	....	....
Total	71,000	0	0	0	0	7,300	0	7,400	0	0	1,000	0	0	1,000	0.0	0	0	0
NORWAY																		
ExxonMobil Refining & Supply Co.—Slagen	110,000	....	....	232,000	....	112,000	....	122,000 538,000 79,000	....	....	....	....	....	....	....	....	23	....
Statoil Mongstad—Mongstad	200,000	....	225,000	....	254,000	19,800 315,800	....	126,000 710,000 16,900 17,100	....	111,500	....	34,000	....	....	....	610	....	....
Total	310,000	0	25,000	32,000	54,000	37,600	0	139,000	0	11,500	0	4,000	0	0	0.0	610	23	0
OMAN																		
Oman Refinery Co.— Mina Al Fahal	85,000	....	....	....	....	316,000	....	221,000	....	....	....	....	....	....	....	....	....	....
Total	85,000	0	0	0	0	16,000	0	21,000	0	0	0	0	0	0	0.0	0	0	0
PAKISTAN																		
Attock Refinery Ltd.— Rawalpindi	30,500	10,000	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....
National Refinery Ltd.— Korangi, Karachi	62,050	12,600	....	....	....	33,800	....	23,800	....	....	....	....	3,400	....	....	....	....	3,600
Pakistan Refinery Ltd.— Karachi	46,300	....	....	....	....	22,700	....	18,100	....	....	....	....	....	....	....	....	....	....
Pak-Arab Refinery Co.— Mahmood Kot, Punjab	95,000	40,660	....	14,004	....	14,715	20,205	23,085	....	....	....	....	....	....	....	115	....	....
Total	233,850	63,260	0	14,004	0	26,215	20,205	44,985	0	0	0	0	3,400	0	0.0	0	115	3,600
PANAMA																		
ChevronTexaco Corp.— Las Minas	60,000	6,500	....	227,000	....	111,000	....	112,500 426,700	....	....	....	....	....	....	....	....	....	....
Total	60,000	6,500	0	27,000	0	11,000	0	39,200	0	0	0	0	0	0	0.0	0	0	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
PARAGUAY																		
Petroleos Paraguayos— Villa Elisa	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
PERU																		
Maple Gas Corp.—Pucallpa	3,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroperu SA—Conchan, Lima	13,500	9,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Iquitos, Loreto	10,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
El Milagro, Amazonas	1,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Talara, Piura	62,000	24,500	....	....	¹ 18,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Repsol-YPF—La Pampilla Lima	100,000	19,000	....	....	¹ 6,700	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	190,950	53,000	0	0	24,700	0	0	0	0	0	0	0	0	0	0.0	0	0	0
PHILIPPINES																		
Caltex (Philippines) Inc.— Batangas	86,500	20,500	....	....	¹ 12,500	¹ 9,000	....	¹ 9,000 ⁵ 16,000	....	....	....	....	....	....	....	....	40	....
Petron Corp.—Limay, Bataan	180,000	32,000	....	....	¹ 12,000	¹ 17,000 ³ 17,000	....	² 54,000 ³ 6,000	....	....	....	....	....	....	⁴ 10.0	....	71	....
Philippine Petroleum Corp.— Pililla .....	....	21,000	....	....	....	....	....	....	....	....	....	....	3,700	....	....	....	....	1,200
Pilipinas Shell Petroleum Corp.—Tabango	153,000	....	....	22,000	....	³ 18,900	....	² 31,100 47,300	....	....	....	....	....	....	....	....	....	....
Total	419,500	73,500	0	22,000	24,500	61,900	0	193,400	0	0	0	0	3,700	0	10.0	0	111	1,200
POLAND																		
Nafta Polska SA— Czechowice .....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gorlice .....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jaslo .....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrochemia—Plock/Trezebina	260,000	115,000	....	....	¹ 46,000	¹ 25,000	¹ 49,500	¹ 24,000 ⁷ 38,000 ¹¹ 3,000	² 3,000	....	¹ 3,500 ² 770	....	....	¹ 1,600	....	....	....	13,000
Rafineria Gdanska SA— Gdansk/Jedlicze	90,000	40,000	....	....	....	³ 14,000	....	² 27,500 16,000 ¹¹ 6,700	....	....	....	....	4,500	....	....	....	24	4,600
Total	350,000	155,000	0	0	46,000	39,000	49,500	115,200	3,000	0	4,270	0	4,500	1,600	0	0	24	17,600
PORTUGAL																		
Petrogal— Leca da Palmeira, Porto*	91,277	11,357	....	....	....	¹ 14,831 ³ 10,601	....	¹ 42,221 ⁵ 28,823 ¹¹ 3,593	....	....	¹ 17,276	....	....	....	....	....	45	....
Sines*	212,895	66,880	....	² 23,400	¹ 31,500	³ 24,750	^m 49,180	¹ 24,750 ⁵ 62,100 ⁸ 13,500	² 5,400	....	....	....	....	....	....	....	207	....
Total	304,172	78,237	0	23,400	31,500	50,182	9,180	174,987	5,400	0	17,276	0	0	0	0.0	0	252	0
PUERTO RICO																		
Shell Chemical Yabucoa Inc. ^F — Yabucoa	73,000	35,000	....	....	....	¹ 20,000	^c 418,000	¹ 20,000	....	....	....	....	....	....	¹ 20.0	....	68	....
Total	73,000	35,000	0	0	0	20,000	18,000	20,000	0	0	0	0	0	0	20.0	0	68	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
QATAR																		
National Oil Distribution Co.— Umm Said	200,000	....	....	....	160,000	120,000 39,400	20,000	219,500 719,850	....	....	....	325,000	....	....	....	....	....	....
Total	200,000	0	0	0	60,000	29,400	20,000	39,350	0	0	0	25,000	0	0	0.0	0	0	0
ROMANIA																		
Arpechim SA—Pitesti	70,288	37,589	....	211,277	219,178	112,233	31,534	111,507 19,178	....	....	11,591	....	752	....	11.5	....	22	3,320
Astra SA—Ploiesti	56,000	9,400	28,600	....	....	....	....	3,000	....	....	....	....	6,300	....	12.1	220	....	1,500
Petrobraz SA—Ploiesti	69,280	39,240	212,660	....	121,400	113,440	....	113,920 75,540	....	....	11,510	3995	....	....	....	400	....	....
Petrolsub SA—Bacau	8,000	5,200	....	....	....	....	....	....	....	....	....	....	210	....	....	....	....	2,870
Petromidia SA—Midia	105,000	46,000	220,000	....	124,000	111,600	....	128,000 7,500 815,000 1322,500	....	....	14,700	....	....	1820	16.1	1,150	87	....
Petrotel SA—Ploiesti	104,000	55,970	211,480	25,500	120,900	111,490	....	120,000 20,680 113,200	22,300	....	....	....	2,680	1510	24.3	270	....	3,670
Rafinaria Darmanesti SA— Darmanesti	16,000	....	19,500	18,800	....	23,000	....	....	....	....	....	....	....	....	....	300	....	....
Rafo SA—Onesti, Bacau	54,625	....	24,155	26,570	118,000	311,300	....	112,800 821,900	....	....	....	....	....	....	....	173	23	....
Rompetrol SA Vega Refinery— Ploiesti	8,717	3,485	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1,291
Steaua Romania SA— Cimpina	9,272	6,341	....	....	....	....	....	....	....	....	....	....	424	....	....	....	....	1,110
Total	501,182	203,225	66,395	32,147	103,478	63,063	1,534	204,725	2,300	0	7,801	995	10,366	1,330	14.0	2,513	132	13,761
RUSSIA																		
Bashneftekhimzavody— Novo-Ufa	285,000	93,800	27,142	251,700	222,247	325,400 122,300	....	152,000 65,205	12,814	....	....	....	9,585	....	....	260	218	14,278
Ufa	234,962	98,671	....	130,900	238,356	114,679	....	115,000 33,300 842,192	....	1979	....	....	....	....	121.5	....	72	498
Ufaneftkhim	184,200	62,000	....	123,700	217,260	18,900 221,775	119,178	131,600 48,904	....	....	18,700	....	7,330	....	121.5	....	....	4,981
Central Fuel Co.—Moscow	242,995	90,214	....	120,000	231,320	133,029	....	134,000 66,548 842,192	....	....	....	33,542	....	11,000	121.5	....	....	22,600
Chernogorneft Refinery— Chernogorneft	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dagestan Oil—Makhachkala	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gazprom—Astrakhan	66,000	....	....	....	....	124,466	....	40,000	....	....	....	....	....	....	....	....	....	....
Surgut	88,000	....	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....
Urengoy	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Komitek—Ukhta	126,518	13,156	....	17,518	....	19,297	....	19,500	....	....	....	....	....	....	....	....	....	4,981
Krasnodareconeft	34,140	14,472	....	110,149	....	....	....	....	....	....	....	....	....	....	....	....	....	5,645
Lukoil—Kogalym	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Perm	279,142	126,000	28,230	29,115	115,726	135,496	....	136,000 84,200	11,003	....	11,840	....	8,833	....	....	490	....	5,645
Volgograd	200,000	79,501	18,230 33,101	29,115	....	118,839	....	119,100 40,500 116,904	....	....	11,830	....	13,065	....	710.8	1,020	....	3,985
Mari El Refinery— Mari Republic	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nizhnekamsknefteorgsintez— Nizhnekamsk	120,493	....	....	....	....	....	....	....	....	....	....	....	....	1625	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Norilsk Refinery—Norilsk.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Norsi Oil— Kstovo, Nizhny Novgorod.....	359,200	74,600	....	....	....	145,506	....	146,800 107,500 116,904	....	....	11,790 21,890	....	7,020	....	....	....	....	15,607
Rosneft—Afipsky	28,115	....	....	....	....	116,147	....	112,658	....	....	13,680 22,387	....	....	....	....	....	....	....
Komsomolsk	108,000	33,266	39,679	211,300	....	8,100	....	19,000	....	....	....	2,700	....	....	....	....	....	....
Tarasovskoye	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tuapse	46,189	....	....	....	....	17,829	....	18,100	....	....	....	....	....	....	....	....	....	....
Russian Investment Co.— Angarsk	440,700	195,463	111,217	225,748	133,753	151,040	....	151,300 30,685 116,900 110,556	....	....	14,900	....	5,638	....	....	410	....	8,500
Khabarovsk	94,000	10,149	....	14,284	....	19,786	....	110,556	....	....	....	....	....	....	....	....	....	5,811
Salavatnefteorgsintez— Salavat	168,300	73,299	....	29,397	210,225	130,160	....	230,400 42,000	11,174	....	11,591	....	....	23,000	....	....	290	....
Sibneft—Omsk	378,000	195,000	112,100	226,500 30,071	165,589	142,400 324,710	19,178	167,100 43,000 242,192 116,904	11,272	....	111,139	....	3,800	11,750	....	510	....	17,433
Sidanco—Cracking-Saratov	134,387	65,780	....	....	....	223,487	....	133,562	....	....	....	....	....	....	....	....	30	3,868
Slavneft—Yanos	290,000	270,305	....	212,404	130,000	125,689	....	126,100 56,959 112,274	11,786	....	11,551	33,542	5,460	1800	....	....	....	10,460
Yaroslavl/Mendeleyev	8,700	....	....	....	....	....	....	....	....	....	....	....	5,300	....	....	....	....	....
Surgutneftegaz—Kirishi	335,900	85,327	....	....	....	156,840	....	167,900 104,800	....	....	15,172	37,085	....	....	....	....	45	16,603
Tatneft—Kichuyi	8,000	3,600	....	....	....	11,750	....	11,850	....	....	....	....	....	....	....	....	....	1,200
Tomskneft	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tyumen Oil Co.— Nizhnevartovsk	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Orsk, Orenburg	128,200	53,752	....	....	....	117,860	....	118,400 54,200	11,125	....	....	....	7,706	....	....	....	....	10,128
Ryazan	361,479	83,636	....	121,990	118,219	153,335	....	154,000 76,137 116,900	....	....	14,078 22,228	....	5,400	....	....	....	....	8,799
Ulyanovskneft	1,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yakutsk Refinery—Yakutsk	2,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yukos—Achinsk	126,000	40,184	....	....	....	125,519	....	125,519 59,679	....	....	....	....	....	....	....	....	21	11,600
Novo-Kuibishev	200,000	73,000	125,300	....	117,266	133,518	....	134,300 64,000	....	....	12,188	....	3,705	....	....	1,030	....	12,286
Samara-Kuibishev	125,000	40,700	....	115,787	213,788	143,794	....	144,400 57,120	1832	1750	....	....	....	....	....	....	....	....
Strezhevoy	4,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Syzran	151,460	48,800	....	116,915	217,068	138,550	....	137,900 78,822	....	....	11,760	....	....	....	....	....	....	7,637
Total	5,435,480	1,924,675	84,999	346,593	330,817	775,201	38,356	2,113,966	10,006	1,729	56,724	16,869	82,842	7,175	75.3	3,720	676	192,545

SAUDI ARABIA

Arabian Oil Co. Ltd.— Ras Al Khafji	30,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petromin-Shell—Al-Jubail	305,000	84,000	....	232,000	....	319,000	144,000	119,000 261,000 53,000 49,000	....	....	15,800 27,000	....	....	....	....	1970	....	....	....
Saudi Arabian Oil Co. (Saudi Aramco)—Rabigh	400,000	....	....	....	....	....	....	47,000	....	....	....	....	....	....	....	112.0	....	....	....
Ras Tanura	300,000	135,000	....	260,000	....	154,000	44,000	154,000	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Jeddah.....	60,000	34,000	....	....	113,000	13,000	310,000	13,000	....	....	....	....	....	....	....	....	....	....
Riyadh.....	120,000	52,350	....	....	....	135,660	133,820	135,660	....	....	....	....	....	....	180.7	....	....	....
Yanbu.....	190,000	....	....	....	....	135,000	....	135,000	....	....	....	....	....	....	....	....	....	....
Saudi Aramco-Mobil—Yanbu	340,000	142,400	....	246,100	190,600	246,700	....	715,000 173,500 793,400	223,500	....	....	112,600 320,400	....	12,200	....	....	....	....
Total	1,745,000	447,750	0	138,100	103,600	193,360	131,820	553,060	23,500	0	12,800	33,000	0	2,200	189.7	0	0	0

SENEGAL

Ste. Africaine de Raffinage— M'Bao (Dakar)	27,000	8,000	....	....	....	12,000	....	2,000	....	....	....	....	....	....	....	....	....	....
Total	27,000	8,000	0	0	0	2,000	0	2,000	0	0	0	0	0	0	0.0	0	0	0

SERBIA

NIS-Oil Refinery Novi Sad— Novi Sad	60,250	30,000	....	....	....	112,300	....	114,300 55,200 114,900 114,600	....	....	....	....	300	....	10.5	....	....	2,400
NIS-Rafinerija Nafta Pancevo— Pancevo	98,000	40,100	....	220,340	118,950	17,920	....	18,070 44,620 59,220	13,070	....	1200	....	....	....	....	....	59	....
Total	158,250	70,100	0	20,340	18,950	20,220	0	50,910	3,070	0	200	0	300	0	0.5	0	59	2,400

SIERRA LEONE

Sierra Leone Petroleum Refining Co. Ltd.—Freetown	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0

SINGAPORE

ExxonMobil Refining & Supply Co.—Jurong/Pulau Ayer Chawan	568,500	163,500	....	2115,500	....	135,000 359,000	m133,500	1140,000 425,500 5138,000	....	....	144,500	....	29,000	....	1270 465.0	....	400	13,500
Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	405,000	74,800	....	1,260,000	1,234,000	16,900 330,100	130,000	2119,300 77,600	23,000	....	....	....	6,500	....	140.8	....	....	8,400
Singapore Petroleum Co. Ltd.— Pulau Merlimau	285,000	71,250	....	230,400	231,000	213,500	c113,300 m417,000	113,700 78,000	14,200	24,100	....	....	....	11,400	235.0 470 514.0 65.0	....	....	10,400
Total	1,258,500	309,550	0	205,900	65,000	144,500	93,800	592,100	7,200	4,100	44,500	0	35,500	1,400	193.8	0	400	32,300

SLOVAKIA

Slovnaft, Joint Stock Co.— Bratislava	115,000	55,000	....	....	118,000	21,000	c119,000 c223,000	116,000 26,000 33,400 49,300 529,000 822,000 113,200 132,100	14,500	....	18,000 41,250	36,000	2,000	....	157.1 424.3 58.2	....	270	2,600
Total	115,000	55,000	0	0	18,000	21,000	42,000	91,000	4,500	0	9,250	6,000	2,000	0	90.0	0	270	2,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
SLOVENIA																		
Nafte Lendava—Lendava	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	13,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
SOUTH AFRICA																		
Caltex Oil SA—Cape Town	105,000	53,000	....	² 11,500	124,000	114,500	....	² 22,500 ⁴ 5,500 ⁵ 18,000	....	14,000	....	³ 5,000	....	....	....	....	82	....
Engen Petroleum Ltd.— Durban	125,000	70,300	....	² 23,300	122,600	120,750	....	¹ 28,300 ⁴ 17,600 ⁵ 27,050	² 2,830	1600	11,500	³ 6,290	2,739	....	412.7	....	130	6,290
National Petroleum Refiners of South Africa Pty Ltd.— Sasolburg	87,547	34,475	....	....	125,660	114,642	^c 11,774	² 12,830 711,562	³ 3,295	....	....	13,623	....	....	129.1 66.1	....	120	....
Shell and BP PLC Petroleum Refineries Pty. Ltd.—Durban	172,000	71,000	....	² 27,000	135,000	129,000	....	² 46,000 70,000 712,000 ¹ 370	³ 3,100	....	....	....	3,200	....	....	240	140	....
Total	489,547	228,775	0	61,800	107,260	78,892	11,774	271,712	9,225	4,600	1,500	14,913	5,939	0	47.9	240	472	6,290
SOUTH KOREA																		
Hyundai Lube Oil—Busan	9,500	6,650	....	....	....	....	....	² 1,800 ¹ 1,080	....	....	....	....	1,800	....	² 0.4	....	....	3,600
Hyundai Oil Refinery Co.— Daesan	310,000	41,000	² 19,000	....	....	³ 20,000	122,000	² 27,000 12,000	....	....	....	....	1,000	....	² 54.0	1,200	180	3,727
Inchon	270,000	18,000	....	....	....	¹ 5,400	....	² 27,900 86,850	....	....	113,000	....	....	....	....	....	126	....
LG-Caltex—Yosu	633,600	9,600	....	....	163,000	....	....	¹ 16,000 ³ 54,500 ⁴ 28,200	....	....	136,000	....	2,800	12,250	....	....	330	5,400
S-Oil Corp.—Onsan	520,000	160,000	....	....	160,000	343,000	^c 260,000 ^c 311,000	⁴ 178,600 ¹ 44,000 ² 12,000 ⁴ 21,000 ⁵ 85,000 ⁶ 40,000 ¹⁰ 50,000 ¹² 6,000	....	....	120,000	....	9,000	11,600	² 198.0 ¹ 57.0	....	900	8,500
SK Corp.—Ulsan	817,000	78,850	....	....	245,000	120,070 ³ 49,500	^c 27,000	¹ 71,280 ² 4,500 ¹ 59,300 ⁵ 4,000 ¹⁰ 27,000	15,400	....	127,900 ² 8,055 ³ 3,600	....	....	14,770	180.0 ² 65.0 ⁴ 199.0	....	1,195	2,970
Total	2,560,100	314,100	19,000	0	168,000	230,970	120,000	1,018,310	5,400	0	108,555	0	14,600	8,620	653.4	1,200	2,731	24,197
SPAIN																		
BP PLC—Castellon de la Plana	104,500	44,650	....	....	127,000	114,850	....	² 50,130 29,430 28,800	13,150	....	....	³ 9,900	....	....	....	....	....	....
Cia. Espanola de Petroles— Cadiz	240,000	40,000	....	² 38,000	138,000	136,000	....	135,000 ⁵ 54,000 ⁸ 30,000	² 5,600	....	111,500	² 5,500	2,300	21,300	44.8	....	246	....
Huelva	100,000	38,000	....	² 9,000	118,000	117,000	....	⁵ 30,000 ⁸ 15,000 ⁸ 15,000	....	....	16,100 24,400 ³ 3,800	....	2,600	....	123.7 49.8	....	115	5,500

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Tenerife.....	87,000	8,000	....	235,000	....	116,000	....	116,000 415,000 514,000	....	....	....	....	....	....	....	....	45	4,500
Petronor SA— Somorrostro Vizcaya	220,000	86,300	....	239,120	143,150	129,810	m432,100	141,300 4,565,803	24,770	....	....	....	....	11,390	a111.0 a229.0 642.0	....	246	....
Repsol YPF SA— Cartagena Murcia	120,000	14,000	....	....	....	125,000	....	229,000	....	....	....	....	3,000	....	....	....	....	5,000
La Coruna.....	135,000	40,000	213,500	....	128,000	122,000	....	17,000	....	....	....	....	....	1800	....	550	....	4,500
Puertollano, Ciudad Real	135,000	62,000	216,000	....	130,000	118,000	....	38,000 10,000	23,300	....	11,800	....	2,800	11,350	....	700	....	6,000
Tarragona	180,000	72,000	....	130,000	....	116,000	115,000	20,000 21,000	....	....	....	....	....	11,300	210.0	....	....	....
Total	1,321,500	404,950	29,500	151,120	184,150	194,660	47,100	574,463	16,820	0	27,600	15,400	10,700	6,140	130.3	1,250	652	25,500

SRI LANKA

Ceylon Petroleum Corp.— Sapugaskanda	47,500	2,280	....	211,250	....	14,770	....	18,897 47,164 51,890	....	....	....	....	....	....	....	....	....	900
Total	47,500	2,280	0	11,250	0	4,770	0	17,951	0	0	0	0	0	0	0.0	0	0	900

SUDAN

China National Petroleum Corp.—El-Gily	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Concorp—Khartoum.....	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Port Sudan Refinery Ltd.— Port Sudan.....	21,700	....	....	....	....	11,900	....	8,100	....	....	....	....	....	....	....	....	....	....
Total	121,700	0	0	0	0	1,900	0	8,100	0	0	0	0	0	0	0.0	0	0	0

SURINAME

Staatsolie Maatschappij Suriname n.v.— Wanica District.....	7,000	7,000	....	22,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,000	7,000	0	2,800	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0

SWEDEN

AB Nynas Petroleum— Gothenburg.....	13,000	13,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,700
Nynashamn.....	28,000	28,000	....	....	....	....	....	69,400	....	....	....	....	....	....	48.1	....	22	18,760
Preem Raffinaderi AB— Gothenburg.....	106,000	....	....	....	....	120,500	....	146,000 314,000 37,000 6,500	....	....	....	310,000	....	....	536.0	....	112	....
Shell Raffinaderi AB— Gothenburg.....	77,000	30,000	....	122,000	....	117,000	....	228,000 5,000 28,000	....	....	....	34,000	....	....	....	....	....	....
Skandinaviska Raffinaderi AB— Brofjorden-Lysekil.....	199,500	64,600	....	237,800	129,700	332,400	m48,600	248,600 345,900	....	13,420	....	314,400	....	....	69.7	....	200	....
Total	423,500	135,600	0	59,800	29,700	69,900	48,600	268,400	0	3,420	0	28,400	0	0	53.8	0	334	27,460

SWITZERLAND

Petroplus—Cressier.....	60,000	24,000	111,000 29,000	116,000	127,000 8,000 27,000	33,600	5,200
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WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Tamoil SA—Collombey	72,000	....	....	....	....	¹ 12,000	² 46,400	³ 118,900 ⁴ 120,000	....	....	....	⁵ 36,400	....	....	....	....	....	....
Total	132,000	24,000	0	20,000	0	28,000	6,400	100,900	0	0	0	10,000	0	0	0.0	0	0	5,200
SYRIA																		
Banias Refining Co.—Banias	132,725	50,935	....	¹ 22,689	....	² 21,430	³ 26,410	⁴ 121,480 ⁵ 16,070	....	....	....	⁶ 38,583	....	....	27.0	....	120	2,223
Homs Refinery Co.—Homs	107,140	12,200	¹ 18,200	....	....	² 9,812	....	³ 12,665 ⁴ 5,987 ⁵ 21,634 ⁶ 93,050	....	....	....	⁷ 12,910	....	....	....	500	30	....
Total	239,865	63,135	18,200	22,689	0	31,242	26,410	80,886	0	0	0	11,493	0	0	27.0	500	150	2,223
TANZANIA																		
Tanzanian & Italian Petroleum Refining Co. Ltd.— Kigamboni Dar es Salaam	14,900	....	....	¹ 2,500	....	² 2,500	....	³ 24,400	....	....	....	....	....	....	....	....	....	....
Total	14,900	0	0	2,500	0	2,500	0	4,400	0	0	0	0	0	0	0.0	0	0	0
THAILAND																		
Esso Standard Thailand Ltd.— Sriracha	173,500	54,000	....	....	¹ 35,000	² 25,000	....	³ 145,500 ⁴ 25,000 ⁵ 71,000	....	....	⁶ 19,000	....	....	....	....	....	160	6,000
PTT PLC—Bangchak Bangkok	61,750	....	....	....	....	¹ 9,450	....	² 14,950 ³ 25,850 ⁴ 16,200	....	....	....	....	....	....	14.7	....	....	....
Shell Co. of Thailand Ltd. ¹ — Map Ta Phut, Rayong	275,000	46,835	....	....	² 33,300	³ 13,500	....	⁴ 113,500 ⁵ 50,580 ⁶ 25,200 ⁷ 67,000	....	....	....	....	....	....	....	....	....	....
Thai Oil Co. Ltd.—Sriracha	192,850	93,100	....	¹ 16,983	² 9,230	³ 120,464 ⁴ 23,496	⁵ 118,460 ⁶ 24,613	⁷ 117,213 ⁸ 212,795 ⁹ 36,360 ¹⁰ 33,696 ¹¹ 33,696	....	....	....	¹² 119,596	....	....	128.8	....	....	....
Total	703,100	193,935	0	16,983	77,530	91,910	43,073	458,540	0	0	9,000	19,596	0	0	33.5	0	160	6,000
TRINIDAD & TOBAGO																		
Petroleum Co. of Trinidad & Tobago Ltd.— Pointe-a-Pierre	160,000	120,000	....	¹ 28,000	² 28,000	³ 19,000	⁴ 147,000	⁵ 119,000 ⁶ 18,000	⁷ 11,000	⁸ 15,000	....	....	....	⁹ 1750	¹⁰ 130.0	....	60	....
Total	160,000	120,000	0	28,000	28,000	19,000	47,000	37,000	1,000	5,000	0	0	0	750	30.0	0	60	0
TUNISIA																		
Ste. Tunisienne Industries des Raffinage—Bizerte	34,000	....	....	....	....	¹ 3,300	....	....	....	....	....	....	....	....	....	....	....	....
Total	34,000	0	0	0	0	3,300	0	0	0	0	0	0	0	0	0.0	0	0	0
TURKEY																		
Anadolu Tasfiyehanesi AS—Mersin	100,000	....	....	....	....	¹ 12,600	....	² 119,800 ³ 9,000	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Narli Petroleum Refining Industry & Commerce Inc.— Narli, Kahramanmaras	6,000	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,000
Turkish Petroleum Refineries Corp.—Aliaga-Izmir	226,440	75,490	....	218,870	115,095	19,810	116,360	111,320 211,320 39,055 411,320 76,790 117,250	....	....	....	....	5,870	....	234.4 488.5	....	98	472
Batman, Siirt	22,015	2,140	....	14,720	....	11,302	....	11,302	....	....	....	....	....	....	....	....	....	2,139
Izmit	251,600	89,947	....	....	113,840	16,920 114,000	122,960	120,760 210,065 33,150 427,050 76,290 839,000 1127,675 135,032	....	....	....	35,030	....	....	150.7 221.8	180	137	9,435
Kirikale	113,220	30,190	....	....	....	120,130	114,500	120,130 515,096	....	....	....	39,025	....	....	222.1	....	80	5,170
Total	719,275	201,767	0	23,590	28,935	64,762	53,820	261,405	0	0	0	14,055	5,870	0	2175	180	315	20,216

TURKMENISTAN

Ministry of Oil & Gas— Chardzou	120,493	50,745	....	....	....	¹ 24,466	....	¹ 24,900	....	....	....	....	....	....	....	....	....	....
Turkmenneftgas— Turkmenbashi	116,477	40,900	² 28,568	....	¹ 15,151	¹ 8,074 ³ 20,000	....	¹ 38,600	¹ 1,028	¹ 1,223	....	....	2,000	....	....	1,040	....	415
Total	236,970	91,645	28,568	0	15,151	52,540	0	63,500	1,028	1,223	0	0	2,000	0	0.0	1,040	0	415

UKRAINE

JSC Khersonnefte- Perperabotka—Kherson	137,630	43,000	² 12,000	....	....	¹ 16,637	....	¹ 13,041	....	....	....	....	....	....	....	340	....	5,811
Lukoil—Odessa	78,321	18,795	....	....	....	¹ 10,276	....	¹ 11,500 ² 8,767	....	....	....	....	....	....	....	....	....	3,155
TNK-Ukraina—Lisichansk	320,000	115,600	....	....	¹ 40,500	¹ 56,761	....	¹ 57,500 ² 79,014 ³ 42,192	....	....	² 1,870	....	....	¹ 125	¹ 21.5	....	90	....
Ukraine Oil Co.—Drogobich	78,321	25,185	³ 3,195	¹ 7,330	....	¹ 8,074	....	¹ 8,200	....	....	....	....	....	....	....	115	....	3,819
Ukratnafta—Kremenchug	360,000	119,997	....	....	¹ 29,600	² 44,400	³ 7,200	⁵ 65,999	....	....	¹ 1,594	....	....	....	....	....	86	....
Nadvornaja	50,487	13,720	² 6,954	¹ 9,961	....	¹ 8,563	....	¹ 8,800	....	....	....	....	....	....	....	250	....	....
Total	1,024,759	336,297	22,149	17,291	70,100	144,711	7,200	315,013	0	0	3,464	0	0	125	21.5	705	176	12,785

UNITED ARAB EMIRATES

Abu Dhabi Abu Dhabi National Oil Co.— Ruwais	145,000	56,680	....	....	¹ 19,150	....	^c 131,050	¹ 21,889 ² 39,248 ³ 21,850 ⁴ 23,500 ⁵ 22,500	....	....	....	....	....	....	¹ 53.0	....	....	....
Umm Al-Nar	88,000	....	....	....	....	³ 14,000	....	² 3,500 ⁵ 22,500	....	....	....	....	....	....	....	....	35	....
Total	233,000	56,680	0	0	19,150	14,000	31,050	128,987	0	0	0	0	0	0	53.0	0	35	0
Dubai Eminates National Oil Co.— Jebel Ali	120,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	....
Total	120,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	6	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Fujairah																		
Metro Oil Corp.	90,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	90,000	17,000	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Sharjah																		
Sharjah Oil Refining Co. Ltd.— Hamriyah	71,250	19,190	....	....	115,200	111,875	....	215,580 42,470 611,590	21,140	11,900	....	....	....	....	75.8	....	16	700
Total	71,250	19,190	0	0	15,200	11,875	0	29,640	1,140	1,900	0	0	0	0	5.8	0	16	700
UNITED KINGDOM																		
England																		
BP PLC —Coryton Essex	180,000	57,950	....	....	56,250	334,200	....	166,600 42,300	218,000	....	....	313,500	6,750	....	....	....	....	2,430
ConocoPhillips— South Killingholme.....	197,000	185,000	265,000	140,000	154,000	147,000	....	553,000 7138,000 928,000 127,650	214,000	13,500	14,500 22,500	316,000	....	....	....	2,300	140	....
Eastham Refinery Ltd.A— Eastham.....	22,500	21,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ExxonMobil Refining & Supply Co.—Fawley	316,000	137,000	....	....	172,000	137,000 223,000	....	195,000 437,000 574,000 1022,000 111,500	....	19,500	....	221,000	11,200	....	648.0	....	275	5,500
Petroplus International NV— Teesside.....	100,000	....	....	....	....	....	....	524,000	....	....	....	....	....	....	....	....	4	....
Shell U.K. Ltd.—Stanlow.....	245,000	46,000	....	....	66,000	129,000 330,000	....	159,000 214,000 57,000	211,000	....	19,000	....	4,500	....	....	....	....	....
TotalFinaElf Lindsey Oil Refinery Ltd.—Killingholme South Humberside	192,000	92,000	....	228,700	148,400	132,600	....	251,000 54,000	26,300	11,900	....	....	....	12,400 31,300	....	....	130	7,100
Total	1,252,500	539,450	65,000	68,700	296,650	232,800	0	834,050	49,300	14,900	16,000	50,500	22,450	3,700	48.0	2,300	549	15,030
Scotland																		
AB Nynas Petroleum— Dundee	12,000	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,000
BP PLC —Grangemouth.....	206,000	64,600	....	....	118,900	139,600	131,500	262,100 731,500	24,500	....	....	....	....	....	149.0	....	....	....
Total	218,000	76,600	0	0	18,900	39,600	31,500	93,600	4,500	0	0	0	0	0	49.0	0	0	8,000
Wales																		
ChevronTexaco Corp. — Pembroke, Dyfed	210,000	105,000	....	226,000	190,000	339,000	....	139,000 214,000 560,000	232,500	....	....	119,900 312,000	....	....	....	....	160	....
Elf Oil UK Ltd.— Milford Haven	108,000	55,000	....	....	132,500	117,800	....	117,800 27,500 71,000 136,800	26,800	21,800	....	37,500	....	....	....	....	22	....
Total	318,000	160,000	0	26,000	122,500	56,800	0	216,100	39,300	1,800	0	39,400	0	0	0.0	0	182	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
UNITED STATES																		
ALABAMA																		
Coastal ExxonMobil Refining Co.—Mobile Bay	20,000	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hunt Refining Co.— Tuscaloosa*	43,225	14,250	² 12,600	....	....	¹ 6,480	....	¹ 9,000 ⁴ 1,800 ⁵ 10,800 ⁸ 9,900	....	....	....	....	....	....	^a 16.1 ⁴ 7.0	500	80	10,800
Shell Chemical Co.—Saraland.....	85,000	28,000	....	....	....	¹ 21,000	....	¹ 25,000 ⁹ 18,000	....	....	....	³ 7,500	....	....	....	....	20	....
Total	148,225	57,250	12,600	0	0	27,480	0	74,500	0	0	0	7,500	0	0	13.1	500	100	10,800
ALASKA																		
BP PLC—Prudhoe Bay	15,000	....	³ 15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kuparuk	14,500	....	³ 14,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petro Star Inc.—North Pole.....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valdez	48,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tesoro Alaska Co.—Kenai	72,000	19,000	....	....	....	¹ 12,000	^c 12,500	¹ 12,500	....	....	....	³ 4,000	....	....	^a 12.8	....	19	1,000
Williams Alaska Petroleum Inc.— North Pole	220,000	8,000	....	....	....	....	....	....	....	....	¹² 800	....	....	....	....	....	....	2,300
Total	384,500	27,000	29,500	0	0	12,000	12,500	12,500	0	0	2,800	4,000	0	0	12.8	0	19	3,300
ARKANSAS																		
Cross Oil Refining Co. Inc.— Smackover.....	7,000	3,000	....	....	....	....	....	¹¹ 4,500	....	....	....	....	4,500	....	12.5	....	....	1,500
Lion Oil Co.—El Dorado	64,000	26,500	....	....	¹¹⁹ 700	³ 14,000	....	¹²⁰ 000 ⁵⁸ 500 ⁸² 1,000	¹⁴ 900	....	....	³⁶ 500	....	....	....	....	157	8,400
Total	71,000	29,500	0	0	19,700	14,000	0	54,000	4,900	0	0	6,500	4,500	0	2.5	0	157	9,900
CALIFORNIA																		
BP PLC—Carson.....	260,000	130,000	²⁶⁵ 000	....	¹⁹⁶ 000	¹⁵² 000	^c 143,000	¹⁴⁰ 000 ²²⁷ 000 ⁴¹⁰ 000 ⁵²⁰ 000 ⁸⁹⁰ 000	¹¹⁵ 000	¹² 800	....	¹³ 500 ³²⁰ 000	....	12,500	^{1105.0}	2,400	350	....
ChevronTexaco Corp.— El Segundo.....	260,000	120,000	²⁶⁴ 000	....	¹⁶² 000	³⁴⁰ 000	^c 145,000	¹⁵² 000 ⁴¹⁵ 000 ⁵³⁴ 000 ⁷⁶ 000 ⁸⁶⁸ 000 ¹²¹⁸ 000	121,000	....	....	¹³ 800 ³¹⁹ 000	....	¹¹⁷⁰⁰ ³²⁶⁰⁰	^{168.0} ^{271.0}	3,447	406	....
Richmond	225,000	110,000	....	....	¹⁶⁵ 000	¹⁴⁵ 000	^c 141,000 ^c 328,000 ^c 40,000	¹⁵⁰ 000 ⁴⁵⁰ 000 ⁵²⁵ 000 ¹¹¹⁹ 000	120,000	¹¹⁸⁰⁰	....	³²⁵ 000	14,000	¹²³⁰⁰ ³²⁵⁰⁰	^{1145.0} ^{410.0}	....	350	....
ConocoPhillips—Los Angeles (Carson and Wilmington)*	130,500	78,000	²⁴⁸ 000	....	¹⁴⁵ 000	¹³⁵ 200	^c 124,750	¹⁵⁰ 850 ⁷³⁵ 000 ⁸⁵⁰ 000	¹¹⁴ 200	....	....	¹⁵ 300 ²¹² 200	....	....	^{1100.0}	2,000	340	....
Rodeo Santa Maria*	107,920	78,309	²⁴⁷ 502	....	....	¹³⁰ 600	¹³² 400	¹²² 113 ⁶¹⁴ 850 ⁷⁹ 000	....	....	....	³⁸ 100	....	....	^{177.7} ^{42.2}	2,133	436	....
ExxonMobil Refining & Supply Co.—Torrance	149,000	98,000	²⁵¹ 500	....	¹⁹⁰ 500	¹¹⁹ 000	^c 123,000	¹²³ 500 ⁷¹⁷ 500 ⁸¹⁰⁰ 000	²²³ 500	....	....	....	....	....	^{1135.5} ^{621.5}	3,215	400	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Kern Oil & Refining Co.— Bakersfield	25,000	....	....	....	....	13,000	....	14,500 32,000 56,500	....	....	....	....	....	....	....	....	5	....
San Joaquin Refining Co. Inc.— Bakersfield	24,300	14,300	....	210,000	....	....	....	63,000	....	....	....	....	4,000	....	13.5 43.5	....	3	5,000
Shell Oil Products USG— Bakersfield	65,000	39,000	222,000	....	....	114,700	123,500	112,500 920,000 139,400	....	....	....	....	....	....	124.7 65.0	1,200	103	....
Martinez.....	154,800	102,400	224,200 20,400	....	167,700 21,000	228,200	133,800	126,000 17,600 721,400 870,800 118,600 1345,200	110,200	22,300	....	114,400	3,500	....	1101.2	1,181	432	15,000
Wilmington	98,500	58,000	241,000	....	135,000	131,000	129,000	134,000 38,500 413,500 836,000	18,700	....	....	....	....	....	113.0 155.0 413.0 455.0	1,890	285	....
Tesoro PetroleumB— Golden Eagle.....	161,000	144,000	142,000	....	166,500	120,000 22,000	132,000	123,000 39,000 532,000 614,000 862,000 135,500	114,000	....	....	....	....	12,300	174.0 131.0	1,500	140	....
Valero Energy Corp.—Benicia	148,000	80,500	129,000	....	172,000	236,000	135,000	129,000 244,000 311,000 413,500 711,500 837,000 1321,000	115,000	22,500	....	....	....	13,500	1131.5	1,080	275	6,600
Valero Energy Corp.H— Wilmington	84,000	49,700	128,000	....	154,000	316,000	....	130,000 530,000 630,000 862,000 1215,000 1315,000	215,000	....	....	110,000	....	....	157.0	1,700	250	3,500
Total	1,893,020	1,102,209	482,602	10,000	654,700	392,700	430,450	1,680,813	156,600	9,400	0	121,300	21,500	17,400	1,303.3	21,746	3,775	30,100
COLORADO																		
ConocoPhillips— Commerce City	60,000	25,000	....	....	119,000	19,600	....	19,600 512,500 812,000	....	12,600	....	....	....	....	....	....	90	10,500
Valero Energy Corp.H— Denver	28,000	9,500	....	....	18,000	19,000	....	19,000	....	1900	....	....	....	....	....	....	4	....
Total	88,000	34,500	0	0	27,000	18,600	0	43,100	0	3,500	0	0	0	0	0.0	0	94	10,500
DELAWARE																		
Motiva Enterprises LLC— Delaware City	175,000	91,000	147,000	....	173,000	339,000	218,000	145,000 415,000 744,000 1215,000	18,190	15,040	11,260	16,000	....	12,192 2,322	138.0 422.0	1,700	514	....
Total	175,000	91,000	47,000	0	73,000	39,000	18,000	119,000	8,190	5,040	1,260	6,000	0	4,514	60.0	1,700	514	0

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
HAWAII																		
ChevronTexaco Corp.— Barber's Point.....	54,000	30,000	....	....	121,000	....	....	133,000	14,000	21,000	....	11,200	....	....	12.0	....	....	1,300
Tesoro Hawaii Corp.— Kapolei.....	93,700	39,500	....	211,500	....	112,800	117,600	110,800	....	....	....	....	....	....	218.0	....	34	1,000
Total	147,700	69,500	0	11,500	21,000	12,800	17,600	13,800	4,000	1,000	0	1,200	0	0	20.0	0	34	2,300
ILLINOIS																		
Citgo Petroleum Corp.— Lemont*	158,650	71,250	235,100	....	160,300	128,080	....	144,100 33,960 531,950 713,500 129,900	218,900	....	16,030	....	....	....	14.5	2,101	344	....
ConocoPhillips—Wood River.....	286,400	107,000	....	....	190,000	115,000 270,000	128,500	160,000 210,000 825,500 1212,000 1370,600	120,500	....	13,500	....	....	....	151.5	....	435	40,000
ExxonMobil Refining & Supply Co.—Joliet.....	238,000	113,000	255,500	....	193,000	342,000	....	178,500 213,000 784,500	227,000	....	....	....	....	....	....	3,330	600	10,500
Marathon Ashland Petroleum LLC—Robinson	192,000	61,900	227,600	....	150,400	234,200 337,100	125,700	157,000 566,500	212,400	....	....	313,300	....	11,300 3200	....	1,270	222	....
Total	875,050	353,150	118,200	0	293,700	226,380	54,200	581,010	78,800	0	9,530	13,300	0	1,500	56.0	6,701	1,601	50,500
INDIANA																		
BP PLC—Whiting	410,000	242,000	234,200	....	1156,800	285,500	....	186,900 796,000 1324,700 92,200	134,200	....	116,200	224,700	....	13,800	129.5	1,690	449	60,000
Countrymark Cooperative Inc.— Mount Vernon	23,500	7,400	....	....	7,850	36,500	....	210,000	21,700	....	....	32,200	....	....	....	....	....	....
Total	433,500	249,400	34,200	0	164,650	92,000	0	309,800	35,900	0	16,200	26,900	0	3,800	29.5	1,690	449	60,000
KANSAS																		
Farmland Industries— Coffeyville	95,000	50,000	217,000	....	129,000	117,000	....	228,500 47,000 723,800	27,000	....	....	38,500	....	....	....	800	....	....
Frontier Oil Corp.—El Dorado	110,000	39,000	218,000	....	137,200	129,500	....	124,000 218,000 412,400 523,500 845,000	212,500	....	13,000	312,500	....	....	16.0 312.0	860	250	....
National Cooperative Refining Assoc.—McPherson	79,000	31,600	220,400	....	120,900	320,900	11,200	121,800 210,200 525,700 79,600	26,300	....	....	13,300 310,200	....	....	....	612	81	....
Total	284,000	120,600	55,400	0	87,100	67,400	11,200	249,500	25,800	0	3,000	34,500	0	0	18.0	2,272	331	0
KENTUCKY																		
Marathon Ashland Petroleum LLC—Catlettsburg.....	222,000	91,200	....	....	155,100 240,900	345,600	....	146,600 26,700 35,700 587,400 838,000 1110,900	212,400	....	13,500 47,600	313,300	8,900	12,600	....	....	494	21,900

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Somerset Refinery Inc.— Somerset	5,500	....	....	....	....	21,500	....	11,500 4500	....	....	....	....	....	....	....	....	....	....
Total	227,500	91,200	0	0	96,000	47,100	0	197,300	12,400	0	11,100	13,300	8,900	2,600	0.0	0	494	21,900
LOUISIANA																		
American International Refining Inc.—Lake Charles	30,000	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	880
Calcasieu Refining Co.— Lake Charles	15,680	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Calumet Lubricants Co.— Cotton Valley	8,500	....	....	....	....	....	....	134,000	....	....	....	....	....	....	a12.5 42.5	....	....	....
Princeton	9,500	8,500	....	....	....	....	48,000	....	....	....	....	....	7,000	....	a14.5 44.5	....	3	....
Shreveport	15,000	10,000	....	....	....	....	c47,200	131,100	....	....	....	....	7,000	....	a16.1 46.1	....	15	....
Canal Refining Co.— Church Point	30,000	2,500	....	....	....	....	....	16,000 42,000	....	....	....	....	....	....	....	....	....	....
Cit-Con Oil Corp.— Lake Charles .....	....	36,100	....	....	....	....	....	....	....	....	....	....	8,550	....	....	....	....	....
Citgo Petroleum Corp.— Lake Charles	336,801	79,800	288,200	....	1126,000	145,900 357,600	c137,800	1103,500 26,300 422,950 532,400 864,800	120,700	....	16,480	328,800	....	13,150 34,140	a147.7 610.8	3,870	567	....
ConocoPhillips— Belle Chasse	250,000	92,000	225,200	....	1104,000	142,000	....	247,000 430,000 735,000	238,000	....	112,400 25,400	....	....	....	710.4	800	70	....
Westlake*	232,000	110,000	260,000	....	140,000	342,000	c329,000	140,420 423,800 545,000 64,000 840,000	75,000	3,000	....	....	....	....	490.5	3,600	....	....
ExxonMobil Refining & Supply Co.—Baton Rouge	491,500	220,500	2108,000	....	1227,000	272,000	c123,000	1103,000 785,500 1123,500 1250,500 1346,000	135,000	19,500	....	....	16,000	17,000	412.0 612.0	5,000	675	....
Chalmette	182,500	102,000	233,000	....	168,000	128,000 318,000	c118,500	139,500 729,000 855,500	212,500	....	110,000	39,500	....	....	45.0	2,050	920	....
Marathon Ashland Petroleum LLC—Garyville	232,000	118,800	232,800	....	1109,300	346,600	....	147,500 562,700 898,800	229,500	....	....	122,800 319,000	....	....	....	2,322	870	39,900
Motiva Enterprises LLC— Convent	235,000	100,000	....	212,000	185,000	136,000	c245,000	140,000 425,000 563,000 834,000	113,050	23,600	....	311,250	....	12,250 32,500	a158.0	....	700	....
Norco	220,000	78,000	221,300	....	1105,000	119,100 238,200	c131,500	138,000 535,300	114,800	....	....	....	....	17,500	149.4	900	140	....
Murphy Oil USA Inc.— Meraux	95,000	47,500	....	....	134,200	....	....	119,800 13,500 1324,750	27,650	....	....	....	....	....	....	....	120	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Orion Refining Corp.—Norco	155,000	124,000	275,000	....	185,000	112,000	....	130,000 730,000 30,000	....	....	....	....	....	....	....	4,110	290	....
Placid Refining Co. LLC— Port Allen	48,000	20,000	....	....	119,000	19,700	....	29,700 712,000	23,800	....	....	....	....	....	....	....	28	....
Shell Chemical Co.—St. Rose.....	55,000	28,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valero Energy Corp.— Krotz Springs	78,000	29,500	....	....	130,500	112,000	....	113,000 23,250	....	12,100	....	33,000	....	....	....	....	....	....
Total	2,719,481	1,222,200	443,500	12,000	1,033,000	479,100	200,000	1,571,070	250,000	18,200	34,280	94,350	38,550	26,540	322.0	22,652	4,398	40,780
MICHIGAN																		
Marathon Ashland Petroleum LLC—Detroit.....	74,000	36,100	....	....	128,500	120,000	....	113,300 518,400 816,900	13,900	....	....	....	....	11,000	....	....	162	20,900
Total	74,000	36,100	0	0	28,500	20,000	0	48,600	3,900	0	0	0	0	1,000	0.0	0	162	20,900
MINNESOTA																		
Koch Petroleum Group ^B — Rosemount*	270,750	171,000	261,200	....	177,400	211,700 332,400	....	145,900 235,100 419,800 572,000 65,400 894,500	110,980	1990 23,240	....	216,200	....	....	199.0 59.0	3,600	810	22,500
Marathon Ashland Petroleum LLC—St. Paul Park.....	70,000	30,400	....	....	124,700	120,000	....	120,900 525,700 824,700	25,200	....	....	11,900 36,700	....	....	19.5	....	114	11,400
Total	340,750	201,400	61,200	0	102,100	64,100	0	344,000	16,180	4,230	0	24,800	0	0	117.5	3,600	924	33,900
MISSISSIPPI																		
ChevronTexaco Corp.— Pascagoula	295,000	231,000	271,000	....	163,000	171,000	c158,000 c284,000	145,000 428,000 532,000 1335,000 98,600	114,800	....	119,000	....	....	12,100	1205.0	4,083	1,067	....
Ergon Refining Inc.—Vicksburg.....	23,000	10,200	....	....	....	....	....	....	....	....	....	....	8,300	....	1a7.7	....	....	9,600
Total	318,000	241,200	71,000	0	63,000	71,000	142,000	148,600	14,800	0	19,000	0	8,300	2,100	212.7	4,083	1,067	9,600
MONTANA																		
Cenex Harvest States—Laurel	56,000	28,000	....	....	113,100	111,800	....	114,000 514,600 815,500	24,200	....	....	12,500	....	....	112.0 412.0	...	125	16,500
ConocoPhillips—Billings*	57,950	28,500	217,325	....	118,090	112,150	....	733,012 821,780	26,489	....	....	13,420	....	....	120.0 611.4	825	....	....
ExxonMobil Refining & Supply Co. (b)—Billings.....	58,000	27,500	18,000	....	120,000	112,000	c15,000	212,500 510,500 713,500 137,000	14,000	....	....	....	....	....	122.0 64.5	375	....	12,500
Montana Refining Co.— Great Falls	7,000	3,350	....	....	12,300	11,000	....	....	....	....	....	....	....	....	....	....	....	....
Total	178,950	87,350	25,325	0	53,490	36,950	5,000	142,392	14,689	0	0	5,920	0	0	81.9	1,200	125	29,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
NEW JERSEY																		
Coastal Eagle Point Oil Co.— Westville	150,000	47,500	....	....	¹ 55,000	¹ 28,000	....	¹ 29,000	¹ 4,000	¹ 3,300	¹ 17,000	³ 10,000	....	....	....	....	20	....
ConocoPhillips—Linden	250,000	62,000	....	....	¹ 138,000	² 28,000	....	⁷ 65,000 ⁸ 45,000 ¹² 40,000 ¹³ 14,000 ⁸ 45,000	¹ 16,000	....	....	¹ 8,300	....	....	⁶ 11.0	....	340	0
Valero Energy Corp.— Paulsboro	166,000	85,000	² 26,600	....	¹ 52,000	¹ 24,500	....	¹ 26,000 ⁴ 25,000 ⁵ 45,500 ¹¹ 750 ¹³ 14,000	² 11,100	....	....	....	11,500	....	⁸ 12.0 ⁴ 9.0	1,470	210	16,000
Total	566,000	194,500	26,600	0	245,000	80,500	0	378,250	31,100	3,300	17,000	18,300	11,500	0	32.0	1,470	570	16,000
NEW MEXICO																		
Giant Refining Co.—Bloomfield	18,600	....	....	....	¹ 6,000	¹ 4,800	....	¹⁴ 800 ⁵³ 000	....	¹² 000	....	....	....	....	....	....	1	....
Gallup	26,000	....	....	....	¹ 8,500	¹ 7,300	....	¹⁷ 500 ⁷⁴ 000	²¹ 800	....	....	³⁴ 000	....	....	....	....	2	....
Navajo Refining Co.—Artesia	60,000	20,000	....	....	¹ 18,500	³ 12,500	....	¹²⁵ 000 ²⁵ 500	²⁷ 800	....	....	³ 10,000	....	....	....	....	30	3,500
Total	104,600	20,000	0	0	33,000	24,600	0	69,800	9,600	2,000	0	14,000	0	0	0.0	0	33	3,500
NORTH DAKOTA																		
Tesoro West Coast Co.— Mandan	58,000	....	....	....	¹ 24,700	² 11,500	....	¹ 12,000	²⁴ 200	¹¹ 100	....	³⁴ 800	....	....	....	....	15	....
Total	58,000	0	0	0	24,700	11,500	0	12,000	4,200	1,100	0	4,800	0	0	0.0	0	15	0
OHIO																		
BP PLC —Toledo	152,000	66,000	² 34,200	....	¹ 57,000	²⁴ 0,800	⁶ 128,500	²³ 8,000 ¹⁴ 300 ⁸ 38,000	¹ 10,900	....	....	....	....	....	^{133.0} ^{424.0} ^{68.0}	1,736	314	8,600
Marathon Ashland Petroleum LLC—Canton	73,000	30,000	....	....	¹ 22,800	³ 18,100	....	¹ 23,800 ⁵⁸ 600 ⁸ 24,700	²⁶ 700	¹ 800	....	³³ 800	....	....	....	....	121	10,900
Premcor Refining Group— Lima	165,000	52,000	² 22,500	....	¹ 40,000	²⁵⁵ 500	⁶⁴ 26,000	¹ 63,000	....	....	¹⁷ 000	³ 18,700	....	....	⁷ 10.4	800	52	....
Sunoco Inc.—Toledo	140,000	30,000	....	....	¹ 60,000	¹⁴⁵ 600	¹ 28,200	¹⁴⁸ 000	¹⁹ 000	....	¹⁹ 000	....	....	....	^{152.0}	....	....	....
Total	530,000	178,000	56,700	0	179,800	160,000	82,700	258,400	26,600	800	16,000	22,500	0	0	127.4	2,536	487	19,500
OKLAHOMA																		
ConocoPhillips— Ponca City*	189,620	68,970	² 24,210	....	¹ 58,815	¹⁴⁷ 160	....	¹⁴⁴ 775 ⁴ 13,950 ⁶ 11,385 ⁷ 30,870 ⁸ 20,700	² 14,580	¹² 430	....	¹⁷ 920	....	....	⁶ 15.3	900	32	....
Gary-Williams Energy Corp.— Wynnewood	52,500	15,500	....	....	¹ 18,500	³ 13,000	¹⁵ 000	¹ 12,000	²⁴ 000	....	....	³³ 500	....	....	^{19.0}	....	....	5,000
Sinclair Oil Corp.— Tulsa	50,000	25,175	....	....	¹ 16,200	¹ 10,800	....	¹ 10,800 ⁷ 15,500	¹² 700	....	....	³⁵ 400	....	....	....	....	19	2,250
Sunoco Inc.—Tulsa	85,000	30,000	²⁸ 500	....	....	¹ 17,500	....	¹²⁴ 000 ¹¹ 10,500	....	....	....	....	8,500	....	....	350	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Valero Energy Corp. ^H — Ardmore	85,000	32,000	....	....	¹ 27,500	² 20,000	....	³ 25,800 ⁴ 33,200 ⁵ 31,200	⁶ 26,400	....	....	⁷ 37,000	....	....	⁸ 126.0 ⁹ 26.0	....	98	10,000
Total	462,120	171,645	32,710	0	121,015	108,460	5,000	284,680	27,680	2,430	0	23,820	8,500	0	76.3	1,250	149	17,250
PENNSYLVANIA																		
American Refining Group— Bradford	10,000	....	....	....	....	¹ 1,800	....	² 3,500	....	....	....	....	2,600	....	....	....	....	....
ConocoPhillips—Trainer*	186,200	75,430	....	....	³ 48,420	⁴ 48,780	⁵ 19,890	⁶ 51,930 ⁷ 20,340 ⁸ 38,340	⁹ 211,790	....	....	....	....	....	....	....	144	....
Sunoco Inc.—Marcus Hook	175,000	26,400	....	....	¹ 93,000	² 15,600	....	³ 36,000 ⁴ 12,000	⁵ 110,000	....	⁶ 19,200 ⁷ 32,400	....	....	⁸ 12,600	⁹ 16.0	....	....	....
Philadelphia	330,000	157,400	....	....	¹ 113,500	² 68,000	....	³ 85,600 ⁴ 578,000	⁵ 216,700	....	⁶ 13,700 ⁷ 40,000	⁸ 17,300	....	....	....	....	....	....
United Refining Co.—Warren	66,700	27,000	....	....	¹ 23,000	² 16,000	....	³ 20,000 ⁴ 6,000 ⁵ 14,000	⁶ 13,500	⁷ 11,000	....	⁸ 36,800	....	....	....	....	....	12,000
Total	767,900	286,230	0	0	277,920	150,180	19,890	365,710	41,990	1,000	35,300	14,100	2,600	2,600	6.0	0	144	12,000
TENNESSEE																		
Williams Energy Services— Memphis	190,000	....	....	....	¹ 68,000	² 36,000	....	³ 60,000 ⁴ 51,000 ⁵ 12,000	⁶ 212,000	....	....	⁷ 34,000	....	....	....	....	45	....
Total	190,000	0	0	0	68,000	36,000	0	123,000	12,000	0	0	4,000	0	0	0.0	0	45	0
TEXAS																		
AGE Refining & Manufacturing— San Antonio	10,000	....	....	....	....	....	....	....	....	....	¹ 12,000	....	....	....	....	....	....	....
Alon USA—Big Spring	61,000	24,000	....	....	² 123,000	³ 121,000	....	⁴ 25,500 ⁵ 43,200 ⁶ 22,000 ⁷ 86,200	⁸ 24,500	....	⁹ 12,000	....	....	....	....	....	135	7,600
Atofina Petrochemicals, Inc.— Port Arthur	176,000	49,900	....	....	¹ 62,800	² 36,100	³ 40,500	⁴ 43,600 ⁵ 39,300 ⁶ 27,800	⁷ 15,700	....	⁸ 113,000	⁹ 39,400	....	....	....	....	264	4,300
BP PLC —Texas City	437,000	228,000	¹ 40,400	....	² 1209,000	³ 2137,800	⁴ 157,000 ⁵ 257,000	⁶ 1104,500 ⁷ 133,000 ⁸ 126,400	⁹ 120,900 ¹⁰ 38,000	....	¹¹ 43,700	¹² 31,400	....	....	¹³ 180.0 ¹⁴ 22.8	2,585	1,123	....
ChevronTexaco Corp.—El Paso	90,000	34,700	....	....	¹ 128,000	² 117,700	....	³ 118,300 ⁴ 48,200 ⁵ 11,300	⁶ 18,200	....	....	⁷ 12,500	....	....	....	....	20	4,800
Citgo Petroleum Corp.— Corpus Christi*	156,750	73,625	¹ 37,800	....	² 172,450	³ 47,250	....	⁴ 149,050 ⁵ 44,100 ⁶ 56,880 ⁷ 19,350	⁸ 218,090	....	⁹ 112,600 ¹⁰ 2,835 ¹¹ 3,600 ¹² 11,070	....	....	¹³ 13,600	....	2,340	282	....
Coastal Refining & Marketing Inc.—Corpus Christi	100,000	56,000	¹ 17,500	² 10,000	³ 120,000	⁴ 110,000 ⁵ 20,000	⁶ 111,000	⁷ 131,000 ⁸ 412,000 ⁹ 14,000 ¹⁰ 25,000	¹¹ 23,000	¹² 12,000	¹³ 14,500 ¹⁴ 26,000	¹⁵ 35,200	....	....	¹⁶ 124.0 ¹⁷ 15.0	1,000	280	12,000
ConocoPhillips—Borger*	142,785	....	....	....	¹ 58,320	² 127,810	....	³ 132,850 ⁴ 214,400 ⁵ 27,000 ⁶ 12,600 ⁷ 71,100	⁸ 217,100	....	⁹ 32,250	¹⁰ 117,100 ¹¹ 220,160 ¹² 36,750	....	....	¹³ 163.0	....	360	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Sweeny.....	215,650	111,150	259,310	....	194,050	332,400	....	150,130 748,420 895,040	214,940	....	19,900 36,750	29,090	....	11,845	585.5 763.0	3,387	432	....
Crown Central Petroleum Corp.—Pasadena.....	100,000	42,000	212,500	....	156,000	....	....	126,000 510,000	213,000	....	....	....	....	12,000	....	480	25	....
ExxonMobil Refining & Supply Co.—Baytown.....	523,000	252,500	240,000 338,000	....	1202,500	2122,000	2125,500	1149,000 433,500 7188,500 8105,500 1126,500	130,000	....	....	....	20,000	16,500	183.5 657.5	3,150	1,630	....
Beaumont.....	348,500	141,000	248,000	....	1108,000	3147,000	2160,000	1106,500 241,000 451,500 562,000 116,000 1325,500	115,500	....	....	224,500	12,500	14,500	554.5	2,900	580	....
Flint Hills Resources ^A — Corpus Christi.....	297,000	104,500	113,680	....	1104,500	110,800 346,800	110,530	147,700 254,000 413,500 556,700 916,200	211,700	....	114,400 24,050 31,800 412,600	311,700	....	11,530	....	600	235	....
LaGloria Oil & Gas Co. —Tyler.....	60,000	15,000	26,500	....	120,200	317,500	....	120,000 512,000	14,750	....	....	35,000	....	....	....	250	18	....
Lyondell-Citgo Refining LP— Houston.....	268,850	187,625	287,300	....	189,100	160,300	....	164,800 224,210 419,800 576,500 73,060 892,700	118,810	....	19,630	....	3,700	12,610	....	5,000	1,042	....
Marathon Ashland Petroleum LLC—Texas City.....	72,000	....	....	....	141,800	110,500	....	....	210,500	....	12,400	....	....	....	....	....	....	....
Motiva Enterprises LLC— Port Arthur.....	250,000	110,000	249,500	....	186,000	345,000	2117,820	145,000 436,000 545,000 822,000 1226,800 1319,200	118,000	....	....	....	21,000	....	....	2,540	540	....
Premcor Refining Group— Port Arthur.....	225,000	130,000	280,000	....	177,000	150,000	213,500	150,000 430,000 570,000 862,000	217,000	....	....	....	....	....	....	1,900 5,000	425 840	....
Shell Deer Park Refining Co. ^G — Deer Park.....	333,800	181,600	280,200	....	167,500	122,400 245,400	2162,600	177,200 433,700 543,200 846,600 1111,200	116,500	....	16,100	....	....	16,100	2165.8 436.5	5,089	1,150	4,500
Valero Energy Corp.— Corpus Christi.....	140,000	86,700	217,500	....	120,000 287,000	110,000 358,500	2447,000	163,000 411,000 512,000 827,000 1071,000	216,500	....	117,000	115,300	....	120,000 32,900	2192.0 4140.0 63.8	1,000	580	12,000
Houston.....	83,000	39,000	....	....	162,000	110,500	....	112,500 532,000	18,500	....	....	....	....	12,200	....	....	70	....
Valero Energy Corp. ^H — Sunray.....	155,000	47,000	....	....	154,500	118,000 328,000	2230,000	136,000 43,500 526,000	19,000	....	....	....	....	11,800 32,200	....	....	60	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Valero Energy Corp.— Texas City	210,000	100,000	....	....	178,500	³ 13,500	....	¹ 18,500 ⁴ 32,100 ⁵ 50,000 ¹⁰ 82,000	² 11,500	....	....	²⁵ 8,800	....	¹² 4,000	....	....	620	....
Valero Energy Corp. ^H — Three Rivers.....	97,000	29,000	....	....	123,000	¹ 10,500 ³ 20,000	² 29,000	¹ 19,000 ⁴ 10,500 ⁵ 19,000 ⁶ 19,000 ⁸ 11,500 ¹¹ 1,750	²⁵ 8,800	....	¹⁹ 6,000	....	¹ 2,000	....	^{16.0} ^{49.6}	....	50	....
Total	4,552,335	2,043,300	628,190	10,000	1,745,220	1,096,760	421,450	3,680,140	337,490	2,000	217,785	163,900	58,400	60,185	1,002.5	37,221	10,761	45,200
UTAH																		
ChevronTexaco Corp.— Salt Lake City	45,000	25,600	²⁷ 200	....	113,000	17,000	....	¹⁷ 300 ⁵ 10,200 ⁷⁶ 500	²⁴ 5,000	....	....	¹¹ 0,000	....	....	....	281	18	....
ConocoPhillips—Woods Cross	25,000	5,500	....	....	17,680	17,200	....	²¹² 000 ⁷¹ 700	²² 4,000	....	....	³² 6,000	....	....	....	....	4	800
Flying J Inc.—Salt Lake City	25,000	5,500	....	....	110,000	15,500	....	¹⁷ 000 ⁵⁷ 000	²¹ 8,000	....	....	¹² 0,000 ³¹ 750	....	....	....	....	4	....
Silver Eagle Refining Inc.— Woods Cross.....	12,500	6,000	....	....	....	12,200	....	¹² 2,200 ⁴ 000	....	....	....	....	....	....	....	....	....	1,200
Tesoro West Coast Co.— Salt Lake City	60,000	....	....	....	123,000	²¹ 1,300	....	¹¹ 1,700	¹⁵ 6,000	....	....	....	....	....	....	....	15	....
Total	167,500	42,600	7,200	0	53,680	33,200	0	69,600	14,300	0	0	7,350	0	0	0.0	281	41	2,000
VIRGINIA																		
Giant Refining ^C — Yorktown	58,900	33,000	²¹⁷ 100	....	126,700	²¹⁰ 800	....	¹¹¹ 300 ⁷¹⁸ 000	....	¹⁴ 0,000	....	....	....	¹⁶⁶⁰	....	905	36	....
Total	58,900	33,000	17,100	0	26,700	10,800	0	29,300	0	4,000	0	0	0	660	0.0	905	36	0
WASHINGTON																		
BP PLC—Ferndale.....	222,720	96,960	²⁵⁹ 520	....	....	¹⁶⁰ 480	²¹⁵⁴ 720	¹⁵⁴ 720 ⁶²⁴ 960	....	....	....	....	....	....	^{192.0} ^{633.0}	2,700	211	....
ConocoPhillips—Ferndale*	90,250	46,360	....	....	²²⁸ 080	²¹⁵ 597	....	¹¹⁶ 200 ⁴¹⁰ 800 ⁷²⁶ 280	²⁴ 950	....	....	¹² 430	....	....	....	....	41	....
Shell Oil Products US ^G — Anacortes	148,600	62,300	²²⁵ 400	....	157,300	¹³² 200	....	¹²⁹ 200 ⁴¹⁵ 800 ⁵³⁸ 500	¹¹¹ 600	¹⁴ 300	....	....	....	....	....	1,320	150	....
Tesoro West Coast Co.— Anacortes	114,500	45,000	....	....	142,000	²²⁴ 300	....	¹³¹ 800	¹¹¹ 500	....	....	¹³ 400	....	....	....	....	....	1,000
US Oil Refining Co.— Tacoma	44,350	23,700	....	....	....	15,500	....	¹⁷ 400 ⁶⁵ 500	....	....	....	³² 700	....	....	....	....	....	10,000
Total	620,420	274,320	84,920	0	127,380	138,077	54,720	261,160	28,050	4,300	0	8,530	0	0	125.0	4,020	402	11,000
WEST VIRGINIA																		
Ergon-West Virginia Inc.— Newell.....	18,600	8,050	....	....	....	14,300	....	¹⁴ 300 ⁹⁵ 700	....	....	....	....	4,700	....	^{a11.2}	....	1	....
Total	18,600	8,050	0	0	0	4,300	0	10,000	0	0	0	0	4,700	0	1	0	1	0
WISCONSIN																		
Murphy Oil USA Inc.— Superior.....	33,250	19,500	....	....	19,900	17,200	....	¹⁸ 100 ⁷⁰²⁰ ¹¹⁵ 500	²¹ 350	....	....	³¹ 800	....	....	....	....	15	6,750
Total	33,250	19,500	0	0	9,900	7,200	0	20,620	1,350	0	0	1,800	0	0	0.0	0	15	6,750

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic hydrocracking	Catalytic hydrotreating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
WYOMING																		
Frontier Refining Inc.— Cheyenne	46,000	26,000	110,000	....	112,000	17,600	....	18,900 516,500	24,200	....	....	11,600	....	....	a15.5 45.5	560	85	....
Sinclair / Little America— Casper.....	22,500	6,000	....	....	110,000	15,500	....	17,500 58,500	....	11,000	....	....	....	....	....	....	20	....
Sinclair Oil Corp.—Sinclair	54,000	29,500	....	....	120,600	114,200	....	114,200 210,000 1122,000	14,000	1700	....	....	....	....	....	....	....	4,900
Wyoming Refining Co.— Newcastle.....	12,500	1,500	....	....	15,500	12,750	....	13,500 54,000	21,300	....	....	....	....	....	....	....	3	....
Total	135,000	63,000	10,000	0	48,100	30,050	0	95,100	9,500	1,700	0	1,600	0	0	11.0	560	108	4,900
URUGUAY																		
ANCAP—La Teja Montevideo.....	37,000	18,000	....	27,000	19,000	13,000	....	13,000 45,000	....	....	....	....	....	....	....	....	....	1,800
Total	37,000	18,000	0	7,000	9,000	3,000	0	8,000	0	0	0	0	0	0	0.0	0	0	1,800
UZBEKISTAN																		
Uzbekneftegaz—Alty-Arik.....	66,271	....	....	19,585	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bukhara	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fergana.....	106,000	45,671	217,667	....	....	123,487	....	123,900 116,904	....	....	....	....	9,397	....	....	650	....	4,151
Total	222,271	45,671	17,667	9,585	0	23,487	0	30,804	0	0	0	0	9,397	0	0.0	650	0	4,151
VENEZUELA																		
Paraguana Refining Center— Cardon/Judibana, Falcon	940,000	503,975	287,300 357,600	....	1166,500	340,500	....	154,000 8184,500 11139,500 122,700	122,500 218,900	....	....	120,700	12,020	11,530 38,500	1141.0	5,200	1,454	36,000
Maracaibo, Zulia.....	15,000	8,835	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroleos de Venezuela SA— El Palito, Puerto Cabello.....	126,900	71,200	....	....	151,700	19,000	....	9,000	220,300	....	12,000	....	....	42,800	46.8	....	....	....
Puerto de la Cruz	195,000	....	....	....	113,600	....	....	....	24,100	....	....	....	....	....	....	....	17	....
San Roque, Anzoategui.....	5,200	1,770	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,282,100	585,780	144,900	0	231,800	49,500	0	389,700	65,800	0	2,000	20,700	12,020	12,830	147.8	5,200	1,471	36,000
VIRGIN ISLANDS																		
Hovenssa LLC—St. Croix.....	525,000	215,000	258,000	280,000	1130,000	1125,000	....	2125,000 165,000 130,000	114,000	26,000	130,000	215,000	....	14,000 34,000	....	....	....	....
Total	525,000	215,000	58,000	80,000	130,000	125,000	0	420,000	14,000	6,000	30,000	15,000	0	8,000	0.0	0	0	0
YEMEN																		
Aden Refinery Co.— Little Aden	120,000	10,500	....	....	....	112,000	....	....	....	....	....	....	....	....	....	....	....	3,000
Yemen Oil Co.—Marib.....	10,000	....	....	....	....	12,500	....	....	....	....	....	....	....	....	....	....	....	....
Total	130,000	10,500	0	0	0	14,500	0	0	0	0	0	0	0	0	0.0	0	0	3,000
ZAMBIA																		
Indeni Petroleum Refinery Co. Ltd.—Bwana Nkubwa Area, Ndola	23,750	2,280	....	....	....	15,320	....	78,550	....	....	....	....	....	....	....	....	....	5,527
Total	23,750	2,280	0	0	0	5,320	0	8,550	0	0	0	0	0	0	0.0	0	0	5,527