

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
ALBANIA																			
Albpetrol—Ballshi	17,800	4,500	² 12,000	....	....	3,500	....	17,400	....	....	....	600	....	700	....	6.5	700	60	....
Fieri	8,500	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	26,300	10,500	12,000	....	....	3,500	....	17,400	....	....	....	600	....	700	....	6.5	700	60	....
ALGERIA																			
Naftec SpA—Algiers	63,323	....	....	....	....	¹ 16,000	....	....	¹ 14,400	....	....	....	....	....	....	....	....	....	....
Arzew	58,632	5,447	....	....	....	¹ 9,000	....	....	¹ 7,380	....	....	....	....	....	....	....	....	....	....
									² 7,470										
Hassi-Messaoud	28,910	....	....	....	....	¹ 3,000	....	....	¹ 2,700	....	....	....	....	....	....	....	....	....	....
Skikda	351,800	5,447	....	....	....	¹ 60,000	....	....	¹ 54,000	....	....	....	....	....	....	....	....	....	....
Total	502,665	10,894	....	....	....	88,000	....	....	81,950	....	....	....	....	....	....	....	....	....	....
ANGOLA																			
Fina Petroleos de Angola—Luanda . . .	39,000	2,500	....	....	....	¹ 1,900	....	² 2,800	¹ 3,800	....	....	....	....	....	....	....	....	....	950
Total	39,000	2,500	....	....	....	1,900	....	2,800	3,800	....	....	....	....	....	....	....	....	....	950
ARGENTINA																			
Destileria Argentina de																			
Petroleo SA—Dock Sud	4,000	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lomas de Zamora	8,000	1,300	....	....	....	....	....	....	....	....	....	....	....	900	....	....	....	....	600
Eg3 SA—Bahia Blanca	29,000	11,875	....	² 3,420	¹ 7,110	¹ 5,400	....	....	² 7,920	....	....	....	² 7,700	....	....	....	....	....	....
Eso SA Petrolera Argentina—																			
Campana	88,000	50,000	² 25,000	....	¹ 26,000	¹ 11,000	....	....	² 10,000	....	....	....	....	....	....	....	¹ 1,100	....	....
									³ 8,000										
									⁸ 14,000										
Galvan	19,000	....	....	² 8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinor SA—Campo Duran	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refisan SA—San Lorenzo	37,600	16,100	....	¹ 3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
				² 12,500															
Shell Cia. Argentina de Petroleo																			
SA—Buenos Aires	110,000	38,500	³ 6,500	² 18,900	¹ 26,000	¹ 17,900	....	....	² 18,200	² 1,700	¹ 500	....	....	1,500	....	....	....	....	4,200
									⁴ 7,500										
Repsol-YPF SA—La Plata	189,000	110,000	² 39,000	....	¹ 73,600	¹ 11,700	....	....	¹ 9,600	....	....	....	³ 6,300	5,660	....	....	¹ 1,500	....	8,300
									² 20,400										
									⁶ 15,700										
									⁷ 5,660										
Lujan de Cuyo	120,000	66,000	² 40,000	....	¹ 43,000	¹ 9,500	¹ 26,000	....	¹ 4,400	² 3,150	....	....	³ 3,500	....	¹ 950	¹ 18.0	¹ 1,550	....	....
									⁶ 17,600										
Plaza Huincul	25,200	....	....	....	¹ 3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	661,800	294,775	110,500	46,320	178,710	55,500	26,000	....	138,980	4,850	500	....	12,500	8,060	950	18.0	4,150	....	13,100
ARUBA																			
Coastal Aruba Refining Co.																			
NV—San Nicolas	225,000	200,000	² 32,000	² 48,000	....	....	....	³ 65,000	⁴ 85,000	....	....	....	....	....	....	² 66.0	2,300	400	1,200
									⁶ 65,000										
Total	225,000	200,000	32,000	48,000	....	....	....	65,000	150,000	....	....	....	....	....	....	66.0	2,300	400	1,200
AUSTRALIA																			
Australian Lubricating Oil Refinery																			
Ltd.—Kurnell [®]	7,470	....	....	....	....	....	....	⁷ 5,850	....	....	....	....	3,500	....	....	....	....	....
BP Australia—Bulwer Island	69,350	15,200	....	....	¹ 18,000	¹ 12,600	....	....	¹ 23,400	² 1,890	....	....	....	1,800	....	....	....	....	....
Kwinana	138,000	20,000	....	....	¹ 34,560	³ 22,600	....	....	² 36,000	² 3,300	¹ 2,100	....	³ 15,000	3,650	....	....	....	70	2,000
									⁶ 18,000										
									⁷ 3,650										
Caltex Refineries (NSW) Ltd.—																			
Kurnell	114,000	23,400	....	....	¹ 40,950	¹ 27,180	....	....	² 27,180	....	....	....	....	3,429	....	....	400	24	3,465
									⁶ 14,400										
Caltex Refineries (Qld) Ltd.—Lytton . .	105,500	....	....	....	¹ 34,250	³ 26,000	....	....	¹ 26,000	² 3,300	¹ 1,600	....	³ 8,200	....	....	⁵ 31.6	....	....	....
									⁹ 9,600										

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Inland Oil Refiners (Qld) Pty. Ltd.— Eromanga	1,500																		
Mobil Oil Australia, Ltd.—Adelaide	69,000	24,000	....	....	....	124,000	....	....	454,000	....	....	....	39,000	6,000	....	....	....	30	5,000
Altona	120,000	22,000	....	....	123,000	131,500	....	....	144,000	12,500	....	....	....	....	....	....	....	....	2,800
									412,500										
									43,800										
Shell Refining (Australia) Pty. Ltd.— Clyde	85,000	21,000	....	....	135,000	320,000	....	27,000	437,000	23,000	12,100	....	....	....	....	....	....	....	3,000
Geelong	110,000	10,000	....	....	140,000	111,000	....	214,000	454,000	24,500	12,700	....	38,000	2,800	....	....	....	....	3,000
						320,000		33,000	44,000										
Total	812,350	143,070	....	....	225,760	194,880	....	24,000	373,380	18,490	8,500	....	40,200	21,179	....	31.6	400	124	19,265

AUSTRIA

OMV AG—Schwechat	208,600	65,000	....	216,875	126,250	132,725	....	212,600	146,400	....	....	....	314,400	....	11,600	....	....	180	1,470
								338,300	24,800										
									437,300										
Total	208,600	65,000	....	16,875	26,250	32,725	....	50,900	88,500	....	....	....	14,400	....	1,600	....	....	180	1,470

BAHRAIN

Bahrain Petroleum Co.—Sitra	248,900	189,810	....	219,800	141,400	115,300	148,600	....	116,200	....	13,060	....	....	....	....	134.0	....	190	6,570
									423,400										
Total	248,900	189,810	....	19,800	41,400	15,300	48,600	....	39,600	....	3,060	....	....	....	....	34.0	....	190	6,570

BANGLADESH

Eastern Refinery Ltd.—Chittagong	33,000	4,000	....	210,000	....	11,800	11,200	....	12,000	....	....	....	....	....	....	11.0	....	....	2,000
Total	33,000	4,000	....	10,000	....	1,800	1,200	....	2,000	....	....	....	....	....	....	1.0	....	....	2,000

BELGIUM

Belgian Refining Corp. NV—Antwerp	85,000	42,000	....	220,300	....	211,000	....	....	....	....	....	....	32,500	....	....	....	....	108	....
Esso Benelux BV—Antwerp	246,000	122,550	....	....	133,300	338,540	....	285,540	264,600	16,815	....	....	....	....	....	143.0	....	396	2,000
									495,140										
Fina Raffinaderij Antwerpen—Antwerp	308,000	96,000	....	243,000	179,500	352,000	....	170,000	286,300	26,700	....	....	....	....	14,500	....	....	650	11,300
								475,000											
Nynas Petroleum NV—Antwerp	15,000	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Universal Refining NV—Antwerp	65,000	....	....	....	....	11,400	....	....	222,000	....	....	....	....	....	....	....	....	30	....
									411,000										
Total	719,000	273,050	....	63,300	112,800	102,940	....	230,540	279,040	13,515	....	....	2,500	....	4,500	43.0	....	1,184	25,300

BOLIVIA

Yacimientos Petroliferos Fiscales Bolivianos—Cochabamba ^{BC}	25,888	2,100	....	....	....	17,344	....	....	17,344	....	....	....	....	449	....	....	....	....	73
									7449										
Santa Cruz	19,000	....	....	....	....	15,760	....	....	15,760	....	....	....	....	....	....	....	....	....	....
Sucre	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	47,888	2,100	....	....	....	13,104	....	....	13,553	....	....	....	....	449	....	....	....	....	73

BRAZIL

Petroleo Brasileiro SA—Araucaria, Parana ^C	175,500	87,160	....	....	154,400	....	....	429,250	....	....	....	....	....	....	11,709	....	....	65	5,000
Betim, Minas Gerais	140,400	70,780	219,010	....	135,100	....	....	414,620	210,530	....	....	....	....	....	....	8.0	699	73	6,000
									410,530										
Canoas, Rio Grande do Sul	175,500	35,100	....	....	117,550	....	....	....	....	....	....	....	....	....	....	....	....	22	2,600
Capuava, Maua, Sao Paulo	42,120	21,060	....	....	218,870	....	....	....	....	....	....	....	....	....	....	....	....	9	....
Cubatao, Sao Paulo	157,940	83,030	230,420	....	155,570	10,530	....	29,250	....	22,925	....	....	....	....	....	30.0	1,466	70	....
Duque de Caxias, Rio de Janeiro ^C	222,290	75,480	....	....	146,800	10,530	....	29,920	....	....	....	....	....	12,806	11,233	10.0	....	62	2,300
Fortaleza, Ceara	5,850	....	....	....	....	....	....	....	....	....	....	....	....	1,000	....	1.0	....	....	3,500
Manaus, Amazonas	42,700	14,625	....	....	12,925	....	....	....	....	....	....	....	....	....	....	....	....	....	1,100
Mataripe, Bahia	283,710	91,834	....	....	129,250	....	....	....	....	....	....	....	....	5,724	....	1.0	....	72	2,300
Paulinia, Sao Paulo	304,200	140,400	229,250	....	190,670	....	....	29,250	....	....	....	....	....	....	12,055	28.0	1,192	217	4,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Sao Jose dos Campos, Sao Paulo ^C	210,600	102,370	....	....	170,200	....	....	38,020	^{217,550} ^{420,475}	....	....	....	....	....	11,514	10.0	....	173	2,600
Refinaria de Petroleo Ipiranga SA—Rio Grande do Sul	12,500	5,900	....	....	13,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinaria de Petroleos de Manguinhos SA—Rio de Janeiro	10,000	....	....	^{14,500} ^{24,500}	....	13,000	....	....	13,000	....	....	....	....	....	....	....	....	....	....
Total	1,783,310	727,739	78,680	9,000	424,335	24,060	....	170,310	62,085	2,925	....	....	....	19,530	6,511	88.0	3,357	763	29,400

BRUNEI

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

BULGARIA

Neftochim—Bourgas	115,240	49,900	....	120,600	123,300	14,060	....	....	^{17,600} ^{32,600} ^{430,700} ^{523,300}	12,600	....	12,000	....	....	1790	^{18.4} ^{51.9}	....	63	1,500
Total	115,240	49,900	....	20,600	23,300	4,060	....	....	64,200	2,600	....	2,000	....	....	790	10.3	....	63	1,500

CAMEROON

Societe Nationale de Raffinage—Cape Limboh Limbe	35,000	....	....	....	....	411,918	....	....	^{114,044} ^{49,094}	....	....	....	....	....	....	....	....	....	....
Total	35,000	....	....	....	....	11,918	....	....	23,138	....	....	....	....	....	....	....	....	....	....

CANADA

Alberta																			
Husky Oil Operations Ltd.—Lloydminster	23,500	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Imperial Oil—Edmonton	179,600	66,100	....	....	152,300	120,900	....	....	^{250,400} ^{622,800}	^{215,700}	....	....	^{16,600}	^{2,600}	....	^{620.0}	....	....	10,400
Parkland Refining Ltd.—Bowden	6,000	....	....	....	....	12,800	....	....	^{12,800} ^{2,800}	....	....	....	^{32,800}	....	....	....	....	....	....
Petro-Canada Products Ltd.—Edmonton	120,000	27,000	^{27,500}	....	134,300	115,300	118,700	....	^{144,500} ^{68,000}	^{212,600}	....	....	^{13,100} ^{312,000}	....	....	^{130.8}	³⁷¹	⁵⁶	....
Shell Canada Ltd.—Scottford	94,350	....	....	....	....	^{321,500}	140,500	....	^{221,500} ^{421,000}	....	....	^{15,300} ³²⁷⁰	....	....	....	....	....	11	....
Total	423,450	108,100	7,500	....	86,600	60,500	59,200	....	175,800	28,300	....	5,570	24,500	2,600	....	50.8	371	67	22,400
British Columbia																			
Chevron Canada Ltd.—Burnaby	52,000	11,000	....	....	118,000	110,000	....	....	^{116,000} ^{414,000}	13,000	12,000	....	^{310,000}	....	....	....	....	15	2,000
Husky Oil Operations Ltd.—Prince George	10,250	....	....	....	13,300	11,600	....	....	^{68,000}	....	....	....	³⁹⁰⁰	....	....	....	....	⁷	....
Total	62,250	11,000	....	....	21,300	11,600	....	....	38,000	3,000	2,000	....	10,900	....	....	....	....	22	2,000
New Brunswick																			
Irving Oil Ltd.—St. John	237,500	61,750	....	^{218,000}	124,000	134,650	129,700	....	^{145,450} ^{428,800}	15,000	....	....	^{39,500}	....	....	^{240.0}	....	....	11,700
Total	237,500	61,750	....	18,000	24,000	34,650	29,700	....	74,250	5,000	....	....	9,500	....	....	40.0	....	....	11,700
Newfoundland																			
North Atlantic Refining Ltd.—Come By Chance	99,750	52,250	....	^{216,200}	....	123,400	^{431,500}	....	^{218,900} ^{416,200}	....	....	....	....	....	....	^{166.0}	....	200	....
Total	99,750	52,250	....	16,200	....	23,400	31,500	....	35,100	....	....	....	....	....	....	66.0	....	200	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Nova Scotia																			
Imperial Oil—Dartmouth	84,000	40,000	....	....	129,200	....	....	435,000	110,500	....	18,100	....	....	....	....	....	....	....	2,000
Total	84,000	40,000	....	....	29,200	....	....	35,000	10,500	....	8,100	....	....	....	....	....	....	....	2,000
Ontario																			
Imperial Oil—Nanticoke	112,000	33,700	....	....	140,850	327,400	....	426,600	128,500	111,875	....	....	....	....	....	....	....	63	4,300
Sarnia	122,000	30,800	123,300	....	125,650	116,150	313,200	59,500	48,900	....	....	15,550	....	5,000	....	127.4	850	....	....
						216,600			620,700							547.5			
									75,900										
									853,000										
Nova Chemicals (Canada) Ltd.—Corunna	80,000	33,000	....	167,000	....	....	....	....	817,000	....	....	110,200	....	....	....	....	....	....	....
Petro-Canada Products Ltd.—Mississauga ^B . . . . .	....	....	....	....	....	39,000	310,300	....	110,300	....	....	....	....	11,700	....	113.3	....	41	....
Oakville	83,000	38,100	....	....	125,400	113,400	....	....	113,300	13,300	....	....	37,100	....	....	....	....	44	15,100
									46,500										
Shell Canada Ltd.—Sarnia	71,400	24,700	....	24,050	114,400	121,000	16,750	....	115,000	....	11,600	12,700	....	....	....	....	....	55	....
									86,300										
Sunoco Inc.—Sarnia	82,400	20,000	....	26,700	126,500	126,300	124,100	....	126,800	25,800	....	110,200	....	....	....	144.2	....	53	2,500
									45,500										
Total	550,800	180,300	23,300	77,750	122,800	129,850	54,350	36,100	217,700	20,975	1,600	28,650	7,100	16,700	....	132.4	850	256	21,900
Quebec																			
Petro-Canada Products Ltd.—Montreal	105,000	42,300	....	112,800	129,700	130,400	424,400	....	125,700	12,700	1800	19,400	....	....	....	143.7	....	....	24,800
									410,400			24,100							
Shell Canada Ltd.—Montreal	129,900	49,500	....	212,000	124,000	120,700	111,700	....	234,200	22,500	....	....	36,800	3,060	....	....	....	....	7,200
									427,000										
Ultramar Ltd.—St. Romuald	155,000	45,000	....	....	154,000	119,500	....	....	125,000	....	14,970	....	313,800	....	....	....	....	50	36,000
									215,000										
									426,000										
Total	389,900	136,800	....	24,800	107,700	70,600	36,100	....	163,300	5,200	5,770	13,500	20,600	3,060	....	43.7	....	50	68,000
Saskatchewan																			
Consumers' Cooperative Refineries Ltd.—Regina	52,000	25,000	29,000	....	119,000	19,500	116,000	....	110,000	....	12,200	....	34,000	....	....	1460.0	385	260	....
							230,000		24,300							430.0			
									48,500										
Moose Jaw Asphalt Inc.—Moose Jaw	12,000	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7,000
Total	64,000	32,000	9,000	....	19,000	9,500	46,000	....	22,800	....	2,200	....	4,000	....	....	90.0	385	260	7,000

CHILE

ENAP—Gregorio-Magallanes	9,650	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petrox SA—Talcahuano	100,640	46,320	....	1810	120,757	24,497	29,000	....	24,497	....	....	....	....	....	....	....	....	....	....
				210,000															
Refineria de Petroleo Concon SA—Concon	94,350	47,000	....	210,000	125,000	112,000	110,000	....	112,000	11,100	....	....	1400	....	....	....	....	30	10,000
									35,000										
Total	204,640	93,320	....	20,810	45,757	16,497	19,000	....	16,497	1,100	....	....	5,400	....	....	....	....	30	10,000

CHINA

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

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Harbin	30,000	....	³ 1,000	....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Heilongjiang	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Huhhot	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	90,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jilin	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinxi	100,400	....	³ 1,000	....	24,000	3,000	....	....	5,000	....	....	....	....	4,000	....	....	....	....	....
Jinzhou	110,500	....	² 20,000	....	16,000	6,000	....	....	8,000	....	....	....	....	....	....	....	500	....	....
Karamay	66,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lanzhou	110,500	....	³ 15,000	....	24,000	2,000	....	....	3,000	11,000	....	....	....	7,000	....	....	....	....	....
Lanzhou	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaohs	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoning	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoyang	80,300	....	....	....	....	3,000	....	....	1,000	....	....	....	....	....	....	....	....	....	....
Linyuan	50,200	....	....	....	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qianguo	50,200	....	....	....	24,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qinghai	27,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sichuan	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Urumqi	50,200	....	² 8,000	....	16,000	3,000	....	....	....	....	....	....	....	....	....	....	200	....	....
Xianyang	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yanchang	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yumen	80,300	....	....	....	....	6,000	....	....	3,000	....	....	....	....	....	....	....	....	....	....
Zepu	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sinopec—Anqing	56,200	....	² 8,000	....	24,000	....	....	....	4,000	21,000	....	....	....	....	....	....	225	....	....
Baling	100,400	....	² 12,000	....	50,000	3,000	....	....	22,000	12,000	....	....	....	....	....	....	300	....	....
Baoding	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Beihai	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Binzhou	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cangzhou	20,000	....	....	....	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Changyi	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dagang	60,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dongming	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fujian	80,300	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gaoqiao	150,600	....	³ 10,000	....	38,000	4,000	....	....	2,000	21,000	....	....	....	6,000	....	....	....	....	....
Guangrao	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Guangzhou	104,400	....	³ 20,000	....	44,000	8,000	....	....	20,000	21,000	....	....	....	....	....	....	....	....	....
Hangzhou	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Henan	2,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Huabei	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ji'nan	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jiangnan	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jianhu	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinan	80,300	....	....	....	22,000	....	....	....	4,000	....	....	....	....	1,000	....	....	....	....	....
Jingmen	100,400	....	² 8,000	....	20,000	3,000	8,000	....	14,000	....	....	....	....	2,000	....	....	270	....	....
Jinling	140,600	....	² 12,000	....	44,000	3,000	16,000	....	3,000	21,000	....	....	....	....	....	....	490	....	....
Jiujiang	50,200	....	³ 8,000	....	24,000	3,000	....	....	8,000	....	....	....	....	....	....	....	....	....	....
Kenli	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lijin	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Linyo	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Luoyang	100,400	....	....	....	40,000	14,000	....	....	16,000	22,000	....	....	....	....	....	....	....	....	....
Luoyang	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Maoming	170,700	....	² 12,000	....	32,000	3,000	16,000	....	16,000	21,000	....	....	....	5,000	....	....	400	....	....
Nandagang	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nanyang	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qilu	160,700	....	² 16,000	....	46,000	3,000	42,000	....	22,000	13,000	....	....	....	....	....	....	400	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Qingdao	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qingdao	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shanghai	106,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shengli	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shengli	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shijiazhuang	50,200	....	....	....	24,000	....	....	....	....	21,000	....	....	....	....	....	....	....	....	....
Shouguang	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Taizhou	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tianjin	120,500	....	....	....	35,000	4,000	....	....	....	21,000	....	....	....	....	....	....	....	....	....
Wuhan	50,200	....	38,000	....	20,000	....	....	....	....	21,000	....	....	....	....	....	....	....	....	....
Wuxi	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Xi'an	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yan'an	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yancheng	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yangzhou	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yangzi	120,500	....	320,000	....	....	21,000	24,000	....	....	....	....	....	....	....	....	....	....	....	....
Yanshan	190,800	....	....	....	48,000	3,000	....	....	5,000	21,000	....	....	....	5,000	....	....	....	....	....
Yongping	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhanjiang	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhenhai	160,700	....	28,000	....	28,000	9,000	....	....	8,000	21,000	....	....	....	....	....	....	200	....	....
Zhongjie	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Zhongyuan	26,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vepec—Dalian	100,000	40,000	....	....	137,000	114,000	....	135,000	17,000	12,500	....	....	....	....	1900	....	....	300	....
								219,000	424,000										
Total	4,346,800	40,000	290,000	....	892,000	157,000	122,000	54,000	229,000	26,500	....	....	....	49,000	900	....	4,585	300	....

CHINA, TAIWAN

Chinese Petroleum Corp.—																			
Kaohsiung ^a	270,000	75,500	215,000	....	125,000	215,000	....	130,000	220,000	....	....	114,000	310,000	5,300	3,616	250.0	2,727	900	14,633
								443,000	525,000										
Ta-Lin	300,000	....	....	....	125,000	355,000	....	160,000	....	....	....	....	310,000	....	....	233.1	....	250	....
Tao-Yuan	200,000	36,000	....	....	....	220,000	....	145,000	....	....	....	....	36,000	....	....	452.0	....	595	....
						325,000		457,000											
Total	770,000	111,500	15,000	....	50,000	115,000	....	235,000	45,000	....	....	14,000	26,000	5,300	3,616	135.1	2,727	1,745	14,633

COLOMBIA

Empresa Colombiana de																			
Petroleos—Apiay	2,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barrancabermeja-Santander	205,000	101,000	....	233,000	164,000	....	....	....	519,800	12,100	....	11,600	....	1,400	....	118.0	....	....	....
												3600							
Cartagena, Bolivar	75,000	40,000	....	219,000	126,000	....	....	....	....	....	12,100	....	....	....	....	....	....	....	....
Orito, Putumayo	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tibu, N. de Santander	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	285,850	141,000	....	52,000	90,000	....	....	....	19,800	2,100	2,100	2,200	....	1,400	....	18.0	....	....	....

CONGO (FORMER ZAIRE)

Sozir—Moanda	17,000	....	....	....	....	13,500	....	....	25,000	....	....	....	....	....	....	....	....	....	....
Total	17,000	....	....	....	....	3,500	....	....	5,000	....	....	....	....	....	....	....	....	....	....

CONGO, DEMOCRATIC REPUBLIC OF

Coraf—Pointe-Noire	21,000	8,000	....	....	....	12,000	12,000	....	43,500	....	....	....	....	....	....	....	....	....	....
Total	21,000	8,000	....	....	....	2,000	2,000	....	3,500	....	....	....	....	....	....	....	....	....	....

COSTA RICA

Refinadora Costarricense de Petroleo																			
SA—Limon	15,000	600	....	16,500	....	11,200	....	....	42,000	....	....	....	....	....	....	....	....	....	....
Total	15,000	600	....	6,500	....	1,200	....	....	2,000	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
CROATIA																			
Ina Refinery Rijeka—Rijeka	91,625	37,000	....	211,525	121,000	120,000	411,900	422,000	115,610	....	....	19,438	....	....	....	....	....	62	....
Ina-Industrija Nafta d.d. Zagreb—Sisak	143,472	16,200	25,930	....	110,000	119,000	....	....	121,240	....	....	19,979	....	....	....	....	170	....	....
									62,700			22,178							
Ina d.d. Rafinerija Zagreb—Zagreb.	803	....	....	....	....	....	....	....	....	....	....	....	....	470	....	....	....	....	....
Total	235,900	53,200	5,930	11,525	31,000	39,000	11,900	22,000	39,550	....	....	21,595	....	470	....	....	170	62	....
CUBA																			
Cienfuegos	76,000	....	....	....	....	17,500	....	....	17,700	....	....	....	....	....	....	....	....	....	....
Ermonos Dias, Santiago	101,500	37,500	....	....	....	17,500	....	....	17,700	....	....	....	....	....	....	5.0	....	....	540
									422,000										
Niko Lopes, Habana	121,800	38,200	....	....	114,700	15,000	....	....	15,250	....	....	....	....	....	....	....	....	....	540
									413,200										
Serhio Soto, Cabaiguan	2,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	301,400	75,700	....	....	14,700	20,000	....	....	55,850	....	....	....	....	....	....	5.0	....	....	1,080
CYPRUS																			
Cyprus Petroleum Refinery Ltd.—Larnaca	27,000	2,600	....	....	....	15,100	....	....	411,000	....	....	....	....	....	....	....	....	....	1,400
Total	27,000	2,600	....	....	....	5,100	....	....	11,000	....	....	....	....	....	....	....	....	....	1,400
CZECH REPUBLIC																			
Czech Refining Co. ^G —Kralupy	62,880	....	....	....	....	19,440	....	....	216,600	....	....	....	34,400	....	12,024	....	....	23	....
									425,500										
Czech Refining Co. ^H —Litvinov	103,175	47,500	....	213,925	....	19,120	122,175	....	121,785	....	....	1670	32,645	....	....	....	....	128	8,150
						29,312			436,566										
Koramo Kolín—Kolín . . . . .	....	....	....	....	....	....	....	....	....	....	....	....	....	2,500	....	....	....	....	....
Paramo A.S.—Pardubice	20,000	7,000	....	....	....	....	....	....	46,000	....	....	....	....	300	....	....	....	....	3,000
Total	186,055	54,500	....	13,925	....	27,872	22,175	....	106,451	....	....	670	7,045	2,800	2,024	....	....	151	11,150
DENMARK																			
AS Dansk Shell—Fredericia	70,000	....	....	125,000	....	112,900	....	211,200	222,500	....	....	....	36,000	....	....	....	....	....	....
Dansk Statoil AS—Karlundborg	65,000	22,000	....	228,000	....	18,600	....	....	18,600	....	....	....	....	....	....	....	....	....	8,000
									611,400										
Total	135,000	22,000	....	53,000	....	21,500	....	11,200	42,500	....	....	....	6,000	....	....	....	....	....	8,000
DOMINICAN REPUBLIC																			
Falconbridge Dominicana C por A—Bonao	16,000	....	....	....	....	....	....	....	26,200	....	....	....	....	....	....	20.6	....	....	....
Refineria Dominicana de Petroleo SA—Haina	33,250	....	....	....	....	17,560	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	49,250	....	....	....	....	7,560	....	....	6,200	....	....	....	....	....	....	0.6	....	....	....
ECUADOR																			
Petroecuador—Esmeraldas	110,000	45,300	....	231,500	118,000	12,780	....	524,500	213,000	....	....	....	....	....	....	....	....	62	....
						310,000													
La Libertad	46,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shushufindi	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	176,000	45,300	....	31,500	18,000	12,780	....	24,500	13,000	....	....	....	....	....	....	....	....	62	....
EGYPT																			
Alexandria Petroleum Co.—Alexandria (El-Mex)	100,000	22,500	....	....	....	....	....	....	71,436	....	....	1603	....	1,436	....	11.0	1	....	2,010
									876			2281							
Amerya Petroleum Refining Co.—Alexandria	78,000	15,000	....	....	....	112,000	....	210,000	214,000	29,000	....	1700	....	2,000	....	24.0	....	....	....
								47,000	44,000										

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Assiut Petroleum Refining Co.—Assiut	47,000	....	....	....	....	....	....	....	71,800 8700	....	....	....	....	....	....	....	....	....	....
Cairo Petroleum Refining Co.—Mostorod	145,000	....	....	....	....	19,000	....	....	111,700 414,400	....	....	....	....	....	....	....	....	....	....
Tanta	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
El-Nasr Petroleum Co.—El-Suez	99,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,613
Wadi-Feran	7,060	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Suez Petroleum Processing Co.—El-Suez	66,400	9,500	216,470	....	....	112,540	....	....	116,660 410,800 71,306	....	....	....	....	1,005	....	73.5	540	....	....
Total	577,760	47,000	16,470	....	....	33,540	....	17,000	76,878	9,000	....	1,584	....	4,441	....	8.5	541	....	4,623
EL SALVADOR																			
Esso Caribbean and Central America—Acajutla	20,000	1,900	....	....	....	13,300	....	....	25,700 47,500 63,900	....	....	....	....	....	....	....	....	....	....
Total	20,000	1,900	....	....	....	3,300	....	....	17,100	....	....	....	....	....	....	....	....	....	....
ERITREA																			
Petroleum Corp. of Eritrea—Assab	18,000	3,000	....	....	....	2,400	....	....	44,500	....	....	....	....	....	....	....	....	....	450
Total	18,000	3,000	....	....	....	2,400	....	....	4,500	....	....	....	....	....	....	....	....	....	450
FINLAND																			
Neste Oy—Naantali	40,000	27,400	....	27,100	214,200	46,800	....	37,100 414,700 8330	26,600	....	1280	....	....	....	....	....	....	....	3,600
Porvoo	160,000	68,000	....	228,000	131,000	436,000	116,000	482,000	251,000	24,200	....	....	23,600	....	14,100	120.0	....	....	8,500
Total	200,000	95,400	....	35,100	45,200	42,800	16,000	103,800	57,930	4,200	280	....	3,600	....	4,100	20.0	....	....	12,100
FORMER SOVIET UNION																			
Azerbaijan																			
Azerneftiyag Baku	238,978	66,157	....	....	....	....	....	....	....	....	....	....	....	27,064	....	....	....	....	4,151
Azerneftyanadjiag	202,830	71,043	238,529	....	171,342	324,466	....	....	125,300 542,192	1930	....	....	....	....	....	....	1,400	....	....
Total	441,808	137,200	38,529	....	71,342	24,466	....	....	67,492	930	....	....	....	27,064	....	....	1,400	....	4,151
Belarus																			
P.O. Naftan Refinery—Novopolotsk	170,000	50,000	....	....	....	144,000	....	....	134,500 4115,000	....	....	12,785	....	3,760	....	17.6 57.6	....	....	....
Slavneft—Mozyr	323,323	18,795	....	....	....	124,000 324,000	12,000	....	150,600 499,726	....	....	....	....	....	....	....	....	85	9,630
Total	493,323	68,795	....	....	....	92,000	12,000	....	299,826	....	....	2,785	....	3,760	....	15.2	....	85	9,630
Georgia																			
Batumi	106,436	24,809	....	....	....	110,276	....	....	110,800	....	....	....	....	....	....	....	....	....	3,819
Georgian American Oil Refinery—Sartichala	2,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	108,836	24,809	....	....	....	10,276	....	....	10,800	....	....	....	....	....	....	....	....	....	3,819
Kazakhstan																			
Atyrau	104,427	27,064	213,720	....	....	18,808	....	....	19,200	....	....	....	....	....	....	....	500	....	....
Chimkent	160,000	....	....	....	....	124,466	....	....	125,200 449,863	....	....	....	....	....	....	....	....	60	....
Pavlodar	162,666	93,973	211,277	230,071	138,356	126,178	....	....	127,200 449,863	....	....	....	....	....	....	121.5	500	64	8,550

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
									546,027										
Total	427,093	121,037	24,997	30,071	38,356	59,452	....	....	207,353	....	....	....	....	....	....	21.5	1,000	124	8,550
Kyrgyzstan																			
Kyrgoil—Dzhalalabad	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Russia																			
Makhachkala	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nizhnekamsk	120,493	....	....	....	....	....	....	....	....	....	....	....	....	....	1625	....	....	....	....
Salavatnefteorgsintez	247,011	73,299	....	29,397	221,096	148,687	....	....	249,300 4121,205 522,247	11,174	....	11,591	....	....	23,000	....	....	290	....
Yakutsk	2,500	....	....	22,941	....	25,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Bashneftekhimzavody—Novo-Ufa	379,553	133,441	27,142	215,400	222,247	325,400	....	....	152,000 465,205	12,814	....	....	....	9,585	....	....	260	218	14,278
Ufa-former Lenin	234,962	98,671	....	222,553	138,356	114,679	....	45,753	115,000 468,466 542,192	....	1979	....	....	....	....	121.5	....	72	498
Ufaneftexhim	251,027	81,756	....	29,397	117,260	117,371 321,775	119,178	....	140,300 448,904	....	....	110,542	....	7,330	....	121.5	....	....	4,981
Central Fuel Co.—Moscow	242,995	90,214	....	220,000	138,356	133,029	....	....	134,000 466,548 542,192	....	....	....	33,542	....	11,000	121.5	....	....	22,600
Chernogorneft	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gazprom—Astrakhan	66,000	....	....	....	....	124,466	....	....	440,000	....	....	....	....	....	....	....	....	....	....
Surgut	88,000	....	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Urengoy	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grozneft—Groznyi-former Lenin	389,595	89,650	....	126,312	138,356	....	....	....	542,192	....	....	....	....	3,759	....	121.5	....	....	....
Groznyi-Sheripov	40,164	16,915	....	....	....	18,074	....	....	18,530	....	....	....	....	5,826	....	....	....	....	....
Novo-Grozny . . . . .	....	....	....	....	....	116,881	....	....	117,400 442,192	....	....	....	....	....	....	....	....	....	....
Komitek—Ukhta	126,518	13,156	....	17,518	....	19,297	....	....	19,500	....	....	....	....	....	....	....	....	....	4,981
Krasnodareconeft	34,140	14,472	....	110,149	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5,645
Lukoil—Kogalym	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Perm	279,142	126,000	213,532	17,706	215,726	142,326	....	....	143,100 472,493	11,003	....	13,481	....	8,833	....	....	490	....	5,645
Volgograd	200,000	79,501	224,809 33,101	126,876	....	118,839	....	32,877	119,100 411,507 76,904	....	....	11,830	....	17,855	....	710.8	1,020	....	3,985
Mari El Refinery	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Norilsk	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Norsi—Kstovo, Nizhny Novgorod	437,792	114,271	....	....	....	145,506	....	....	146,800 4107,500 76,904	....	....	11,790 21,890	....	8,645	....	....	....	....	15,607
Onako—Orsk	158,649	53,752	....	....	....	117,860	....	....	118,400 454,200	11,125	....	....	....	7,706	....	....	....	....	10,128
Rosneft—Afipsky	28,115	....	....	....	....	116,147	....	....	112,658	....	....	13,680 22,387	....	....	....	....	....	....	....
Komsomolsk	108,000	33,266	39,679	211,300	....	7,340	....	....	19,000	....	....	....	....	....	....	....	....	....	....
Tuapse	46,189	....	....	....	....	17,829	....	....	18,100	....	....	....	....	....	....	....	....	....	....
Sibneft—Omsk	566,318	272,609	213,908	126,500 230,071	165,589	148,687 324,710	19,178	....	174,000 469,425 542,192 76,904	11,272	....	111,139	....	10,525	11,750	....	510	....	17,433
Sidanco—Angarsk	440,700	195,463	211,217	125,748	133,753	133,029 412,233	....	....	133,900 430,685 76,900	....	....	13,182	....	5,638	....	....	410	....	9,630
Cracking-Saratov	176,723	74,426	....	160,142	....	127,891	....	....	128,300	....	....	....	....	....	....	....	....	42	3,819
Khabarovsk	94,000	10,149	....	214,284	....	19,786	....	....	110,556	....	....	....	....	....	....	....	....	....	5,811
Slavneft—Yaroslavl	290,000	270,305	....	212,404	122,500	125,689	....	....	126,100 456,959 712,274	11,786	....	11,551	33,542	12,028	....	....	....	....	10,460
Yaroslavl/Mendeleev	8,700	....	....	....	....	....	....	....	....	....	....	....	....	2,510	....	....	....	....	....
Surgutneftegaz—Kirishi	387,586	85,327	....	....	....	167,281	....	....	167,900	....	....	15,172	37,085	....	....	....	....	45	16,603

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Tatneft—Kichuyi	8,000	3,600	....	....	....	11,750	....	....	⁴ 104,800	....	....	....	....	....	....	....	....	....	1,200
Tomskneft	3,000	....	....	....	....	....	....	....	¹ 1,850	....	....	....	....	....	....	....	....	....	....
Tyumen Oil Co.—Ryazan	361,479	83,636	....	¹ 21,990	¹ 18,219	¹ 53,335	....	....	¹ 54,000	....	....	¹ 4,078	....	⁷ 1,142	....	....	....	....	⁸ 7,799
Ulyanovskneft	1,500	....	....	....	....	....	....	....	⁴ 76,137	....	....	² 2,228	....	....	....	....	....	....	....
Yukos—Achinsk	146,584	40,184	....	....	....	¹ 25,519	....	....	¹ 25,519	....	....	....	....	....	....	....	....	² 1	¹ 11,600
Novo-Kuibishev	309,266	129,682	² 28,192	¹ 9,397	² 13,616	¹ 33,518	....	....	¹ 34,300	....	....	¹ 2,188	....	⁹ 7,773	....	....	¹ 0,030	....	¹ 2,286
Samara-Kuibishev	154,000	50,745	....	¹ 15,787	² 18,795	¹ 43,794	....	....	⁴ 57,918	¹ 832	¹ 750	....	....	....	....	....	....	....	....
Strezhevoy	4,400	....	....	....	....	....	....	....	¹ 44,400	....	....	....	....	....	....	....	....	....	....
Syzran	210,863	67,284	....	¹ 16,915	² 17,068	¹ 43,060	....	....	⁴ 50,438	....	....	....	....	....	....	....	....	....	⁷ 6,637
Total	6,672,964	2,301,774	111,580	422,787	380,937	855,788	38,356	8,630	2,358,597	10,006	1,729	56,729	14,169	117,155	6,375	96.8	3,720	688	193,626
Turkmenistan																			
Chardzou	120,493	50,745	....	....	....	¹ 24,466	....	....	¹ 24,900	....	....	....	....	....	....	....	....	....	....
Turkmenbashi	116,477	20,486	² 28,568	....	¹ 15,151	¹ 8,074	....	....	¹ 8,400	¹ 1,028	¹ 1,223	....	....	....	....	....	¹ 0,040	....	⁴ 15
Total	236,970	71,231	28,568	....	15,151	32,540	....	....	33,300	1,028	1,223	....	....	....	....	....	1,040	....	415
Ukraine																			
Drogobich	78,321	25,185	³ 195	¹ 7,330	....	¹ 8,074	....	....	¹ 8,200	....	....	....	....	....	....	....	¹ 15	....	³ 819
Kherson	236,000	43,000	² 12,000	....	....	¹ 16,637	....	....	¹ 13,041	....	....	....	....	....	....	....	³ 40	....	⁵ 811
Lisichansk	320,000	202,981	....	....	¹ 40,500	¹ 56,761	....	....	¹ 57,500	....	....	² 1,870	....	....	....	¹ 21.5	....	⁹ 0	....
Odessa	78,321	18,795	....	....	....	¹ 10,276	....	....	⁴ 79,014	....	....	....	....	....	....	....	....	....	³ 155
Ukratnafta—Kremenchug	361,500	113,000	....	....	¹ 28,500	....	....	....	⁴ 42,192	....	....	¹ 6,000	....	....	....	....	....	....	....
Nadvornaja	74,304	13,720	² 6,954	¹ 9,961	....	¹ 8,563	....	....	⁴ 28,767	....	....	....	....	....	....	....	² 50	....	....
Total	1,148,446	416,681	22,149	17,291	69,000	100,311	....	....	371,414	....	....	7,870	....	....	....	21.5	705	90	12,785
Uzbekistan																			
Uzbekneftegaz—Alty-Arik	66,271	....	....	¹ 9,585	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bukhara	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fergana	106,000	45,671	² 17,667	....	....	¹ 23,487	....	....	¹ 23,900	....	....	....	....	⁹ 9,397	....	....	⁶ 50	....	⁴ 151
Total	222,271	45,671	17,667	9,585	....	23,487	....	....	30,804	....	....	....	....	9,397	....	....	650	....	4,151

FRANCE

Cie. de Raffinage et de Distribution																			
Total France—Dunkirk	133,700	36,200	....	....	¹ 35,100	¹ 21,500	....	....	¹ 40,200	....	....	....	³ 1,840	....	² 130	....	....	¹ 05	....
Gonfreville l'Orcher ^c	323,643	68,981	....	² 20,451	¹ 40,950	¹ 42,300	....	....	¹ 30,128	....	¹ 3,087	¹ 3,040	¹ 5,051	⁹ 8,846	² 1,371	⁶ 0.4	....	² 15	⁴ 737
La Mede	145,150	69,180	....	² 20,330	¹ 33,500	¹ 27,570	....	....	⁴ 28,200	¹ 3,950	....	....	³ 20,350	....	....	....	....	² 00	....
Cie. Rhenane de Raffinage—Reichstett- Vendenheim	80,000	34,200	....	² 16,000	¹ 14,000	¹ 14,400	....	² 15,300	² 22,500	....	....	....	....	....	....	....	....	....	⁷ 200
Elf France—Donges	214,300	119,950	....	² 33,380	¹ 49,400	¹ 29,280	....	³ 36,430	¹ 42,860	² 4,300	....	....	³ 4,900	....	....	....	³ 20	....	....
Feyzin	128,130	36,200	....	² 15,730	¹ 24,940	¹ 9,200	....	³ 34,630	⁴ 13,000	....	....	¹ 2,200	....	....	¹ 1,400	....	¹ 73	....	....
Grandpuits	98,000	49,900	....	² 14,860	¹ 30,720	¹ 14,800	....	³ 28,875	¹ 27,860	² 3,150	....	....	....	....	....	....	² 08	....	....
Esso SAF—Fos sur Mer	117,000	34,000	....	....	¹ 25,000	¹ 19,000	....	....	² 7,000	....	....	....	....	....	....	....	....	¹ 00	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Port Jerome	156,000	71,200	....	....	¹ 33,900	¹ 18,000	....	....	^{464,000} ^{118,700} ^{214,600} ^{447,900} ^{76,900} ^{831,600}	¹ 7,000	....	....	....	^{10,200}	....	....	....	²³⁰	....
Mobil Oil Francaise—Notre Dame de Gravenchon	73,000	26,000	....	....	....	¹ 11,500	....	^B 8,500	¹ 15,000 ^{424,000}	....	....	....	³ 5,500	^{7,000}	....	^{67.0}	....	....	^{3,000}
Ste. des Petroles Shell—Berre l'Etang . Petit Couronne	82,000 141,000	52,000 76,000	.... ....	.... ² 12,000	¹ 17,000 ¹ 20,000	¹ 19,000 ¹ 28,000	.... ....	² 37,000 ² 33,000	² 37,000 ² 48,000	....	....	....	....	.... ^{6,200}	.... ^{6,400}	.... ^{110.0}	....	....	^{6,000} ^{11,000}
Ste. Raffinerie BP et Elf—Dunkirk ^{BI} . . . Ste. Francaise des Petroles BP—Lavera . . . . .	.... 210,000	21,150 74,100	.... ....	.... ² 21,600	.... ¹ 27,900	.... ¹ 10,800	.... ¹ 15,300	....	² 24,300 ^{439,600}	....	....	....	³ 13,500	....	....	^{130.0}	....	....	^{13,500}
Total	1,901,923	769,061	....	154,351	352,410	265,350	15,300	193,735	813,992	18,400	6,118	5,240	68,627	39,646	4,151	47.4	701	850	45,437

GABON

Ste. Gabonaise de Raffinage—Port Gentil	17,300	....	....	¹ 7,200	....	¹ 1,400	....	....	⁴ 5,000	....	....	....	....	....	....	....	....	....	....
Total	17,300	....	....	7,200	....	1,400	....	....	5,000	....	....	....	....	....	....	....	....	....	....

GERMANY

Addinol Mineralol GmbH—Krumpa ^B . . . Bayernoil—Vohburg/Ingolstadt Neustadt . . . . .	.... 258,300	4,533 87,800	.... ....	.... ¹ 9,900 ² 38,900	.... ¹ 60,000 ¹ 38,000 ³ 17,800	.... ....	.... ⁴ 81,800	.... ³ 11,000 ⁴ 18,000	.... ¹ 25,000 ² 6,100	....	....	....	....	^{3,800}	....	....	....	....	....
DEA Mineraloel AG—Heide/ Grasbrook	80,000	30,000	....	² 14,000	² 9,000	² 18,000	....	³ 11,000 ⁴ 18,000	¹ 25,000	....	¹ 450	¹ 5,800	....	....	¹ 280	....	....	³⁵	^{4,300}
Wesseling	140,000	60,000	....	² 26,000	....	² 21,000	¹ 31,000	⁴ 41,000	¹ 21,000 ² 6,100	....	¹ 2,000	¹ 7,600	....	....	¹ 1,500	....	....	²⁴⁰	....
Deutsche Shell AG—Godorf.	180,000	73,000	....	¹ 18,000 ² 7,000	....	¹ 17,000 ³ 21,000	¹ 36,000	² 32,000	² 52,000 ³ 34,000 ⁴ 12,000	....	....	¹ 17,000 ² 3,000	³ 8,000	....	....	....	....	....	^{12,000}
Harburg	102,000	44,000	....	² 14,000	¹ 16,000	³ 17,000	....	² 16,000	² 29,000 ³ 2,000	....	....	....	³ 2,800	^{6,000}	....	....	....	....	^{5,900}
Esso AG—Ingolstadt	105,000	30,200	....	....	¹ 27,900	² 18,200	....	....	² 33,000 ⁴ 55,400 ⁵ 15,700	....	....	....	³ 6,800	....	....	....	....	⁶⁹	^{9,300}
Holborn Europa Raffinerie GmbH—Harburg	78,000	15,000	....	....	¹ 18,750	¹ 14,700	....	....	¹ 31,700 ³ 3,500 ⁴ 38,400	....	....	....	....	....	....	....	....	....	....
Mineraloelraffinerie Oberrhein GmbH—Karlsruhe	285,000	130,000	² 26,000	² 24,000	¹ 87,000	¹ 31,000 ³ 22,000	....	³ 74,000 ⁴ 120,000	¹ 53,000 ² 76,000	² 12,000	....	....	³ 16,000	....	¹ 4,000	....	^{1,200}	³⁶⁰	^{14,000}
Mitteldeutsche Erdoel-Raffinerie GmbH—Leuna	214,000	96,000	....	² 26,000	¹ 44,000	³ 24,000	....	⁴ 66,000	⁵ 49,720	¹ 6,000	....	....	....	....	....	³ 82.4 ⁴ 82.4	....	⁴¹⁰	....
Mobil Schmierstoff GmbH— Hamburg . . . . .	....	13,300	....	....	....	....	^C 4800	....	⁷ 1,620	....	....	....	....	^{4,800}	....	^{1a} 438.0 ⁴ 438.0	....	....	....
OMV AG—Burghausen	72,000	....	² 27,500	....	....	....	....	....	⁴ 818,700	....	....	² 2,300	....	....	....	....	....	³⁴	....
PCK Raffinerie GmbH—Schwedt	210,000	140,000	^{K3} 16,500	² 27,000	¹ 51,000	¹ 16,000 ³ 18,000	....	³ 45,000 ⁴ 105,000	¹ 36,600	² 6,100	....	¹ 5,000	³ 15,000	....	¹ 1,900	¹ 8.1	....	....	^{12,000}
SRS GmbH—Salzbergen ^B . . . . .	....	6,000	....	....	....	....	....	....	⁷ 2,800 ⁸ 900	....	....	....	....	^{4,020}	....	....	....	....	....
Veba Oel/Ruhr Oel GmbH— Gelsenkirchen	246,000	148,000	² 29,000	² 18,000	¹ 26,400	³ 28,000	^{C1} 32,900	² 29,300	² 38,500 ⁴ 50,000 ⁶ 11,700	....	....	^{14,000} ³ 3,245 ⁴ 9,482	....	....	....	¹ 23.7 ³ 6.1 ⁴ 6.2	^{1,250}	⁵⁷⁶	^{14,800}
Wilhelmshavener Raffinerie Gesellschaft mbH—Wilhelmshaven ^B	225,000	....	....	....	....	¹ 41,000	....	....	² 80,000	....	....	....	....	....	....	....	....	¹⁰⁰	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Wintershall AG—Lingen	80,000	38,000	223,400	....	....	113,843 321,160	123,000	441,500	411,000 117,500	....	....	14,700 22,000 35,000	....	....	....	144.0 444.0 550.0	480	112	9,200
Total	2,275,300	915,833	122,400	222,800	340,050	397,703	123,700	680,600	1,003,040	24,100	2,450	69,127	61,100	18,620	8,555	1,306.9	3,620	2,178	93,500
GHANA																			
Tema Oil Refinery Co. Ltd.—Tema	45,000	....	....	....	....	15,850	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	45,000	....	....	....	....	5,850	....	....	....	....	....	....	....	....	....	....	....	....	....
GREECE																			
Hellenic Petroleum SA—Aspropyrgos . .	121,000	56,000	....	221,400	136,000	19,800 321,000	128,000	416,300	236,000 416,300	....	27,450	....	37,000	....	11,100	119.6	....	....	2,000
Thessaloniki	66,500	8,100	....	....	....	110,000	....	....	216,500 418,800	....	....	....	27,470	....	....	....	....	40	2,800
Motor Oil (Hellas) Corinth Refineries SA—Aghii Theodori	95,000	61,750	....	224,300	126,550	110,800	....	....	117,100 424,750 73,015 417,500	22,250	21,323	....	35,040	3,015	1873	43.7	....	100	....
Petrola Hellas—Elefsis	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	44.2	....	26	....
Total	382,500	125,850	....	45,700	62,550	51,600	28,000	16,300	149,965	2,250	8,773	....	19,510	3,015	1,973	17.5	....	166	4,800
GUATEMALA																			
Basic Resources International—Peten . .	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Texas Petroleum Co.—Escuintla	16,000	....	....	....	....	13,000	....	....	13,000 42,000	....	....	....	....	....	....	....	....	....	....
Total	20,000	....	....	....	....	3,000	....	....	5,000	....	....	....	....	....	....	....	....	....	....
HUNGARY																			
MOL Hungarian Oil & Gas Co.—Szazhalombatta	161,000	77,500	....	214,000	124,000	116,000 313,600	....	330,600 47,400	450,920 72,200	23,300	....	17,100	32,700	4,200	11,240	....	....	34	6,300
Tiszaujvaros	61,000	33,000	....	....	....	....	....	....	414,000	....	....	....	....	....	1620	....	....	21	....
Zalaegerszeg	10,000	6,000	....	....	....	....	....	....	....	....	....	....	....	4,500	....	....	....	....	....
Total	232,000	116,500	....	14,000	24,000	29,600	....	38,000	67,120	3,300	....	7,100	2,700	8,700	1,860	....	....	55	6,300
INDIA																			
Bharat Petroleum Co. Ltd.—Mahul, Bombay	120,000	39,000	....	....	128,755	15,503	....	....	....	....	....	12,175	....	....	....	....	....	....	10,000
Bongaigaon Refinery & Petrochemicals Ltd.—Bongaigaon Assam	27,110	....	29,675	....	....	11,833	....	....	11,833	....	....	1694	....	....	....	....	203	....	....
Cochin Refineries Ltd.—Ambalamugal . .	150,000	57,000	....	219,000	127,000	16,000	....	....	24,800 49,000	....	....	....	....	....	....	....	....	....	5,900
Hindustan Petroleum Corp. Ltd.—Mahul, Bombay	110,452	52,500	....	....	112,000	....	....	....	76,600	....	....	....	....	4,800	....	786.3	....	....	9,400
Visakhapatnam	90,000	47,000	....	....	119,200	....	....	....	....	....	....	....	....	....	....	....	....	16	2,240
Indian Oil Co. Ltd.—Barauni, Bihar . . .	65,800	23,700	220,000	....	....	....	....	....	....	....	....	....	....	....	....	....	540	....	....
Digboi, Assam	11,700	....	2850	....	....	....	....	....	....	....	....	....	....	30	....	....	26	....	400
Gawahati, Assam	19,920	....	26,000	....	....	....	....	....	....	....	....	....	....	....	....	....	145	....	....
Koyali, Gujarat	185,100	98,000	....	219,500	120,000	18,300	....	....	18,300	....	....	11,450	....	....	....	242.7	....	....	4,400
Haldia, West Bengal	61,000	27,000	....	29,600	....	15,300	....	....	15,300 413,400 73,100	....	....	....	....	3,100	....	....	....	....	7,500
Mathura, Uttar Pradesh	156,000	47,000	....	218,000	120,000	....	....	....	....	....	....	....	....	....	....	....	....	....	7,500
Panipat	120,000	62,000	....	26,500	113,400	312,000	32,600	....	....	....	....	....	....	....	....	....	....	84	....
Madras Refineries Ltd.—Cauvery Basin	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Madras	130,660	66,866	....	....	111,250	12,138	....	....	12,138 422,612 75,110	....	....	....	....	5,110	....	110.0	....	17	3,877

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Mangalore Refinery & Petrochemicals Ltd.—Mangalore	180,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Numaligarh Refinery Ltd.—Assam	60,000	....	8,400	....	....	2,000	22,000	....	29,000	....	....	....	....	....	....	....	....	....	....
Reliance Petroleum Ltd.—Jamnagar . . .	360,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,857,742	520,066	44,925	72,600	151,605	43,074	54,600	....	111,193	....	....	4,319	....	13,040	....	139.0	914	117	51,217
INDONESIA																			
Pertamina—Balikpapan, Kalimantan. . .	240,920	89,110	....	....	....	318,720	149,500	....	....	....	....	....	....	....	....	....	....	....	....
Balongan	125,000	....	....	....	183,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cepu	3,420	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cilacap, Central Java	348,000	37,600	....	250,040	....	330,690	....	....	712,000	....	....	....	....	....	....	....	....	....	....
Dumai, Central Sumatra	114,000	87,970	232,580	....	....	312,870	150,220	....	411,430	....	....	....	....	....	....	....	....	....	....
Musi, South Sumatra	109,155	51,300	....	18,820	118,450	330,690	....	....	....	116,200	....	....	....	....	....	....	....	....	....
Pangakalan Brandan, North Sumatra . .	4,750	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sungai Pakning, Central Sumatra . . .	47,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	992,745	265,980	32,580	58,860	101,450	92,970	99,720	....	23,430	16,200	....	....	....	....	....	....	....	....	....
IRAN																			
National Iranian Oil Co.—Abadan	400,000	80,000	....	....	130,000	126,000	....	....	126,000	....	....	....	....	1,500	....	....	....	....	1,000
Arak	150,000	71,000	....	227,300	....	321,600	124,500	....	121,600	....	....	....	....	....	....	1450.0	....	60	5,500
Bandar Abbas	232,000	126,000	....	231,000	....	336,000	128,000	....	136,000	....	....	....	....	....	....	150.0	....	130	5,000
Isfahan	265,000	119,000	....	238,000	....	129,600	130,000	....	129,600	....	....	....	....	10,000	....	170.0	....	70	5,500
Kermanshah	30,000	....	....	....	....	12,775	....	....	43,100	....	....	....	....	....	....	....	....	....	....
Lavan Island	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shiraz	40,000	18,400	....	29,000	....	16,215	19,280	....	16,200	....	....	....	....	....	....	117.0	....	30	1,500
Tabriz	112,000	50,000	....	216,500	....	111,120	118,000	....	111,100	....	....	....	....	....	....	134.0	....	80	5,000
Tehran	225,000	120,000	....	235,000	....	127,260	130,000	....	127,260	....	....	....	....	3,760	....	165.0	....	100	20,000
Total	1,474,000	584,400	....	156,800	30,000	160,570	139,780	....	180,635	....	....	....	....	15,260	....	286.0	....	470	43,500
IRAQ																			
Oil Refineries Administration—Baiji . .	150,000	65,000	....	....	....	38,500	38,000	31,000 28,000 41,000	....	....	....	....	....	....	....	64.0	....	....	....
Basra	70,000	17,650	....	....	....	....	....	....	....	....	....	....	....	2,008	....	....	....	....	....
Daura	100,000	....	....	....	....	5,000	....	....	13,000	....	....	....	....	8,160	....	....	....	....	1,815
K3-Haditha	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Khanaqin	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Muthia	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qaiyarah Mosul	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,900
Iraqi Company for Oil Operations— Kirkuk	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	347,500	82,650	....	....	....	43,500	38,000	100,000	13,000	....	....	....	....	10,168	....	64.0	....	....	6,715
IRELAND																			
Irish National Petroleum Corp.— Whitegate	71,250	....	....	....	....	210,800	....	....	110,800 413,500	....	....	....	....	....	....	....	....	4	....
Total	71,250	....	....	....	....	10,800	....	....	24,300	....	....	....	....	....	....	....	....	4	....
ISRAEL																			
Oil Refineries Ltd.—Ashdod	90,000	45,000	....	225,000	127,500	111,500	....	....	220,000 430,000	....	....	....	....	....	1750	....	....	....	....
Haifa	130,000	73,000	....	241,000	122,000	115,000	....	....	216,000 430,000	....	22,200	....	....	....	....	....	....	....	2,700
Total	220,000	118,000	....	66,000	49,500	26,500	....	....	96,000	....	2,200	....	....	....	750	....	....	....	2,700

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
ITALY																			
AgipPetroli SpA—Livorno	84,000	36,000	....	....	....	³ 14,000	....	431,700	² 22,000	....	....	....	³ 6,000	10,000	....	....	....	....	3,500
Porto Marghera	80,000	38,000	....	¹ 13,500 ² 27,000	....	³ 15,000	....	427,000	² 16,000	....	....	....	³ 6,000	....	....	....	....	....	3,500
Sannazzaro, Pavia	200,000	84,500	....	² 32,000	¹ 34,000	² 12,000	¹ 30,000	441,000	¹ 12,000	² 3,200	....	....	² 12,000	....	¹ 920	² 35.0	....	....	2,500
Taranto	84,000	13,500	....	¹ 27,000 ² 37,250	....	² 17,000	¹ 15,500	443,000	² 24,000	....	....	....	³ 6,000	....	....	² 39.5	....	....	2,500
Api Raffineria di Ancona SpA— Falconara, Marittima	80,000	40,526	....	¹ 22,874 ² 15,415	....	¹ 14,000	....	441,168	² 25,263	....	....	....	³ 7,863	....	....	¹ 7.2 ² 47.2	....	120	....
Arcola Petrolifera SpA—La Spezia . . .	33,000	....	....	....	....	....	....	....	¹ 23,100	² 8,300	....	....	¹ 2,400	¹ 7,800	....	....	....	....	....
Esso Italiana SpA—Augusta, Siracusa .	188,300	90,200	....	....	¹ 45,600	¹ 22,100	....	....	¹ 23,100 ² 42,400 ³ 16,700 ⁴ 23,400	....	....	....	¹ 2,400	....	....	....	....	196	....
Iploim SpA—Busalla	35,000	17,500	....	....	....	....	....	² 8,570 ³ 8,930	....	....	....	....	....	....	....	^{1a} 19.2	....	33	....
Isab SpA—Priolo Gargallo	235,000	102,700	....	¹ 33,000 ² 45,000	....	² 38,000	^m 165,000	....	² 64,000 ⁴ 72,000 ⁶ 24,400	....	....	....	³ 9,000	....	....	² 20.3 ⁶ 3.6	....	315	....
Italiana Energia E Servizi SpA—Mantova	56,600	20,100	....	¹ 9,400 ² 24,200	....	¹ 8,200	....	....	² 14,800 ⁴ 19,000 ⁸ 0,000	....	....	....	³ 3,300	....	....	....	....	60	....
Praoil—Gela, Ragusa	105,000	52,500	² 45,000	....	¹ 35,000	² 13,850	....	² 35,000 ⁴ 42,500	¹ 16,500	² 10,000	....	¹ 6,700 ² 700	¹ 8,050	....	¹ 1,100 ³ 1,200	³ 17.0 ⁵ 8.0	² 0,000	....	....
Priolo, Siracusa	220,000	50,000	....	² 25,000	¹ 32,000	² 9,000	....	418,000	¹ 9,000	¹ 4,000	....	¹ 12,000 ² 2,300	....	....	¹ 1,050	....	....	....	....
Raffineria di Milazzo SpA—Milazzo, Messina	235,200	69,300	....	....	¹ 44,000	....	^c 126,700 ² 22,700	415,100	² 20,900	¹ 4,000	....	....	....	....	¹ 1,400	² 47.5	....	310	....
Raffineria di Roma SpA—Rome	81,500	11,500	....	² 31,600	....	¹ 14,300	....	421,500	² 21,000 ³ 2,000	....	....	....	³ 7,100	....	....	....	....	42	9,620
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	....	....	....	....	....	⁴ 25.7	....	440	....
Sarpom—S. Martino Di Treccate	248,000	27,400	....	....	¹ 29,500	¹ 18,000 ² 7,800	....	....	² 66,300 ⁴ 55,500	....	¹ 3,100	....	³ 10,500	....	....	....	....	84	....
Tamoi Raffinazione SpA—Cremona . . .	90,000	....	....	² 33,000	....	¹ 8,600 ³ 15,000	^B 46,000	426,900	¹ 31,600 ³ 1,800	....	....	....	³ 10,500	....	....	⁴ 5.5	....	....	....
Total	2,340,600	761,226	45,000	421,239	300,100	270,550	215,900	360,368	761,163	36,300	3,100	21,700	88,713	27,800	5,670	235.7	2,000	1,600	21,620
IVORY COAST																			
Societe Ivoirienne de Raffinage— Abidjan	59,000	25,755	....	....	....	413,904	^c 14,111	....	¹ 19,214 ⁴ 13,232	....	....	....	....	....	....	^{1a} 28.3	....	....	....
Ste. Multinationale de Bitumes— Abidjan	10,000	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	69,000	32,755	....	....	....	13,904	14,111	....	32,446	....	....	....	....	....	....	28.3	....	....	....
JAMAICA																			
Petrojam Ltd.—Kingston*	34,200	1,710	....	....	....	¹ 3,240	....	....	² 6,600 ⁴ 16,000	....	....	....	....	....	....	....	....	....	720
Total	34,200	1,710	....	....	....	3,240	....	....	22,600	....	....	....	....	....	....	....	....	....	720
JAPAN																			
Cosmo Oil Co. Ltd.—Chiba*	228,000	57,000	....	....	¹ 31,500	¹ 32,850	....	¹ 64,800 ² 31,500 ⁴ 113,400	¹ 25,200 ² 7,200	....	....	....	....	....	....	^{1a} 88.0	....	600	....
Sakai*	104,500	32,300	....	....	¹ 19,800	¹ 7,200	....	² 18,000 ⁴ 48,600	¹ 9,900	¹ 7,200	....	....	....	....	¹ 1,465	^{1a} 11.0	....	140	....
Sakaide*	133,000	39,425	....	....	¹ 17,100	¹ 12,600	....	¹ 27,000	¹ 12,600	....	....	....	....	....	....	^{1a} 34.0	....	265	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Yokkaichi ¹	147,250	70,300	....	....	¹ 22,500	¹ 5,400	....	² 15,480 ³ 457,600 ⁴ 237,350	¹ 17,550	....	....	....	....	....	....	^{1a} 12.0	....	200	....
Fuji Oil Co. Ltd.—Sodegaura ^B	192,000	55,000	^{M3} 24,000	....	¹ 17,000	³ 28,000	....	⁴ 58,500 ⁵ 247,000	¹ 43,000	¹ 2,400	....	¹ 21,000 ² 2,100 ³ 119,800	....	....	....	⁵ 38.4	¹ 223	360	....
General Sekiyu Seisei KK—Sakai	140,400	47,700	....	....	¹ 36,000	¹ 30,600	....	³ 34,200 ⁴ 239,420 ⁵ 470,020	....	....	....	¹ 19,800	....	....	....	¹ 17.0 ² 75.0 ³ 260.4	....	353	....
Idemitsu Kosan Co. Ltd.—Chita, Aichi	152,000	....	....	....	....	³ 16,200	....	⁴ 149,500 ⁵ 470,200	¹ 23,400	¹ 5,400	....	....	....	....	....	² 60.4	....	360	....
Himeji, Hyogo	133,000	....	....	....	....	¹ 15,300	....	³ 136,000 ⁴ 470,200	¹ 25,200	....	....	....	....	....	....	² 31.9	....	207	....
Ichihara, Chiba	228,000	62,700	....	....	¹ 42,750	¹ 15,300	^{c3} 10,440	³ 136,000 ⁴ 235,100 ⁵ 410,170	¹ 22,500 ² 812,060	....	....	¹ 7,045	....	¹ 9,450	¹ 2,100	² 46.3	....	540	....
Tokuyama, Yamaguchi	114,000	52,250	....	....	¹ 23,750	³ 18,000	....	⁴ 240,500 ⁵ 449,500	¹ 18,000	....	....	....	....	....	....	² 17.1	....	153	¹ 609
Tomakomai, Hokkaido	133,000	22,800	....	....	¹ 28,500	¹ 16,200	^{c1} 13,500	³ 131,500 ⁴ 449,500	¹ 24,300	....	....	....	....	....	....	² 53.7	....	356	....
Japan Energy Co.—Chita, Aichi ¹	90,250	38,000	....	....	....	² 21,150	....	³ 27,000 ⁴ 135,100 ⁵ 445,000	....	....	....	¹ 7,360 ² 1,790	....	....	....	¹ 26.1 ² 217.0 ³ 54.7 ⁴ 127.0 ⁵ 255.9 ⁶ 3.4	....	150	9,000
Mizushima, Okayama ^B	190,190	103,550	² 23,400	....	¹ 38,700	¹ 18,000 ² 21,600	^{c2} 27,900	³ 363,000 ⁴ 136,000 ⁵ 497,290 ⁶ 64,320 ⁷ 74,500	....	¹ 4,590	....	¹ 11,700 ² 2,000	....	¹ 5,515	....	....	....	610	9,000
Kashima Oil Co. Ltd.—Kashima, Ibaragi ^B	171,000	39,900	....	....	¹ 29,700	³ 19,800	....	⁴ 122,500 ⁵ 222,500 ⁶ 485,500	¹ 20,700	....	....	....	....	....	¹ 1,400	....	....	240	....
Koa Oil Co. Ltd.—Takaishi, Osaka ¹	118,750	57,000	....	....	¹ 24,300	¹ 12,600	....	³ 15,300 ⁴ 119,800 ⁵ 441,400	....	¹ 3,600	....	¹ 1,890	....	....	....	....	....	100	....
Yamaguchi ¹	120,650	60,800	² 17,100	....	¹ 21,600	³ 21,600	....	⁴ 238,700 ⁵ 127,000 ⁶ 431,500	....	....	....	¹ 6,750 ² 2,430	....	....	....	² 8.5 ³ 419.0	¹ 770	220	9,900
Kyokuto Petroleum Ltd.—Ichihara, Chiba	160,000	83,000	....	....	¹ 34,000	¹ 25,000	^{m1} 38,000	⁴ 440,000 ⁵ 126,000 ⁶ 432,000	....	....	....	....	....	....	....	² 30.0 ³ 420.0 ⁴ 68.5 ⁵ 714.9	....	220	12,000
Kyushu Oil Co. Ltd.—Oita	130,000	66,000	....	....	¹ 16,500	¹ 8,000	....	² 233,000 ³ 427,000	¹ 9,000	....	....	....	....	....	....	....	....	....	....
Nansei Sekiyu KK—Okinawa	90,000	....	....	....	....	¹ 10,800	....	² 221,600 ³ 416,200	....	....	....	....	....	....	....	....	....	....	....
Nihonkai Oil Co. Ltd.—Toyama	60,000	10,000	....	....	....	¹ 6,000	....	² 213,000 ³ 210,000 ⁴ 49,500	....	....	....	....	....	....	....	....	....	40	....
Nippon Oil Co. Ltd.—Niigata ^B	26,000	2,000	....	....	....	¹ 5,000	....	² 421,300	....	....	....	....	....	¹ 300	....	....	....	....	....
Nippon Mitsubishi Petroleum Refining Co. Ltd. ^N —Mizushima	247,000	63,650	....	....	¹ 36,000	¹ 22,500 ² 318,000	¹ 9,900	³ 140,500 ⁴ 233,300 ⁵ 472,000 ⁶ 73,690	¹ 40,500 ² 34,500 ³ 73,690	¹ 6,840	¹ 2,700	¹ 26,100	....	¹ 2,970	....	¹ 54.0 ² 64.0	....	540	22,500
Muroran	186,200	57,950	....	....	¹ 20,700	³ 27,000	^{c1} 18,900	⁴ 112,600 ⁵ 236,000 ⁶ 451,300	¹ 46,800	....	....	¹ 5,400	....	....	....	² 22.0 ³ 239.9	....	350	2,430
Negishi	365,750	123,500	....	....	¹ 63,900	¹ 18,000 ² 327,000	....	³ 127,000 ⁴ 272,900 ⁵ 412,750	¹ 262,550 ² 74,410	¹ 8,100	....	¹ 9,000	....	¹ 2,070	¹ 1,620	¹ 24.2 ² 229.8	....	660	6,930
Okinawa Sekiyu Seisei—Yonashiro, Okinawa	100,000	....	....	....	....	³ 15,000	....	⁴ 138,000 ⁵ 220,000 ⁶ 423,000	¹ 115,000	....	....	....	....	....	....	² 22.0	....	300	....
Seibu Oil Co. Ltd.—Yamaguchi	120,000	40,000	....	....	¹ 22,000	¹ 17,000	....	² 150,000 ³ 430,000 ⁴ 73,690	¹ 26,000 ² 436,000	....	² 3,000	....	² 5,700	....	....	¹ 242.4 ² 617.7	....	340	30,000
Showa Shell Sekiyu KK—Kawasaki	109,000	27,500	....	....	....	¹ 19,100	....	² 27,600 ³ 414,200	¹ 224,900 ² 418,700	....	....	¹ 3,300	² 5,500	....	....	....	....	....	....
Showa Yokkaichi Sekiyu Co. Ltd.— Yokkaichi	222,000	96,300	....	....	¹ 22,600	¹ 40,600	....	² 236,900 ³ 535,600	¹ 261,500 ² 439,200	....	....	¹ 5,500	² 9,200	¹ 5,500	....	¹ 28.3	....	....	6,300
Taiyo Oil Co. Ltd.—Kikuma, Ehime	102,000	27,000	....	....	....	³ 30,000	^{c1} 18,000	⁴ 237,000 ⁵ 418,000	....	....	....	....	....	....	....	² 18.0 ³ 483.0	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Toa Oil Co. Ltd.—Kawasaki	65,000	58,000	^A 524,000	....	¹ 33,000	¹ 8,000	....	² 46,000 ⁴ 23,000	² 17,000 ⁸ 5,000	....	....	....	....	....	....	¹ 33.0 ⁶ 6.0	....	365	....
Toho Oil Co. Ltd.—Owase	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tohoku Oil Co. Ltd.—Sendai	83,900	54,700	....	....	¹ 25,000	¹ 12,000	....	² 31,100	¹ 12,000 ⁴ 18,500	....	....	....	....	....	....	....	....	....	⁶ 200
Tonen Corp.—Kawasaki ^P	292,950	116,235	....	....	¹ 79,380	¹ 17,680 ³ 26,460	² 22,250	³ 75,600 ⁴ 37,800	¹ 44,120 ² 13,230 ⁴ 107,730	¹ 6,615	....	....	....	....	....	² 44.0 ⁶ 11.0	....	522	....
Wakayama	156,870	58,307	....	....	¹ 34,020	¹ 34,918	....	³ 28,350 ⁴ 28,350	¹ 34,918 ⁴ 53,865 ⁷ 9,568	¹ 2,079	....	....	....	7,008	....	¹ 16.0 ⁵ 7.0 ⁶ 10.0	....	172	....
Wakayama Petroleum Refining Co. Ltd.—Kainan City, Wakayama	50,000	30,000	....	....	....	....	....	....	⁴ 20,000 ⁷ 9,000	....	....	....	....	8,500	....	² 135.0	....	....	....
Total	4,997,660	1,652,867	88,500	....	740,300	712,608	158,890	2,475,480	1,750,741	46,824	5,700	133,165	20,400	41,313	6,585	1,297.1	1,993	8,363	115,869
JORDAN																			
Jordan Petroleum Refinery—Zerka . . .	90,400	16,700	....	....	¹ 4,000	¹ 10,900	^c 14,350	....	¹ 17,300	....	....	....	....	....	....	² 8.0 ⁴ 8.0	....	....	4,250
Total	90,400	16,700	....	....	4,000	10,900	4,350	....	17,300	....	....	....	....	....	....	16.0	....	....	4,250
KENYA																			
Kenya Petroleum Refineries Ltd.— Mombasa	70,000	....	....	....	....	¹ 9,300	....	⁴ 6,000	⁴ 30,000	....	....	....	....	....	....	....	....	....	¹ 100
Total	70,000	....	....	....	....	9,300	....	6,000	30,000	....	....	....	....	....	....	....	....	....	1,100
KUWAIT																			
Kuwait National Petroleum Co.—Mina Abdulla ^a	247,000	142,500	² 68,400	....	....	....	^c 138,250	¹ 90,900	² 6,750 ⁶ 72,000	....	....	....	....	....	....	¹ 182.0 ⁴ 24.0	² 400	⁸ 10	....
Mina Al-Ahmadi ^a	427,500	80,750	....	....	¹ 36,000	¹ 32,400	^c 134,200	¹ 118,800	¹ 32,400 ⁴ 68,670	¹ 5,616	....	....	....	....	¹ 656	¹ 198.0 ⁴ 56.0	....	¹ 334	....
Shuaiba ^a	190,000	131,100	....	....	....	¹ 13,500	^c 136,000 ^e 245,000	....	¹ 22,500 ³ 54,000	....	....	....	....	....	....	¹ 210.0	....	⁸ 25	....
Total	864,500	354,350	68,400	....	36,000	45,900	153,450	209,700	256,320	5,616	....	....	....	....	656	670.0	2,400	2,969	....
LEBANON																			
Tripoli Oil Installations—Tripoli	20,000	12,730	....	....	¹ 7,250	¹ 4,392	....	² 7,392	....	....	....	....	....	....	....	....	....	....	⁴ 09
Zahrani Oil Installations—Sidon	17,500	....	....	....	....	¹ 3,050	....	....	¹ 3,050	....	....	....	....	....	....	....	....	....	....
Total	37,500	12,730	....	....	7,250	7,442	....	7,392	3,050	....	....	....	....	....	....	....	....	....	409
LIBERIA																			
Liberia Petroleum Refining—Monrovia .	15,000	1,000	....	....	....	¹ 2,000	....	....	¹ 2,300 ⁴ 1,000	....	....	....	....	....	....	....	....	....	² 00
Total	15,000	1,000	....	....	....	2,000	....	....	3,300	....	....	....	....	....	....	....	....	....	200
LIBYA																			
Azzawiya Oil Refining Co.—Azzawiya and Benghazi	120,000	7,548	....	....	....	¹ 13,440	....	....	¹ 16,604 ⁶ 19,926	....	....	....	....	635	....	....	....	....	³ 432
Ras Lanuf Oil & Gas Processing Co.—Ras Lanuf	220,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sirte Oil Co.—Brega	8,400	....	....	....	....	¹ 1,200	....	....	² 1,200	....	....	....	....	....	....	....	....	....	....
Total	348,400	7,548	....	....	....	14,640	....	....	37,730	....	....	....	....	635	....	....	....	....	3,432
LITHUANIA																			
JSC Mazeikiu Nafta—Mazeikiai	263,420	83,223	....	² 29,525	¹ 43,692	¹ 25,741	....	....	¹ 51,482 ⁴ 11,937	....	....	....	....	....	¹ 125	¹ 62.5	....	¹ 98	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Total	263,420	83,223	....	29,525	43,692	25,741	....	....	^{542,511} 105,930	....	....	....	....	....	125	62.5	....	198	....
MACEDONIA																			
Okta Crude Oil Refinery—Skopje.....	51,180	....	....	....	....	110,780	....	^{45,870}	^{214,870}	....	....	....	^{33,490}	....	....	....	....	....	....
Total	51,180	....	....	....	....	10,780	....	5,870	14,870	....	....	....	3,490	....	....	....	....	....	....
MADAGASCAR																			
Solima Raffinerie—Toamasina	15,000	1,500	....	26,000	....	22,000	....	23,600	64,500	....	....	....	....	....	....	....	....	....	....
Total	15,000	1,500	....	6,000	....	2,000	....	3,600	4,500	....	....	....	....	....	....	....	....	....	....
MALAYSIA																			
Esso Malaysia Berhad—Port Dickson. .	84,400	4,400	....	....	....	117,700	....	....	^{224,900} ^{410,800}	....	....	....	....	....	....	....	....	....	....
Petronas—Kertih	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Melaka I.	100,000	....	....	....	....	^{320,000}	....	....	^{120,000}	....	....	....	....	....	....	....	....	....	....
Melaka II	100,000	62,000	^{221,000}	....	....	26,000	28,500	....	^{235,000}	....	....	....	9,000	....	....	....	....	....	....
Sarawak Shell Berhad—Lutong	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shell Refining Co. Berhad—Port Dickson	155,000	7,000	....	....	6,000	14,000 ^{313,000}	....	....	^{232,000} ^{45,000}	....	....	....	....	....	....	....	....	....	4,000
Total	524,400	73,400	21,000	....	6,000	80,700	28,500	....	127,700	....	....	....	9,000	....	....	....	....	....	4,000
MARTINIQUE																			
Societe Anonyme de la Raffinerie des Antilles—Fort-de-France	16,090	....	....	....	....	^{43,019}	....	....	^{15,176} ^{48,977}	....	....	....	....	....	....	....	....	15	....
Total	16,090	....	....	....	....	3,019	....	....	14,153	....	....	....	....	....	....	....	....	15	....
MEXICO																			
Petroleos Mexicanos—Cadereyta	235,000	137,000	....	50,000	165,000	120,000	....	....	86,000	19,700	....	....	....	....	¹⁷⁰⁰	....	....	....	15,000
Cd. Madero	195,000	86,100	....	....	143,000	135,000	....	....	58,000	^{25,111}	....	....	....	....	....	....	....	....	18,000
Minatitlan	200,000	81,000	....	....	140,000	131,000	....	....	100,000	15,000	....	^{117,000}	....	....	....	....	....	....	....
Salamanca	245,000	143,000	....	....	160,000	125,000	^{218,500}	....	96,000	17,435	....	....	....	16,250	^{1,022}	31.0	....	....	15,000
Salina Cruz	330,000	155,000	....	50,000	180,000	^{350,000}	....	....	161,000	38,800	....	....	....	....	^{2,093}	....	....	....	....
Tula Hidalgo	320,000	155,000	^{141,000}	....	180,000	165,000	....	....	247,000	24,726	....	....	....	....	^{4,187}	....	....	....	....
Total	1,525,000	757,100	41,000	100,000	368,000	226,000	18,500	....	748,000	120,772	....	17,000	....	16,250	8,002	31.0	....	....	48,000
MOROCCO																			
Samir—Mohammedia ^B	125,230	17,465	....	....	....	121,830	....	....	^{121,830} ^{68,670}	....	....	....	....	2,460	....	....	....	....	5,630
Samir ^C —Sidi Kacem	31,400	7,840	....	....	^{425,600}	12,935	....	....	^{72,510} ^{12,935}	....	....	....	....	....	....	....	....	....	....
Total	156,630	25,305	....	....	5,600	24,765	....	....	35,945	....	....	....	....	2,460	....	....	....	....	5,630
MYANMAR																			
Myanma Petrochemical Enterprise—Chauk	6,000	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Thanlyin	26,000	2,000	^{25,200}	....	....	....	....	....	....	....	....	....	....	500	....	....	120	....	....
Total	32,000	4,000	5,200	....	....	....	....	....	....	....	....	....	....	500	....	....	120	....	....
NETHERLANDS																			
Esso Benelux BV—Rotterdam	180,000	80,700	^{A336,660}	....	....	^{328,825}	140,500	....	^{128,825} ^{210,660} ^{470,500} ^{618,140}	....	....	....	....	....	....	121.0	....	564	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Kuwait Petroleum Europoort BV—Rotterdam	75,500	37,600	....	19,200 26,800	....	322,600	....	....	141,200 431,800 75,900	....	....	....	36,500	4,500	....	42.0	....	72	3,320
Netherlands Refining Co.—Europoort*	399,000	101,650	....	260,300	150,400	153,100	....	....	131,500 263,900 464,800	25,850	....	....	37,200	....	11,350	....	....	....	....
Shell Nederland Raffinaderij BV—Pernis	374,000	148,000	....	245,000	154,000	342,000	222,000	286,000	2138,000 38,000 7300	26,800	....	....	....	7,100	12,550	159.0	....	....	5,500
Smid & Hollander Raffinaderij BV—Amsterdam	10,000	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5,800
Total Raffinaderij Nederland NV—Vlissingen	149,342	54,610	....	....	....	325,223	2145,653	....	217,081 428,959	....	....	125,618	....	....	....	162.9	....	205	....
Total	1,187,842	430,560	36,660	121,300	104,400	171,748	108,153	86,000	559,565	12,650	....	25,618	13,700	11,600	3,900	144.9	....	841	14,620

NETHERLANDS ANTILLES

Refineria Isla Curazao SA—Emmstad	320,000	195,000	....	180,000	150,000	120,000	....	....	153,000 437,000 514,000 73,000	26,500	12,900	....	....	12,000	....	....	....	160	22,000
Total	320,000	195,000	....	80,000	50,000	20,000	....	....	107,000	6,500	2,900	....	....	12,000	....	....	....	160	22,000

NEW ZEALAND

New Zealand Refining Co. Ltd.—Whangarei	98,000	42,750	....	....	....	122,500	125,000	....	232,400 418,000	....	....	....	....	....	....	144.0	....	80	4,410
Total	98,000	42,750	....	....	....	22,500	25,000	....	50,400	....	....	....	....	....	....	44.0	....	80	4,410

NICARAGUA

Esso Caribbean and Central America—Managua	21,000	1,900	....	....	....	13,200	....	....	25,700 46,600 54,000	....	....	....	....	....	....	....	....	....	....
Total	21,000	1,900	....	....	....	3,200	....	....	16,300	....	....	....	....	....	....	....	....	....	....

NIGERIA

Kaduna Refinery & Petrochemical Co. (NNPC)—Kaduna	110,000	36,290	....	....	118,000	115,300	....	....	121,600 415,750 8536	....	....	2291	....	3,878	....	....	....	....	14,850
Port Harcourt Refining Co. (NNPC)— Port Harcourt, Alesa Eleme	60,000	....	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Port Harcourt, Rivers State.	150,000	54,000	....	....	140,000	433,000	....	....	133,000 614,500	27,020	22,274	....	13,610	....	....	....	....	....	....
Warri Refinery & Petrochemical Co. (NNPC)—Warri	118,750	34,200	....	....	124,700	115,770	....	....	215,770 68,075	22,850	....	....	....	....	....	....	....	....	....
Total	438,750	124,490	....	....	82,700	70,070	....	....	109,231	9,870	2,274	291	3,610	3,878	....	....	....	....	14,850

NORTH KOREA

Government [®]	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ungi.	42,000	....	....	....	....	17,300	....	....	17,400	....	....	11,000	....	....	11,000	....	....	....	....
Total	71,000	....	....	....	....	7,300	....	....	7,400	....	....	1,000	....	....	1,000	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
NORWAY																			
Esso Norge AS—Slagen	105,000	....	....	230,200	....	112,100	....	....	222,600 439,200 69,500	....	....	....	....	....	....	....	....	24	....
Norske Shell AS—Sola	53,000	....	....	118,000	....	111,000	....	....	117,500 411,000	....	....	....	34,000	....	....	....	....	....	....
Statoil Mongstad—Mongstad	200,000	....	225,000	....	5254,000	19,800 315,800	....	217,100 416,900	126,000 610,000	....	111,500	....	34,000	....	....	....	610	....	....
Total	358,000	....	25,000	48,200	54,000	48,700	....	34,000	135,800	....	11,500	....	8,000	....	....	....	610	24	....
OMAN																			
Oman Refinery Co.—Mina Al Fahal . . .	85,000	....	....	....	....	316,000	....	....	221,000	....	....	....	....	....	....	....	....	....	....
Total	85,000	....	....	....	....	16,000	....	....	21,000	....	....	....	....	....	....	....	....	....	....
PAKISTAN																			
Attock Refinery Ltd.—Rawalpindi	35,000	5,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
National Refinery Ltd.—Korangi, Karachi	62,050	12,600	....	....	....	33,800	....	....	23,800	....	....	....	....	3,400	....	....	....	....	3,600
Pakistan Refinery Ltd.—Karachi	46,300	....	....	....	....	22,700	....	....	418,100	....	....	....	....	....	....	....	....	....	....
Total	143,350	18,300	....	....	....	6,500	....	....	21,900	....	....	....	....	3,400	....	....	....	....	3,600
PANAMA																			
Refineria Panama SA—Las Minas	60,000	6,500	....	227,000	....	111,000	....	....	112,500 426,700	....	....	....	....	....	....	....	....	....	....
Total	60,000	6,500	....	27,000	....	11,000	....	....	39,200	....	....	....	....	....	....	....	....	....	....
PARAGUAY																			
Petroleos Paraguayos—Villa Elisa	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PERU																			
Maple Gas Corp.—Pucallpa	3,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroperu S.A.—Conchan	6,500	4,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Iquitos Loreto	10,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
La Pampilla Lima	100,000	19,000	....	....	16,700	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Talara	62,000	24,000	....	....	116,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	182,250	47,400	....	....	23,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....
PHILIPPINES																			
Caltex (Philippines) Inc.—Batangas . . .	84,000	19,500	....	....	112,000	19,000	....	....	29,000 416,000	....	....	....	....	....	....	....	....	40	....
Petron Corp.—Limay, Bataan	180,000	32,000	....	....	112,000	117,000 317,000	....	436,000	254,000	....	....	....	....	....	....	410.0	....	71	....
Philippine Petroleum Corp.—Pililla . . . .	....	21,000	....	....	....	....	....	....	....	....	....	....	....	3,700	....	....	....	....	1,200
Pilipinas Shell Petroleum Corp.—Tabango	137,000	....	....	120,300	....	318,900	....	247,300	231,100	....	....	....	....	....	....	....	....	....	....
Total	401,000	72,500	....	20,300	24,000	61,900	....	83,300	110,100	....	....	....	....	3,700	....	10.0	....	111	1,200
POLAND																			
Government-owned refineries at Czechowice, Gorlice, Jaslo, Jedlicze, Trzebinia	32,000	....	....	....	....	....	....	....	....	....	....	13,500 2770	....	....	11,600	....	....	....	....
Petrochemia—Plock	260,000	115,000	....	....	146,000	125,000	149,500	....	124,000 638,000 73,000	23,000	....	....	....	....	....	....	....	....	13,000
Rafineria Gdanska S.A.—Gdansk ^C	90,000	40,000	....	....	....	314,000	....	....	227,500 416,000	....	....	....	....	4,500	....	....	....	24	4,600

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Total	382,000	155,000	....	....	46,000	39,000	49,500	....	^{76,700} 115,200	3,000	....	4,270	....	4,500	1,600	....	....	24	17,600
PORTUGAL																			
Petrolgal—Leca da Palmeira, Porto . . .	91,300	11,400	....	....	....	^{114,800} ^{310,600}	....	....	^{142,200} ^{428,800}	....	....	^{117,300}	....	....	....	....	....	⁴⁵	....
Sines	213,000	67,000	....	^{223,400}	^{131,500}	....	^{7m49,180}	^{230,600}	^{124,750} ^{431,500} ^{513,500}	^{25,400}	....	....	....	....	....	....	....	²⁰⁷	....
Total	304,300	78,400	....	23,400	31,500	25,400	9,180	30,600	144,350	5,400	....	17,300	....	....	....	....	....	252	....
PUERTO RICO																			
Caribbean Petroleum Corp.— Bayamon	49,000	34,000	....	....	^{114,200}	^{16,000}	....	....	^{16,000} ^{98,000}	....	^{13,000}	....	....	....	....	^{23.5}	¹⁰	¹⁷	....
Sunoco Inc.—Yabucoa . . . . .	....	34,000	....	....	....	....	^{315,600}	....	....	....	....	....	....	^{9,200}	....	^{219.0}	....	⁴⁹	....
Total	49,000	68,000	....	....	14,200	6,000	15,600	....	14,000	....	3,000	....	....	9,200	....	22.5	10	66	....
QATAR																			
National Oil Distribution Co.—Umm Said	57,500	....	....	....	....	^{12,100} ^{39,400}	....	....	^{219,500} ^{619,850}	....	....	....	^{35,300}	....	....	....	....	....	....
Total	57,500	....	....	....	....	11,500	....	....	39,350	....	....	....	5,300	....	....	....	....	....	....
ROMANIA																			
Arpechim SA—Pitesti ^{BC}	70,288	37,589	....	^{211,277}	^{119,178}	^{112,233}	^{31,534}	....	^{111,507} ^{419,178}	....	....	^{11,591}	....	⁷⁵²	....	^{11.5}	....	²²	^{3,320}
Astra SA—Ploiesti	56,000	9,400	^{28,600}	....	....	....	....	^{53,000}	....	....	....	....	....	^{6,300}	....	^{12.1}	²²⁰	....	^{1,500}
Petrobraz SA—Ploiesti	69,280	39,240	^{212,660}	....	^{121,400}	^{113,440}	....	....	^{113,920} ^{65,540}	....	....	^{11,510}	³⁹⁹⁵	....	....	....	⁴⁰⁰	....	....
Petrolsub SA—Bacau	8,000	5,200	....	....	....	....	....	....	....	....	....	^{14,700}	....	²¹⁰	....	....	....	....	^{2,870}
Petromidia SA—Midia	100,000	....	^{222,000}	....	^{119,000}	^{212,200}	....	....	^{116,000} ^{413,000} ^{523,000} ^{66,500}	....	....	^{14,700}	....	....	¹⁸⁰⁰	^{18.1}	....	⁸⁸	....
Petrotel SA—Ploiesti ^C	104,000	55,970	^{211,480}	^{25,500}	^{120,900}	^{111,490}	....	....	^{120,000} ^{620,680} ^{73,200}	^{22,300}	....	....	....	^{2,680}	¹⁵¹⁰	^{24.3}	²⁷⁰	....	^{3,670}
Rafinaria Darmanesti SA— Darmanesti	16,000	....	^{19,500}	^{18,800}	....	^{23,000}	....	....	....	....	....	....	....	....	....	....	³⁰⁰	....	....
Rafo SA—Onesti, Bacau	54,625	....	^{24,155}	^{26,570}	^{118,000}	^{311,300}	....	....	^{112,800} ^{521,900}	....	....	....	....	....	....	....	¹⁷³	²³	....
Steaua Romania SA—Cimpina	9,272	6,341	....	....	....	....	....	....	....	....	....	....	....	⁴²⁴	....	....	....	....	^{1,110}
Vega SA—Ploiesti	11,572	3,764	....	....	....	....	....	....	⁸³⁶³	....	....	....	....	....	....	....	....	....	....
Total	499,037	157,504	68,395	32,147	98,478	63,663	1,534	3,000	187,588	2,300	....	7,801	995	10,366	1,310	16.0	1,363	133	12,470
SAUDI ARABIA																			
Arabian Oil Co. Ltd.—Ras Al Khafji . . .	30,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petromin-Shell—Al-Jubail	292,000	84,000	....	^{232,000}	....	^{319,000}	^{144,000}	^{249,000}	^{119,000} ^{261,000} ^{453,000}	....	....	^{15,800} ^{27,000}	....	....	....	^{197.0}	....	....	....
Saudi Arabian Oil Co. (Saudi Aramco)—Rabigh	325,000	....	....	....	....	....	....	....	^{447,000}	....	....	....	....	....	....	^{112.0}	....	....	....
Ras Tanura	325,000	135,000	....	^{260,000}	....	^{154,000}	^{44,000}	....	^{154,000}	....	....	....	....	....	....	....	....	....	....
Jeddah	42,000	34,000	....	....	^{113,000}	^{13,000}	^{310,000}	....	^{13,000}	....	....	....	....	....	....	....	....	....	....
Riyadh ^U	140,000	52,350	....	....	....	^{135,660}	^{133,820}	....	^{135,660}	....	....	....	....	....	....	^{180.7}	....	....	....
Yanbu	190,000	....	....	....	....	^{135,000}	....	....	^{614,500} ^{135,000} ^{615,000}	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Saudi Aramco-Mobil—Yanbu	366,000	142,400	....	246,100	190,600	246,700	....	....	173,500 693,400	223,500	....	....	112,600 320,400	....	12,200	....	....	....	....
Total	1,710,000	447,750	....	138,100	103,600	193,360	131,820	49,000	504,060	23,500	....	12,800	33,000	....	2,200	189.7	....	....	....
SENEGAL																			
Ste. Africaine de Raffinage—M'Bao (Dakar)	17,000	8,000	....	....	....	12,000	....	....	2,000	....	....	....	....	....	....	....	....	....	....
Total	17,000	8,000	....	....	....	2,000	....	....	2,000	....	....	....	....	....	....	....	....	....	....
SERBIA																			
Novi Sad	60,246	30,000	....	....	....	112,233	....	44,600	110,700 44,400 74,600	....	....	....	....	1,500	....	10.5	....	....	4,000
Rafinerija Nafta Pancevo—Pancevo . . .	107,018	45,962	....	....	121,210	19,377	....	....	17,700 44,550 69,800	13,450	....	12,904	....	....	....	....	....	60	4,242
Total	167,264	75,962	....	....	21,210	21,610	....	4,600	41,750	3,450	....	2,904	....	1,500	....	0.5	....	60	8,242
SIERRA LEONE																			
Sierra Leone Petroleum Refining Co. Ltd.—Freetown.	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SINGAPORE																			
Esso Singapore Pty. Ltd.—Pulau Ayer Chawan	265,000	51,000	....	250,000	....	111,600	11,600	....	223,000 484,300	....	....	....	....	....	....	13.0 411.0	....	126	7,600
Mobil Oil Singapore Pty. Ltd.—Jurong. .	300,000	95,000	....	256,000	....	118,000 348,000	126,000	511,000	190,000 448,000	....	....	115,000 33,300	....	8,000	....	116.0 418.0	....	....	....
Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	405,000	74,800	....	1260,000	134,000	16,900 330,100	130,000	277,600	284119,300	23,000	....	....	....	6,500	....	140.8	....	....	8,400
Singapore Petroleum Co. Ltd.—Pulau Merlimau	285,000	71,250	....	230,400	231,000	213,500	113,300 m417,000	478,000	113,700	14,200	24,100	....	....	....	11,400	235.0 47.0 514.0 65.0	....	....	10,400
Total	1,255,000	292,050	....	196,400	65,000	128,100	87,900	166,600	378,300	7,200	4,100	18,300	....	14,500	1,400	149.8	....	126	26,400
SLOVAKIA																			
Slovnaft, Joint Stock Co.—Bratislava ^B .	115,000	53,030	....	....	....	122,270	116,970	....	120,850 33,410 446,000 73,200 8370	....	....	13,160 41,250	35,790	3,200	....	132.9 58.2	....	74	9,070
Total	115,000	53,030	....	....	....	22,270	16,970	....	73,830	....	....	4,410	5,790	3,200	....	41.1	....	74	9,070
SLOVENIA																			
Nafta Lendava—Lendava	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SOMALIA																			
Iraqsoma Ref. Co.—Mogadishu	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
SOUTH AFRICA																			
Caltex Oil SA—Cape Town	110,000	51,200	....	² 11,000	¹ 22,300	¹ 15,000	....	....	² 24,000 ⁴⁸⁶ 26,000	....	¹ 4,000	....	² 5,500	....	....	....	....	82	....
Engen Petroleum Ltd.—Durban ^{WX}	104,000	39,000	....	² 34,000	¹ 22,600	¹ 20,750	....	....	¹ 27,000 ^{443,000} ^{52,900}	² 2,623	¹ 530	¹ 1,500	³ 6,290	² 739	....	^{48.4}	....	¹ 30	^{4,830}
National Petroleum Refiners of South Africa Pty Ltd.—Sasolburg . . .	87,547	34,475	....	....	¹ 224,604	¹ 49,781	¹ 91,774	¹ 98,294	² 29,585 ^{428,906}	² 31,396	....	....	¹ 14,491	....	....	^{129.1} ^{65.8}	....	¹ 20	⁹¹³
Shell and BP Petroleum Refineries Pty. Ltd.—Durban	165,000	71,000	....	² 30,000	¹ 33,000	¹ 29,000	....	....	² 46,000 ^{470,000} ^{612,000} ⁷³⁷⁰	² 3,100	....	....	....	³ 2,200	....	....	²⁴⁰	¹⁴⁰	....
Total	466,547	195,675	....	75,000	302,504	114,531	91,774	98,294	309,761	37,119	4,530	1,500	26,281	5,939	....	43.3	240	472	5,743
SOUTH KOREA																			
Hyundai Lube Oil—Busan [*]	9,500	6,650	....	....	....	....	....	....	² 1,800 ^{71,080}	....	....	....	....	¹ 800	....	^{20.4}	....	....	^{3,600}
Hyundai Oil Refinery Co.—Daesan . . .	310,000	41,000	² 19,000	....	....	³ 20,000	¹ 22,000	....	² 27,000 ^{412,000}	....	....	....	....	¹ 000	....	^{254.0}	^{1,200}	¹⁸⁰	^{3,727}
Inchon	270,000	18,000	....	....	....	¹ 5,400 ^{322,500}	....	....	² 27,900 ^{486,850}	....	....	¹ 13,000	....	....	....	....	....	¹²⁶	....
LG-Caltex—Yosu	633,600	9,600	....	....	¹ 63,000	¹ 16,000 ^{354,500}	....	....	¹ 80,800 ^{28,200} ^{4178,600}	....	....	¹ 22,000	....	² 800	^{12,250}	....	....	³³⁰	^{5,400}
Ssangyong Oil Refining Co. Ltd.—Onsan	500,000	27,400	....	....	¹ 50,000	¹ 4,800 ^{427,000}	^{60,000}	¹ 35,000 ^{230,000}	¹ 27,400 ²⁷⁸⁰ ^{443,800} ^{710,300}	....	....	¹ 9,600	....	^{5,500}	....	^{212.8} ^{720.1}	....	....	....
SK Corp.—Ulsan [*]	817,000	78,850	....	....	² 45,000	¹ 20,070 ^{349,500}	² 27,000	¹ 27,000 ^{354,000}	¹ 71,280 ^{24,500} ^{4159,300}	¹ 5,400	....	¹ 27,900 ^{28,055} ^{3,600}	....	....	^{14,770}	^{180.0} ^{265.0} ^{4199.0}	....	^{1,195}	^{2,970}
Total	2,540,100	181,500	19,000	....	158,000	219,770	109,000	146,000	761,590	5,400	....	84,155	....	11,100	7,020	431.3	1,200	1,831	15,697
SPAIN																			
Asfaltos Espanoles SA—Tarragona . . .	21,000	16,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{15,000}
BP Oil Espana—Castellon de la Plana [*]	106,500	44,650	....	....	¹ 22,500	¹ 15,300	....	⁴ 28,800	² 27,000 ^{417,100}	....	....	....	³ 8,100	....	....	....	....	....	....
Compania Espanola de Petroles— Huelva	100,000	38,400	....	² 9,300	¹ 19,400	¹ 17,500	....	....	¹ 13,930 ^{47,350}	....	....	¹ 8,350 ^{24,138} ^{36,000}	....	² 3,350	....	^{144.0} ^{452.6}	....	⁵⁰	^{7,470}
Cadiz	210,000	40,700	....	² 35,000	¹ 37,500	¹ 36,250	....	....	¹ 35,000 ^{416,000} ^{512,000} ^{640,000} ^{81,550}	² 5,650	....	¹ 11,700	² 5,500	⁷ 6,600	^{11,275}	....	....	¹⁴⁶	....
Tenerife	88,000	9,000	....	² 35,000	....	¹ 16,000	....	⁴ 25,000	....	....	....	....	....	....	....	....	....	⁴⁵	....
Petronor SA—Somorrostro Vizcaya . .	220,000	90,000	....	² 42,000	¹ 45,000	² 30,650	....	³ 35,000 ^{471,695}	¹ 45,000	² 5,000	....	....	....	....	^{11,564}	^{112.0} ^{224.0} ^{68.1}	....	³²⁴	....
Repsol-YPF SA—Cartagena Murcia . . .	120,000	14,000	....	....	....	¹ 25,000	....	....	² 29,000	....	....	....	....	³ 000	....	....	....	....	^{5,000}
La Coruna	135,000	40,000	² 13,500	....	¹ 28,000	¹ 22,000	....	....	⁴ 17,000	....	....	....	....	....	¹ 800	....	⁵⁵⁰	....	^{4,500}
Puertollano, Ciudad Real	135,000	62,000	² 16,000	....	¹ 30,000	¹ 18,000	....	² 10,000	⁴ 38,000	² 3,300	....	¹ 1,800	....	² 800	^{11,350}	....	⁷⁰⁰	....	^{6,000}
Tarragona	180,000	72,000	....	² 30,000	....	¹ 16,000	¹ 15,000	² 21,000	⁴ 20,000	....	....	....	....	....	^{11,300}	^{210.0}	....	....	....
Total	1,315,500	427,550	29,500	151,300	182,400	196,700	15,000	191,495	318,930	13,950	....	31,988	13,600	15,750	6,289	150.7	1,250	565	37,970

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
SRI LANKA																			
Ceylon Petroleum Corp.— Sapugaskanda	47,500	2,280	....	211,250	....	14,770	....	41,890	46,570	....	....	....	....	....	....	....	....	....	900
Total	47,500	2,280	....	11,250	....	4,770	....	1,890	6,570	....	....	....	....	....	....	....	....	....	900
SUDAN																			
China National Petroleum Corp.—El- Gily	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Concorp—Khartoum	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Port Sudan Refinery Ltd.—Port Sudan	21,700	....	....	....	....	11,900	....	....	48,100	....	....	....	....	....	....	....	....	....	....
Total	81,700	....	....	....	....	1,900	....	....	8,100	....	....	....	....	....	....	....	....	....	....
SURINAME																			
Staatsolie Maatschappij Suriname n.v.—Wanica District	7,000	7,000	....	2,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,000	7,000	....	2,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
SWEDEN																			
AB Nynas Petroleum—Gothenburg	12,500	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,500
Nynashamn	28,000	31,000	....	....	....	....	....	....	72,500	....	....	....	....	2,500	....	21.9	....	....	20,000
Preem Raffinaderi AB—Gothenburg	106,000	....	....	....	....	120,500	....	26,500	146,000	....	....	....	310,000	....	....	536.0	....	112	....
Shell Raffinaderi AB—Gothenburg	81,000	30,000	....	125,000	....	117,000	....	437,000	314,000	....	....	....	34,000	....	....	....	....	....	....
Skandinaviska Raffinaderi AB—Brofjorden-Lysekil	199,500	64,600	....	237,800	129,700	332,400	448,600	....	248,600	....	13,420	....	314,400	....	....	69.7	....	200	....
									345,900										
Total	427,000	134,600	....	62,800	29,700	69,900	48,600	71,500	190,000	....	3,420	....	28,400	2,500	....	47.6	....	312	28,500
SWITZERLAND																			
Raffinerie de Cressier SA—Cressier	60,000	24,000	....	111,000	....	116,000	....	227,000	127,000	....	....	....	33,600	....	....	....	....	....	5,200
				29,000					48,000										
Tamoil SA—Collombey	72,000	....	....	....	....	112,000	84,400	....	118,800	....	....	....	36,400	....	....	....	....	....	....
									420,000										
Total	132,000	24,000	....	20,000	....	28,000	6,400	27,000	73,800	....	....	....	10,000	....	....	....	....	....	5,200
SYRIA																			
Banias Refining Co.—Banias	135,000	50,000	....	225,000	....	316,000	425,000	416,000	116,000	....	....	....	37,500	....	....	....	....	....	....
Homs Refinery Co.—Homs	107,140	12,200	218,200	....	....	39,812	....	23,050	18,928	....	....	....	32,910	....	....	....	400	40	6,422
								424,724											
Total	242,140	62,200	18,200	25,000	....	25,812	25,000	43,774	24,928	....	....	....	10,410	....	....	....	400	40	6,422
TANZANIA																			
Tanzanian & Italian Petroleum Refining Co. Ltd.—Kigamboni Dar es Salaam	14,900	....	....	12,500	....	22,500	....	....	24,400	....	....	....	....	....	....	....	....	....	....
Total	14,900	....	....	2,500	....	2,500	....	....	4,400	....	....	....	....	....	....	....	....	....	....
THAILAND																			
Esso Standard Thailand Ltd.— Sriracha	173,000	49,000	....	....	133,000	19,500	....	....	241,600	....	....	....	....	....	....	....	....	164	5,000
						320,000			31,000										
									458,200										
									613,700										
Petroleum Authority of Thailand— Bangchak Bangkok	61,750	....	....	....	....	19,450	....	53,150	14,950	....	....	....	....	....	....	14.7	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Refinery Company (Refco)—Map Ta Phut, Rayong	275,000	46,835	....	....	133,300	313,500	....	....	^{25,850} ^{816,200} 113,500	....	....	....	....	....	....	....	....	....	....
Thai Oil Co. Ltd.—Sriracha	203,000	55,900	....	217,400	111,200	335,400	119,900	24,100	^{450,580} ^{525,200} 467,000	....	....	....	12,100	....	....	132.6	....	....	3,400
Total	712,750	151,735	....	17,400	77,500	87,850	19,900	7,250	297,780	....	....	....	2,100	....	....	37.3	....	164	8,400

TRINIDAD

Petroleum Co. of Trinidad & Tobago Ltd.—Pointe-a-Pierre	160,000	120,000	....	228,800	125,000	119,100	^m 147,000	418,000	119,100	11,000	11000	....	....	1,500	1950	^{126.0} ^{626.0}	....	150	....
Total	160,000	120,000	....	28,800	25,000	19,100	47,000	18,000	19,100	1,000	1,000	....	....	1,500	950	52.0	....	150	....

TUNISIA

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

TURKEY

Anadolu Tasfiyehanesi AS—Mersin	100,000	....	....	....	....	112,600	....	9,000	119,800	....	....	....	....	....	....	....	....	....	....
Narli Petroleum Refining Industry & Commerce Inc.—Narli, Kahramanmaraş	2,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Turkish Petroleum Refineries Corp.—Aliaga-Izmir	226,440	84,540	....	219,620	115,095	19,810	^c 117,360	411,320	^{111,320} ^{211,320} ^{415,845} ^{72,250}	....	....	....	....	5,870	....	^{234.0} ^{430.1}	....	114	5,440
Batman, Siirt	22,015	2,140	....	14,720	....	11,302	....	....	^{11,302}	....	....	....	....	....	....	....	....	....	3,235
Izmit	226,440	88,060	....	....	122,645	^{16,920} ^{314,000}	125,160	427,050	^{120,760} ^{213,215} ^{472,965} ^{86,290}	....	....	....	35,030	....	....	150.0	180	137	9,435
Kırıkkale	113,220	30,190	....	....	....	120,130	^c 114,500	....	^{120,130} ^{415,096}	....	....	....	39,025	....	....	^{223.0} ^{421.8}	....	83	5,750
Total	690,915	204,930	....	24,340	37,740	64,762	57,020	47,370	215,293	....	....	....	14,055	5,870	....	158.9	180	334	23,860

UNITED ARAB EMIRATES

Abu Dhabi																			
Abu Dhabi National Oil Co.—Ruweis	145,000	56,680	....	....	119,150	....	^c 131,050	221,850 ^{339,248}	421,889	....	....	....	....	....	....	153.0	....	....	....
Umm Al-Nar	88,500	....	....	....	....	314,000	....	....	^{223,500} ^{422,500}	....	....	....	....	....	....	....	....	35	....
Total	233,500	56,680	....	....	19,150	14,000	31,050	61,098	67,889	....	....	....	....	....	....	53.0	....	35	....
Dubai																			
Emirates National Oil Co.—Jebel Ali	120,000	....	....	....	....	....	....	....	^{233,000} ^{411,500}	....	....	....	....	....	....	....	....	6	....
Total	120,000	....	....	....	....	....	....	....	44,500	....	....	....	....	....	....	....	....	6	....
Fujairah																			
Metro Oil Corp.	75,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	75,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

UNITED KINGDOM

England																			
Conoco Ltd.—South Killingholme	180,000	185,000	268,000	140,000	148,000	147,000	....	....	475,000	214,000	13,500	14,500	316,000	....	....	....	2,300	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Eastham Refinery Ltd.—Ellesmere Port	22,632	21,368	....	....	....	....	....	....	^{658,000} ^{828,000}	....	....	^{22,500}	....	....	....	....	....	....	14,737
Esso Petroleum Co. Ltd.—Fawley	311,240	131,905	....	....	^{182,406}	^{137,070} ^{223,554}	....	^{121,340}	^{194,683} ^{471,780} ^{711,461} ^{835,333}	....	^{19,471}	....	^{320,391}	^{8,963}	....	^{646.0}	....	²⁹⁶	^{19,453}
Lindsey Oil Refinery Ltd.—Killingholme South Humberside	192,000	92,000	....	^{228,700}	^{148,400}	^{132,600}	....	^{454,000}	^{251,000}	^{26,300}	^{11,900}	....	....	....	^{12,400} ^{31,300}	....	....	¹³⁰	^{7,100}
Mobil Oil Co. Ltd.—Coryton Essex	180,000	57,950	....	....	^{156,250}	^{334,200}	....	^{442,300}	^{166,600}	^{218,000}	....	....	^{313,500}	^{6,750}	....	....	....	....	^{2,430}
Phillips Imperial Petroleum Ltd.—Port Clarence	100,000	....	....	....	....	....	....	....	^{424,000}	....	....	....	....	....	....	....	....	⁴	....
Shell U.K. Ltd.—Stanlow	262,000	46,000	....	....	^{173,000}	^{129,000} ^{330,000}	....	^{257,000}	^{159,000} ^{214,000}	^{211,000}	....	^{19,000}	....	^{4,500}	....	....	....	....	....
Total	1,247,872	534,223	68,000	68,700	308,056	233,424	....	174,640	588,857	49,300	14,871	16,000	49,891	20,213	3,700	46.0	2,300	430	43,720
Scotland																			
BP Refinery Grangemouth Ltd.— Grangemouth	206,000	64,600	....	....	^{118,900}	^{139,600}	^{131,500}	^{431,500}	^{262,100}	^{24,500}	....	....	....	....	....	^{149.0}	....	....	....
Nynas UK AB—Dundee	12,800	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{8,300}
Total	218,800	76,600	....	....	18,900	39,600	31,500	31,500	62,100	4,500	....	....	....	....	....	49.0	....	....	8,300
Wales																			
Elf Oil UK Ltd.—Milford Haven	108,000	55,000	....	....	^{132,500}	^{117,800}	....	....	^{117,800} ^{27,500} ^{471,000} ^{86,800}	^{26,800}	^{21,800}	....	^{37,500}	....	....	....	....	²²	....
Texaco Ltd.—Pembroke, Dyfed	210,000	105,000	....	^{226,000}	^{190,000}	^{339,000}	....	^{460,000}	^{139,000} ^{214,000}	^{232,500}	....	....	^{119,900} ^{312,000}	....	....	....	....	¹⁶⁰	....
Total	318,000	160,000	....	26,000	122,500	56,800	....	60,000	156,100	39,300	1,800	....	39,400	....	....	....	....	182	....
UNITED STATES																			
ALABAMA																			
Coastal Mobile Refining Co.—Mobile Bay	20,000	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	^{11,000}
Hunt Refining Co.—Tuscaloosa	43,225	14,250	^{210,800}	....	....	^{16,480}	....	....	^{111,790} ^{410,800} ^{510,800} ^{225,000}	....	....	....	....	....	....	^{1a6.1} ^{47.0}	⁵⁰⁸	⁸¹	^{10,800}
Shell Chemical Co.—Saraland	85,000	28,000	....	....	....	^{121,000}	....	^{218,000}	^{225,000}	....	....	....	^{37,500}	....	....	....	....	²⁰	....
Total	148,225	57,250	10,800	....	....	27,480	....	18,000	58,390	....	....	....	7,500	....	....	13.1	508	101	21,800
ALASKA																			
ARCO Alaska Inc.—Prudhoe Bay	15,000	....	^{315,000}	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kuparuk	14,500	....	^{314,500}	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petro Star Inc.—North Pole	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valdez	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tesoro Alaska Co.—Kenai	72,000	16,500	....	....	....	^{112,000}	^{c12,500}	....	^{112,000}	....	....	....	^{34,000}	....	....	^{112.8}	....	²⁰	^{1,000}
Williams Alaska Petroleum Inc.—North Pole	210,000	3,000	....	....	....	....	....	....	....	....	....	^{12,500}	....	....	....	....	....	....	....
Total	371,500	19,500	29,500	....	....	12,000	12,500	....	12,000	....	....	2,500	4,000	....	....	12.8	....	20	1,000
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	50,350	18,525	....	....	^{117,190}	^{311,610}	....	....	^{118,000} ^{47,650} ^{518,900}	^{14,410}	....	....	^{35,850}	....	....	....	....	¹⁴²	^{6,930}
Total	63,050	24,525	....	....	17,190	11,610	....	....	49,050	4,410	....	....	5,850	....	....	2.5	....	142	9,330

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd										
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt	
CALIFORNIA																				
Anchor Refining Co.—McKittrick.	10,000	6,500	2,500
Atlantic Richfield Co.—Carson	260,000	130,000	² 65,000	....	¹ 96,000	¹ 52,000	¹ 43,000	....	¹ 40,000	¹ 15,000	¹ 2,800	....	¹ 3,500	....	¹ 2,500	¹ 105.0	¹ 2,400	¹ 350	....
									² 7,000				³ 20,000							
									⁴ 20,000											
									⁵ 90,000											
									⁶ 10,000											
Chevron Products Co.—El Segundo. . .	260,000	120,000	² 64,000	....	¹ 62,000	³ 40,000	¹ 45,000	² 68,000	¹ 52,000	¹ 21,000	....	....	¹ 4,000	....	¹ 1,700	¹ 68.0	³ 447	¹ 406	....
									⁴ 9,000				³ 19,000		³ 2,600	² 54.0				
									⁶ 6,000											
									⁸ 18,000											
Richmond ^W	225,000	110,000	....	....	¹ 65,000	¹ 45,000	¹ 41,000	....	¹ 50,000	¹ 20,000	¹ 1,800	....	³ 25,000	¹ 4,000	¹ 2,300	¹ 14.5	....	¹ 350	....
							³ 28,000		⁴ 75,000						³ 2,500					
							⁴ 40,000		⁷ 19,000											
Equilon Enterprises LLC—Bakersfield ¹ .	61,750	37,050	² 19,800	....	....	¹ 13,230	¹ 18,900	² 16,200	¹ 11,250	....	....	....	....	....	....	¹ 24.7	¹ 1,200	¹ 103	....
									⁸ 460											
Martinez.	154,800	102,400	² 24,200	....	¹ 67,700	² 28,200	¹ 33,800	....	¹ 26,000	¹ 10,200	² 2,300	....	³ 14,400	³ 500	....	¹ 101.2	¹ 1,181	¹ 432	¹ 15,000
			³ 20,400			² 1,000			³ 17,600											
									⁴ 21,400											
									⁵ 70,800											
									⁷ 8,600											
									⁸ 45,200											
Wilmington ¹	91,700	56,050	² 37,350	....	¹ 30,600	¹ 25,200	¹ 25,200	³ 26,100	¹ 18,000	¹ 8,010	....	....	....	....	....	¹ 14.0	¹ 1,820	¹ 285	....
									³ 6,300							¹ 55.0				
									⁴ 12,330							⁴ 69.0				
Exxon Co. USA—Benicia	129,500	68,500	¹ 27,000	....	¹ 71,500	² 36,000	¹ 33,500	² 37,000	¹ 29,000	¹ 15,000	¹ 2,500	....	....	....	¹ 3,500	¹ 131.5	¹ 1,080	¹ 275	....
									² 46,000											
									³ 11,000											
									⁴ 15,000											
									⁶ 12,000											
									⁸ 21,000											
Golden Bear Oil Specialties—Oildale . .	12,500	11,500	....	....	....	....	....	....	⁷ 2,000	....	....	....	....	⁶ 000	....	....	....	....	⁵ 000
Greka Energy ² —Santa Maria	10,000	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	⁷ 000
Huntway Refining Co.—Benicia	10,000	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	⁵ 000
Wilmington.	6,000	5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	³ 500
Kern Oil & Refining Co.—Bakersfield . .	21,400	....	....	....	....	¹ 3,000	....	....	¹ 4,500	....	....	....	....	....	....	....	....	⁵	....
									³ 2,000											
									⁴ 6,500											
Mobil Oil Corp.—Torrance	158,500	101,000	² 52,400	....	¹ 92,300	¹ 19,400	¹ 26,400	³ 105,300	² 24,300	² 23,800	....	....	....	....	....	¹ 137.6	³ 000	¹ 400	....
									⁶ 17,800											
Paramount Petroleum Corp.— Paramount.	45,000	26,500	....	....	....	¹ 7,500	....	² 10,800	² 9,500	....	....	....	....	....	....	....	....	³ 8	¹ 5,000
									⁴ 8,000											
									⁸ 8,000											
San Joaquin Refining Co. Inc.— Bakersfield.	24,300	14,300	....	² 10,000	....	....	....	....	⁴ 3,000	....	....	....	....	⁴ 000	....	¹ 3.5	....	³	⁵ 000
									⁴ 3.5											
Ten By, Inc.—Oxnard.	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tosco Refining Co.—Los Angeles (Carson and Wilmington)	130,500	78,000	² 48,000	....	¹ 45,000	¹ 35,200	¹ 24,750	....	¹ 50,850	¹ 9,450	....	....	³ 12,200	....	....	¹ 100.8	² 000	¹ 340	....
									⁵ 0,000											
									⁶ 35,000											
San Francisco (Avon, Rodeo, and Santa Maria)	271,000	172,400	¹ 42,000	....	¹ 66,500	¹ 49,100	¹ 64,000	² 65,000	¹ 43,700	¹ 15,000	....	....	³ 9,000	....	¹ 2,300	¹ 31.0	³ 500	¹ 460	....
			² 42,200			³ 21,500			³ 7,000						¹ 154.0					
									⁴ 33,000											
									⁶ 36,100											
Ultramar Diamond Shamrock Corp.—Wilmington.	78,000	45,000	² 25,000	....	¹ 52,000	³ 15,000	....	² 60,000	² 29,000	² 15,000	....	....	¹ 10,000	....	....	....	¹ 700	¹ 250	....
									³ 15,000											
									⁴ 36,000											
World Oil Co.—South Gate	7,000	7,125	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,971,450	1,108,825	467,350	10,000	649,600	390,330	423,550	388,400	1,257,190	152,460	9,400	....	117,100	27,500	17,400	1,067.3	21,328	3,697	58,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
COLORADO																			
Conoco Inc.—Commerce City	57,500	25,000	....	....	119,000	19,600	....	312,000	19,600 412,500	....	12,600	....	....	....	....	....	....	90	9,800
Ultramar Diamond Shamrock Corp.—Denver	28,000	9,500	....	....	18,000	19,000	....	....	19,000	....	1900	....	....	....	....	....	....	4	....
Total	85,500	34,500	....	....	27,000	18,600	....	12,000	31,100	....	3,500	....	....	....	....	....	....	94	9,800
DELAWARE																			
Motiva Enterprises LLC—Delaware City	152,000	95,000	149,000	....	166,000	38,000	217,100	....	162,100 426,100 627,000 842,000	18,190	15,040	11,260	....	....	12,192 2,322	140.0 442.0	1,800	579	....
Total	152,000	95,000	49,000	....	66,000	38,000	17,100	....	157,200	8,190	5,040	1,260	....	....	4,514	82.0	1,800	579	....
GEORGIA																			
Young Refining Corp.—Douglasville . .	6,000	....	....	....	....	....	....	....	....	....	....	....	....	1,200	....	....	....	....	3,000
Total	6,000	....	....	....	....	....	....	....	....	....	....	....	....	1,200	....	....	....	....	3,000
HAWAII																			
Chevron Products Co.—Barber's Point .	54,000	30,000	....	....	121,000	....	....	....	83,000	14,000	21,000	....	11,200	....	....	12.0	....	....	1,300
Tesoro Hawaii Corp.—Kapolei	95,000	40,000	....	213,000	....	113,000	118,000	....	111,000	....	....	....	....	....	....	215.0	....	34	....
Total	149,000	70,000	....	13,000	21,000	13,000	18,000	....	14,000	4,000	1,000	....	1,200	....	....	17.0	....	34	1,300
ILLINOIS																			
Citgo Petroleum Corp.—Lemont*	158,650	71,250	233,300	....	160,300	128,080	....	....	141,850 29,900 33,780 431,950 613,500	218,900	....	16,030	....	....	....	185.0	2,000	380	....
Clark Refining & Marketing—Blue Island	76,000	37,000	....	....	130,000	129,000	110,000	....	121,000	25,700	....	....	....	....	....	....	....	20	6,700
Hartford	68,000	30,000	215,000	....	126,500	113,000	....	....	111,400 23,800 43,800 67,600	26,000	....	....	3,800	....	....	12.4	680	....	....
Marathon Ashland Petroleum LLC—Robinson	192,000	54,200	226,600	....	145,600	232,300 339,900	125,200	....	156,100 464,600	211,400	....	....	313,300	....	11,300 200	123.8	1,270	180	....
Mobil Oil Corp.—Joliet	231,700	103,500	248,100	....	191,200	341,700	....	....	168,500 210,900 681,200	226,000	....	....	....	....	....	....	3,025	560	....
Equilon Enterprises LLC ^{AA} —Wood River	286,400	107,000	....	....	190,000	115,000 270,000	128,500	....	160,000 470,600 525,500	120,500	....	13,500	....	....	....	151.5	....	435	40,000
Total	1,012,750	402,950	123,000	....	343,600	268,980	63,700	....	585,980	88,500	....	9,530	17,100	....	1,500	82.7	6,975	1,575	46,700
INDIANA																			
BP Amoco—Whiting	410,000	242,000	234,200	....	1156,800	285,500	....	392,200	186,900 696,000 824,700	134,200	....	116,200	324,700	....	13,800	129.5	1,690	449	60,000
Countryside Cooperative Inc.—Mount Vernon	23,000	7,200	....	....	17,850	36,500	....	....	210,000	21,700	....	....	32,200	....	....	....	....	....	....
Laketon Refining Corp.—Laketon* . . .	3,990	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	436,990	249,200	34,200	....	164,650	92,000	....	92,200	217,600	35,900	....	16,200	26,900	....	3,800	29.5	1,690	449	60,000
KANSAS																			
Farmland Industries Inc.—Coffeyville . .	110,000	50,000	216,500	....	128,000	117,000	....	....	228,500 37,000 621,000	27,000	....	....	38,500	....	....	....	800	....	....
Frontier Oil Corp. ^{BB} —El Dorado*	103,550	37,050	216,200	....	134,650	125,200	....	343,200	120,250 216,200 630,960	210,350	....	12,700 41,500	313,500	....	....	16.0 311.8	860	250	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
National Cooperative Refinery Association—McPherson	75,500	32,100	220,800	....	120,800	320,300	410,400	....	122,200 29,400 424,000 69,000	26,600	....	....	13,300 39,400	....	....	....	612	81	....
Total	289,050	119,150	53,500	....	83,450	62,500	10,400	43,200	188,510	23,950	....	4,200	34,700	....	....	17.8	2,272	331	....
KENTUCKY																			
Marathon Ashland Petroleum LLC—Catlettsburg ^W	222,000	90,300	....	....	154,200 240,900	344,700	....	340,900	147,500 26,700 36,700 473,200 710,500	211,400	....	13,500 47,600	312,400	8,100	12,600	....	....	410	21,900
Somerset Refinery Inc.—Somerset	5,500	....	....	....	....	21,000	....	....	31,300 6400	....	....	....	....	....	....	....	....	....	....
Total	227,500	90,300	....	....	95,100	45,700	....	40,900	146,300	11,400	....	11,100	12,400	8,100	2,600	....	....	410	21,900
LOUISIANA																			
American International Refining Inc.—Lake Charles	35,000	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BP Amoco—Belle Chasse	250,000	92,000	225,200	....	1104,000	142,000	....	435,000	247,000 430,000	238,000	....	112,400 25,400	....	....	....	710.4	800	66	....
Calcasieu Refining Co.—Lake Charles	15,680	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Calumet Lubricants Co.—Cotton Valley	8,500	....	....	....	....	....	....	53,500	....	....	....	....	....	....	....	12.5 42.5	....	....	....
Princeton	9,500	8,500	....	....	....	....	....	58,000	....	....	....	....	....	7,000	....	14.5 44.5	....	3	....
Canal Refining Co.—Church Point	10,000	3,000	....	....	....	....	....	....	13,000	....	....	....	....	....	....	....	....	....	....
Cit-Con Oil Corp.—Lake Charles	....	36,100	....	....	....	....	....	....	....	....	....	....	....	8,550	....	....	....	....	....
Citgo Petroleum Corp.—Lake Charles	307,325	79,800	288,200	....	1117,000	145,900 346,800	134,200	....	192,700 211,700 429,700 561,200 822,950	120,700	....	....	328,800	....	13,150 34,140	1253.0	4,000	685	....
Conoco Inc.—Westlake	245,000	163,000	265,000	111,300	148,000	345,200	329,000	....	146,700 433,600 548,500 637,800 811,200	....	....	....	....	11,500	11,300	4110.0	3,800	363	....
Exxon Co.—Baton Rouge	483,000	218,000	2104,500	....	1216,500	269,000	122,500	....	1107,000 246,500 685,500 72,700 844,000	135,000	19,000	....	....	16,000	17,000	414.0 67.5	4,977	675	....
Marathon Ashland Petroleum LLC—Garyville ^W	232,000	118,800	....	....	1104,500	342,800	....	....	143,700 49,400 588,400	228,500	....	....	121,900 317,100	....	....	....	....	460	39,900
Mobil Oil Corp.—Chalmette	190,100	101,800	233,800	....	171,200	129,100 319,700	120,500	344,200	237,600 630,400	212,900	....	113,400	310,500	....	....	....	2,205	250	....
Motiva Enterprises LLC—Convent	225,000	100,000	....	212,000	185,000	136,000	245,000	....	140,000 488,000 534,000	113,050	23,600	....	311,250	....	12,250 32,500	358.0	....	711	....
Norco	230,000	78,000	225,500	....	1107,000	120,000 239,000	134,000	....	138,000 444,500	116,000	....	....	....	....	17,000	160.0	1,000	155	....
Murphy Oil USA Inc.—Meraux ^W	95,000	47,500	....	....	134,200	316,200	....	....	119,800 413,500 824,750	27,650	....	....	....	....	....	....	....	120	....
Orion Refining Corp. ^{CC} —Norco	200,000	220,000	275,000	....	....	112,000	....	330,000	130,000 630,000	....	....	....	....	....	....	....	4,110	290	....
Pennzoil-Quaker State Co. ^{DD} — Shreveport	46,200	23,085	....	....	1210,080	18,000	....	....	110,000 73,060	15,040	....	....	14,032	7,650	....	126.1	....	10	540

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd										
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt	
Placid Refining Co. LLC—Port Allen ^W . .	48,000	20,000	....	....	119,000	19,700	....	....	8,500 29,700 612,000	23,800	....	....	....	....	....	....	....	28	....
Shell Chemical Co.—St. Rose	55,000	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valero Energy Corp.—Krotz Springs . .	78,000	29,500	....	....	131,000	112,000	....	....	113,000 23,250	....	12,100	....	33,250	....	....	....	....	20	....
Total	2,763,305	1,378,085	417,200	23,300	947,480	493,400	185,200	120,700	1,433,310	180,640	14,700	31,200	96,832	50,700	27,340	333.0	20,892	3,836	40,440	
MICHIGAN																				
Lakeside Refining Co.—Kalamazoo . . .	5,600	....	....	....	....	1900	....	....	....	....	....	....	....	....	....	....	....	....	....
Marathon Ashland Petroleum LLC— Detroit	74,000	39,000	....	....	128,500	120,000	....	....	115,700 418,400 516,900	13,900	....	....	....	....	11,000	....	....	130	20,900
Total	79,600	39,000	....	....	28,500	20,900	....	....	51,000	3,900	....	....	....	....	1,000	....	....	130	20,900
MINNESOTA																				
Koch Petroleum Group L.P.— Rosemount	280,000	160,000	270,000	....	185,000	315,000 438,000	....	....	153,000 234,000 495,000 594,000 86,000	112,200	11,100 23,600	....	319,000	....	21,500	180.0 510.0	4,000	800	25,000
Marathon Ashland Petroleum LLC—St. Paul Park	70,000	32,300	....	....	123,800	119,000	....	323,800	120,900 423,800	25,700	....	....	11,900 36,700	....	....	19.5	....	90	9,500
Total	350,000	192,300	70,000	....	108,800	72,000	....	23,800	326,700	17,900	4,700	....	27,600	....	1,500	99.5	4,000	890	34,500
MISSISSIPPI																				
Chevron Products Co.—Pascagoula . .	295,000	231,000	271,000	....	163,000	171,000	158,000 284,000	....	145,000 460,000 635,000	114,800	....	119,000	....	....	12,100	1205.0	4,083	1,067	....
Ergon Refining Inc.—Vicksburg	23,000	10,200	....	....	....	....	....	26,000	76,500	....	....	....	....	6,000	....	1a7.7	....	....	....
Southland Oil Co.—Lumberton	5,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,150
Sandersville	11,000	6,050	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,500
Total	334,800	247,250	71,000	....	63,000	71,000	142,000	6,000	146,500	14,800	....	19,000	....	6,000	2,100	212.7	4,083	1,067	7,650
MONTANA																				
Cenex Harvest States—Laurel ^C	46,000	23,500	....	....	113,500	112,000	....	....	116,000 417,000 516,000	23,500	....	....	12,500	....	....	112.0 412.0	....	120	10,500
Conoco Inc.—Billings ^a	55,100	26,600	216,470	....	118,450	113,500	....	219,800	210,800 414,400 68,100	26,480	....	....	13,420	....	....	120.0 611.4	825	....	....
Exxon Co.—Billings	58,000	25,500	18,000	....	120,000	111,500	15,000	....	215,000 49,500 69,500 85,500	23,500	....	....	....	....	....	122.0 83.5	375	....	6,000
Montana Refining Co.—Great Falls . . .	7,000	3,350	....	....	12,300	11,000	....	....	11,000 41,950 52,900 6900	2650	1400	....	3650	....	....	....	....	....	2,800
Total	166,100	78,950	24,470	....	54,250	38,000	5,000	19,800	128,550	14,130	400	....	6,570	....	....	80.9	1,200	120	19,300
NEVADA																				
Foreland Refining Co.—Tonopah	3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	3,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
NEW JERSEY																				
Amerada-Hess Corp.—Port Reading . .	....	....	....	....	162,000	....	....	....	....	14,050	14,500	....	....	....	11,200	....	....	....	....
Coastal Eagle Point Oil Co.—Westville .	145,000	47,500	....	....	155,000	129,000	....	416,000	130,000	14,000	13,300	117,600	310,000	....	....	....	....	20	....
Tosco Refining Co.—Linden ^W	250,000	62,000	....	....	1138,000	228,000	....	345,000 465,000	129,000 614,000	112,000	....	....	13,000	....	....	611.0	....	90	36,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Valero Energy Corp.—Paulsboro	155,000	83,200	223,200	....	146,200	123,000	....	514,000	123,200 424,000 639,600 7680	210,300	....	....	....	11,500	....	110.6	1,255	160	14,000
Total	550,000	192,700	23,200	....	301,200	80,000	....	140,000	160,480	30,350	7,800	17,600	13,000	11,500	1,200	21.6	1,255	270	50,000
NEW MEXICO																			
Giant Refining Co.—Bloomfield	18,000	....	....	....	16,500	15,000	....	....	15,000 63,000	....	12,800	....	....	....	....	....	....	1	....
Gallup	20,800	....	....	....	18,500	17,300	....	....	17,500 64,000	21,800	....	....	34,000	....	....	....	....	2	....
Navajo Refining Co.—Artesia	60,000	20,000	....	....	118,500	312,500	....	....	125,000 425,500	27,800	....	....	310,000	....	....	....	....	30	3,500
Total	98,800	20,000	....	....	33,500	24,800	....	....	70,000	9,600	2,800	....	14,000	....	....	....	....	33	3,500
NORTH DAKOTA																			
BP Amoco—Mandan	58,000	....	....	....	124,700	211,500	....	....	112,000 84,800	24,200	11,100	....	34,800	....	....	....	....	15	....
Total	58,000	....	....	....	24,700	11,500	....	....	16,800	4,200	1,100	....	4,800	....	....	....	....	15	....
OHIO																			
BP Amoco—Toledo	152,000	66,000	234,200	....	157,000	240,800	128,500	....	238,000 414,300 538,000	110,900	....	....	....	....	....	133.0 424.0 68.0	1,736	314	8,600
Clark Refining & Marketing—Lima	165,000	53,000	222,500	....	138,000	253,000	424,000	....	160,000	....	....	14,950 23,150	318,500	....	....	710.4	800	20	....
Marathon Ashland Petroleum LLC—Canton	73,000	34,000	....	....	122,800	318,100	....	323,800	124,700 49,500	25,700	12,000	....	34,800	....	....	....	....	100	7,600
Sunoco Inc.—Toledo	140,000	30,000	....	....	160,000	145,600	128,200	....	148,000	19,000	....	19,000	....	....	....	152.0	....	....	....
Total	530,000	183,000	56,700	....	177,800	157,500	80,700	23,800	232,500	25,600	2,000	17,100	23,300	....	....	127.4	2,536	434	16,200
OKLAHOMA																			
Conoco Inc.—Ponca City	174,000	52,200	223,950	....	154,300	140,400	....	....	140,400 412,800 518,900 630,300	213,600	11,500	....	17,350	....	11,200	610.4	1,000	30	....
Gary-Williams Energy Corp.— Wynnewood ^W	45,000	14,000	....	....	117,500	311,250	14,500	....	110,500	24,500	....	....	33,500	....	....	19.0	....	....	4,500
Sinclair Oil Corp.—Tulsa	50,000	25,175	....	....	116,200	110,800	....	....	110,800 615,500	12,700	....	....	35,400	....	....	....	....	19	2,250
Sunoco Inc.—Tulsa ^B	85,000	30,000	28,500	....	....	117,500	....	....	124,000 710,500	....	....	....	....	8,500	....	....	350	....	....
Ultramar Diamond Shamrock Corp.—Ardmore	80,000	32,000	....	....	126,000	318,000	....	331,000	124,000 431,000	26,300	....	....	37,000	....	....	126.0 426.0	....	98	6,000
Total	434,000	153,375	32,450	....	114,000	97,950	4,500	31,000	228,700	27,100	1,500	....	23,250	8,500	1,200	71.4	1,350	147	12,750
PENNSYLVANIA																			
American Refining Group—Bradford ^W . Pennzoil-Quaker State Co. ^{DD} — Rouseville	10,000	....	....	....	....	11,800	....	....	23,500	....	....	....	....	2,600	....	....	....	....	....
Sunoco Inc.—Marcus Hook	175,000	26,400	....	....	193,000	115,600	....	412,000	136,000 77,470	110,000	....	119,200 32,400	....	....	12,600	16.0	....	....	....
Philadelphia	307,000	157,400	....	....	199,000	168,000	....	....	185,600 478,000	216,700	....	13,700 410,000	17,300	....	....	....	....	....	....
Tosco Refining Co.—Trainer	180,000	70,000	....	....	150,000	347,500	EE420,000	338,000	152,000 440,000	211,900	....	....	....	....	....	....	....	35	....
United Refining Co.—Warren	66,700	27,000	....	....	123,000	216,000	....	....	220,000 46,000 614,000	13,500	11,000	....	36,800	....	....	....	....	....	12,000
Total	754,400	286,975	....	....	265,000	154,138	20,000	50,000	348,420	42,100	1,000	35,300	15,135	6,875	2,600	9.5	....	35	12,000

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
TENNESSEE																			
Williams Energy Services—Memphis . .	140,000	15,000	....	....	¹ 65,000	¹ 15,000	....	....	¹ 20,000 ² 20,000 ⁶ 20,000	² 7,200	¹ 3,800	....	¹ 4,000	....	....	....	....	40	....
Total	140,000	15,000	....	....	65,000	15,000	....	....	60,000	7,200	3,800	....	4,000	....	....	....	....	40	....
TEXAS																			
AGE Refining & Manufacturing—San Antonio	⁵ 5,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
BP Amoco—Texas City ^C	437,000	228,000	² 40,400	....	¹ 209,000	² 137,800	¹ 157,000 ² 57,000	³ 95,000	¹ 104,500 ⁶ 133,000 ⁸ 31,400	¹ 20,900 ² 38,000	....	¹ 43,700	³ 31,400	....	....	¹ 180.0 ² 22.8	¹ 2,585	¹ 1,123	....
Chevron Products Co.—El Paso	90,000	34,700	....	....	¹ 28,000	¹ 17,700	....	....	¹ 18,300 ⁴ 19,500	¹ 8,200	....	....	¹ 2,500	....	....	....	....	20	4,800
Citgo Petroleum Corp.—Corpus Christi	152,000	68,850	² 37,620	....	¹ 72,450	³ 47,250	....	....	¹ 49,050 ⁴ 44,100 ⁵ 66,880 ⁸ 19,350	² 18,090	....	¹ 32,130 ³ 2,240 ⁵ 6,880 ⁸ 10,575	....	....	¹ 4,050	⁵ 12.0	² 300	³ 34	....
Clark Refining & Marketing—Port Arthur	225,000	100,000	² 37,500	....	¹ 70,000	¹ 50,000	....	....	¹ 50,000 ⁴ 79,000 ⁵ 60,000	² 17,000	....	¹ 9,800 ² 2,500 ³ 2,200	....	....	....	....	¹ 900	⁴ 25	....
Coastal Refining & Marketing Inc.—Corpus Christi	110,000	56,000	² 17,500	² 10,000	¹ 20,000	¹ 10,000 ³ 19,000	¹ 10,500	² 25,000 ⁴ 24,000	¹ 31,000	² 3,000	¹ 2,000	¹ 14,300 ² 6,000	³ 5,200	....	....	¹ 24.0 ⁵ 15.0	¹ 1,000	² 80	¹ 12,000
Crown Central Petroleum Corp.—Pasadena	100,000	42,000	² 12,500	....	¹ 56,000	³ 22,000	....	⁴ 10,000	¹ 26,000	² 13,000	....	....	....	....	¹ 2,000	....	⁴ 80	² 25	....
Exxon Co. USA—Baytown ^C	505,000	236,000	³ 38,000	....	¹ 195,000	² 119,000	¹ 26,000	² 103,000	¹ 142,500 ³ 16,500 ⁴ 130,500 ⁷ 45,000	² 19,000	....	....	....	² 1,000	¹ 7,000	¹ 83.0 ⁶ 57.5	⁴ 382	² 950	¹ 5,000
Fina Oil & Chemical Co.—Big Spring ^C	61,000	24,000	....	....	¹ 23,000	¹ 21,000	....	....	² 25,500 ⁴ 22,000 ⁶ 5,500 ⁸ 3,200	² 4,500	....	¹ 2,000	....	....	....	....	....	¹ 133	⁷ 600
Port Arthur ^U	176,000	49,900	....	....	¹ 63,200	³ 36,200	....	² 27,800 ⁴ 49,900	² 42,400	¹ 5,700	....	¹ 13,000	³ 9,400	....	....	....	....	² 264	¹ 2,200
Koch Petroleum Group—Corpus Christi	297,000	104,500	² 13,680	....	¹ 99,000	¹ 10,800 ³ 46,800	¹ 10,530	² 16,200	¹ 147,700 ² 54,000 ⁴ 56,700	² 11,700	....	¹ 14,400 ² 4,050 ³ 1,800 ⁴ 12,600	³ 23,400	....	¹ 1,530	....	¹ 600	² 235	....
LaGloria Oil & Gas Co.—Tyler	60,000	15,000	² 6,500	....	¹ 20,200	¹ 4,000 ³ 12,200	....	....	² 20,000 ⁴ 12,000	¹ 4,700	....	....	³ 4,000	....	....	....	¹ 250	¹ 16	....
Lyondell-Citgo Refining LP—Houston [*]	268,800	187,600	² 87,300	....	¹ 89,100	¹ 58,100	....	....	¹ 64,800 ² 9,500 ⁴ 83,700 ⁵ 90,900 ⁶ 31,500	¹ 20,900	....	....	....	³ 700	¹ 2,900	....	¹ 5,000	¹ 1,042	....
Marathon Ashland Petroleum LLC—Texas City	72,000	....	....	....	¹ 39,900	¹ 10,500	....	....	....	² 8,600	....	¹ 2,400	....	....	....	....	....	....	....
Mobil Oil Corp.—Beaumont	348,400	145,000	² 42,600	....	¹ 108,000	³ 146,000	¹ 53,000	....	¹ 110,000 ⁶ 93,000 ⁷ 3,500 ⁸ 2,200	¹ 15,000	....	....	² 22,100	¹ 2,200	¹ 3,800	¹ 54.0	¹ 2,384	¹ 500	....
Motiva Enterprises LLC—Port Arthur	235,000	106,400	² 49,500	....	¹ 83,000	³ 45,000	¹ 17,820	....	¹ 138,700 ² 16,000 ⁴ 65,000 ⁶ 30,000 ⁸ 16,200	¹ 18,000	....	....	....	¹ 17,550	....	....	¹ 3,200	¹ 705	....
Phillips Petroleum Co.—Borger	125,000	....	....	....	¹ 60,000	¹ 27,700	....	¹ 62,000	² 26,800 ⁴ 27,300 ⁶ 9,200 ⁸ 21,400	² 17,500	....	² 2,500	¹ 12,000 ² 13,500 ³ 7,500	....	....	¹ 60.0	....	¹ 345	....
Sweeny	205,000	65,000	....	....	¹ 90,000	¹ 34,000	....	¹ 75,000	² 50,500	² 19,000	....	¹ 5,300	² 9,000	....	¹ 2,850	⁵ 100.0	....	¹ 362	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-refining	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Pride Refining Inc.—Abilene	44,800	12,500	....	....	....	15,800	....	....	447,000 15,800 411,600	....	....	37,000 ....	....	....	....	....	....	....	2,700
Shell Deer Park Refining Co.—Deer Park	274,200	146,000	259,100	....	167,500	125,100 245,900	164,000	....	162,100 467,100 545,500 840,700	116,800	....	....	....	....	15,100	165.3 436.9	3,752	915	4,400
Specified Fuels & Chemicals LLC—Channelview	1,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ultramar Diamond Shamrock Corp.—Three Rivers ^W	86,000	28,000	....	....	121,000	19,000 320,000	23,000	39,500	118,000 66,600	24,500	....	19,000	....	1,200	....	14.0 48.0	....	50	....
Sunray ^C	145,500	47,000	....	....	148,000	118,000 325,000	228,000	....	134,000 426,000 84,000	19,000	....	....	....	....	11,800 32,200	....	....	80	....
Valero Energy Corp.—Corpus Christi	86,300	30,700	....	....	182,500	336,500	FFC434,500	171,000	121,000	211,500	....	18,000	115,300	....	120,000 32,900	162.0 467.0 63.8	....	399	....
Houston ^W	80,000	39,000	....	....	GG261,000	110,000	....	432,500	112,000	19,000	....	....	....	....	12,300	....	....	70	....
Texas City ^W	165,000	128,000	....	....	148,000	17,000 312,000	....	168,000 466,200	124,900	28,000	....	....	35,000	....	12,200	....	....	640	....
Total	4,355,600	1,894,150	442,200	10,000	1,653,850	1,089,350	381,350	735,100	2,563,080	331,590	2,000	206,495	160,300	55,650	60,630	855.3	23,833	8,913	38,700
UTAH																			
BP Amoco—Salt Lake City	53,000	....	....	....	119,400	210,600	....	....	110,600	14,900	....	....	....	....	....	....	....	14	....
Chevron Products Co.—Salt Lake City	45,000	25,600	27,200	....	113,000	17,000	....	....	17,300 410,200 66,500	24,500	....	....	11,000	....	....	....	281	18	....
Inland Refining Inc.—Woods Cross ^B	12,500	6,000	....	....	....	12,200	....	....	12,200 44,000	....	....	....	....	....	....	....	....	....	1,200
Flying J Inc.—Salt Lake City	25,000	5,000	....	....	J25,000	15,500	....	42,000	17,000 47,000	21,400	....	....	12,000 31,750	....	....	....	....	4	....
Phillips Petroleum Co.—Woods Cross ^C	25,000	5,500	....	....	17,680	17,200	....	....	212,000 61,700	22,400	....	....	32,600	....	....	....	....	4	800
Total	160,500	42,100	7,200	....	45,080	32,500	....	2,000	68,500	13,200	....	....	7,350	....	....	....	281	40	2,000
VIRGINIA																			
BP Amoco—Yorktown	58,600	33,000	217,100	....	126,700	210,800	....	....	111,300 618,000	....	14,000	....	....	....	1660	....	905	36	....
Total	58,600	33,000	17,100	....	26,700	10,800	....	....	29,300	....	4,000	....	....	....	660	....	905	36	....
WASHINGTON																			
Atlantic Richfield Co.—Ferndale	222,720	96,960	259,520	....	....	160,480	154,720	....	154,720 624,960	....	....	....	....	....	....	192.0 633.0	2,136	211	....
Equilon Enterprises LLC—Anacortes	144,900	58,900	224,100	....	154,000	129,800	....	....	128,000 615,500 837,400	110,200	13,700	....	....	....	....	....	1,310	150	....
Sound Refining Inc.—Tacoma	11,900	3,600	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,600
Tesoro West Coast Co.—Anacortes	108,200	45,000	....	....	142,000 22,800	224,300	....	....	131,800 428,100 56,500 115,500 413,000 48624,000	111,500	....	....	13,400	....	....	....	....	....	1,000
Tosco Refining Co.—Ferndale	88,500	31,000	....	....	J225,000	215,500	....	....	17,000 45,500	26,000	....	....	13,900	....	....	....	....	40	....
US Oil & Refining Co.—Tacoma	40,800	23,700	....	....	....	15,750	....	....	....	....	....	....	32,300	....	....	....	....	....	10,000
Total	617,020	259,160	83,620	....	123,800	135,830	54,720	....	291,980	27,700	3,700	....	9,600	....	....	125.0	3,446	401	14,600
WEST VIRGINIA																			
Ergon-West Virginia Inc.—Newell	11,500	8,850	....	....	....	14,300	34,800	....	14,300	....	....	....	....	3,600	....	1a1.2	....	1	....
Total	11,500	8,850	....	....	....	4,300	4,800	....	4,300	....	....	....	....	3,600	....	1.2	....	1	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd									Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- refining	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
WISCONSIN																			
Murphy Oil USA Inc.—Superior ¹	33,250	19,500	....	....	19,900	17,200	....	45,500	18,100 47,020	21,350	....	....	31,800	....	....	....	....	15	6,750
Total	33,250	19,500	....	....	9,900	7,200	....	5,500	15,120	1,350	....	....	1,800	....	....	....	....	15	6,750
WYOMING																			
Frontier Refining Inc.—Cheyenne	40,500	23,500	210,000	....	112,000	17,800	....	416,600	18,000	24,200	....	....	11,500	....	....	15.5	475	105	5,500
Little America Refining Co.—Casper	22,000	7,800	....	....	113,300	15,700	....	....	15,700 23,500 68,000	....	....	....	....	....	....	....	....	20	1,750
Sinclair Oil Corp.—Sinclair	54,000	29,500	....	....	120,600	114,200	....	210,000	114,200 422,000	14,000	1700	....	....	....	....	....	....	....	4,900
Wyoming Refining Co.—Newcastle ^B	12,500	1,500	....	....	425,500	12,750	....	....	23,000 42,000 61,500	2850	....	....	....	....	....	....	....	2	....
Total	129,000	62,300	10,000	....	51,400	30,450	....	26,600	67,900	9,050	700	....	1,500	....	....	5.5	475	127	12,150
URUGUAY																			
ANCAP—La Teja Montevideo	37,000	18,000	....	27,000	19,000	13,000	....	....	13,000 45,000	....	....	....	....	....	....	....	....	....	3,000
Total	37,000	18,000	....	7,000	9,000	3,000	....	....	8,000	....	....	....	....	....	....	....	....	....	3,000
VENEZUELA																			
Petroleos de Venezuela SA—El Palito, Puerto Cabello	126,900	71,200	....	....	151,700	19,000	....	39,000	....	220,300	....	12,000	....	....	HH42,800	46.8	....	....	....
Puerto de la Cruz	195,000	....	....	....	113,600	....	....	....	....	24,100	....	....	....	....	....	....	....	17	....
San Roque, Anzoategui	5,200	1,770	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Paraguana Refining Center—Cardon, Falcon	288,230	148,675	254,000	....	169,300	340,500	....	....	154,000 531,500 676,500	122,500	....	....	19,900	10,620	11,530	127.0	3,200	434	....
Judibana, Falcon	612,750	355,300	233,300 A357,600	....	197,200	....	....	....	5153,000 663,000 82,700	218,900	....	....	110,800	1,400	38,500	1114.0	2,000	1,020	36,000
Maracaibo, Zulia	10,800	8,835	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,238,880	585,780	144,900	....	231,800	49,500	....	9,000	380,700	65,800	....	2,000	20,700	12,020	12,830	147.8	5,200	1,471	36,000
VIRGIN ISLANDS																			
Hovensa LLC ¹¹ —St. Croix	525,000	215,000	....	280,000	1130,000	1125,000	....	2130,000	2125,000 4165,000	114,000	26,000	130,000	215,000	....	14,000 34,000	....	....	....	....
Total	525,000	215,000	....	80,000	130,000	125,000	....	130,000	290,000	14,000	6,000	30,000	15,000	....	8,000	....	....	....	....
YEMEN																			
Aden Refinery Co.—Little Aden	110,000	10,500	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	415
Yemen Hunt Oil Co.—Marib	10,000	....	....	....	....	12,500	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	120,000	10,500	....	....	....	8,500	....	....	....	....	....	....	....	....	....	....	....	....	415
ZAMBIA																			
Indeni Petroleum Refinery Co. Ltd.—Bwana Nkubwa Area, Ndola	24,500	2,400	....	....	....	15,600	....	....	18,900 48,900	....	....	....	....	....	....	....	....	....	....
Total	24,500	2,400	....	....	....	5,600	....	....	17,800	....	....	....	....	....	....	....	....	....	....