

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- 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	0	0	3,500	0	17,400	0	0	600	0	700	0	6.5	700	60	0
ALGERIA																		
Naftec SpA—Algiers.....	60,000	....	....	....	....	¹ 15,000	....	¹ 14,400	....	....	....	....	....	....	....	....	....	....
Arzew.....	60,000	5,447	....	....	....	¹ 11,500	....	¹ 7,380	....	....	....	....	....	....	....	....	....	....
								¹ 13,470										
Hassi-Messaoud.....	30,000	....	....	....	....	¹ 2,400	....	¹ 2,700	....	....	....	....	....	....	....	....	....	....
Skikda.....	300,000	5,447	....	....	....	¹ 60,000	....	¹ 54,000	....	....	....	....	....	....	....	....	....	....
Total.....	450,000	10,894	0	0	0	88,900	0	81,950	0	0	0	0	0	0	0.0	0	0	0
ANGOLA																		
Fina Petroleos de Angola— Luanda.....	39,000	2,500	....	....	....	11,900	....	¹ 3,800 2,800	....	....	....	....	....	....	....	....	....	950
Total.....	39,000	2,500	0	0	0	1,900	0	6,600	0	0	0	0	0	0	0.0	0	0	950
ARGENTINA																		
Destileria Argentina de Petroleo SA— Dock Sud.....	4,000	1,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lomas de Zamora.....	8,000	1,300	....	....	....	....	....	....	....	....	....	....	900	....	....	....	....	600
Eso SA Petrolera Argentina— Campana.....	84,500	48,000	² 24,000	....	¹ 26,000	¹ 11,000	....	¹ 10,000 ³ 7,500 ⁷ 14,000	....	....	....	....	....	....	....	1,000	....	....
Petroleo Brasileiro SA— Bahia Blanca ^K	28,975	11,875	....	² 3,420	¹ 7,110	¹ 5,400	....	² 7,920	....	....	....	³ 2,700	....	....	....	....	....	....
Refineria San Lorenzo SA— San Lorenzo.....	37,600	16,100	....	¹ 3,500 ² 12,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Refinor SA— Campo Duran.....	32,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Repsol YPF SA— La Plata.....	189,000	116,500	¹ 39,400	....	¹ 68,000	¹ 12,000	....	¹ 12,000 ² 20,400 ⁵ 18,900 ¹ 15,400	....	....	....	³ 9,000	5,500	....	....	1,500	30	8,300
Lujan de Cuyo.....	120,000	65,000	¹ 40,000	....	¹ 41,500	¹ 9,500	¹ 21,000	¹ 9,500 ⁵ 16,000	² 3,150	....	....	³ 3,500	....	¹ 1,000	¹ 18.0	1,550	30	....
Plaza Huincul.....	25,000	....	....	....	....	¹ 3,000	....	¹ 3,000	....	....	....	....	....	....	....	....	....	....
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 ⁷ 5,500	² 1,700	¹ 500	....	....	1,500	....	....	....	....	4,200
Total.....	639,075	298,275	109,900	38,320	168,610	58,800	21,000	150,320	4,850	500	0	15,200	7,900	1,000	18.0	4,050	60	13,100
ARUBA																		
Coastal Aruba Refining Co. NV— San Nicolas.....	280,000	160,000	² 64,000	² 48,000	....	....	^m 60,000	⁷ 130,000 ⁶ 65,000	....	....	....	....	....	....	² 95.0	4,000	300	1,000
Total.....	280,000	160,000	64,000	48,000	0	0	60,000	195,000	0	0	0	0	0	0	95.0	4,000	300	1,000

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	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
AUSTRALIA																		
Australian Lubricating Oil Refinery Ltd.—Kurnell .....	....	7,470	....	....	....	....	....	115,850	....	....	....	....	3,500	....	....	....	....	....
BP PLC—																		
Bulwer Island	69,825	14,820	....	....	118,450	111,880	....	111,880	22,160	....	....	....	1,800	....	26.0	....	35	1,980
Kwinana	158,500	20,000	....	....	135,000	322,600	....	136,000 518,000	23,775	12,100	....	115,000	3,650	....	....	....	70	2,000
Caltex Refineries (NSW) Ltd.— Kurnell	114,000	23,400	....	....	140,950	127,180	....	227,180 714,400	....	....	....	....	3,429	....	....	400	24	3,465
Caltex Refineries (Qld.) Ltd.— Lytton	105,500	....	....	....	136,160	326,000	....	126,000 69,600	23,300	11,600	....	38,200	....	....	550.2 77.0	....	....	....
Inland Oil Refiners (Qld.) Pty. Ltd.—Eromanga	1,425	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ExxonMobil Refining & Supply Co.—Port Stanvac, Adelaide	74,000	25,900	....	....	....	123,900	....	756,900	....	....	....	39,800	6,800	....	....	....	31	5,000
Altona	130,000	83,500	....	....	128,500	136,000	....	151,000 56,500	13,000	....	....	....	....	....	....	....	7	3,000
Shell Refining (Australia) Pty. Ltd.—Clyde	85,000	21,000	....	....	135,000	320,000	....	37,000 7,000	23,000	12,100	....	....	....	....	....	....	....	3,000
Geelong	110,000	10,000	....	....	140,000	111,000 320,000	....	54,000 14,000 134,000 3,000	24,500	12,700	....	38,000	2,800	....	....	....	....	3,000
Total	848,250	206,090	0	0	234,060	198,560	0	382,310	19,735	8,500	0	41,000	21,979	0	83.2	400	167	21,445
AUSTRIA																		
OMV AG—Schwechat	208,600	65,000	....	216,875	126,250	132,725	....	146,400 24,800 37,300 38,300 12,600	....	....	....	314,400	....	11,600	....	....	180	1,470
Total	208,600	65,000	0	16,875	26,250	32,725	0	139,400	0	0	0	14,400	0	1,600	0.0	0	180	1,470
AZERBAIJAN																		
Azneftiyag—Baku	238,978	66,157	....	....	....	....	....	....	....	....	....	....	16,200	....	....	....	....	4,151
Azneftyanajag— New Baku	202,830	71,043	238,529	....	157,750	324,466	....	125,300 842,192	1930	....	....	....	....	....	....	1,400	....	....
Total	441,808	137,200	38,529	0	57,750	24,466	0	67,492	930	0	0	0	16,200	0	0.0	1,400	0	4,151
BAHRAIN																		
Bahrain Petroleum Co.— Sitra	248,900	189,810	....	219,800	141,400	115,300	148,600	116,200 523,400	....	13,060	....	....	....	....	134.0	....	190	6,570
Total	248,900	189,810	0	19,800	41,400	15,300	48,600	39,600	0	3,060	0	0	0	0	34.0	0	190	6,570
BANGLADESH																		
Eastern Refinery Ltd.— Chittagong	33,000	4,000	....	210,000	....	11,800	11,200	12,000	....	....	....	....	....	....	11.0 41.0	....	....	....
Total	33,000	4,000	0	10,000	0	1,800	1,200	2,000	0	0	0	0	0	0	2.0	0	0	0

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
				27,000														
Total	1,785,841	727,328	78,679	12,000	424,329	24,058	0	232,396	2,925	0	0	0	19,530	6,517	88.0	3,357	763	29,400
BRUNEI																		
Brunei Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	....	....	....	....	15,700	....	....	....	....	....	....	....	....	....	....	....	....
Total	8,600	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0.0	0	0	0
BULGARIA																		
Neftochim—Bourgas	115,240	49,900	....	120,600	123,300	14,060	....	17,600 32,600 30,700 23,300	12,600	....	12,000	....	....	1790	18.4 51.9	....	63	1,500
Total	115,240	49,900	0	20,600	23,300	4,060	0	64,200	2,600	0	2,000	0	0	790	10.3	0	63	1,500
CAMEROON																		
Societe Nationale de Raffinage— Cape Limboh Limbe	42,000	....	....	....	....	47,000	....	19,500 10,500	....	....	....	....	....	....	....	....	....	....
Total	42,000	0	0	0	0	7,000	0	20,000	0	0	0	0	0	0	0.0	0	0	0
CANADA																		
Alberta																		
Husky Oil Operations Ltd.— Lloydminster	23,500	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12,000
Imperial Oil— Edmonton	184,300	66,100	....	....	154,200	120,900	....	250,400 722,800	215,700	....	....	16,600	2,600	....	620.0	....	40	10,400
Parkland Refining Ltd.— Bowden	6,000	....	....	....	....	12,800	....	12,800 22,800	....	....	....	32,800	....	....	....	....	....	....
Petro-Canada Products Ltd.— Edmonton	125,200	27,000	27,500	....	134,300	115,300	118,700	78,000	212,600	....	....	13,100 312,000	....	....	130.8	371	56	....
Shell Canada Ltd.— Scotford	96,550	....	....	....	....	321,500	140,500	221,500 421,000	....	....	15,300 3270	....	....	....	....	....	11	....
Total	435,550	108,100	7,500	0	88,500	60,500	59,200	129,300	28,300	0	5,570	24,500	2,600	0	50.8	371	107	22,400
British Columbia																		
ChevronTexaco Corp.— BurnabyA	52,000	11,000	....	....	118,000	110,000	....	116,000 14,000	13,000	12,000	....	310,000	....	....	....	....	15	2,000
Husky Oil Operations Ltd.— Prince George	10,250	....	....	....	13,300	11,600	....	8,000	....	....	....	3900	....	....	....	....	7	....
Total	62,250	11,000	0	0	21,300	11,600	0	38,000	3,000	2,000	0	10,900	0	0	0.0	0	22	2,000
New Brunswick																		
Irving Oil Ltd.— St. John	250,000	100,000	....	220,000	195,000	135,000	134,000	148,000 314,000 430,000	116,000	....	....	110,000	....	....	147.0	....	200	....
Total	250,000	100,000	0	20,000	95,000	35,000	34,000	92,000	16,000	0	0	10,000	0	0	47.0	0	200	0
Newfoundland																		
North Atlantic Refining Ltd.— Come By Chance	105,000	52,250	216,200	123,400	131,500	218,900 16,200	166.0	200
Total	105,000	52,250	0	16,200	0	23,400	31,500	35,100	0	0	0	0	0	0	66.0	0	200	0

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	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Dalian.....	142,600	....	....	....	70,000	3,000	....	6,000	22,000	....	....	....	6,000	....	....	....	....	....
Dandong.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Daqing.....	70,300	....	213,000	....	14,000	4,000	8,000	12,000	21,000	....	....	....	10,000	....	....	325	....	....
Daqing.....	120,500	....	313,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dushanzi.....	120,500	....	28,000	....	12,000	6,000	....	8,000	....	....	....	....	2,000	....	....	450	....	....
Fushun.....	184,800	....	36,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Golmud.....	20,000	....	235,000	....	66,000	23,000	8,000	5,000	13,000	....	....	....	1,000	....	....	825	....	....
Harbin.....	30,000	....	31,000	....	6,000	3,000	....	3,000	....	....	....	....	....	....	....	....	....	....
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	....	31,000	....	24,000	3,000	....	5,000	....	....	....	....	4,000	....	....	....	....	....
Jinzhou.....	110,500	....	220,000	....	16,000	6,000	....	8,000	....	....	....	....	....	....	....	500	....	....
Karamay.....	66,300	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lanzhou.....	110,500	....	315,000	....	24,000	2,000	....	3,000	11,000	....	....	....	7,000	....	....	....	....	....
Lanzhou.....	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaohu.....	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoning.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Liaoyang.....	80,300	....	....	....	....	3,000	....	1,000	....	....	....	....	....	....	....	....	....	....
Linyuan.....	50,200	....	....	....	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Qianguo.....	50,200	....	....	....	24,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Qinghai.....	27,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shaanxi.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sichuan.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Urumqi.....	50,200	....	28,000	....	16,000	3,000	....	....	....	....	....	....	....	....	....	200	....	....
Xianyang.....	50,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yanchang.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yumen.....	80,300	....	....	....	....	6,000	....	3,000	....	....	....	....	....	....	....	....	....	....
Zepu.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sinopec—																		
Anqing.....	56,200	....	28,000	....	24,000	....	....	4,000	21,000	....	....	....	....	....	....	225	....	....
Baling.....	100,400	....	212,000	....	50,000	3,000	....	22,000	12,000	....	....	....	....	....	....	300	....	....
Baoding.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Beihai.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Binzhou.....	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boxing.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cangzhou.....	20,000	....	....	....	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Changyi.....	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dagang.....	60,200	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dongming.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fujian.....	80,300	....	....	....	16,000	....	....	....	....	....	....	....	....	....	....	....	....	....
Gaoqiao.....	150,600	....	310,000	....	38,000	4,000	....	2,000	21,000	....	....	....	6,000	....	....	....	....	....
Guangrao.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Guangzhou.....	104,400	....	320,000	....	44,000	8,000	....	20,000	21,000	....	....	....	....	....	....	....	....	....
Hangzhou.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Henan.....	2,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Huabei.....	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jianghan.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jianhu.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jinan.....	80,300	....	....	....	22,000	....	....	4,000	....	....	....	....	1,000	....	....	....	....	....
Ji'nan.....	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jingmen.....	100,400	28,000	20,000	3,000	8,000	14,000	2,000	270
Jinling.....	140,600	212,000	44,000	3,000	16,000	3,000	21,000	490

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Jiujiang.....	50,200	³ 16,000 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	² 2,000
Luoyang.....	4,000
Maoming.....	170,700	² 12,000 ³ 12,000	32,000	3,000	16,000	² 16,000 ⁴ 22,800	² 1,000	5,000	400
Nandagang.....	2,000
Nanyang.....	12,500
Qilu.....	160,700	² 16,000	46,000	3,000	42,000	22,000	¹ 3,000	400
Qingdao.....	50,200
Qingdao.....	4,000
Shanghai.....	106,400
Shengli.....	50,200
Shengli.....	3,000
Shijiazhuang.....	50,200	24,000	² 1,000
Shouguang.....	3,000
Taizhou.....	6,000
Tianjin.....	120,500	35,000	4,000	² 1,000
Wuhan.....	50,200	³ 8,000	20,000	² 1,000
Wuxi.....	3,000
Xi'an.....	3,000
Yan'an.....	20,000
Yancheng.....	2,000
Yangzhou.....	3,000
Yangzi.....	120,500	³ 20,000	21,000	24,000
Yanshan.....	190,800	48,000	3,000	5,000	² 1,000	5,000
Yongping.....	6,000
Zhanjiang.....	20,000
Zhenhai.....	342,000	² 24,000	28,000	9,000	⁸ 57,600	² 1,000	200
Zhongjie.....	3,000
Zhongyuan.....	26,100
West Pacific Petrochemical Corp.— Dalian.....	100,000	40,000	37,000	114,000	¹ 7,000 ² 4,000 ³ 19,000 ¹⁰ 35,000	12,500	¹ 900	300
Total.....	4,528,100	40,000	306,000	0	892,000	157,000	122,000	355,400	26,500	0	0	0	49,000	900	0.0	4,585	300	0

CHINA, TAIWAN

Chinese Petroleum Corp.— Kaohsiung.....	270,000	75,500	² 15,000	.....	125,000	² 15,000	.....	² 20,000 ⁸ 25,000 ¹⁰ 30,000	.....	.....	¹ 14,000	³ 10,000	.....	³ 3,616	.....	2,722	900	12,120
Ta-Lin.....	300,000	.....	.....	.....	125,000	³ 55,000	.....	¹⁰ 60,000	.....	.....	.....	³ 10,000	5,300	.....	.....	.....	250	.....
Tao-Yuan.....	200,000	36,000	.....	.....	.....	² 20,000 ³ 25,000	.....	¹⁰ 45,000	.....	.....	.....	³ 6,000	.....	.....	452.0	.....	595	.....
Formosa Petrochemical Co.— Mailiao.....	150,000	.....	.....	.....	173,000	.....	.....	⁷ 63,000 ¹⁰ 70,000	.....	.....	.....	.....	.....	14,500	190.0	.....	.....	.....
Total.....	920,000	111,500	15,000	0	123,000	115,000	0	313,000	0	0	14,000	26,000	5,300	8,116	142.0	2,722	1,745	12,120

COLOMBIA

Empresa Colombiana de Petroleos—Aplay.....	2,250	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barrancabermeja- Santander.....	205,000	101,000	² 33,000	¹ 64,000	⁸ 19,800	12,100	¹ 1,600 ³ 600	1,400	118.0

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Cartagena, Bolivar	75,000	40,000	...	² 19,000	126,000	¹² 1,100
Orito, Putumayo	1,800
Tibu, N. de Santander	1,800	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	285,850	141,000	0	52,000	90,000	0	0	19,800	2,100	2,100	2,200	0	1,400	0	18.0	0	0	0
CONGO (FORMER ZAIRE)																		
Sozir—Moanda	15,000	....	....	....	....	¹³ 500	....	²⁵ 000	....	....	....	....	....	....	....	....	....	....
Total	15,000	0	0	0	0	3,500	0	5,000	0	0	0	0	0	0	0.0	0	0	0
CONGO (BRAZZAVILLE)																		
Coraf—Pointe-Noire	21,000	8,000	....	....	....	¹² 000	¹² 000	3,500	....	....	....	....	....	....	....	....	....	....
Total	21,000	8,000	0	0	0	2,000	2,000	3,500	0	0	0	0	0	0	0.0	0	0	0
COSTA RICA																		
Refinadora Costarricense de Petroleo SA—Limon	15,000	600	....	¹⁶ 500	....	¹¹ 200	....	2,000	....	....	....	....	....	....	....	....	....	....
Total	15,000	600	0	6,500	0	1,200	0	2,000	0	0	0	0	0	0	0.0	0	0	0
CROATIA																		
Ina Refinery Rijeka— Rijeka	¹³² 040	³⁴ 545	....	²¹² 195	¹²⁰ 325	¹¹⁴ 687	^{m2} 10,069	⁵²⁰ 947	....	....	....	....	....	....	....	....	60	....
Ina-Industrija Naft e d.d. Zagreb— Sisak	80,613	15,665	¹⁴ 423	....	¹⁹ 680	¹¹⁵ 519	....	¹¹⁵ 519 ⁵² 377	....	....	¹⁹ 490 ²¹ 994	....	....	....	....	170	....	....
Ina d.d. Rafinerija Zagreb— Zagreb	80,337	37,044	....	²¹¹ 525	¹²¹ 000	¹¹⁹ 914	....	⁵²⁴ 780	....	....	¹⁹ 438	....	470	....	....	....	63	....
Total	292,990	87,254	4,423	23,720	51,005	50,120	10,069	63,623	0	0	20,922	0	470	0	0.0	170	123	0
CUBA																		
Cuba Petroleos— Cienfuegos	76,000	....	....	....	....	¹⁷ 500	....	¹⁷ 700	....	....	....	....	....	....	....	....	....	....
Ermonos Dias, Santiago	101,500	37,500	....	....	....	¹⁷ 500	....	¹⁷ 700 ²² 000	....	....	....	....	....	....	5.0	....	....	540
Niko Lopes, Habana	121,800	38,200	....	....	¹¹⁴ 700	¹⁵ 000	....	¹⁵ 250 ¹³ 200	....	....	....	....	....	....	....	....	....	540
Serhio Soto, Cabaiguan	2,100	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	301,400	75,700	0	0	14,700	20,000	0	55,850	0	0	0	0	0	0	5.0	0	0	1,080
CYPRUS																		
Cyprus Petroleum Refinery Ltd.— Larnaca	27,000	2,600	....	....	....	¹⁵ 100	....	11,000	....	....	....	....	....	....	....	....	....	1,400
Total	27,000	2,600	0	0	0	5,100	0	11,000	0	0	0	0	0	0	0.0	0	0	1,400
CZECH REPUBLIC																		
Czech Refining Co.— Kralupy	68,000	13,500	....	....	¹²⁶ 000	¹⁹ 440	....	¹¹⁷ 400 ⁴⁶ 700 ⁵¹⁶ 500 ¹²⁴ 500	....	....	....	²⁴ 300	....	¹² 300	^{a28} 5	....	24	....
Litvinov	110,000	50,200	²¹⁵ 700	¹⁹ 400 ³⁹ 300	^{c125} 000 ^{c37} 300	¹²² 100 ⁴⁶ 800 ⁵²⁶ 600	¹⁶ 70	³² 300	^{a223} 0	185	8,800
Koramo Kolin—Kolin	2,500

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Paramo A.S.—Pardubice.....	20,000	7,000	6,000	300	3,000
Total	198,000	70,700	0	15,700	26,000	28,140	32,300	106,600	0	0	670	6,600	2,800	2,300	31.5	0	209	11,800
DENMARK																		
AS Dansk Shell— Fredericia.....	70,000	....	....	125,000	....	112,900	....	222,500	....	....	....	36,000	....	....	....	....	....	....
Dansk Statoil AS— Kalundborg	106,400	22,000	....	28,000	....	18,600	....	18,600 711,400	....	....	....	....	....	....	....	....	....	8,000
Total	176,400	22,000	0	53,000	0	21,500	0	42,500	0	0	0	6,000	0	0	0.0	0	0	8,000
DOMINICAN REPUBLIC																		
Falconbridge Dominicana C por A—Bonao	16,000	....	....	....	....	....	....	26,213	....	....	....	....	....	....	20.6	....	....	....
Refineria Dominicana de Petroleo SA—Haina.....	33,250	....	....	....	....	17,560	....	114,670	....	....	....	....	....	....	....	....	....	....
Total	49,250	0	0	0	0	7,560	0	20,883	0	0	0	0	0	0	0.6	0	0	0
ECUADOR																		
Petroecuador— Esmeraldas.....	110,000	45,300	....	231,500	118,000	12,800 310,000	....	924,500	....	....	....	....	....	....	....	....	....	....
La Libertad	46,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shushufindi.....	20,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	176,000	45,300	0	31,500	18,000	12,800	0	24,500	0	0	0	0	0	0	0.0	0	0	0
EGYPT																		
Alexandria Petroleum Co.— Alexandria (El-Mex).....	100,000	22,500	....	....	....	....	....	111,436 1321,000	....	....	1603 2281	....	1,436	....	11.0	1	....	2,010
Ameriya Petroleum Refining Co.—Alexandria.....	78,000	15,000	....	....	....	112,000	....	214,000 4,000 7,000 10,000 13700 111,800	29,000	....	1700	....	2,000	....	24.0	....	....	....
Assiut Petroleum Refining Co.— Assiut.....	47,000	....	....	....	....	37,000	....	....	....	....	....	....	....	....	....	....	....	....
Cairo Petroleum Refining Co.— Mostorod.....	145,000	....	....	....	....	19,000	....	111,700 14,400	....	....	....	....	....	....	....	....	....	....
Tanta	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
El-Nasr Petroleum Co.— El-Suez.....	146,300	....	....	....	....	....	....	1332,000	....	....	....	....	....	....	....	....	....	2,613
Wadi-Feran.....	8,550	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Middle East Oil Refinery— Alexandria.....	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Suez Petroleum Processing Co.— El-Suez.....	66,400	9,500	216,470	....	....	112,540	....	116,660 10,800 111,306	....	....	....	....	1,005	....	73.5	540	....	....
Total	726,250	47,000	16,470	0	0	40,540	0	146,802	9,000	0	1,584	0	4,441	0	8.5	541	0	4,623
EL SALVADOR																		
Esso Caribbean and Central America—Acajutla.....	22,000	2,000	13,200	15,000 43,000 77,000
Total	22,000	2,000	0	0	0	3,200	0	15,000	0	0	0	0	0	0	0.0	0	0	0

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ERITREA																		
Petroleum Corp. of Eritrea— Assab	14,564	2,219	11,465	82,742
Total	14,564	2,219	0	0	0	1,465	0	2,742	0	0	0	0	0	0	0.0	0	0	0
FINLAND																		
Fortum Oil and Gas Oy— Naantali ^D	51,800	28,100	....	27,380	212,900	36,930	....	18,100 44,320 516,200 86,030	....	1540	....	....	....	....	....	....	60	5,700
Porvoo	187,000	70,100	....	223,400	138,100	437,500	119,400	160,400 562,900 840,500	26,980	....	....	23,600	4,000	12,560 32,590	120.0	....	240	....
Total	238,800	98,200	0	30,780	51,000	44,430	19,400	198,450	6,980	540	0	3,600	4,000	5,150	20.0	0	300	5,700
FRANCE																		
BP PLC—Lavera	210,000	74,100	....	221,600	127,900	110,800	115,300	224,300 39,600	....	....	....	313,500	....	....	130.0	....	....	13,500
Cie. de Raffinage et de Distribution Total France— Dunkirk	133,700	36,200	....	....	135,100	121,500	....	140,200 28,200	....	....	....	31,840	....	2130	....	....	105	....
Gonfreville l'Orcher	323,643	68,981	....	120,451	240,950	142,300	....	130,128 269,943 107,979 1112,813 131,719	....	13,087 23,031	13,040	15,051 317,486	9,846	21,371	60.4	....	215	4,737
La Mede	145,150	69,180	....	220,330	133,500	127,570	....	....	13,950	....	....	320,350	....	....	....	....	200	....
Cie. Rhenane de Raffinage— Reichstett-Vendenheim	78,000	34,200	....	216,000	114,000	114,400	....	222,500 15,300	....	....	....	....	....	....	....	....	....	7,200
Elf France—Donges	234,000	119,950	....	233,380	149,400	129,280	....	142,860 13,000 36,430	24,300	....	....	34,900	....	....	....	320	....	....
Feyzin	114,000	36,200	....	215,730	124,940	19,200	....	114,190 834,630	....	....	12,200	....	....	11,400 31,250	....	173	....	....
Grandpuits	90,000	49,900	....	214,860	130,720	114,800	....	127,860 28,875	23,150	....	....	....	....	....	....	208	....	....
ExxonMobil Refining & Supply Co.—Dunkirk .....	....	21,000	....	....	....	....	....	114,300	....	....	....	....	6,400	....	....	....	....	....
Fos sur Mer	119,000	38,000	....	....	128,000	121,000	....	134,000 422,000 551,000	....	....	....	....	....	....	....	....	110	....
Port Jerome/NDG	226,000	101,000	....	....	134,000	133,000	....	130,000 228,000 434,000 579,000 116,500	16,800	....	....	36,300	17,400	....	67.5	....	230	6,900
Ste. des Petroles Shell— Berre l'Etang	82,000	52,000	....	....	134,000	119,000	....	237,000	....	....	....	....	....	....	....	....	....	6,000
Petit Couronne	141,000	76,000	....	212,000	120,000	128,000	....	248,000	....	....	....	....	6,200	....	110.0	....	....	11,000
Total	1,896,493	776,711	0	154,351	372,510	270,850	15,300	964,327	18,200	6,118	5,240	69,427	39,846	4,151	47.9	701	860	49,337
GABON																		
Ste. Gabonaise de Raffinage— Port Gentil	17,300	....	....	17,200	....	11,400	....	5,000	....	....	....	....	....	....	....	....	....	....
Total	17,300	0	0	7,200	0	1,400	0	5,000	0	0	0	0	0	0	0.0	0	0	0

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
GEORGIA																		
Batumi Oil Refinery— Batumi	106,436	24,809	....	....	....	¹ 10,276	....	¹ 10,800	....	....	....	....	....	....	....	....	....	3,819
Total	106,436	24,809	0	0	0	10,276	0	10,800	0	0	0	0	0	0	0.0	0	0	3,819
GERMANY																		
Addinol Mineralöl GMBH— Krumpha.....	....	4,533	....	....	....	....	....	....	....	....	....	....	3,800	....	....	....	....	....
Bayernoil Raffineriegesellschaft GMBH—Vohburg/Ingolstadt/ Neustadt	260,000	89,900	....	¹ 9,400 ² 34,300	¹ 59,800	¹ 34,100 ³ 14,400	....	¹ 87,700 ⁴ 8,400 ⁵ 82,400 ¹² 2,600	....	....	....	³ 13,300	....	¹ 870	⁵ 84.0	....	194	12,000
BP PLC—Hamburg .....	....	15,000	....	....	....	....	^c 800	¹¹ 1,620	....	....	....	....	4,800	....	^a 1440.0 ⁴ 440.0	....	....	....
DEA Mineralöl AG— Heide/Grasbrook	80,000	37,000	....	² 14,000	....	² 18,000	¹ 15,000	¹ 25,000	....	² 7,000	¹ 5,800	....	....	¹ 280	....	....	55	4,300
Wesseling	140,000	50,000	....	² 26,000	....	² 21,000	¹ 37,000	² 6,100	....	¹ 2,000	¹ 10,000	....	....	¹ 1,500	....	....	240	....
Deutsche Shell AG— Godorf	162,000	73,000	....	¹ 18,000 ² 7,000	....	¹ 17,000 ³ 21,000	¹ 36,000	² 52,000 ³ 34,000 ³ 2,000 ¹² 000	....	....	¹ 17,000 ² 3,000	³ 8,000	....	....	....	....	....	12,000
Harburg	97,000	44,000	....	² 14,000	¹ 16,000	³ 17,000	....	² 29,000 ³ 2,000 ¹⁶ 000	....	....	....	³ 2,800	6,000	....	....	....	....	5,900
ExxonMobil Refining & Supply Co.—Ingolstadt	106,000	39,000	....	....	¹ 28,000	¹ 20,000	....	¹ 35,000 ⁴ 18,000 ⁵ 54,000	....	....	....	³ 7,000	....	....	....	....	66	3,800
H & R Chemisch- Pharmazeutische Spezialitäten GMBH—Salzbergen ^E .....	....	6,800	....	....	....	....	....	¹¹ 3,650 ¹³ 1,050	....	....	....	....	3,300	....	....	....	....	580
Holborn Europa Raffinerie GMBH—Harburg	78,000	15,000	....	....	¹ 18,750	¹ 14,700	....	¹ 31,700 ³ 3,500 ³⁸ 400	....	....	....	....	....	....	....	....	....	....
Mineralöleraffinerie Oberrhein GMBH—Karlsruhe	285,000	130,000	² 26,000	² 24,000	¹ 87,000	¹ 31,000 ³ 22,000	....	¹ 53,000 ² 76,000 ¹²⁰ 000 ⁷⁴ 000	² 12,000	....	....	³ 16,000	....	¹ 4,000	....	1,200	360	14,000
Mitteldeutsche Erdoel- Raffinerie GMBH— Leuna, Spargau	222,800	96,000	....	² 26,400	¹ 56,700	³ 24,000	....	¹ 40,000 ⁵ 84,000	¹ 7,700	....	....	....	....	....	^a 138.0 ⁴ 48.0	....	410	....
OMV AG—Burghausen	72,000	....	² 27,500	....	....	....	....	⁸ 65,000	....	....	² 2,300	....	....	....	⁷ 90.0	690	34	....
PCK Raffinerie GMBH— Schwedt	210,000	140,000	....	¹ 20,000 ² 27,000	¹ 51,000	¹ 16,000 ³ 18,000	¹ 16,000	¹ 35,000 ² 15,000 ⁴ 20,000 ⁵ 80,000 ⁸ 53,000	² 7,300	....	¹ 5,000	³ 15,000	....	¹ 1,950	¹ 30.0	....	480	8,000
Veba Oel AG— Gelsenkirchen	246,000	148,010	² 29,376	² 17,883	¹ 26,415	³ 27,927	^c 132,895	² 38,534 ⁴ 11,736 ⁵ 50,067 ⁹ 29,256	....	....	¹ 4,023 ³ 3,245 ⁴ 9,482	....	....	....	¹ 23.7 ³ 6.1	1,250	576	16,450

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Lingen.....	80,000	38,000	123,400	....	....	15,800 21,200	c123,000	125,400 410,000 531,500	....	....	14,700 22,000 35,000	....	....	....	144.0 444.0 550.0	550	112	9,200
Wilhelmshavener Raffinerie Gesellschaft GMBH— Wilhelmshaven.....	220,000	....	....	....	....	142,500	312,000	176,000 582,000	....	....	....	39,000	....	....	....	....	50	....
Total.....	2,258,800	926,243	106,276	237,983	343,665	385,627	172,695	1,666,613	27,000	9,000	71,550	71,100	17,900	8,600	1,437.8	3,690	2,577	86,230

GHANA

Tema Oil Refinery Co. Ltd.— Tema.....	45,000	....	....	....	....	15,850	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	45,000	0	0	0	0	5,850	0	0	0	0	0	0	0	0	0.0	0	0	0

GREECE

Hellenic Petroleum SA— Aspropyrgos.....	140,000	68,000	....	223,000	142,300	19,800 21,400	m449,300	136,000 536,000	....	27,450	....	39,500	....	11,350	19.6	....	240	7,500
Thessaloniki*.....	66,500	8,100	....	....	....	19,000	....	216,500 49,000 518,000	....	....	....	37,470	....	....	a15.2	....	40	2,800
Motor Oil (Hellas) Corinth Refineries SA— Aghii Theodori.....	100,000	60,550	....	226,400	130,150	313,200	....	120,600 530,000 1210,580 517,500	22,380	21,830	....	35,800	3,375	11,080	....	....	103	....
Petrola Hellas—Elefsis.....	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	a74.2	....	26	....
Total.....	406,500	136,650	0	49,400	72,450	53,400	49,300	194,180	2,380	9,280	0	22,770	3,375	2,430	19.0	0	409	10,300

GUATEMALA

ChevronTexaco Corp.— Escuintla ^A	16,000	....	....	....	....	13,000	....	13,000 42,000	....	....	....	....	....	....	....	....	....	....
Total.....	16,000	0	0	0	0	3,000	0	5,000	0	0	0	0	0	0	0.0	0	0	0

HUNGARY

MOL Hungarian Oil & Gas Co.— Szazhalombatta.....	161,000	77,500	....	214,000	124,000	116,000 313,600	....	130,000 2700 49,000 541,000 835,000 113,800 131,200 514,000	23,300	....	112,000	33,500	6,100	11,200	125.4 450.8	600	226	6,300
Tiszaujvaros.....	....	....	....	....	....	....	....	....	....	....	....	....	....	1700	....	....	21	....
Total.....	161,000	77,500	0	14,000	24,000	29,600	0	134,700	3,300	0	12,000	3,500	6,100	1,900	76.2	600	247	6,300

INDIA

Bharat Petroleum Co. Ltd.— Mahul, Bombay.....	120,000	39,000	....	....	128,755	15,503	....	....	....	....	12,175	....	....	....	....	....	....	10,000
Numaligarh, Assam.....	60,000	....	8,400	....	....	2,000	22,000	29,000	....	....	....	....	....	....	....	71	4	....
Bongaigaon Refinery & Petrochemicals Ltd.— Bongaigaon Assam.....	27,110	....	29,675	....	....	11,833	....	11,833	....	....	1694	....	....	....	....	203	....	....

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-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Chennai Refinery— Madras.....	130,660	66,866	....	....	111,250	12,138	....	12,138 422,612 75,110	....	....	....	....	5,110	....	110.0	....	17	3,877
Hindustan Petroleum Corp. Ltd.— Mahul, Bombay	131,085	63,420	....	....	114,000	....	....	534,275	....	....	....	....	7,490	....	217.5	....	138	....
Visakhapatnam	164,250	....	....	220,580	132,900	....	....	547,104	....	....	13,123	....	....	11,396	121.2	....	162	4,091
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	....	....
Haldia, West Bengal	61,000	27,000	....	29,600	....	15,300	....	15,300 13,400 113,100	....	....	....	....	3,100	....	....	....	....	7,500
Koyali, Gujarat	185,100	98,000	....	219,500	120,000	18,300	....	18,300	....	....	11,450	....	....	....	242.7	....	....	4,400
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	....
Kochi Refineries Ltd.— Ambalamugal	152,000	80,000	....	219,000	127,000	26,000	....	24,800 9,000	....	....	....	....	....	....	....	....	....	5,900
Madras Refineries Ltd.— Cauvery Basin.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mangalore Refinery & Petrochemicals Ltd.— Mangalore.....	180,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Reliance Petroleum Ltd.— Jamnagar	540,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	2,134,625	506,986	44,925	93,180	167,305	43,074	54,600	185,972	0	0	7,442	0	15,730	1,396	91.4	985	405	43,668

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	....	1112,000	....	....	....	....	....	....	....	....	....	....
Dumai, Central Sumatra	114,000	87,970	232,580	....	....	312,870	150,220	11,430	....	....	....	....	....	....	....	....	....	....
Musi, South Sumatra	109,155	51,300	....	18,820	118,450	330,690	....	....	116,200	....	....	....	....	....	....	....	....	....
Pangkalan Brandan, North Sumatra.....	4,750	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sungai Pakning, Central Sumatra.....	47,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	992,745	265,980	32,580	58,860	101,450	92,970	99,720	23,430	16,200	0	0	0	0	0	0.0	0	0	0

IRAN

National Iranian Oil Co.— Abadan	400,000	80,000	....	....	130,000	126,000	....	126,000	....	....	....	....	1,500	....	....	....	....	1,000
Arak	150,000	71,000	....	227,300	....	221,600	124,500	121,600	....	....	....	....	....	....	1,450.0	....	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	....	12,775 3,100	....	....	....	....	....	....	....	....	....	....
Lavan Island.....	30,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shiraz.....	40,000	18,400	....	29,000	....	16,215	19,280	16,200 3,800	....	....	....	....	....	....	117.0	....	30	1,500
Tabriz	112,000	50,000	....	216,500	....	111,120	118,000	111,100 13,200	....	....	....	....	....	....	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.....	1,484,000	584,400	0	156,800	30,000	160,570	139,780	180,635	0	0	0	0	15,260	0	286.0	0	470	43,500

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
IRAQ																		
Iraqi Co. for Oil Operations— Kirkuk.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Oil Refineries Administration— Baiji.....	150,000	65,000	....	....	....	38,500	38,000	31,000 28,000 41,000	....	....	....	....	....	....	64.0	....	....	....
Basra.....	140,000	17,650	....	....	....	....	....	....	....	....	....	....	2,008	....	....	....	....	....
Daura.....	100,000	....	....	....	....	5,000	....	13,000	....	....	....	....	8,160	....	....	....	....	1,815
K3-Haditha.....	7,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Khanaqin.....	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Muthia.....	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Qaiyarah Mosul.....	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4,900
Total.....	417,500	82,650	0	0	0	43,500	38,000	113,000	0	0	0	0	10,168	0	64.0	0	0	6,715
IRELAND																		
Phillips 66 Co.— Whitegate ^B	71,250	....	....	....	....	² 10,800	....	¹ 10,800 ²⁵ 5,400 ⁵ 13,500	....	....	....	³⁵ 5,400	....	....	....	....	4	....
Total.....	71,250	0	0	0	0	10,800	0	29,700	0	0	0	5,400	0	0	0.0	0	4	0
ISRAEL																		
Oil Refineries Ltd.— Ashdod.....	90,000	45,000	....	²²⁵ 25,000	¹²⁷ 27,500	¹¹¹ 11,500	....	²²⁰ 20,000 ³⁰ 3,000	....	....	....	....	....	¹⁷⁵⁰ 1,750	....	....	....	....
Haifa.....	130,000	73,000	....	²⁴¹ 41,000	¹²² 22,000	¹¹⁵ 15,000	....	²¹⁶ 16,000 ³⁰ 3,000	....	^{22,200} 22,200	....	....	....	....	....	....	....	2,700
Total.....	220,000	118,000	0	66,000	49,500	26,500	0	96,000	0	2,200	0	0	0	750	0.0	0	0	2,700
ITALY																		
AgipPetroli SPA—Livorno.....	84,000	36,000	....	....	....	³¹⁴ 14,000	....	²²² 22,000 ^{31,700} 31,700	....	....	....	^{36,000} 36,000	10,000	....	....	....	....	3,500
Porto Marghera.....	80,000	38,000	....	^{113,500} 113,500 ^{227,000} 27,000	....	³¹⁵ 15,000	....	^{216,000} 216,000 ^{27,000} 27,000	....	....	....	^{36,000} 36,000	....	....	....	....	....	3,500
Sannazzaro, Pavia.....	200,000	84,500	....	^{232,000} 32,000	¹³⁴ 34,000	^{212,000} 12,000 ^{316,700} 16,700	¹³⁰ 30,000	^{112,000} 12,000 ^{227,000} 27,000 ^{41,000} 41,000	^{23,200} 23,200	....	....	^{212,000} 12,000	....	¹⁹²⁰ 1,920	^{235.0} 235.0	....	....	2,500
Taranto.....	84,000	13,500	....	^{127,000} 27,000 ^{237,250} 37,250	....	^{217,000} 17,000	^{115,500} 15,500	^{224,000} 24,000 ^{43,000} 43,000	....	....	....	^{36,000} 36,000	....	....	^{239.5} 239.5	....	....	2,500
Api Raffineria di Ancona SPA— Falconara, Marittima*.....	76,000	52,250	....	^{129,250} 29,250 ^{214,310} 14,310	....	^{112,600} 12,600	....	^{222,770} 22,770 ^{537,035} 37,035	....	....	....	^{37,074} 37,074	....	....	^{17.2} 17.2 ^{47.2} 47.2	....	120	....
Arcola Petrolifera SPA— La Spezia.....	33,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
ExxonMobil Refining & Supply Co.—Augusta, Siracusa.....	190,000	93,000	....	....	^{146,000} 46,000	^{122,000} 22,000	....	^{124,000} 24,000 ^{412,000} 12,000 ^{531,000} 31,000 ^{819,000} 19,000 ^{1124,000} 24,000	^{28,700} 28,700	....	....	^{12,400} 12,400	17,800	....	....	....	200	....
Iplom SPA—Busalla.....	35,000	17,500	....	....	....	....	....	^{8,930} 8,930 ^{8,570} 8,570	....	....	....	....	....	....	^{a119.2} 119.2	....	33	....
Isab SPA—Priolo Gargallo.....	235,000	102,700	....	^{133,000} 33,000 ^{245,000} 45,000	....	^{238,000} 38,000	^{m165,000} 65,000	^{264,000} 64,000 ^{72,000} 72,000 ^{724,400} 24,400	....	....	....	^{39,000} 39,000	....	....	^{220.3} 220.3 ^{63.6} 63.6	....	315	....
Italiana Energia E Servizi SPA— Mantova.....	56,600	20,100	....	^{19,400} 19,400 ^{224,200} 24,200	....	^{18,200} 18,200	....	^{214,800} 14,800 ^{19,000} 19,000 ^{78,000} 78,000	....	....	....	^{33,300} 33,300	....	....	....	....	60	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Praoil—Gela, Ragusa.....	105,000	52,500	245,000	....	135,000	213,850	....	116,500 42,500 35,000	210,000	....	16,700 2700	18,050	....	11,100 31,200	317.0 58.0	2,000	....	....
Priolo, Siracusa.....	220,000	50,000	....	225,000	132,000	29,000	....	19,000 18,000	14,000	....	112,000 22,300	....	....	11,050	....	....	....	....
Raffineria di Milazzo SPA— Milazzo, Messina.....	235,200	69,300	....	....	144,000	....	c126,700 222,700	220,900 15,100	14,000	....	....	....	....	11,400	247.5	....	310	....
Raffineria di Roma SPA— Rome.....	85,000	11,500	....	231,600	....	114,300	....	221,000 32,000 21,500	....	....	....	37,100	....	....	....	....	42	9,620
Saras SPA—Sarroch.....	300,000	108,000	....	241,000	185,000	327,000	m1100,000	127,000 426,000	27,200	....	....	....	....	35,800	a332.2 425.8	....	440	....
Sarpom— S. Martino Di Trecate.....	174,000	28,000	....	....	129,000	118,000 28,000	....	167,000 418,000 540,000	....	11,600	....	310,500	....	....	....	....	84	....
Tamoil Raffinazione SPA — Cremona.....	90,000	....	....	233,000	....	18,600 315,000	46,000	131,600 31,800 426,900	....	....	....	310,500	....	....	45.5	....	....	....
Total.....	2,282,800	776,850	45,000	422,510	305,000	269,250	265,900	1,073,005	37,100	1,600	21,700	87,924	27,800	11,470	268.0	2,000	1,604	21,620

IVORY COAST

Societe Ivoirienne de Raffinage —Abidjan.....	65,200	26,490	....	....	....	112,827	c114,934	114,184 419,409	....	....	....	....	....	....	1a49.0 430.0 610.0	....	....	....
Total.....	65,200	26,490	0	0	0	12,827	14,934	33,593	0	0	0	0	0	0	89.0	0	0	0

JAMAICA

Petrojam Ltd.—Kingston.....	34,200	1,283	....	....	....	13,240	....	16,400 46,000 57,200	....	....	....	....	....	....	....	....	....	1,350
Total.....	34,200	1,283	0	0	0	3,240	0	19,600	0	0	0	0	0	0	0.0	0	0	1,350

JAPAN

Cosmo Oil Co. Ltd.— Chiba*.....	228,000	57,000	....	....	131,500	132,850	....	134,200 456,700 931,500 1064,800	....	....	....	....	....	....	a188.0	....	600	....
Sakai*.....	76,000	32,300	....	....	119,800	17,200	....	19,900 426,100 522,500 918,000	17,200	....	....	....	....	11,465	a111.0	....	140	....
Sakaide*.....	114,000	39,425	....	....	117,100	112,600	....	112,600 421,600 536,000 915,480 1027,000	....	....	....	....	....	....	a134.0	....	265	....
Yokkaichi*.....	147,250	70,300	....	....	122,500	15,400 312,150	....	117,550 431,500 527,000 937,350	....	....	....	....	....	....	a112.0	....	200	....
Fuji Oil Co. Ltd.— Sodegaura.....	192,000	55,000	324,000	....	118,000	328,000	....	143,000 443,500	12,400	....	121,000 22,100	....	....	....	138.4	1,223	360	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
								⁵ 35,000 ⁹ 47,000 ¹¹ 10,000										
Idemitsu Kosan Co. Ltd.— Chita, Aichi	152,000	....	....	....	¹ 41,800	¹ 16,200	....	¹² 3,400 ⁴ 571,100 ¹⁰ 49,500	¹⁵ ,400	....	....	....	....	....	² 60.4	....	360	....
Himeji, Hyogo	76,000	....	....	....	....	¹ 15,300	....	¹²⁵ ,200 ⁴ 54,000 ¹⁰ 36,000	....	....	....	....	....	....	² 31.9	....	207	....
Ichihara, Chiba	209,000	62,700	....	....	¹ 42,750	¹ 15,300	....	¹³⁸ ,700 ⁴ 5114,300 ⁹ 35,100	....	....	....	....	9,450	....	^a 246.3	....	540	....
Tokuyama, Yamaguchi	114,000	52,250	....	....	¹ 24,700	³ 18,000	....	¹⁰ 35,100 ¹¹ 36,000 ¹¹⁸ ,000	....	....	....	....	....	....	² 17.1	....	153	....
Tomakomai, Hokkaido	133,000	22,800	....	....	¹ 28,500	¹ 16,200	^c 13,500	⁹ 40,500 ¹²⁴ ,300 ⁴ 549,500	....	....	....	....	....	....	^a 253.7	....	356	....
Japan Energy Co.— Chita, Aichi* .....	....	....	....	....	....	² 21,150	....	¹³⁵ ,100 ⁴ 549,500	....	....	¹⁷ ,754 ³¹ ,886	....	....	....	^{126.1} ^{54.6}	....	....	....
Mizushima, Okayama*	190,190	103,550	² 23,400	....	¹³⁸ ,700	¹¹⁸ ,000 ⁴ 41,490	^c 27,900	¹³⁶ ,000 ⁴ 41,490 ⁵ 55,800	¹⁴ ,590	....	¹¹¹ ,700 ²² ,095	....	5,513	....	^{127.0} ^{255.9} ^{53.3}	....	610	10,000
Kashima Oil Co. Ltd.— Kashima, Ibaragi	171,000	39,900	....	....	¹²⁹ ,700	³ 19,800	....	⁸ 63,000 ¹¹⁵ ,670 ¹²³ ,150	....	....	¹⁵ ,123	....	....	¹¹ ,397	^a 122.5	....	240	....
Koa Oil Co. Ltd.— Takaishi, Osaka	118,750	57,000	....	....	¹²⁴ ,300	¹¹² ,600	....	¹²⁰ ,700 ⁴ 41,400 ⁵ 44,100	¹³ ,600	....	¹¹ ,890	....	....	....	....	....	100	....
Yamaguchi*	120,650	60,800	² 17,100	....	¹²³ ,400	³ 21,600	....	⁹ 22,500 ¹⁰ 27,000 ¹¹⁹ ,800	....	....	¹⁶ ,750 ²² ,430	....	....	....	^{29.0}	303	185	9,900
Kyokuto Petroleum Ltd.— Ichihara, Chiba	160,000	83,000	....	....	¹³⁴ ,000	¹²⁷ ,000	^m 138,500	¹²⁷ ,500 ⁴ 33,500 ⁵ 45,000	....	....	¹⁶ ,500	....	....	....	^a 230.0 ⁴ 20.0 ^{68.5}	....	220	12,000
Kyushu Oil Co. Ltd.—Oita	130,000	66,000	....	....	¹¹⁶ ,500	¹⁸ ,000	....	¹⁹ ,000 ²⁷ ,000 ³³ ,000	....	....	....	....	....	....	⁷ 14.9	....	....	....
Nansei Sekiyu KK—Okinawa	90,000	....	....	....	....	¹¹¹ ,000	....	¹²¹ ,500 ⁴ 17,000	....	....	....	....	....	....	^{64.5}	....	....	....
Nihonkai Oil Co. Ltd.— Toyama*	57,000	10,450	....	....	....	¹⁵ ,400	....	....	....	....	....	....	....	....	....	....	40	....
Nippon Mitsubishi Petroleum Refining Co. Ltd.— Mizushima	230,000	67,000	....	....	¹⁴³ ,000	¹¹⁸ ,000 ³ 20,000	^c 11,100	¹⁴⁵ ,000 ³⁴ ,300 ⁴ 40,000	¹⁴ ,400	¹² ,100	¹¹⁴ ,000	....	3,100	....	^{255.2} ^{64.0}	....	540	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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Muroran.....	180,000	61,000	....	....	125,000	330,000	c125,000	540,000 937,000 1045,000 114,100 152,000 432,000 522,000 940,000 1015,000	....	....	11,500	....	....	....	a235.0	....	350	3,200
Negishi	360,000	130,000	....	....	174,000	120,000 330,000	....	169,500 478,000 559,000 981,000 1033,000 114,400	15,700	....	12,200	....	4,000	11,800	a124.2 a229.8	....	660	7,300
Niigata .....	....	2,000	....	....	....	....	....	....	....	....	....	....	300	....	20.6	....	....	....
Okinawa Sekiyu Seisei— Yonashiro, Okinawa	100,000	....	....	....	....	315,000	....	115,000 23,000 20,000 1038,000	....	....	....	....	....	....	222.0	....	300	....
Seibu Oil Co. Ltd.— Yamaguchi.....	110,000	40,000	....	....	122,000	117,000	....	126,000 36,000 30,000 1050,000	....	23,000	....	25,700	....	....	242.4 617.7	....	340	30,000
Showa Yokkaichi Sekiyu Co. Ltd.—Yokkaichi.....	222,000	96,300	....	....	122,600	140,600	....	261,500 39,200 35,600 36,900	....	....	15,500	39,200	5,500	....	128.3	....	....	6,300
Taiyo Oil Co. Ltd.— Kikuma, Ehime.....	102,000	27,000	....	....	....	330,000	c118,000	137,000 418,000	....	....	....	....	....	....	218.0 4108.0	....	....	....
Toa Oil Co. Ltd.— Mizue Factory, Kawasaki.....	65,000	57,000	124,000	....	133,000	18,000	....	117,000 29,500 413,000 520,000 7750 846,000 1310,700	....	12,040	210,200	....	....	....	132.8 613.0	....	380	....
Ohgimachi Factory, Kawasaki	120,000	30,000	....	....	....	321,500	....	128,000 421,000 527,000 916,000	....	....	115,000	36,000	....	....	....	....	100	17,000
Toho Oil Co. Ltd.—Owase.....	35,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tohoku Oil Co. Ltd.—Sendai.....	138,000	54,700	....	....	125,000	112,000	....	112,000 418,500 931,100	....	....	....	....	....	....	....	....	....	6,200
Tonen/General Sekiyu Seisei KK—Sakai.....	139,500	47,500	....	....	137,500	127,500	....	142,500 425,500 543,500 835,000 98,100	....	....	122,000	....	....	....	118.5 69.0	....	330	....
Kawasaki	296,000	94,500	....	....	186,000	118,000 328,000	c222,500	159,000 468,000 581,000 877,000 142,000 443,500	17,000	....	....	....	....	....	246.0 613.5	....	525	....
Wakayama.....	160,000	71,000	....	....	138,000	142,000	....	....	13,500	....	....	....	7,000	....	117.0 57.0	....	175	....

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Wakayama Petroleum Refining Co. Ltd.—Kainan City, Wakayama.....	50,000	30,000	....	....	....	....	....	⁵ 41,000 ⁸ 28,500 ¹¹ 11,000	....	....	....	....	8,500	....	⁶ 10.0	....	....	....
Total.....	4,786,340	1,620,475	88,500	0	819,350	742,840	146,500	4,271,310	43,790	7,140	163,928	20,900	43,363	4,662	1,306.1	1,526	8,276	106,500
JORDAN																		
Jordan Petroleum Refinery— Zerka.....	90,400	21,500	....	....	¹⁴ 4,000	¹¹⁰ 900	^{c14} 350	¹¹⁷ 300	....	....	....	....	....	....	^{28.0} ^{48.0}	....	....	4,250
Total.....	90,400	21,500	0	0	4,000	10,900	4,350	17,300	0	0	0	0	0	0	16.0	0	0	4,250
KAZAKHSTAN																		
Hurricane Hydrocarbons Ltd.— Shymkent.....	160,000	....	....	....	....	¹²⁴ 466	....	¹²⁵ 200 ⁴⁹ 863	....	....	....	....	....	....	....	....	60	....
Kazakoil—Atyrau.....	104,427	27,064	²¹³ 720	....	....	¹⁸ 808	....	¹⁹ 200	....	....	....	....	....	....	....	500	....	....
Pavlodar.....	162,666	93,973	²¹¹ 277	²³⁰ 071	¹³⁸ 356	¹²⁶ 178	....	¹²⁷ 200 ⁴⁹ 863 ⁸⁴⁶ 027	....	....	....	....	....	....	^{121.5}	500	64	8,550
Total.....	427,093	121,037	24,997	30,071	38,356	59,452	0	207,353	0	0	0	0	0	0	21.5	1,000	124	8,550
KYRGYZSTAN																		
Kyrgoil—Dzhalalabad.....	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
KENYA																		
Kenya Petroleum Refineries Ltd.—Mombasa.....	90,000	....	....	....	....	¹⁹ 300	....	³⁰ 000 ⁶ 000	....	....	....	....	....	....	....	....	....	1,100
Total.....	90,000	0	0	0	0	9,300	0	36,000	0	0	0	0	0	0	0.0	0	0	1,100
KUWAIT																		
Kuwait National Petroleum Co.—Mina Abdulla*.....	256,500	142,500	² 68,400	....	....	....	^{c136} 000	²⁶ 750 ⁴³³ 300 ⁵³¹ 500 ¹⁰⁹⁰ 900	....	....	....	....	....	....	^{a1} 182.0 ^{456.0}	2,600	810	....
Mina Al-Ahmadi*.....	326,800	80,750	....	....	¹⁴¹ 400	....	^{c138} 700	⁴¹⁸ 720 ⁵⁵⁵ 440 ¹⁰¹ 18,800	¹⁵ 616	....	....	....	....	¹⁶ 561	^{1198.0} ^{456.5} ^{456.0}	....	1,334	....
Shuaiba*.....	190,000	104,500	....	....	....	¹¹³ 500	¹⁴⁰ 500 ²⁴⁸ 600	¹²³ 400 ⁴³¹ 500 ⁵²⁷ 000	....	....	....	....	....	....	^{1210.0}	....	1,000	....
Total.....	773,300	327,750	68,400	0	41,400	13,500	163,800	437,310	5,616	0	0	0	0	6,561	758.5	2,600	3,144	0
LEBANON																		
Tripoli Oil Installations— Tripoli.....	20,000	12,730	....	....	¹⁷ 250	¹⁴ 392	....	⁷ 392	....	....	....	....	....	....	....	....	....	409
Zahrani Oil Installations— Sidon.....	17,500	....	....	....	....	¹³ 050	....	¹³ 050	....	....	....	....	....	....	....	....	....	....
Total.....	37,500	12,730	0	0	7,250	7,442	0	10,442	0	0	0	0	0	0	0.0	0	0	409

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
LIBERIA																		
Liberia Petroleum Refining— Monrovia	15,000	1,000	....	....	....	12,000	....	12,300 1,000	....	....	....	....	....	....	....	....	....	200
Total	15,000	1,000	0	0	0	2,000	0	3,300	0	0	0	0	0	0	0.0	0	0	200
LIBYA																		
Azzawiya Oil Refining Co.— Azzawiya and Benghazi	115,000	3,775	....	....	....	115,750	....	116,604 619,926	....	....	....	....	635	....	....	....	....	3,432
Ras Lanuf Oil & Gas Processing Co.—Ras Lanuf	220,000	....	....	....	....	13,300	....	25,600	....	....	....	....	....	....	....	....	....	....
Sirta Oil Co.—Brega	8,400	....	....	....	....	11,200	....	21,200	....	....	....	....	....	....	....	....	....	....
Total	343,400	3,775	0	0	0	20,250	0	43,330	0	0	0	0	635	0	0.0	0	0	3,432
LITHUANIA																		
JSC Mazeikiu Nafta— Mazeikiai	263,420	83,223	....	29,525	43,692	25,741	....	151,482 11,937 842,511	....	6,800	....	....	....	125	62.5	....	198	....
Total	263,420	83,223	0	29,525	43,692	25,741	0	105,930	0	6,800	0	0	0	125	62.5	0	198	0
MACEDONIA																		
Okta Crude Oil Refinery— Skopje	51,180	....	....	....	....	110,780	....	214,870 5,870	....	....	....	3,490	....	....	....	....	....	....
Total	51,180	0	0	0	0	10,780	0	20,740	0	0	0	3,490	0	0	0.0	0	0	0
MADAGASCAR																		
Solitany Malagasy— Toamasina	15,000	1,500	....	6,000	....	2,000	....	53,600 74,500	....	....	....	....	....	....	....	....	....	....
Total	15,000	1,500	0	6,000	0	2,000	0	8,100	0	0	0	0	0	0	0.0	0	0	0
MALAYSIA																		
Eso Malaysia Bhd.— Port Dickson	84,500	....	....	....	....	119,000	....	125,500 411,000	....	....	....	....	....	....	....	....	....	....
Petronas— Kertih	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Melaka I	95,000	....	....	....	....	218,000	....	118,000	....	....	....	....	....	....	112.0 461.6	975	200	....
Melaka II	95,000	58,900	218,900	....	....	223,400	128,500	123,400 531,500	....	....	....	38,100	....	....	112.0 461.6	....	....	....
Sarawak Shell Bhd.— Lutong	45,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Shell Refining Co. Bhd.— Port Dickson	155,000	7,000	....	....	....	14,000 313,000	....	232,000 5,000	....	....	....	....	....	....	....	....	....	4,000
Total	514,500	65,900	18,900	0	0	77,400	28,500	146,400	0	0	0	8,100	0	0	147.2	975	200	4,000
MARTINIQUE																		
Societe Anonyme de la Raffinerie des Antilles— Fort-de-France	17,000	....	....	....	....	43,019	....	15,176 8,977	....	....	....	....	....	....	....	....	15	....
Total	17,000	0	0	0	0	3,019	0	14,153	0	0	0	0	0	0	0.0	0	15	0

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
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	0	17,000	0	16,250	8,002	31.0	0	0	48,000
MOROCCO																		
Samir—																		
Mohammedia.....	125,230	17,465	....	....	....	121,830	....	121,830	....	....	....	....	2,460	....	....	....	....	5,630
								78,670										
								112,510										
Sidi Kacem*	29,671	7,456	....	....	25,040	12,529	....	12,529	....	....	....	....	....	....	....	....	....	....
Total.....	154,901	24,921	0	0	5,040	24,359	0	35,539	0	0	0	0	2,460	0	0.0	0	0	5,630
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	0	0	0	0	0	0	0	0	0	500	0	0.0	120	0	0
NETHERLANDS																		
ExxonMobil Refining & Supply																		
Co.—Rotterdam	182,000	79,000	339,000	....	....	228,000	144,000	129,000	....	....	....	....	....	....	124.0	....	485	....
								212,000										
								135,000										
								340,000										
								919,000										
Kuwait Petroleum Europoort																		
BV—Rotterdam	75,500	37,600	....	19,200	....	322,600	....	141,200	....	....	....	36,500	4,500	....	42.0	....	72	3,320
				26,800				431,800										
								75,900										
								75,900										
Netherlands Refining Co.—																		
Europoort	399,000	101,650	....	260,300	150,400	153,100	....	131,500	25,850	....	....	37,200	....	11,350	....	....	....	....
								263,900										
								64,800										
Shell Nederland Raffinaderij																		
BV—Pernis	390,000	148,000	....	245,000	151,000	342,000	274,000	2138,000	26,800	....	....	....	7,100	12,550	159.0	....	....	5,500
								38,000										
								11300										
								86,000										
Smid & Hollander Raffinaderij																		
BV—Amsterdam	10,000	8,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5,800
Total Raffinaderij Nederland																		
NV—Vlissingen.....	149,342	54,610	....	....	....	325,223	145,653	217,081	....	....	125,618	....	....	....	162.9	....	205	....
								28,959										
Total.....	1,205,842	428,860	39,000	121,300	101,400	170,923	163,653	658,340	12,650	0	25,618	13,700	11,600	3,900	147.9	0	762	14,620
NETHERLANDS ANTILLES																		
Refineria Isla Curazao SA—																		
Emmastad	320,000	195,000	....	180,000	150,000	120,000	....	153,000	26,500	12,900	....	....	12,000	....	....	....	160	22,000
								37,000										
								814,000										
								113,000										
Total.....	320,000	195,000	0	80,000	50,000	20,000	0	107,000	6,500	2,900	0	0	12,000	0	0.0	0	160	22,000

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
NEW ZEALAND																		
New Zealand Refining Co. Ltd.— Whangarei.....	106,000	46,100	....	....	....	127,672	^c 129,235	140,180 ^d 14,800 ^e 6,600	....	....	....	....	....	....	158.0	....	159	4,850
Total	106,000	46,100	0	0	0	27,672	29,235	61,580	0	0	0	0	0	0	58.0	0	159	4,850
NICARAGUA																		
Esso Caribbean and Central America—Managua.....	20,000	1,500	....	....	....	12,700	....	15,500 ^d 4,000 ^e 5,500	....	....	....	....	....	....	....	....	....	....
Total	20,000	1,500	0	0	0	2,700	0	15,000	0	0	0	0	0	0	0.0	0	0	0
NIGERIA																		
Kaduna Refinery & Petrochemical Co. (NNPC)— Kaduna	110,000	36,290	....	....	118,000	115,300	....	121,600 ^d 15,750 ^e 13,536	....	....	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 ^d 714,500	27,020	22,274	....	13,610	....	....	....	....	....	....
Warri Refinery & Petrochemical Co. (NNPC)— Warri	118,750	34,200	....	....	124,700	115,770	....	215,770 ^d 68,075	22,850	....	....	....	....	....	....	....	....	....
Total	438,750	124,490	0	0	82,700	70,070	0	109,231	9,870	2,274	291	3,610	3,878	0	0.0	0	0	14,850
NORTH KOREA																		
Government.....	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Government—Ungi	42,000	....	....	....	....	17,300	....	17,400	....	....	11,000	....	....	11,000	....	....	....	....
Total	71,000	0	0	0	0	7,300	0	7,400	0	0	1,000	0	0	1,000	0.0	0	0	0
NORWAY																		
ExxonMobil Refining & Supply Co.—Slagen	110,000	....	....	232,000	....	112,000	....	122,000 ^d 538,000 ^e 79,000	....	....	....	....	....	....	....	....	23	....
Statoil Mongstad—Mongstad	200,000	....	225,000	....	254,000	19,800 ^d 15,800	....	126,000 ^d 710,000 ^e 16,900 ^f 17,100	....	111,500	....	34,000	....	....	....	610	....	....
Total	310,000	0	25,000	32,000	54,000	37,600	0	139,000	0	11,500	0	4,000	0	0	0.0	610	23	0
OMAN																		
Oman Refinery Co.— Mina Al Fahal.....	85,000	....	....	....	....	316,000	....	221,000	....	....	....	....	....	....	....	....	....	....
Total	85,000	0	0	0	0	16,000	0	21,000	0	0	0	0	0	0	0.0	0	0	0

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
PAKISTAN																		
Attock Refinery Ltd.— Rawalpindi	30,500	10,000	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....
National Refinery Ltd.— Korangi, Karachi	62,050	12,600	....	....	....	33,800	....	23,800	....	....	....	....	3,400	....	....	....	....	3,600
Pakistan Refinery Ltd.— Karachi	46,300	....	....	....	....	22,700	....	18,100	....	....	....	....	....	....	....	....	....	....
Pak-Arab Refinery (PARCO)— Mahmood Kot, Punjab	100,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	238,850	22,600	0	0	0	11,500	0	21,900	0	0	0	0	3,400	0	0.0	0	0	3,600
PANAMA																		
ChevronTexaco Corp.— Las Minas ^A	60,000	6,500	....	27,000	....	111,000	....	112,500 426,700	....	....	....	....	....	....	....	....	....	....
Total	60,000	6,500	0	27,000	0	11,000	0	39,200	0	0	0	0	0	0	0.0	0	0	0
PARAGUAY																		
Petroleos Paraguayos— Villa Elisa	7,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
PERU																		
Maple Gas Corp.—Pucallpa	3,250	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroperu SA— Conchan	6,500	4,400	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Iquitos Loreto	10,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Talara	62,000	24,000	....	....	116,600	....	....	....	....	....	....	....	....	....	....	....	....	....
Repsol-YPF— La Pampilla Lima ^I	100,000	19,000	....	....	16,700	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	182,250	47,400	0	0	23,300	0	0	0	0	0	0	0	0	0	0.0	0	0	0
PHILIPPINES																		
Caltex (Philippines) Inc.— Batangas	86,500	20,500	....	....	112,500	19,000	....	29,000 516,000	....	....	....	....	....	....	....	....	40	....
Petron Corp.— Limay, Bataan	180,000	32,000	....	....	112,000	117,000 317,000	....	254,000 36,000	....	....	....	....	....	....	410.0	....	71	....
Philippine Petroleum Corp.— Pililla .....	....	21,000	....	....	....	....	....	....	....	....	....	....	3,700	....	....	....	....	1,200
Pilipinas Shell Petroleum Corp.—Tabango	153,000	....	....	22,000	....	318,900	....	231,100 47,300	....	....	....	....	....	....	....	....	....	....
Total	419,500	73,500	0	22,000	24,500	61,900	0	193,400	0	0	0	0	3,700	0	10.0	0	111	1,200
POLAND																		
Polski Koncern Naftowy Orlen (PKN)—Rafineria Trzebinia	16,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rafineria Nafty Jedlicze	16,000	....	....	....	....	....	....	131,500	....	....	....	....	....	....	....	....	....	10
Petrochemia—Plock	260,000	115,000	....	....	146,000	125,000	149,500	124,000 738,000 113,000	23,000	....	13,500 2770	....	....	11,600	....	....	....	13,000
Rafineria Gdanska S.A.— Gdansk	90,000	40,000	....	....	....	314,000	....	227,500 16,000 116,700	....	....	....	....	4,500	....	....	....	24	4,600
Total	382,000	155,000	0	0	46,000	39,000	49,500	116,700	3,000	0	4,270	0	4,500	1,600	0.0	0	24	17,610

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
PORTUGAL																		
Petrogal— Leca da Palmeira, Porto*	91,277	11,357	....	....	....	^{114,831} ^{10,601}	....	^{142,221} ^{28,823} ^{113,593}	....	....	^{117,276}	....	....	....	....	....	⁴⁵	....
Sines*	^{212,895}	^{66,880}	....	^{223,400}	^{131,500}	^{324,750}	^{49,180}	^{124,750} ^{62,100} ^{13,500}	^{25,400}	....	....	....	....	....	....	....	²⁰⁷	....
Total	304,172	78,237	0	23,400	31,500	50,182	9,180	174,987	5,400	0	17,276	0	0	0	0.0	0	252	0
PUERTO RICO																		
Sunoco Inc.—Yabucoa .....	....	34,000	....	....	....	....	^{15,600}	....	....	....	....	....	9,200	....	^{219.0}	....	⁵⁴	....
Total	0	34,000	0	0	0	0	15,600	0	0	0	0	0	9,200	0	19.0	0	54	0
QATAR																		
National Oil Distribution Co.— Umm Said	57,500	....	....	....	....	^{12,100} ^{9,400}	....	^{219,500} ^{19,850}	....	....	....	^{35,300}	....	....	....	....	....	....
Total	57,500	0	0	0	0	11,500	0	39,350	0	0	0	5,300	0	0	0.0	0	0	0
ROMANIA																		
Arpechim SA—Pitesti	70,288	37,589	....	^{211,277}	^{219,178}	^{112,233}	^{31,534}	^{111,507} ^{19,178}	....	....	^{11,591}	....	752	....	^{11.5}	....	²²	^{3,320}
Astra SA—Ploiesti	56,000	9,400	^{28,600}	....	....	....	....	^{3,000}	....	....	....	....	6,300	....	^{12.1}	²²⁰	....	^{1,500}
Petrobrazi SA—Ploiesti	69,280	39,240	^{212,660}	....	^{121,400}	^{113,440}	....	^{113,920} ^{75,540}	....	....	^{11,510}	³⁹⁹⁵	....	....	....	⁴⁰⁰	....	....
Petrolsub SA—Bacau	8,000	5,200	....	....	....	....	....	....	....	....	....	....	210	....	....	....	....	^{2,870}
Petromidia SA—Midia	105,000	46,000	^{20,000}	....	^{124,000}	^{111,600}	....	^{128,000} ^{7,500} ^{15,000} ^{22,500}	....	....	^{14,700}	....	....	¹⁸²⁰	^{16.1}	^{1,150}	⁸⁷	....
Petrotel SA—Ploiesti	104,000	55,970	^{211,480}	^{25,500}	^{120,900}	^{111,490}	....	^{120,000} ^{720,680} ^{113,200}	^{22,300}	....	....	....	2,680	¹⁵¹⁰	^{24.3}	²⁷⁰	....	^{3,670}
Rafinaria Darmanesti SA— Darmanesti	16,000	....	19,500	18,800	....	^{23,000}	....	....	....	....	....	....	....	....	....	³⁰⁰	....	....
Rafo SA— Onesti, Bacau	54,625	....	^{24,155}	^{26,570}	^{118,000}	^{311,300}	....	^{112,800} ^{21,900}	....	....	....	....	....	....	....	¹⁷³	²³	....
Steaua Romania SA— Cimpina	9,272	6,341	....	....	....	....	....	....	....	....	....	....	424	....	....	....	....	^{1,110}
Vega SA—Ploiesti	11,572	3,764	....	....	....	....	....	¹³⁶³	....	....	....	....	....	....	....	....	....	....
Total	504,037	203,504	66,395	32,147	103,478	63,063	1,534	205,088	2,300	0	7,801	995	10,366	1,330	14.0	2,513	132	12,470
RUSSIA																		
Bashneftekhimzavody— Novo-Ufa	285,000	93,800	^{27,142}	^{251,700}	^{222,247}	^{325,400} ^{122,300}	....	^{152,000} ^{65,205}	^{12,814}	....	....	....	9,585	....	....	²⁶⁰	²¹⁸	^{14,278}
Ufa	234,962	98,671	....	^{130,900}	^{238,356}	^{114,679}	....	^{115,000} ^{33,300} ^{842,192}	....	¹⁹⁷⁹	....	....	....	....	^{121.5}	....	⁷²	⁴⁹⁸
Ufaneftkhim	184,200	62,000	....	^{123,700}	^{217,260}	^{18,900} ^{321,775}	^{119,178}	^{131,600} ^{48,904}	....	....	^{18,700}	....	7,330	....	^{121.5}	....	....	^{4,981}
Central Fuel Co.—Moscow	242,995	90,214	....	^{120,000}	^{231,320}	^{133,029}	....	^{134,000} ^{66,548} ^{842,192}	....	....	....	^{33,542}	....	^{11,000}	^{121.5}	....	....	^{22,600}
Chernogorneft Refinery— Chernogorneft	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dagestan Oil— Makhachkala	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Gazprom—																		
Astrakhan	66,000	....	....	....	....	124,466	....	40,000	....	....	....	....	....	....	....	....	....	....
Surgut	88,000	....	....	....	....	15,000	....	....	....	....	....	....	....	....	....	....	....	....
Urengoy	9,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Komitek—																		
Ukhta	126,518	13,156	....	17,518	....	19,297	....	19,500	....	....	....	....	....	....	....	....	....	4,981
Krasnodareconeft	34,140	14,472	....	110,149	....	....	....	....	....	....	....	....	....	....	....	....	....	5,645
Lukoil—																		
Kogalym	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Perm	279,142	126,000	28,230	29,115	115,726	135,496	....	136,000	11,003	....	11,840	....	8,833	....	....	490	....	5,645
								84,200										
Volgograd	200,000	79,501	18,230 33,101	29,115	....	118,839	....	119,100 40,500 116,904	....	....	11,830	....	13,065	....	110.8	1,020	....	3,985
Mari El Refinery—																		
Mari Republic	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Nizhnekamsknefteorgsintes—																		
Nizhnekamsk	120,493	....	....	....	....	....	....	....	....	....	....	....	....	1625	....	....	....	....
Norilsk Refinery—Norilsk	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Norsi Oil—																		
Kstovo, Nizhny Novgorod	359,200	74,600	....	....	....	145,506	....	146,800 107,500 116,904	....	....	11,790 21,890	....	7,020	....	....	....	....	15,607
Rosneft—																		
Afipsky	28,115	....	....	....	....	116,147	....	112,658	....	....	13,680 22,387	....	....	....	....	....	....	....
Komsomolsk	108,000	33,266	39,679	211,300	....	8,100	....	19,000	....	....	....	2,700	....	....	....	....	....	....
Tarasovskoye	2,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tuapse	46,189	....	....	....	....	17,829	....	18,100	....	....	....	....	....	....	....	....	....	....
Russian Investment Co.—																		
Angarsk	440,700	195,463	111,217	225,748	133,753	151,040	....	151,300 30,685 116,900 110,556	....	....	14,900	....	5,638	....	....	410	....	8,500
Khabarovsk	94,000	10,149	....	14,284	....	19,786	....	110,556	....	....	....	....	....	....	....	....	....	5,811
Salavatnefteorgsintez—																		
Salavat	168,300	73,299	....	29,397	210,225	130,160	....	230,400 42,000	11,174	....	11,591	....	....	23,000	....	....	290	....
Sibneft—Omsk	378,000	195,000	112,100	226,500 30,071	165,589	142,400 24,710	19,178	167,100 43,000 842,192 116,904	11,272	....	111,139	....	3,800	11,750	....	510	....	17,433
Sidanco—																		
Cracking-Saratov	134,387	65,780	....	....	....	223,487	....	133,562	....	....	....	....	....	....	....	....	30	3,868
Slavneft—																		
Yanos	290,000	270,305	....	212,404	130,000	125,689	....	126,100 56,959 112,274	11,786	....	11,551	33,542	5,460	1800	....	....	....	10,460
Yaroslavl/Mendeleyev	8,700	....	....	....	....	....	....	....	....	....	....	....	5,300	....	....	....	....	....
Surgutneftegaz—Kirishi	335,900	85,327	....	....	....	156,840	....	167,900 104,800	....	....	15,172	37,085	....	....	....	....	45	16,603
Tatneft—																		
Kichuyi	8,000	3,600	....	....	....	11,750	....	11,850	....	....	....	....	....	....	....	....	....	1,200
Tomskneft	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tyumen Oil Co.—																		
Nizhnevartovsk	40,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Orsk, Orenburg ⁶	128,200	53,752	....	....	....	117,860	....	118,400 54,200	11,125	....	....	....	7,706	....	....	....	....	10,128
Ryazan	361,479	83,636	....	121,990	118,219	153,335	....	154,000 76,137 116,900	....	....	14,078 22,228	....	5,400	....	....	....	....	8,799
Ulyanovskneft	1,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yakutsk Refinery—Yakutsk	2,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yukos—																		
Achinsk	126,000	40,184	....	....	....	125,519	....	125,519 59,679	....	....	....	....	....	....	....	....	21	11,600
Novo-Kuibishev	200,000	73,000	125,300	....	117,266	133,518	....	134,300 64,000	....	....	12,188	....	3,705	....	....	1,030	....	12,286
Samara-Kuibishev	125,000	40,700	....	115,787	213,788	143,794	....	144,400	1832	1750	....	....	....	....	....	....	....	....

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-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Strezhevoy	4,400	....	....	....	....	....	....	57,120	....	....	....	....	....	....	....	....	....	....
Syzran.....	151,460	48,800	....	116,915	217,068	138,550	....	137,900	....	....	11,760	....	....	....	....	....	....	7,637
								78,822										
Total.....	5,435,480	1,924,675	84,999	346,593	330,817	775,201	38,356	2,113,966	10,006	1,729	56,724	16,869	82,842	7,175	75.3	3,720	676	192,545

SAUDI ARABIA

Arabian Oil Co. Ltd.— Ras Al Khafji	30,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petromin-Shell— Al-Jubail	305,000	84,000	....	232,000	....	319,000	144,000	119,000 261,000 53,000 49,000	....	....	15,800 27,000	....	....	....	197.0	....	....	....
Saudi Arabian Oil Co. (Saudi Aramco)— Rabigh	400,000	....	....	....	....	....	....	47,000	....	....	....	....	....	....	112.0	....	....	....
Ras Tanura	300,000	135,000	....	260,000	....	154,000	44,000	154,000	....	....	....	....	....	....	....	....	....	....
Jeddah	60,000	34,000	....	....	113,000	13,000	310,000	13,000	....	....	....	....	....	....	....	....	....	....
Riyadh	120,000	52,350	....	....	....	135,660	133,820	135,660 714,500	....	....	....	....	....	....	180.7	....	....	....
Yanbu	190,000	....	....	....	....	135,000	....	135,000 715,000	....	....	....	....	....	....	....	....	....	....
Saudi Aramco-Mobil— Yanbu	340,000	142,400	....	246,100	190,600	246,700	....	173,500 793,400	223,500	....	....	112,600 320,400	....	12,200	....	....	....	....
Total	1,745,000	447,750	0	138,100	103,600	193,360	131,820	553,060	23,500	0	12,800	33,000	0	2,200	189.7	0	0	0

SENEGAL

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

SERBIA

Serbia Oil Co.—Novi Sad	60,246	30,000	....	....	....	112,233	....	110,700 4,600 4,400 114,600	....	....	....	....	1,500	....	10.5	....	....	4,000
NIS-Rafinerija Nafta Pancevo— Pancevo	98,000	40,100	....	220,340	118,950	17,920	....	18,070 44,620 59,220	13,070	....	1200	....	....	....	....	....	59	4,242
Total	158,246	70,100	0	20,340	18,950	20,153	0	46,210	3,070	0	200	0	1,500	0	0.5	0	59	8,242

SIERRA LEONE

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

SINGAPORE

ExxonMobil Refining & Supply Co.—Jurong/Pulau Ayer Chawan	568,500	163,500	....	2115,500	....	135,000 361,000	33,500	1140,000 425,500 5138,000	....	....	124,000	....	37,500	....	127.0 465.0	....	400	7,500
Shell Eastern Petroleum (Pte.) Ltd.—Pulau Bukom	405,000	74,800	....	1,260,000	1,234,000	16,900 330,100	130,000	2119,300 77,600	23,000	....	....	....	6,500	....	140.8	....	....	8,400

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Singapore Petroleum Co. Ltd.— Pulau Merlimau	285,000	71,250	....	230,400	231,000	213,500	c113,300 m417,000	113,700 78,000	14,200	24,100	....	....	....	11,400	235.0 47.0 514.0 65.0	....	....	10,400
Total.....	1,258,500	309,550	0	205,900	65,000	146,500	93,800	592,100	7,200	4,100	24,000	0	44,000	1,400	193.8	0	400	26,300

SLOVAKIA

Slovnaft, Joint Stock Co.— Bratislava	115,000	53,030	....	....	....	122,270	c116,970	120,850 33,410 46,000 113,200 13370	....	....	13,160 41,250	35,790	3,200	....	132.9 58.2	....	74	9,070
Total	115,000	53,030	0	0	0	22,270	16,970	73,830	0	0	4,410	5,790	3,200	0	41.1	0	74	9,070

SLOVENIA

Nafte Lendava—Lendava	13,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	13,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0

SOMALIA

Iraqsoma Refinery Co.— Mogadishu	10,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0

SOUTH AFRICA

Caltex Oil SA—Cape Town	105,000	53,000	....	211,500	124,000	114,500	....	222,500 45,500 518,000	....	14,000	....	35,000	....	....	....	....	82	....
Engen Petroleum Ltd.— Durban	104,000	39,000	....	234,000	122,600	120,750	....	127,000 43,000 132,900	22,623	1530	11,500	36,290	2,739	....	48.4	....	130	4,830
National Petroleum Refiners of South Africa Pty Ltd.— Sasolburg	87,547	34,475	....	....	125,660	114,642	c111,774	212,830 711,562	23,295	....	....	13,623	....	....	129.1 66.1	....	120	....
Shell and BP PLC Petroleum Refineries Pty. Ltd.— Durban	172,000	71,000	....	227,000	135,000	129,000	....	246,000 70,000 712,000 11370	23,100	....	....	....	3,200	....	....	240	140	....
Total	468,547	197,475	0	72,500	107,260	78,892	11,774	271,662	9,018	4,530	1,500	14,913	5,939	0	43.6	240	472	4,830

SOUTH KOREA

Hyundai Lube Oil—Busan	9,500	6,650	....	....	....	....	....	21,800 111,080	....	....	....	....	1,800	....	20.4	....	....	3,600
Hyundai Oil Refinery Co.— Daesan	310,000	41,000	219,000	....	....	320,000	122,000	227,000 12,000	....	....	....	....	1,000	....	254.0	1,200	180	3,727
Inchon	270,000	18,000	....	....	....	15,400	....	227,900 86,850	....	....	113,000	....	....	....	....	....	126	....
LG-Caltex—Yosu	633,600	9,600	....	....	163,000	....	....	116,000 354,500	....	....	136,000	....	2,800	12,250	....	....	330	5,400
S-Oil Corp.—Onsan	520,000	160,000	....	....	160,000	343,000	c260,000	4178,600 144,000	....	....	120,000	....	9,000	11,600	2198.0	....	900	8,500

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
							c311,000	212,000 421,000 585,000 840,000 1050,000 126,000							157.0			
SK Corp.—Ulsan	817,000	78,850	....	....	245,000	120,070 349,500	c227,000	171,280 24,500 159,300 54,000 1027000	15,400	....	127,900 28,055 33,600	....	....	14,770	180.0 265.0 4199.0	....	1,195	2,970
Total	2,560,100	314,100	19,000	0	168,000	230,970	120,000	1,018,310	5,400	0	108,555	0	14,600	8,620	653.4	1,200	2,731	24,197

SPAIN

BP PLC—Castellon de la Plana	106,500	44,650	....	....	¹ 22,500	¹ 15,300	....	² 27,000 ¹ 7,100 ² 8,800	....	....	....	³ 8,100	....	....	....	....	....	....
Cia. Espanola de Petroles— Huelva	100,000	38,000	....	² 9,000	¹ 18,000	¹ 17,000	....	¹ 17,000 ⁵ 30,000 ⁸ 15,000	....	....	³ 4,400 ⁴ 3,800	....	2,600	....	¹ 23.7 ² 49.8	....	115	5,500
Cadiz	210,000	40,000	....	² 38,000	¹ 38,000	¹ 36,000	....	¹ 35,000 ⁵ 54,000 ⁸ 25,000	² 5,600	....	¹ 11,500	² 5,500	2,300	² 1,300	....	....	246	....
Tenerife	87,000	8,000	....	² 40,000	....	¹ 16,000	....	¹ 16,000 ⁴ 15,000 ⁵ 14,000	....	....	....	....	....	....	....	....	45	4,500
Petronor SA— Somorrostro Vizcaya	220,000	86,300	....	² 39,120	¹ 43,150	¹ 29,810	^m 432,100	¹ 41,300 ⁴ 65,803	² 4,770	....	....	....	....	¹ 1,390	^a 111.0 ^a 229.0 ⁴ 42.0	....	246	....
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	....	¹ 7,000	....	....	....	....	....	¹ 800	....	550	....	4,500
Puertollano, Ciudad Real	135,000	62,000	² 16,000	....	¹ 30,000	¹ 18,000	....	¹ 38,000	² 3,300	....	¹ 1,800	....	2,800	¹ 1,350	....	700	....	6,000
Tarragona	180,000	72,000	....	¹ 30,000	....	¹ 16,000	¹ 15,000	¹ 10,000 ² 20,000 ² 1,000	....	....	....	....	....	¹ 1,300	² 10.0	....	....	....
Total	1,293,500	404,950	29,500	156,120	179,650	195,110	47,100	536,003	13,670	0	21,500	13,600	10,700	6,140	125.5	1,250	652	25,500

SRI LANKA

Ceylon Petroleum Corp.— Sapugaskanda	50,000	2,650	....	² 13,350	....	¹ 5,450	....	¹ 8,000 ⁵ 2,100	....	....	....	....	....	....	....	....	....	860
Total	50,000	2,650	0	13,350	0	5,450	0	10,100	0	0	0	0	0	0	0.0	0	0	860

SUDAN

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

SURINAME

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

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
SWEDEN																		
AB Nynas Petroleum— Gothenburg	13,000	13,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,700
Nynashamn	28,000	28,000	....	....	....	....	....	69,400	....	....	....	....	....	....	48.1	....	22	18,760
Preem Raffinaderi AB— Gothenburg	106,000	....	....	....	....	120,500	....	146,000 314,000 37,000 6,500	....	....	....	310,000	....	....	536.0	....	112	....
Shell Raffinaderi AB— Gothenburg	77,000	30,000	....	122,000	....	117,000	....	228,000 5,000 28,000	....	....	....	34,000	....	....	....	....	....	....
Skandinaviska Raffinaderi AB— Brofjorden-Lysekil	199,500	64,600	....	237,800	129,700	332,400	448,600	248,600 345,900	....	13,420	....	314,400	....	....	69.7	....	200	....
Total	423,500	135,600	0	59,800	29,700	69,900	48,600	268,400	0	3,420	0	28,400	0	0	53.8	0	334	27,460
SWITZERLAND																		
Petroplus—Cressier	60,000	24,000	....	111,000 29,000	....	116,000	....	127,000 8,000 27,000	....	....	....	33,600	....	....	....	....	....	5,200
Tamoil SA—Collombey	72,000	....	....	....	....	112,000	46,400	118,800 130,000	....	....	....	36,400	....	....	....	....	....	....
Total	132,000	24,000	0	20,000	0	28,000	6,400	100,800	0	0	0	10,000	0	0	0.0	0	0	5,200
SYRIA																		
Banias Refining Co.— Banias	135,000	50,000	....	225,000	....	316,000	425,000	116,000 16,000	....	....	....	37,500	....	....	....	....	....	....
Homs Refinery Co.— Homs	107,140	12,200	218,200	....	....	39,812	....	18,928 3,050 24,724	....	....	....	32,910	....	....	....	400	40	6,422
Total	242,140	62,200	18,200	25,000	0	25,812	25,000	68,702	0	0	0	10,410	0	0	0.0	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	0	0	2,500	0	2,500	0	4,400	0	0	0	0	0	0	0.0	0	0	0
THAILAND																		
Esso Standard Thailand Ltd.— Sriracha	160,000	50,000	....	....	134,000	324,000	....	142,000 425,000 568,000	....	....	19,000	....	....	....	....	....	150	6,000
Petroleum Authority of Thailand— Bangchak Bangkok	61,750	....	....	....	....	19,450	....	14,950 25,850 1316,200	....	....	....	....	....	....	14.7	....	....	....
Refinery Co. (Refco)— Map Ta Phut, Rayong	275,000	46,835	....	....	133,300	313,500	....	113,500 50,580 825,200 67,000	....	....	....	....	....	....	....	....	....	....

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-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Thai Oil Co. Ltd.—Sriracha	185,000	55,900	....	217,400	111,200	335,400	119,900	4,100	....	....	....	12,100	....	....	132.6	....	....	3,400
Total.....	681,750	152,735	0	17,400	78,500	82,350	19,900	322,380	0	0	9,000	2,100	0	0	37.3	0	150	9,400

TRINIDAD

Petroleum Co. of Trinidad & Tobago Ltd.— Pointe-a-Pierre	160,000	125,000	....	228,800	226,600	119,100	146,800	119,300	11,600	11,500	....	....	3,000	1950	130.0	....	160	2,500
								4,518,000							710.0			
Total	160,000	125,000	0	28,800	26,600	19,100	46,800	37,300	1,600	1,500	0	0	3,000	950	40.0	0	160	2,500

TUNISIA

Ste. Tunisienne Industries des Raffinage—Bizerte	34,000	....	....	....	....	3,300	....	....	....	....	....	....	....	....	....	....	....	....
Total	34,000	0	0	0	0	3,300	0	0	0	0	0	0	0	0	0.0	0	0	0

TURKEY

Anadolu Tasfiyehanesi AS— Mersin	100,000	....	....	....	....	112,600	....	119,800	....	....	....	....	....	....	....	....	....	....
								9,000										
Narli Petroleum Refining Industry & Commerce Inc.— Narli, Kahramanmaraş	6,000	4,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,000
Turkish Petroleum Refineries Corp.— Allaga-Izmir	226,440	75,490	....	218,870	115,095	19,810	116,360	111,320	....	....	....	....	5,870	....	234.4	....	98	472
								211,320							488.5			
								39,055										
								411,320										
								76,790										
								117,250										
Batman, Siirt	22,015	2,140	....	14,720	....	11,302	....	11,302	....	....	....	....	....	....	....	....	....	2,139
Izmit	251,600	89,947	....	....	113,840	16,920	122,960	120,760	....	....	....	35,030	....	....	150.7	180	137	9,435
						314,000		210,065										
								33,150										
								427,050										
								76,290										
								839,000										
								1127,675										
								135,032										
Kirikkale	113,220	30,190	....	....	....	120,130	114,500	120,130	....	....	....	39,025	....	....	222.1	....	80	5,170
								515,096							421.8			
Total	719,275	201,767	0	23,590	28,935	64,762	53,820	261,405	0	0	0	14,055	5,870	0	217.5	180	315	20,216

TURKMENISTAN

Ministry of Oil & Gas— Chardzou	120,493	50,745	....	....	....	124,466	....	124,900	....	....	....	....	....	....	....	....	....	....
Turkmenbashi	116,477	40,900	228,568	....	115,151	18,074	....	138,600	11,028	11,223	....	....	....	....	....	1,040	....	415
						20,000												
Total	236,970	91,645	28,568	0	15,151	52,540	0	63,500	1,028	1,223	0	0	0	0	0.0	1,040	0	415

UKRAINE

Ukraine Oil Co.— Drogobich	78,321	25,185	33,195	17,330	....	18,074	....	18,200	....	....	....	....	....	....	....	115	....	3,819
JSC Khersonnefte-Perperabotka— Kherson	137,630	43,000	212,000	....	....	116,637	....	113,041	....	....	....	....	....	....	....	340	....	5,811
TNK-Ukraina— Lisichansk	320,000	115,600	....	....	140,500	156,761	....	157,500	....	....	21,870	....	....	1125	121.5	....	90	....
								79,014										

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Lukoil—Odessa	78,321	18,795	....	....	....	110,276	....	⁸ 42,192 ¹¹ 11,500 28,767	....	....	....	....	....	....	....	....	....	3,155
Ukratnafta— Kremenchug.....	361,500	113,000	....	....	128,500	....	....	142,500 73,000 ¹¹ 6,900	....	....	16,000	....	....	....	....	....	....	....
Nadvornaja.....	50,487	13,720	²⁶ 6,954	19,961	....	18,563	....	18,800	....	....	....	....	....	....	....	250	....	....
Total	1,026,259	329,300	22,149	17,291	69,000	100,311	0	371,414	0	0	7,870	0	0	125	21.5	705	90	12,785

UNITED ARAB EMIRATES

Abu Dhabi

Abu Dhabi National Oil Co.— Ruwais	145,000	56,680	....	....	119,150	....	^{c1} 31,050	21,889 39,248 21,850	....	....	....	....	....	....	¹⁵ 3.0	....	....	....
Umm Al-Nar	88,500	....	....	....	....	³ 14,000	....	223,500 22,500	....	....	....	....	....	....	....	....	35	....
Total	233,500	56,680	0	0	19,150	14,000	31,050	128,987	0	0	0	0	0	0	53.0	0	35	0

Dubai

Eminates National Oil Co.— Jebel Ali	120,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	....
Total	120,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	6	0

Fujairah

Metro Oil Corp.—	90,000	17,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	90,000	17,000	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0

Sharjah

Sharjah Oil Refining Co. Ltd.— Hamriyah	71,250	19,190	....	....	115,200	111,875	....	² 15,580 ⁴ 2,470 ⁶ 11,590	²¹ 1,140	¹¹ 1,900	....	....	....	....	75.8	....	16	700
Total	71,250	19,190	0	0	15,200	11,875	0	29,640	1,140	1,900	0	0	0	0	5.8	0	16	700

UNITED KINGDOM

England

AB Nynas Petroleum— Eastham.....	27,000	27,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	18,000
BP PLC —Coryton Essex	180,000	57,950	....	....	56,250	³ 34,200	....	166,600 42,300	²¹ 8,000	....	....	³¹ 3,500	6,750	....	....	....	....	2,430
Conoco Ltd.— South Killingholme.....	197,000	185,000	²⁶ 5,000	140,000	150,000	147,000	....	⁵ 44,000 ⁷ 138,000 ⁹ 28,000	²¹ 4,000	13,500	14,500 22,500	³¹ 6,000	....	....	....	2,300	140	....
ExxonMobil Refining & Supply Co.—Fawley	307,000	137,000	....	....	170,000	137,000 223,000	....	437,000 574,000 ¹⁰ 22,000 ¹¹ 11,500 ¹² 7,000	....	19,500	....	³² 0,000	11,200	....	⁶ 48.0	....	275	....
Lindsey Oil Refinery Ltd.— Killingholme South Humberside.....	192,000	92,000	....	²² 8,700	148,400	132,600	....	²⁵ 1,000 54,000	²⁶ 3,300	11,900	....	....	....	12,400 31,300	....	....	130	7,100
Petroplus International NV— Teesside.....	100,000	....	....	....	....	....	....	524,000	....	....	....	....	....	....	....	....	4	....
Shell U.K. Ltd.—Stanlow.....	245,000	46,000	....	....	66,000	129,000 330,000	....	159,000 214,000	²¹ 1,000	....	19,000	....	4,500	....	....	....	....	....

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd						Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur per day)	Asphalt
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates				
								57,000										
Total.....	1,248,000	544,950	65,000	68,700	290,650	232,800	0	729,400	49,300	14,900	16,000	49,500	22,450	3,700	48.0	2,300	549	27,530
Scotland																		
AB Nynas Petroleum— Dundee	12,000	12,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8,000
BP PLC —Grangemouth.....	206,000	64,600	....	....	118,900	139,600	131,500	262,100 731,500	24,500	....	....	....	....	....	149.0	....	....	....
Total.....	218,000	76,600	0	0	18,900	39,600	31,500	93,600	4,500	0	0	0	0	0	49.0	0	0	8,000
Wales																		
ChevronTexaco Corp. — Pembroke, DyfedA	210,000	105,000	....	226,000	190,000	339,000	....	139,000 214,000 560,000	232,500	....	....	119,900 312,000	....	....	....	....	160	....
Elf Oil UK Ltd.— Milford Haven	108,000	55,000	....	....	132,500	117,800	....	117,800 27,500 71,000 136,800	26,800	21,800	....	37,500	....	....	....	....	22	....
Total.....	318,000	160,000	0	26,000	122,500	56,800	0	216,100	39,300	1,800	0	39,400	0	0	0.0	0	182	0
UNITED STATES																		
ALABAMA																		
Coastal ExxonMobil Refining Co.—Mobile Bay	20,000	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hunt Refining Co.— Tuscaloosa*	43,225	14,250	212,600	....	....	16,480	....	19,000 41,800 510,800 89,900	....	....	....	....	....	....	a16.1 47.0	500	80	10,800
Shell Chemical Co.— Saraland	85,000	28,000	....	....	....	121,000	....	125,000 918,000	....	....	....	37,500	....	....	....	....	20	....
Total.....	148,225	57,250	12,600	0	0	27,480	0	74,500	0	0	0	7,500	0	0	13.0	500	100	10,800
ALASKA																		
BP PLC—Prudhoe Bay	15,000	....	315,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Kuparuk	14,500	....	314,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petro Star Inc.— North Pole	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valdez	47,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tesoro Alaska Co.—Kenai	72,000	16,500	....	....	....	112,000	c112,500	112,500	....	....	....	34,000	....	....	a112.8	....	20	1,000
Williams Alaska Petroleum Inc.— North Pole	210,000	6,000	....	....	....	....	....	....	....	....	12,800	....	....	....	....	....	....	3,000
Total.....	373,500	22,500	29,500	0	0	12,000	12,500	12,500	0	0	2,800	4,000	0	0	12.8	0	20	4,000
ARKANSAS																		
Berry Petroleum Co.—Stephens ...	6,700	3,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	900
Cross Oil & Refining Co. Inc.— Smackover	6,000	3,000	....	....	....	....	....	114,500	....	....	....	....	....	....	12.5	....	....	1,500
Lion Oil Co.—El Dorado*	55,000	21,280	....	....	118,000	312,240	....	120,000 58,500 821,000	14,410	....	....	35,850	....	....	....	....	157	7,560
Total.....	67,700	27,280	0	0	18,000	12,240	0	54,000	4,410	0	0	5,850	0	0	2.5	0	157	9,960
CALIFORNIA																		
Anchor Refining Co.—McKittrick...	10,000	6,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2,500

WORLDWIDE REFINING Company and refinery location	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro- cracking	Cat hydro- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
BP PLC—Carson.....	260,000	130,000	265,000	....	196,000	152,000	c143,000	140,000 227,000 410,000 520,000 890,000	115,000	12,800	....	13,500 320,000	....	12,500	1105.0	2,400	350	....
ChevronTexaco Corp.— El Segundo ^A	260,000	120,000	264,000	....	162,000	340,000	c145,000	152,000 415,000 534,000 76,000 868,000 1218,000	121,000	....	....	13,800 319,000	....	11,700 2,600	168.0 271.0	3,447	406	....
Richmond ^A	225,000	110,000	....	....	165,000	145,000	c141,000 c328,000 c440,000	150,000 450,000 525,000 1119,000	120,000	11,800	....	325,000	14,000	12,300 2,500	1145.0 410.0	....	350	....
Equilon Enterprises LLC— Bakersfield.....	65,000	39,000	222,000	....	....	114,700	c123,500	112,500 920,000 139,400	....	....	....	....	....	....	124.7.0 65.0	1,200	103	....
Martinez.....	154,800	102,400	224,200 320,400	....	167,700 21,000	228,200	c133,800	126,000 317,600 721,400 870,800 118,600 1245,200	110,200	22,300	....	314,400	3,500	....	1101.2	1,181	432	15,000
Wilmington	98,500	58,000	241,000	....	135,000	129,500	c129,000	120,500 38,500 413,500 833,000	18,700	....	....	....	....	....	113.0 a255.0 413.0 a555.0	1,890	285	....
ExxonMobil Refining & Supply Co.—Torrance	148,500	98,000	250,500	....	189,000	119,000	c123,000	122,500 717,500 899,000	223,000	....	....	....	....	....	1135.5 621.5	3,215	400	....
Tricor Refining LLC— Bakersfield ^J	12,500	11,500	....	....	....	....	....	112,000	....	....	....	....	6,000	....	....	....	....	5,000
Greka Energy Corp.— Santa Maria.....	10,000	6,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6,000
Kern Oil & Refining Co.— Bakersfield.....	25,000	....	....	....	....	13,000	....	14,500 32,000 56,500	....	....	....	....	....	....	....	....	5	....
Paramount Petroleum Corp.— Paramount.....	50,000	26,500	....	....	....	18,500	....	29,500 58,000 78,000 10,800	....	....	....	....	....	....	....	....	38	15,000
Phillips 66 Co.—Los Angeles (Carson and Wilmington) ^H	131,000	78,000	248,000	....	145,000	135,200	c124,750	150,850 550,000 635,000	19,450	....	....	13,000 312,200	....	....	1100.0	2,000	340	....
Rodeo & Santa Maria ^H	115,000	70,400	242,200	....	....	130,600	132,000	120,700 722,100	....	....	....	39,000	....	....	180.0	2,000	320	....
San Joaquin Refining Co. Inc.—Bakersfield.....	24,300	14,300	....	210,000	....	....	....	....	....	....	....	....	4,000	....	a13.5 43.5	....	3	5,000
Tenby Inc.—Oxnard.....	4,500	4,500	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3,000
Ultramar Diamond Shamrock Corp.—Golden Eagle.....	161,000	144,000	142,000	....	166,500	120,000 322,000	c132,000	123,000 39,000 532,000 614,000 862,000 135,500	114,000	....	....	....	....	12,300	a174.0 231.0	1,500	140	....
Wilmington	78,000	44,000	228,000	....	154,000	316,000	....	130,000 530,000 630,000	215,000	....	....	110,000	....	....	a143.0	1,700	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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Valero Energy Corp.—Benicia	135,000	68,500	129,000	....	172,000	236,000	135,000	862,000 1215,000 129,000 244,000 311,000 413,500 711,500 937,000 1221,000	115,000	22,500	....	....	....	13,500	1131.5	1,080	275	....
World Oil Co.—South Gate.....	7,000	7,125	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1,975,100	1,138,725	476,300	10,000	653,200	399,700	430,050	1,679,450	151,350	9,400	0	119,900	27,500	17,400	1,289.0	21,613	3,697	51,500
COLORADO																		
Conoco Inc.— Commerce City	60,000	25,000	....	....	119,000	110,000	12,500	19,600 12,500 12,000	....	12,600	....	....	....	....	....	....	90	9,800
Ultramar Diamond Shamrock Corp.—Denver	28,000	9,500	....	....	18,000	19,000	....	19,000	....	1900	....	....	....	....	....	....	4	....
Total	88,000	34,500	0	0	27,000	19,000	12,500	43,100	0	3,500	0	0	0	0	0.0	0	94	9,800
DELAWARE																		
Motiva Enterprises LLC— Delaware City.....	175,000	91,000	147,000	....	173,000	339,000	218,000	145,000 415,000 744,000 1215,000	18,190	15,040	11,260	16,000	....	12,192 32,322	138.0 435.0	1,700	514	....
Total	175,000	91,000	47,000	0	73,000	39,000	18,000	119,000	8,190	5,040	1,260	6,000	0	4,514	73.0	1,700	514	0
GEORGIA																		
Young Refining Corp.— Douglasville	6,000	....	....	....	....	....	....	....	....	....	....	....	1,200	....	....	....	....	3,000
Total	6,000	0	0	0	0	0	0	0	0	0	0	0	1,200	0	0.0	0	0	3,000
HAWAII																		
ChevronTexaco Corp.— Barber's Point ^A	54,000	30,000	....	....	121,000	....	....	133,000	14,000	21,000	....	11,200	....	....	12.0	....	....	1,300
Tesoro Hawaii Corp.— Kapolei.....	95,000	40,000	....	113,000	....	113,000	118,000	111,000	....	....	....	....	....	....	215.0	....	34	....
Total	149,000	70,000	0	13,000	21,000	13,000	18,000	14,000	4,000	1,000	0	1,200	0	0	17.0	0	34	1,300
ILLINOIS																		
Citgo Petroleum Corp.— Lemont*	158,650	71,250	234,740	....	160,300	128,080	....	141,850 33,780 531,950 713,500 129,900	218,900	....	16,030	....	....	....	15.0	2,101	344	....
ExxonMobil Refining & Supply Co.—Joliet.....	235,500	113,000	255,000	....	193,000	342,000	....	178,500 212,000 784,500	227,000	....	....	....	....	....	....	3,330	600	10,500
Marathon Ashland Petroleum LLC—Robinson	192,000	54,200	226,600	....	145,600	232,300 339,900	125,200	156,100 64,600	211,400	....	....	313,300	....	11,300 3200	123.8	1,270	180	....
Phillips 66 Co.—Wood River ^H	286,400	107,000	....	....	190,000	115,000 270,000	128,500	160,000 470,600 525,500	120,500	....	13,500	....	....	....	150.0	....	435	40,000

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Premcor Refining Group— Hartford	68,000	30,000	² 15,000	....	¹ 26,500	¹ 13,000	....	¹ 212,000 ² 3,800 ³ 800 ⁴ 77,600	² 6,000	....	....	³ 3,800	....	....	12.4	680	....	....
Total	940,550	375,450	131,340	0	315,400	240,280	53,700	591,380	83,800	0	9,530	17,100	0	1,500	81.2	7,381	1,559	50,500
INDIANA																		
BP PLC—Whiting	410,000	242,000	² 34,200	....	¹ 156,800	² 85,500	....	¹ 86,900 ² 96,000 ³ 24,700 ⁴ 92,200	¹ 34,200	....	¹ 16,200	² 24,700	....	¹ 3,800	¹ 29.5	1,690	449	60,000
Countrymark Cooperative Inc.— Mount Vernon	23,500	7,400	....	¹ 7,850	....	³ 6,500	....	² 10,000	² 1,700	....	....	³ 2,200	....	....	....	....	....	....
Total	433,500	249,400	34,200	7,850	156,800	92,000	0	309,800	35,900	0	16,200	26,900	0	3,800	29.5	1,690	449	60,000
KANSAS																		
Farmland Industries— Coffeyville	95,000	50,000	² 16,500	....	128,000	117,000	....	² 28,500 ³ 7,000 ⁴ 721,000	² 7,000	....	....	³ 8,500	....	....	....	800	....	....
Frontier Oil Corp.—El Dorado*	104,500	37,050	² 16,200	....	¹ 34,650	¹ 26,550	....	¹ 21,600 ² 16,200 ³ 31,860 ⁴ 840,500	² 11,250	....	¹ 2,700 ⁴ 1,458	³ 11,250	....	....	¹ 6.0 ³ 12.0	860	250	....
National Cooperative Refining Assoc.—McPherson	79,000	31,600	³ 20,400	....	120,900	³ 20,900	^m 11,200	¹ 21,800 ² 10,200 ³ 25,700 ⁴ 79,600	² 6,300	....	....	¹ 3,300 ³ 10,200	....	....	....	612	81	....
Total	278,500	118,650	53,100	0	83,550	64,450	11,200	233,960	24,550	0	4,158	33,250	0	0	18.0	2,272	331	0
KENTUCKY																		
Marathon Ashland Petroleum LLC—Catlettsburg	222,000	90,300	....	....	¹ 54,200 ² 40,900	³ 44,700	....	¹ 47,500 ² 6,700 ³ 36,700 ⁴ 73,200 ⁵ 110,500 ⁶ 1340,900	² 11,400	....	¹ 3,500 ⁴ 7,600	³ 12,400	8,100	12,600	....	....	410	21,900
Somerset Refinery Inc.— Somerset	5,500	....	....	....	....	² 1,500	....	¹ 1,500 ⁴ 500	....	....	....	....	....	....	....	....	....	....
Total	227,500	90,300	0	0	95,100	46,200	0	187,500	11,400	0	11,100	12,400	8,100	2,600	0.0	0	410	21,900
LOUISIANA																		
American International Refining Inc.— Lake Charles	30,000	15,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	880
Calcasieu Refining Co.— Lake Charles	15,680	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cotton Valley	8,500	....	....	....	....	....	....	¹ 34,000	....	....	....	....	....	....	^a 12.5	....	....	....
Princeton	9,500	8,500	....	....	....	....	⁴ 8,000	....	....	....	....	....	7,000	....	^a 4.5 ⁴ 4.5	....	3	....
Shreveport ^c	15,000	10,000	....	....	....	....	^c 47,200	¹ 31,100	....	....	....	....	7,000	....	^a 16.1 ⁴ 6.1	....	15	....
Canal Refining Co.— Church Point	30,000	6,000	....	....	....	¹ 6,000	¹ 6,000	¹ 6,000	....	....	....	....	....	....	....	....	....	....

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Cit-Con Oil Corp.— Lake Charles.....	....	36,100	....	....	....	....	....	....	....	....	....	....	8,550	....	....	....	....	....
Citgo Petroleum Corp.— Lake Charles.....	321,100	79,800	288,200	....	1126,000	145,900 357,600	134,200	1103,500 26,300 422,950 532,400 864,800	120,700	....	16,480	328,800	....	13,150 34,140	153.0 612.0	3,600	617	....
Conoco Inc.—Westlake.....	245,000	163,000	265,000	111,300	148,000	345,200	329,000	146,700 211,200 33,600 737,800 848,500	....	....	....	....	8,500	....	4110.0	3,800	363	....
ExxonMobil Refining & Supply Co.—Baton Rouge.....	488,500	220,500	2107,000	....	1221,500	272,000	123,000	1103,000 785,500 1122,500 1248,500 1344,000	135,000	19,000	....	....	16,000	17,000	412.0 612.0	5,000	675	....
Chalmette	182,500	102,000	231,500	....	168,000	128,000 318,000	118,500	139,500 729,000 855,500	212,500	....	110,000	39,500	....	....	45.0	2,050	695	....
Marathon Ashland Petroleum LLC—Garyville	232,000	118,800	....	....	1104,500	342,800	....	143,700 49,400 888,400	228,500	....	....	121,900 317,100	....	....	....	....	460	39,900
Motiva Enterprises LLC— Convent	225,000	100,000	....	212,000	185,000	136,000	245,000	140,000 425,000 563,000 834,000	113,050	23,600	....	311,250	....	12,250 32,500	358.0	....	700	....
Norco	220,000	78,000	221,300	....	1105,000	119,100 238,200	131,500	138,000 535,300	114,800	....	....	....	....	17,500	149.4	900	140	....
Murphy Oil USA Inc.—Meraux.....	95,000	47,500	....	....	134,200	....	....	119,800 13,500 1324,750	27,650	....	....	....	....	....	....	....	120	....
Orion Refining Corp.—Norco	155,000	124,000	275,000	....	185,000	112,000	....	130,000 730,000 30,000	....	....	....	....	....	....	....	4,110	290	....
Placid Refining Co. LLC— Port Allen.....	48,000	20,000	....	....	119,000	19,700	....	29,700 712,000	23,800	....	....	....	....	....	....	....	28	....
Phillips 66 Co.—Belle ChasseH.....	250,000	92,000	225,200	....	1104,000	142,000	....	247,000 430,000 735,000	238,000	....	112,400 25,400	....	....	....	710.4	800	70	....
Shell Chemical Co.—St. Rose.....	55,000	29,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Valero Energy Corp.— Krotz Springs	78,000	29,500	....	....	131,000	113,000	....	114,000 23,250	....	12,100	....	33,000	....	....	....	....	....	....
Total	2,703,780	1,279,700	413,200	23,300	1,031,200	485,500	202,400	1,562,150	174,000	14,700	34,280	91,550	47,050	26,540	348.0	20,260	4,176	40,780
MICHIGAN																		
Marathon Ashland Petroleum LLC—Detroit	74,000	39,000	....	....	128,500	120,000	....	115,700 18,400 816,900	13,900	....	....	....	....	11,000	....	....	130	20,900
Total	74,000	39,000	0	0	28,500	20,000	0	51,000	3,900	0	0	0	0	1,000	0.0	0	130	20,900
MINNESOTA																		
Koch Petroleum Group — Rosemount	290,000	185,000	270,000	....	186,000	213,000	....	151,000	112,200	11,100	....	218,000	....	....	1115.0	4,000	800	25,000

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
								³ 38,000 ⁴ 22,000 ⁵ 80,000 ⁶ 6,000 ⁸ 102,000		²³ ,600					⁵ 10.0			
Marathon Ashland Petroleum LLC—St. Paul Park.....	70,000	32,300	....	....	¹ 23,800	¹ 19,000	....	¹ 20,900 ² 3,800 ² 23,800	²⁵ ,700	....	....	¹¹ ,900 ³⁶ ,700	....	....	¹⁹ .5	....	90	9,500
Total.....	360,000	217,300	70,000	0	109,800	70,000	0	363,500	17,900	4,700	0	26,600	0	0	134.5	4,000	890	34,500
MISSISSIPPI																		
ChevronTexaco Corp.— Pascagoula ^A	295,000	231,000	² 71,000	....	¹ 63,000	¹ 71,000	^{C1} 58,000 ^{C2} 84,000	¹ 45,000 ² 28,000 ³ 32,000 ¹³ 35,000	¹¹ 4,800	....	¹ 19,000	....	....	¹² ,100	¹² 05.0	4,083	1,067	....
Ergon Refining Inc.— Vicksburg.....	23,000	10,200	....	....	....	....	....	¹¹ 6,500 ⁶ 6,000	....	....	....	....	6,000	....	^{1a} 7.7	....	....	....
Total.....	318,000	241,200	71,000	0	63,000	71,000	142,000	152,500	14,800	0	19,000	0	6,000	2,100	212.7	4,083	1,067	0
MONTANA																		
Cenex Harvest States— Laurel.....	55,000	27,200	....	....	¹ 12,700	¹ 11,200	....	¹ 13,000 ⁵ 14,500 ⁸ 15,500	²³ ,500	....	....	¹² ,500	....	....	¹¹ 2.0 ⁴ 12.0	...	125	15,600
Conoco Inc.—Billings.....	55,100	26,600	² 16,470	....	¹ 18,450	¹ 13,500	....	²¹ 0,800 ¹⁴ 4,400 ⁷⁸ ,100 ¹⁹ ,800	²⁶ ,480	....	....	¹³ ,420	....	....	¹² 0.0 ⁶ 11.4	825	....	....
ExxonMobil Refining & Supply Co.—Billings.....	58,000	27,500	18,000	....	120,000	112,000	^{C1} 5,000	²¹ 2,500 ⁵ 10,500 ⁷ 13,500 ¹³ 7,000	24,000	....	....	....	....	....	¹² 2.0 ⁶⁴ .5	375	....	12,500
Montana Refining Co.— Great Falls.....	7,000	3,350	....	....	12,300	11,000	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	175,100	84,650	24,470	0	53,450	37,700	5,000	139,600	13,980	0	0	5,920	0	0	81.9	1,200	125	28,100
NEW JERSEY																		
Coastal Eagle Point Oil Co.— Westville.....	150,000	47,500	....	....	155,000	128,000	....	129,000	14,000	13,300	117,000	310,000	....	....	....	....	20	....
Phillips 66 Co.— Linden ^H	250,000	62,000	....	....	1138,000	228,000	....	¹ 29,000 ⁶ 14,000 ⁷⁶ 5,000 ¹²⁴ 0,000 ⁸⁴ 5,000	116,000	....	....	13,000	....	....	⁶ 11.0	....	90	....
Valero Energy Corp.— Paulsboro.....	157,000	84,300	224,500	....	152,000	123,000	....	¹ 23,200 ⁴ 24,000 ⁵⁴ 3,000 ¹¹⁶ 80 ¹³¹ 4,000	210,300	....	....	....	11,500	....	^{a1} 12.0 ⁴⁹ .0	1,255	160	14,000
Total.....	557,000	193,800	24,500	0	245,000	79,000	0	326,880	30,300	3,300	17,000	13,000	11,500	0	32.0	1,255	270	14,000
NEW MEXICO																		
Giant Refining Co.— Bloomfield.....	16,800	....	....	....	16,000	14,800	....	14,800	....	12,000	....	....	....	....	....	....	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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Gallup	20,800	....	....	....	18,500	17,300	53,000	17,500 74,000	21,800	....	....	34,000	....	....	....	....	2	....
Navajo Refining Co.—Artesia	60,000	20,000	....	....	118,500	312,500	....	125,000 25,500	27,800	....	....	310,000	....	....	....	....	30	3,500
Total	97,600	20,000	0	0	33,000	24,600	0	69,800	9,600	2,000	0	14,000	0	0	0.0	0	33	3,500
NORTH DAKOTA																		
Tesoro West Coast Co.—Mandan ^F	58,000	....	....	....	124,700	211,500	....	112,000	24,200	11,100	....	34,800	....	....	....	....	15	....
Total	58,000	0	0	0	24,700	11,500	0	12,000	4,200	1,100	0	4,800	0	0	0.0	0	15	0
OHIO																		
BP PLC —Toledo	152,000	66,000	234,200	....	157,000	240,800	128,500	238,000 14,300 838,000	110,900	....	....	....	....	....	133.0 424.0 68.0	1,736	314	8,600
Marathon Ashland Petroleum LLC—Canton	73,000	34,000	....	....	122,800	318,100	....	124,700 9,500 23,800	25,700	12,000	....	34,800	....	....	....	....	100	7,600
Premcor Refining Group—Lima	165,000	53,000	222,500	....	138,000	253,000	424,000	160,000	....	....	14,950 23,150 19,000	318,500	....	....	710.4	800	20	....
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	0	177,800	157,500	80,700	256,300	25,600	2,000	17,100	23,300	0	0	127.4	2,536	434	16,200
OKLAHOMA																		
Conoco Inc.—Ponca City	174,000	52,200	223,950	....	154,300	140,400	....	140,400 12,800 818,900 730,300	213,600	11,500	....	17,350	....	11,200	610.4	1,000	30	....
Gary-Williams Energy Corp.— Wynnewood	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	....	110,800 715,500	12,700	....	....	35,400	....	....	....	....	19	2,250
Sunoco Inc.—Tulsa	85,000	30,000	28,500	....	....	117,500	....	124,000 110,500	....	....	....	....	8,500	....	....	350	....	....
Ultramar Diamond Shamrock Corp.—Ardmore	84,858	32,000	....	....	126,300	319,964	....	125,760 533,176 831,200	26,400	....	....	37,000	....	....	126.0 426.0	....	98	10,000
Total	438,858	153,375	32,450	0	114,300	99,914	4,500	263,836	27,200	1,500	0	23,250	8,500	1,200	71.0	1,350	147	16,750
PENNSYLVANIA																		
American Refining Group— Bradford	10,000	....	....	....	....	11,800	....	23,500	....	....	....	....	2,600	....	....	....	....	....
Phillips 66 Co.—Trainer ^H	180,000	70,000	....	....	150,000	347,500	m420,000	152,000 40,000 138,000	211,900	....	....	....	....	....	....	....	35	....
Sunoco Inc.— Marcus Hook	175,000	26,400	....	....	193,000	115,600	....	136,000 1212,000	110,000	....	119,200 32,400	....	....	12,600	16.0	....	....	....
Philadelphia	330,000	157,400	....	....	1113,500	168,000	....	185,600 578,000	216,700	....	13,700 410,000	17,300	....	....	....	....	....	....
United Refining Co.—Warren	66,700	27,000	....	....	123,000	216,000	....	220,000 6,000 714,000	13,500	11,000	....	36,800	....	....	....	....	....	12,000
Total	761,700	280,800	0	0	279,500	148,900	20,000	385,100	42,100	1,000	35,300	14,100	2,600	2,600	6.0	0	35	12,000
TENNESSEE																		
Williams Energy Services— Memphis	175,000	....	....	....	168,000	336,000	....	160,000	212,000	13,800	....	34,000	....	....	....	....	45	....

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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Total.....	175,000	0	0	0	68,000	36,000	0	51,000 1312,000	12,000	3,800	0	4,000	0	0	0.0	0	45	0
TEXAS																		
AGE Refining & Manufacturing— San Antonio.....	10,000	....	....	....	....	....	....	....	....	....	112,000	....	....	....	....	....	....	....
Alon USA—Big Spring.....	61,000	24,000	....	....	123,000	121,000	....	125,500 43,200 522,000 86,200	24,500	....	12,000	....	....	....	....	....	135	7,600
Atofina Petrochemicals, Inc.— Port Arthur.....	176,000	49,900	....	....	162,800	336,100	140,500	143,600 539,300 827,800	15,700	....	113,000	39,400	....	....	....	....	264	4,300
BP PLC —Texas City.....	437,000	228,000	240,400	....	1209,000	2137,800	157,000 257,000	1104,500 7133,000 13126,400	120,900 238,000	....	143,700	331,400	....	....	1180.0 522.8	2,585	1,123	....
ChevronTexaco Corp.— El Paso ^A	90,000	34,700	....	....	128,000	117,700	....	118,300 48,200 511,300	18,200	....	....	12,500	....	....	....	....	20	4,800
Citgo Petroleum Corp.— Corpus Christi [*]	156,750	73,625	237,800	....	172,450	347,250	....	149,050 544,100 856,880 1319,350	218,090	....	112,600 25,670 33,420 410,620	....	....	13,600	....	2,340	301	....
Coastal Refining & Marketing Inc.—Corpus Christi.....	100,000	56,000	217,500	210,000	120,000	110,000 320,000	111,000	131,000 412,000 514,000 825,000	23,000	12,000	114,500 26,000	35,200	....	....	124.0 515.0	1,000	280	12,000
Crown Central Petroleum Corp.—Pasadena.....	100,000	42,000	212,500	....	156,000	....	....	126,000 510,000	213,000	....	....	....	....	12,000	....	480	25	....
ExxonMobil Refining & Supply Co.—Baytown.....	516,500	247,500	238,000 338,000	....	1197,500	2119,500	125,500	1146,000 433,500 7184,500 8102,500 1126,500	130,000	....	....	....	20,000	16,500	183.5 657.5	3,150	1,630	....
Beaumont.....	348,500	138,500	245,000	....	1108,000	3147,000	159,500	1106,500 241,000 451,500 562,000 116,000 125,500	115,500	....	....	224,500	12,500	14,500	551.5	2,715	550	....
Koch Petroleum Group— Corpus Christi.....	297,000	104,500	113,680	....	1104,500	110,800 346,800	110,530	147,700 254,000 413,500 556,700 916,200	211,700	....	114,400 24,050 31,800 412,600	311,700	....	11,530	....	600	235	....
LaGloria Oil & Gas Co.—Tyler.....	60,000	15,000	26,500	....	120,200	14,000 312,200	....	220,000 12,000	14,700	....	....	34,000	....	....	....	250	16	....
Lyondell-Citgo Refining LP— Houston.....	268,850	187,625	287,300	....	189,100	160,300	....	164,800 224,210 419,800 576,500 73,060 892,700	118,810	....	19,630	....	3,700	12,610	....	5,000	1,042	....
Marathon Ashland Petroleum LLC—Texas City.....	72,000	....	....	....	139,900	110,500	....	....	28,600	....	12,400	....	....	....	....	....	....	....
Motiva Enterprises LLC— Port Arthur.....	245,000	106,400	249,500	....	186,000	345,000	117,820	145,000	118,000	....	....	....	21,000	....	....	2,540	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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Phillips 66 Co.—Borger	125,000	....	....	....	¹ 60,000	¹ 27,700	....	⁴ 36,000 ⁵ 45,000 ⁸ 22,000 ¹ 26,800 ¹ 319,200	² 17,500	....	³ 2,500	¹ 12,000 ² 13,500 ³ 7,500	....	....	¹ 60.0	....	345	....
Sweeny	205,000	169,500	² 58,000	....	¹ 90,000	³ 32,400	....	² 6,800 27,300 79,200 62,000 ¹ 321,400	² 19,000	....	¹ 5,300 ³ 7,000	² 9,000	....	12,850	⁵ 100.0	....	362	....
Premcor Refining Group— Port Arthur	225,000	100,000	² 37,500	....	¹ 70,000	¹ 50,000	....	¹ 50,000 79,000 ⁸ 60,000	² 17,000	....	¹ 9,800 ² 2,500 ³ 2,200	....	....	....	....	1,900	425	....
Shell Deer Park Refining Co.— Deer Park	333,800	181,600	² 77,500	....	¹ 67,500	¹ 22,400 ² 45,400	^c 162,600	¹ 77,200 ⁴ 29,800 ⁵ 41,300 ⁸ 46,600 ⁹ 48,100	¹ 16,500	....	....	....	....	16,100	^a 165.8 ⁴ 36.5	4,915	1,150	4,500
Trifinery Petroleum Services— Corpus Christi	30,000	29,000	....	....	....	....	....	¹ 11,200	....	....	....	....	....	....	....	....	....	18,000
Ultramar Diamond Shamrock Corp.—Three Rivers	86,000	28,000	....	....	¹ 21,000	¹ 9,000 ³ 20,000	^c 23,000	¹ 18,000 ⁶ 6,600 ⁸ 9,500	² 4,500	....	¹ 9,000	....	1,200	....	¹ 4.0 ⁴ 8.0	....	50	....
Sunray	155,000	47,000	....	....	¹ 52,000	¹ 18,000 ³ 28,000	^c 30,000	¹ 36,000 ⁴ 3,500 ⁵ 26,000	¹ 9,000	....	....	....	....	¹ 1,800 ³ 2,200	....	....	60	....
Valero Energy Corp.— Corpus Christi	94,100	30,700	....	....	² 90,000	³ 36,500	^c 436,000	¹ 30,000 ¹⁰ 74,000	² 13,500	....	¹ 8,000	¹ 15,300	....	¹ 21,000 ³ 2,900	^a 172.0 ⁴ 145.0 ⁶ 3.8	....	470	....
Houston	83,000	39,000	....	....	¹ 61,000	¹ 11,500	....	¹ 12,000 ¹ 32,500	¹ 9,000	....	....	....	....	12,300	....	....	70	....
Texas City	165,000	100,000	....	....	¹ 55,000	¹ 7,000 ³ 13,500	....	¹ 23,000 ⁴ 25,000 ⁵ 52,000 ¹⁰ 72,500	² 8,000	....	....	² 5,000	....	¹ 2,200	....	....	640	....
Total	4,440,500	2,032,550	559,180	10,000	1,682,950	1,067,350	400,450	3,520,350	332,700	2,000	214,690	151,000	58,400	62,090	929.4	27,475	9,733	51,200
UTAH																		
ChevronTexaco Corp.— Salt Lake City ^A	45,000	25,600	² 7,200	....	¹ 13,000	¹ 7,000	....	¹ 7,300 ⁵ 10,200 ⁷ 6,500	² 4,500	....	....	¹ 1,000	....	....	....	281	18	....
Flying J Inc.—Salt Lake City	25,000	5,000	....	....	² 5,000	¹ 5,500	....	¹ 7,000 ⁵ 7,000	² 1,400	....	....	¹ 2,000 ³ 1,750	....	....	....	....	4	....
Phillips 66 Co.—Woods Cross	25,000	5,500	....	....	¹ 7,680	¹ 7,200	....	² 12,000 ⁷ 1,700	² 2,400	....	....	³ 2,600	....	....	....	....	4	800
Silver Eagle Refining Inc.— Woods Cross	12,500	6,000	....	....	....	¹ 2,200	....	¹ 2,200 4,000	....	....	....	....	....	....	....	....	....	1,200
Tesoro West Coast Co.— Salt Lake City ^F	53,000	....	....	....	¹ 19,400	² 10,600	....	¹ 10,600	¹ 4,900	....	....	....	....	....	....	....	14	....
Total	160,500	42,100	7,200	0	45,080	32,500	0	68,500	13,200	0	0	7,350	0	0	0.0	281	40	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- treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
VIRGINIA																		
BP PLC—Yorktown.....	58,600	33,000	217,100	....	126,700	210,800	....	111,300 718,000	....	14,000	....	....	....	1660	....	905	36	....
Total	58,600	33,000	17,100	0	26,700	10,800	0	29,300	0	4,000	0	0	0	660	0.0	905	36	0
WASHINGTON																		
BP PLC—Ferndale.....	222,720	96,960	259,520	....	....	160,480	c154,720	154,720 624,960	....	....	....	....	....	....	192.0 633.0	2,700	211	....
Equilon Enterprises LLC— Anacortes.....	148,600	62,300	225,400	....	157,300	132,200	....	129,200 715,800 138,500	111,600	14,300	....	....	....	....	....	1,320	150	....
Tesoro West Coast Co.— Anacortes.....	114,500	45,000	....	....	142,000	224,300	....	131,800	111,500	....	....	13,400	....	....	....	....	....	1,000
Phillips 66 Co.—FerndaleH.....	89,000	31,000	....	....	225,000	215,500	....	115,500 413,000 4,624,000	26,000	....	....	13,900	....	....	....	....	40	....
US Oil & Refining Co.— Tacoma.....	43,700	23,700	....	....	....	15,750	....	17,000 55,500	....	....	....	32,300	....	....	....	....	....	10,000
Total	618,520	258,960	84,920	0	124,300	138,230	54,720	259,980	29,100	4,300	0	9,600	0	0	125.0	4,020	401	11,000
WEST VIRGINIA																		
Ergon-West Virginia Inc.— Newell.....	11,500	8,850	....	....	....	14,300	c34,800	14,300	....	....	....	....	3,600	....	a11.2	....	1	....
Total	11,500	8,850	0	0	0	4,300	4,800	4,300	0	0	0	0	3,600	0	1.2	0	1	0
WISCONSIN																		
Murphy Oil USA Inc.— Superior.....	33,250	19,500	....	....	19,900	17,200	....	18,100 7,020 115,500	21,350	....	....	31,800	....	....	....	....	15	6,750
Total	33,250	19,500	0	0	9,900	7,200	0	20,620	1,350	0	0	1,800	0	0	0.0	0	15	6,750
WYOMING																		
Frontier Refining Inc.— Cheyenne.....	41,000	25,000	210,000	....	112,000	17,400	....	18,500 516,500	24,200	....	....	11,600	....	....	a15.5 45.5	560	85	7,300
Sinclair / Little America— Casper.....	22,500	6,000	....	....	110,000	15,500	....	17,500 58,500	....	11,000	....	....	....	....	....	....	20	....
Sinclair Oil Corp.— Sinclair.....	54,000	29,500	....	....	120,600	114,200	....	114,200 210,000 112,000	14,000	1700	....	....	....	....	....	....	....	4,900
Wyoming Refining Co.— Newcastle.....	12,500	1,500	....	....	16,000	13,500	....	13,500 54,000	21,500	....	....	....	....	....	....	....	3	600
Total	130,000	62,000	10,000	0	48,600	30,600	0	94,700	9,700	1,700	0	1,600	0	0	11.0	560	108	12,800
URUGUAY																		
ANCAP— La Teja Montevideo.....	37,000	18,000	....	27,000	19,000	13,000	....	13,000 45,000	....	....	....	....	....	....	....	....	....	1,800
Total	37,000	18,000	0	7,000	9,000	3,000	0	8,000	0	0	0	0	0	0	0.0	0	0	1,800

WORLDWIDE REFINING

Company and refinery location

UZBEKISTAN

Uzbekneftegaz—

	Charge capacity, b/cd								Production capacity, b/cd									
	Crude	Vacuum distillation	Coking	Thermal operations	Catalytic cracking	Catalytic reforming	Cat hydro-cracking	Cat hydro-treating	Alkylation	Pol./Dim.	Aromatics	Isomerization	Lubes	Oxygenates	Hydrogen (MMcfd)	Coke (tonnes per day)	Sulfur	Asphalt
Alty-Arik.....	66,271	....	....	¹ 9,585	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bukhara.....	50,000	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fergana.....	106,000	45,671	² 17,667	....	....	123,487	....	¹²³ 900 ¹¹⁶ ,904	....	....	....	....	9,397	....	....	650	....	4,151
Total.....	222,271	45,671	17,667	9,585	0	23,487	0	30,804	0	0	0	0	9,397	0	0.0	650	0	4,151

VENEZUELA

Paraguana Refining Center—

Cardon/Judibana, Falcon.....	940,000	503,975	² 87,300 ³ 57,600	....	¹ 166,500	³ 40,500	....	¹⁵⁴ ,000 ⁸ 184,500 ¹¹ 139,500 ¹² 2,700	¹²² ,500 ² 18,900	....	....	¹²⁰ ,700	12,020	¹¹ ,530 ³ 8,500	¹¹ 41.0	5,200	1,454	36,000
Maracaibo, Zulia.....	15,000	8,835	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Petroleos de Venezuela SA—																		
El Palito, Puerto Cabello.....	126,900	71,200	....	....	¹ 51,700	¹ 9,000	....	9,000	² 20,300	....	¹² ,000	....	....	⁴ 2,800	⁴ 6.8	....	....	....
Puerto de la Cruz.....	195,000	....	....	....	¹ 13,600	....	....	....	² 4,100	....	....	....	....	....	....	....	17	....
San Roque, Anzoategui.....	5,200	1,770	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	1,282,100	585,780	144,900	0	231,800	49,500	0	389,700	65,800	0	2,000	20,700	12,020	12,830	147.8	5,200	1,471	36,000

VIRGIN ISLANDS

Hovensia LLC—

St. Croix.....	525,000	215,000	....	² 80,000	¹ 130,000	¹ 125,000	....	² 125,000 ¹ 65,000 ¹ 30,000	¹ 14,000	² 6,000	¹ 30,000	² 15,000	....	¹ 4,000 ³ 4,000	....	....	....	....
Total.....	525,000	215,000	0	80,000	130,000	125,000	0	420,000	14,000	6,000	30,000	15,000	0	8,000	0.0	0	0	0

YEMEN

Aden Refinery Co.—

Little Aden.....	120,000	10,500	....	....	....	¹ 12,000	....	....	....	....	....	....	....	....	....	....	....	3,000
Yemen Oil Co.—																		
Marib.....	10,000	....	....	....	....	¹² ,500	....	....	....	....	....	....	....	....	....	....	....	....
Total.....	130,000	10,500	0	0	0	14,500	0	0	0	0	0	0	0	0	0.0	0	0	3,000

ZAMBIA

Indeni Petroleum Refinery Co.

Ltd.—																		
Bwana Nkubwa Area, Ndola.....	23,750	2,280	....	....	....	¹ 5,320	....	⁷ 8,550	....	....	....	....	....	....	....	....	....	5,527
Total.....	23,750	2,280	0	0	0	5,320	0	8,550	0	0	0	0	0	0	0.0	0	0	5,527