

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
ALBANIA																			
Albpetrol—Ballshi.....	17,800	4,500	² 12,000	....	....	3,500	....	17,400	....	....	....	600	....	700	....	6.5	700	60	....
Fieri.....	8,500	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	26,300	10,500	12,000	....	....	3,500	....	17,400	....	....	....	600	....	700	....	6.5	700	60	....
ALGERIA																			
Naftec SpA ^A —Algiers.....	63,323	....	....	....	....	¹ 16,000	....	....	¹ 14,400	....	....	....	....	....	....	....	....	....	....
Arzew.....	58,632	5,447	....	....	....	¹ 9,000	....	....	¹ 7,380	....	....	....	....	....	....	....	....	....	....
									² 3,470										
Hassi-Messaoud.....	28,910	....	....	....	....	¹ 3,000	....	....	¹ 2,700	....	....	....	....	....	....	....	....	....	....
Skikda.....	351,800	5,447	....	....	....	¹ 60,000	....	....	¹ 54,000	....	....	....	....	....	....	....	....	....	....
Total	502,665	10,894	....	....	....	88,000	....	....	81,950	....	....	....	....	....	....	....	....	....	....
ANGOLA																			
Fina Petroleos de Angola—Luanda.....	39,000	2,500	....	....	....	¹ 1,900	....	² 2,800	¹ 3,800	....	....	....	....	....	....	....	....	....	950
Total	39,000	2,500	....	....	....	1,900	....	2,800	3,800	....	....	....	....	....	....	....	....	....	950
ARGENTINA																			
Destileria Argentina de Petroleo SA—Dock Sud.....	4,000	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lomas de Zamora.....	8,000	1,300	....	....	....	....	....	....	....	....	....	....	....	900	....	....	....	....	600
Eg3 SA—Bahia Blanca ^A	28,975	11,875	....	² 3,420	¹ 7,110	¹ 5,400	....	....	¹ 7,920	....	....	....	² 2,700	....	....	....	....	....	....
Esso SAPA—Campana.....	88,100	49,800	² 25,000	....	¹ 27,300	¹ 11,170	....	....	² 18,300	....	....	....	....	....	....	....	¹ 1,184	....	....
									² 14,300										
									² 2,100										
Galvan.....	19,000	....	....	² 7,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinor SA—Campo Duran.....	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refisan SA—San Lorenzo.....	37,600	16,100	....	¹ 3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
				² 12,500															
Shell Cia. Argentina de Petroleo SA—Buenos Aires.....	110,000	38,500	² 36,500	² 18,900	¹ 26,000	¹ 17,900	....	....	² 18,200	² 1,700	¹ 500	....	....	1,500	....	....	....	....	4,200
									² 7,500										
YPF SA—La Plata.....	180,000	110,000	² 39,000	....	¹ 73,600	¹ 11,700	....	....	¹ 9,600	....	....	....	² 6,300	5,660	....	....	1,500	....	8,300
									² 20,400										
									² 5,300										
									² 15,700										
									² 5,660										
Lujan de Cuyo.....	120,000	66,000	² 40,000	....	¹ 43,000	¹ 9,500	² 126,000	....	¹ 4,400	² 3,150	....	....	² 3,500	....	¹ 950	¹ 18.0	1,550	....	....
									² 17,600										
Plaza Huincul.....	25,000	....	....	....	....	¹ 3,000	....	....	¹ 3,000	....	....	....	....	....	....	....	....	....	....
Total	652,675	294,575	110,500	45,920	177,010	58,670	26,000	....	149,980	4,850	500	....	12,500	8,060	950	18.0	4,234	....	13,100
ARUBA																			
Coastal Aruba Refining Co. NV—San Nicolas.....	205,000	130,000	² 31,000	² 48,000	....	....	....	² 58,000	² 128,000	....	....	....	....	....	....	² 63.0	1,800	250	1,000
Total	205,000	130,000	31,000	48,000	....	....	....	58,000	128,000	....	....	....	....	....	....	63.0	1,800	250	1,000
AUSTRALIA																			
Australian Lubricating Oil Refinery Ltd.—Kurnell ^C.....	....	7,470	....	....	....	....	....	....	² 75,850	....	....	....	....	3,500	....	....	....	....	....
BP Australia—Bulwer Island ^D	69,350	15,200	....	....	¹ 18,000	¹ 12,600	....	....	² 123,400	² 1,890	....	....	....	1,800	....	....	....	....	....
Kwinana ^D	131,575	19,000	....	....	¹ 31,050	² 20,340	....	....	² 32,400	² 2,970	¹ 1,890	....	² 13,500	3,285	....	....	....	70	1,800
									² 16,200										
									² 73,285										
Caltex Refineries (NSW) Ltd. ^E —Kurnell.....	116,700	19,000	....	....	¹ 46,000	¹ 30,200	....	....	¹ 46,000	¹ 7,800	¹ 6,500	....	....	3,800	....	....	....	45	....
									² 16,000										
Caltex Refineries (Qld) Ltd. ^E —Lytton.....	104,000	....	....	....	¹ 4,564	² 26,000	....	....	¹ 26,000	² 3,300	¹ 1,600	....	² 8,200	....	....	² 51.6	....	....	....
									² 9,600										
Inland Oil Refiners (Qld) Pty. Ltd.—Eromanga.....	1,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mobil Oil Australia, Ltd.—Adelaide.....	69,000	24,000	....	....	....	¹ 24,000	....	....	² 45,000	....	....	....	² 9,000	6,000	....	....	....	30	5,000
Altona.....	120,000	22,000	....	....	¹ 23,000	¹ 31,500	....	....	¹ 44,000	² 12,500	....	....	....	....	....	....	....	....	2,800
									² 42,500										
									² 3,800										
Shell Refining (Australia) Pty. Ltd.—Clyde.....	85,000	21,000	....	....	¹ 35,000	² 20,000	....	² 7,000	² 47,000	² 3,000	² 12,100	....	....	....	....	....	....	....	3,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Geelong	110,000	10,000	....	....	140,000	111,000 320,000	....	214,000 33,000	454,000 84,000	24,500	12,700	....	38,000	2,800	....	....	....	....	3,000
Total	807,125	137,670	....	....	197,614	195,640	....	24,000	388,035	25,960	14,790	....	38,700	21,185	....	31.6	....	145	15,600
AUSTRIA																			
OMV AG—Schwechat	208,600	65,000	....	216,875	126,250	132,725	....	212,600 338,300	146,400 24,800 437,300	....	....	....	314,400	....	11,600	....	....	180	1,470
Total	208,600	65,000	....	16,875	26,250	32,725	....	50,900	88,500	....	....	....	14,400	....	1,600	....	....	180	1,470
BAHRAIN																			
Bahrain Petroleum Co.—Sitra*	248,900	189,810	....	219,800	141,400	115,300	148,600	....	116,200 419,800	....	13,060	....	....	....	....	134.0	....	190	6,570
Total	248,900	189,810	....	19,800	41,400	15,300	48,600	....	36,000	....	3,060	....	....	....	....	34.0	....	190	6,570
BANGLADESH																			
Eastern Refinery Ltd.—Chittagong	33,000	4,000	....	210,000	....	11,800	11,200	....	12,000	....	....	....	....	....	....	11.0	....	....	2,000
Total	33,000	4,000	....	10,000	....	1,800	1,200	....	2,000	....	....	....	....	....	....	1.0	....	....	2,000
BELGIUM																			
Belgian Refining Corp. NV—Antwerp*	80,750	39,900	....	218,270	....	19,900	....	222,500	219,800	....	....	....	32,250	....	....	....	....	97	....
Esso Belgium—Antwerp	246,000	122,550	....	....	133,300	338,540	....	285,540	264,600 495,140	16,815	....	....	....	....	....	143.0	....	396	2,000
Fina Raffinaderij Antwerpen—Antwerp	308,000	96,000	....	243,000	179,500	352,000	....	170,000 475,000	286,300	26,700	....	....	....	....	14,500	....	....	650	11,300
Nynas Petroleum NV—Antwerp	15,000	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Universal Refining NV—Antwerp	65,000	....	....	....	....	11,400	....	....	222,000 411,000	....	....	....	....	....	....	....	....	30	....
Total	714,750	270,950	....	61,270	112,800	101,840	....	253,040	298,840	13,515	....	....	2,250	....	4,500	43.0	....	1,173	25,300
BOLIVIA																			
Yacimientos Petroliferos Fiscales Bolivianos— Cochabamba* ^{C,D}	25,888	2,100	....	....	....	17,344	....	....	17,344 7449	....	....	....	....	449	....	....	....	....	73
Santa Cruz*	19,000	....	....	....	....	15,760	....	....	15,760	....	....	....	....	....	....	....	....	....	....
Sucre	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	47,888	2,100	....	....	....	13,104	....	....	13,553	....	....	....	....	449	....	....	....	....	73
BRAZIL																			
Petroleo Brasileiro SA—Araucaria, Parana ^D	158,000	62,550	....	....	148,556	....	....	....	....	....	....	....	....	....	11,709	....	....	....	....
Betim, Minas Gerais	140,403	62,550	219,013	....	135,100	....	....	415,210	210,530 410,530	....	....	....	....	....	....	....	....	....	....
Canoas, Rio Grande do Sul	175,505	30,700	....	....	116,380	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Capuava, Maua, Sao Paulo	49,000	....	....	....	213,455	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cubatão, Sao Paulo	155,029	....	230,420	....	155,576	10,530	....	....	....	2,925	....	....	....	....	....	....	....	....	....
Duque de Caxias, Rio de Janeiro ^D	259,000	97,490	....	....	143,876	10,530	....	32,175	....	....	....	....	....	12,753	11,233	....	....	....	....
Fortaleza, Ceara	6,800	....	....	....	....	....	....	....	....	....	....	....	....	1,000	....	....	....	....	....
Manaus, Amazonas	15,700	6,260	....	....	12,925	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mataripe, Bahia	236,931	57,850	....	....	125,740	....	....	....	....	....	....	....	....	4,855	....	....	....	....	....
Paulinia, Sao Paulo	354,500	125,090	229,250	....	187,752	....	....	....	....	....	....	....	....	....	12,055	....	....	....	....
Sao Jose dos Campos, Sao Paulo ^D	198,905	90,980	....	....	163,181	....	....	38,026	217,550 420,475	....	....	....	....	....	11,514	....	....	....	....
Refinaria de Petroleo Ipiranga SA—Rio Grande do Sul	12,500	5,900	....	....	13,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinaria de Petroleos de Manguinhos SA—Rio de Janeiro	10,000	....	....	14,500 24,500	....	13,000	....	....	13,000	....	....	....	....	....	....	....	....	....	....
Total	1,772,273	551,310	78,683	9,000	395,541	24,060	....	85,411	62,085	2,925	....	....	....	18,608	6,511	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
BRUNEI																			
Brunei Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	.....	.....	.....	.....	15,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	8,600	.....	.....	.....	.....	5,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
BULGARIA																			
Neftochim—Burgas	133,500	58,700	....	124,700	124,800	16,400	....	....	110,200 33,800 439,600 524,800	12,900	....	12,500	....	....	11,000	....	....	70	1,400
Total	133,500	58,700	....	24,700	24,800	6,400	....	....	78,400	2,900	....	2,500	....	....	1,000	....	....	70	1,400
CAMEROON																			
Societe Nationale de Raffinage—Cape Limboh Limbe	35,000	.....	....	....	....	411,918	....	....	114,044 49,094	.....	.....	.....	....	....	.....	.....	.....	.....	.....
Total	35,000	.....	.....	.....	.....	11,918	.....	.....	23,138	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CANADA																			
Alberta																			
Husky Oil Operations Ltd.—Lloydminster	23,500	15,000	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,000
Imperial Oil Ltd.—Edmonton	179,600	66,100	....	.....	152,300	120,900	.....	.....	250,400 621,900 73,100 12,800 22,800	215,700	.....	.....	16,600	2,600	.....	620.0	.....	.....	10,400
Parkland Refining Ltd.—Bowden	6,000	.....	....	....	....	12,800	.....	.....	.....	.....	.....	.....	32,800	.....	.....	.....	.....	.....	.....
Petro-Canada Products Inc.—Edmonton	115,500	27,000	27,500	....	134,300	115,300	118,700	.....	1446,500 8,000	212,600	.....	.....	13,100 39,200	.....	.....	130.8	371	56	.....
Shell Canada Ltd.—Scotford	89,100	.....	....	....	.....	321,500	140,500	.....	221,500 421,000	.....	.....	15,300 3270	.....	.....	.....	.....	.....	11	.....
Total	413,700	108,100	7,500	....	86,600	60,500	59,200	....	178,000	28,300	....	5,570	21,700	2,600	....	50.8	371	67	22,400
British Columbia																			
Chevron Canada Ltd.—Burnaby	50,000	11,000	....	....	118,000	110,000	.....	.....	116,000 414,000	13,000	12,000	.....	310,000	.....	.....	.....	.....	15	2,000
Husky Oil Operations Ltd.—Prince George	10,250	.....	....	....	13,300	11,600	.....	.....	88,000	.....	.....	.....	3900	.....	.....	.....	.....	7	.....
Total	60,250	11,000	....	....	21,300	11,600	....	....	38,000	3,000	2,000	....	10,900	....	.....	.....	.....	22	2,000
New Brunswick																			
Irving Oil Ltd.—St. John	237,500	61,750	....	218,000	124,000	134,650	129,700	.....	145,450 428,800	15,000	.....	.....	39,500	.....	.....	240.0	.....	.....	11,700
Total	237,500	61,750	....	18,000	24,000	34,650	29,700	....	74,250	5,000	....	.....	9,500	....	.....	40.0	.....	.....	11,700
Newfoundland																			
North Atlantic Refining Ltd.—Come By Chance*	99,750	52,250	....	216,200	....	123,400	431,500	.....	218,900 416,200	.....	.....	.....	.....	.....	.....	166.0	.....	200	.....
Total	99,750	52,250	....	16,200	....	23,400	31,500	....	35,100	.....	.....	.....	.....	.....	.....	66.0	.....	200	.....
Nova Scotia																			
Imperial Oil Ltd.—Dartmouth	84,000	40,000	....	....	128,500	149,600	.....	.....	19,600 312,400 621,900	.....	14,000	.....	.....	.....	.....	.....	.....	.....	20,000
Total	84,000	40,000	....	....	28,500	9,600	....	....	43,900	.....	4,000	.....	.....	.....	.....	.....	.....	.....	20,000
Ontario																			
Imperial Oil Ltd.—Nanticoke	112,000	33,700	....	....	140,850	327,400	.....	426,600 6510,000	128,500 89,500	111,875	.....	.....	.....	.....	.....	563.0	.....	.....	4,300
Sarnia	118,000	30,800	123,300	....	125,650	116,150 216,600	131,000	.....	48,900 618,800 75,900	.....	.....	15,000	.....	5,000	.....	127.4 547.5	850	.....	.....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Nova Chemicals (Canada) Ltd.—Corunna	80,000	33,000	....	167,000	....	....	....	....	^{853,000} ^{817,000}	....	....	110,200	....	....	....	....	....	....	....
Petro-Canada Products Inc.—Mississauga ^c .....	....	....	....	....	....	^{39,800}	^{310,300}	....	^{110,300}	....	....	....	....	13,300	....	^{113.3}	....	41	....
Oakville	80,500	38,100	....	....	^{125,400}	^{113,400}	....	....	^{113,300}	13,300	....	....	....	....	....	....	....	44	15,100
Shell Canada Ltd.—Sarnia	71,400	24,700	....	^{24,050}	^{114,400}	^{121,000}	^{16,750}	....	^{115,000} ^{96,300}	....	^{11,600}	^{12,700}	....	....	....	....	....	55	....
Sunoco Inc.—Sarnia	82,400	20,000	....	^{26,700}	^{1216,500}	^{126,300}	^{c124,100}	....	^{126,800} ^{45,500}	^{25,800}	....	110,200	....	....	....	^{1a44.2}	....	53	2,500
Total	544,300	180,300	23,300	77,750	122,800	130,650	54,150	36,600	225,300	20,975	1,600	28,100	....	18,300	....	195.4	850	193	21,900
Quebec																			
Petro-Canada Products Inc.—Montreal	89,300	42,300	....	^{112,800}	^{118,400}	^{130,400}	^{420,900}	....	^{125,700} ^{49,500}	^{12,700}	¹⁸⁰⁰	^{18,350} ^{24,100}	....	....	....	^{143.7}	....	....	14,300
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
Ultramar Ltd.—St. Romuald	150,000	45,000	....	....	^{154,000}	^{119,500}	....	....	^{125,000} ^{215,000} ^{426,500}	....	^{14,970}	....	^{313,800}	....	....	....	....	50	36,000
Total	369,200	136,800	....	24,800	96,400	70,600	32,600	....	162,900	5,200	5,770	12,450	20,600	3,060	....	43.7	....	50	57,500
Saskatchewan																			
Consumers' Cooperative Refineries Ltd.—Regina	52,000	24,750	^{28,750}	....	^{118,500}	^{19,500}	^{c116,000} ^{c230,000}	....	^{315,000} ^{48,000}	....	^{12,200}	....	^{35,500}	....	....	^{1a59.0} ^{430.0}	375	260	....
Moose Jaw Asphalt Inc.—Moose Jaw	12,000	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7,000
Total	64,000	31,750	8,750	....	18,500	9,500	46,000	....	23,000	....	2,200	....	5,500	....	....	89.0	375	260	7,000

CHILE

ENAP—Gregorio-Magallanes	9,650	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrox SA—Talcahuano	100,640	46,320	....	¹⁸¹⁰	^{120,757}	^{24,497}	^{c29,000}	....	^{24,497}	....	....	....	....	....	....	....	....	....	....
Refineria de Petroleo Concon SA—Concon	94,350	47,000	....	^{210,000} ^{210,000}	^{125,000}	^{112,000}	^{m110,000}	....	^{112,000}	11,100	....	....	¹⁴⁰⁰ ^{35,000}	....	....	....	....	30	10,000
Total	204,640	93,320	....	20,810	45,757	16,497	19,000	....	16,497	1,100	....	....	5,400	....	....	....	....	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} ^{36,000}	....	12,000	6,000	....	....	8,000	....	....	....	....	2,000	....	....	450	....	....
Fushun	184,800	....	^{235,000}	....	66,000	23,000	8,000	....	5,000	13,000	....	....	....	1,000	....	....	825	....	....
Golmud	20,000	....	....	....	....	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	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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 .....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lanzhou	110,500	....	^{315,000}	....	24,000	2,000	....	....	3,000	11,000	....	....	....	7,000	....	....	....	....	....
Lanzhou	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaohu	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoning	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
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.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinan.....	80,300	....	....	....	22,000	....	....	....	4,000	....	....	....	....	1,000	....	....	....	....	....
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	....	316,000	....	24,000	3,000	....	....	8,000	....	....	....	....	....	....	....	....	....	....
Karamay.....	66,300	....	38,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kenli.....	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lijin.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Linyi.....	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	....	16,000	21,000	....	....	....	5,000	....	....	400	....	....
Nandagang.....	2,000	....	312,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....	....	....	....	....
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	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Yongping	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhanjiang	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhenhai	160,700	....	28,000	....	28,000	9,000	....	....	8,000	21,000	....	....	....	....	....	....	200	....	....
Zhongyuan	26,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhongjie	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Wepec—Dalian	100,000	40,000	....	....	137,000	114,000	....	135,000 219,000	17,000 424,000	12,500	....	....	....	....	1900	....	....	300	....
Total	4,346,800	40,000	290,000	....	892,000	157,000	122,000	54,000	229,000	26,500	....	....	....	49,000	900	....	4,585	300	....
CHINA, TAIWAN																			
Chinese Petroleum Corp.—Kaohsiung ^c	270,000	75,500	215,000	....	125,000	215,000	....	130,000 443,000	220,000 525,000	....	....	114,000	310,000	5,300	43,616	250.0	2,727	900	14,633
Ta-Lin	300,000	....	....	....	125,000	355,000	175,000	160,000	....	....	....	....	310,000	....	....	233.1	....	250	....
Tao-Yuan	200,000	36,000	....	....	....	325,000 420,000	....	145,000	....	....	....	....	36,000	....	....	259.4	900	540	....
Total	770,000	111,500	15,000	....	50,000	115,000	75,000	178,000	45,000	....	....	14,000	26,000	5,300	3,616	142.5	3,627	1,690	14,633
COLOMBIA																			
Empresa Colombiana de Petroleos—Apiay	2,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barrancabermeja-Santander	173,000	101,000	....	233,000	164,000	....	....	....	519,800	12,100	....	11,600 3600	....	1,400	....	118.0	....	....	....
Cartagena, Bolivar	70,000	40,000	....	219,000	126,000	....	....	....	....	....	12,100	....	....	....	....	....	....	....	....
Orito, Putumayo	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tibu, N. de Santander	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	248,850	141,000	....	52,000	90,000	....	....	....	19,800	2,100	2,100	2,200	....	1,400	....	18.0	....	....	....
CONGO (FORMER ZAIRE)																			
Sozir—Moanda	17,000	....	....	....	....	13,500	....	....	25,000	....	....	....	....	....	....	....	....	....	....
Total	17,000	....	....	....	....	3,500	....	....	5,000	....	....	....	....	....	....	....	....	....	....
CONGO, REPUBLIC OF																			
Coraf—Pointe-Noire	21,000	8,000	....	....	....	12,000	12,000	....	43,500	....	....	....	....	....	....	....	....	....	....
Total	21,000	8,000	....	....	....	2,000	2,000	....	3,500	....	....	....	....	....	....	....	....	....	....
COSTA RICA																			
Refinadora Costarricense de Petroleo SA—Limon	15,000	600	....	16,500	....	11,200	....	....	42,000	....	....	....	....	....	....	....	....	....	....
Total	15,000	600	....	6,500	....	1,200	....	....	2,000	....	....	....	....	....	....	....	....	....	....
CROATIA																			
Ina Refinery Rijeka—Rijeka	91,625	37,044	....	211,525	121,000	120,000	111,900	422,000	115,610	....	....	19,438	36,650	....	....	....	....	62	....
Ina-Industrija Naft e d.d. Zagreb—Sisak	143,472	16,200	25,930	....	110,000	119,000	....	....	121,240 62,700	....	....	19,979 22,178	....	....	....	....	170	....	....
Ina d.d. Rafinerija Zagreb—Zagreb	803	....	....	....	....	....	....	....	....	....	....	....	....	470	....	....	....	....	....
Total	235,900	53,244	5,930	11,525	31,000	39,000	11,900	22,000	39,550	....	....	21,595	6,650	470	....	....	170	62	....
CUBA																			
Cienfuegos	76,000	....	....	....	....	17,500	....	....	17,700	....	....	....	....	....	....	....	....	....	....
Ermonos Dias, Santiago	101,500	37,500	....	....	....	17,500	....	....	17,700 422,000	....	....	....	....	....	....	5.0	....	....	540
Niko Lopes, Habana	121,800	38,200	....	....	114,700	15,000	....	....	15,250 413,200	....	....	....	....	....	....	....	....	....	540
Serhio Soto, Cabaiguan	2,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	301,400	75,700	....	....	14,700	20,000	....	....	55,850	....	....	....	....	....	....	5.0	....	....	1,080
CYPRUS																			
Cyprus Petroleum Refinery Ltd.—Larnaca	27,000	2,600	....	....	....	15,100	....	....	411,000	....	....	....	....	....	....	....	....	....	1,400
Total	27,000	2,600	....	....	....	5,100	....	....	11,000	....	....	....	....	....	....	....	....	....	1,400

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
CZECH REPUBLIC																			
Chemopetrol a.s.—Litvinov.....	110,000	46,000	....	....	....	16,600	25,000	....	48,000	....	....	....	22,700	....	....	103.4	....	....	10,000
Kaucuk s.p.—Kralupy.....	68,000	....	....	....	....	18,198	....	....	212,096 422,189	....	....	....	....	....	12,063	....	....	....	....
Koramo Kolin—Kolin.....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,500	....	....	....	....	....
Paramo A.S.—Pardubice.....	20,000	7,000	....	....	....	....	....	....	46,000	....	....	....	....	300	....	....	....	....	3,000
Total	198,000	53,000	....	....	....	24,798	25,000	....	88,285	....	....	....	2,700	2,800	2,063	103.4	....	....	13,000
DENMARK																			
AS Dansk Shell—Fredericia.....	70,000	....	....	125,000	....	112,900	....	211,200	222,500	....	....	....	36,000	....	....	....	....	....	....
Dansk Statoil AS—Karlundborg.....	65,000	22,000	....	228,000	....	18,600	....	....	18,600 611,400	....	....	....	....	....	....	....	....	....	8,000
Total	135,000	22,000	....	53,000	....	21,500	....	11,200	42,500	....	....	....	6,000	....	....	....	....	....	8,000
DOMINICAN REPUBLIC																			
Falconbridge Dominicana C por A—Bonao.....	16,000	....	....	....	....	....	....	....	26,200	....	....	....	....	....	....	20.6	....	....	....
Refineria Dominicana de Petroleo SA—Haina.....	35,000	....	....	....	....	18,400	....	....	116,300	....	....	....	....	....	....	....	....	....	....
Total	51,000	....	....	....	....	8,400	....	....	22,500	....	....	....	....	....	....	0.6	....	....	....
ECUADOR																			
Petroecuador—Esmeraldas.....	110,000	45,300	....	231,500	118,000	12,780 310,000	....	524,500	213,000	....	....	....	....	....	....	....	....	62	....
La Libertad.....	46,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shushufindi.....	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	176,000	45,300	....	31,500	18,000	12,780	....	24,500	13,000	....	....	....	....	....	....	....	....	62	....
EGYPT																			
Alexandria Petroleum Co.—Alexandria (El-Mex).....	100,000	22,500	....	....	....	....	....	....	71,436 876	....	....	1603 2281	....	1,436	....	11.0	1	....	2,010
Amerya Petroleum Refining Co.—Alexandria.....	78,000	15,000	....	....	....	112,000	....	210,000 47,000	214,000 44,000 71,800 8700	29,000	....	1700	....	2,000	....	24.0	....	....	....
Assiut Petroleum Refining Co.—Assiut.....	47,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cairo Petroleum Refining Co.—Mostorod.....	145,000	....	....	....	....	19,000	....	....	111,700 414,400	....	....	....	....	....	....	....	....	....	....
Tanta.....	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
El-Nasr Petroleum Co.—El-Suez.....	99,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,613
Wadi-Feran.....	7,060	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Suez Petroleum Processing Co.—El-Suez.....	66,400	9,500	216,470	....	....	112,540	....	....	116,660 410,800 71,306	....	....	....	....	1,005	....	73.5	540	....	....
Total	577,760	47,000	16,470	....	....	33,540	....	17,000	76,878	9,000	....	1,584	....	4,441	....	8.5	541	....	4,623
EL SALVADOR																			
Refineria Petrolera Acajutla SA—Acajutla.....	19,800	1,900	....	....	....	13,300	....	....	25,700 47,500 83,900	....	....	....	....	....	....	....	....	....	....
Total	19,800	1,900	....	....	....	3,300	....	....	17,100	....	....	....	....	....	....	....	....	....	....
ERITREA																			
Petroleum Corp. of Eritrea—Assab.....	18,000	3,000	....	....	....	22,400	....	....	44,500	....	....	....	....	....	....	....	....	....	450
Total	18,000	3,000	....	....	....	2,400	....	....	4,500	....	....	....	....	....	....	....	....	....	450
FINLAND																			
Neste Oy—Naantali.....	40,000	27,400	....	27,100	214,200	46,800	....	37,100 414,700	26,600 8330	....	1280	....	....	....	....	....	....	....	3,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Porvoo.....	160,000	68,000	....	228,000	131,000	436,000	116,000	482,000	251,000	24,200	....	....	23,600	....	14,100	120.0	....	....	8,500
Total.....	200,000	95,400	....	35,100	45,200	42,800	16,000	103,800	57,930	4,200	280	....	3,600	....	4,100	20.0	....	....	12,100

FORMER SOVIET UNION

Azerbaijan																			
Baku.....	238,978	66,157	....	....	....	....	....	....	....	....	....	....	....	27,064	....	....	....	....	4,151
Novo-Baku	202,830	71,043	238,529	....	171,342	324,466	....	....	125,300	1930	....	....	....	....	....	....	1,400	....	....
									542,192										
Total.....	441,808	137,200	38,529	....	71,342	24,466	....	....	67,492	930	....	....	....	27,064	....	....	1,400	....	4,151
Belarus																			
P.O. Naftan Refinery—Novopolotsk	150,600	49,000	....	....	....	136,700	....	448,000	136,700	....	....	12,400	....	4,100	....	15.1	....	....	....
																55.1			
Slavneft—Mozyr.....	323,323	18,795	....	....	....	124,000	12,000	....	150,600	....	....	....	....	....	....	....	....	85	9,630
						324,000			499,726										
Total.....	473,923	67,795	....	....	....	84,700	12,000	48,000	187,026	....	....	2,400	....	4,100	....	10.2	....	85	9,630
Georgia																			
Batumi.....	106,436	24,809	....	....	....	110,276	....	....	110,800	....	....	....	....	....	....	....	....	....	3,819
Total.....	106,436	24,809	....	....	....	10,276	....	....	10,800	....	....	....	....	....	....	....	....	....	3,819
Kazakhstan																			
Atyrau.....	104,427	27,064	213,720	....	....	18,808	....	....	19,200	....	....	....	....	....	....	....	500	....	....
Chimkent.....	160,000	....	....	....	....	124,466	....	....	125,200	....	....	....	....	....	....	....	....	60	....
									449,863										
Pavlodar.....	162,666	93,973	211,277	230,071	138,356	126,178	....	....	127,200	....	....	....	....	....	....	121.5	500	64	8,550
									449,863										
									546,027										
Total.....	427,093	121,037	24,997	30,071	38,356	59,452	....	....	207,353	....	....	....	....	....	....	21.5	1,000	124	8,550
Kyrgyzstan																			
Kyrgoil—Dzhalsalabad.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Russia																			
Makhachkala.....	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nizhnekamsk.....	120,493	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Salavatnefteorgsintez.....	247,011	73,299	....	29,397	221,096	148,687	....	....	249,300	11,174	....	11,591	....	....	1625	....	....	290	....
									4121,205						23,000				
									522,247										
Yakutsk.....	2,500	....	....	22,941	....	25,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Bashneftkhimzavody—Novo-Ufa	379,553	133,441	27,142	215,400	222,247	325,400	....	....	152,000	12,814	....	....	....	9,585	....	....	260	218	14,278
									465,205										
Ufa-former Lenin	234,962	98,671	....	222,553	138,356	114,679	....	45,753	115,000	....	1979	....	....	....	....	121.5	....	72	498
									468,466										
									542,192										
Ufaneftekhim.....	251,027	81,756	....	29,397	117,260	117,371	119,178	....	140,300	....	....	....	....	7,330	....	121.5	....	....	4,981
						321,775			448,904										
Central Fuel Co.—Moscow.....	242,995	90,214	....	220,000	138,356	133,029	....	....	134,000	....	....	....	33,542	....	11,000	121.5	....	....	22,600
									466,548										
									542,192										
Gazprom—Astrakhan	66,000	....	....	....	....	124,466	....	....	440,000	....	....	....	....	....	....	....	....	....	....
Surgut.....	88,000	....	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Urengoy.....	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grozneft—Groznyi-former Lenin.....	389,595	89,650	....	126,312	138,356	....	....	....	542,192	....	....	....	....	3,759	....	121.5	....	....	....
Groznyi-Sheripov	40,164	16,915	....	....	....	18,074	....	....	18,530	....	....	....	....	5,826	....	....	....	....	....
Novo-Grozny.....	....	....	....	....	....	116,881	....	....	117,400	....	....	....	....	....	....	....	....	....	....
									442,192										
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	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Perm	279,142	126,000	213,532	17,706	215,726	142,326	....	....	143,100	11,003	....	13,481	....	8,833	....	....	490	....	5,645
Volgograd.....	188,733	79,501	224,809 33,101	126,876	....	118,839	....	32,877	472,493 119,100 411,507 76,904	....	....	11,830	....	17,855	....	710.8	1,020	....	3,985
Norsi—Kstovo, Nizhny Novgorod.....	437,792	114,271	....	....	....	145,506	....	....	146,800 4107,500 76,904	....	....	11,790 21,890	....	8,645	....	....	....	....	15,607
Onako—Orsk	158,649	53,752	....	....	....	117,860	....	....	118,400 454,200	11,125	....	....	....	7,706	....	....	....	....	10,128
Rosneft—Afipsky	28,115	....	....	....	....	116,147	....	....	112,658	....	....	13,680 22,387	....	....	....	....	....	....	....
Komsomolsk.....	116,477	33,266	39,679	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tuapse	46,189	....	....	....	....	17,829	....	....	18,100	....	....	....	....	....	....	....	....	....	....
Sibneft—Omsk.....	566,318	272,609	213,908	126,500 230,071	165,589	148,687 324,710	19,178	....	174,000 469,425 542,192 76,904	11,272	....	111,139	....	10,525	11,750	....	510	....	17,433
Sidanco—Angarsk	440,700	195,463	211,217	125,748	133,753	133,029 412,233	....	....	133,900 430,685 76,900	....	....	13,182	....	5,638	....	....	410	....	9,630
Cracking-Saratov	176,723	74,426	....	160,142	....	127,891	....	....	128,300	....	....	....	....	....	....	....	....	42	3,819
Khabarovsk	114,468	10,149	....	214,284	....	19,786	....	....	110,556	....	....	....	....	....	....	....	....	....	5,811
Slavneft—Yaroslavl	359,471	270,305	....	212,404	121,096	125,689	....	....	126,100 456,959 712,274	11,786	....	11,551	33,542	12,028	....	....	....	....	10,460
Yaroslavl/Mendeleev	8,700	....	....	....	....	....	....	....	....	....	....	....	....	2,510	....	....	....	....	....
Surgutneftegaz—Kirishi	387,586	85,327	....	....	....	167,281	....	....	167,900 4104,800	....	....	15,172	37,085	....	....	....	....	45	16,603
Tatneft—Kichuyi	8,000	3,600	....	....	....	11,750	....	....	11,850	....	....	....	....	....	....	....	....	....	1,200
Tyumen Oil Co.—Ryazan.....	361,479	83,636	....	121,990	118,219	153,335	....	....	154,000 476,137 76,900	....	....	14,078 22,228	....	7,142	....	....	....	....	8,799
Yukos—Achinsk	146,584	40,184	....	....	....	125,519	....	....	125,519 459,679	....	....	....	....	....	....	....	....	21	11,600
Novo-Kuibishev	309,266	129,682	228,192	19,397	213,616	133,518	....	....	134,300 457,918	....	....	12,188	....	9,773	....	....	1,030	....	12,286
Samara-Kuibishev	154,000	50,745	....	115,787	218,795	143,794	....	....	144,400 450,438	1832	1750	....	....	....	....	....	....	....	....
Syzran	210,863	67,284	....	116,915	217,068	143,060	....	....	143,700 478,822	....	....	....	....	....	....	....	....	....	7,637
Total	6,745,213	2,301,774	111,580	411,487	379,533	848,448	38,356	8,630	2,339,597	10,006	1,729	56,729	14,169	117,155	6,375	96.8	3,720	688	193,626
Turkmenistan																			
Chardzou	120,493	50,745	....	....	....	124,466	....	....	124,900	....	....	....	....	....	....	....	....	....	....
Turkmenbashi.....	116,477	20,486	228,568	....	115,151	18,074	....	....	18,400	11,028	11,223	....	....	....	....	....	1,040	....	415
Total	236,970	71,231	28,568	....	15,151	32,540	....	....	33,300	1,028	1,223	....	....	....	....	....	1,040	....	415
Ukraine																			
Drogobich.....	78,321	25,185	33,195	17,330	....	18,074	....	....	18,200	....	....	....	....	....	....	....	115	....	3,819
Kherson	172,707	60,518	212,028	....	....	116,637	....	....	116,900	....	....	....	....	....	....	....	790	....	5,977
Lisichansk	320,000	202,981	....	....	140,500	156,761	....	....	157,500 479,014 542,192	....	....	21,870	....	....	....	121.5	....	90	....
Odessa.....	78,321	18,795	....	....	....	110,276	....	....	111,500 428,767	....	....	....	....	....	....	....	....	....	3,155
Ukratnafta—Kremenchug	361,479	112,765	....	....	128,384	....	....	....	142,575 472,877 76,904 18,800	....	....	16,000	....	....	....	....	....	....	....
Nadvornaja.....	74,304	13,720	26,954	19,961	....	18,563	....	....	....	....	....	....	....	....	....	....	250	....	....
Total	1,085,132	433,964	22,177	17,291	68,884	100,311	....	....	375,229	....	....	7,870	....	....	....	21.5	1,155	90	12,951
Uzbekistan																			
Uzbekneftegaz—Alty-Arik.....	66,271	....	....	19,585	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Bukhara.....	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fergana.....	106,000	45,671	217,667	....	....	123,487	....	....	123,900	....	....	....	....	9,397	....	....	650	....	4,151
									76,904										
Total	222,271	45,671	17,667	9,585	....	23,487	....	....	30,804	....	....	....	....	9,397	....	....	650	....	4,151

FRANCE

Cie. de Raffinage et de Distribution Total France— Dunkirk.....	133,700	36,200	....	....	135,100	121,500	....	....	140,200	....	....	....	31,840	....	2130	....	....	105	....
									428,200										
Gonfreville l'Orcher ^D	323,643	68,981	....	220,451	140,950	142,300	....	....	130,128	....	13,087	13,040	15,051	9,846	21,371	60.4	....	215	4,737
									269,943		23,031		317,486						
									4107,979										
									712,813										
									81,719										
La Mede.....	145,150	69,180	....	220,330	133,500	127,570	....	....	....	13,950	....	....	320,350	....	....	....	....	200	....
Cie. Rhenane de Raffinage—Reichstett-Vendenheim.....	80,000	34,200	....	216,000	114,000	114,400	....	215,300	222,500	....	....	....	....	....	....	....	....	....	7,200
Elf France—Donges.....	214,300	119,950	....	233,380	149,400	129,280	....	336,430	142,860	24,300	....	....	34,900	....	....	....	320	....	....
									413,000										
Feyzin.....	128,130	36,200	....	215,730	124,940	19,200	....	334,630	114,190	....	....	12,200	....	....	11,400	....	173	....	....
															31,250				
Grandpuits.....	98,000	49,900	....	214,860	130,720	114,800	....	328,875	127,860	23,150	....	....	....	....	....	....	208	....	....
Esso SAF—Fos sur Mer.....	117,000	34,000	....	....	125,000	119,000	....	....	119,000	....	....	....	....	....	....	....	....	100	....
									27,000										
									464,000										
Port Jerome.....	156,000	71,200	....	....	133,900	118,000	....	....	118,700	16,900	....	....	....	10,000	....	....	....	230	....
									28,800										
									447,900										
									76,900										
									831,600										
Mobil Oil Francaise—Notre Dame de Gravenchon.....	73,000	26,000	....	....	....	111,500	....	358,500	115,000	....	....	....	35,500	7,000	....	67.0	....	....	3,000
									424,000										
Ste. des Petroles Shell—Berre l'Etang.....	127,000	52,000	....	....	134,000	119,000	....	237,000	237,000	....	....	....	....	....	....	....	....	....	6,000
Petit Couronne.....	141,000	76,000	....	212,000	120,000	128,000	....	233,000	248,000	....	....	....	....	6,200	....	110.0	....	....	11,000
Ste. Raffinerie BP et Elf—Dunkirk ^{CK}.....	....	20,092	....	....	....	....	....	....	74,500	....	....	....	....	5,760	....	....	....	....	....
Ste. Francaise des Petroles BP—Lavera*.....	210,000	74,100	....	221,600	127,900	110,800	115,300	....	224,300	....	....	....	313,500	....	....	130.0	....	....	13,500
									439,600										
Total	1,946,923	768,003	....	154,351	369,410	265,350	15,300	193,735	807,692	18,300	6,118	5,240	68,627	38,806	4,151	47.4	701	850	45,437

GABON

Ste. Gabonaise de Raffinage—Port Gentil.....	17,300	....	....	17,200	....	11,400	....	....	45,000	....	....	....	....	....	....	....	....	....	....
Total	17,300	....	....	7,200	....	1,400	....	....	5,000	....	....	....	....	....	....	....	....	....	....

GERMANY

Addinol Mineralol GmbH—Krumpa ^C.....	....	4,533	....	....	....	....	....	....	....	....	....	....	....	3,800	....	....	....	....	....
Bayernoil Raffineriegesellschaft mbH.....	258,000	110,050	....	236,400	161,100	133,900	....	472,000	122,500	....	....	....	310,800	....	48,550	....	....	92	16,200
						317,100			270,200										
DEA Mineralol AG—Heide/Grasbrook.....	80,000	30,000	....	214,000	229,000	220,000	....	311,000	125,000	....	1450	15,800	....	8,000	1280	....	....	35	4,300
						418,000													
Wesseling.....	140,000	60,000	....	226,000	....	221,000	131,000	441,000	121,000	....	12,000	17,600	....	....	11,500	....	....	240	....
									26,100										
Deutsche Shell AG—Godorf.....	170,000	73,000	....	118,000	....	117,000	136,000	232,000	252,000	....	....	117,000	38,000	....	....	....	....	....	12,000
				27,000		321,000			334,000			23,000							
									412,000										
Harburg.....	102,000	44,000	....	214,000	116,000	317,000	....	216,000	229,000	....	....	....	32,800	6,000	....	....	....	....	5,900
									32,000										
Esso AG—Ingolstadt.....	105,000	30,200	....	....	127,900	218,200	....	....	233,000	....	....	....	36,800	....	....	....	....	69	9,300
									455,400										
									515,700										
Holborn Europa Raffinerie GmbH—Harburg.....	78,000	15,000	....	....	118,750	114,700	....	....	131,700	....	....	....	....	....	....	....	....	....	....
									33,500										
									438,400										
Mineraloelraffinerie Oberrhein GmbH—Karlsruhe.....	285,000	130,000	226,000	224,000	187,000	131,000	....	374,000	153,000	212,000	....	....	316,000	....	14,000	....	1,200	360	14,000
						322,000		4120,000	276,000										

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Mitteldeutsche Erdoel-Raffinerie GmbH—Leuna.....	214,000	96,000	....	226,000	144,000	324,000	....	466,000	549,720	16,000	....	....	....	....	....	382.4 482.4	....	410	....
Mobil Schmierstoff GmbH—Hamburg .....	....	13,300	....	....	....	....	c4800	....	71,620	....	....	....	....	4,770	....	1a438.0 4438.0	....	....	....
OMV AG—Burghausen.....	72,000	....	227,500	....	....	....	....	....	44618,700	....	....	22,300	....	....	....	....	690	34	....
PCK Raffinerie GmbH—Schwedt	210,000	140,000	N316,500	227,000	151,000	116,000	....	345,000	136,600	26,100	....	15,000	315,000	....	11,900	18.1	....	....	12,000
SRS GmbH ^Q —Salzbergen ^C.....	....	6,000	....	....	....	....	....	4105,000	72,600 8900	....	....	....	....	3,855	....	....	....	....	....
Veba Oel/Ruhr Oel GmbH—Gelsenkirchen.....	227,000	77,000	228,000	216,000	121,000	327,000	c130,000	315,000 489,000	131,000	....	....	13,650 21,960 32,190 44,625	....	....	....	125.0 342.0	1,200	530	6,000
Wilhelmshavener Raffinerie Gesellschaft mbH ^P — Wilhelmshaven ^C	225,000	....	....	....	....	141,000	....	....	280,000 4111,000	....	....	....	....	....	....	....	....	100	....
Wintershall AG—Lingen.....	80,000	38,000	223,400	....	....	113,843 321,160	c123,000	441,500	117,500	....	....	14,700 22,000 35,000	....	....	....	144.0 444.0 550.0	480	112	9,200
Total	2,246,000	867,083	121,400	208,400	335,750	393,903	120,800	745,500	930,140	24,100	2,450	64,825	59,400	26,425	16,230	1,253.9	3,570	1,982	88,900

GHANA

Tema Oil Refinery Co. Ltd.—Tema*	45,000	....	....	....	....	15,850	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	45,000	....	....	....	....	5,850	....	....	....	....	....	....	....	....	....	....	....	....	....

GREECE

Hellenic Petroleum SA ^Q —Thessaloniki	66,500	8,100	....	....	....	110,000	....	....	216,500 418,800	....	....	....	....	....	....	....	....	40	2,800
Aspropyrgos.....	121,000	56,000	....	221,400	136,000	19,800 321,000	m428,000	416,300	236,000 416,300	....	27,450	....	37,000	....	11,100	R19.6	....	....	2,000
Motor Oil (Hellas) Corinth Refineries SA— Aghii Theodori.....	100,000	62,100	....	224,200	130,400	212,700	....	....	219,300 427,000 73,300 417,500	22,400	21,400	....	25,200	3,200	1650	13.0	....	....	....
Petrola Hellas—Elefsis	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	S14.1 44.1	....	26	....
Total	387,500	126,200	....	45,600	66,400	53,500	28,000	16,300	154,700	2,400	8,850	....	12,200	3,200	1,750	20.8	....	66	4,800

GUATEMALA

Basic Resources International—Peten.....	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Texas Petroleum Co.—Escuintla.....	16,000	....	....	....	....	13,000	....	....	13,000 42,000	....	....	....	....	....	....	....	....	....	....
Total	20,000	....	....	....	....	3,000	....	....	5,000	....	....	....	....	....	....	....	....	....	....

HUNGARY

MOL Hungarian Oil & Gas Co.—Szazhalombatta.....	161,000	77,500	....	214,000	124,000	116,000 313,600	....	330,600 47,400	442,800 72,200	23,300	....	17,100	32,700	4,200	11,240	....	....	34	6,300
Tiszaujvaros.....	61,000	33,000	....	....	....	....	....	....	414,000	....	....	....	....	....	1620	....	....	21	....
Zalaegerszeg	10,000	6,000	....	....	....	....	....	....	....	....	....	....	....	4,500	....	....	....	....	4,500
Total	232,000	116,500	....	14,000	24,000	29,600	....	38,000	59,000	3,300	....	7,100	2,700	8,700	1,860	....	....	55	10,800

INDIA

Bharat Petroleum Co. Ltd.—Mahul, Bombay.....	120,000	39,000	....	....	128,755	15,503	....	....	....	....	....	12,175	....	....	....	....	....	....	10,000
Bongaigaon Refinery & Petrochemicals Ltd.— Bongaigaon Assam.....	27,110	....	29,675	....	....	11,833	....	....	11,833	....	....	1694	....	....	....	....	203	....	....
Cochin Refineries Ltd.—Ambalamugal.....	93,400	37,600	....	218,200	127,000	15,800	....	....	25,800	....	....	12,100	....	....	....	....	....	....	6,300
Hindustan Petroleum Corp. Ltd.—Mahul, Bombay	110,452	52,500	....	....	112,000	....	....	....	76,600	....	....	....	....	4,800	....	786.3	....	....	9,400
Visakhapatnam	90,369	43,200	....	....	119,200	....	....	....	....	....	....	....	....	....	....	....	....	....	2,440
Indian Oil Co. Ltd.—Barauni, Bihar.....	65,800	23,700	220,000	....	....	....	....	....	....	....	....	....	....	....	....	....	540	....	....
Digboi, Assam.....	11,700	....	2850	....	....	....	....	....	....	....	....	....	....	30	....	....	26	....	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	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Gawahati, Assam.....	19,920	....	26,000	....	....	....	....	....	18,300	....	....	11,450	....	....	....	....	145	....	....
Koyali, Gujarat.....	185,100	98,000	....	219,500	120,000	18,300	....	....	15,300	....	....	....	....	....	....	242.7	....	....	4,400
Haldia, West Bengal.....	61,000	27,000	....	29,600	....	15,300	....	....	413,400 73,100	....	....	....	....	3,100	....	....	....	....	7,500
Mathura, Uttar Pradesh.....	156,000	47,000	....	218,000	120,000	....	....	....	....	....	....	....	....	....	....	....	....	....	7,500
Madras Refineries Ltd.—Cauvery Basin.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Madras.....	130,660	66,866	....	....	111,250	12,138	....	....	12,138 422,612 75,110	....	....	....	....	5,110	....	110.0	....	17	3,877
Mangalore Refinery & Petrochemicals Ltd.—Mangalore.....	60,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	1,141,511	434,866	36,525	65,300	138,205	28,874	....	....	74,193	....	....	6,419	....	13,040	....	139.0	914	17	51,817

INDONESIA

Pertamina—Balikpapan, Kalimantan.....	240,920	89,110	....	....	....	318,720	149,500	....	....	....	....	....	....	....	....	....	....	....	....
Balongan.....	125,000	....	....	....	183,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cepu.....	3,420	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cilacap, Central Java.....	285,000	37,600	....	250,040	....	330,690	....	....	712,000	....	....	....	....	....	....	....	....	....	....
Dumai, Central Sumatra.....	114,000	87,970	232,580	....	....	312,870	150,220	....	411,430	....	....	....	....	....	....	....	....	....	....
Musi, South Sumatra.....	109,155	51,300	....	18,820	118,450	330,690	....	....	....	116,200	....	....	....	....	....	....	....	....	....
Pangakalan Brandan, North Sumatra.....	4,750	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sungai Pakning, Central Sumatra.....	47,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	929,745	265,980	32,580	58,860	101,450	92,970	99,720	....	23,430	16,200	....	....	....	....	....	....	....	....	....

IRAN

National Iranian Oil Co.—Abadan*.....	427,500	76,000	....	....	127,000	123,400	....	....	123,400	....	....	....	....	1,350	....	....	....	....	1,800
Arak*.....	142,500	67,450	....	224,570	....	319,440	122,050	....	119,440	....	....	....	....	....	....	1,450.0	....	60	4,950
Bandar Abbas*.....	220,400	106,400	....	227,900	....	332,400	125,200	....	132,400	....	....	....	....	....	....	....	....	130	4,500
Isfahan*.....	251,750	113,050	....	234,200	....	126,550	127,000	....	126,550	9,000	....	....	....	....	....	170.0	....	70	....
Kermanshah*.....	28,500	....	....	....	....	12,520	....	....	12,520	....	....	....	....	....	....	....	....	....	....
Lavan Island*.....	19,000	....	....	....	....	....	....	....	42,790	....	....	....	....	....	....	....	....	....	....
Shiraz*.....	38,000	17,480	....	28,100	15,580	....	18,352	....	15,580	....	....	....	....	....	....	117.0	....	30	1,350
Tabriz*.....	106,400	47,500	....	214,850	....	110,000	116,200	....	19,990	....	....	....	....	....	....	134.0	....	80	4,500
Tehran*.....	213,750	114,000	....	231,500	....	124,535	126,460	....	126,460	....	....	....	....	3,760	....	165.0	....	100	18,000
Total.....	1,447,800	541,880	....	141,120	32,580	138,845	125,262	....	164,430	....	....	....	....	14,110	....	236.0	....	470	35,100

IRAQ

Oil Refineries Administration—Baiji.....	150,000	65,000	....	....	....	38,500	38,000	31,000 28,000 41,000	....	....	....	....	....	....	....	64.0	....	....	....
Basra.....	70,000	17,650	....	....	....	....	....	....	....	....	....	....	....	2,008	....	....	....	....	....
Daura.....	100,000	....	....	....	....	5,000	....	....	13,000	....	....	....	....	8,160	....	....	....	....	1,815
K3-Haditha.....	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Khanaqin.....	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Muthia.....	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qaiyarah Mosul.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,900
Iraqi Company for Oil Operations—Kirkuk.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	347,500	82,650	....	....	....	43,500	38,000	100,000	13,000	....	....	....	....	10,168	....	64.0	....	....	6,715

IRELAND

Irish National Petroleum Corp.—Whitegate.....	66,500	....	....	....	....	210,800	....	413,500	110,800	....	....	....	....	....	....	....	....	2	....
Total.....	66,500	....	....	....	....	10,800	....	13,500	10,800	....	....	....	....	....	....	....	....	2	....

ISRAEL

Oil Refineries Ltd.—Ashdod.....	90,000	45,000	225,000	127,500	111,500	220,000 430,000	1750
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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	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Haifa.....	130,000	73,000	....	241,000	122,000	115,000	....	....	216,000 430,000	....	22,200	....	....	....	....	....	....	....	2,700
Total	220,000	118,000	....	66,000	49,500	26,500	....	....	96,000	....	2,200	....	....	....	750	....	....	....	2,700
ITALY																			
Agip Plas SpA—Livorno.....	84,000	36,000	....	....	....	314,000	....	431,700	222,000	....	....	....	36,000	10,000	....	....	....	....	3,500
Agip Raffinazione—Porto Marghera.....	80,000	38,000	....	113,500 227,000	....	315,000	....	427,000	216,000	....	....	....	36,000	....	....	....	....	....	3,500
Sannazzaro, Pavia.....	200,000	84,500	....	232,000	134,000	212,000 316,700	130,000	441,000	112,000 227,000	23,200	....	....	212,000	....	1920	235.0	....	....	2,500
Taranto.....	84,000	13,500	....	127,000 237,250	....	217,000	115,500	443,000	224,000	....	....	....	36,000	....	....	239.5	....	....	2,500
Api Raffineria di Ancona SpA—Falconara, Marittima.....	77,000	42,200	....	119,400 218,400	....	114,000	....	440,000	224,000	....	....	....	39,300	....	....	17.2	....	....	....
Arcola Petrolifera SpA—La Spezia.....	33,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Esso Italiana SpA—Augusta, Siracusa.....	188,300	90,200	....	....	145,600	122,100	....	....	123,100 442,400 516,700 823,400	28,300	....	....	12,400	17,800	....	....	....	196	....
Iplom SpA—Busalla.....	33,500	20,500	....	....	....	....	....	....	4900	....	....	....	....	....	....	1a19.2	....	33	....
Isab SpA—Priolo Gargallo.....	235,000	102,700	....	133,000 245,000	....	238,000	m165,000	....	264,000 472,000 624,400	....	....	....	39,000	....	....	220.3 63.6	....	315	....
Italiana Energia E Servizi SpA—Frassino, Mantova.....	50,318	16,605	....	18,176 220,963	....	17,445	....	219,600 53,926	214,570	....	....	....	32,015	....	....	....	....	....	....
Praoil—Gela, Ragusa.....	105,000	52,500	245,000	....	135,000	213,850	....	218,000 442,500	116,500	210,000	....	16,700 2700	18,050	....	11,100 31,200	317.0 58.0	2,000	....	....
Priolo, Siracusa.....	220,000	50,000	....	225,000	132,000	29,000	....	418,000	19,000	14,000	....	112,000 22,300	....	....	11,050	....	....	....	....
Raffineria di Milazzo SpA—Milazzo, Messina.....	351,600	75,000	....	....	144,200	113,500	c130,000	416,400	222,000	14,200	....	....	....	....	11,600	247.5	....	300	....
Raffineria di Roma SpA—Rome.....	81,500	11,500	....	231,600	....	114,300	....	421,500	221,000 32,000	....	....	....	37,100	....	....	....	....	42	9,620
Saras SpA—Sarroch.....	285,000	107,500	....	245,000	180,000	327,000	m150,000	....	127,000 475,500	26,800	....	....	....	....	....	425.7	....	440	....
Sarpom—S. Martino Di Trecate.....	248,000	27,400	....	....	129,500	118,000 27,800	....	....	266,300 455,500	....	13,100	....	310,500	....	....	....	....	84	....
Tamoiel Raffinazione SpA—Cremona.....	90,000	....	....	233,000	....	18,600 315,000	C46,000	426,900	131,600 31,800	....	....	....	310,500	....	....	45.5	....	....	....
Total	2,446,218	768,105	45,000	416,289	300,300	283,295	196,500	349,526	734,670	36,500	3,100	21,700	88,865	27,800	5,870	228.5	2,000	1,410	21,620
IVORY COAST																			
Societe Ivoirienne de Raffinage—Abidjan.....	59,000	25,755	....	....	....	413,904	c114,111	....	119,214 413,232	....	....	....	....	....	....	1a28.3	....	....	....
Ste. Multinationale de Bitumes—Abidjan.....	10,000	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6,000
Total	69,000	33,755	....	....	....	13,904	14,111	....	32,446	....	....	....	....	....	....	28.3	....	....	6,000
JAMAICA																			
Petrojam Ltd.—Kingston.....	35,500	2,000	....	....	....	13,540	....	....	26,400 413,200	....	....	....	....	....	....	....	....	....	680
Total	35,500	2,000	....	....	....	3,540	....	....	19,600	....	....	....	....	....	....	....	....	....	680
JAPAN																			
Cosmo Oil Co. Ltd.—Chiba*.....	228,000	57,000	....	....	131,500	132,850	....	164,800 231,500 4113,400	125,200 27,200	....	....	....	....	....	....	1a88.0	....	600	....
Sakaide*.....	133,000	39,425	....	....	117,100	112,600	....	127,000 215,480 457,600	112,600	....	....	....	....	....	....	1a34.0	....	265	....
Sakai*.....	104,500	32,300	....	....	119,800	17,200	....	218,000 448,600	19,900	17,200	....	....	....	....	11,465	1a11.0	....	140	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Yokkaichi*.....	147,250	70,300	....	....	122,500	15,400 312,150	....	237,350 458,500	117,550	....	....	....	....	....	....	1a12.0	....	200	....
Fuji Oil Co. Ltd.—Sodegaura ^C	162,000	55,000	T324,000	....	115,500	328,000	....	247,000 478,500	143,000	12,400	....	121,000 22,100	....	....	....	538.4	1,223	210	....
General Sekiyu Seisei KK—Sakai.....	140,400	47,700	....	....	136,000	130,600	....	334,200 239,420	....	....	....	119,800	....	....	....	116.7 75.0	....	353	....
Idemitsu Kosan Co. Ltd.—Chita, Aichi.....	152,000	....	....	....	141,800	316,200	....	149,500 471,100	123,400	15,400	....	....	....	....	....	257.2	....	360	....
Himeji, Hyogo.....	133,000	....	....	....	....	115,300	....	136,000 454,000	125,200	....	....	....	....	....	....	230.2	....	207	....
Ichihara, Chiba.....	237,500	60,800	....	....	139,900	115,300	c39,450	136,000 235,100	122,500 816,200	....	....	17,045	....	9,450	12,100	258.2	....	540	1,260
Tokuyama, Yamaguchi.....	114,000	52,250	....	....	123,750	318,000	....	240,500 49,500	118,000	....	....	....	....	....	....	216.2	....	153	270
Tomakomai, Hokkaido.....	123,500	22,800	....	....	126,600	116,200	c113,500	131,500 49,500	124,300	....	....	....	....	....	....	250.8	....	356	....
Japan Energy Co.—Chita, Aichi*.....	90,250	38,000	....	....	115,300	121,150	....	327,000 135,100	....	....	....	17,360 445,000	....	....	....	126.1 216.1	....	150	9,000
Mizushima, Okayama ^C	190,190	97,850	223,400	....	138,700	118,000	c227,900	363,000 497,290	137,800 84,320	14,590	....	111,700 2,000	....	5,515	....	127.0 255.9 633.9	....	530	9,000
Kashima Oil Co. Ltd.—Kashima, Ibaragi ^C	171,000	39,900	....	....	125,650	319,800	....	122,500 222,500	120,700 485,500	....	....	....	....	....	11,400	....	....	240	....
Koa Oil Co. Ltd.—Takaishi, Osaka*.....	118,750	57,000	....	....	124,300	112,600	....	215,300 119,800	....	13,600	....	11,890	....	....	....	....	....	100	....
Yamaguchi*.....	120,650	60,800	217,100	....	121,600	319,800	....	234,200 127,000	....	....	....	16,750 22,070	....	....	....	28.0 419.0	770	220	1,530
Kygnus Sekiyu Seisei KK—Kawasaki.....	75,600	....	....	....	....	....	....	419,845	....	....	....	....	....	....	....	....	....	....	....
Kyokuto Petroleum Ltd.—Chiba.....	155,000	83,000	....	....	128,000	125,000	m137,000	440,000 430,000	....	....	....	....	....	....	....	230.0 420.0 88.5	....	220	....
Kyushu Oil Co. Ltd.—Oita.....	130,000	66,000	....	....	116,500	18,000	....	233,000 427,000	19,000	....	....	....	....	....	....	714.9	....	....	....
Mitsubishi Oil Co. Ltd.—Kawasaki.....	75,000	....	....	....	....	110,000	....	437,000 110,000	....	....	....	....	....	....	....	....	....	33	....
Mizushima.....	230,000	67,000	....	....	140,000	125,000	111,000	145,000 320,000	145,000 35,000	17,600	13,000	129,000	....	3,300	....	154.0 64.0	....	540	25,000
Nansei Sekiyu KK—Okinawa.....	90,000	....	....	....	....	110,800	....	480,000 221,600	....	....	....	....	....	....	....	....	....	....	....
Nihonkai Oil Co. Ltd.—Toyama.....	60,000	10,000	....	....	....	17,000	....	213,000 210,000	....	....	....	....	....	....	....	....	....	40	....
Nippon Oil Co. Ltd.—Niigata ^C	26,000	2,000	....	....	....	15,000	....	421,300	....	....	....	....	....	300	....	....	....	....	....
Nippon Petroleum Refining Co. Ltd.—Muroran.....	170,000	61,000	....	....	123,000	122,000	c121,000	114,000 238,000	....	....	....	....	....	....	....	122.0 239.9	....	380	3,000
Negishi.....	385,000	130,000	....	....	171,000	120,000	....	130,000 281,000	269,500 4137,500	14,000	....	12,000	....	2,000	11,800	124.2 229.8	....	660	7,000
Okinawa Sekiyu Seisei—Yonashiro, Okinawa.....	100,000	....	....	....	....	315,000	....	138,000 220,000	115,000 423,000	....	....	....	....	....	....	222.0	....	300	....
Seibu Oil Co. Ltd.—Yamaguchi.....	120,000	40,000	....	....	122,000	117,000	....	150,000 430,000	126,000 436,000	....	23,000	....	25,700	....	....	242.4 617.7	....	340	30,000
Showa Shell Sekiyu KK—Kawasaki.....	109,000	27,500	....	....	....	119,100	....	27,600 414,200	224,900 418,700	....	....	13,300	35,500	....	....	....	....	....	....
Niigata.....	39,000	....	....	....	....	15,300	....	22,900 411,600	....	....	....	....	....	....	....	....	....	....	....
Showa Yokkaichi Sekiyu Co. Ltd.—Yokkaichi.....	222,000	96,300	....	....	122,600	140,600	....	236,900 535,600	261,500 439,200	....	....	15,500	39,200	5,500	....	128.3	....	....	6,300
Taiyo Oil Co. Ltd.—Kikuma, Ehime.....	102,000	27,000	....	....	....	13,000	c218,000	145,200 330,000	....	....	....	113,525 26,000	....	....	....	118.0 4108.0	....	....	....
Toa Oil Co. Ltd.—Kawasaki.....	61,750	55,100	B521,600	....	129,700	17,200	....	115,300 233,150	....	....	15,439	....	....	....	....	1a33.0 60.6	100	330	....
Toho Oil Co. Ltd.—Owase.....	35,000	....	....	....	....	....	....	411,700 541,400 618,000	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Tohoku Oil Co. Ltd.—Sendai.....	83,900	54,700	....	....	125,000	112,000	....	231,100	112,000 418,500	....	....	....	....	....	....	....	....	....	6,200
Tonen Corp.—Kawasaki	217,350	116,235	....	....	179,380	117,680 326,460	222,250	375,600 437,800	144,120 213,230	16,615	....	....	....	....	....	244.0 611.0	....	522	....
Wakayama	156,870	58,307	....	....	134,020	134,918	....	328,350 428,350	134,918 453,865 79,568	12,079	....	....	....	7,008	....	116.0 57.0 610.0	....	172	....
Wakayama Petroleum Refining Co. Ltd.—Kainan City, Wakayama	50,000	30,000	....	....	....	....	....	....	420,000 79,000	....	....	....	....	8,500	....	213.5	....	....	....
Total	5,059,460	1,655,267	86,100	....	791,200	733,808	160,100	2,296,830	2,048,281	43,484	11,439	142,830	20,400	41,573	6,765	1,222.5	2,093	8,161	98,560
JORDAN																			
Jordan Petroleum Refinery—Zerka	90,400	16,700	....	....	14,000	110,900	14,350	....	117,700	....	....	....	....	....	....	28.0 48.0	....	....	4,250
Total	90,400	16,700	....	....	4,000	10,900	4,350	....	17,700	....	....	....	....	....	....	16.0	....	....	4,250
KENYA																			
Kenya Petroleum Refineries Ltd.—Mombasa.....	90,000	1,800	....	....	....	19,000	....	....	229,700	....	....	....	....	....	....	....	....	....	900
Total	90,000	1,800	....	....	....	9,000	....	....	29,700	....	....	....	....	....	....	....	....	....	900
KUWAIT																			
Kuwait National Petroleum Co.—Mina Abdulla.....	255,000	137,000	260,000	....	....	....	138,000	196,000	27,200 672,000	....	....	....	....	....	....	1167.0 424.0	2,100	635	....
Mina Al-Ahmadi.....	435,000	82,000	....	....	138,000	134,000	136,000	1125,000	136,000 474,000	....	....	....	....	....	....	1172.0 454.0	....	850	....
Shuaiba.....	196,000	138,000	....	....	....	114,000	140,000 247,000	....	125,000 656,000	....	....	....	....	....	....	1215.0	....	325	....
Total	886,000	357,000	60,000	....	38,000	48,000	161,000	221,000	270,200	....	....	....	....	....	....	632.0	2,100	1,810	....
LEBANON																			
Tripoli Oil Installations—Tripoli.....	20,000	12,730	....	....	17,250	14,392	....	27,392	....	....	....	....	....	....	....	....	....	....	409
Zahrani Oil Installations—Sidon	17,500	....	....	....	....	13,050	....	....	13,050	....	....	....	....	....	....	....	....	....	....
Total	37,500	12,730	....	....	7,250	7,442	....	7,392	3,050	....	....	....	....	....	....	....	....	....	409
LIBERIA																			
Liberia Petroleum Refining—Monrovia	15,000	1,000	....	....	....	12,000	....	....	12,300 41,000	....	....	....	....	....	....	....	....	....	200
Total	15,000	1,000	....	....	....	2,000	....	....	3,300	....	....	....	....	....	....	....	....	....	200
LIBYA																			
Azzawiya Oil Refining Co.—Azzawiya and Benghazi.....	120,000	7,548	....	....	....	113,440	....	....	116,604 619,926	....	....	....	....	635	....	....	....	....	3,432
Ras Lanuf Oil & Gas Processing Co.—Ras Lanuf	220,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sirte Oil Co.—Brega.....	8,400	....	....	....	....	11,000	....	....	21,200	....	....	....	....	....	....	....	....	....	....
Total	348,400	7,548	....	....	....	14,440	....	....	37,730	....	....	....	....	635	....	....	....	....	3,432
LITHUANIA																			
JSC Mazeikiu Nafta—Mazeikiai.....	263,420	83,223	....	29,525	143,692	125,741	....	....	151,482 411,937 542,511	....	....	....	....	....	1125	162.5	....	198	....
Total	263,420	83,223	....	29,525	43,692	25,741	....	....	105,930	....	....	....	....	....	125	62.5	....	198	....
MACEDONIA																			
Okta Crude Oil Refinery—Skopje.....	51,180	....	....	....	....	110,780	....	45,870	214,870	....	....	....	33,490	....	....	....	....	....	....
Total	51,180	....	....	....	....	10,780	....	5,870	14,870	....	....	....	3,490	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
MADAGASCAR																			
Solima Raffinerie—Toamasina	15,000	1,500	....	26,000	....	22,000	....	23,600	64,500	....	....	....	....	....	....	....	....	....	....
Total	15,000	1,500	....	6,000	....	2,000	....	3,600	4,500	....	....	....	....	....	....	....	....	....	....
MALAYSIA																			
Esso Malaysia Berhad—Port Dickson	84,400	4,400	....	....	....	117,700	....	....	224,900	....	....	....	....	....	....	....	....	....	....
									410,800										
Petronas—Kertih	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Melaka I	100,000	....	....	....	....	320,000	....	....	120,000	....	....	....	....	....	....	....	....	....	....
Melaka II	100,000	62,000	221,000	....	....	26,000	28,500	....	235,000	....	....	....	9,000	....	....	....	....	....	....
Sarawak Shell Berhad—Lutong	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shell Refining Co. Berhad—Port Dickson	105,000	7,000	....	....	....	14,000	....	....	232,000	....	....	....	....	....	....	....	....	....	4,000
						313,000			45,000										
Total	474,400	73,400	21,000	....	....	80,700	28,500	....	127,700	....	....	....	9,000	....	....	....	....	....	4,000
MARTINIQUE																			
Societe Anonyme de la Raffinerie des Antilles— Fort-de-France	16,090	....	....	....	....	43,019	....	....	15,176	....	....	....	....	....	....	....	....	15	....
									48,977										
Total	16,090	....	....	....	....	3,019	....	....	14,153	....	....	....	....	....	....	....	....	15	....
MEXICO																			
Petroleos Mexicanos—Cadereyta	235,000	137,000	....	50,000	165,000	120,000	....	....	86,000	19,700	....	....	....	....	1700	....	....	....	15,000
Ciudad Madero	195,000	81,500	....	....	143,000	135,000	....	....	58,000	25,111	....	....	....	....	....	10.0	....	....	....
Minatitlan	200,000	82,000	....	....	124,000	148,000	....	....	100,000	15,000	....	117,150	....	....	....	....	....	....	....
Salamanca	235,000	149,200	....	....	140,000	125,000	218,500	....	96,000	17,435	....	....	....	16,250	1,022	60.0	....	....	15,000
Salina Cruz	340,000	160,000	....	50,000	180,000	350,000	....	....	161,000	38,800	....	....	....	....	2,093	....	....	....	....
Tula Hidalgo	320,000	152,000	141,000	....	180,000	165,000	....	....	247,000	24,726	....	....	....	....	4,187	....	....	....	....
Total	1,525,000	761,700	41,000	100,000	332,000	243,000	18,500	....	748,000	120,772	....	17,150	....	16,250	8,002	70.0	....	....	30,000
MOROCCO																			
Samir—Mohammedia ^C	125,230	17,465	....	....	....	121,830	....	....	121,830	....	....	....	....	2,460	....	....	....	....	5,630
									88,670										
									72,510										
Ste. Cherifienne des Petroles—Sidi Kacem	31,600	7,200	....	....	25,040	12,800	....	....	13,000	....	....	....	....	....	....	....	....	....	....
Total	156,830	24,665	....	....	5,040	24,630	....	....	36,010	....	....	....	....	2,460	....	....	....	....	5,630
MYANMAR																			
Myanma Petrochemical Enterprise—Chauk	6,000	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Thanlyin	26,000	2,000	25,200	....	....	....	....	....	....	....	....	....	....	500	....	....	120	....	....
Total	32,000	4,000	5,200	....	....	....	....	....	....	....	....	....	....	500	....	....	120	....	....
NETHERLANDS																			
Esso Nederland BV—Rotterdam	180,000	80,700	336,660	....	....	328,825	139,300	....	128,825	....	....	....	....	....	....	121.0	....	564	....
									210,660										
									470,500										
									618,140										
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					431,800										
									75,900										
Netherlands Refining Co.—Europoort*	399,000	101,650	....	260,300	150,400	153,100	....	....	131,500	25,850	....	....	37,200	....	11,350	....	....	....	....
									263,900										
									464,800										
Shell Nederland Raffinaderij BV—Pernis	374,000	148,000	....	245,000	154,000	342,000	222,000	286,000	2138,000	26,800	....	....	....	7,100	12,550	159.0	....	....	5,500
									38,000										
									7300										
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	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Total	1,187,842	430,560	36,660	121,300	104,400	171,748	106,953	86,000	^{428,959} 559,565	12,650	....	25,618	13,700	11,600	3,900	144.9	....	841	14,620
NETHERLANDS ANTILLES																			
Refineria Isla Curazao SA—Emmastad, Curaçao.....	250,000	157,000	....	170,000	150,000	119,800	....	....	^{249,600} ^{429,100} ^{513,500} ^{72,700}	26,300	12,900	....	....	8,800	....	....	300	140	15,000
Total	250,000	157,000	....	70,000	50,000	19,800	....	....	94,900	6,300	2,900	....	....	8,800	....	....	300	140	15,000
NEW ZEALAND																			
New Zealand Refining Co. Ltd.—Whangarei	98,000	42,750	....	....	....	122,500	125,000	....	^{232,400} ^{418,000}	....	....	....	....	....	....	144.0	....	80	4,410
Total	98,000	42,750	....	....	....	22,500	25,000	....	50,400	....	....	....	....	....	....	44.0	....	80	4,410
NICARAGUA																			
Esso Standard Oil SA Ltd.—Managua	18,500	1,900	....	....	....	13,200	....	....	^{25,700} ^{46,600} ^{54,000}	....	....	....	....	....	....	....	....	....	....
Total	18,500	1,900	....	....	....	3,200	....	....	16,300	....	....	....	....	....	....	....	....	....	....
NIGERIA																			
Kaduna Refinery & Petrochemical Co. (NNPC)—Kaduna.....	110,000	36,290	....	....	118,000	115,300	....	....	^{121,600} ^{415,750} ⁸⁵³⁶	....	....	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} ^{614,500}	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	....	....	82,700	70,070	....	....	109,231	9,870	2,274	291	3,610	3,878	....	....	....	....	14,850
NORTH KOREA																			
Government ^U	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ungi.....	42,000	....	....	....	....	17,300	....	....	17,400	....	....	11,000	....	....	11,000	....	....	....	....
Total	71,000	....	....	....	....	7,300	....	....	7,400	....	....	1,000	....	....	1,000	....	....	....	....
NORWAY																			
Esso Norge AS—Slagen	105,000	....	....	230,200	....	112,100	....	....	^{222,600} ^{439,200} ^{69,500}	....	....	....	....	....	....	....	....	24	....
Norske Shell AS—Sola.....	53,000	....	....	118,000	....	111,000	....	....	^{117,500} ^{411,000}	....	....	....	34,000	....	....	....	....	....	....
Statoil Mongstad—Mongstad.....	154,000	....	225,000	....	^{1254,000} ^{315,800}	19,800	....	^{217,100} ^{416,900}	^{126,000} ^{610,000}	....	111,500	....	34,000	....	....	....	610	....	....
Total	312,000	....	25,000	48,200	54,000	48,700	....	34,000	135,800	....	11,500	....	8,000	....	....	....	610	24	....
OMAN																			
Oman Refinery Co.—Mina Al Fahal	85,000	....	....	....	....	316,000	....	....	221,000	....	....	....	....	....	....	....	....	....	....
Total	85,000	....	....	....	....	16,000	....	....	21,000	....	....	....	....	....	....	....	....	....	....
PAKISTAN																			
Attock Refinery Ltd.—Rawalpindi.....	30,500	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
National Refinery Ltd.—Korangi, Karachi.....	62,050	12,600	....	....	....	33,800	....	....	23,800	....	....	....	....	3,400	....	....	....	....	3,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Pakistan Refinery Ltd.—Karachi.....	46,300	....	....	....	....	22,700	....	....	418,100	....	....	....	....	....	....	....	....	....	....
Total	138,850	13,600	....	....	....	6,500	....	....	21,900	....	....	....	....	3,400	....	....	....	....	3,600
PANAMA																			
Refineria Panama SA—Las Minas	60,000	6,500	....	227,000	....	111,000	....	....	112,000 45,400 622,700	....	....	....	....	....	....	....	....	....	....
Total	60,000	6,500	....	27,000	....	11,000	....	....	40,100	....	....	....	....	....	....	....	....	....	....
PARAGUAY																			
Petroleos Paraguayos—Villa Elisa.....	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PERU																			
Maple Gas Corp.—Pucallpa	3,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroperu S.A.—Conchan	6,500	4,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Iquitos Loreto	10,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
La Pampilla Lima	100,000	19,000	....	....	16,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Talara	62,000	24,000	....	....	116,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	182,250	47,400	....	....	23,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PHILIPPINES																			
Caltex (Philippines) Inc.—Batangas	72,000	19,500	....	....	112,500	19,000	....	....	29,000 416,000	....	....	....	....	....	....	....	....	40	....
Petron Corp.—Limay, Bataan	180,000	32,000	....	....	212,000	117,000	....	436,000	254,000	....	....	....	....	....	....	....	....	....	....
Philippine Petroleum Corp.—Pililla .....	....	21,000	....	....	....	....	....	....	....	....	....	....	....	3,700	....	....	....	....	1,200
Pilipinas Shell Petroleum Corp.—Tabango.....	137,000	....	....	120,300	....	318,900	....	247,300	231,100	....	....	....	....	....	....	....	....	....	....
Total	389,000	72,500	....	20,300	24,500	44,900	....	83,300	110,100	....	....	....	....	3,700	....	....	....	40	1,200
POLAND																			
Government-owned refineries at Czechowice, Gorlice, Jaslo, Jedlicze, Trzebinia	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrochemia—Plock.....	260,000	115,000	....	....	146,000	125,000	149,500	....	124,000 638,000 73,000	23,000	....	13,500 2770	....	....	11,600	....	....	....	13,000
Rafineria Gdanska S.A.—Gdansk ^D	90,000	40,000	....	....	....	314,000	....	....	227,500 416,500 75,500	....	....	....	....	4,500	....	....	....	24	4,600
Total	382,000	155,000	....	....	46,000	39,000	49,500	....	114,500	3,000	....	4,270	....	4,500	1,600	....	....	24	17,600
PORTUGAL																			
Petrogal—Leca da Palmeira, Porto*	91,300	11,400	....	....	....	114,800 310,600	....	....	142,200 428,800 73,600	....	....	117,300	....	....	....	....	....	....	....
Sines*.....	213,000	67,000	....	223,400	131,500	324,750	149,180	230,600	124,750 431,500 513,500	25,400	....	....	....	....	....	....	....	180	....
Total	304,300	78,400	....	23,400	31,500	50,150	9,180	30,600	144,350	5,400	....	17,300	....	....	....	....	....	180	....
PUERTO RICO																			
Caribbean Petroleum Corp.—Bayamon.....	49,000	34,000	....	....	114,200	16,000	....	....	16,000 88,000	....	13,000	....	....	....	....	23.5	10	17	....
Sun Company Inc.—Yabucoa .....	....	34,000	....	....	....	....	315,600	....	....	....	....	....	....	9,200	....	219.0	....	49	....
Total	49,000	68,000	....	....	14,200	6,000	15,600	....	14,000	....	3,000	....	....	9,200	....	22.5	10	66	....
QATAR																			
National Oil Distribution Co.—Umm Said	57,500	....	....	....	....	12,100	....	....	219,500	....	....	....	35,300	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Total	57,500	....	....	....	....	^{39,400} 11,500	....	....	^{619,850} 39,350	....	....	....	5,300	....	....	....	....	....	....
ROMANIA																			
Arpechim SA—Pitesti ^{C,D}	70,288	37,589	....	^{211,277}	^{119,178}	^{112,233}	^{31,534}	....	^{111,507} ^{419,178}	....	....	^{11,591}	....	⁷⁵²	....	^{11.5}	....	²²	^{3,320}
Astra SA—Ploiesti.....	56,000	9,400	^{28,600}	....	....	....	....	^{53,000}	....	....	....	....	....	^{6,300}	....	^{12.1}	²²⁰	....	^{1,500}
Petrobrazi SA—Ploiesti.....	69,280	39,240	^{212,660}	....	^{121,400}	^{113,440}	....	....	^{113,920} ^{65,540}	....	....	^{11,510}	^{3,995}	....	....	....	⁴⁰⁰	....	....
Petrolsub SA—Bacau.....	8,000	5,200	....	....	....	....	....	....	....	....	....	....	....	²¹⁰	....	....	....	....	^{2,870}
Petromidia SA—Midia.....	100,000	....	^{222,000}	....	^{119,000}	^{212,200}	....	....	^{116,000} ^{413,000} ^{523,000} ^{6,500}	....	....	^{14,700}	....	....	¹⁸⁰⁰	^{18.1}	....	⁸⁸	....
Petrotel SA—Ploiesti ^P	104,000	55,970	^{211,480}	^{25,500}	^{120,900}	^{111,490}	....	....	^{120,000} ^{620,680} ^{73,200}	^{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.....	77,303	....	^{24,450}	^{212,013}	^{127,197}	^{312,673}	....	^{425,386}	^{220,606} ^{823,797}	....	....	....	....	....	....	^{118.5}	¹⁹⁵	⁶⁰	....
Steaua Romania SA—Cimpina.....	9,272	6,341	....	....	....	....	....	....	....	....	....	....	....	⁴²⁴	....	....	....	....	^{1,110}
Vega SA—Ploiesti.....	11,572	3,764	....	....	....	....	....	....	⁸³⁶³	....	....	....	....	....	....	....	....	....	....
Total	521,715	157,504	68,690	37,590	107,675	65,036	1,534	28,386	197,291	2,300	....	7,801	995	10,366	1,310	34.5	1,385	170	12,470
SAUDI ARABIA																			
Arabian Oil Co. Ltd.—Ras Al Khafji.....	30,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petromin-Shell—Al-Jubail.....	292,000	84,000	....	^{232,000}	....	^{319,000}	^{144,000}	^{249,000}	^{119,000} ^{261,000} ^{453,000}	....	....	^{15,800} ^{27,000}	....	....	....	^{197.0}	....	....	....
Saudi Arabian Oil Co. (Saudi Aramco)—Rabigh.....	325,000	....	....	....	....	....	....	....	^{447,000}	....	....	....	....	....	....	^{112.0}	....	....	....
Ras Tanura.....	300,000	135,000	....	^{260,000}	....	^{154,000}	^{44,000}	....	^{154,000}	....	....	....	....	....	....	....	....	....	....
Jeddah.....	42,000	34,000	....	....	^{113,000}	^{13,000}	^{310,000}	....	^{13,000}	....	....	....	....	....	....	....	....	....	....
Riyadh ^X	140,000	52,350	....	....	....	^{135,660}	^{133,820}	....	^{135,660} ^{614,500}	....	....	....	....	....	....	^{180.7}	....	....	....
Yanbu.....	190,000	....	....	....	....	^{135,000}	....	....	^{135,000} ^{615,000}	....	....	....	....	....	....	....	....	....	....
Saudi Aramco-Mobil—Yanbu.....	366,000	142,400	....	^{246,100}	^{190,600}	^{246,700}	....	....	^{173,500} ^{693,400}	^{223,500}	....	....	^{112,600} ^{320,400}	....	^{12,200}	....	....	....	....
Total	1,685,000	447,750	....	138,100	103,600	193,360	131,820	49,000	504,060	23,500	....	12,800	33,000	....	2,200	189.7	....	....	....
SENEGAL																			
Ste. Africaine de Raffinage—M'Bao (Dakar).....	17,000	8,000	....	....	....	^{12,000}	....	....	^{2,000}	....	....	....	....	....	....	....	....	....	....
Total	17,000	8,000	....	....	....	2,000	....	....	2,000	....	....	....	....	....	....	....	....	....	....
SERBIA																			
Novi Sad.....	60,246	30,000	....	....	....	^{112,233}	....	^{44,600}	^{110,700} ^{44,400} ^{74,600}	....	....	....	....	^{1,500}	....	^{10.5}	....	....	^{4,000}
Rafinerija Nafta Pancevo—Pancevo.....	107,018	45,962	....	....	^{121,210}	^{19,377}	....	....	^{17,700} ^{44,550} ^{69,800}	^{13,450}	....	^{12,904}	....	....	....	....	....	⁶⁰	^{4,242}
Total	167,264	75,962	....	....	21,210	21,610	....	4,600	41,750	3,450	....	2,904	....	1,500	....	0.5	....	60	8,242
SIERRA LEONE																			
Sierra Leone Petroleum Refining Co. Ltd.—Freetown.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SINGAPORE																			
Esso Singapore Pty. Ltd.—Pulau Ayer Chawan.....	227,000	51,900	....	^{248,100}	....	^{111,400}	^{11,500}	....	^{222,800}	....	....	....	....	^{11,400}	....	^{13.0}	....	¹²⁶	^{6,800}

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Mobil Oil Singapore Pty. Ltd.—Jurong	255,000	95,000	....	256,000	....	118,000 348,000	m126,000	J511,000	484,100 190,000 448,000	....	....	115,000 33,300	....	8,000	....	410.0 116.0 418.0	....	....	....
Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	405,000	74,800	....	18260,000	134,000	16,900 330,100	130,000	277,600	284119,300	23,000	....	....	....	6,500	....	140.8	....	....	8,400
Singapore Petroleum Co. Ltd.—Pulau Merlimau	285,000	71,250	....	230,400	Y231,000	213,500	c113,300 m417,000	478,000	113,700	14,200	24,100	....	....	....	11,400	235.0 47.0 514.0 65.0	....	....	10,400
Total	1,172,000	292,950	....	194,500	65,000	127,900	87,800	166,600	377,900	7,200	4,100	18,300	....	25,900	1,400	148.8	....	126	25,600

SLOVAKIA

Slovnaft, Joint Stock Co.—Bratislava ^C	115,000	53,030	....	....	....	122,270	c116,970	....	120,850 33,410 446,000 73,200 6370	....	....	13,160 41,250	35,790	3,200	....	132.9 58.2	....	74	9,070
Total	115,000	53,030	....	....	....	22,270	16,970	....	73,830	....	....	4,410	5,790	3,200	....	41.1	....	74	9,070

SLOVENIA

Nafta Lendava d.o.o.—Lendava	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14.7	....	....	....
Total	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4.7	....	....	....

SOMALIA

Iraqsoma Ref. Co.—Mogadishu	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

SOUTH AFRICA

Caltex Oil SA—Cape Town	112,000	55,500	....	212,000	138,000	115,000	....	....	224,000 418,000 6,000	....	11,800	....	35,500	....	....	....	....	90	....
Engen Refinery—Durban ^{ZAA}	104,000	37,633	....	17,000 221,578	121,598	120,362	....	....	126,088 445,000	2,148	1512	19,220	35,652	2,739	....	413.0	....	133	4,835
National Petroleum Refiners of South Africa Pty Ltd.—Sasolburg	87,547	48,420	....	....	118,717	114,642	c111,472	113,132	214,642 411,321	23,924	....	....	13,622	....	....	125.4 68.5	....	120	1,207
Shell and BP Petroleum Refineries Pty. Ltd.—Durban	165,000	71,000	....	230,000	133,000	129,000	....	....	246,000 470,000 612,000 7370	23,100	....	....	....	3,200	....	....	240	140	....
Total	468,547	212,553	....	70,578	111,315	79,004	11,472	13,132	273,421	9,172	2,312	9,220	14,774	5,939	....	46.9	240	483	6,042

SOUTH KOREA

Hyundai Lube Oil—Busan*	9,500	6,650	....	....	....	....	....	....	21,800 71,080	....	....	....	....	1,800	....	20.4	....	....	3,600
Hyundai Oil Refinery Co.—Daesan	310,000	41,000	219,000	....	....	320,000	122,000	....	227,000 412,000	....	....	....	....	1,000	....	254.0	1,200	180	3,727
Inchon ^{BB}	270,000	18,000	....	....	....	15,400 322,500	....	....	227,900 486,850	....	....	113,000	....	....	....	....	....	126	....
LG-Caltex—Yosu	633,600	9,600	....	....	163,000	116,000 354,500	....	....	180,800 228,200	....	....	122,000	....	2,800	12,250	....	....	330	5,400
Ssangyong Oil Refining Co. Ltd.—Onsan	500,000	27,400	....	....	150,000	14,800 427,000	60,000	135,000 230,000	127,400 2780 443,800 710,300	....	....	19,600	....	5,500	....	212.8 720.1	....	....	....
SK Corp. ^{CC} —Ulsan*	817,000	78,850	....	....	245,000	120,070 349,500	c227,000	127,000 354,000	171,280 24,500	15,400	....	127,900 28,055	....	....	14,770	180.0 265.0	....	1,195	2,970

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Total	2,540,100	181,500	19,000	....	158,000	219,770	109,000	146,000	4159,300 761,590	5,400	....	33,600 84,155	....	11,100	7,020	4199.0 431.3	1,200	1,831	15,697
SPAIN																			
Asfaltos Espanoles SA—Tarragona.....	21,000	16,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15,000
BP Oil Espana—Castellon de la Plana*	106,500	44,650	....	....	122,500	115,300	....	428,800	227,000	....	....	....	38,100	....	....	....	....	....	....
Compania Espanola de Petroles—Huelva.....	100,000	38,400	....	29,300	119,400	117,500	....	....	417,100	....	....	18,350	....	2,350	....	144.0	....	50	7,470
									47,350			24,138				452.6			
Cadiz.....	210,000	40,700	....	235,000	137,500	136,250	....	....	135,000	25,650	....	111,700	25,500	7,600	11,275	....	....	146	....
									416,000										
									512,000										
									640,000										
									81,550										
Tenerife	88,000	9,000	....	235,000	....	116,000	....	425,000	116,000	....	....	....	....	....	....	....	....	43	4,500
Petronor SA—Somorrostro Vizcaya.....	220,000	90,000	....	242,000	145,000	230,650	....	....	135,000	27,246	....	....	....	....	15,132	212.0	....	324	....
									245,000							60.1			
									456,000										
Repsol Petroleo 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	....	....	417,000	....	....	....	....	....	1800	....	550	....	4,500
Puertollano, Ciudad Real.....	135,000	62,000	216,000	....	130,000	118,000	....	210,000	438,000	23,300	....	11,800	....	2,800	11,350	....	700	....	6,000
Tarragona.....	180,000	72,000	....	230,000	....	116,000	115,000	221,000	420,000	....	....	....	....	....	11,300	210.0	....	....	....
Total	1,315,500	427,550	29,500	151,300	182,400	196,700	15,000	84,800	425,930	16,196	....	31,988	13,600	15,750	9,857	118.7	1,250	563	42,470
SRI LANKA																			
Ceylon Petroleum Corp.—Sapugaskanda.....	47,500	2,280	....	211,250	....	13,375	....	41,890	46,570	....	....	....	....	....	....	....	....	....	900
Total	47,500	2,280	....	11,250	....	3,375	....	1,890	6,570	....	....	....	....	....	....	....	....	....	900
SUDAN																			
Port Sudan Refinery Ltd.—Port Sudan.....	21,700	....	....	....	....	11,900	....	....	48,100	....	....	....	....	....	....	....	....	....	....
Total	21,700	....	....	....	....	1,900	....	....	8,100	....	....	....	....	....	....	....	....	....	....
SURINAME																			
Staatsolie Maatschappij Suriname n.v.— Wanica District*	6,650	9,960	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	6,650	9,960	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SWEDEN																			
AB Nynas Petroleum—Gothenburg	12,500	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,500
Nynashamn.....	28,000	31,000	....	....	....	....	....	....	72,500	....	....	....	....	2,500	....	21.9	....	....	20,000
Preem Raffinaderi AB—Gothenburg	106,000	....	....	....	....	120,500	....	26,500	146,000	....	....	....	310,000	....	....	536.0	....	112	....
								437,000	314,000										
Shell Raffinaderi AB—Gothenburg	81,000	30,000	....	125,000	....	117,000	....	228,000	228,000	....	....	....	34,000	....	....	....	....	....	....
									45,000										
Skandinaviska Raffinaderi AB—Brofjorden-Lysekil*	199,500	64,600	....	237,800	129,700	332,400	148,600	....	248,600	....	13,420	....	314,400	....	....	69.7	....	200	....
									345,900										
Total	427,000	134,600	....	62,800	29,700	69,900	48,600	71,500	190,000	....	3,420	....	28,400	2,500	....	47.6	....	312	28,500
SWITZERLAND																			
Raffinerie de Cressier SA—Cressier.....	60,000	24,000	....	111,000	....	116,000	....	227,000	127,000	....	....	....	33,600	....	....	....	....	....	5,200
				29,000					48,000										
Tamoi SA—Collombey	72,000	....	....	....	....	112,000	146,400	....	118,800	....	....	....	36,400	....	....	....	....	....	....
									420,000										
Total	132,000	24,000	....	20,000	....	28,000	6,400	27,000	73,800	....	....	....	10,000	....	....	....	....	....	5,200
SYRIA																			
Banias Refining Co.—Banias.....	135,000	50,000	....	225,000	....	316,000	425,000	416,000	116,000	....	....	....	37,500	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Homs Refinery Co.—Homs	107,140	12,200	218,200	....	....	39,812	....	23,050 424,724	18,928	....	....	....	32,910	....	....	....	400	40	6,422
Total	242,140	62,200	18,200	25,000	....	25,812	25,000	43,774	24,928	....	....	....	10,410	....	....	....	400	40	6,422

TANZANIA

Tanzanian & Italian Petroleum Refining Co. Ltd.— Kigamboni Dar es Salaam	14,900	....	....	12,500	....	22,500	....	....	24,400	....	....	....	....	....	....	....	....	....	....
Total	14,900	....	....	2,500	....	2,500	....	....	4,400	....	....	....	....	....	....	....	....	....	....

THAILAND

Esso Standard Thailand Ltd.—Sriracha	173,000	49,000	....	....	133,000	19,500 320,000	....	....	241,600 31,000 458,200 613,700	....	....	....	....	....	....	....	....	164	5,000
Petroleum Authority of Thailand—Bangchak Bangkok	61,750	....	....	....	....	19,450	....	53,150	14,950 25,850 816,200	....	....	....	....	....	....	14.7	....	....	....
Refinery Company (Refco) ^{PD} —Map Ta Phut, Rayong	275,000	46,835	....	....	133,300	313,500	....	....	113,500 450,580 525,200	....	....	....	....	....	....	....	....	....	....
Thai Oil Co. Ltd.—Sriracha	203,000	55,900	....	217,400	111,200	335,400	119,900	24,100	467,000	....	....	....	12,100	....	....	132.6	....	....	3,400
Total	712,750	151,735	....	17,400	77,500	87,850	19,900	7,250	297,780	....	....	....	2,100	....	....	37.3	....	164	8,400

TRINIDAD

Petroleum Co. of Trinidad & Tobago Ltd.— Pointe-a-Pierre	160,000	120,000	....	227,000	127,100	119,100	147,000	418,000	119,500	11,500	....	....	....	1,800	1900	127.0	....	160	....
Total	160,000	120,000	....	27,000	27,100	19,100	47,000	18,000	19,500	1,500	....	....	....	1,800	900	27.0	....	160	....

TUNISIA

Ste. Tunisienne Industries des Raffinage—Bizerte	34,000	....	....	....	....	3,300	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	34,000	....	....	....	....	3,300	....	....	....	....	....	....	....	....	....	....	....	....	....

TURKEY

Anadolu Tasfiyehanesi AS—Mersin*	100,000	....	....	....	....	112,600	....	9,000	119,800	....	....	....	....	....	....	....	....	....	....
Turkish Petroleum Refineries Corp.—Aliaga-Izmir	226,440	84,540	....	219,620	115,095	19,810	216,360	....	111,320 211,320 415,845 77,250	....	....	....	....	5,870	....	234.0 430.1	....	113	5,440
Batman, Siirt	22,015	2,140	....	14,720	....	11,302	....	....	11,302	....	....	....	....	....	....	....	....	....	3,235
Izmit	226,440	88,060	....	....	122,645	16,920 314,000	223,000	427,050	120,760 213,215 488,060 86,290	....	....	....	35,030	....	....	....	180	47	9,000
Kirikkale	113,200	30,190	....	....	....	120,125	214,500	....	120,125 415,096	....	....	....	38,800	....	....	224.6 421.8	....	83	5,750
Total	688,095	204,930	....	24,340	37,740	64,757	53,860	36,050	230,383	....	....	....	13,830	5,870	....	110.5	180	243	23,425

UNITED ARAB EMIRATES

Abu Dhabi																			
Abu Dhabi National Oil Co.—Ruwais*	132,050	44,935	....	....	....	117,280	226,730	....	220,520 420,160	....	....	....	....	....	....	....	....	....	....
Umm Al-Nar 2*	80,750	....	....	....	....	312,600	....	....	235,910 438,790	....	....	....	....	....	....	153.0	....	....	....
Total	212,800	44,935	....	....	....	29,880	26,730	....	115,380	....	....	....	....	....	....	53.0	....	....	....
Fujairah																			
Metro Oil Corp.	75,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	75,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
UNITED KINGDOM																			
England																			
Conoco Ltd.—South Killingholme.....	180,000	185,000	268,000	140,000	148,000	147,000	....	....	475,000 658,000 828,000	214,000	13,500	14,500 22,500	316,000	....	....	....	2,300	....	....
Eastham Refinery Ltd.—Ellesmere Port.....	20,000	17,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11,000
Esso Petroleum Co. Ltd.—Fawley.....	311,200	132,000	....	....	182,400	137,100 223,500	....	121,400	194,700 471,900 711,460 835,400	....	19,470	....	319,560	8,963	....	646.0	....	296	19,600
Lindsey Oil Refinery Ltd.—Killingholme South Humberside.....	192,000	92,000	....	228,700	148,400	132,600	....	454,000	251,000	26,300	11,900	....	....	....	12,400 31,300	....	....	130	7,100
Mobil Oil Co. Ltd.—Coryton Essex*.....	180,000	57,950	....	....	156,250	334,200	....	442,300	166,600	218,000	....	....	313,500	6,750	....	....	....	....	2,430
Phillips Imperial Petroleum Ltd.—Port Clarence.....	100,000	....	....	....	....	....	....	217,500	....	....	....	....	....	....	....	....	....	4	....
Shell U.K. Ltd.—Shell Haven.....	92,000	30,000	....	....	....	339,000	124,000	....	265,000 429,000	....	....	....	320,000	....	....	....	....	....	5,400
Stanlow.....	262,000	46,000	....	....	173,000	129,000 330,000	....	257,000	159,000 214,000	211,000	....	19,000	....	4,500	....	....	....	....	....
Total.....	1,337,200	560,450	68,000	68,700	308,050	272,400	24,000	192,200	659,060	49,300	14,870	16,000	69,060	20,213	3,700	46.0	2,300	430	45,530
Scotland																			
BP Refinery Grangemouth Ltd.—Grangemouth*.....	206,000	64,600	....	....	118,900	139,600	131,500	431,500	262,100	24,500	....	....	....	....	....	149.0	....	....	....
Nynas UK AB—Dundee.....	12,800	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,300
Total.....	218,800	76,600	....	....	18,900	39,600	31,500	31,500	62,100	4,500	....	....	....	....	....	49.0	....	....	8,300
Wales																			
Elf Oil UK Ltd.—Milford Haven.....	108,000	55,000	....	....	132,500	117,800	....	....	117,800 27,500 470,000 86,800 73,430	26,800	21,800	....	37,500	....	....	....	....	22	....
Mobil Llandarcy Refinery—Llandarcy, Neath ^C.....	....	25,740	....	....	....	....	....	....	73,430	....	....	....	....	4,440	....	....	....	....	5,800
Pembroke Cracking Co.—Milford Haven.....	....	....	....	....	EE190,000	....	....	....	....	232,500	....	....	119,900	....	....	....	....	....	....
Texaco Ltd.—Pembroke, Dyfed.....	190,000	91,000	....	226,000	....	439,000	....	434,000	139,000	....	....	....	....	....	....	....	....	160	....
Total.....	298,000	171,740	....	26,000	122,500	56,800	....	34,000	144,530	39,300	1,800	....	27,400	4,440	....	....	....	182	5,800

UNITED STATES

ALABAMA

Coastal Mobile Refining Co.—Mobile Bay.....	18,700	14,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10,300
Hunt Refining Co.—Tuscaloosa*.....	43,225	14,250	210,800	....	....	16,480	....	....	111,790 410,800 510,800 225,000	....	....	....	....	....	....	186.1 47.0	508	81	10,800
Shell Chemical Co.—Saraland.....	85,000	27,000	....	....	....	120,000	....	218,000	....	....	....	....	37,500	....	....	....	....	20	....
Total.....	146,925	55,950	10,800	....	....	26,480	....	18,000	58,390	....	....	....	7,500	....	....	13.1	508	101	21,100

ALASKA

ARCO Alaska Inc.—Prudhoe Bay.....	15,000	....	315,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kuparuk.....	12,000	....	312,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petro Star Inc.—North Pole.....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valdez.....	42,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tesoro Alaska Petroleum Corp.—Kenai.....	72,000	16,500	....	....	....	112,000	112,500	....	112,000	....	....	....	34,000	....	....	112.8	....	15	....
Williams Companies Inc. ^{UU}	130,000	6,000	....	....	....	....	....	....	....	....	....	12,500	....	....	....	....	....	....	....
Total.....	286,000	22,500	27,000	....	....	12,000	12,500	....	12,000	....	....	2,500	4,000	....	....	12.8	....	15	....

ARKANSAS

Berry Petroleum Co.—Stephens.....	6,700	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	900
Cross Oil & Refining Co. Inc.—Smackover.....	6,000	3,000	....	....	....	....	....	....	74,500	....	....	....	....	....	....	12.5	....	....	1,500
Lion Oil Co.—El Dorado* ^D	50,350	18,525	....	....	117,190	311,520	....	....	118,000 47,200	14,410	....	....	35,850	....	....	....	....	142	6,930

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Total	63,050	24,525	....	....	17,190	11,520	....	....	^{518,900} 48,600	4,410	....	....	5,850	....	....	2.5	....	142	9,330
CALIFORNIA																			
Anchor Refining Co.—McKittrick.....	10,000	6,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,500
Atlantic Richfield Co.—Carson.....	255,000	125,000	^{257,000}	....	^{192,000}	^{152,000}	^{143,000}	....	^{140,000} ^{27,000}	^{114,000}	^{12,800}	....	^{13,500}	....	^{12,200}	^{1105.0}	^{2,400}	³⁰⁰	....
Chevron USA Products Co.—El Segundo.....	260,000	120,000	^{264,000}	....	^{162,000}	^{340,000}	^{c145,000} ^{FF468,000}	....	^{152,000} ^{49,000} ^{60,000} ^{890,000}	^{121,000}	....	....	^{319,000}	....	^{11,700} ^{32,600}	^{168.0} ^{254.0}	^{3,447}	⁴⁰⁶	....
Richmond ²	225,000	110,000	....	....	^{165,000}	^{145,000}	^{c141,000} ^{c328,000} ^{c440,000}	....	^{150,000} ^{475,000} ^{719,000}	^{120,000}	^{11,800}	....	^{325,000}	^{14,000}	^{12,300} ^{32,500}	^{1145.0}	....	³⁵⁰	....
Equilon Enterprises LLC ^{GG} —Wilmington*.....	90,250	53,200	^{237,800}	....	^{127,000}	^{125,200}	^{c126,550}	^{326,460}	^{118,000} ^{36,300} ^{412,600}	^{17,920}	....	....	....	....	....	^{113.0} ^{322.5}	^{1,814}	²⁴⁵	....
Bakersfield*.....	61,750	34,295	^{219,440}	....	....	^{110,620}	^{c118,900}	^{215,030}	^{111,250} ^{34,230}	....	....	....	....	....	....	^{124.7}	^{1,089}	⁹³	....
Equilon Martinez Refinery Co. ^{HL} —Martinez.....	153,900	105,200	^{223,200} ^{B320,900}	....	^{168,600} ^{21,000}	^{228,200}	^{c133,800}	....	^{126,000} ^{425,000} ^{570,800} ^{617,600} ^{78,600} ^{844,300}	^{110,200}	^{22,300}	....	^{314,400}	^{3,500}	....	^{1101.2}	^{1,181}	⁴³²	^{15,000}
Exxon Co. USA—Benicia.....	129,500	68,500	^{125,500}	....	^{169,000}	^{234,000}	^{c132,000}	^{237,000}	^{128,000} ^{244,000} ^{311,000} ^{413,500} ^{611,500} ^{817,500}	^{114,000}	^{12,000}	....	....	....	....	^{1110.0}	⁹²⁵	²⁷⁵	....
Golden Bear Oil Specialties—Oildale.....	12,500	11,500	....	....	....	....	....	....	^{72,000}	....	....	....	....	^{6,000}	....	....	....	....	^{5,000}
Huntway Refining Co.—Benicia.....	10,000	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{5,000}
Wilmington.....	5,500	5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{3,500}
Kern Oil & Refining Co.—Bakersfield.....	21,400	....	....	....	....	^{13,000}	....	....	^{14,500} ^{32,000} ^{46,500}	....	....	....	....	....	....	....	....	⁵	....
Mobil Oil Corp.—Torrance.....	130,000	101,000	^{250,200}	....	^{190,500}	^{139,200}	^{123,900}	^{397,300}	^{120,800} ^{617,800}	^{223,000}	....	....	....	....	....	^{1139.6}	^{3,000}	⁴⁰⁰	....
Paramount Petroleum Corp.—Paramount.....	43,000	26,500	....	....	....	^{17,500}	....	^{210,800}	^{29,500} ^{48,000} ^{68,000}	....	....	....	....	....	....	....	....	....	^{15,000}
San Joaquin Refining Co. Inc.—Bakersfield.....	24,300	14,300	....	^{210,000}	....	....	....	....	^{43,000}	....	....	....	....	^{4,000}	....	^{1a3.5} ^{43.5}	....	³	^{5,000}
Santa Maria Refining Co.—Santa Maria.....	11,000	11,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{7,000}
Ten By, Inc.—Oxnard.....	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{2,500}
Tosco Refining Co.—Los Angeles (Carson and Wilmington).....	125,000	78,000	^{248,000}	....	^{145,000}	^{135,200}	^{c124,750}	....	^{150,850} ^{50,000} ^{635,000}	^{19,450}	....	....	^{13,000}	....	....	^{1100.8}	^{2,000}	³⁴⁰	....
San Francisco (Avon, Rodeo, and Santa Maria).....	271,000	172,400	^{142,000} ^{242,200}	....	^{166,500}	^{149,100} ^{321,500}	^{c164,000}	^{265,000}	^{143,700} ^{37,000} ^{433,000} ^{636,100}	^{115,000}	....	....	^{39,000}	....	^{12,300}	^{1a31.0} ^{1154.0}	^{3,500}	⁴⁶⁰	....
Ultramar Diamond Shamrock Corp.—Wilmington.....	100,000	39,000	^{222,000}	....	^{135,000}	^{314,000}	....	^{441,000}	^{222,000}	^{29,700}	....	....	^{17,600}	....	....	....	^{1,100}	....	....
World Oil Co.—South Gate.....	7,000	7,125	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,950,600	1,096,020	452,240	10,000	621,600	404,520	488,900	292,590	1,179,930	144,270	8,900	....	81,500	27,500	13,600	1,075.8	20,456	3,309	60,500
COLORADO																			
Conoco Inc.—Commerce City.....	57,500	25,000	....	....	^{119,000}	^{19,600}	....	^{312,000}	^{19,600}	....	^{12,600}	....	....	....	....	....	....	⁹⁰	^{9,800}

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Ultramar Diamond Shamrock Corp.—Denver.....	28,000	9,500	....	....	18,000	19,000	....	....	⁴ 12,500 19,000	....	1900	....	....	....	....	....	....	....	....
Total	85,500	34,500	....	....	27,000	18,600	....	12,000	31,100	....	3,500	....	....	....	....	....	....	90	9,800
DELAWARE																			
Motiva Enterprises LLC ^{ll} —Delaware City	140,000	85,500	149,000	....	163,000	336,900	^c 217,100	....	162,100 426,100 627,000 840,560	18,190	15,040	11,260	....	....	12,192 32,322	140.0 427.0	1,800	455	....
Total	140,000	85,500	49,000	....	63,000	36,900	17,100	....	155,760	8,190	5,040	1,260	....	....	4,514	67.0	1,800	455	....
GEORGIA																			
Citgo Petroleum Corp.—Savannah.....	28,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	20,250
Young Refining Corp.—Douglasville.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	1,200	....	....	....	....	3,000
Total	34,000	....	....	....	....	....	....	....	....	....	....	....	....	1,200	....	....	....	....	23,250
HAWAII																			
Chevron USA Products Co.—Barber's Point	54,000	30,000	....	....	121,000	....	....	....	83,000	14,000	21,000	....	11,200	....	....	12.0	....	....	1,300
Tesoro Hawaii Petroleum Co. ^{TT} —Kapolei.....	95,000	40,000	....	² 13,000	....	113,000	^c 118,000	....	....	....	....	....	....	....	....	² 15.0	....	20	....
Total	149,000	70,000	....	13,000	21,000	13,000	18,000	....	3,000	4,000	1,000	....	1,200	....	....	17.0	....	20	1,300
ILLINOIS																			
Citgo Petroleum Corp.—Lemont*	145,350	55,100	225,110	....	152,200	126,820	....	....	120,700 223,400 35,760 435,100 5,760	216,200	....	13,150	36,660	....	....	111.0	1,816	....	3,240
Clark Refining & Marketing—Blue Island	76,000	37,000	....	....	130,000	129,000	110,000	....	121,000	25,700	....	....	....	....	....	....	....	20	6,700
Hartford	68,000	30,000	215,000	....	126,500	113,000	....	....	111,400 23,800 43,800 67,600	26,000	....	....	33,800	....	....	12.4	680	....	....
Marathon Ashland Petroleum LLC—Robinson.....	192,000	56,000	227,100	....	147,400	232,000 339,700	125,200	....	155,800 464,200 815,700	212,300	....	....	313,500	....	11,200 3200	125.0	1,400	192	....
Mobil Oil Corp.—Joliet.....	231,700	103,500	247,700	....	191,200	341,700	....	....	168,500 210,000 681,200	226,000	....	....	....	....	....	....	3,000	560	....
Wood River Refining Co.—Wood River ^p	274,500	107,000	....	....	190,000	115,000 270,000	^c 128,500	....	160,000 219,000 470,000 525,500 710,000	120,500	....	13,500	....	5,000	....	^{1a} 51.5	....	442	40,000
Total	987,550	388,600	114,910	....	337,300	267,220	63,700	....	618,220	86,700	....	6,650	23,960	5,000	1,400	89.9	6,896	1,214	49,940
INDIANA																			
Amoco Oil Co.—Whiting.....	410,000	242,000	234,200	....	1156,800	285,500	....	392,200	186,900 696,000 824,700	134,200	....	116,200	324,700	....	13,800	129.5	1,690	449	60,000
Countrysmark Cooperative Inc.—Mount Vernon.....	22,000	7,200	....	....	17,850	36,500	....	....	210,000	21,700	....	....	32,200	....	....	....	....	....	....
Laketon Refining Corp.—Laketon*	3,990	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	435,990	249,200	34,200	....	164,650	92,000	....	92,200	217,600	35,900	....	16,200	26,900	....	3,800	29.5	1,690	449	60,000
KANSAS																			
El Dorado Refining Co. ⁶⁶ —El Dorado*	109,000	39,000	218,000	....	137,500	127,500	....	348,000	122,000 218,000 633,500	211,500	....	13,000 41,500	315,000	....	....	16.0	860	250	....
Farmland Industries Inc.—Coffeyville	110,000	50,000	216,500	....	128,000	117,000	....	....	228,500 37,000 621,000	27,000	....	....	38,500	....	....	....	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	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
National Cooperative Refinery Association— McPherson.....	75,500	32,100	220,800	....	120,800	320,300	410,400	....	122,400 29,400 424,000 69,000	26,600	....	....	13,300 39,400	....	....	....	612	81	....
Total.....	294,500	121,100	55,300	....	86,300	64,800	10,400	48,000	194,800	25,100	....	4,500	36,200	....	....	6.0	2,272	331	....
KENTUCKY																			
Marathon Ashland Petroleum LLC—Catlettsburg ²	222,000	90,000	....	....	155,000 240,600	345,100	....	341,300	147,700 26,700 38,100 493,400 710,700 820,500 31,300 6400	211,300	11,200	15,800 48,700	14,300 312,100	9,800	12,100	....	....	438	21,800
Somerset Refinery Inc.—Somerset.....	5,500	....	....	....	....	21,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	227,500	90,000	....	....	95,600	46,100	....	41,300	188,800	11,300	1,200	14,500	16,400	9,800	2,100	....	....	438	21,800
LOUISIANA																			
American International Refining, Inc.—Lake Charles.....	27,600	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BP Oil Co.—Belle Chasse ¹	255,000	89,300	222,500	....	192,700	137,800	....	427,900	243,200 423,400	234,200	....	27,000	....	....	....	710.4	800	....	....
Calcasieu Refining Co.—Lake Charles.....	15,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Calumet Lubricants Co.—Cotton Valley.....	8,000	....	....	....	....	....	....	....	33,600	....	....	....	....	....	....	12.5	....	....	....
Princeton.....	8,000	7,150	....	....	....	....	....	....	....	....	....	....	....	5,300	....	14.5	....	3	1,500
Canal Refining Co.—Church Point.....	10,000	3,000	....	....	....	....	....	....	13,000	....	....	....	....	....	....	....	....	....	....
Cit-Con Oil Corp.—Lake Charles.....	....	38,000	....	....	....	....	....	....	....	....	....	....	....	9,500	....	....	....	....	....
Citgo Petroleum Corp.—Lake Charles.....	304,000	76,950	284,600	....	1117,000	146,800 345,000	136,000	435,100	173,800 25,400 412,600 433,300 547,500 637,300 811,200	120,700	....	14,500	325,200	9,500	12,520 33,420	....	3,800	700	....
Conoco Inc.—Westlake.....	231,100	154,000	264,100	111,300	147,800	343,900	329,000	....	146,000 433,300 547,500 637,300 811,200	110,300	15,300	....	....	11,500	11,300	4100.0	3,400	363	....
Exxon Co.—Baton Rouge.....	473,000	217,000	2102,000	....	1208,000	269,000	122,500	....	1107,000 243,000 685,500 72,700 844,000	135,000	19,000	....	....	16,000	17,000	411.0 67.0	4,940	610	....
Marathon Ashland Petroleum LLC—Garyville ²	232,000	124,000	....	....	1102,000	343,000	....	....	143,700 48,000 583,500 818,000	229,100	....	....	121,400 317,400	....	....	....	....	490	39,900
Mobil Oil Corp.—Chalmette.....	184,100	120,000	233,800	....	166,000	127,000 316,500	119,600	343,700	236,500 626,500	211,600	....	19,700	310,700	....	....	....	2,205	250	....
Motiva Enterprises LLC ¹¹ —Convent.....	225,000	100,000	....	212,000	185,000	136,000	445,000	....	140,000 488,000 534,000	113,050	23,600	....	311,250	....	12,250 32,500	358.0	....	711	....
Motiva Enterprises LLC ¹¹ —Norco.....	225,000	78,000	225,500	....	1107,000	119,600 239,000 316,200	136,000	....	140,000 451,000	116,000	....	....	....	....	17,000	165.0	1,000	....	....
Murphy Oil USA Inc.—Meraux ²	95,000	47,500	....	....	134,200	....	....	....	119,800 413,500 824,750	27,650	....	....	....	....	....	....	....	120	....
Pennzoil Products Co.—Shreveport.....	46,200	23,085	....	....	1210,080	18,000	....	....	110,000 73,060 88,500	15,040	....	....	14,032	7,650	....	16.1	....	10	540
Placid Refining Co.—Port Allen ²	48,000	20,000	....	....	119,000	19,700	....	....	29,700 612,000	23,800	....	....	....	....	....	....	....	28	....
Shell Chemical Co.—St. Rose.....	55,000	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
TransAmerican Refining Corp.—Norco.....	200,000	220,000	275,000	....	....	112,000	....	30,000	130,000 630,000	....	....	....	....	....	....	....	4,110	290	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Valero Energy Corp.—Krotz Springs	74,000	20,800	....	....	131,000	111,800	....	....	114,900	....	14,200	....	34,300	....	12,100	....	....	....	....
Total	2,716,300	1,377,785	407,500	23,300	919,780	481,300	188,100	136,700	1,307,910	186,440	22,100	41,200	94,282	59,450	28,090	269.0	20,255	3,575	41,940
MICHIGAN																			
Lakeside Refining Co.—Kalamazoo	5,600	....	....	....	....	1900	....	....	....	14,100	....	....	....	....	1700	....	....	139	21,100
Marathon Ashland Petroleum LLC—Detroit.....	74,000	39,000	....	....	128,600	118,800	....	....	114,000 419,000 516,900	....	....	....	....	....	....	....	....	....	....
Ultramar Diamond Shamrock Corp.—Alma.....	51,000	....	....	....	118,500	112,000	....	....	112,000 25,100 414,000 63,600 83,500	24,600	2900	....	35,100	....	....	66.7	....	25	....
Total	130,600	39,000	....	....	47,100	31,700	....	....	88,100	8,700	900	....	5,100	....	700	6.7	....	164	21,100
MINNESOTA																			
Koch Refining Co. L.P.—Rosemount	280,000	160,000	270,000	....	185,000	315,000 438,000	....	....	153,000 234,000 495,000 594,000 66,000	112,200	11,100 23,600	....	319,000	....	21,500	180.0 510.0	4,000	800	25,000
Marathon Ashland Petroleum LLC—St. Paul.....	70,000	32,000	....	....	123,600	119,100	....	324,000	124,300 425,100 89,600	25,800	....	....	12,000 37,600	....	....	110.0	....	94	9,100
Total	350,000	192,000	70,000	....	108,600	72,100	....	24,000	341,000	18,000	4,700	....	28,600	....	1,500	100.0	4,000	894	34,100
MISSISSIPPI																			
Chevron USA Products Co.—Pascagoula.....	295,000	231,000	271,000	....	163,000	171,000	158,000 284,000	....	145,000 460,000 635,000	114,800	....	119,000	....	....	12,100	1205.0	4,083	1,067	....
Ergon Refining Inc.—Vicksburg	23,000	10,200	....	....	....	....	....	26,000	76,500	....	....	....	....	6,000	....	1a7.7	....	....	....
Southland Oil Co.—Lumberton.....	5,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,150
Sandersville	11,000	6,050	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,500
Total	334,800	247,250	71,000	....	63,000	71,000	142,000	6,000	146,500	14,800	....	19,000	....	6,000	2,100	212.7	4,083	1,067	7,650
MONTANA																			
Cenex Harvest States—Laurel ^D	46,000	23,500	....	....	113,500	112,000	....	....	116,000 417,000 516,000	23,500	....	....	12,500	....	....	1a12.0 412.0	....	120	10,500
Conoco Inc.—Billings.....	52,000	26,500	216,000	....	119,000	115,000	....	222,000	212,000 416,000 69,000	26,800	....	....	13,800	....	....	120.0 611.4	720	....	....
Exxon Co.—Billings	52,000	21,000	17,500	....	120,000	19,500	14,500	....	215,000 49,500 69,500 85,500	23,500	....	....	....	....	....	120.5 63.5	375	....	6,000
Montana Refining Co.—Great Falls	7,000	3,350	....	....	12,300	11,000	....	....	11,000 41,950 52,900 6900	2650	1400	....	3650	....	....	12.0	....	....	....
Total	157,000	74,350	23,500	....	54,800	37,500	4,500	22,000	132,250	14,450	400	....	6,950	....	....	81.4	1,095	120	16,500
NEVADA																			
Foreland Refining Co. ^{KK} —Tonopah	3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
NEW JERSEY																			
Amerada-Hess Corp.—Port Reading .....	....	....	....	....	162,000	....	....	....	....	14,050	14,500	....	....	....	11,200	....	....	....	....
Chevron USA Products Co.—Perth Amboy.....	80,000	43,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	33,250
Citgo Asphalt Refining Co.—Paulsboro.....	80,000	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30,500
Coastal Eagle Point Oil Co.—Westville ^C	135,000	47,500	....	....	150,000	128,000	....	416,000	129,000	14,000	13,300	117,600	310,000	....	....	....	....	15	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Tosco Refining Co.—Linden ²	250,000	62,000	....	....	1138,000	228,000	....	345,000 465,000	129,000 614,000	112,000	....	41,600	13,000	....	....	611.0	....	90	36,000
Valero Energy Corp. ^{LL} —Paulsboro.....	155,000	83,200	223,200	....	146,200	123,000	....	514,000	124,000 423,500 641,500 7680	210,100	....	....	....	11,500	....	110.6	1,255	160	9,800
Total	700,000	271,400	23,200	....	296,200	79,000	....	140,000	161,680	30,150	7,800	19,200	13,000	11,500	1,200	21.6	1,255	265	109,550
NEW MEXICO																			
Giant Refining Co.—Bloomfield.....	16,800	....	....	....	15,331	14,900	....	....	14,900 63,000	....	12,000	....	....	....	....	....	....	2	....
Gallup.....	20,800	....	....	....	18,500	16,800	....	....	26,800 43,000	21,800	....	....	34,000	....	....	....	....	....	....
Navajo Refining Co.—Artesia.....	60,000	20,000	....	....	118,500	312,500	....	....	125,000 425,500	27,800	....	....	310,000	....	....	....	....	30	3,500
Total	97,600	20,000	....	....	32,331	24,200	....	....	68,200	9,600	2,000	....	14,000	....	....	....	....	32	3,500
NORTH DAKOTA																			
Amoco Oil Co.—Mandan.....	58,000	....	....	....	124,700	211,500	....	....	112,000 64,800	24,200	11,100	....	34,800	....	....	....	....	15	....
Total	58,000	....	....	....	24,700	11,500	....	....	16,800	4,200	1,100	....	4,800	....	....	....	....	15	....
OHIO																			
Marathon Ashland Petroleum LLC—Canton.....	73,000	33,000	....	....	123,700	318,000	....	323,900	125,000 49,500 64,700	25,900	12,100	....	34,700	....	....	....	....	108	8,000
BP Oil Co.—Toledo*.....	147,250	51,300	228,000	....	154,000	237,800	425,200	440,500	136,900	110,350	....	....	....	....	....	125.0	850	....	....
Clark Refining & Marketing ^{MM} —Lima.....	165,000	53,000	222,500	....	138,000	253,000	424,000	....	160,000	....	....	14,950 23,150	318,500	....	....	110.4	800	20	....
Sun Company Inc.—Toledo.....	130,000	30,000	....	....	160,000	145,600	128,200	....	148,000	19,000	....	19,000	....	....	....	152.0	....	....	....
Total	515,250	167,300	50,500	....	175,700	154,400	77,400	64,400	184,100	25,250	2,100	17,100	23,200	....	....	87.4	1,650	128	8,000
OKLAHOMA																			
Conoco Inc.—Ponca City.....	168,000	50,400	221,800	....	154,300	140,400	....	....	140,400 412,800 518,900 630,300	213,600	11,500	....	17,350 37,800	....	11,200	610.4	925	30	....
Gary-Williams Energy Corp.—Wynnewood* ²	45,000	14,000	....	....	117,500	311,250	14,500	....	110,500	24,500	....	....	33,500	....	....	19.0	....	....	4,500
Sinclair Oil Corp.—Tulsa.....	50,000	25,175	....	....	116,200	110,800	....	....	110,800 615,500	12,700	....	....	35,400	....	....	....	....	19	2,250
Sun Company Inc.—Tulsa ^C	85,000	30,000	28,500	....	....	117,500	....	....	124,000 710,500	....	....	....	....	8,000	....	....	350	....	....
Ultramar Diamond Shamrock Corp.—Ardmore.....	68,000	30,000	....	....	123,000	315,000	....	325,000	121,000 425,000	26,200	....	....	36,100	....	....	126.0 426.0	....	41	5,500
Total	416,000	149,575	30,300	....	111,000	94,950	4,500	25,000	219,700	27,000	1,500	....	30,150	8,000	1,200	71.4	1,275	90	12,250
OREGON																			
Chevron USA Products Co.—Portland.....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,000
Total.....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,000
PENNSYLVANIA																			
American Refining Group—Bradford ²	10,000	....	....	....	....	11,800	....	....	23,500	....	....	....	....	2,600	....	....	....	....	....
Pennzoil Products Co.—Rouseville.....	15,700	6,175	....	....	....	15,238	....	....	15,850 77,470	....	....	....	31,035	4,275	....	13.5	....	....	....
Sun Company Inc.—Marcus Hook.....	175,000	26,400	....	....	193,000	115,600	....	412,000	136,000	110,000	....	119,200 32,400	....	....	12,600	16.0	....	....	....
Philadelphia.....	307,000	157,400	....	....	199,000	181,600	....	....	185,600 478,000	216,700	....	13,700 43,900	17,300	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd							Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates					
Tosco Refining Co.—Trainer	175,000	70,000	....	....	150,000	347,500	NNm420,000	338,000	152,000 440,000	211,900	....	....	....	....	....	....	....	35	....
United Refining Co.—Warren	66,700	27,000	....	....	123,000	216,000	....	....	220,000 46,000 614,000	13,500	11,000	....	36,800	....	....	....	....	....	12,000
Total	749,400	286,975	....	....	265,000	167,738	20,000	50,000	348,420	42,100	1,000	29,200	15,135	6,875	2,600	9.5	....	35	12,000
TENNESSEE																				
Williams Companies Inc. ^{UU} —Memphis.....	120,000	15,000	....	....	165,000	115,000	....	....	120,000 420,000 620,000	27,200	13,800	....	14,000	....	....	....	....	40	....
Total	120,000	15,000	....	....	65,000	15,000	....	....	60,000	7,200	3,800	....	4,000	....	....	....	....	40	....
TEXAS																				
AGE Refining & Manufacturing—San Antonio.....	5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Amoco Oil Co.—Texas City ^D	437,000	228,000	240,400	....	1209,000	2137,800	c157,000 c257,000	395,000	1104,500 133,000 831,400	120,900 238,000	....	143,700	331,400	....	....	1180.0 522.8	2,585	1,123	....
Chevron USA Products Co.—El Paso	90,000	34,700	....	....	128,000	117,700	....	....	118,300 419,500	18,200	....	....	12,500	....	....	....	....	20	4,800
Citgo Petroleum Corp.—Corpus Christi.....	130,000	72,000	236,000	....	177,000	352,000	....	....	247,000 562,000 641,000	221,000	....	33,600 48,800	....	....	14,500	....	2,200	....	....
Clark Refining & Marketing—Port Arthur.....	225,000	100,000	237,500	....	170,000	150,000	....	....	150,000 479,000 560,000	217,000	....	19,800 22,500 32,200	....	....	....	....	1,900	425	....
Coastal Refining & Marketing Inc.—Corpus Christi.....	100,000	56,000	217,000	210,000	120,000	110,000 319,000	c110,500	....	131,000 424,000 525,000	23,000	12,000	114,300 26,000	35,200	....	....	124.0 515.0	1,000	280	12,000
Crown Central Petroleum Corp.—Pasadena	100,000	40,000	212,500	....	156,000	114,000 322,000	....	410,000	126,000	213,000	....	....	35,000	....	12,000	....	320	20	...
Exxon Co. USA—Baytown.....	465,000	230,000	B338,000	....	1193,000	2119,000	c126,000	2106,000	1145,000 316,500 4128,000 663,000 747,000	128,000	....	....	....	31,000	17,000	183.0 557.5	382	950	7,000
Fina Oil & Chemical Co.—Big Spring ^D	60,500	23,000	....	....	122,000	120,000	....	....	224,500 421,000 56,500 83,100	24,500	....	1950	....	....	1950	....	....	127	7,600
Port Arthur ^K	176,000	49,900	....	....	163,200	333,600	....	224,700 449,900	242,400	15,700	....	113,000	39,400	....	....	....	....	....	2,200
Koch Refining Co. L.P.—Corpus Christi.....	282,000	103,000	215,000	....	196,000	121,000 216,000 350,000	c115,000	....	1110,000 473,000 518,000 812,000	220,000	....	136,000 23,200 31,700 414,000	320,000	....	11,700	....	620	200	....
LaGloria Oil & Gas Co.—Tyler.....	60,000	15,000	26,000	....	120,200	15,000 313,000	....	....	220,000 412,000	14,700	....	....	35,000	....	....	....	183	18	....
Lyondell-Citgo Refining Co.—Houston*	263,055	173,375	287,300	....	191,800	163,000	....	....	272,900 483,700 590,900 631,500 73,330	120,900	....	....	....	3,700	12,900	....	5,000	1,042	....
Marathon Ashland Petroleum LLC—Texas City.....	72,000	....	....	....	139,900	110,400	....	....	....	29,700	....	12,500	....	....	....	....	....	....	....
Mobil Oil Corp.—Beaumont.....	335,000	145,000	241,600	....	1107,000	3146,000	153,000	....	1105,000 688,000 73,500 82,200	114,000	....	....	222,100	14,000	12,800	154.0	2,350	500	....
Motiva Enterprises LLC ^{II} —Port Arthur	235,000	106,400	249,500	....	183,000	345,000	117,820	....	138,700 216,000 465,000 630,000 816,200	118,000	....	....	....	17,550	....	....	3,200	694	....
Neste Trifinery Petroleum Services—Corpus Christi	30,000	25,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
Phillips Petroleum Co.—Borger	125,000	....	....	....	⁰⁰ 57,000	127,700	....	158,000	² 26,800 ⁴ 27,300 ⁶ 9,200 ⁸ 21,400	² 17,500	....	³ 2,500	¹ 12,000 ² 13,500 ³ 7,500	....	....	^{1a} 60.0	....	345	....
Sweeny	205,000	65,000	....	....	190,000	134,000	....	175,000	² 50,500 ⁴ 47,000 ⁵ 15,800	² 19,000	....	¹⁵ 3,300 ³⁷ 7,000	²⁹ 9,000	....	¹² 8,850	⁵ 100.0	....	320	....
Pride Refining Inc.—Abilene	44,800	12,500	....	....	....	15,800	....	....	⁴ 11,600	....	....	....	....	....	....	....	....	....	2,700
Shell Deer Park Refining Co.—Deer Park	274,200	146,000	²⁵ 9,100	....	¹⁶ 7,500	¹²⁵ 1,100 ²⁴⁵ 900	^c 164,000	....	^x 162,100 ⁴ 67,100 ⁵ 45,500 ⁸ 40,700	¹ 16,800	....	....	....	....	¹⁵ 1,100	^{165.3} ^{436.9}	3,752	915	4,400
Specified Fuels & Chemicals LLC ^{PP} —Channelview	1,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ultramar Diamond Shamrock Corp.—Three Rivers ^X	86,000	28,000	....	....	¹² 1,000	¹⁹ 0,000 ³²⁰ 000	^c 23,000	³⁸ 0,000	¹ 18,000 ⁶ 6,600	²⁴ 500	....	¹⁹ 0,000	....	¹ 2,200	....	^{14.0} ^{48.0}	....	50	....
Sunray ^D	145,500	47,000	....	....	¹⁴ 8,000	¹ 18,000 ³²⁵ 000	² 28,000	....	¹³⁴ 000 ⁴ 26,000 ⁸ 4,000	¹⁹ 000	....	....	....	....	^{11,810} ^{32,200}	....	....	80	....
Valero Energy Corp.—Corpus Christi	88,350	30,400	⁰⁰³ 69,300	....	....	³ 35,100	^{EE} 432,400	¹⁶⁶ 600	¹²⁰ 700	² 10,080	....	¹²⁶ 100	¹ 12,600	....	^{118,540} ^{32,700}	^{1a} 65.0 ^{470.0}	....	457	....
Houston ^Z	85,000	39,000	....	....	¹⁶² 000	....	....	⁴⁴⁴ 500	....	¹ 10,000	....	....	....	....	¹² 300	....	....	112	....
Texas City ^Z	165,000	128,000	....	....	¹⁴⁸ 000	¹⁷ 000 ³¹² 000	....	¹⁶⁸ 000 ⁴⁶⁶ 200	¹²⁴ 900	⁸ 000	....	....	³⁵ 500	....	¹² 200	....	....	640	....
Total	4,286,005	1,897,275	509,200	10,000	1,569,600	1,129,100	383,720	671,900	2,689,830	341,480	2,000	212,150	160,700	67,450	59,550	845.5	23,492	8,318	55,700
UTAH																			
Amoco Oil Co.—Salt Lake City	53,000	....	....	....	¹ 18,600	² 10,600	....	....	¹ 10,600	¹⁴ 900	....	....	....	....	....	....	....	14	....
Chevron USA Products Co.—Salt Lake City	45,000	25,600	²⁷ 200	....	¹ 13,000	¹⁷ 000	....	....	¹⁷ 300 ⁴ 10,200 ⁶ 5,500	²⁴ 500	....	....	¹¹ 000	....	....	....	²⁸¹	¹⁸	....
Inland Refining Inc. ⁰⁰ —Woods Cross ^J	12,500	6,000	....	....	....	¹² 200	....	....	¹² 200 ⁴ 4,000	....	....	....	....	....	....	....	....	....	1,200
Flying J Inc.—Salt Lake City	25,000	5,000	....	....	^M 25,000	¹⁵ 500	....	⁴ 2,000	¹⁷ 000 ⁴ 7,000	²¹ 400	....	....	¹² 000 ^{31,750} ³² 600	....	....	....	....	4	....
Phillips Petroleum Co.—Woods Cross ^D	25,000	5,500	....	....	¹⁷ 680	¹⁷ 200	....	....	² 12,000 ⁶¹ 700	²² 400	....	....	³² 600	....	....	....	....	4	800
Total	160,500	42,100	7,200	....	44,280	32,500	....	2,000	68,500	13,200	....	....	7,350	....	....	....	281	40	2,000
VIRGINIA																			
Amoco Oil Co.—Yorktown	58,600	33,000	² 19,500	....	¹²⁶ 700	² 10,800	....	....	¹¹¹ 300 ⁶ 18,000	....	¹⁴ 000	....	....	....	² 660	....	⁹⁰⁵	⁶⁶	....
Total	58,600	33,000	19,500	....	26,700	10,800	....	....	29,300	....	4,000	....	....	....	660	....	905	66	....
WASHINGTON																			
Atlantic Richfield Co.—Ferndale	202,000	101,000	²⁵ 1,000	....	....	¹⁵⁷ 000	^c 150,000	⁴ 20,000	²⁴⁷ 000 ⁶ 22,000	....	....	....	....	....	....	^{181.0}	^{2,550}	²⁰¹	....
Chevron USA Products Co.—Seattle .....	....	⁵ 700	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,000
Equilon Enterprises LLC ^{GG} —Anacortes	144,900	58,900	² 24,100	....	¹⁵² 600	¹²⁹ 800	....	....	¹²⁸ 000 ⁶ 15,500 ⁸ 37,400	¹ 10,200	¹² 500	....	....	....	....	....	^{1,310}	⁹⁹	....
Sound Refining Inc.—Tacoma	11,900	3,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,600
Tesoro ^{RR} —Anacortes ^D	108,200	45,000	....	....	¹⁴² 000 ² 8,800	²²⁴ 300	....	....	¹³¹ 800 ⁴ 28,100 ⁵ 6,500	¹ 11,500	....	....	¹³ 400	....	....	....	....	....	....
Tosco Refining Co.—Ferndale	88,500	31,000	....	....	^M 25,000	² 15,500	....	....	¹¹⁵ 500 ⁴ 13,000 ⁴⁸ 624,000	²⁶ 000	....	....	¹³ 900	....	....	....	....	40	....
US Oil & Refining Co.—Tacoma	40,800	23,700	....	....	....	¹⁵ 750	....	....	¹⁷ 000 ⁴ 5,500	....	....	....	³² 300	....	....	....	....	....	10,000
Total	596,300	268,900	75,100	....	122,400	132,350	50,000	20,000	281,300	27,700	2,500	....	9,600	....	....	81.0	3,860	340	16,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (mt/d)	Sulfur (mt/d)	Asphalt
WEST VIRGINIA																			
Ergon-West Virginia Inc.—Newell.....	11,500	8,850	....	....	....	14,300	^{c3} 4,800	....	14,300	....	....	....	....	3,600	....	^{1a} 1.2	....	1	....
Total	11,500	8,850	....	....	....	4,300	4,800	....	4,300	....	....	....	....	3,600	....	1.2	....	1	....
WISCONSIN																			
Murphy Oil USA Inc.—Superior*.....	33,250	19,500	....	....	19,900	17,200	....	45,500	18,100	21,350	....	....	³¹ 1,800	....	....	....	....	15	6,750
Total	33,250	19,500	....	....	9,900	7,200	....	5,500	15,120	1,350	....	....	1,800	....	....	....	....	15	6,750
WYOMING																			
Frontier Oil & Refining Inc.—Cheyenne*.....	38,950	21,850	29,000	....	110,800	16,840	....	....	17,200	23,780	....	....	11,440	....	....	15.5	450	90	4,600
Little America Refining Co.—Casper.....	22,000	7,800	....	....	113,300	15,700	....	....	⁴¹⁴ 850	....	11,000	....	....	....	....	^{45.5}....	....	20	1,200
Sinclair Oil Corp.—Sinclair.....	54,000	29,500	....	....	120,600	114,200	....	²¹⁰ 0,000	23,500	14,000	1700	....	....	....	....	....	....	....	4,900
Wyoming Refining Co.—Newcastle ^c	12,500	1,500	....	....	^{M25} 5,500	12,750	....	....	⁴²² 0,000	2850	....	....	....	....	....	....	....	2	....
Total	127,450	60,650	9,000	....	50,200	29,490	....	10,000	73,950	8,630	1,700	....	1,440	....	....	11.0	450	112	10,700
URUGUAY																			
Ancap—La Teja Montevideo.....	37,000	18,000	....	²⁷ 0,000	19,000	13,000	....	....	13,000	....	....	....	....	....	....	....	....	....	3,000
Total	37,000	18,000	....	7,000	9,000	3,000	....	....	8,000	....	....	....	....	....	....	....	....	....	3,000
VENEZUELA																			
Corpoven SA—El Palito, Puerto Cabello.....	115,000	63,000	....	....	152,000	19,200	....	....	19,200	220,000	....	13,500	....	....	⁴³ 300	46.8	....	....	....
El Toreno, Barinas.....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Puerto La Cruz, Anzoategui.....	195,000	....	....	....	113,000	....	....	....	....	24,100	....	....	....	....	....	....	....	....	....
San Roque, Anzoategui ^{ss}	5,200	1,770	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Paraguana Refining Center—Judibana Falcon.....	571,000	336,000	152,100	....	197,200	....	....	....	⁴⁶³ 0,000	217,800	....	....	19,800	2,100	....	181.0	....	....	39,800
Punta Cardon Falcon.....	286,000	147,600	....	282,000	172,700	38,000	....	....	⁵¹⁴⁹ 0,000	222,800	....	....	19,500	6,000	....	^{1a50.0} 124.0	....	....	....
Total	1,187,200	548,370	52,100	82,000	234,900	47,200	....	....	284,600	64,700	....	3,500	19,300	8,100	3,300	161.8	....	....	39,800
VIRGIN ISLANDS																			
Hess Oil Virgin Islands Corp.—St. Croix.....	545,000	215,000	....	280,000	1130,000	1125,000	....	²¹³⁰ 0,000	²¹²⁵ 0,000	114,000	26,000	130,000	215,000	....	14,000	....	....	....	....
Total	545,000	215,000	....	80,000	130,000	125,000	....	130,000	290,000	14,000	6,000	30,000	15,000	....	8,000	....	....	....	....
YEMEN																			
Aden Refinery Co.—Little Aden.....	110,000	10,500	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	415
Yemen Hunt Oil Co.—Marib.....	10,000	....	....	....	....	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	120,000	10,500	....	....	....	8,500	....	....	....	....	....	....	....	....	....	....	....	....	415
ZAMBIA																			
Indeni Petroleum Refinery Co. Ltd.—Bwana Nkubwa Area, Ndola.....	24,500	2,400	....	....	....	15,600	....	....	18,900	....	....	....	....	....	....	....	....	....	....
Total	24,500	2,400	....	....	....	5,600	....	....	17,800	....	....	....	....	....	....	....	....	....	....