

Country	Company, operator, refinery name, location	Thermal Processes		Catalytic Cracking			Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating				Isomerization				Asphalt (incl. road oil)													
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low-pressure	High-pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reformer feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization		Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation	Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen	Coke	Sulfur
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd
BELGIUM	ExxonMobil Refining & Supply Co.—Antwerp	307,000	137,000	0	0	0	47,000	35,000	0	0	38,000	0	0	0	0	81,500	0	0	50,000	102,000	0	0	96,500	0	7,500	0	0	0	0	0	98.5	0	355	12,500
	Gunvor Group Ltd.—IBR NV—Antwerp	107,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	Total SA—Antwerp	338,000	82,502	0	0	0	0	95,035	0	0	56,000	50,916	0	0	0	134,608	0	43,563	75,188	0	0	50,000	0	8,935	13,900	0	0	0	0	0.0	0	758	1,250	
	Vitol Group—VTTI BV—Antwerp Terminal & Processing Co. NV—Antwerp	24,189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,300	0	0	0	0	0	0.0	0	0	0		
Total		776,689	219,502	0	0	0	47,000	130,035	0	0	94,000	50,916	0	0	0	216,108	0	43,563	125,188	102,000	50,000	0	96,500	22,300	16,435	13,900	0	0	0	98.5	0	1,113	13,750	
BOLIVIA	Empresa Boliviana de Refinacion—Cochabamba	28,000	2,200	0	0	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0	499	0	0	0	0	0	0	0.0	0	0	0	
	Empresa Boliviana de Refinacion—Santa Cruz de la Sierra	24,350	0	0	0	0	0	0	0	6,400	0	0	0	0	6,400	0	0	0	0	0	0	0	0	0	0	0	0	0	14.0	0	0	0	0	
Total		52,350	2,200	0	0	0	0	0	0	12,100	0	0	0	0	6,400	0	0	0	0	0	0	0	499	0	0	0	0	0	0	14.0	0	0	0	
BOSNIA	Rafinerija Nafta Brod AD—Brod	240,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Total		240,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
BRAZIL	Petroleo Brasileiro SA—REMAN—Manaus, Amazonas	46,000	6,635	0	0	0	0	2,930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	1,100		
	Petroleo Brasileiro SA—RLAM—Mataripe, Bahia	315,000	126,058	0	0	0	0	87,888	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,221	2.0	0	72	2,300		
	Petroleo Brasileiro SA—LUBNOR—Fortaleza, Ceara	8,000	6,032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,076	1.0	0	0	3,500			
	Petroleo Brasileiro SA—REGAP—Betim, Minas Gerais	157,000	77,203	0	22,265	0	0	40,269	0	0	0	0	0	0	0	10,547	10,547	35,679	0	0	0	0	0	0	0	0	0	0	20.0	1,062	73	6,000		
	Petroleo Brasileiro SA—REPAR—Araucaria, Parana	208,000	89,869	0	0	0	0	53,904	0	0	0	0	0	0	0	0	0	29,249	0	0	0	0	0	0	0	0	0	0	10.0	0	70	5,000		
	Petroleo Brasileiro SA—RNEST—Ipojuca, Pernambuco	74,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0		
	Petroleo Brasileiro SA—REDUC—Duque de Caxias, Rio de Janeiro	239,000	112,186	0	0	0	0	49,717	0	11,132	0	0	0	0	0	0	0	33,340	0	0	11,698	0	0	3,145	0	0	0	13,712	18.0	1,481	70	0		
	Petroleo Brasileiro SA—REFAP—Canoas, Rio Grande do Sul	201,000	33,173	0	0	0	0	18,163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	22	2,600			
	Petroleo Brasileiro SA—RECAP—Capuava, Maua, Sao Paulo	53,000	0	0	0	0	0	17,578	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	9	0			
	Petroleo Brasileiro SA—RPBC—Cubatao, Sao Paulo	170,000	77,806	0	31,054	0	0	55,662	0	10,254	0	0	0	0	10,528	0	0	0	0	0	0	0	0	3,145	0	0	0	0	30.0	1,481	70	0		
	Petroleo Brasileiro SA—REPLAN—Paulina, Sao Paulo	415,000	155,010	0	62,000	0	0	93,747	0	0	0	0	0	0	0	0	0	66,679	0	0	0	0	0	0	0	0	0	35.0	2,950	212	4,000			
	Petroleo Brasileiro SA—REVAP—Sao Jose dos Campos, Sao Paulo	252,000	120,768	0	0	0	0	82,029	0	0	0	0	0	0	0	20,507	17,578	35,094	0	0	0	0	0	0	0	0	0	0	10.0	0	173	2,600		
Total		2,138,000	804,740	0	115,319	0	0	501,887	0	21,386	0	0	0	0	10,528	31,054	28,125	200,041	0	0	11,698	0	0	6,290	0	0	0	0	20,009	126.0	6,974	771	27,100	
BRUNEI	Brunei Shell Petroleum Co. Sdn. Bhd.—Seria	8,600	0	0	0	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Total		8,600	0	0	0	0	0	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
BULGARIA	Lukoil Neftochim Bourgas AD—Bourgas	195,000	76,900	26,400	0	0	0	37,100	0	14,400	0	0	0	0	166,900	0	0	0	0	0	0	0	0	8,100	3,300	1,700	0	0	0	25.9	0	180	5,400	
Total		195,000	76,900	26,400	0	0	0	37,100	0	14,400	0	0	0	0	166,900	0	0	0	0	0	0	0	0	8,100	3,300	1,700	0	0	0	25.9	0	180	5,400	
CAMEROON	Societe Nationale de Raffinage—Cape Limboh, Limbe	42,000	22,966	0	0	0	0	0	0	8,000	0	0	0	0	10,000	0	0	17,000	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Total		42,000	22,966	0	0	0	0	0	0	8,000	0	0	0	0	10,000	0	0	17,000	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
CANADA	Consumers' Cooperative Refineries Ltd.—Regina, Sask.	145,000	40,000	0	10,000	0	10,000	25,000	0	12,000	0	0	0	0	13,000	17,000	0	8,000	0	37,000	10,000	0	0	0	0	0	0	0	125.0	300	430	0	0	
	Husky Oil Operations Ltd.—Lloydminster, Alta. Tidewater Midstream & Infrastructure Ltd.—Prince George, BC	82,000	15,000	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	685	0	12,000		
		12,000	0	0	0	0	0	3,300	0	1,600	0	0	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	900	0	0.0	0	7	0		

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		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low-pressure	High-pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reformer feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation		Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen	Coke	Sulfur	
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	
	Imperial Oil—Dartmouth, NS	85,000	41,500	0	0	0	0	31,500	0	10,500	0	0	0	0	10,500	0	0	16,000	0	0	0	0	34,500	0	0	0	0	0	0	0	0	57	1,500		
	Imperial Oil—Edmonton, Alta.	191,000	69,000	0	0	0	0	65,000	0	21,000	0	0	0	0	0	30,500	0	78,500	0	0	0	0	52,000	15,500	0	6,500	0	0	0	20.0	0	49	10,500		
	Imperial Oil—Nanticoke, Ont.	113,000	48,000	0	0	0	0	49,000	0	0	33,500	0	0	0	25,500	44,000	0	29,500	0	0	0	0	12,000	0	0	0	0	0	0	0	0	100	10,000		
	Imperial Oil—Sarnia, Ont.	119,000	31,500	31,000	0	0	0	30,000	0	20,500	17,000	0	0	20,000	0	0	0	14,500	0	0	0	0	74,500	0	5,500	0	0	0	0	80.0	850	214	0		
	Irving Oil Ltd.—St. John, Newf.	300,000	100,000	0	0	20,000	0	95,000	0	35,000	0	34,000	0	0	48,000	0	30,000	0	0	0	0	0	14,000	16,000	0	10,000	0	0	0	47.0	0	200	0		
	NARL Refining LP—Come-by-Chance, Newf.	135,800	70,000	0	0	20,000	0	0	0	34,000	0	0	0	41,000	36,000	0	0	30,000	0	0	0	0	8,750	0	0	0	0	0	0	73.0	0	180	0		
	Nova Chemicals (Canada) Ltd.—Corunna, Ont.	80,000	33,000	0	0	0	67,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,200	0	0	0	0	0	0	0	0		
	Parkland Fuel Corp.—Burnaby, BC	55,000	11,800	0	0	0	0	17,800	0	0	9,400	0	0	0	15,000	0	0	16,500	0	0	0	14,000	0	3,000	0	0	10,000	0	0	0	0	0	22,000	2,000	
	Shell Canada Ltd.—Sarnia, Ont.	73,000	24,400	0	0	4,000	0	19,000	0	22,040	0	9,000	0	0	15,000	0	0	0	0	0	0	0	6,000	0	3,140	0	0	0	0	0	0	0	0		
	Shell Canada Ltd.—Scottford, Alta.	92,000	0	0	0	0	0	0	0	21,700	74,000	0	0	0	0	29,140	0	0	0	0	0	0	28,070	0	5,170	0	0	0	0	0	0	11	0		
	Suncor Energy Inc.—Edmonton, Alta.	142,000	47,500	0	17,100	0	0	0	40,850	11,700	0	0	0	0	33,400	0	0	62,700	0	0	36,100	0	14,200	14,700	0	0	0	0	0	20.0	800	370	0		
	Suncor Energy Inc.—Montreal, Que.	137,000	54,000	0	0	0	0	0	32,000	24,000	12,000	0	0	0	40,000	0	19,500	33,000	0	0	0	0	29,000	4,000	21,000	0	0	0	0	48.0	0	0	30,000		
	Suncor Energy Inc.—Sarnia, Ont.	85,000	26,730	0	0	0	0	0	16,668	22,957	0	32,078	0	0	25,788	0	5,975	43,588	0	0	0	0	6,743	5,503	13,209	0	0	0	0	41.0	0	180	5,200		
	Valero Energy Corp.—Ultramar Ltd.—Levis, Que.	230,000	48,500	0	0	0	0	67,500	0	19,000	29,450	0	0	0	43,200	43,600	40,000	70,800	0	0	0	0	0	0	0	0	0	26,190	0	0.0	0	80	0		
Total		2,076,800	660,930	38,500	27,100	44,000	77,000	403,100	89,518	234,297	123,050	149,078	0	20,000	41,000	305,388	149,100	124,615	403,088	0	37,000	46,100	14,000	267,763	70,703	58,219	16,500	10,000	27,090	0	454.0	2,635	23,878	71,200	
CHILE																																			
	Empresa Nacional de Petroleo—Aconcagua, Concon, Valparaiso	104,000	37,800	0	0	0	7,560	28,490	0	13,860	0	26,460	0	0	0	0	0	0	0	0	0	0	0	0	910	0	4,730	0	0	0	0.0	0	45	0	
	Empresa Nacional de Petroleo—Hualpen, Bio Bio	116,000	47,250	13,860	0	0	0	22,050	0	12,600	0	23,940	0	0	0	0	0	0	0	0	0	0	0	0	0	3,780	0	0	0	0.0	656	45	0		
Total		220,000	85,050	13,860	0	0	7,560	50,540	0	26,460	0	50,400	0	0	0	0	0	0	0	0	0	0	0	910	0	8,510	0	0	0	0.0	656	90	0	0	
CHINA																																			
	China National Petroleum Corp.—Dalian	411,685	0	0	0	0	0	70,000	0	3,000	0	0	0	0	6,000	0	0	0	0	0	0	0	0	2,000	0	0	0	0	6,000	0.0	0	0	0	0	
	China National Petroleum Corp.—Dushanzi	200,822	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Fushun	200,822	0	0	35,000	0	0	66,000	0	23,000	0	8,000	0	0	5,000	0	0	0	0	0	0	0	0	3,000	0	0	0	0	1,000	0.0	825	0	0	0	
	China National Petroleum Corp.—Guangzxi	200,822	0	0	0	0	0	70,288	0	44,181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Hohhot	100,411	0	0	0	0	0	56,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Jilin	200,822	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Jinxi	120,000	0	0	0	1,000	0	24,000	0	3,000	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	4,000	0.0	0	0	0	0	
	China National Petroleum Corp.—Jinzhou	100,000	0	0	20,000	0	0	16,000	0	6,000	0	20,082	0	0	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	500	0	0	0	
	China National Petroleum Corp.—Lanzhou	251,027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Liaoyang	200,822	0	0	0	0	0	0	0	3,000	0	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Ningxia	100,411	0	0	0	0	0	52,214	0	12,049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
	China National Petroleum Corp.—Qingyang	60,247	0	0	0	0	0	32,132	0	12,049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Qinzhou	200,000	0	0	0	0	0	0	75,753	0	47,613	0	0	0	0	0	0	0	0	0	0	0	0	0	2,008	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Sichuan	200,822	0	0	0	0	0	0	40,164	0	0	0	50,205	0	44,181	0	0	70,288	0	60,247	0	0	0	0	1,305	0	0	0	0	0.0	0	0	0	0	
	China National Petroleum Corp.—Urumqi	120,493	0	0	24,099	0	0	0	8,033	0	0	0	0	0	30,123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	200	803	0	0	
	CNOOC Trading (Singapore) Pte. Ltd.—Huizhou	240,000	167,448	0	84,000	0	0	24,000	0	0	40,200	152,000	0	0	37,000	0	0	0	0	0	0	0	0	3,200	34,600	0	0	0	0	178.0	0	164	0	0	
	Dalian West Pacific Petrochemical Co. Ltd. (Sinochem Corp.)—Dalian	200,822	40,000	0	0	0	0	60,247	0	30,123	0	30,123	0	0	0	0	0	40,164	0	0	40,164	0	0	2,500	0	0	0	0	0	0.0	0	274	0	0	

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		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	
	Hebei Xinhai Chemical Group Co. Ltd.—Changzhou, Hebei	98,630	0	0	16,603	0	0	0	12,233	0	15,342	0	0	0	0	10,000	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,792	
	Panjin North Asphalt Fuel Co., Ltd.—Panjin, Liaoning	290,000	200,000	0	56,000	0	0	38,000	1,000	59,000	0	17,000	0	23,000	0	42,000	20,000	0	29,000	0	23,000	0	0	0	32,000	12,000	2,000	2,000	2,000	11,000	100.0	1,500	400	10,000	
	Shandong Dongming Petrochemical Group Co. Ltd.—Heze City, Shandong	298,315	183,935	0	92,411	0	0	80,650	12,914	64,809	0	0	0	0	0	60,329	39,161	0	166,018	0	0	0	39,252	27,391	0	17,616	0	320	0	0	0.6	4,340	693	50,394	
	Sinochem Hongrun Petro-chemical Co. Ltd.—Weifang, Shandong	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Sinochem Quanzhou Petrochemical Co. Ltd.—Quanzhou	240,986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
	Sinopec Corp.—Anqing Co.—Anqing, Anhui	160,658	0	0	30,123	0	0	42,173	0	4,418	0	0	0	0	0	32,132	0	0	0	0	0	0	44,181	1,000	0	0	0	0	0	0.0	225	803	0	0	
	Sinopec Corp.—Beijing Yanshan Co.—Beijing	220,904	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Sinopec Corp.—Guangzhou Petrochemical Co.—Guangzhou, Guangdong	265,085	0	0	0	20,000	0	44,000	0	8,000	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	1,000	0	0	0	0	0	0.0	0	0	0	0
	Sinopec Corp.—Maoming Co.—Maoming, Guangdong	471,932	0	0	12,000	0	0	32,000	0	14,058	0	16,000	0	0	0	0	0	0	0	0	0	0	16,000	1,000	0	0	0	0	5,000	0.0	400	0	0	0	
	Sinopec Corp.—Zhanjiang Dongxing Petrochemical Co. Ltd.—Zhanjiang City, Guangdong	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Sinopec Corp.—Beihai Refining & Chemical Co. Ltd.—Beihai, Guangxi	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Sinopec Corp.—Hainan Petrochemical Co. Ltd.—Yangpu Economic Development Zone, Hainan	184,756	0	0	0	0	0	56,230	0	24,099	0	24,099	0	0	0	62,255	0	20,082	40,164	0	0	0	0	0	0	0	4,016	0	0	0	0.0	0	219	0	0
	Sinopec Corp.—Cangzhou Co.—Cangzhou, Hebei	70,288	0	0	24,099	0	0	24,099	0	3,012	0	0	0	0	0	32,132	0	0	32,132	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	4,016	0
	Sinopec Corp.—Shijiazhuang Refining & Chemical Co.—Shijiazhuang City, Hebei	200,822	0	0	16,066	0	0	40,164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	0	0	0	0.0	0	0	0	0	0
	Sinopec Corp.—Luoyang Co.—Luoyang, Henan	160,658	0	0	28,115	0	0	56,230	0	14,000	0	16,066	0	0	0	0	0	52,214	0	0	0	0	44,181	2,000	0	0	0	0	0	0.0	0	803	0	0	0
	Sinopec Corp.—Jingmen Co.—Jingmen City, Hubei	120,493	0	0	8,000	0	0	20,000	0	3,000	0	8,000	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	0	2,000	0.0	270	0	0	0	
	Sinopec Corp.—Wuhan Petrochemical Co. Ltd.—Wuhan City, Hubei	160,658	0	0	0	8,000	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	0	0	0	0.0	0	0	0	0	0
	Sinopec Corp.—Changling Petrochemical Co.—Yueyang, Hunan	230,945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Sinopec Corp.—Yangzi Petrochemical Co. Ltd.—Nanjing, Jiangsu	281,151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52,214	0	50,205	0	12,049	0	0	0	0	0.0	0	0	0	0	0
	Sinopec Corp.—Jinling Petrochemical Co.—Nanjing, Jiangsu	421,726	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28,115	0	0	0	0	0.0	0	0	0	0	0
	Sinopec Corp.—Jiujiang Co.—Jiujiang City, Jiangxi	160,658	0	0	0	8,000	0	24,000	0	3,000	0	0	0	0	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0
	Sinopec Corp.—Jinan Co.—Jinan City, Shandong	100,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
	Sinopec Corp.—Qingdao Refining and Chemical Co. Ltd.—Qingdao, Shandong	240,986	0	0	0	0	0	0	22,000	0	133,000	0	0	0	0	0	0	0	0	0	100,000	0	0	0	0	0	0	0	0	0.0	0	602	0	0	0

Country	Company, operator, refinery name, location	Thermal Processes					Catalytic Cracking					Catalytic Reforming					Catalytic Hydrocracking					Catalytic Hydrotreating					Isomerization					Asphalt (incl. road oil)		
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low-pressure	High-pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reformer feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation	Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen		Coke	Sulfur
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd
	Sinopec Corp.—Qilu Petrochemical Corp.—Zibo, Shandong	281,151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	
	Sinopec Corp.—Gaoqiao Co.—Shanghai	261,068	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Sinopec Corp.—Shanghai Petrochemical Co. Ltd.—Shanghai	321,315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Sinopec Corp.—Tianjin Co.—Binhai New Area, Tianjin	277,134	0	0	0	0	0	35,000	0	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000	0	0	0	0	0.0	0	0	0		
	Sinopec Corp.—Tahe Co.—Dongcheng District of Kuiche County, Xinjiang Autonomous Region	100,411	0	52,214	0	0	0	0	0	3,012	0	0	0	0	0	48,197	0	48,197	0	0	0	0	0	0	0	0	1,406	0	0	0.0	0	110	8,033	
	Sinopec Corp.—Zhenhai Refining & Chemical Co.—Ningbo City, Zhejiang	461,890	200,000	0	27,000	0	0	90,000	0	60,000	0	20,000	0	0	250,000	0	0	0	0	0	0	0	0	0	21,000	0	0	0	0.0	1,600	460	0		
	Sinopec Corp.—Fujian Petrochemical Co. Ltd.—Quanzhou City, Fujian	268,000	0	0	0	0	10,000	45,000	0	0	0	0	0	47,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Wudi Xinyue Chemical Co. Ltd.—Shandong	161,000	60,300	0	20,000	0	0	0	0	0	0	0	0	0	20,100	0	16,100	0	0	0	0	0	0	0	0	6,000	0	0	27.0	0	0	0		
	Yangchang Petroleum (Group) Co. Ltd.—Yanan	160,658	0	0	0	0	0	0	0	24,099	0	28,115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Yangchang Petroleum (Group) Co. Ltd.—Yongping	90,370	34,140	0	0	0	0	0	0	3,012	0	0	0	0	0	0	0	0	0	0	0	0	4,016	0	0	0	0	0	0.0	0	0	0		
	Yangchang Petroleum (Group) Co. Ltd.—Yulin	200,822	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0			
	Zhejiang Petroleum & Chemical Co. Ltd. (Phase 1)—Zhoushan, Zhejiang Province	400,000	400,000	0	60,000	0	0	86,300	0	186,000	0	76,712	143,835	95,890	0	69,041	38,365	26,849	0	0	0	0	0	17,328	79,560	28,000	0	0	0	170	0	1,080	0	
Total		10,775,142	1,285,823	52,214	553,516	0	0	1,204,957	89,667	696,351	87,813	564,539	194,040	118,890	91,181	617,748	240,087	46,931	504,277	0	183,247	92,378	39,252	185,974	68,028	208,253	41,422	2,320	2,000	29,000	475.6	9,860	6,411	83,235
CHINA (TAIWAN)																																		
	Chinese Petroleum Corp.—Kaohsiung	270,000	75,500	0	15,000	0	0	25,000	0	0	15,000	0	0	0	0	0	0	0	0	30,000	25,000	0	0	0	14,000	0	0	10,000	0	0.0	2,722	900	12,120	
	Chinese Petroleum Corp.—TaLin	300,000	0	0	0	0	0	25,000	0	0	55,000	0	0	0	0	0	0	0	0	60,000	0	0	0	0	0	0	10,000	5,300	0.0	0	250	0		
	Chinese Petroleum Corp.—Tao-Yuan	200,000	36,000	0	0	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	45,000	0	0	0	0	0	0	6,000	0	52.0	0	595	0		
	Formosa Petrochemical Co.—Mailiao	540,000	137,000	0	36,000	0	0	167,900	0	0	0	0	25,000	0	96,500	42,000	126,000	0	161,000	52,000	0	0	14,200	0	0	0	10,000	289.0	1,800	2,000	3,150			
Total		1,310,000	248,500	0	51,000	0	0	217,900	0	0	90,000	0	0	25,000	0	96,500	42,000	126,000	0	296,000	77,000	0	0	14,200	14,000	0	0	26,000	15,300	341.0	4,522	3,745	15,270	
COLOMBIA																																		
	Empresa Colombiana de Petroleos—Apjay, Meta	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Empresa Colombiana de Petroleos—Barrancabermeja, Santander	250,000	101,000	0	0	33,000	0	64,000	0	0	0	0	0	0	0	0	0	0	0	0	0	19,800	2,100	2,200	0	0	0	1,400	18.0	0	0	0		
	Empresa Colombiana de Petroleos—Refineria de Cartagena	165,000	40,000	0	0	19,000	0	26,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
	Empresa Colombiana de Petroleos—Orto, Putumayo	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
Total		420,000	141,000	0	0	52,000	0	90,000	0	0	0	0	0	0	0	0	0	0	0	0	0	19,800	2,100	2,200	0	0	0	1,400	18.0	0	0	0		
CONGO, REPUBLIC of																																		
	Societe Nationale des Petroles du Congo—La Congolaise de Raffinage—M'bota	21,000	8,000	0	0	0	0	0	0	2,000	0	2,000	0	0	3,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
Total		21,000	8,000	0	0	0	0	0	0	2,000	0	2,000	0	0	3,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
COSTA RICA																																		
	Refinadora Costarricense de Petroleo SA—Limon	24,000	600	0	0	0	6,500	0	0	1,200	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
Total		24,000	600	0	0	0	6,500	0	0	1,200	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0		
CROATIA																																		
	Ina-Industrija Nafta d.d.—Rijeka	90,000	38,000	0	0	12,001	0	20,002	0	14,454	0	12,264	0	0	0	0	0	22,776	0	0	0	0	0	0	0	0	0	4,660	0	0.0	0	60	0	
	Ina-Industrija Nafta d.d.—Sisak	44,181	16,000	0	5,000	0	0	10,000	0	15,000	0	0	0	0	15,000	0	0	5,700	0	0	0	0	0	0	0	0	0	0	0.0	200	0	0		
	Ina-Industrija Nafta d.d.—Zagreb	80,337	37,044	0	0	11,525	0	21,000	0	19,914	0	0	0	0	0	0	0	24,780	0	0	0	0	0	0	9,438	0	0	470	0.0	0	63	0		
Total		214,518	91,044	0	5,000	23,526	0	51,002	0	49,368	0	12,264	0	0	15,000	0	0	53,256	0	0	0	0	0	0	9,438	0	0	4,660	470	0.0	200	123	0	

Country	Company, operator, refinery name, location	Crude		Thermal Processes			Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating					Isomerization					Asphalt (incl. road oil)										
		b/cd	b/cd	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low- pressure	High- pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reform feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating		Alkylation	Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen	Coke	Sulfur	
GABON	Ste. Gabonaise de Raffinage—Port Gentil	24,000	0	0	0	0	9,220	0	1,400	0	0	0	0	0	4,870	0	0	4,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		24,000	0	0	0	0	9,220	0	1,400	0	0	0	0	0	4,870	0	0	4,560	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GERMANY	AB Nynas Petroleum NV—Harburg Bayernoil Raffineriegesellschaft GmbH—Vohburg/Ingolstadt/Neustadt BP PLC—BP Lingen GMBH—Lingen Deutsche Shell AG—Rheinland Gunvor Group Ltd.—Gunvor Raffinerie Ingolstadt GmbH—Ingolstadt Hestia Energy BV—Wilhelmshaven Holborn Europa Raffinerie GmbH—Harburg Kiesch & Co.—Heide Mineraloelraffinerie Oberrhein GmbH—Karlsruhe OMV AG—OMV Aktiengesellschaft—Burghausen PCK Raffinerie GmbH—Schwedt BP PLC—BP Gelsenkirchen GmbH—Gelsenkirchen Total SA—Leuna, Spargau	58,000	44,000	0	0	14,000	15,000	0	16,000	0	0	0	0	0	29,000	0	0	0	0	0	0	18,000	0	0	0	0	4,000	0	5,620	0.0	0	0	80	5,250	
Total		92,667	87,800	0	0	38,900	9,900	61,000	0	38,000	17,800	0	0	0	93,600	25,200	8,600	75,000	0	0	0	0	0	0	0	0	0	14,200	0	84.0	0	194	12,000		
		91,867	42,915	0	21,461	0	0	0	0	27,299	0	26,917	0	0	19,949	0	7,231	32,906	0	0	0	8,382	0	8,367	0	8,382	0	0	0.0	128	670	147			
		325,000	178,353	0	0	0	44,000	0	0	17,708	48,309	80,000	0	0	82,292	6,717	60,068	74,653	101,872	0	0	0	0	0	25,000	0	13,644	0	0	189.8	0	526	0		
		110,000	39,000	0	0	0	28,000	0	19,000	0	0	0	0	0	35,000	0	18,000	42,000	0	0	0	0	0	0	0	0	7,000	0	0	11.0	0	66	3,800		
		260,000	103,000	0	0	0	0	0	44,000	0	0	0	0	0	90,000	0	0	79,000	0	0	0	38,000	0	0	0	0	9,000	0	0.0	0	100	0			
		78,000	15,000	0	0	0	18,750	0	14,700	0	0	0	0	0	31,700	0	0	0	0	0	0	41,900	0	0	0	0	0	0	0.0	0	0	0	0		
		90,000	37,000	0	0	15,000	0	0	18,000	0	16,000	0	0	0	25,000	0	0	0	0	0	0	1,000	0	6,000	0	6,000	0	0	28.0	0	60	4,380			
		287,000	130,680	0	0	36,000	0	87,000	0	53,060	0	0	0	0	52,000	0	3,000	130,000	0	0	0	76,660	13,000	0	0	0	16,000	0	0.0	1,240	90	10,500			
		74,575	0	0	29,880	0	0	0	0	0	0	0	0	0	8,730	0	0	34,380	0	0	0	8,793	0	6,600	0	0	0	0	0.0	746	33	0			
		214,000	141,360	0	0	40,000	0	54,000	0	34,860	0	0	0	0	35,000	0	22,000	83,940	0	0	0	61,000	9,000	5,140	0	16,000	0	0	30.0	0	450	8,200			
		251,465	146,044	0	27,279	17,469	0	26,703	0	28,764	0	0	50,076	0	45,562	18,401	10,944	51,507	0	0	31,374	0	0	17,460	0	0	0	0.0	266	1,200	711				
		227,000	99,044	0	0	24,783	0	59,311	0	24,886	0	0	0	0	45,775	0	29,729	94,615	0	0	68,654	0	0	9,824	0	0	0	0	0.0	0	478	0			
Total		2,159,574	1,064,196	0	78,620	186,152	53,900	349,764	0	336,277	66,109	122,917	50,076	0	593,608	50,318	159,572	698,001	101,872	0	100,028	8,793	244,942	31,824	68,567	0	55,026	39,200	5,620	342.8	2,380	3,947	44,988		
GHANA	Tema Oil Refinery Co. Ltd.—Tema	45,000	0	0	0	0	14,000	0	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	
Total		45,000	0	0	0	0	14,000	0	65,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0
GREECE	Hellenic Petroleum SA—Aspropyrgos Hellenic Petroleum SA—Elefsis Hellenic Petroleum SA—Thessaloniki Motor Oil (Hellas) Corinth Refineries SA—Aghii, Theodori	146,500	68,000	0	0	23,000	0	44,700	0	24,900	0	0	0	0	40,200	0	15,000	35,000	0	0	43,800	0	47,535	0	0	10,000	0	0	8.6	0	240	7,500			
		100,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.2	0	26	0			
		66,500	12,000	0	0	0	0	0	10,000	0	0	0	0	0	0	0	10,000	20,000	0	0	0	16,500	0	0	0	8,300	0	0	5.2	0	40	4,150			
		110,000	72,000	0	0	26,000	30,850	0	14,300	0	43,900	0	0	0	21,300	18,000	25,000	70,600	0	0	0	23,700	2,400	9,100	0	5,350	0	3,500	5.5	0	213	5,300			
Total		423,000	152,000	0	0	49,000	0	75,550	0	49,200	0	43,900	0	0	61,500	18,000	25,000	125,600	0	0	43,800	0	87,735	2,400	9,100	0	23,650	0	3,500	23.5	0	519	16,950		
HUNGARY	MOL Hungarian Oil & Gas Co.—Szazhalombatta	161,000	77,500	0	16,900	14,000	0	24,000	0	29,600	0	0	0	0	30,000	0	9,000	41,000	0	0	35,000	0	5,700	3,300	12,000	0	0	3,500	6,100	76.2	600	226	6,300		
Total		161,000	77,500	0	16,900	14,000	0	24,000	0	29,600	0	0	0	0	30,000	0	9,000	41,000	0	0	35,000	0	5,700	3,300	12,000	0	0	3,500	6,100	76.2	600	226	6,300		
INDIA	Bharat Oman Refineries Ltd.—Bina, Madhya Pradesh Bharat Petroleum Corp. Ltd.—Kochi, Kerala Bharat Petroleum Corp. Ltd.—Mumbai, Maharashtra Chennai Petroleum Corp. Ltd.—Manali Essar Oil Ltd.—Vadinar HCPL-Mittal Energy Ltd.—Bathinda Hindustan Petroleum Corp. Ltd.—Mumbai, Maharashtra Hindustan Petroleum Corp. Ltd.—Visakhapatnam, Andhra Pradesh Indian Oil Corp. Ltd.—Barauni, Bihar Indian Oil Corp. Ltd.—Bongaigaon, Assam Indian Oil Corp. Ltd.—Digboi, Assam Indian Oil Corp. Ltd.—Guwahati, Assam Indian Oil Corp. Ltd.—Haldia, West Bengal Indian Oil Corp. Ltd.—Koyali, Gujarat Indian Oil Corp. Ltd.—Mathura, Uttar Pradesh Indian Oil Corp. Ltd.—Panipat, Haryana Indian Oil Corp. Ltd.—Paradip, Odisha	156,641	80,555	0	34,244	0	0	0	20,478	0	50,342	45,548	0	0	29,784	0	0	0	0	0	0	0	0	0	0	0	15,619	0	0	127.5	0	735	329		
		340,845	167,583	0	79,027	0	0	81,480	0	28,639	0	104,160	0	0	30,177	0	10,080	57,120	0	0	99,120	0	0	4,073	0	9,859	0	0	24.0	0	900	7,025			
		240,986	86,267	0	0	0	38,356	0	28,543	0	0	40,274	0	0	34,201	23,400	0	92,054	0	0	0	0	0	5,304	0	15,193	0	4,887	128.0	0	329	13,282			
		210,863	98,671	0	41,438	23,453	0	14,959	0	7,431	0	43,151	0	0	12,450	0	7,844	69,042	0	0	6,156	0	0	0	0	3,857	0	5,695	136.5	0	426	0			
		401,643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0			
		180,739	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0			
		150,616	64,404	0	0	0	0	43,649	0	13,334	0	0	0	0	19,450	11,621	0	77,383	0	0	0	0	0	0	0	6,116	0	10,562	19.5	0	237	0			
		166,682	74,430	0	0	18,795	0	41,425	0	25,420	0	0	0	0	36,699	21,855	0	101,452	0	0	0	0	0	0	0	5,718	0	0	73.2	0	452	3,736			
		133,771	47,991	0	20,674	0	0	32,581	0	0	7,417	0	0	0	10,569	10,874	0	66,464	0	0	0	0	0	0	0	3,152	0	0	66.4	0	80	2,490			
		47,193	0	0	18,795	0	0	0	0	0	3,915	0	0	0	3,915	0	0	23,014	0	0	0	0	0	0	0	3,679	0	0	33.7	0	9	0			
		14,186	5,923	0	5,184	0	0	0	0	2,222	0	0	0	0	2,222	0	0	7,850	0	0	0	1,316	0	0	0	2,705	0	0	9.4	0	3	3			
		19,492	0	0	8,032	0	0	2,886	0	0	0	0	0	0	1,137	0	0	13,364	0	0	0	736	0	0	0	1,142	0	0	12.8	0	5	0			
		160,658	77,058	0	31,951	9,247	0	13,425	0	0	5,285	0	32,603	0	11,430	3,836	11,075	55,425	11,699	0	0	0	0	0	0	2,340	0	2,631	117.8	1,366	360	4,151			

Country	Company, operator, refinery name, location	Thermal Processes					Catalytic Cracking				Catalytic Reforming				Catalytic Hydrocracking				Catalytic Hydrotreating				Isomerization				Asphalt (incl. road oil)							
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low- pressure	High- pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reform er feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation	Aromatics		C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen	Coke	Sulfur
ISRAEL		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd
	Oil Refineries Ltd.—Haifa	130,000	73,000	0	0	41,000	0	22,000	0	15,000	0	0	0	0	0	0	0	0	0	0	0	0	46,000	0	0	0	0	0	0	0.0	0	0	2,700	
	Paz Oil Co. Ltd.—Ashdod	90,000	45,000	0	0	25,000	0	27,500	0	11,500	0	0	0	0	0	0	0	0	0	0	0	50,000	0	0	0	0	0	0	0.0	0	0	0		
Total		220,000	118,000	0	0	66,000	0	49,500	0	26,500	0	0	0	0	0	0	0	0	0	0	0	96,000	0	0	0	0	0	0	0.0	0	0	2,700		
ITALY																																		
	Api Fattineria di Ancona SPA—Falconara, Marittima	82,900	37,500	0	0	24,500	0	0	0	14,000	0	0	0	0	25,000	0	0	44,100	0	0	0	0	0	0	0	15,000	0	0	7.2	0	120	0		
	Arcola Petroliera SPA—La Spezia	33,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0			
	Eni SPA—Livorno	106,000	36,000	0	0	0	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	53,700	0	0	6,000	0	0	10,000	0.0	0	0	3,500		
	Eni SPA—Sannazzaro, Pavia	223,000	84,500	0	0	32,000	0	34,000	0	28,700	0	30,000	0	0	12,000	0	0	0	0	0	0	68,000	3,200	0	12,000	0	0	0	35.0	0	0	2,500		
	Eni SPA—Taranto	120,000	60,590	0	0	37,250	0	0	0	17,000	0	15,500	0	0	0	0	0	0	0	0	0	67,000	0	0	0	6,000	0	0	39.5	0	0	2,500		
	ERG Refinerie Mediterranee South—Mellilli, Sicily	238,000	106,000	0	0	43,000	0	0	0	36,000	0	62,000	0	0	63,000	0	34,000	70,000	0	0	0	0	0	0	0	9,000	0	0	16.0	0	360	3,000		
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Agusta, Siracusa	198,000	92,500	0	0	0	0	50,000	0	23,000	0	0	0	0	24,000	13,500	22,000	36,500	0	0	21,500	0	27,500	9,000	0	5,000	0	14,000	0.0	0	200	0		
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—S. Martino Di Trecate	132,000	27,500	0	0	0	0	35,000	0	27,500	0	0	0	0	59,500	0	20,500	48,000	0	0	0	0	0	0	0	12,000	0	0	13.0	0	42	0		
	Ipiom SPA—Bussalla	39,500	19,500	0	0	0	0	0	0	0	0	0	0	0	0	10,500	0	0	0	0	0	9,500	0	0	0	0	0	6.8	0	37	0			
	ISAB SRL—Priolo, Sicily	320,000	120,800	0	0	24,000	0	38,000	0	41,000	0	90,000	0	0	226,900	0	0	0	0	0	0	0	0	5,000	0	18,000	0	0	16.5	0	640	33		
	Raffineria di Milazzo SPA—Milazzo, Messina	241,300	69,700	0	0	0	0	44,500	0	12,900	0	33,900	0	23,400	0	28,000	0	0	0	0	0	21,000	5,130	0	0	0	0	0	82.7	0	412	0		
	Reffineria di Roma SPA—Rome	89,109	11,027	0	0	31,734	0	0	0	14,219	0	0	0	0	22,835	0	0	28,438	0	0	0	0	0	0	0	19,095	0	0	0.0	0	39	706		
	Saras SPA—Sarroch	300,000	105,000	0	0	41,000	0	41,000	0	110,000	0	120,000	0	0	26,500	26,500	0	39,000	39,000	0	0	20,000	9,000	5,000	0	0	0	75,000.0	0	440	0			
Total		2,122,809	770,617	0	0	233,484	0	242,500	0	338,319	0	351,400	0	23,400	459,735	78,500	76,500	266,038	39,000	0	21,500	0	266,700	31,330	5,000	41,000	49,095	12,000	24,000	75,216.7	0	2,290	12,239	
IVORY COAST																																		
	Societe Ivoirienne de Raffinage—Abidjan	76,000	28,979	0	0	0	0	0	0	15,000	0	17,000	0	0	18,600	0	0	14,220	0	0	0	0	0	0	0	0	0	0.0	0	0	0	5,000		
Total		76,000	28,979	0	0	0	0	0	0	15,000	0	17,000	0	0	18,600	0	0	14,220	0	0	0	0	0	0	0	0	0	0.0	0	0	0	5,000		
JAMAICA																																		
	Petrojam Ltd.—Kingston	36,000	1,800	0	0	0	0	0	0	3,700	0	0	0	0	6,800	0	7,500	9,500	0	0	0	0	0	0	0	0	0	0.0	0	0	0	850		
Total		36,000	1,800	0	0	0	0	0	0	3,700	0	0	0	0	6,800	0	7,500	9,500	0	0	0	0	0	0	0	0	0	0.0	0	0	0	850		
JAPAN																																		
	Cosmo Oil Co. Ltd.—Chiba	220,000	57,000	0	0	0	0	33,300	0	32,850	0	0	0	0	34,200	0	56,700	63,900	0	64,800	0	31,500	0	0	0	0	0	0	88.0	0	600	0		
	Cosmo Oil Co. Ltd.—Sakai	100,000	36,100	0	0	0	0	20,700	0	7,200	0	0	0	0	9,900	0	26,100	22,500	0	0	0	18,000	7,200	0	0	0	0	0	11.0	0	140	0		
	Cosmo Oil Co. Ltd.—Yokkaichi	132,000	70,300	0	0	0	0	55,000	0	17,550	0	0	0	0	17,550	0	31,500	27,000	0	0	0	37,350	0	0	0	0	0	12.0	0	200	0			
	Fuji Oil Co. Ltd.—Sodegaura	143,000	55,000	0	0	24,000	18,000	0	0	28,000	0	0	0	0	43,000	0	43,500	35,000	0	0	0	47,000	2,400	23,100	0	0	0	0.0	1,223	360	0			
	Idemitsu Kosan Co. Ltd.—Aichi	160,000	15,200	0	0	0	0	47,500	0	0	18,000	0	0	0	27,000	14,220	44,100	30,600	0	54,000	0	0	5,320	0	0	0	0	60.4	0	392	0			
	Idemitsu Kosan Co. Ltd.—Chiba	190,000	62,700	0	0	0	0	42,750	0	15,300	0	0	10,440	0	23,400	12,240	39,600	54,000	0	36,000	35,100	0	0	0	0	0	0	32.9	0	540	0			
	Idemitsu Kosan Co. Ltd.—Hokkaido	150,000	22,800	0	0	0	0	31,350	0	16,200	14,850	0	0	0	24,300	9,720	32,850	22,500	0	37,800	0	0	0	0	0	0	0	60.2	0	356	0			
	JX Nippon Oil & Energy Corp.—Oita	136,000	66,000	0	0	0	0	26,000	0	0	29,000	10,000	0	0	29,000	0	0	43,000	23,000	0	0	4,900	0	0	0	0	0	23.9	0	180	0			
	JX Nippon Oil & Energy Corp.—Sendai	145,000	60,000	0	0	0	0	43,000	0	54,000	36,000	0	0	0	54,000	20,000	34,000	40,000	0	52,000	40,000	0	0	4,800	10,000	0	0	60.0	0	535	0			
	JX Nippon Oil & Energy Corp.—OIREC Refinery—Osaka	115,000	60,000	0	0	0	0	27,000	0	17,000	0	0	0	0	22,000	0	25,000	21,000	0	0	23,000	0	0	3,600	2,700	0	0	16.9	0	0	0			
	JX Nippon Oil & Energy Corp.—Mizushima	380,200	186,000	30,000	0	0	0	98,000	0	87,395	0	13,000	0	0	87,200	4,590	96,070	106,000	0	45,000	107,740	0	21,490	9,880	29,164	0	0	9,000	186.2	0	1,210	16,250		
	JX Nippon Oil & Energy Corp.—Negishi	270,000	130,000	0	20,000	0	0	83,000	0	50,000	0	0	0	0	71,500	28,000	77,500	60,000	0	35,000	81,000	0	4,900	5,700	13,800	0	8,000	4,000	54.0	0	660	5,500		
	JX Nippon Oil & Energy Corp.—Marifu	127,000	75,000	0	0	22,000	0	28,000	0	24,000	0	0	0	0	34,000	0	25,000	23,000	0	0	52,000	0	0	0	6,670	0	0	9.5	640	220	1,000			
	Kashima Oil Co. Ltd.—Kashima	252,500	39,900	0	0	0	0	31,050	0	19,800	0	0	0	0	20,700	23,400	41,400	39,600	0	27,000	22,500	0	0	0	5,123	0	0	30.4	0	300	0			
	Idemitsu Kosan Co. Ltd.—Showa Yokkaichi Sekiyu Co. Ltd.—Yamag																																	

Country	Company, operator, refinery name, location	Thermal Processes					Catalytic Cracking				Catalytic Reforming				Catalytic Hydrocracking				Catalytic Hydrotreating						Isomerization					Asphalt (incl. road oil)							
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low- pressure	High- pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reformer feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation	Aromatics	C4 feed	C5/C6 feed	C8 feed		Lubes	Hydrogen	Coke	Sulfur			
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd		
MYANMAR																																					
	Myanma Petrochemical Enterprise—Chauk	6,000	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Myanma Petrochemical Enterprise—Thanlyin	26,000	2,000	0	5,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	0.0	120	0	0				
	Myanma Petrochemical Enterprise—Thanbayan	25,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0				
Total		57,000	4,000	0	5,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	500	0.0	120	0	0	0				
NETHERLANDS																																					
	BP PLC—BP Raffinaderij Rotterdam BV—Rotterdam	370,522	83,170	0	0	30,564	0	60,263	0	29,208	0	0	0	0	57,056	0	158,536	81,509	14,944	0	0	0	8,694	7,336	0	0	0	0	2,444.0	37	0	228	0				
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Rotterdam	192,000	82,000	0	0	0	41,000	0	0	32,500	0	52,500	0	53,500	33,000	0	22,000	39,500	0	0	0	0	0	6,000	0	0	0	18,000	80.0	0	422	0	0				
	Gunvor Group Ltd.—Gunvor Petroleum Rotterdam BV—Rotterdam	83,600	40,470	0	0	6,840	9,000	0	0	20,430	0	0	0	0	38,790	0	10,620	22,050	0	0	0	5,900	0	0	0	8,730	0	4,500	2.0	0	72	5,200	0				
	Royal Dutch Shell PLC—Shell Nederland Raffinaderij BV—Pernis	404,000	440,000	0	0	45,000	0	48,000	0	0	41,400	56,300	0	25,400	106,000	9,250	28,700	50,000	0	0	0	33,720	7,300	0	0	0	0	7,100	160.6	0	700	5,500	0				
	Smid & Hollander Raffinaderij BV—Amsterdam	10,000	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	5,800	0				
	Zeeland Refinery NV—Vissingen	148,000	63,699	0	0	0	0	0	26,000	0	74,000	0	0	0	22,693	0	0	44,359	0	0	0	0	0	0	12,300	0	0	0	105.0	0	289	0	0				
Total		1,208,122	717,339	0	0	82,404	50,000	108,263	0	108,138	41,400	182,800	0	25,400	257,539	9,250	219,856	237,418	14,944	0	0	0	48,314	14,636	18,300	0	8,730	0	29,600	2,791.6	37	1,483	16,728	0			
NETHERLANDS ANTILLES																																					
	Refineria Isla Curazao SA—Emmastad	320,000	195,000	0	0	0	80,000	50,000	0	20,000	0	0	0	0	53,000	0	0	37,000	0	0	26,000	0	3,500	9,000	0	0	0	12,000	54.6	0	300	26,000	0				
Total		320,000	195,000	0	0	0	80,000	50,000	0	20,000	0	0	0	0	53,000	0	0	37,000	0	0	26,000	0	3,500	9,000	0	0	0	12,000	54.6	0	300	26,000	0				
NEW ZEALAND																																					
	New Zealand Refining Co. Ltd.—Marsden Point, Northland	107,000	38,270	0	0	0	0	0	25,840	0	30,000	0	0	0	48,980	0	5,510	50,000	0	0	0	0	0	0	0	0	0	0	60.0	0	111	5,490	0				
Total		107,000	38,270	0	0	0	0	0	25,840	0	30,000	0	0	0	48,980	0	5,510	50,000	0	0	0	0	0	0	0	0	0	0	60.0	0	111	5,490	0				
NICARAGUA																																					
	Puma Energy International—Puma Energy Bahamas SA—Managua	19,950	1,425	0	0	0	0	0	2,700	0	0	0	0	0	4,950	0	3,555	0	0	0	0	5,580	0	0	0	0	0	0	0.0	0	0	378	0				
Total		19,950	1,425	0	0	0	0	0	2,700	0	0	0	0	0	4,950	0	3,555	0	0	0	0	5,580	0	0	0	0	0	0	0.0	0	0	378	0				
NIGERIA																																					
	Nigerian National Petroleum Corp.—Kaduna Refinery & Petrochemical Co.—Kaduna	104,500	36,290	0	0	0	18,000	0	15,300	0	0	0	0	0	21,600	0	0	0	0	0	0	16,286	0	291	0	0	0	3,878	0.0	0	0	14,850	0				
	Nigerian National Petroleum Corp.—Port Harcourt Refining Co.—Port Harcourt	142,500	54,000	0	0	0	40,000	0	33,000	0	0	0	0	0	33,000	0	0	0	0	0	0	14,500	7,020	0	3,610	0	0	0	0.0	0	0	0	0				
	Nigerian National Petroleum Corp.—Port Harcourt Refining Co.—Alesa Eleme	57,000	0	0	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0				
	Nigerian National Petroleum Corp.—Warri Refinery & Petrochemical Co.—Warri	118,750	34,200	0	0	0	24,700	0	15,770	0	0	0	0	0	0	0	0	0	0	0	0	23,845	2,850	0	0	0	0	0	0.0	0	0	0	0				
	Niger Delta Exploration & Production PLC—Niger Delta Petroleum Resources Ltd.—Ogbele	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0				
Total		423,750	124,490	0	0	0	82,700	0	70,070	0	0	0	0	0	54,600	0	0	0	0	0	0	54,631	9,870	291	3,610	0	0	3,878	0.0	0	0	14,850	0				
NORTH KOREA																																					
	North Korean Government—Ponghwa Chemical Factory—Sinuiju, Huich'on-kun, North Pyongan	29,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0				
	North Korean Government—Sonbong-gun, Rason Special Economic Zone	42,000	0	0	0	0	0	0	7,300	0	0	0	0	0	7,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0				
Total		71,000	0	0	0	0	0	0	7,300	0	0	0	0	0	7,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0			
NORWAY																																					
	ExxonMobil Corp.—ExxonMobil Refining & Supply Co.—Slagen	116,000	0	0	0	32,000	0	0	10,500	0	0	0	0	0	24,000	0	0	36,000	0	0	0	12,000	0	0	0	0	0	0	0.0	0	20	0	0	0			
	Mongstad Refining Co.—Mongstad	203,000	0	0	23,000	0	0	0	55,000	24,400	0	0	0	0	26,000	0	0	10,000	0	0	0	18,000	0	0	0	3,840	0	0	0.0	610	0	0	0				
Total		319,000	0	0	23,000	32,000	0	0	55,000	34,900	0	0	0	0	50,000	0	0	46,000	0	0	0	30,000	0	0	0	3,840	0	0	0.0	610	20	0	0				
OMAN																																					
	Oman Refinery Co.—Mina Al Fahal	85,000	0	0	0	0	0	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	21,000	0	0	0	0	0	0	0.0	0	0	0	0	0			
Total		85,000	0	0	0	0	0	0	16,000	0	0	0	0	0	0	0	0	0	0	0	0	21,000	0	0	0	0	0	0	0.0	0	0	0	0	0			

Country	Company, operator, refinery name, location	Thermal Processes					Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking				Catalytic Hydrotreating						Isomerization					Asphalt (incl. road oil)											
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low- pressure	High- pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reform er feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation		Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen	Coke	Sulfur			
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	
UNITED ARAB EMIRATES																																					
	Abu Dhabi Oil Refining Co. (Takreer)—Ruwais	800,000	56,680	0	0	0	0	19,150	0	0	0	31,050	57,000	0	0	69,000	0	108,000	75,000	0	0	0	0	82,987	37,000	0	26,000	0	0	0	0	53.0	0	0	0		
	Abu Dhabi Oil Refining Co. (Takreer)—Umm Al-Nar	85,000	0	0	0	0	0	0	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	46,000	0	0	0	0	0	0	0	0.0	0	35	0			
	Emirates National Oil Co.—Jebel Ali	140,000	0	0	0	0	0	0	36,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	6	0	0			
	Vitol Group—Fujairah Refinery Ltd.—Fujairah	82,000	17,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0			
Total		1,107,000	73,680	0	0	0	0	19,150	0	0	0	31,050	57,000	0	0	69,000	0	108,000	75,000	0	0	0	128,987	37,000	0	26,000	0	0	0	0	53.0	0	41	0			
UNITED KINGDOM																																					
	AB Nynas Petroleum NV—Eastham Refinery Ltd.—Eastham, England	27,000	27,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,000			
	Essar Energy PLC—Essar UK Ltd.—Stanlow, Cheshire, England	195,000	130,000	0	0	0	0	68,000	0	27,000	30,000	0	0	0	0	60,000	0	0	0	0	0	97,298	11,000	8,700	5,738	0	0	4,999	0.0	0	3	0	0				
	ExxonMobil Corp.—Esso UK Ltd.—Fawley, Hampshire, England	262,000	107,000	0	0	0	37,000	89,000	0	40,000	26,000	0	0	0	106,000	18,500	56,000	91,000	0	36,500	0	2,500	0	0	0	0	35,000	9,000	55.0	0	271	0	0	0			
	Ineos AG—Petroineos Refining Ltd.—Grangemouth, Lothian, Scotland	210,000	64,600	0	0	0	0	0	39,600	0	36,000	0	0	0	0	0	0	0	0	0	0	56,700	4,500	0	0	0	0	0	49.0	0	0	0	0	0			
	Phillips 66 Co.—Phillips 66 Ltd.—Humber, North Lincolnshire, England	221,000	157,000	0	67,860	0	55,000	53,758	0	53,900	0	0	0	0	0	7,254	0	0	175,655	0	30,744	0	39,831	11,880	4,500	8,352	13,158	0	0	0.0	2,400	140	0	0			
	Total SA—Total Lindsey Oil Refinery Ltd.—Killingholme, North Lincolnshire, England	109,000	79,607	0	0	20,471	0	50,067	0	16,000	0	0	0	0	38,637	0	0	65,037	0	0	0	0	7,133	0	0	0	0	0	0.0	0	139	4,810	0	0			
	Valero Energy Corp.—Valero Energy Ltd.—Pembroke, Wales	210,000	95,000	0	0	26,000	0	90,000	0	39,000	0	0	0	0	48,300	49,500	0	60,000	0	0	0	0	32,500	0	19,900	0	0	0	8.0	0	160	0	0				
Total		1,234,000	660,207	0	67,860	46,471	92,000	350,825	0	215,500	56,000	36,000	0	0	252,937	75,254	56,000	216,037	175,655	36,500	30,744	0	196,329	67,013	13,200	33,990	13,158	35,000	13,999	112.0	2,400	713	22,810	0			
URUGUAY																																					
	ANCAP—La Teja, Montevideo	50,000	25,000	0	0	7,000	0	12,000	0	12,000	0	0	0	0	12,000	0	5,000	0	0	0	0	6,000	0	0	0	0	0	0	0.0	0	0	0	0	0	0		
Total		50,000	25,000	0	0	7,000	0	12,000	0	12,000	0	0	0	0	12,000	0	5,000	0	0	0	0	6,000	0	0	0	0	0	0	0.0	0	0	0	0	0	0		
UZBEKISTAN																																					
	Uzbekneftegaz—Bukhara	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0			
	Uzbekneftegaz—Fergana	108,000	45,671	0	17,667	0	0	0	23,487	0	0	0	0	0	23,900	0	0	0	0	0	0	6,904	0	0	0	0	0	9,397	0.0	650	0	4,151	0	0			
Total		158,000	45,671	0	17,667	0	0	0	23,487	0	0	0	0	0	23,900	0	0	0	0	0	0	6,904	0	0	0	0	0	9,397	0.0	650	0	4,151	0	0	0		
VENEZUELA																																					
	Petroleos de Venezuela SA—Refineria El Palito—Puerto Cabello, Carabobo	126,900	71,200	0	0	0	0	51,700	0	9,000	0	0	0	0	9,000	0	0	0	0	0	0	0	20,300	2,000	0	0	0	0	6.8	0	0	0	0	0			
	Petroleos de Venezuela SA—Centro de Refinacion Paraguana—Amuay and Cardon, Falcon	940,000	503,975	0	87,300	0	57,600	166,500	0	40,500	0	0	0	0	54,000	2,700	0	0	0	0	184,500	0	139,500	41,400	0	20,700	0	0	12,020	141.0	5,200	1,454	36,000	0			
	Petroleos de Venezuela SA—Refineria Bajo Grande—Bajo Grande, Zulia	16,000	8,835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0			
	Petroleos de Venezuela SA—Refineria Puerto la Cruz—Puerto de la Cruz, Anzoategui	195,500	0	0	0	0	0	13,600	0	0	0	0	0	0	0	0	0	0	0	0	0	4,100	0	0	0	0	0	0	0.0	0	17	0	0	0			
	Petroleos de Venezuela SA—Refineria San Roque—San Roque, Anzoategui	5,200	1,770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0			
Total		1,283,600	585,780	0	87,300	0	57,600	231,800	0	49,500	0	0	0	0	63,000	2,700	0	0	0	0	184,500	0	139,500	65,800	2,000	20,700	0	0	12,020	147.8	5,200	1,471	36,000	0			
VIETNAM																																					
	Binh Son Refining & Petrochemical Co. Ltd.—Dung Quat Nghi Son Refinery & Petrochemical LLC—Thanh Hoa Province	130,534	0	0	0	0	0	62,730	0	18,900	0	18,900	0	0	18,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	39	0	0	0	0		
Total		200,000	0	0	0	0	0	62,730	0	18,900	0	18,900	0	0	18,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	39	0	0	0	0		

Country	Company, operator, refinery name, location	Thermal Processes					Catalytic Cracking					Catalytic Reforming					Catalytic Hydrocracking					Catalytic Hydrotreating					Isomerization					Asphalt (incl. road oil)		
		Crude	Vacuum	Fluid coking (incl.)	Delayed coking	Visbreaking	Other	Fresh feed	Recycled feed	Low-pressure	High-pressure	Distillate	Gas oil	Residual	Other	Naphtha/Reformer feed	Gasoline desulfurization	Kerosine/Jet desulfurization	Diesel desulfurization	Other distillate desulfurization	Resid desulfurization	Heavy gas oil desulfurization	Other desulfurization	Other hydrotreating	Alkylation	Aromatics	C4 feed	C5/C6 feed	C8 feed	Lubes	Hydrogen		Coke	Sulfur
		b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd	b/cd
	Marathon Petroleum Co. LP—Galveston Bay Refining Division—Texas City	585,000	246,600	0	29,800	0	0	195,300	0	137,300	0	74,600	0	80,300	0	118,800	144,500	75,100	55,600	0	0	103,100	0	0	55,200	34,700	0	0	0	0	0.0	2,053	1,375	0
	Motiva Enterprises LLC—Port Arthur PDV America Inc. (Petroleos de Venezuela SA)—Citgo Refining & Chemical Inc.—Corpus Christi	603,000	309,000	0	150,000	0	0	88,000	0	0	106,000	98,700	0	0	20,000	147,500	52,000	75,000	142,000	0	0	45,000	0	19,000	19,000	0	0	41,925	0	34,125	40.0	8,862	1,509	0
	Chevron Corp.—Pasadena Phillips 66 Refinery—Sweeny	106,000	42,500	0	0	0	0	52,000	0	22,000	0	0	0	0	0	22,000	40,000	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	21	0	
	Royal Dutch Shell PLC—Deer Park Refining LP—Deer Park Total SA—Total Petrochemicals & Refining USA Inc.—Port Arthur	312,000	171,000	0	82,000	0	0	68,000	4,500	40,500	22,050	0	53,000	0	0	67,950	38,700	36,000	0	40,500	44,550	72,000	38,700	0	16,650	0	0	0	0	0.0	4,771	984	0	
	Valero Energy Corp.—Premcor Refining Group Inc.—Port Arthur	202,000	111,521	0	54,082	0	0	74,772	0	37,916	0	0	0	0	0	54,507	33,462	29,386	72,044	0	0	51,568	0	0	6,144	7,100	0	7,522	0	0	0.0	2,800	683	0
	Valero Energy Corp.—Sunray Refining	195,000	47,500	0	0	0	0	49,050	0	26,100	16,200	0	24,300	0	0	38,700	35,640	0	42,750	0	0	0	0	0	8,820	0	2,700	0	0	0	30.0	0	68	10,800
	Valero Energy Corp.—Three Rivers Refining	89,000	31,825	0	0	0	0	21,150	0	21,150	9,000	0	25,200	0	0	21,800	0	9,000	22,500	0	0	18,000	0	0	5,850	9,720	2,700	0	0	1,710	0.0	0	122	0
	Valero Energy Corp.—Valero Refining Co. Texas LP—Corpus Christi	290,000	92,150	0	15,300	0	0	85,950	0	35,100	9,000	0	45,000	0	0	57,600	54,000	9,900	56,925	0	66,600	27,000	0	0	19,170	13,950	15,300	10,800	0	0	275.0	853	1,168	34,200
	Valero Energy Corp.—Valero Refining Co. Texas LP—Houston	205,000	37,050	0	0	0	0	67,500	0	0	0	30,600	0	0	0	8,550	14,400	34,200	0	0	0	0	29,700	10,800	0	0	0	0	0	0.0	0	300	0	
	Valero Energy Corp.—Valero Refining Co. Texas LP—Texas City	225,000	126,825	0	48,150	0	0	77,400	0	16,290	0	0	0	0	0	22,500	55,350	25,200	49,500	0	99,000	0	5,850	0	13,230	0	0	5,850	0	0	0.0	2,584	617	0
	Marathon Petroleum Co. LP—Texas Refining Division—El Paso WRB Refining LP—Borger	131,000	52,700	0	0	0	0	33,300	0	26,600	0	0	0	0	0	29,000	33,300	17,200	46,100	0	0	0	0	0	11,900	0	3,800	0	0	0	9.5	0	0	3,800
Total	Utah	5,548,510	2,509,016	37,800	808,332	0	0	1,636,467	11,700	822,956	199,700	292,900	270,800	80,300	20,000	1,250,797	1,011,352	578,466	1,102,277	179,200	210,150	820,218	112,320	64,700	335,429	116,820	50,580	125,417	0	67,341	590.5	44,015	13,190	55,640
	Chevron Corp.—Chevron USA Inc.—Salt Lake City FJ Management Inc.—Big West Oil LLC—North Salt Lake HollyFrontier Corp.—HollyFrontier Woods Cross Refining LLC—Woods Cross Silver Eagle Refining Inc.—Silver Eagle Refining Woods Cross Inc.—Woods Cross	54,720	26,125	0	9,000	0	0	13,950	0	0	7,650	0	0	0	0	7,650	17,640	0	11,970	6,480	0	0	0	0	0	5,040	0	1,980	0	0	0.0	279	51	0
	Marathon Petroleum Co. LP—Salt Lake City Refining Division—Salt Lake City	30,400	0	0	0	0	0	10,350	0	0	7,650	0	0	0	0	10,350	0	0	9,900	0	0	0	0	0	2,700	0	1,710	2,700	0	0	0.0	0	4	0
	Marathon Petroleum Co. LP—Salt Lake City Refining Division—Salt Lake City	39,330	0	0	0	0	0	15,750	0	0	7,560	0	13,500	0	0	11,250	0	2,610	0	9,720	0	0	0	0	4,770	0	0	2,700	0	0	0.0	0	9	1,620
	Marathon Petroleum Co. LP—Salt Lake City Refining Division—Salt Lake City	14,915	6,650	0	0	0	0	0	0	0	0	0	0	0	0	900	0	0	2,700	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Total	Washington	202,365	32,775	0	9,000	0	0	63,350	0	0	33,760	0	13,500	0	41,050	25,240	2,610	45,970	16,200	0	0	0	0	0	19,610	0	3,690	5,400	0	0	0.0	279	80	1,620
	BP PLC—BP West Coast Products LLC—Cherry Point (Ferndale) Phillips 66 Co.—Ferndale Refinery—Ferndale	238,450	132,050	0	55,350	0	0	0	0	58,500	0	0	58,500	0	0	68,220	0	13,500	57,960	0	0	0	0	23,400	0	0	0	23,400	0	0	0.0	186	2,767	258
	Royal Dutch Shell PLC—Shell Oil Products US—Anacortes	105,000	45,700	0	0	0	0	34,000	0	16,700	0	0	0	0	17,500	30,700	0	31,500	0	0	0	0	0	0	11,400	0	4,500	0	0	0.0	0	110	0	
	Marathon Petroleum Co. LP—Anacortes Refining Division—Anacortes	137,000	62,510	0	23,000	0	0	52,000	0	0	19,530	0	0	0	30,150	32,130	17,100	36,630	0	0	0	0	0	0	10,890	0	0	0	0	0.0	1,142	318	0	
	Par Pacific Holdings Inc.—Tacoma	119,000	44,700	0	0	0	0	48,900	0	27,100	0	0	0	0	43,700	25,200	17,600	35,200	0	0	0	0	0	16,200	0	6,200	11,400	0	0	0.0	0	47	0	
Total		639,350	303,200	0	78,350	0	0	134,900	0	102,300	25,650	0	58,500	0	0	168,930	88,030	48,200	168,670	0	0	0	23,400	38,490	0	10,700	38,850	0	0	0.0	1,328	3,252	7,458	

Company, operator, Country refinery name, location	Crude b/cd	Vacuum b/cd	Thermal Processes		Visbreaking b/cd	Catalytic Cracking		Catalytic Reforming		Catalytic Hydrocracking					Catalytic Hydrotreating					Isomerization				Lubes b/cd	Hydrogen MMcfd	Coke tonne/day	Sulfur tonne/day	Asphalt (incl. road oil) b/d									
			Fluid coking (incl. b/cd)	Delayed coking b/cd		Other b/cd	Fresh feed b/cd	Recycled feed b/cd	Low- pressure b/cd	High- pressure b/cd	Distillate b/cd	Gas oil b/cd	Residual b/cd	Other b/cd	Naphtha/Reformer feed b/cd	Gasoline desulfurization b/cd	Kerosine/Jet desulfurization b/cd	Diesel desulfurization b/cd	Other distillate desulfurization b/cd	Resid desulfurization b/cd	Heavy gas oil desulfurization b/cd	Other desulfurization b/cd	Other hydrotreating b/cd						Alkylation b/cd	Aromatics b/cd	C4 feed b/cd	C5/C6 feed b/cd	C8 feed b/cd				
West Virginia																																					
Ergon Inc.—Ergon West Virginia Inc.—Newell	21,850	8,170	0	0	0	0	0	0	3,555	0	0	0	0	0	3,870	0	0	8,100	0	0	5,670	0	0	0	0	0	0	0	0	0	0	0	5,490	3.0	0	1	630
Total	21,850	8,170	0	0	0	0	0	0	3,555	0	0	0	0	0	3,870	0	0	8,100	0	0	5,670	0	0	0	0	0	0	0	0	0	0	5,490	3.0	0	1	630	
Wisconsin																																					
Husky Energy Inc.—Superior	47,500	19,475	0	0	0	0	9,900	0	7,200	0	0	0	0	0	9,900	6,750	6,930	5,850	0	0	0	0	0	1,440	5,400	0	0	0	0	0	0.0	0	31	7,110			
Total	47,500	19,475	0	0	0	0	9,900	0	7,200	0	0	0	0	0	9,900	6,750	6,930	5,850	0	0	0	0	0	1,440	5,400	0	0	0	0	0	0.0	0	31	7,110			
Wyoming																																					
HollyFrontier Corp.—HollyFrontier Cheyenne Refining LLC—Cheyenne	49,400	26,600	0	12,330	0	0	11,250	0	8,280	0	0	0	0	0	9,000	9,000	0	16,200	0	0	0	0	0	3,780	0	0	0	0	0	0	10.0	639	105	14,400			
Par Petroleum Inc.—Wyoming Refining Co.—Newcastle	17,575	0	0	0	0	0	7,020	0	0	3,825	0	0	0	0	3,825	0	0	6,003	0	0	0	0	0	1,170	0	0	0	0	0	0	0.0	0	0	0			
Sinclair Oil Corp.—Little America Refining Co.—Evansville Sinclair Oil Corp.—Sinclair Wyoming Refining Co.—Sinclair	24,225	0	0	0	0	0	10,350	450	4,500	0	0	0	0	0	6,750	5,850	0	9,450	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	9	0			
Total	85,500	38,950	0	18,000	0	0	19,800	450	12,780	13,050	14,040	0	0	0	17,100	14,850	13,500	25,650	0	0	0	0	0	4,050	0	0	0	0	0	0	52.0	952	188	7,200			
Total	176,700	65,550	0	30,330	0	0	48,420	450	25,560	26,100	28,080	0	0	0	36,675	29,700	27,000	51,300	0	0	0	0	0	9,000	0	0	0	0	0	0	62.0	1,591	302	21,600			