

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
ABU DHABI															
Abu Dhabi National Oil Co.—Ruwais*	132,050	44,935	....	....	117,280	226,730	....	220,520	....	....	....	....	....	....	....
Umm Al-Nar 2*	80,750	....	....	....	312,600	....	....	220,160	....	....	....	....	153.0	....	....
								235,910							
								438,790							
Total	212,800	44,935	....	....	29,880	26,730	....	115,380	....	....	....	....	53.0	....	....
ALBANIA															
Government-owned refineries at Ballsh, Cerrik, Stalin	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ALGERIA															
Sonatrach—Ain Amenas	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Arzew	60,000	5,500	....	....	11,600	....	....	11,000	....	....	2,400	....	....	....	2,400
Hassi Messaoud	30,000	....	....	....	2,400	....	....	....	....	....	....	....	....	....	....
Maison Carree	58,000	....	....	....	15,000	....	....	15,000	....	....	....	....	....	....	....
Skikda	310,000	9,000	....	....	30,000	....	....	....	....	1,900	....	....	....	....	2,900
Total	465,000	14,500	....	....	59,000	....	....	26,000	....	1,900	2,400	....	....	....	5,300
ANGOLA															
Finia Petroleos de Angola—Luanda	32,100	1,900	....	....	11,900	....	42,800	13,800	....	....	....	....	....	....	950
Total	32,100	1,900	....	....	1,900	....	2,800	3,800	....	....	....	....	....	....	950
ARGENTINA															
Destileria Argentina de Petroleo SA—Dock Sud ^A	4,000	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Lomas de Zamora	8,000	1,300	....	....	....	....	....	....	....	....	900	....	....	....	600
Eg3 SA ^B —Bahia Blanca	25,400	12,580	23,800	17,860	....	....	....	....	....	....	....	....	....	....	....
Esso SAPA—Campana	88,100	49,800	425,000	127,300	18,800	....	....	29,800	....	....	....	....	....	1,184	....
								614,300							
								82,100							
Galvan	19,000	....	27,600	....	....	....	....	....	....	....	....	....	....	....	....
Refinor SA—Campo Duran ^A	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refisan SA—San Lorenzo ^A	37,600	16,100	13,500	....	....	....	....	....	....	....	....	....	....	....	....
			212,500												
Shell Cia. Argentina de Petroleo SA—Buenos Aires	121,700	38,500	218,900	129,200	117,900	....	....	218,200	21,700	....	1,500	....	....	....	4,200
			MM\$6,500					47,500	3500						
Sol Petroleo SA—San Francisco Solama, Quilmes	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
YPF SA—La Plata	176,000	104,000	439,000	173,600	111,700	....	....	19,600	....	....	5,450	....	....	1,500	8,300
								45,300							
								619,300							
								75,450							
Lujan de Cuyo	120,000	66,000	435,200	144,700	19,500	6126,000	....	14,400	....	....	....	11,000	118.0	1,500	....
								617,600							
Plaza Huicul	23,600	....	....	....	13,000	....	....	13,000	....	....	....	....	....	....	....
Total	661,400	289,280	152,000	182,660	50,900	26,000	....	116,550	2,200	....	7,850	1,000	18.0	4,184	13,100
AUSTRALIA															
Ampol Refineries (NSW) Pty. Ltd. ^C —Sydney	111,000	27,500	....	144,000	124,500	....	....	124,500	13,800	....	3,300	....	....	....	4,000
								415,000	36,000						
								75,500							
Ampol Refineries (Q'Land) Ltd. ^C —Lytton	95,000	....	....	131,500	323,000	....	....	123,000	22,900	78,200	....	....	524.4	....	....
								67,200	31,600						
Australian Lubricating Oil Refinery Ltd.—Kurnell ^D .....	....	7,470	....	....	....	....	....	75,850	....	....	3,500	....	....	....	....
BP Australia—Bulwer Island*	54,150	15,200	....	117,100	111,700	....	....	111,700	21,890	....	....	....	....	....	1,800
								49,000							
Kwinana*	111,150	19,000	....	127,900	319,800	....	416,200	112,600	22,430	714,400	2,430	....	....	....	1,350
								41,800	31,800						
								72,700							
Inland Oil Refiners (Qld) Pty. Ltd.—Eromanga	1,425	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mobil Oil Australia, Ltd.—Adelaide	67,000	20,000	....	....	124,000	....	....	449,000	....	79,500	5,200	....	....	....	4,100

WORLDWIDE REFINING Company and refinery location	Crude	Vacuum distillation	Thermal operations	Charge capacity, b/cd					Production capacity, b/cd						
				Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Altona	103,000	22,000	....	E25,000	I31,500	....	....	144,000 412,500 63,800	12,500	....	....	....	....	....	2,800
Shell Refining (Australia) Pty. Ltd.—Clyde	80,000	21,000	....	I35,000	320,000	....	27,000	437,000	23,000 32,100	....	....	....	....	....	3,000
Geelong.....	110,000	10,000	....	I38,000	111,000 320,000	....	214,000 33,000	454,000 84,000	24,500 32,700	78,000	2,800	....	....	....	3,000
Total	732,725	142,170	....	218,500	185,500	....	40,200	323,150	35,220	40,100	17,230	....	24.4	....	20,050
AUSTRIA															
OeMV AG—Schwechat ^H	210,000	68,000	218,100	I25,800	115,600 118,100	....	FG338,300	146,400 24,800 437,300	....	614,400	....	11,600	....	....	9,800
Total	210,000	68,000	18,100	25,800	33,700	....	38,300	88,500	....	14,400	....	1,600	....	....	9,800
BAHRAIN															
Bahrain Petroleum Co.—Sitra	250,000	156,000	220,000	I39,000	I18,000	....	I50,000	118,000 422,000	31,300	....	....	....	I32.2	....	5,000
Total	250,000	156,000	20,000	39,000	18,000	....	50,000	40,000	1,300	....	....	....	32.2	....	5,000
BANGLADESH															
Eastern Refinery Ltd.—Chittagong	31,200	3,530	210,400	....	I1,650	I1,180	....	I1,940	....	....	....	....	I11.0	....	1,200
Total	31,200	3,530	10,400	....	1,650	1,180	....	1,940	....	....	....	....	1.0	....	1,200
BARBADOS															
Mobil Oil Barbados Ltd.—Bridgetown	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BELGIUM															
Belgian Refining Corp. NV—Antwerp*	80,750	39,900	218,270	....	I9,900	....	....	219,800 1622,500	....	52,250	....	....	....	....	....
Esso Belgium—Antwerp	246,000	122,550	....	I33,300	338,540	....	285,540	264,600 454,290	16,815	....	....	....	I43.0	....	2,000
Fina Raffinaderij Antwerpen—Antwerp.....	268,000	134,200	243,000	I77,600	350,000	....	160,000 469,000	286,300 316,300	26,700 31,600	....	....	I4,500	410.0	....	11,300
Nynas Petroleum NV—Antwerp	15,000	12,500	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Total	609,750	309,150	61,270	110,900	98,440	....	214,540	263,790	15,115	2,250	....	4,500	53.0	....	25,300
BOLIVIA															
Yacimientos Petroliferos Fiscales Bolivianos—Cochabamba ^J	27,250	2,210	....	....	I4,940	....	....	18,160 7499	....	....	419	....	....	....	63
Santa Cruz	15,000	....	....	....	I3,200	....	....	13,200	....	....	....	....	....	....	....
Sucre	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	45,250	2,210	....	....	8,140	....	....	11,859	....	....	419	....	....	....	63
BRAZIL															
Petroleo Brasileiro SA—Araucaria, Parana.....	159,210	62,550	....	I45,700	....	....	....	....	....	....	....	....	....	....	....
Betim, Minas Gerais.....	136,470	62,550	....	I33,080	....	....	....	211,320 K827,670	....	....	....	....	75.8	....	....
Canoas, Rio Grande do Sul	68,230	30,700	....	I14,040	....	....	....	....	....	....	....	....	....	....	....
Capuava, Sao Paulo	38,100	11,940	....	211,580	....	....	....	....	....	....	....	....	....	....	....
Cubatao, Sao Paulo .....	....	....	432,700	....	....	....	....	111,320	23,140	17,550	....	....	....	....	....
Duque de Caxias, Rio de Janeiro	225,730	97,490	415,720	I41,360	....	....	....	111,320 715,660 K1832,174	....	....	13,730	....	25.1	....	9,400
Fortaleza, Ceara .....	....	6,200	....	....	....	....	....	....	....	....	....	....	....	....	....
Manaus, Amazonas.....	10,230	6,260	....	I2,200	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Mataripe, Bahia	117,960	57,850	....	124,810	....	....	....	72,600 KL82,100	....	....	2,600	....	....	....	....
Paulinia, Sao Paulo	272,930	125,090	....	150,314	....	....	....	....	....	....	....	....	....	....	....
Sao Jose dos Campos, Sao Paulo	204,700	90,980	....	157,900	....	....	....	217,640 K857,900	....	....	....	....	....	....	....
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	....	14,860 24,300	....	13,000	....	....	....	....	....	....	....	....	....	....
Total	1,256,060	557,510	57,580	333,604	3,000	....	....	189,704	3,140	7,550	16,330	....	10.9	....	9,400
BRUNEI															
Brunei Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	....	....	....	15,700	....	....	....	....	....	....	....	....	....	....
Total	8,600	....	....	....	5,700	....	....	....	....	....	....	....	....	....	....
BULGARIA															
Government-owned refineries at Burgas, Pleven, Ruse	300,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	300,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
CAMEROON															
Ste. Nationale de Raffinage—Cape Limboh Limbe	42,000	....	....	....	17,000	....	210,500	29,500	....	....	....	....	....	....	....
Total	42,000	....	....	....	7,000	....	10,500	9,500	....	....	....	....	....	....	....
CANADA															
Alberta															
Husky Oil Operations Ltd.—Lloydminster	23,500	15,000	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Imperial Oil Ltd.—Edmonton	176,000	66,100	....	147,500	220,900	....	....	251,000 616,100	216,000	56,600	2,600	....	....	....	10,400
Parkland Refining Ltd.—Bowden	6,000	....	....	....	12,800	....	....	12,800 22,800	....	72,800	....	....	....	....	....
Petro-Canada Products Inc.—Edmonton	116,400	27,000	46,500	133,900	115,400	118,700	....	144,600 68,100	211,900	53,100	....	....	130.8	417	....
Shell Canada Ltd.—Scotford	75,700	....	....	....	321,500	140,500	....	221,500 421,000	....	79,200 15,300 3270	....	....	....	....	....
Total	397,600	108,100	6,500	81,400	60,600	59,200	....	167,900	27,900	27,270	2,600	....	30.8	417	22,400
British Columbia															
Chevron Canada Ltd.—North Burnaby	50,000	11,000	....	117,000	111,000	....	....	111,000 414,000	13,000 3800	....	....	....	....	....	2,000
Husky Oil Operations Ltd.—Prince George	9,500	3,800	....	13,300	11,400	....	....	66,900	....	7650	....	....	....	....	1,300
Total	59,500	14,800	....	20,300	12,400	....	....	31,900	3,800	650	....	....	....	....	3,300
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 31,710	79,500	....	....	240.0	....	11,700
Total	237,500	61,750	18,000	24,000	34,650	29,700	....	74,250	6,710	9,500	....	....	40.0	....	11,700
Newfoundland															
North Atlantic Refining Ltd. ^M —Come By Chance ^N	99,750	52,250	216,200	....	123,400	0c131,500	....	218,900 416,200	....	....	....	....	166.0	....	....
Total	99,750	52,250	16,200	....	23,400	31,500	....	35,100	....	....	....	....	66.0	....	....
Northwest Territories															
Imperial Oil Ltd.—Norman Wells	3,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	3,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Nova Scotia															
Imperial Oil Ltd.—Dartmouth	82,200	39,800	....	¹ 25,700	² 9,800	....	....	^{19,800} ^{414,300} ^{620,300}	³ 3,900	....	....	....	^{11.8}	....	^{4,200}
Total	82,200	39,800	....	25,700	9,800	....	....	44,400	3,900	....	....	....	1.8	....	4,200
Ontario															
Imperial Oil Ltd.—Nanticoke	112,000	33,700	....	¹ 40,850	³ 27,400	....	....	^{128,500} ^{69,500}	^{19,500}	....	....	....	⁵ 63.0	....	....
Imperial Oil Ltd.—Sarnia	118,000	30,800	³ 23,300	¹ 25,650	¹ 16,150 ² 16,600	⁶ 12,500	....	⁴ 11,400	....	¹ 4,200	^{4,800}	....	¹ 25.0	⁸⁵⁰ ⁵ 10.0	....
Novacor Chemicals (Canada) Ltd.—Corunna	80,000	33,000	¹ 58,000	....	....	....	....	^{75,900} ⁸ 54,700	....	¹ 10,200	....	....	....	....	....
Petro-Canada Products Inc.—Mississauga ^R .....	....	....	....	....	³ 9,800	³ 10,300	....	⁰ 17,000	....	....	^{4,900}	....	¹ 13.3	....	....
Oakville	80,500	38,100	....	¹ 25,400	¹ 13,400	....	....	¹ 10,300 ¹ 13,300 ^{46,500}	¹ 3,300	....	....	....	....	....	^{15,100}
Shell Canada Ltd.—Sarnia	71,400	24,700	² 4,050	¹ 14,400	¹ 21,000	¹ 6,750	....	¹ 15,000 ^{66,300}	³ 1,600	¹ 2,700	....	....	....	....	....
Sunoco Inc.—Sarnia	83,400	17,200	² 6,700	² 15,500	¹ 24,700	¹ 23,700	....	¹ 25,000 ^{45,500}	² 5,600	^{19,500}	....	....	¹ 44.2	....	^{2,500}
Total	545,300	177,500	92,050	121,800	129,050	53,250	....	230,300	20,000	26,600	9,700	....	155.5	850	17,600
Quebec															
Petro-Canada Products Inc.—Montreal	89,300	40,700	¹ 12,600	¹ 17,200	¹ 30,400	¹⁴ 18,900	....	¹ 26,600 ^{49,000}	¹ 2,300 ⁸⁰⁰	¹ 8,350 ^{22,800}	....	....	¹ 42.8	....	^{14,300}
Shell Canada Ltd.—Montreal	125,500	49,500	² 12,000	¹ 24,000	¹ 20,700	¹ 11,700	....	² 34,200 ^{427,000}	² 2,500	⁷ 6,800	^{3,060}	....	....	....	^{7,200}
Ultramar Canada Inc.—St. Romuald	150,000	45,000	....	¹ 47,000	¹ 19,500	....	....	¹ 25,000 ⁵² 15,000 ^{420,000}	³ 11,000	⁷ 13,800	....	....	....	....	....
Total	364,800	135,200	24,600	88,200	70,600	30,600	....	156,800	16,600	31,750	3,060	....	42.8	....	21,500
Saskatchewan															
Consumers' Cooperative Refineries Ltd.—Regina	45,200	23,000	⁴ 8,300	¹ 17,600	¹ 9,000	⁶ 10,800	¹ 27,100	¹ 10,800 ^{22,700} ^{46,300}	³ 1,880	⁵ 2,700	....	....	¹ 58.8 ^{480.7}	³²⁵	....
Moose Jaw Asphalt Inc.—Moose Jaw	13,000	9,000	....	....	....	....	....	....	....	....	....	....	....	....	^{7,000}
Total	58,200	32,000	8,300	17,600	9,000	10,800	27,100	19,800	1,880	2,700	....	....	139.5	325	7,000
CHILE															
ENAP—Gregorio-Magallanes	^{9,650}	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrox SA—Talcahuano	89,570	38,600	² 10,000	¹ 20,790	¹ 4,500	....	....	^{22,500} ^{84,000}	....	....	....	....	....	....	....
Refineria de Petroleo Concon SA—Concon	78,600	37,400	² 9,200	¹ 25,000	¹ 5,980	¹¹ 12,580	....	^{15,980}	^{11,100}	....	....	....	....	....	....
Total	177,820	76,000	19,200	45,790	10,480	12,580	....	12,480	1,100	....	....	....	....	....	....
CHINA															
Sinopec ^U —Anqing	60,000	....	⁷ 8,000 ⁵ 16,000	² 4,000	....	....	....	^{4,000}	² 1,000	....	....	....	....	²²⁵	....
Anshan	50,000	....	....	^{2,000}	....	....	....	....	....	....	....	....	....	....	....
Baling	100,000	....	¹ 12,000	^{50,000}	^{3,000}	....	....	^{22,000}	^{12,000}	....	....	....	....	³⁰⁰	....
Cangzhou	24,000	....	....	^{9,000}	....	....	....	....	....	....	....	....	....	....	....
Dalian	142,000	....	....	^{70,000}	^{3,000}	....	....	^{6,000}	^{22,000}	....	^{6,000}	....	....	....	....
Daqing	110,000	....	⁷ 33,000 ⁵ 13,000	^{14,000}	^{4,000}	^{8,000}	....	^{12,000}	^{21,000}	....	^{10,000}	....	....	³²⁵	....
Dushanzi	66,000	....	⁷ 8,000 ⁵ 6,000	^{12,000}	^{6,000}	....	....	^{8,000}	....	....	^{2,000}	....	....	⁴⁵⁰	....
Fujian	50,000	....	....	^{16,000}	....	....	....	....	....	....	....	....	....	....	....
Fushun	174,000	....	⁷ 35,000	^{66,000}	^{23,000}	^{8,000}	....	^{5,000}	^{13,000}	....	^{1,000}	....	....	⁸²⁵	....
Gaoqiao	146,000	....	⁵ 10,000	^{38,000}	^{4,000}	....	....	^{2,000}	^{21,000}	....	^{6,000}	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Guangzhou.....	104,000	....	⁵ 20,000	44,000	8,000	....	....	20,000	² 1,000	....	....	....	....	....	....
Harbin.....	30,000	....	⁵ 1,000	6,000	....	....	....	....	....	....	....	....	....	....	....
Jinan.....	60,000	....	....	22,000	....	....	....	4,000	....	....	1,000	....	....	....	....
Jingmen.....	100,000	....	^T 8,000	20,000	3,000	8,000	....	14,000	....	....	2,000	....	....	270	....
Jinling.....	134,000	....	^T 12,000	44,000	3,000	16,000	....	3,000	² 1,000	....	....	....	....	490	....
.....	.....	.....	⁵ 16,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jinshan.....	106,000	....	....	....	8,000	18,000	....	....	....	....	....	....	....	....	....
Jinxi.....	100,000	....	⁵ 10,000	24,000	3,000	....	....	5,000	....	....	4,000	....	....	....	....
Jinzhou.....	110,000	....	^T 20,000	16,000	6,000	....	....	8,000	....	....	....	....	....	500	....
Jiujiang.....	50,000	....	⁵ 8,000	24,000	3,000	....	....	8,000	....	....	....	....	....	....	....
Lanzhou.....	100,000	....	⁵ 15,000	24,000	2,000	....	....	3,000	¹ 1,000	....	7,000	....	....	....	....
Lanzhou Pet.....	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoyang.....	30,000	....	....	....	3,000	....	....	1,000	....	....	....	....	....	....	....
Linyuan.....	30,000	....	....	17,000	....	....	....	....	....	....	....	....	....	....	....
Luoyang.....	60,000	....	....	40,000	14,000	....	....	16,000	² 2,000	....	....	....	....	....	....
Maoming.....	170,000	....	^T 12,000	32,000	3,000	16,000	....	16,000	² 1,000	....	5,000	....	....	400	....
.....	.....	.....	⁵ 12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Qianguo.....	30,000	....	....	24,000	....	....	....	....	....	....	....	....	....	....	....
Qilu.....	160,000	....	^T 16,000	46,000	3,000	42,000	....	22,000	¹ 3,000	....	....	....	....	400	....
Shijiazhuang.....	70,000	....	....	24,000	....	....	....	....	² 1,000	....	....	....	....	....	....
Tianjin.....	74,000	....	....	35,000	4,000	....	....	....	² 1,000	....	....	....	....	....	....
Urumqi.....	50,000	....	^T 8,000	16,000	3,000	....	....	....	....	....	....	....	....	200	....
Wuhan.....	50,000	....	⁵ 8,000	20,000	....	....	....	....	² 1,000	....	....	....	....	....	....
Yangzi.....	60,000	....	⁵ 20,000	....	21,000	24,000	....	....	....	....	....	....	....	....	....
Yanshan.....	140,000	....	....	48,000	3,000	....	....	5,000	² 1,000	....	5,000	....	....	....	....
Zhenhai.....	110,000	....	^T 8,000	28,000	9,000	....	....	8,000	² 1,000	....	....	....	....	200	....
Total.....	2,867,000	....	315,000	855,000	142,000	140,000	....	192,000	24,000	....	49,000	....	....	4,585	....

COLOMBIA

Empresa Colombiana de Petroleos—Apiay.....	2,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barrancabermeja-Santander.....	173,000	101,000	² 33,000	¹ 64,000	....	....	....	⁵ 19,800	¹ 2,100	¹ 1,600	1,400	....	¹ 18.0	....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	³ 600	.....	.....	.....	.....	.....
Cartagena, Bolivar.....	70,000	40,000	² 19,000	¹ 26,000	....	....	....	....	³ 2,100	....	....	....	....	....	....
Orito, Putumayo.....	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tibu, N. de Santander.....	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	248,850	141,000	52,000	90,000	....	....	....	19,800	4,200	2,200	1,400	....	18.0	....	....

COMMONWEALTH OF INDEPENDENT STATES (and former Soviet Union)

Azerbaijan															
Baku.....	238,978	66,157	....	....	....	....	....	....	....	....	27,064	....	....	....	4,151
Novo-Baku.....	202,830	71,043	⁴ 38,529	¹ 32,986	³ 24,466	....	....	¹ 25,300	¹ 930	....	....	....	....	¹ 1,400	....
Total.....	441,808	137,200	38,529	32,986	24,466	....	....	25,300	930	....	27,064	....	....	1,400	4,151
Belarus															
Mozyr.....	323,323	18,795	....	....	149,176	....	....	¹ 50,600	....	² 2,387	....	....	....	....	9,630
.....	.....	.....	.....	.....	⁴ 99,726	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
P.O. Naftan Refinery—Novopolotsk ^{WW}	401,644	48,866	....	....	148,932	....	....	² 38,356	....	¹ 5,112	7,142	....	....	....	....
.....	.....	.....	.....	.....	.....	.....	.....	⁴ 153,425	.....	² 2,188	.....	.....	.....	.....	.....
Total.....	724,967	67,661	....	....	98,108	....	....	342,107	....	9,687	7,142	....	....	....	9,630
Georgia															
Batumi.....	106,436	24,809	....	....	¹ 10,276	....	....	¹ 10,800	....	....	....	....	....	....	3,819
Total.....	106,436	24,809	....	....	10,276	....	....	10,800	....	....	....	....	....	....	3,819
Kazakhstan															
Atyrau.....	104,427	27,064	⁴ 13,720	....	18,808	....	....	¹ 9,200	¹ 1,003	....	....	....	....	500	....
Chimkent.....	126,518	....	....	....	¹ 24,466	....	....	¹ 25,200	....	....	....	....	....	....	....
.....	.....	.....	.....	.....	.....	.....	.....	⁴ 49,863	.....	.....	.....	.....	.....	.....	.....
Pavlodar.....	162,666	93,973	² 30,071	¹ 38,356	¹ 26,178	....	....	¹ 27,200	....	....	....	....	¹ 21.5	500	8,550
.....	.....	.....	⁴ 11,277	.....	.....	.....	.....	⁴ 49,863	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	⁵ 46,027	.....	.....	.....	.....	.....	.....	.....
Total.....	393,611	121,037	55,068	38,356	59,452	....	....	207,353	1,003	....	....	....	21.5	1,000	8,550

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Russia															
Joint Stock Co. Achinsk Refinery—Achinsk.....	146,584	40,184	....	....	125,519	....	....	125,519	....	....	....	....	....	....	....
Angarsk	463,899	195,463	125,748 411,217	133,753	133,029	....	....	459,679 133,900 430,685	....	13,182	5,638	....	....	410	9,630
Aripsky	28,115	....	....	....	116,147	....	....	112,658	....	13,680 22,387	....	....	....	....	....
Astrakhan	66,000	....	....	....	124,466	....	....	440,000	....	....	....	....	....	....	....
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	....	....	....	....
Khabarovsk	114,468	10,149	214,284	....	19,786	....	....	110,556	....	....	....	....	....	....	5,811
Kirishi	387,586	85,327	....	....	167,281	....	....	152,740	....	15,172	....	....	....	....	16,603
Komsomolsk.....	116,477	33,266	59,679	....	....	....	....	429,918	....	77,085	....	....	....	350	....
Krasnodar.....	34,140	14,472	110,149	....	....	....	....	....	....	....	....	....	....	....	5,645
Kutshui	8,000	3,600	....	....	11,750	....	....	11,850	....	....	....	....	....	....	1,200
Moscow	242,995	90,214	....	138,356	133,029	....	....	134,000 466,548 542,192	....	73,542	....	11,000	121.5	....	7,637
Nizhnekamsk.....	120,493	....	....	....	....	....	....	....	....	....	....	1625	....	....	....
Nizhniy Novgorod.....	437,792	114,271	....	....	145,506	....	....	146,800 464,438 76,904	....	11,790 21,890	8,645	....	....	....	15,607
Novi-Grozny .....	....	....	....	....	116,881	....	....	117,400 442,192	....	....	....	....	....	....	....
Novo-Kuibishev	309,266	129,682	19,397 428,192	213,616	133,518	....	....	134,300 457,918	....	12,188	9,773	....	....	1,030	12,286
Novo-Ufa	379,553	133,441	138,341 47,142	222,247	150,399	....	....	152,000 465,205	12,814	....	9,585	....	....	260	14,278
Omsk	566,318	272,609	126,500 230,071	165,589	148,687	19,178	....	174,000 469,425 542,192	11,272	111,139	10,525	11,000	....	510	17,433
Omsk (c).....	....	....	413,908	....	247,710	....	....	76,904 118,400 411,507	11,125	....	7,706	....	....	....	10,128
Orsk.....	158,649	53,752	....	....	117,860	....	....	143,100 472,493	11,003	13,481	8,833	....	....	490	5,645
Perm.....	279,142	86,079	17,706 413,532	215,726	142,326	....	....	154,000 476,137	....	14,078	7,142	....	....	....	8,799
Ryazan	361,479	83,636	121,990	118,219	153,335	....	....	249,300 4121,205 522,247	11,174	11,591	....	....	....	....	....
Salavat	247,011	73,299	29,397	221,096	148,687	....	....	144,400 450,438	1832 3750	....	....	....	....	....	....
Samara-Kuibishev	120,493	50,745	115,787	218,795	143,794	....	....	128,300	....	....	....	....	....	....	3,819
Saratov	176,723	74,426	160,142	....	127,891	....	....	143,700 478,822	....	....	....	....	....	....	7,637
Surgut.....	88,000	....	....	....	....	....	....	18,100	....	....	....	....	....	....	....
Syzran	210,863	67,284	116,915	217,068	143,060	....	....	115,000 468,466 542,192	3979	....	....	....	121.5	....	498
Tuapse.....	46,189	....	....	....	17,829	....	....	140,300 448,904	....	110,542	7,330	....	121.5	....	4,981
Ufa-former Lenin	234,962	98,671	222,553	138,356	114,679	....	45,753	19,500	....	....	....	....	....	....	4,981
Ufaneftkhim	251,027	81,756	29,397	117,260	117,371 321,775	119,178	....	119,100 411,507 76,904	....	11,830	17,855	....	710.8	1,020	3,985
Ukhta	126,518	13,156	17,518	....	19,297	....	....	....	....	....	....	....	....	....	....
Urengol.....	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Volgograd	188,733	79,501	126,876 424,809 53,101	....	118,839	....	32,877	....	....	11,830	17,855	....	710.8	1,020	3,985
Yakutsk.....	2,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yaroslav	359,471	132,313	212,404	121,096	125,689	....	....	126,100 456,959 712,274	11,786	11,551 73,542	12,028	....	....	....	10,460
Yaroslav-Mendeleev	8,700	....	....	....	....	....	....	....	....	....	2,510	....	....	....	....
Total	6,720,905	2,123,861	503,067	379,533	843,447	38,356	8,630	2,150,000	11,735	70,898	117,155	2,625	96.8	4,070	167,063

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Turkmenistan															
Chardzou.....	120,493	50,745	.....	.....	124,466	.....	.....	124,900	.....	.....	.....	.....	.....	.....	.....
Krasnovodsk.....	116,477	20,486	428,568	115,151	18,074	.....	.....	18,400	11,028 31,223	.....	.....	.....	.....	1,040	415
Total	236,970	71,231	28,568	15,151	32,540	.....	.....	33,300	2,251	.....	.....	.....	.....	1,040	415
Ukraine															
Drogobich.....	78,321	25,185	17,330	.....	18,074	.....	.....	18,200	.....	.....	.....	.....	.....	115	3,819
Lisitchansk.....	481,973	202,981	53,195	130,356	156,761	.....	.....	157,500 479,014 542,192	.....	21,870	.....	.....	121.5	.....	.....
Kherson.....	172,707	60,518	412,028	.....	116,637	.....	.....	116,900	.....	.....	.....	.....	.....	790	5,977
Kremenchugnefteorgsintez Joint Stock Co.—Kremenchug.....	375,913	108,699	.....	130,189	155,500	.....	.....	157,811 494,340 77,128 18,800	.....	17,773	7,128	.....	.....	.....	6,226
Nadvornaja.....	74,304	13,720	19,961	.....	18,563	.....	.....	.....	.....	.....	.....	.....	.....	250	.....
Odessa.....	78,321	18,795	46,954	.....	110,276	.....	.....	111,500 428,767	.....	.....	.....	.....	.....	.....	3,155
Total	1,261,539	429,898	39,468	60,545	155,811	.....	.....	412,152	.....	9,643	7,128	.....	21.5	1,155	19,177
Uzbekistan															
Alty-Arik.....	66,271	.....	19,585	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fergana.....	108,444	45,671	417,667	.....	123,487	.....	.....	123,900 76,904	.....	.....	9,397	.....	.....	650	4,151
Total	174,715	45,671	27,252	.....	23,487	.....	.....	30,804	.....	.....	9,397	.....	.....	650	4,151
CONGO															
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 d.d. Zagreb Rafinerija Rijeka—Rijeka.....	150,000	45,000	211,300	122,000	118,400	.....	.....	119,500 43,100	.....	13,300 21,550	2,150	.....	.....	.....	.....
Ina-Industrija Nafta d.d. Zagreb—Sisak.....	143,472	16,200	45,930	110,000	119,000	.....	.....	121,240 75,000 77,500	.....	19,979 22,178	.....	.....	.....	170	.....
Ina d.d. Rafinerija Zagreb—Zagreb.....	803	.....	.....	.....	.....	.....	.....	62,700	.....	.....	470	.....	.....	.....	.....
Total	294,275	61,200	17,230	32,000	37,400	.....	.....	51,540	.....	24,507	2,620	.....	.....	170	.....
CUBA															
Cienfuegos.....	76,000	.....	.....	.....	17,500	.....	.....	17,700	.....	.....	.....	.....	.....	.....	.....
Ermonos Dias, Santiago.....	101,500	37,500	.....	.....	17,500	.....	.....	17,700	.....	.....	.....	.....	5.0	.....	540
Niko Lopes, Habana.....	121,800	38,200	.....	114,700	15,000	.....	.....	422,000 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
CYPRESS															
Cyprus Petroleum Refinery Ltd.—Larnaca.....	22,000	2,600	15,100	47,700	1,400
Total	22,000	2,600	5,100	7,700	1,400

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WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd							Production capacity, b/cd							
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
FINLAND															
Neste Oy—Naantali.....	40,000	27,400	27,100	214,200	46,800	....	37,100	26,600	3280	....	....	....	....	....	3,600
Porvoo.....	160,000	68,000	228,000	131,000	436,000	116,000	414,700	8330	24,200	63,600	....	14,100	120.0	....	8,500
Total	200,000	95,400	35,100	45,200	42,800	16,000	103,800	57,930	4,480	3,600	....	4,100	20.0	....	12,100
FRANCE															
Cie. de Raffinage et de Distribution Total France— Gonfreville L'Orcher.....	211,000	73,000	219,000	140,000	145,000	....	....	6102,000	....	717,000	....	....	....	....	....
La Mede.....	127,000	47,500	217,000	130,000	224,000	....	....	658,000	23,000	79,000	....	....	....	....	....
Mardyck.....	127,000	41,600	....	132,000	222,000	....	....	224,000	....	79,000	....	....	....	....	....
Cie. Rhenane de Raffinage—Reichstett-Vendenheim	80,000	36,000	15,000	114,000	116,000	....	217,000	225,000	....	....	....	....	....	....	6,000
Elf France—Donges.....	214,300	119,950	233,380	149,400	129,280	....	336,430	142,860	24,300	74,900	....	....	....	320	....
Feyzin.....	128,130	36,200	215,730	124,940	19,200	....	334,630	114,190	....	12,200	....	11,400	....	173	....
Grandpuits.....	98,000	49,900	214,860	130,720	114,800	....	328,875	127,860	23,150	....	....	31,250	....	208	....
Esso SAF—Fos sur Mer	107,000	33,000	....	125,000	119,000	....	....	118,000	....	....	....	....	....	....	....
Port Jerome.....	155,700	71,200	....	129,300	117,700	....	....	27,000	1900	....	9,600	....	....	....	....
								364,000							
								1600							
								448,900							
								75,000							
								831,600							
Mobil Oil Francaise—Notre Dame de Gravenchon	66,000	27,000	....	....	112,000	....	K258,000	115,000	....	75,000	6,000	....	....	....	3,600
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. Francaise des Petroles BP—Dunkirk.....	....	17,500	....	....	....	....	....	....	....	....	10,800	....	....	....	....
Lavera*	199,500	74,100	221,600	127,900	110,800	115,300	....	224,300	....	713,500	....	....	130.0	....	13,500
								439,600							
Total	1,781,630	754,950	149,570	357,260	266,780	15,300	194,935	669,910	11,350	60,600	32,600	2,650	40.0	701	40,100
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—Krumpha ^W.....	....	26,106	....	....	....	....	....	....	....	....	3,414	....	....	....	1,607
Beta Raffineriegesellschaft Wilhelmshaven mbH—Wilhelmshaven..	180,000	....	....	....	140,200	....	....	168,900	....	....	....	....	....	....	....
								474,700							
								A488,800							
BP Oil Deutschland GmbH—Hamburg ^{BB}.....	....	14,280	....	....	....	....	....	72,000	....	....	9,900	....	1320.0	....	....
								8840					4320.0		
DEA Mineraloel AG—Heide/Grasbrook	80,000	30,000	214,000	E29,000	220,000	....	311,000	125,000	3450	15,800	8,000	1280	....	....	5,000
								418,000							
Wesseling.....	120,000	50,000	226,000	....	221,000	140,000	440,000	124,000	32,000	17,600	....	11,500	....	....	....
								26,000							
Deutsche Shell AG—Godorf	170,000	73,000	118,000	....	117,000	136,000	232,000	252,000	....	117,000	....	....	....	....	12,000
								334,000							
								412,000							
Harburg	98,000	44,000	216,000	116,000	317,000	....	216,000	229,000	....	72,800	6,000	....	....	....	5,900
								32,000							
Erdoel Raffinerie Neustadt GmbH—Neustadt-Donau.....	144,000	65,400	213,000	126,000	117,700	....	445,000	122,500	....	....	....	....	....	....	5,400
Esso AG—Ingolstadt	105,000	29,500	....	127,500	118,200	....	....	230,200	....	76,300	....	....	....	....	6,900
								452,900							
								615,000							
								247,600							
								441,300							
Karlsruhe.....	151,800	54,200	130,200	....	134,400	....	....	643,000	....	....	....	....	....	1,200	10,000
								224,500							
								321,000							
								421,000							

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Holborn Europa Raffinerie GmbH—Hamburg	78,000	15,000	....	¹ 18,750	¹ 14,700	....	....	¹ 31,700 ³ 3,500 ⁴ 38,400	....	....	....	....	....	....	....
Leuna Raffineriegesellschaft mhH—Leuna ^{CC}	100,000	70,000	² 26,000	....	¹ 15,000	¹ 48,000	⁴ 33,000	¹ 19,000	....	....	....	....	² 31.3	....	....
Oberrheinische Mineralölwerke GmbH—Karlsruhe	174,000	102,000	² 28,000	¹ 74,000	¹ 11,400 ³ 21,300	....	³ 66,000 ⁴ 68,000	¹ 50,000	² 10,200	⁷ 13,000	....	¹ 2,700	....	....	¹ 1,800
OMV AG—Burghausen	72,000	....	⁴ 27,500	....	....	....	....	⁴ 86 ¹ 8,700	....	² 2,300	....	....	....	⁶ 90	....
PCK Schwedt AG—Schwedt	230,000	94,300	² 26,800 ^{DD} 14,000	¹ 51,000	¹ 16,000 ³ 18,000	....	³ 45,000 ⁴ 105,000	¹ 36,600	² 6,100	¹ 5,000 ⁷ 15,000	....	¹ 1,900	¹ 8.1	....	¹ 2,000
Raffineriegesellschaft—Vohburg/Ingolstadt*	114,000	44,650	² 23,400	¹ 35,100	¹ 16,200 ³ 17,100	....	⁴ 27,000	² 70,200	....	⁷ 10,800	....	⁴ 8,550	....	....	¹ 0,800
Schmierstoff Raffinerie—Salzbergen	3,100	5,500	....	....	....	....	....	....	....	....	....	....	....	....	....
Veba Oel/Ruhr Oel GmbH—Gelsenkirchen	227,000	77,000	² 16,000 ⁴ 28,000	¹ 21,000	³ 27,000	¹ 30,000	³ 15,000 ⁴ 89,000	¹ 31,000	....	¹ 3,650 ² 1,960 ³ 2,190 ⁴ 4,625	....	....	¹ 25.0 ³ 42.0	¹ 200	⁶ ,000
Wintershall AG—Lingen	79,460	37,689	⁴ 17,693	....	¹ 13,843 ³ 21,160	^{KKK} 121,061	⁴ 22,000	¹ 17,500 ⁴ 7,500	....	¹ 4,644 ² 1,986 ³ 3,760	....	....	¹ 41.0 ⁴ 41.0 ⁵ 50.0	⁴ 50	⁷ ,085
Total	2,126,360	832,625	398,093	278,350	398,203	175,061	632,000	915,840	18,750	119,415	27,314	14,930	878.4	3,540	94,492
GHANA															
Tema Oil Refinery CL—Tema	25,315	....	....	....	¹ 5,877	....	....	....	....	....	....	....	....	....	....
Total	25,315	....	....	....	5,877	....	....	....	....	....	....	....	....	....	....
GREECE															
EKO-Hellenic Refineries & Chemicals of Macedonia Industrial & Commercial Co. SA—Thessaloniki	66,500	8,100	....	....	² 8,100	....	....	² 16,500 ⁴ 18,800	....	....	....	....	....	....	² ,800
Hellenic Aspropyrgos Refinery SA—Aspropyrgos	126,000	57,500	² 21,400	¹ 37,000	¹ 9,800 ³ 20,600	^{OE} 28,000	² 16,300	¹ 36,000	⁴ 7,450	⁷ 7,000	....	¹ 1,120	^{YY} 19.6 ⁴ 8.6	....	....
Motor Oil (Hellas) Corinth Refineries SA—Aghii Theodori	100,000	62,100	² 24,200	¹ 30,400	² 12,700	....	....	² 19,300 ⁴ 27,000 ⁷ 3,300	² 2,400 ⁴ 1,400	⁶ 5,200	³ ,200	¹ 650	¹ 3.0	....	....
Petrola Hellas SA—Elefsis	108,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	400,500	127,700	45,600	67,400	51,200	28,000	16,300	120,900	11,250	12,200	3,200	1,770	21.2	....	2,800
GUATEMALA															
Basic Resources International—Peten	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Texas Petroleum Co.—Escuintla	16,000	....	....	....	¹ 3,000	....	....	¹ 3,000 ⁴ 2,000	....	....	....	....	....	....	....
Total	20,000	....	....	....	3,000	....	....	5,000	....	....	....	....	....	....	....
HONDURAS															
Refineria Texas de Honduras SA—Puerto Cortes	14,000	....	....	....	¹ 1,800	....	....	¹ 3,000 ⁴ 2,000	....	....	....	....	....	....	....
Total	14,000	....	....	....	1,800	....	....	5,000	....	....	....	....	....	....	....
HUNGARY															
Mol Rt.—Szazhalombatta	161,000	77,500	² 14,000	¹ 24,000	¹ 16,000 ³ 13,600	....	³ 30,600 ⁴ 7,400	⁴ 42,800 ⁷ 2,200	² 3,300	¹ 7,100 ⁷ 2,700	⁴ ,200	¹ 1,240	....	....	⁶ ,300
Tiszaújváros	61,000	33,000	....	....	....	....	....	⁴ 14,000	....	....	....	¹ 620	....	....	....
Zalaegerszeg	10,000	6,000	....	....	....	....	....	....	....	....	....	....	....	....	⁴ ,500
Total	232,000	116,500	14,000	24,000	29,600	....	38,000	59,000	3,300	9,800	4,200	1,860	....	....	10,800
INDIA															
Bharat Petroleum Co. Ltd.—Mahul Bombay ^{FF}	134,860	38,970	....	¹ 28,755	¹ 5,503	....	....	....	....	¹ 2,175	....	....	....	....	¹ 0,000
Bongaigaon Refinery & Petrochemicals Ltd.— Bongaigaon Assam	27,110	....	⁴ 9,675	....	¹ 1,833	....	....	¹ 1,833	....	¹ 694	....	....	....	² 03	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Cochin Refineries Ltd.—Ambalamugal ^{GG}	93,400	37,600	² 18,200	¹ 27,000	¹ 5,800	....	....	² 5,800	....	¹ 2,100	....	....	....	....	6,300
Hindustan Petroleum Co. Ltd.—Mahul Bombay.....	110,452	52,500	....	¹ 12,000	....	....	....	⁷ 6,600	....	....	4,800	....	⁷ 86.3	....	9,400
Visakhapatnam.....	90,369	43,200	....	¹ 19,200	....	....	....	....	....	....	....	....	....	....	2,440
Indian Oil Co. Ltd.—Barauni, Bihar.....	65,800	23,700	⁴ 20,000	....	....	....	....	....	....	....	....	....	....	540	....
Digboi, Assam.....	11,700	....	⁴ 850	....	....	....	....	....	....	....	30	....	....	26	400
Gawahati, Assam.....	19,920	....	46,000	....	....	....	....	....	....	....	....	....	....	145	....
Koyali, Gujarat.....	185,100	98,000	² 19,500	¹ 20,000	¹ 8,300	....	....	¹ 8,300	....	^{x1} 1,450	....	....	² 42.7	....	4,400
Haldia, West Bengal.....	61,000	27,000	² 9,600	....	¹ 5,300	....	....	¹ 5,300	....	....	3,100	....	....	....	7,500
								⁴ 13,400							
								⁷ 3,100							
Mathura, Uttar Pradesh.....	156,000	47,000	² 18,000	¹ 20,000	....	....	....	....	....	....	....	....	....	....	7,500
Madras Refineries Ltd.—Madras.....	130,660	66,866	² 3,446	¹ 11,250	¹ 2,138	....	....	¹ 2,138	....	....	5,110	....	¹ 10.0	....	3,877
								⁴ 22,612							
								⁷ 5,110							
Total	1,086,371	434,836	105,271	138,205	28,874	....	....	74,193	....	6,419	13,040	....	139.0	914	51,817
INDONESIA															
Pertamina—Balikpapan, Kalimantan.....	240,920	89,110	....	....	³ 18,720	¹ 49,500	....	....	....	....	....	....	....	....	....
Cepu.....	3,420	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cilacap, Central Java.....	285,000	35,340	² 50,040	....	³ 30,690	....	....	....	....	....	....	....	....	....	....
Dumai, Central Sumatra.....	114,000	87,970	⁴ 32,580	....	³ 12,870	¹ 50,220	....	⁴ 11,430	....	....	....	....	....	....	....
Musi, South Sumatra.....	109,155	51,300	¹ 8,820	¹ 18,450	³ 30,690	....	....	....	¹ 16,200	....	....	....	....	....	....
Pangakalan Brandan, North Sumatra.....	4,750	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sungai Pakning, Central Sumatra.....	47,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	804,745	263,720	91,440	18,450	92,970	99,720	....	11,430	16,200	....	....	....	....	....	....
IRAN															
National Iranian Oil Co.—Abadan.....	320,000	69,640	² 11,700	¹ 40,000	⁴ 41,555	....	⁴ 17,430	¹ 71,175	....	....	4,920	....	¹ 116.0	....	17,550
Arak.....	150,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Isfahan.....	265,000	114,000	² 80,000	....	⁴ 36,000	¹ 36,000	....	¹ 36,000	....	....	....	....	¹ 70.0	....	25,000
Kermanshah.....	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lavan.....	23,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shiraz.....	38,000	18,400	² 8,800	....	46,245	¹ 9,380	⁴ 3,120	¹ 5,225	....	....	....	....	....	....	....
Tabriz.....	112,000	50,000	² 16,500	....	⁴ 11,120	² 13,300	....	....	....	....	....	....	⁷ 34.0	....	1,000
Tehran.....	224,700	100,000	² 34,000	....	⁴ 28,000	¹ 26,000	....	....	....	....	6,000	....	....	....	7,000
						² 27,800									
Total	1,167,700	352,040	151,000	40,000	122,920	99,180	33,850	112,400	....	....	10,920	....	220.0	....	50,550
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	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Khanqin.....	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.....	55,000	....	....	....	¹ 12,000	....	45,500	¹ 13,650	....	....	....	....	....	....	....
Total	55,000	....	....	....	12,000	....	5,500	13,650	....	....	....	....	....	....	....
ISRAEL															
Oil Refineries Ltd.—Ashdod.....	90,000	45,000	² 25,000	¹ 27,500	¹ 11,500	....	....	² 20,000 ⁴ 30,000	....	....	....	¹ 750	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Haifa	130,000	73,000	² 41,000	¹ 22,000	¹ 15,000	....	....	² 16,000 ³ 30,000	⁴ 2,200	....	....	....	....	....	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	....	....	³ 12,000	....	⁴ 31,700	² 22,000	....	....	9,300	....	....	....	3,500
Agip Raffinazione—Porto Marghera	80,000	38,000	¹ 13,500 ² 27,000	....	³ 15,000	....	⁴ 27,000	² 16,000	....	⁷ 6,000	....	....	....	....	3,500
Sannazzaro, Pavia	200,000	84,500	¹ 32,000	¹ 34,000	² 12,000 ³ 16,700	¹ 30,000	⁴ 41,000	¹ 12,000 ² 27,000	³ 3,200	⁷ 11,000	....	¹ 920	² 35.0	....	2,500
Taranto	84,000	13,500	¹ 27,000 ² 37,250	....	¹ 17,000	....	⁴ 34,200	² 24,000	....	⁷ 3,900	....	....	² 39.5	....	2,500
Anonima Petroli Italiana—Falconara, Marittima	78,000	57,400	¹ 16,000 ² 22,000	....	¹ 14,000	....	....	² 25,000 ⁴ 27,600	....	⁷ 6,500	....	....	¹ 4.6	....	....
Arcola Petroli SpA—La Spezia	33,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Esso Italiana SpA—Augusta, Siracusa	182,500	85,500	....	¹ 43,200	¹ 21,900	....	¹ 15,900	¹ 22,400 ³ 35,700 ² 22,600	² 7,900	⁵ 2,300	¹ 7,000	....	....	....	....
Iplom SpA—Busalla	46,500	12,600	² 13,100	....	....	....	....	....	....	....	6,500	....	....	....	12,500
Isab SpA—Priolo Gargallo ^l	256,680	120,755	¹ 40,255 ² 45,283	....	² 40,000	^m 164,906	....	² 65,358 ¹ 65,509 ⁰⁰⁶ 27,170 ² 14,570	....	⁷ 12,830	....	....	⁷ 17.4	....	....
Italiana Energia E Servizi SpA ^{HH} —Frassino, Mantova	50,318	16,605	¹ 8,176 ² 20,963	....	¹ 7,445	....	² 19,600 ⁵ 3,926	....	....	⁷ 2,015	....	....	....	....	....
Praoil—Gela, Ragusa	105,000	52,500	⁴ 45,000	¹ 35,000	¹ 13,850	....	² 30,000 ⁴ 17,000	¹ 16,500	² 10,000	¹ 6,700 ² 700 ⁴ 8,050	....	¹ 1,100 ³ 1,200	³ 17.0 ⁵ 8.0	2,000	....
Priolo, Siracusa	220,000	50,000	² 25,000	¹ 32,000	¹ 9,000	....	⁴ 18,000	¹ 9,000	¹ 4,000	¹ 12,000 ² 2,300 ⁷ 7,100	....	¹ 1,050	....	....	....
Raffineria di Roma SpA—Rome	81,500	11,500	² 31,600	....	¹ 14,300	....	⁴ 21,400	² 21,000	....	....	....	....	....	....	9,620
Raffineria Mediterranea SpA—Milazzo, Messina	160,000	78,000	....	¹ 45,000	¹ 12,000	¹ 30,000	⁴ 14,000	² 15,000	¹ 5,000	....	....	¹ 1,400	² 35.0	....	....
Saras SpA—Sarroch	285,000	107,500	² 45,000	¹ 80,000	³ 27,000	^m 150,000	....	¹ 27,000 ⁴ 75,500	² 6,800	....	....	....	....	....	....
Sarpom—S. Martino Di Trecate	248,000	27,400	....	¹ 25,200	¹ 18,000 ² 7,800	....	....	² 66,300 ⁴ 42,300	³ 3,100	⁷ 10,500	....	....	....	....	....
Tamoi Raffinazione SpA—Cremona	90,000	....	² 33,000	....	¹ 9,400 ³ 15,000	^{GZ} 46,000	⁴ 11,500	^S 33,400 ³ 1,800	....	⁷ 10,900	....	....	⁴ 5.5	....	....
Total	2,284,498	791,760	482,127	294,400	282,395	180,906	285,226	714,707	40,000	102,795	32,800	5,670	162.0	2,000	34,120
IVORY COAST															
Ste. Ivoirienne de Raffinage —Abidjan	54,000	33,000	....	....	¹ 9,000	¹ 13,000	¹ 11,000	⁴ 14,000	....	....	....	....	¹ 23.0	....	....
Ste. Multinationale de Bitumes—Abidjan	10,000	10,000	....	....	....	....	....	....	....	....	....	....	....	....	6,000
Total	64,000	43,000	....	....	9,000	13,000	11,000	14,000	....	....	....	....	23.0	....	6,000
JAMAICA															
Petrojam Ltd.—Kingston	35,500	2,000	....	....	¹ 3,540	....	....	² 6,400 ⁴ 13,200	....	....	....	....	....	....	680
Total	35,500	2,000	....	....	3,540	....	....	19,600	....	....	....	....	....	....	680
JAPAN															
Cosmo Oil Co. Ltd.—Chiba*	228,000	57,000	....	¹ 31,500	¹ 32,850	....	¹ 64,800 ² 31,500 ² 7,200	¹ 34,200 ² 7,200	....	....	....	....	¹ 22.0 ² 66.0	....	....
Sakaide*	133,000	39,425	....	¹ 17,100	¹ 12,600	....	⁴ 113,400 ¹ 25,200 ² 15,480	¹ 12,600	....	....	....	....	¹ 33.0	....	....
Sakai*	104,500	32,300	....	¹ 19,800	¹ 7,200	....	² 18,000 ⁴ 26,100	¹ 9,900	¹ 7,200	....	....	¹ 1,465	¹ 11.0	....	....
Yokkaichi*	147,250	70,300	....	¹ 22,500	¹ 5,400 ³ 12,150	....	² 37,350 ⁴ 58,500	¹ 17,550	....	....	....	....	¹ 12.0	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Fuji Oil Co. Ltd.—Sodegaura* ^{JJ}	153,900	52,250	521,600	113,950	327,000	....	233,300	138,700 470,650	....	17,359	....	....	....	....	....
General Sekiyu Seisei KK—Sakai	140,400	63,000	....	136,000	130,600	....	336,000	236,000 467,860	....	119,800	....	....	122.0 75.0	....	....
Idemitsu Kosan Co. Ltd.—Chita, Aichi*	152,000	....	....	136,000	316,200	....	149,500 443,200	123,400	19,000	....	....	....	263.6	....	....
Himeji, Hyogo*	133,000	....	....	....	115,300	....	136,000 454,000	125,200	....	....	....	....	233.5	....	....
Ichihara, Chiba*	237,500	60,800	....	137,800	115,300	6310,440	136,000 235,100	122,500	....	112,060	9,450	17,981	248.7	....	....
Tokuyama, Yamaguchi*	114,000	52,250	....	122,500	318,000	....	4101,700 240,500	118,000	....	....	....	....	218.0	....	1,530
Tomakomai, Hokkaido*	123,500	22,800	....	123,400	116,200	m113,500	431,500 131,500	124,300	....	....	....	....	253.0	....	....
Japan Energy Co.—Chita, Aichi	77,600	24,700	....	113,400	119,200	....	427,000 217,900	128,700 428,200	....	114,810 22,000	....	....	220.5 525.4	....	....
Funakawa	6,000	2,740	....	....	....	....	....	....	....	....	1,070	....	....	....	....
Okayama, Mizushima	156,500	55,500	416,800	139,100	318,700	....	113,200 247,500 418,400	125,100 429,500 69,200	17,700	22,500	4,800	....	118.0 224.9 613.8	822	8,300
Kashima Oil Co. Ltd.—Kashima, Ibaragi* ^{KK}	171,000	39,900	....	119,800	16,750 315,300	....	120,700 222,500	123,400 454,000	....	12,387	....	11,396	122.5	....	....
Koa Oil Co. Ltd.—Yamaguchi	120,000	64,000	419,000	122,000	222,000	....	238,000	130,000 433,000	....	17,500	....	....	28.0 419.0	770	1,700
Takaishi, Osaka	104,000	55,000	....	125,000	111,000	....	215,000	133,000 115,000	14,000	12,100	....	....	....	....	....
Kygnus Sekiyu Seisei KK—Kawasaki	66,500	....	....	....	....	....	....	425,000 221,600	....	....	....	....	....	....	....
Kyokuto Petroleum Ltd.—Chiba	139,000	58,000	....	120,000	122,000	m135,000	....	124,000 463,000	....	....	....	....	130.0 416.0 68.0	....	15,000
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	....	433,000	110,000	....	....	....	....	....	....	....
Mizushima	250,000	67,000	....	140,000	125,000 320,000	111,000	145,000 230,000 440,000	143,500 39,500 74,100	17,600	112,800	3,300	....	239.0	....	4,300
Nansei Sekiyu KK—Okinawa	90,000	....	....	....	110,800	....	....	221,060 413,500	....	....	....	....	....	....	....
Nihonkai Oil Co. Ltd.—Toyama	60,000	10,000	....	....	16,000	....	213,000	210,000 47,500	....	....	....	....	....	....	....
Nippon Oil Co. Ltd.—Niigata*	24,700	1,900	....	....	14,500	....	....	419,170	....	....	....	....	....	....	....
Nippon Petroleum Refining Co. Ltd.—Muroran*	161,500	54,900	....	120,700	119,800	m136,000	111,250	234,200 451,300	....	....	....	....	261.8	....	....
Okinawa*	....	....	....	....	12,700	....	....	22,700	....	....	....	....	....	....	....
Negishi*	342,000	123,500	218,000	163,900	118,000 227,000	....	127,000 272,900	262,550 487,750	13,960	....	3,879	11,620	222.0	....	....
Yokohama*	....	....	....	....	13,600	....	....	23,780 46,570	....	....	1,125	....	....	....	....
Okinawa Sekiyu Seisei—Yonashiro, Okinawa	57,000	....	....	....	....	....	134,200 213,500	418,000	....	....	....	....	242.7	....	....
Seibu Oil Co. Ltd.—Yamaguchi	110,100	42,200	....	119,900	120,000	....	140,100 223,200 32,700	248,300 426,700	....	75,200	....	....	142.4	....	....
Showa Shell Sekiyu KK—Kawasaki	110,100	27,500	....	....	119,100	....	27,600 414,200	224,900 418,700	....	13,300 75,500	....	....	....	....	....
Niigata	36,700	....	....	....	15,300	....	22,900	411,600	....	....	....	....	....	....	....
Showa Yokkaichi Sekiyu Co. Ltd.—Yokkaichi	220,300	96,300	....	122,600	140,600	....	236,900 535,600	261,500 439,200	....	15,500 79,200	5,500	....	128.3	....	6,300
Taiyo Oil Co. Ltd.—Kikuma, Ehime	89,000	25,000	....	....	326,000	615,000	....	131,000 416,000	....	112,000 29,400	....	....	218.0 483.0	....	....
Toa Oil Co. Ltd.—Kawasaki	59,700	48,600	MM520,400	127,100	17,100	....	210,700 341,000	218,200 49,000	....	....	....	....	132.8	....	....
Toho Oil Co. Ltd.—Owase	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcf/d)	Coke (t/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	217,400	116,200	....	179,400	117,700 326,500	....	375,600 437,800	144,200 213,200 487,900	16,600	....	....	....	219.0 72.0	....	....
Wakayama	156,900	58,300	....	134,000	133,900	....	328,400 428,400	133,900 453,900 79,570	12,080	....	7,000	....	116.0 57.0 710.0	....	....
Wakayama Petroleum Refining Co. Ltd.—Kainan City, Wakayama ..	50,000	30,000	....	....	....	....	....	420,000 79,000	....	....	8,500	....	213.5	....	....
Total	4,866,950	1,572,065	95,800	748,950	687,350	120,940	1,989,600	1,841,510	48,140	137,416	44,624	12,462	1,046.3	1,592	43,330
JORDAN															
Jordan Petroleum Refinery—Zerka	100,000	17,000	....	14,350	18,640	14,230	....	114,400	....	....	....	....	27.9	....	4,000
Total	100,000	17,000	....	4,350	8,640	4,230	....	14,400	....	....	....	....	7.9	....	4,000
KENYA															
Kenya Petroleum Refineries Ltd.—Mombasa	90,000	1,700	....	....	19,600	....	....	233,000	....	....	....	....	....	....	....
Total	90,000	1,700	....	....	9,600	....	....	33,000	....	....	....	....	....	....	....
KOREA, NORTH															
Government ^{NN}	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Government—Ungi	42,000	....	....	....	17,300	....	....	17,400	....	11,000	....	11,000	....	....	....
Total	71,000	....	....	....	7,300	....	....	7,400	....	1,000	....	1,000	....	....	....
KOREA, SOUTH															
Honam Oil Refinery Co. Ltd.—Yochon*	361,000	9,500	....	163,000	117,100	....	....	224,300 445,000	....	120,700	2,155	12,250	....	....	5,400
Kukdong Oil Co. Ltd.—Busan	10,000	7,000	....	....	....	....	....	22,000 71,200	....	....	2,000	....	20.4	....	4,000
Daesan	60,000	41,000	419,000	....	13,000	122,000	....	27,000 412,000	....	....	1,000	....	254.0	1,200	3,727
Kyung In Energy Co. Ltd.—Inchon	60,000	....	....	....	13,600	....	....	13,600 44,000	....	....	....	....	....	....	....
Ssangyong Oil Refining Co. Ltd.—Onsan	143,000	27,400	....	....	14,800 427,000	....	....	127,400 2780 443,800	....	19,600	5,500	....	212.8 720.1	....	....
Yukong Ltd.—Ulsan	610,000	11,000	....	....	119,000 250,000	....	....	172,000 456,000	....	124,000 21,100 31,800	....	13,070	....	....	3,200
Total	1,244,000	95,900	19,000	63,000	124,500	22,000	....	309,380	....	57,200	10,655	5,320	87.3	1,200	16,327
KUWAIT															
Kuwait National Petroleum Co.—Mina Abdulla	242,000	134,000	459,000	....	....	c136,000	194,000	37,000 48671,000	....	....	....	....	1161.0 423.0	2,000	....
Mina Al-Ahmadi	415,000	82,000	....	128,000	134,000	c136,000	1125,000	134,000 473,000	....	....	....	....	1160.0 454.0	....	....
Shuaiba	144,000	107,000	....	....	114,000	c140,000 c242,000	....	125,000 48660,000	....	....	....	....	1210.0	....	....
Total	801,000	323,000	59,000	28,000	48,000	154,000	219,000	270,000	....	....	....	....	608.0	2,000	....
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

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd							Production capacity, b/cd							
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
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-Benghazi	120,000	7,548	....	....	113,440	....	....	116,604 19,926	....	....	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															
Mazheikiai State Oil Refinery Nafta—Mazeikia	263,420	83,223	29,525	143,692	125,741	....	....	151,482 419,370 542,511	....	....	....	11,061	124.6	....	6,333
Total	263,420	83,223	29,525	43,692	25,741	....	....	213,363	....	....	....	1,061	24.6	....	6,333
MACEDONIA															
Rafinerija Skopje—Skopje.....	51,180	....	....	....	110,780	....	....	214,870 185,870	....	73,490	....	....	....	....	....
Total	51,180	....	....	....	10,780	....	....	20,740	....	3,490	....	....	....	....	....
MADAGASCAR															
Solima Raffinerie—Toamasina ^{PP}	15,000	1,500	26,000	....	12,000	....	....	63,000	....	....	....	....	....	....	....
Total	15,000	1,500	6,000	....	2,000	....	....	3,000	....	....	....	....	....	....	....
MALAYSIA															
Eso Malaysia Berhad—Port Dickson.....	70,700	4,300	....	....	115,400	....	....	225,100 410,900	....	....	....	....	....	....	....
Petronas Penapisan (Melaka) Sdn. Berhad—Melaka	100,000	....	....	....	320,000	....	....	120,000	....	....	....	....	....	....	....
Sarawak Shell Berhad—Lutong	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shell Refining Co. Berhad—Port Dickson	105,000	7,000	....	....	14,000 313,000	....	....	232,000 45,000	....	....	....	....	....	....	4,000
Total	320,700	11,300	....	....	52,400	....	....	93,000	....	....	....	....	....	....	4,000
MARTINIQUE															
Ste. Anonyme de la Raffinerie des Antilles—Fort-de-France	16,000	....	....	....	13,000	....	....	29,200	....	....	....	....	....	....	....
Total	16,000	....	....	....	3,000	....	....	9,200	....	....	....	....	....	....	....
MEXICO															
Petroleos Mexicanos—Cadereyta	235,000	137,000	....	140,000	120,000	....	....	86,000	....	....	....	1698	....	....	....
Ciudad Madero.....	195,000	81,500	....	143,000	115,000	....	....	58,000	23,420	....	....	....	10.0	....	....
Minatitlan	200,000	83,000	....	140,000	131,000	....	....	100,000	2600	117,150	....	....	....	....	....
Salamanca	240,000	149,200	34,000	160,000	124,800	218,500	....	71,000	....	....	19,000	....	60.0	....	15,000
Salina Cruz.....	330,000	155,000	50,000	180,000	350,000	....	....	161,000	....	....	....	1698	....	....	....
Tula Hidalgo	320,000	155,000	341,000	180,000	160,000	....	....	172,000	....	....	....	31,396 4,187	....	....	....
Total	1,520,000	760,700	95,000	343,000	200,800	18,500	....	648,000	4,020	17,150	19,000	6,979	70.0	....	15,000
MOROCCO															
Samir—Mohammedia.....	129,000	20,000	....	....	124,000	....	....	124,000 69,700 72,100	....	....	2,100	....	....	....	1,900
Ste. Cherifienne des Petroles—Sidi Kacem ^W	26,388	8,232	....	15,880	13,000	....	....	22,352	....	....	....	....	....	....	....
Total	155,388	28,232	....	5,880	27,000	....	....	38,152	....	....	2,100	....	....	....	1,900

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
MYANMAR															
Myanma Petrochemical Enterprise—Chauk	6,000	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Thanlyin.....	26,000	2,000	45,200	....	....	....	....	....	....	....	500	....	....	120	....
Total	32,000	4,000	5,200	....	....	....	....	....	....	....	500	....	....	120	....
NETHERLANDS															
Esso Nederland BV—Rotterdam	180,000	80,700	MM536,660	....	328,080	133,840	....	128,080	....	....	....	....	121.0	....	....
								210,660							
								470,500							
								618,140							
Kuwait Petroleum Europoort BV—Rotterdam	75,500	37,600	19,200	....	322,600	....	....	141,200	....	76,500	4,400	....	42.0	....	3,321
			26,800					431,800							
								75,500							
Netherlands Refining Co.—Europoort & Pernis*	399,000	101,650	260,300	150,400	153,100	....	....	131,500	25,850	77,200	....	11,350	....	....	....
								263,900							
								464,800							
Shell Nederland Raffinaderij BV—Pernis.....	374,000	148,000	245,000	187,000	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.....	148,000	58,000	....	....	323,000	139,000	....	626,000	....	....	....	....	....	....	....
Total	1,186,500	433,950	157,960	137,400	168,780	94,840	86,000	538,380	12,650	13,700	11,500	3,900	82.0	....	14,621
NETHERLANDS ANTILLES															
Coastal Aruba Refining Co. NV—San Nicolas.....	170,000	120,000	238,000	....	....	0438,000	....	477,000	....	....	....	....	254.0	....	....
Refineria Isla Curazao SA—Emmstad.....	320,000	195,000	275,000	149,000	120,000	....	314,000	153,000	24,500	76,500	12,000	....	....	....	20,000
								437,000	31,300						
								72,500							
Total	490,000	315,000	113,000	49,000	20,000	38,000	14,000	169,500	5,800	6,500	12,000	....	54.0	....	20,000
NEW ZEALAND															
New Zealand Refining Co. Ltd.—Whangarei*	91,200	41,800	....	....	120,700	122,500	....	232,400	....	....	....	....	144.0	....	2,250
								418,000							
Total	91,200	41,800	....	....	20,700	22,500	....	50,400	....	....	....	....	44.0	....	2,250
NICARAGUA															
Esso Standard Oil SA Ltd.—Managua.....	16,500	2,000	....	13,500	....	....	....	25,000	....	....	....	....	....	....	....
								4600							
								610,400							
Total	16,500	2,000	....	3,500	....	....	....	16,000	....	....	....	....	....	....	....
NIGERIA															
Kaduna Refinery & Petrochemical Co. (NNPC)—Kaduna	104,500	36,290	....	118,000	115,300	....	....	121,600	....	2291	3,878	....	....	....	14,850
								415,750							
								536							
Port Harcourt Refining Co. (NNPC)—Port Harcourt, Alesa Eleme...	60,000	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....
	150,000	54,000		140,000	433,000			133,000	27,020	53,610					
								614,500	42,274						
Warri Refinery & Petrochemical Co. (NNPC)—Warri.....	118,750	34,200	....	124,700	115,770	....	....	215,770	22,850	....	....	....	....	....	....
								68,075							
Total	433,250	124,490	....	82,700	70,070	....	....	109,231	12,144	3,901	3,878	....	....	....	14,850
NORWAY															
Esso Norge AS—Slagen.....	100,000	....	230,200	....	112,100	....	....	222,600	....	....	....	....	....	....	....
								439,200							
								69,500							
Norske Shell AS—Sola	53,000	....	118,000	....	111,000	....	....	117,500	....	74,000	....	....	....	....	....
								411,000							

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Statoil Division Mongstad—Mongstad ^{QQ}	154,000	....	⁴ 25,000	^{FFF2} 48,000	^{19,800} ^{315,800}	....	⁴ 16,900	^{126,000} ^{610,000}	....	^{74,000}	....	....	....	....	....
Total	307,000	....	73,200	48,000	48,700	....	16,900	135,800	....	8,000	....	....	....	....	....
OMAN															
Oman Refinery Co.—Mina Al Fahal	85,000	....	....	....	³ 16,000	....	....	² 20,000	....	....	....	....	....	....	....
Total	85,000	....	....	....	16,000	....	....	20,000	....	....	....	....	....	....	....
PAKISTAN															
Attock Refinery Ltd.—Rawalpindi*	28,975	950	....	....	....	....	....	....	....	....	....	....	....	....	1,100
National Refinery Ltd.—Korangi, Karachi	62,050	12,600	....	....	³ 3,800	....	....	^{23,800}	....	....	3,400	....	....	....	3,600
Pakistan Refinery Ltd.—Karachi	46,300	....	....	....	^{22,700}	....	....	^{418,100}	....	....	....	....	....	....	....
Total	137,325	13,550	....	....	6,500	....	....	21,900	....	....	3,400	....	....	....	4,700
PANAMA															
Refineria Panama SA—Las Minas	60,000	6,500	² 27,000	....	111,000	....	....	⁶ 26,700	....	....	....	....	....	....	....
Total	60,000	6,500	27,000	....	11,000	....	....	26,700	....	....	....	....	....	....	....
PARAGUAY															
Petroleos Paraguayos—Villa Elisa	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PERU															
Maple Gas Corp. ^{RR} —Pucallpa	3,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroperu SA—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	....	....	^{216,000} ^{SS416,000}	....	....	....	....	....	....	....
Petron Corp.—Limay, Bataan*	147,250	30,400	....	^{213,500}	^{115,300}	....	^{132,400}	^{232,400}	....	....	....	....	....	....	....
Philippine Petroleum Corp.—Pililla .....	....	21,000	....	....	....	....	....	....	....	....	3,700	....	....	....	1,200
Pilipinas Shell Petroleum Corp.—Tabangao	103,800	....	^{120,300}	....	^{318,900}	....	^{247,300}	^{231,100}	....	....	....	....	....	....	....
Total	323,050	70,900	20,300	26,000	43,200	....	79,700	95,500	....	....	3,700	....	....	....	1,200
POLAND															
Government-owned refineries at Czechowice, Gorlice, Jaslo, Jedlicze, Trzebinia	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrochemia—Plock	260,000	115,000	....	146,000	125,000	....	....	^{124,000} ^{638,000} ^{73,000}	^{23,000}	^{13,500} ²⁷⁷⁰	....	11,600	....	....	13,000
Refineria Gdanska S.A.—Gdansk ^Z	60,000	29,500	....	^{314,000}	....	....	....	^{220,600} ^{416,000} ^{79,000}	....	....	4,800	....	....	....	4,300
Total	352,000	144,500	....	46,000	39,000	....	....	110,600	3,000	4,270	4,800	1,600	....	....	17,300
PORTUGAL															
Petrolgal—Leca da Palmeira Porto*	91,390	11,400	....	....	^{115,570} ^{310,440}	....	....	^{137,890} ^{47,200} ^{73,600}	....	^{16,282}	....	....	....	....	....
Sines*	212,895	66,880	^{23,400}	^{131,500}	^{324,750}	^{TT49,180}	....	^{124,750} ^{428,260} ^{513,500}	^{27,200}	....	....	....	....	....	....
Total	304,285	78,280	23,400	31,500	50,760	9,180	....	115,200	7,200	6,282	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
PUERTO RICO															
Caribbean Petroleum Corp.—Bayamon	42,000	....	....	114,200	16,500	....	....	16,800	31,300	....	....	....	....	....	1,000
								411,000							
Puerto Rico Sun Oil Co.—Yabucoa.....	85,000	45,000	....	....	120,000	315,600	210,000	120,000	....	....	9,200	....	219.0	....	....
Total	127,000	45,000	....	14,200	26,500	15,600	10,000	37,800	1,300	....	9,200	....	19.0	....	1,000
QATAR															
National Oil Distribution Co.—Umm Said.....	57,500	....	....	....	12,100	....	....	219,500	....	75,300	....	....	....	....	....
					39,400			100619,850							
Total	57,500	....	....	....	11,500	....	....	39,350	....	5,300	....	....	....	....	....
ROMANIA															
Arpechim SA—Pitesti ^{WUU}	70,288	....	211,277	119,178	112,233	31,534	00219,178	111,507	....	....	751	....	11.5	....	3,320
								28767							
Astra SA—Ploiesti	56,000	9,400	48,600	....	....	....	53,000	....	....	....	6,300	....	12.1	220	1,500
Rafinaria Darmanesti SA—Darmanesti	33,000	....	18,800	....	22,500	....	....	....	....	....	....	....	....	300	....
			49,500												
Petrobraz SA—Ploiesti	159,000	95,000	439,000	123,000	130,000	....	....	242,000	....	14,000	....	....	....	900	....
								448,000		64,500					
Petrobsub SA—Barcau.....	8,000	5,200	....	....	....	....	....	....	....	....	210	....	....	....	2,870
Petromidia SA—Midia	110,000	44,000	420,000	123,700	111,500	....	....	120,000	....	14,700	....	1800	15.5	1,150	....
								47,700							
								522,500							
								620,000							
Petrotel SA—Ploiesti ^{IV}	104,000	55,970	25,500	120,900	111,490	....	....	120,000	22,300	....	2,680	1510	24.3	270	3,670
			411,480					120,680							
								73,200							
Rafo SA—Onesti ^W	87,358	....	211,277	123,014	129,359	....	....	136,014	....	16,803	....	....	16.1	252	....
			45,638					523,014							
								100619,945							
Steaua Romania SA—Campina.....	9,272	6,341	....	....	....	....	....	....	....	....	424	....	....	....	1,110
Vega SA—Ploiesti	18,516	3,764	....	....	....	....	....	WW8363	....	....	703	....	....	....	1,265
Total	655,434	219,675	131,072	109,792	97,082	1,534	22,178	295,690	2,300	20,003	11,068	1,310	19.5	3,092	13,735
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	....	15,800	....	....	197.0	....	....
								261,000		27,000					
								453,000							
Saudi Aramco—Rabigh.....	290,000	....	....	....	....	....	....	XX447,000	....	....	....	....	YY712.0	....	....
Ras Tanura.....	300,000	135,000	....	....	154,000	....	....	154,000	....	....	....	....	....	....	....
Jeddah.....	82,000	34,000	....	113,000	13,000	310,000	....	13,000	....	....	....	....	....	....	....
Riyadh.....	140,000	52,350	....	....	135,660	133,820	....	135,660	....	....	....	....	180.7	....	....
								00414,500							
Yanbu.....	190,000	....	....	....	135,000	....	....	135,000	....	....	....	....	....	....	....
								00415,000							
Saudi Aramco-Mobil—Yanbu.....	331,700	142,400	246,100	190,600	246,700	....	....	173,500	223,500	512,600	....	12,200	....	....	....
								693,400		720,400					
Total	1,655,700	447,750	78,100	103,600	193,360	87,820	49,000	504,060	23,500	45,800	....	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	....	....	1,500	....	10.5	....	4,000
								44,400							
								74,600							

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Rafinerija Nafta Pancevo—Pancevo	108,000	44,850	³ 21,700	¹ 20,750	¹ 8,800	....	⁴ 5,000 ⁵ 9,370	¹ 8,800	¹ 3,400	^X 12,815	....	....	....	....	6,300
Total	168,246	74,850	21,700	20,750	21,033	....	18,970	28,500	3,400	2,815	1,500	....	0.5	....	10,300
SIERRA LEONE															
Sierra Leone Petroleum Refining Co. Ltd.—Freetown	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SINGAPORE															
Esso Singapore Pty. Ltd.—Pulau Ayer Chawan	240,000	39,600	² 45,000	....	¹ 11,400	¹ 1,800	....	² 22,800 ⁴ 44,000 ⁶ 17,100	....	....	9,300	....	¹ 6.0	....	5,700
Mobil Oil Singapore Pty. Ltd.—Jurong	255,000	95,000	² 56,000	....	¹ 18,000 ³ 48,000	^m 126,000	^{KZ} 511,000	¹ 90,000 ⁴ 48,000	....	¹ 15,000 ³ 3,300	....	....	¹ 16.0 ⁴ 18.0	....	....
Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	405,000	74,800	^{1&2} 60,000	¹ 28,600	¹ 6,900 ³ 30,100	¹ 28,600	² 77,600	^{2&4} 119,300	² 3,000	....	6,500	....	¹ 40.8	....	8,400
Singapore Petroleum Co. Ltd.—Pulau Merlimau	270,000	71,250	² 30,400	^{FFF} 231,000	² 13,500	^c 113,300 ^m 417,000	⁴ 78,000	¹ 13,700	¹ 4,200	....	....	¹ 1,400	² 35.0 ⁴ 7.0 ⁵ 14.0 ⁶ 5.0	....	4,300
Total	1,170,000	280,650	191,400	59,600	127,900	86,700	166,600	354,900	7,200	18,300	15,800	1,400	141.8	....	18,400
SLOVAKIA															
Slovnaft, Joint Stock Co.—Bratislava ²	115,000	59,030	....	....	¹ 22,270	^c 16,970	....	¹ 22,270 ³ 3,410 ⁴ 38,580 ⁷ 3,220 ⁸ 377	³ 5,200	¹ 3,164 ⁴ 1,250 ⁷ 5,787	3,220	....	¹ 33.4 ⁵ 9.4	....	9,077
Total	115,000	59,030	....	....	22,270	16,970	....	67,857	5,200	10,201	3,220	....	42.8	....	9,077
SLOVENIA															
Nafta Lendava d.o.o.—Lendava	12,000	....	....	....	....	....	....	....	....	....	....	....	¹ 4.7	....	....
Total	12,000	....	....	....	....	....	....	....	....	....	....	....	4.7	....	....
SOMALIA															
Iraqsoma Ref. Co.—Mogadishu	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SOUTH AFRICA															
Caltex Oil SA Pty. Ltd.—Cape Town	90,000	51,500	² 11,000	¹ 25,000	¹ 11,000	....	⁴ 23,500	² 17,000	³ 4,000	....	....	....	....	....	1,200
Engen Refinery—Durban	65,000	32,000	² 11,000	¹ 15,000	¹ 15,000	....	....	¹ 21,000 ² 28,000	² 2,200	⁵ 3,000 ⁷ 3,000	3,000	....	....	....	4,000
National Petroleum Refiners of South Africa Pty. Ltd.—Sasolburg ^{AAA} ..	86,000	28,000	....	¹ 18,000	¹ 14,500	¹ 10,500 ² 13,000	....	¹ 14,500 ⁴ 10,300	² 3,300	....	....	....	¹ 25.4 ⁶ 6.6	....	....
Shell and BP South Africa Petroleum Refineries Pty. Ltd.—Durban	160,000	59,000	² 28,000	¹ 27,000	¹ 21,000	....	² 79,000	² 36,000	¹ 2,200	....	3,000	....	....	....	6,000
Total	401,000	170,500	50,000	85,000	61,500	23,500	102,500	126,800	11,700	6,000	6,000	....	32.0	....	11,200
SPAIN															
Asfaltos Espanoles SA—Tarragona	21,000	16,800	....	....	....	....	....	....	....	....	....	....	....	....	15,000
Compania Espanola de Petroles—San Roque (Cadiz)	205,000	40,000	² 32,000	¹ 40,000	¹ 35,000	....	....	¹ 35,000 ⁴ 49,000	² 5,000	¹ 13,100 ² 1,800 ⁶ 10,000	4,000	¹ 1,000	....	....	....
Tenerife	89,000	10,000	² 35,000	....	¹ 16,000	....	....	¹ 15,000 ⁴ 29,000	....	....	....	....	....	....	6,000
Ertoil SA—Huelva	100,000	35,000	² 10,000	¹ 18,000	¹ 17,000	....	....	¹ 17,000 ⁴ 14,000 ⁵ 3,000 ⁷ 2,000	....	¹ 2,420 ² 3,500 ³ 1,800	1,900	....	¹ 25.0 ⁴ 6.0	....	7,000

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Petromed—Castellon de la Plana*	101,650	44,650	....	122,500	115,300	....	428,800	229,700 419,800	....	713,500	....	....	....	....	....
Petronor SA—Somorrostro Vizcaya	240,000	90,000	240,000	140,000	133,500	....	335,000 440,000	145,000	25,452	....	....	11,149	712.0	....	....
Repsol Petroleo SA—Cartagena Murcia	120,000	14,000	....	....	125,000	....	....	229,000	....	....	3,000	....	....	....	5,000
La Coruna	135,000	40,000	413,500	128,000	122,000	....	....	417,000	....	....	....	1800	....	550	4,500
Puertollano, Ciudad Real	135,000	62,000	416,000	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	1,326,650	424,450	176,500	178,500	197,800	15,000	134,800	362,500	13,752	47,920	11,700	5,599	53.0	1,250	43,500

SRI LANKA

Ceylon Petroleum Corp.—Sapugaskanda*	47,500	2,280	211,250	....	13,375	....	41,890	46,570	....	....	....	....	....	....	....
Total	47,500	2,280	11,250	....	3,375	....	1,890	6,570	....	....	....	....	....	....	....

SUDAN

Port Sudan Refinery Ltd.—Port Sudan	21,700	....	....	....	11,900	....	....	48,100	....	....	....	....	....	....	....
Total	21,700	....	....	....	1,900	....	....	8,100	....	....	....	....	....	....	....

SWEDEN

AB Nynas Petroleum—Gothenburg	12,500	9,000	....	....	....	....	....	....	....	....	....	....	....	....	8,500
Nynashamn	28,000	31,000	....	....	....	....	....	72,500	....	....	2,500	....	21.9	....	20,000
OK Raffinaderi AB—Gothenburg	105,000	....	....	....	124,500	....	....	447,000	....	79,000	....	....	....	....	....
Shell Raffinaderi AB—Gothenburg	81,000	30,000	125,000	....	117,000	....	228,000	228,000 45,000	....	74,000	....	....	....	....	....
Skandinaviska Raffinaderi AB—Brofjorden-Lysekil	210,000	68,000	242,000	133,000	336,000	Gm454,000	BBB51,000	154,000	37,200	716,000	....	....	....	....	....
Total	436,500	138,000	67,000	33,000	77,500	54,000	79,000	136,500	7,200	29,000	2,500	....	1.9	....	28,500

SWITZERLAND

Raffinerie de Cressier SA—Cressier	60,000	24,000	111,000 29,000	....	116,000	....	227,000	127,000 48,000	....	73,600	....	....	....	....	5,200
Raffinerie du Sud-Ouest SA—Collombey	72,000	....	....	....	110,000	246,300	....	116,700 420,000	....	76,400	....	....	....	....	....
Total	132,000	24,000	20,000	....	26,000	6,300	27,000	71,700	....	10,000	....	....	....	....	5,200

SYRIA

Banias Refining Co.—Banias	135,000	50,000	225,000	....	316,000	425,000	416,000	116,000	....	77,500	....	....	....	....	....
Homs Refinery Co.—Homs	107,140	12,200	418,200	....	13,427 49,812	....	433,760	216,100	....	62,910	....	....	214.0	....	....
Total	242,140	62,200	43,200	....	29,239	25,000	49,760	32,100	....	10,410	....	....	14.0	....	....

TAIWAN

Chinese Petroleum Corp.—Kaohsiung	425,000	79,100	413,560	145,200	136,160	118,080	154,240 218,080	136,000 25,400	23,200	112,746 21,222	3,960	....	135.0 250.0	850	11,181
							322,600	618,080		31,222			345.0		
Tao-Yuan	117,500	32,600	....	....	120,340	....	413,560 140,680	87,230 120,340	....	79,950	....	....	162.0	....	....
							218,080	414,500							
Total	542,500	111,700	13,560	45,200	56,500	18,080	167,240	101,550	3,200	25,140	3,960	....	192.0	850	11,181

TANZANIA

Tanzanian & Italian Petroleum Refining Co. Ltd.— Kigamboni Dar es Salaam*	15,865	2,430	....	....	18,721	....	....	14,500	....	....	....	....	....	....	....
Total	15,865	2,430	....	....	8,721	....	....	4,500	....	....	....	....	....	....	....

THAILAND

Esso Standard Thailand Ltd.—Sriracha	157,000	40,500	125,000	19,500 20,000	231,000 23,400	241,000	3,500
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WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Petroleum Authority of Thailand—Bangchak Bangkok.....	61,750	....	....	....	19,450	....	53,150	14,950 25,850 816,200	....	....	....	....	14.7	....	....
Thai Oil Co. Ltd.—Sriracha	207,000	55,900	217,400	111,200	335,400	119,900	24,100	467,000	....	52,100	....	....	132.6	....	3,400
Total	425,750	96,400	17,400	36,200	74,350	19,900	61,650	135,000	....	2,100	....	....	37.3	....	6,900

TRINIDAD

Petroleum Co. of Trinidad & Tobago Ltd.—Pointe-a-Pierre	165,000	125,000	210,000	125,000	125,000	....	....	125,000 618,000	11,200	....	1,800	....	....	....	....
Point Fortin.....	80,000	....	....	....	16,000	....	54,000	620,000	....	....	....	....	....	....	....
Total	245,000	125,000	10,000	25,000	31,000	....	4,000	63,000	1,200	....	1,800	....	....	....	....

TUNISIA

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

TURKEY

Anadolu Tasfiyehanesi AS—Mersin	100,000	....	....	....	114,000	....	....	121,000 411,000 111,320	....	....	....	....	....	....	....
Turkish Petroleum Refineries Corp.—Aliaga-Izmir	226,440	78,500	219,620	115,095	19,810	216,500	....	211,320 15,845 78,303	....	....	5,870	....	234.0	....	5,440
Batman, Siirt	22,015	2,140	14,720	....	11,302	....	....	11,302	....	....	....	....	....	....	3,235
Izmit.....	251,600	89,950	....	122,645	120,755	....	427,050	121,165 213,065 488,060	....	75,030	....	....	....	180	9,000
Kirikkale.....	113,200	30,190	....	....	120,125	214,500	....	120,125 15,096	....	....	....	....	224.6 21.8	....	5,750
Total	713,255	200,780	24,340	37,740	65,992	31,000	27,050	243,891	....	5,030	5,870	....	80.4	180	23,425

UNITED KINGDOM

England															
Conoco Ltd.—South Killingholme	130,000	120,000	140,000 470,000	150,000	150,000	....	....	480,000 658,000 30,000	214,000 33,500	14,500 22,500 719,000	....	....	....	2,500	....
Eastham Refinery Ltd.—Ellesmere Port	22,000	19,250	....	....	....	....	....	....	....	....	....	....	....	....	15,000
Eso Petroleum Co. Ltd.—Fawley	317,000	129,000	....	185,000	139,200 224,200	....	123,400	197,200 472,500 36,200	39,769	719,400	10,933	....	....	....	....
Lindsey Oil Refinery Ltd.—Killingholme South Humberside	182,000	92,000	228,700	148,400	132,600	....	442,400	250,800	26,300 31,900	....	....	12,400 31,300	....	....	7,100
Mobil Oil Co. Ltd.—Croyton Essex.....	178,000	101,000	....	160,000	337,000	....	....	148,500 438,000 72,000	218,000	516,000 713,000	7,500	....	....	....	2,500
Phillips Imperial Petroleum Ltd.—Port Clarence	100,000	....	....	....	....	116,800	....	....	....	....	....	....	....	....	....
Shell U.K. Ltd.—Shell Haven.....	92,000	30,000	....	....	339,000	124,000	....	265,000 429,000	....	720,000	....	....	....	....	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	1,283,000	537,250	138,700	316,400	281,000	30,800	122,800	680,200	64,469	103,400	22,933	3,700	....	2,500	30,000
Scotland															
BP Refinery Grangemouth Ltd.—Grangemouth*	194,750	64,600	....	118,900	139,600	130,600	....	262,100	24,500	....	....	....	149.0	....	....
Nynas UK AB—Dundee	10,240	9,600	....	....	....	....	....	....	....	....	....	....	....	....	6,600
Total	204,990	74,200	....	18,900	39,600	30,600	....	62,100	4,500	....	....	....	49.0	....	6,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Wales															
BP Refinery Llandarcy Ltd.—Llandarcy Neath .....	....	29,000	....	....	....	....	....	76,800	....	....	15,300	....	....	....	6,500
Elf Oil UK Ltd.—Milford Haven	108,000	55,000	....	132,500	117,800	....	....	117,800 27,500 430,000	26,400 41,800	712,500	....	....	....	....	....
Gulf Oil—Milford Haven	112,000	40,000	....	EEE130,500	122,500	....	415,300	235,600	EEE210,500	712,000	....	....	....	....	....
Pembroke Cracking Co. (65% Texaco 35%, Gulf Oil GB)— Milford Haven .....	....	....	....	190,000	....	....	....	....	233,000	520,500	....	....	....	....	....
Texaco Ltd.—Pembroke, Dyfed	180,000	91,000	226,000	....	439,000	....	434,000	139,000	....	....	....	....	....	....	....
Total	400,000	215,000	26,000	153,000	79,300	....	49,300	136,700	51,700	45,000	15,300	....	....	....	6,500

UNITED STATES

ALABAMA

Coastal Mobil Refining Co.—Mobile Bay	15,000	13,300	....	....	....	....	....	....	....	....	....	....	....	....	10,000
Hunt Refining Co.—Tuscaloosa	41,000	15,000	312,000	....	17,200	....	29,800 417,000	17,500	....	....	....	....	15.8 45.8	350	10,000
Louisiana Land & Exploration Co.—Saraland	74,000	10,000	....	....	119,000	....	....	223,000 415,000	....	67,000	....	....	....	....	....
Total	130,000	38,300	12,000	....	26,200	....	26,800	45,500	....	7,000	....	....	11.6	350	20,000

ALASKA

ARCO Alaska Inc.—Prudhoe Bay	15,000	....	HHH515,000	....	....	....	....	....	....	....	....	....	....	....	....
Kuparuk	12,000	....	HHH512,000	....	....	....	....	....	....	....	....	....	....	....	....
Mapco Alaska Petroleum—North Pole	130,000	6,000	....	....	....	....	....	....	....	12,500	....	....	....	....	....
Petro Star Inc.—North Pole	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valdez	34,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tesoro Alaska Petroleum Corp.—Kenai	72,000	16,500	....	....	112,000	19,000	....	112,000	....	74,000	....	....	112.8	....	....
Total	275,000	22,500	27,000	....	12,000	9,000	....	12,000	....	6,500	....	....	12.8	....	....

ARIZONA

Intermountain Refining Co.—Fredonia	5,710	2,000	....	....	....	....	....	....	....	....	....	....	....	....	1,160
Total	5,710	2,000	....	....	....	....	....	....	....	....	....	....	....	....	1,160

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	48,000	25,000	....	118,500	312,000	....	....	114,000 26,000 67,000	14,800	76,000	....	....	....	....	7,000
Total	60,700	31,000	....	18,500	12,000	....	....	31,500	4,800	6,000	....	....	2.5	....	9,400

CALIFORNIA

Anchor Refining Co.—McKittrick	10,000	6,500	....	....	....	....	....	....	....	....	....	....	....	....	2,500
Atlantic Richfield Co.—Carson	237,000	115,500	458,000	190,000	150,000	138,000	....	139,000 25,700 417,000 610,000 885,000 152,000 459,000 568,000 614,000 11819,000	113,000 32,800	....	....	12,200	175.0	2,400	....
Chevron USA Products Co.—El Segundo	258,000	129,000	464,000	161,000	340,000	147,000	....	....	120,000	719,000	....	11,700 32,600	2122.0	3,450	....
RichmondJJJ	230,000	110,000	....	167,000	145,000	145,000 328,000	348,000	....	120,000 31,800	715,000	11,500	12,300 32,500	1150.0	....	....
Exxon Co. USA—Benicia	128,000	65,000	325,500	166,000	233,000	c129,000	233,500	126,000 221,000 412,000 612,000 KKK816,000	113,000 31,800	....	....	14,000	1100.0	925	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Huntway Refining Co.—Benicia	8,400	7,500	....	....	....	....	....	....	....	....	....	....	....	....	4,500
Wilmington.....	5,500	5,000	....	....	....	....	....	....	....	....	....	....	....	....	3,500
Kern Oil & Refining Co.—Bakersfield.....	21,400	....	....	....	13,000	....	....	23,000 3350 46,500	....	....	....	....	....	....	....
Lunday-Thagard Co.—South Gate.....	7,000	7,125	....	....	....	....	....	....	....	....	....	....	....	....	....
Mobil Oil Corp.—Torrance.....	130,000	95,000	447,500	181,900	142,000	122,700	393,000	122,000 27,200	219,000	....	....	....	1132.0	2,716	....
Paramount Petroleum Corp.—Paramount.....	42,200	25,000	....	....	17,500	....	29,200	28,000 48,000	....	....	....	....	....	....	15,000
San Joaquin Refining Co. Inc.—Bakersfield	18,000	14,000	210,000	....	....	....	....	....	....	....	4,000	....	....	....	5,000
Santa Maria Refining Co.—Santa Maria*	9,500	5,700	....	....	....	....	....	....	....	....	....	....	....	....	4,500
Shell Oil Products Co.—Martinez.....	143,500	98,900	MM520,400	166,200	227,200	2132,300	....	120,900 317,900 422,000 552,400 711,600 11827,400	110,600 42,100	714,000	3,900	....	1102.9	131	15,000
Sunland Refining Corp.—Bakersfield.....	15,000	....	....	....	11,350	....	....	21,350	....	....	....	....	....	....	....
Ten By, Inc.—Oxnard	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	2,500
Texaco Refining & Marketing Inc.—Los Angeles/Wilmington*	91,675	63,365	461,830	129,070	126,820	2126,820	326,460	119,710 37,560 413,230	17,650	....	....	....	115.5 352.9	....	....
Bakersfield*	57,760	30,495	419,080	....	115,390	2117,100	215,300	112,600 37,200	....	....	....	....	124.0	1,100	....
Tosco Refining & Marketing Co.—Martinez	148,000	102,000	342,000	165,000	118,500 321,500	132,000	263,000	123,000 428,000	115,000	....	....	12,300	174.0	1,500	....
Ultramar Inc.—Wilmington	68,000	39,000	422,000	135,000	314,000	....	1K541,000	222,000	29,700	57,600	....	....	....	1,100	....
Unocal Corp.—Los Angeles/Wilmington*	118,750	71,250	446,800	142,300	148,600	124,750	331,500	150,850 634,650	19,450	....	....	....	176.3	2,000	....
San Francisco/Santa Maria*	103,645	70,395	442,210	....	130,600	130,600	....	120,700 222,050 71,260	....	76,660	4,320	....	165.0	2,000	....
Witco Corp.—Oildale*	9,785	9,120	....	....	....	....	....	....	....	....	4,320	....	....	....	3,420
Total	1,865,615	1,069,850	459,320	603,470	424,460	373,270	360,960	1,088,110	145,900	62,260	28,040	17,600	989.6	17,322	55,920
COLORADO															
Conoco Inc.—Commerce City.....	57,500	20,000	....	119,000	110,000	....	....	110,000 411,000 512,500	32,500	....	....	....	613.5	....	8,500
Total Petroleum Inc.—Denver.....	28,000	9,500	....	18,000	19,000	....	....	19,000	3900	....	....	....	....	....	....
Total	85,500	29,500	....	27,000	19,000	....	....	42,500	3,400	....	....	....	13.5	....	8,500
DELAWARE															
Star Enterprise—Delaware City*	140,000	80,750	336,450	156,700	110,530 333,210	12414,742	....	151,840 421,600 626,100	110,449 34,536	11,134	....	11,973 32,099	140.0	1,800	....
Total	140,000	80,750	36,450	56,700	43,740	14,742	....	99,540	14,985	1,134	....	4,072	40.0	1,800	....
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															
BHP Hawaii Inc. ^{LL} —Kapolei	95,000	40,000	215,000	....	113,000	2118,000	....	211,000	....	....	....	....	118.0	....	500
Chevron USA Products Co.—Barber's Point.....	54,000	30,000	....	121,000	....	....	....	33,000	14,000 31,000	51,200	....	....	12.0	....	1,300
Total	149,000	70,000	15,000	21,000	13,000	18,000	....	14,000	5,000	1,200	....	....	20.0	....	1,800
ILLINOIS															
Clark Oil & Refining Corp.—Hartford	57,000	28,500	413,000	124,700	....	....	....	111,400 23,800 43,800 67,600	27,600	73,800	....	....	12.4	680	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Blue Island	66,500	25,700	....	123,800	129,000	18,500	....	119,500	25,700	....	....	....	....	....	6,700
Marathon Oil Co.—Robinson	166,000	48,500	15,000 424,200	143,000	235,000 338,500	121,000	....	158,700 213,300 460,000	211,500	713,300	....	11,450 3250	125.0	1,090	....
Mobil Oil Corp.—Joliet	203,700	93,700	442,900	193,400	339,400	....	....	167,900 28,300 465,300	226,200	....	....	....	....	2,882	....
Shell Oil Products Co.—Wood River.....	268,000	102,300	....	185,000	115,000 269,000	128,500	....	160,000 470,500 525,500 710,000	121,000	13,500	5,000	....	151.5	....	38,000
The UNO-VEN Co.—Lemont*	145,350	55,100	425,110	152,200	126,820	....	....	120,700 223,400 35,760 435,100 85,760	216,200	13,150 76,660	....	....	111.0	1,816	3,240
Total	906,550	353,800	110,210	322,100	252,720	58,000	....	576,320	88,200	30,410	5,000	1,700	89.9	6,468	47,940
INDIANA															
Amoco Oil Co.—Whiting.....	410,000	228,000	430,400	1149,200	285,500	....	389,300	185,500 485,500 74,100 5823,800	130,400	114,200 723,800	6,100	13,800	133.0	1,460	60,000
Countrysmark Cooperative, Inc.—Mt. Vernon.....	22,000	7,200	....	17,850	36,500	....	....	210,000	21,700	72,200	....	....	....	....	....
Laketon Refining Corp.—Laketon* ^{MMM}	3,990	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	435,990	235,200	30,400	157,050	92,000	....	89,300	208,900	32,100	40,200	6,100	3,800	33.0	1,460	60,000
KANSAS															
Farmland Industries Inc.—Coffeyville.....	75,000	30,000	416,000	128,000	116,000	....	....	226,500 47,000 421,000	26,000	78,500	....	....	....	800	....
National Cooperative Refinery Association—McPherson	72,200	24,500	420,800	119,800	319,800	149,400	....	121,300 29,400 424,000 69,000	25,700	51,960 79,400	....	....	....	612	....
Texaco Refining & Marketing Inc.—El Dorado*	99,750	37,810	415,300	131,320	123,670	....	339,600	118,450 218,000 425,830	210,800	12,700 713,500	....	....	18.0	....	....
Total Petroleum Inc.—Arkansas City.....	56,000	15,300	....	118,000	116,600	12,900	....	116,600	25,200	....	....	....	....	....	2,300
Total	302,950	107,610	52,100	97,120	76,070	12,300	39,600	197,080	27,700	36,060	....	....	8.0	1,412	2,300
KENTUCKY															
Ashland Petroleum Co.—Catlettsburg ^{NNN}	219,300	89,240	14,074 53,350	158,200 238,800	342,195	....	338,800	144,135 25,820 35,820 477,600 79,700 228,130	211,640 970	15,820 53,880 711,640	8,245	13,104	....	....	29,100
Somerset Refinery Inc.—Somerset.....	5,500	....	....	....	11,000	....	4400	11,300	....	....	....	....	....	....	....
Total	224,800	89,240	57,424	97,000	43,195	....	39,200	172,505	12,610	21,340	8,245	3,104	....	....	29,100
LOUISIANA															
American International Refining, Inc.—Lake Charles	30,000	16,500	....	....	18,500	....	....	28,500	....	....	....	....	....	....	4,000
Atlas Processing Co. Div. of Pennzoil—Shreveport.....	46,200	23,085	....	....	14,500	....	....	19,000 73,060 46,030	....	....	7,650	....	16.1	....	540
BP Oil Co.—Belle Chasse*	237,500	89,300	422,500	192,700	137,800	....	427,900	243,200 423,400	234,200	19,000 25,850	....	....	710.4	900	....
Calcasieu Refining Co.—Lake Charles	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Calumet Lubricants Co.—Princeton.....	9,000	8,500	....	....	....	....	....	76,000	....	....	6,000	....	14.5	....	1,800
Canal Refining Co.—Church Point.....	9,000	....	....	....	21,300	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Cit-Con Oil Corp. ^{SSS} —Lake Charles.....	....	38,000	....	1117,000	146,800	136,000	435,100	173,800	120,700	14,500	9,500	....	....	3,900	....
Citgo Petroleum Corp.—Lake Charles*.....	304,000	76,950	484,600	....	345,000	....	....	25,400	....	725,200	....	12,520	....	....	....
Conoco Inc.—Westlake ^{TTT}	191,000	87,800	111,400	150,000	117,000	....	....	412,600	110,400	....	....	11,500	440.0	3,400	....
Exxon Co.—Baton Rouge.....	424,000	185,000	497,000	1204,000	268,000	122,500	....	133,000	135,000	....	16,200	17,000	....	4,595	6,000
Calumet Lubricants Co. ^{VVV} —Cotton Valley.....	7,800	....	....	....	....	....	....	431,200	37,800	....	....	....	....	....	....
Marathon Oil Co.—Garyville ^{WWW}	225,000	120,000	....	190,000	342,500	....	....	549,000	26,000	522,000	....	....	....	....	40,000
Mobil Oil Corp.—Chalmette.....	176,200	98,600	432,800	160,000	126,200	119,600	340,900	642,300	219,500	19,600	....	....	123.0	2,740	....
Murphy Oil USA Inc.—Meraux ^{XXX}	95,000	48,000	....	138,000	317,500	....	326,500	812,000	29,000	....	....	....	....	....	....
Phibro Refining Inc.—Krotz Springs.....	67,100	20,800	....	130,700	111,800	....	....	127,500	37,400	74,300	....	12,100	....	....	....
Placid Refining Co.—Port Allen ^{ZZZ}	48,000	20,000	....	119,000	19,700	....	145,000	240,000	33,800	....	....	....	....	....	....
Shell Chemical Co. ^{YYY} —Saint Rose.....	35,000	30,000	....	....	....	....	....	114,900	115,000	....	....	....	....	....	....
Shell Oil Products Co.—Norco.....	218,000	76,000	423,000	197,000	118,000	137,000	....	19,700	....	....	....	16,800	166.0	1,000	....
Star Enterprise—Convent*.....	230,000	104,500	210,800	176,500	238,000	245,000	....	612,000	113,050	711,250	....	12,250	362.5	....	....
								533,000	43,600	....	....	33,150	....	....	....
								463,000	....	....	....	....	....	....	....
								528,800	....	....	....	....	....	....	....
								623,400	....	....	....	....	....	....	....
Total.....	2,365,300	1,043,035	347,100	874,900	459,600	160,100	145,400	1,116,590	207,550	109,700	39,350	28,740	212.5	16,535	52,340
MICHIGAN															
Crystal Refining Co.—Carson City.....	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lakeside Refining Co.—Kalamazoo.....	5,600	....	....	....	1900	....	....	....	....	....	....	....	....	....	....
Marathon Oil Co.—Detroit.....	70,000	37,000	....	127,000	115,000	....	....	116,500	14,000	....	....	11,100	....	....	18,000
Total Petroleum Inc.—Alma.....	45,600	....	....	118,500	112,000	....	....	419,500	24,600	75,100	....	....	66.7	....	....
								513,500	4900	....	....	....	....	....	....
								112,000	....	....	....	....	....	....	....
								25,100	....	....	....	....	....	....	....
								414,000	....	....	....	....	....	....	....
								63,600	....	....	....	....	....	....	....
								AAAAB3,500	....	....	....	....	....	....	....
Total.....	125,200	37,000	....	45,500	27,900	....	....	87,700	9,500	5,100	....	1,100	6.7	....	18,000
MINNESOTA															
Ashland Petroleum Co.—St. Paul.....	69,000	31,040	....	122,310	122,795	....	322,310	123,765	25,335	78,051	....	....	18.7	....	13,580
Koch Refining Co. L.P.—Rosemount.....	245,000	165,000	464,000	180,000	215,000	....	....	426,384	112,000	716,000	....	21,500	169.0	2,900	25,000
					335,000			BBB88,051	31,000			510.0			
								228,000	43,400						
								4100,000							
								585,000							
Total.....	314,000	196,040	64,000	102,310	72,795	....	22,310	321,200	22,123	24,051	....	1,500	87.7	2,900	38,580
MISSISSIPPI															
Chevron USA Products Co.—Pascagoula.....	295,000	231,000	471,000	163,000	171,000	158,000	184,000	145,000	114,800	115,100	....	12,100	1205.0	3,800	....
Ergon Refining Inc.—Vicksburg.....	25,000	20,000	....	....	....	....	....	428,000	....	....	6,500	....	18.0	....	....
								667,000					48.0		
								76,500							

WORLDWIDE REFINING Company and refinery location	Crude	Charge capacity, b/cd							Production capacity, b/cd						
		Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Southland Oil Co.—Lumberton	5,800	....	....	....	....	....	....	....	....	....	....	....	....	....	3,150
Sandersville.....	11,000	....	....	....	....	....	....	....	....	....	....	....	....	....	4,500
Total	336,800	251,000	71,000	63,000	71,000	58,000	84,000	146,500	14,800	15,100	6,500	2,100	221.0	3,800	7,650
MONTANA															
Cenex—Laurel ^{CCCC}	41,450	12,000	....	113,500	112,000	....	216,000	118,000 415,000	23,780	51,250	....	....	112.0 412.0	....	10,000
Conoco Inc.—Billings	49,500	25,000	413,000	119,000	112,000	....	220,000	428,000 611,100	26,000	53,800	....	....	120.0	585	....
Exxon Co.—Billings	44,000	19,000	37,300	120,000	19,500	14,500	....	115,000 49,700 69,700 333,600	23,200	....	....	....	120.5	375	6,000
Montana Refining Co.—Great Falls	7,000	3,600	....	12,400	11,000	....	....	11,000 42,700 53,000 6500	2700 3400	7700	....	....	12.0	....	....
Total	141,950	59,600	20,300	54,900	34,500	4,500	36,000	119,300	14,080	5,750	....	....	66.5	960	16,000
NEVADA															
Petro Source Refining Partners—Eagle Springs	7,000	6,000	....	....	....	....	....	....	....	....	....	....	....	....	1,000
Total	7,000	6,000	....	....	....	....	....	....	....	....	....	....	....	....	1,000
NEW JERSEY															
Amerada-Hess Corp.—Port Reading .....	....	....	....	154,000	....	....	....	....	14,050 34,500	....	....	11,200	....	....	....
Bayway Refining Co.—Linden	240,000	62,000	....	1135,000	226,000	....	345,000 460,000	127,000 614,000	112,000	53,000	....	....	619.0	....	36,000
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	125,000	45,000	210,000	150,000	127,000	....	....	125,000 414,000 617,000 84,800 7670	13,500	16,500 42,500 79,300	....	....	....	....	....
Mobil Oil Corp.—Paulsboro	140,700	77,700	423,300	142,700	120,300 441,500	....	....	....	27,100	....	11,500	....	110.6	1,332	....
Total	665,700	263,400	33,300	281,700	114,800	....	105,000	102,470	31,150	21,300	11,500	1,200	29.6	1,332	99,750
NEW MEXICO															
Giant Refining Co. ^{DDDD} —Bloomfield	16,800	....	....	16,000	14,000	....	....	14,000 42,100 6900	32,000	....	....	....	....	....	....
Gallup	20,800	....	....	18,500	16,800	....	....	16,800 44,000	21,800	74,000	....	....	....	....	....
Navajo Refining Co.—Artesia	60,000	19,000	....	118,500	16,000 315,000	....	426,500	120,000	29,400	....	....	....	....	....	6,000
Total	97,600	19,000	....	33,000	31,800	....	26,500	37,800	13,200	4,000	....	....	....	....	6,000
NORTH DAKOTA															
Amoco Oil Co.—Mandan	58,000	....	....	124,700	211,500	....	....	112,000 384,800	24,200 31,100	74,800	....	....	....	....	....
Total	58,000	....	....	24,700	11,500	....	....	16,800	5,300	4,800	....	....	....	....	....
OHIO															
Ashland Petroleum Co.—Canton	65,900	32,010	....	124,250	319,400	....	322,310	119,400 49,290 BBB886,305	26,790 3970	76,305	....	....	....	....	11,640
BP Oil Co.—Lima*	147,250	40,850	417,100	128,800	248,600	421,600	....	152,200	....	14,950 23,150 716,200	....	....	529.0	750	....
Toledo*	128,250	46,550	415,300	152,200	236,000	423,400	436,000	136,000	111,700	....	....	....	125.0	850	9,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Sun Refining & Marketing Co.—Toledo.....	125,000	30,000	....	¹ 60,000	¹ 45,600	¹ 28,200	....	¹ 40,000	¹ 7,800 ³ 2,800	¹ 9,000	....	....	¹ 48.0	....	....
Total	466,400	149,410	32,400	165,250	149,600	73,200	58,310	163,195	30,060	39,605	....	....	102.0	1,600	20,640
OKLAHOMA															
Barrett Refining Corp.—Thomas.....	10,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Conoco Inc.—Ponca City.....	150,000	45,000	⁴ 21,500	¹ 53,000	¹ 36,000	....	....	¹ 36,000 ⁴ 12,000 ⁵ 22,000 ⁶ 30,000	² 12,000 ³ 2,100	⁵ 6,000 ⁷ 8,500	....	¹ 1,000	....	960	....
Cyril Petrochemical Corp.—Cyril ^{EEEE}	5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sinclair Oil Corp.—Tulsa.....	50,000	25,175	....	¹ 16,200	¹ 10,800	....	....	¹ 10,800 ⁴ 4,500	¹ 2,700	⁷ 5,400	....	....	....	....	² 250
Sun Refining & Marketing Co.—Tulsa.....	85,000	....	⁴ 8,000	¹ 30,000	¹ 24,000	....	....	¹ 24,000 ⁷ 10,500	² 7,000	¹ 2,200 ² 1,200 ³ 2,000 ⁵ 3,000	8,000	....	....	300	4,600
Total Petroleum Inc.—Ardmore.....	68,000	30,000	....	¹ 23,000	³ 15,000	....	³ 25,000	¹ 21,000 ⁴ 25,000	² 6,200	⁷ 6,100	....	....	¹ 26.0 ⁴ 26.0 ⁹ 9.0	....	5,500
Wynnewood Refining Co. ^{WW} —Wynnewood ^{FFFF}	<u>49,400</u>	<u>14,250</u>	....	<u>¹18,000</u>	<u>³11,250</u>	<u>¹4,950</u>	....	<u>¹11,250</u>	<u>²4,500</u>	<u>⁷3,960</u>	....	....	....	....	<u>4,500</u>
Total	417,900	114,425	29,500	140,200	97,050	4,950	25,000	207,050	34,500	38,360	8,000	1,000	61.0	1,260	16,850
OREGON															
Chevron USA Products Co.—Portland.....	....	<u>15,000</u>	....	....	....	....	....	....	....	....	....	....	....	....	<u>8,000</u>
Total .....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	8,000
PENNSYLVANIA															
BP Oil Co.—Marcus Hook*.....	180,500	74,100	....	¹ 47,700	³ 42,300	⁴ 18,900	⁴ 37,800	¹ 50,400 ⁴ 39,600	² 10,800	....	....	....	....	....	....
Pennzoil Products Co.—Rouseville.....	15,700	6,175	....	....	¹ 5,238	....	....	¹ 5,850 ⁷ 7,470	....	⁷ 1,035	⁴ 2,275	....	¹ 3.5	....	....
Sun Refining & Marketing Co.—Marcus Hook.....	175,000	46,000	....	¹ 87,000	¹ 24,000	....	....	¹ 54,300 ⁴ 14,400 ⁵ 13,000	¹ 12,000	¹ 7,000	....	¹ 2,600	¹ 6.0	....	....
Philadelphia-Girard Point.....	177,000	74,400	....	¹ 59,500	¹ 31,600	....	....	¹ 31,600 ⁴ 28,000	² 16,700	¹ 3,700 ⁴ 3,900 ⁵ 7,300	....	....	....	....	....
Philadelphia-Point Breeze.....	130,000	83,000	....	¹ 40,000	¹ 50,000	⁴ 30,000	....	¹ 54,000 ⁴ 50,000 ⁵ 24,000	¹ 6,000	....	....	....	⁷ 40.0	....	35,000
United Refining Co.—Warren.....	66,700	27,000	....	¹ 23,000	² 16,000	....	....	² 20,000 ⁴ 6,000 ⁶ 14,000 ¹ 3,500	¹ 3,500 ³ 1,000	⁷ 6,800	....	....	....	....	12,000
Witco Corp.—Bradford.....	<u>10,000</u>	....	....	....	<u>11,800</u>	....	....	....	....	....	<u>2,100</u>	....	....	....	....
Total	754,900	310,675	....	257,200	170,938	48,900	37,800	416,120	50,000	29,735	6,375	2,600	49.5	....	47,000
TENNESSEE															
Mapco Petroleum Inc.—Memphis.....	90,000	12,000	....	¹ 42,000	¹ 15,000	....	⁴ 35,000	¹ 18,000	² 3,500 ³ 3,000	⁷ 4,000	....	....	....	....	....
Total	90,000	12,000	....	42,000	15,000	....	35,000	18,000	6,500	4,000	....	....	....	....	....
TEXAS															
AGE Refining & Manufacturing—San Antonio.....	5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Amoco Oil Co.—Texas City ^{GGG}	433,000	228,000	⁴ 34,200	¹ 196,700	² 133,000	¹ 157,000 ² 57,000	² 95,000	¹ 112,100 ⁶ 128,200 ⁸ 26,600	¹ 20,900 ² 38,000	¹ 42,800 ⁷ 26,600	....	....	¹ 180.0 ⁵ 22.8	2,150	....
Clark Oil & Refining Corp.—Port Arthur.....	185,000	83,000	⁴ 33,000	¹ 63,000	² 45,000	....	....	¹ 45,000 ⁴ 79,000 ⁵ 60,000	² 15,500	¹ 9,800 ² 2,500 ³ 2,200	....	....	....	1,900	....
Chevron USA Products Co.—El Paso.....	87,000	32,000	⁴ 2,400	¹ 28,000	¹ 23,000	....	....	¹ 23,000 ⁴ 16,300 ^{HHHH} 10,500	¹ 8,200	⁵ 4,500	....	....	....	110	3,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
Citgo Petroleum Corp.—Corpus Christi	132,500	76,000	⁴ 30,150	¹ 63,850	³ 48,600	....	³ 58,500 ⁴ 37,500	¹ 54,000	² 17,300	¹ 6,800 ³ 3,100 ⁴ 9,900	....	¹ 4,200	....	1,950	....
Coastal Refining & Marketing Inc.—Corpus Christi	95,000	53,000	² 11,000 ⁴ 12,000	¹ 20,000	¹ 11,000 ³ 20,000	¹ 18,500	....	¹ 30,000 ⁴ 22,000 ⁵ 25,000	¹ 3,200 ³ 3,000	¹ 17,500 ² 7,000 ⁷ 5,300 ⁷ 4,500	....	....	¹ 24.0 ⁵ 15.0	310	4,000
Crown Central Petroleum Corp.—Pasadena*	100,000	38,000	⁴ 11,250	¹ 50,400	¹ 12,600 ³ 19,800	....	⁴ 9,000	¹ 23,400	² 11,700	⁷ 4,500	....	¹ 1,800	....	320	....
Diamond Shamrock Corp.—Three Rivers ^{III}	75,000	28,000	....	¹ 20,000	¹ 10,000 ³ 20,000	^{IK} 25,000	....	¹ 34,000	² 6,000	....	1,000	....	¹ 6.0 ⁴ 12.0	....	....
McKee	135,000	45,000	....	¹ 45,000	¹ 15,000 ³ 25,000	^{IC} 25,000	....	¹ 39,000 ⁴ 30,000	¹ 8,700 ⁴ 4,600	....	....	² 1,950 ³ 2,140	....	....	8,000
Exxon Co. USA—Baytown	396,000	190,000	^{MM} 31,000	¹ 190,000	² 119,000	^C 22,000	² 106,000	¹ 143,000 ³ 15,200 ⁴ 126,000 ⁶ 63,000 ⁷ 42,400	¹ 28,000	....	31,300	¹ 7,000	¹ 83.0	200	7,000
Fina Oil & Chemical Co.—Big Spring ^{JJJ}	55,000	24,000	....	¹ 21,000	¹ 21,000	....	² 6,000 ⁴ 22,000	¹ 25,500 ⁴ 2,700	² 5,000	¹ 900	....	¹ 1,000	....	....	6,000
Port Arthur ^{KKKK}	178,500	53,000	....	¹ 57,500	³ 36,000	....	² 25,000 ⁴ 50,000	² 42,000	¹ 5,900	¹ 13,000 ⁷ 9,900	....	....	....	....	1,800
Howell Hydrocarbons & Chemicals Inc.—Channelview	1,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Koch Refining Co. L.P.—Corpus Christi ^{BBBBLLLL}	280,000	103,000	⁴ 15,000	¹ 92,000	¹ 19,000 ² 16,000 ³ 50,000	¹ 15,000	....	¹ 115,000 ⁴ 54,000 ⁵ 18,000 ^{BBB} 12,000	² 20,000 ³ 2,000 ⁴ 2,000	¹ 36,000 ² 4,500 ³ 1,600 ⁴ 9,800 ⁷ 20,000	....	¹ 1,700	....	635	....
LaGloria Oil & Gas Co.—Tyler	52,000	15,200	⁴ 5,400	¹ 16,500	¹ 4,000 ³ 12,000	....	....	² 19,500 ⁶ 11,600	¹ 4,200	⁷ 4,200	....	....	....	227	....
Lyondell-Citgo Refining Co.—Houston	265,000	143,000	⁴ 42,000	¹ 96,000	¹ 108,000	....	....	² 108,000 ³ 8,000 ⁴ 123,000 ⁵ 50,000	¹ 12,500	¹ 13,700	6,500	¹ 2,500	....	2,500	....
Marathon Oil Co.—Texas City	70,000	30,000	....	¹ 32,000	¹ 10,000	....	....	....	² 10,000	¹ 2,500	....	....	....	....	....
Mobil Oil Corp.—Beaumont	320,000	145,000	⁴ 45,500	¹ 100,000	³ 120,000	¹ 48,000	....	¹ 90,000 ⁶ 88,000 ⁷ 3,500 ⁸ 2,200	¹ 12,200	⁶ 14,400	11,100	¹ 2,700	¹ 54.0	2,630	....
Neste Trifinery Petroleum Services—Corpus Christi	30,000	25,000	....	....	....	....	....	....	....	....	....	....	....	....	15,000
Phibro Refining Inc.—Houston ^{MMMM}	67,600	36,900	....	¹ 58,500	¹ 11,300	....	⁴ 29,700	¹ 13,400	¹ 10,400	¹ 5,700	....	¹ 1,700	....	....	2,200
Texas City ^{NNN}	125,400	94,000	² 9,600	¹ 48,000	¹ 10,000 ³ 12,000	^m 268,700	⁴ 66,200	¹ 24,900	² 5,700	⁷ 9,500	....	¹ 2,200	⁴ 57.0	....	....
Phillips Petroleum Co.—Borger	110,000	....	....	¹ 57,000	¹ 27,700	....	¹ 55,000	¹ 26,800 ⁴ 28,400 ⁶ 12,700	² 16,200	³ 2,200 ⁵ 10,900 ⁶ 16,000 ⁷ 9,900	....	....	¹ 47.0	....	....
Sweeny	185,000	65,000	....	¹ 80,500 ² 11,100	¹ 34,000	....	¹ 69,000	² 50,500 ⁴ 47,000	² 19,000	¹ 5,300 ³ 7,000 ⁶ 9,000	....	¹ 2,850	⁵ 90.0	....	....
Pride Refining Inc.—Abilene	44,800	12,500	....	....	¹ 5,800	....	....	¹ 5,800 ⁴ 11,600	....	....	....	....	....	....	2,700
Shell Oil Products Co.—Odessa	28,300	....	....	¹ 9,600	¹ 9,500	....	....	¹ 10,500	² 3,200	....	....	....	....	....	....
Deer Park ^{OOOO}	222,200	116,700	⁴ 52,700	¹ 62,500	¹ 23,200 ² 41,200	^C 62,700	....	¹ 62,400 ⁴ 66,600 ⁵ 42,800 ⁷ 9,500 ⁸ 30,700	¹ 16,500	¹ 17,900	25,000	¹ 5,500	¹ 62.3 ⁴ 37.0	4,481	4,600
Star Enterprise—Port Arthur*	235,000	106,400	⁴ 54,000	¹ 72,000	³ 45,000	¹ 17,820	....	¹ 38,700 ⁴ 70,380 ⁶ 21,600 ⁷ 17,730	¹ 18,000	....	17,550	....	....	3,200	....
Valero Refining Co.—Corpus Christi ^{PPPP}	29,900	22,700	....	² 64,000	³ 33,000	^{IK} 430,000	¹ 63,000	¹ 23,000 ² 19,400	² 10,800	⁵ 13,000	....	¹ 18,500 ³ 3,800	¹ 60.0 ⁴ 62.0	....	....
Total	3,943,500	1,765,400	389,200	1,555,150	1,150,700	446,720	691,900	2,555,110	338,700	379,400	92,450	59,540	812.1	20,613	54,300

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky./ Pol./Dim.	Arom./ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
UTAH															
Amoco Oil Co.—Salt Lake City	51,000	....	....	117,700	29,000	....	....	19,000	14,900	....	....	....	....	....	....
Big West Oil Co.—Salt Lake City ^{oooo}	25,000	5,000	....	E25,000	15,000	....	....	16,500	21,300	71,700	....	....	....	....	....
Chevron USA Products Co.—Salt Lake City.....	45,000	25,600	47,200	113,000	17,000	....	....	47,000 17,300 410,200	24,500	51,000	....	....	....	280	....
Crysen Refining Inc.—Woods Cross ^{RRRR}	12,500	6,000	....	....	12,100	....	....	65,000 13,000 44,000	....	....	....	....	41.0	....	2,400
Phillips Petroleum Co.—Woods Cross ^{SSSS}	25,000	4,500	....	E28,000	16,400	....	....	110,500 TTT41,600	22,000	72,550	....	....	....	....	1,600
Total	158,500	41,100	7,200	43,700	29,500	....	....	64,100	12,700	5,250	....	....	1.0	280	4,000
VIRGINIA															
Amoco Oil Co.—Yorktown	56,700	32,300	418,000	125,700	210,800	....	....	111,100 617,700	33,300	....	....	2710	....	870	....
Total	56,700	32,300	18,000	25,700	10,800	....	....	28,800	3,300	....	....	710	....	870	....
WASHINGTON															
Atlantic Richfield Co.—Ferndale	185,000	92,000	449,000	....	152,000	150,000	420,000	140,000	....	....	....	....	180.0	2,100	....
Chevron USA Products Co.—Seattle .....	....	5,700	....	....	....	....	....	....	....	....	....	....	....	....	3,000
Shell Oil Products Co.—Anacortes ^{UUUU}	106,300	45,000	....	142,000	224,300	....	....	129,900 425,000 56,500	111,500	52,800	....	....	....	....	....
Sound Refining Inc.—Tacoma.....	11,900	6,000	....	....	....	....	....	....	....	....	....	....	....	....	3,600
Texaco Refining & Marketing Inc.—Anacortes*	135,850	57,000	422,050	147,700	124,750	....	....	225,200 414,400 www29,700	18,550 32,160	....	....	....	....	....	....
Tosco Corp.—Ferndale	88,500	31,000	....	E25,000	214,500	....	....	115,000 413,000 48624,000	26,000	....	....	....	....	....	....
U.S. Oil & Refining Co.—Tacoma.....	40,800	23,700	....	....	15,750	....	....	17,000 45,500	....	72,300	....	....	....	....	10,000
Total	568,350	260,400	71,050	114,700	121,300	50,000	20,000	235,200	28,210	5,100	....	....	80.0	2,100	16,600
WEST VIRGINIA															
Quaker State Oil Refining Corp.—Newell ^{WWWW}	10,500	4,700	....	....	13,300	c34,300	....	13,800	....	....	3,600	....	11.2	....	....
Total	10,500	4,700	....	....	3,300	4,300	....	3,800	....	....	3,600	....	1.2	....	....
WISCONSIN															
Murphy Oil USA Inc.—Superior	33,200	19,500	....	110,400	17,600	....	45,500	18,500	21,500	61,900	....	....	....	....	12,500
Total	33,200	19,500	....	10,400	7,600	....	5,500	8,500	1,500	1,900	....	....	....	....	12,500
WYOMING															
Frontier Oil & Refining Inc.—Cheyenne*	38,950	22,325	49,000	110,350	16,750	....	413,950	16,750	23,150	51,080	....	....	15.5	....	9,000
Little America Refining Co.—Casper	22,000	7,800	....	113,300	25,700	....	....	15,700 23,500 67,600	....	....	....	....	....	....	1,250
Sinclair Oil Corp.—Sinclair	54,000	29,500	....	120,600	114,200	....	210,000	114,200 422,000 22,475	14,000 3700 2751	....	....	....	....	....	4,900
Wyoming Refining Co.—Newcastle* ^{XXXX}	11,875	190	....	E24,950	12,475	....	43,600	....	....	....	....	....	....	....	....
Total	126,825	59,815	9,000	49,200	29,125	....	27,550	62,225	8,601	1,080	....	....	5.5	....	15,150
Total U.S.	15,354,140	6,789,550	1,891,954	5,283,450	3,623,193	1,335,982	1,876,130	8,198,415	1,166,469	906,335	216,360	128,766	2,957.2	81,062	693,730
URUGUAY															
ANCAP—La Teja Montevideo	37,000	18,000	27,000	FFF29,000	13,000	....	....	13,000 45,000	....	....	....	....	....	....	....
Total	37,000	18,000	7,000	9,000	3,000	....	....	8,000	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						
	Crude	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alky/ Pol./Dim.	Arom/ Isom.	Lubes	Oxygen.	Hydrogen (MMcfd)	Coke (t/d)	Asphalt
VENEZUELA															
Corpoven SA—El Palito, Puerto Cabello	115,000	63,000	....	152,000	19,200	19,200	....	....	220,000	13,500	....	....	46.8	....	....
El Toreno Barinas	4,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Puerto La Cruz, Anzoategui	195,000	....	....	113,000	....	....	....	....	24,100	....	....	....	....	....	....
San Roque, Anzoategui ^{GG}	5,200	1,770	....	....	....	....	....	....	....	....	....	....	....	....	....
Lagoven—Judibana Falcon	571,000	336,000	352,100	197,200	....	....	....	463,000 5149,000	217,800	59,800	2,100	....	181.0	....	39,800
Maraven—Punta Cardon Falcon	286,000	147,600	282,000	172,700	....	....	....	432,300 531,100	222,800	59,500	6,000	....	124.0	....	....
Total	1,177,000	548,370	134,100	234,900	9,200	9,200	....	275,400	64,700	22,800	8,100	....	111.8	....	39,800
VIRGIN ISLANDS															
Hess Oil Virgin Islands Corp.—St. Croix	545,000	215,000	280,000	1110,000	1125,000	....	2130,000	2125,000 4165,000	114,000 46,000	130,000 615,000	....	14,000 34,000	....	....	....
Total	545,000	215,000	80,000	110,000	125,000	....	130,000	290,000	20,000	45,000	....	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
ZAIRE															
Sozif—Muanda	17,000	....	....	....	13,500	....	....	25,000	....	....	....	....	....	....	....
Total	17,000	....	....	....	3,500	....	....	5,000	....	....	....	....	....	....	....
ZAMBIA															
Indeni Petroleum Refinery Co. Ltd.—Bwana Nkubwa Area, Ndola ..	24,500	2,400	....	....	15,600	....	....	18,900 48,900	....	....	....	....	....	....	....
Total	24,500	2,400	....	....	5,600	....	....	17,800	....	....	....	....	....	....	....

A. Previously listed as YPF SA. **B.** Previously listed as Isaura SA. **C.** Merger of Ampol & Caltex. **D.** Dewaxing 5,130 b/cd. **E.** TCC. **F.** 20% of feed reduced. **G.** MHC. **H.** Dewaxing 11,200 b/cd. **I.** Gas oil. **J.** Dewaxing 945 b/cd. **K.** Mid distillate. **L.** Wax. **M.** Previously listed as Newfoundland Processing Ltd. **N.** Platformate hydrogenation 6,750, LPG merox 4,500, kerosine merox 18,000 b/cd. **O.** VGO. **P.** Mixed feed. **Q.** Gasoline hydrogenation. **R.** Dewaxing 6,400 b/cd. **S.** Isom. feed. **T.** Type of coking not specified. **U.** Process & feedstock types not specified. **V.** Solvent dewaxing, propane deasphalting. **W.** Converted from tons. **X.** BT only. **Y.** Previously listed as Ethiopian Petroleum Corp. **Z.** Dewaxing. **AA.** Distillate aromatics saturation. **BB.** Di/Me dewaxing 6,300 b/cd. **CC.** Dewaxing 5,000 b/cd. **DD.** High conv. soaker cracking. **EE.** 30% of feed reduced. **FF.** Benzene 1,800, toluene 375 b/cd. **GG.** Benzene 1,750, toluene 350 b/cd. **HH.** Previously listed as Cameli Petroli. **II.** Mid distillate dewaxing 9,509 b/cd. **JJ.** Dewaxing 6,750

b/cd. **KK.** Dewaxing 7,200 b/cd. **LL.** Previously listed as Nippon Mining Co. Ltd. **MM.** Flexicoking. **NN.** Estimate. **OO.** Kerosine. **PP.** Merox 1,000 b/cd. **QQ.** Calciner 610 b/cd. **RR.** Previously listed as Petroperu SA. **SS.** LCGO. **TT.** Isomax. **UU.** Propane deasphalting. **VV.** Propane deasphalting 4,400 b/cd. **WW.** Hydrogenated hexane. **XX.** Diesel. **YY.** LPG. **ZZ.** Demex 10,000 b/cd. **AAA.** Kerox 11,000 b/cd. **BBB.** Synsat. **CCC.** Naphtha. **DDD.** Thermal cracker feed. **EEE.** Gulf Oil's share. **FFF.** Resid. **GGG.** Paraffin wax 78.8 t/d. **HHH.** Distillation fractionation. **III.** Gasoline. **JJJ.** Rose 44,000 b/cd. **KKK.** Alky. feed. **LLL.** Previously listed as BHP Petroleum Americas Refining Inc. **MMM.** Merox 2,160 b/cd. **NNN.** SDA 13,300 b/cd. **OOO.** ART. **PPP.** Reduced crude converter. **QQQ.** Aromatics 4,850, C₅C₆ 11,640, & C₃C₄ 11,640 b/cd. **RRR.** Wax 1,200, lube 5,500 b/cd. **SSS.** Joint venture of Citgo and Conoco. **TTT.** Solvents 5,200 b/cd. **UUU.** Wax 2,500, alky. feed 42,000 b/cd. **VVV.** Previously listed as Kerr McGee Refining Corp. **WWW.** Rose 29,000 b/cd. **XXX.** Rose 17,000 b/cd. **YYY.** Previously listed as

Saint Rose Refining. **ZZZ.** Rose 6,000 b/cd. **AAAA.** FCC slurry. **BBBB.** C₅C₆. **CCCC.** Solvent deasphalting 4,000 b/cd. **DDDD.** Previously listed as Bloomfield Refining Co. **EEEE.** Solvent extraction 2,200 b/cd. **FFFF.** Rose 3,600 b/cd. **GGGG.** Deasphalting 18,000 b/cd. **HHHH.** Olefin saturation. **IIII.** Demex 7,000 b/cd. **JJJJ.** Propane deasphalting 10,000 b/cd. **KKKK.** Demex 18,000 b/cd. **LLLL.** Includes assets of Southwestern Refining Co. Inc. **MMMM.** Rose 16,100, crude mineral spirits extraction 1,400 b/cd. **NNNN.** Rose 30,600 b/cd. **OOOO.** Fuel assets owned by Deer Park Refining Ltd. Partnership; 50% Shell, 50% Pemex. **PPPP.** Oleflex. **QQQQ.** Mid distillate dewaxing 1,600 b/cd. **RRRR.** Mid distillate dewaxing 4,000 b/cd. **SSSS.** Solvent deasphalting 4,750 b/cd. **TTTT.** Includes LCO. **UUUU.** Deasphalting 16,600 b/cd. **VVVV.** Cracked distillation. **WWWW.** Mek dewaxing 4,100, propane deresining 1,800 b/cd. **XXXX.** Dewaxing diesel 3,600 b/cd.