APPENDIX 1: KEY ECONOMIC INDICATORS

APPENDIX 1.1: Domestic Economy, Trade and Investment

	1995	1996	1997	1998	1999
Population (Mln)	195	198	201	204	208
GDP ($Bln)	201	221	216	101	142
GDP per capita ($)	1,010	1,100	1,073	497	684
Real GDP growth (%)	8.2	7.8	5.0	-13.2	0.2
Gov't Spending (as % of GDP) (a)	13.9	14.3	21.1	18.0	19.0
Consumer Price Inflation (%)	9.0	6.6	11.1	77.6	2.0
Avg. Exchange Rate (Rp/$)	2,249	2,342	2,909	9,875	7,809
Foreign Debt ($Bln) (a)	106.5	113.6	136.0	150.9	141.4
Debt Service Ratio (a)	33.2	33.9	41.0	72.0	57.0
US Economic Aid ($Mln) (a)	96.0	71.0	47.0	250.0	316.6
Unemployment (%)	4.0	4.0	4.7	5.5	6.4
Total Merchandise Exports (US$Bln)	45.4	49.8	53.4	48.8	48.7
Total Merchandise Imports (US$Bln)	40.6	42.9	41.7	27.3	24.0
Merchandise Exports to US (US$Bln)	6.3	6.8	7.1	7.0	6.9
Merchandise Imports from US (US$Bln)	4.8	5.1	5.4	3.5	2.8
Growth Rate of Total Imports (%)	18.5	4.9	-2.9	-34.4	12.1
Growth Rate of Imports from US (%)	33.3	6.2	7.5	-35.4	20.0
Foreign Investment (US$Mln) (b)	1996	1997	1998	1999	1967/99
Approved: Japan	7,655	5,421	1,331	644	35,446
Britain	3,391	5,474	4,745	507	24,976
Singapore	3,131	2,299	1,267	731	19,101
Hong Kong	1,106	251	549	77	14,443
Taiwan	535	3,419	165	1,489	14,180
USA	642	1,018	568	136	10,064
Australia	446	187	84.5	2,458	10,637
S. Korea	1,231	1,410	412	263	9,511
Malaysia	1,393	2,289	1,060	186	6,695
Germany	165	4,468	71	87	6,443
Others	10,236	7,597	3,311	4,313	63,955
Total	**29,931**	**33,833**	**13,563**	**10,891**	**215,451**
Realized: **Total**	**8,520**	**10,411**	**2,900**	**7,649**	**66,749**

(a) Figures are for Indonesian fiscal years (April 1 through March 31) and foreign debt is public and private.

(b) These figures do not include investment in the oil and gas sector. Realization data are tentative estimates.

APPENDIX 1.2: Government Budget

(Rp Trillion)

	1997/98 Actual	1998/99 Actual	1999/00 Actual	2000 (Apr-Dec) Budget	2001(Jan-Dec) Draft budget
Domestic Revenues	112.3	158.9	201.7	137.7a	243.0
- Oil and Gas	30.6	41.3	56.3	N/A	67.1
- Non-Oil and Gas	81.7	117.7	145.4	N/A	175.9
Development Revenues	14.4	56.2	43.6	N/A	N/A
Total Revenues	126.7	215.1	245.3	137.7	243.0
Expenditures	128.0	215.6	245.2	183.1	295.1
- Routine	89.6	147.7	166.9	143.7	186.9
- Development	38.4	67.9	78.3	39.4	108.2b
Balance	-1.3	-5.0	1.0	-44.1	-52.1

Source: Department of Finance

a: Revenues originated from tax and non-tax.

b: Includes various central government transfers to cities/regencies and provinces

APPENDIX 1.3: Balance of Payments

(US$Billion)

	1996/97 Actual	1997/98 Actual	1998/99 Actual	1999/00 Budget	2000 (Apr-Dec) Budget
Exports (FOB)	52.0	56.1	48.3	55.6	41.6
- Oil/Gas	12.8	10.2	7.2	12.2	8.0
- Non-Oil\Gas	39.3	45.9	41.1	43.4	33.5
Imports (FOB)	-45.8	-42.7	-30.6	-33.9	-27.3
- Oil/Gas	-4.7	-4.1	-2.8	-2.8	-3.2
- Non Oil/Gas	-41.1	-38.6	-27.8	-31.1	-24.1
Services	-14.2	-15.1	-13.3	-17.1	-11.7
- Oil/Gas	-3.5	-4.6	-2.6	-2.9	-2.4
- Non-Oil\Gas	-10.7	-10.5	-10.7	-14.2	-9.3
CURRENT ACCOUNT	-8.1	-1.7	4.4	1.3	2.6
- Oil/Gas	4.6	1.5	1.8	0.9	2.4
- Non Oil/Gas	-12.6	-3.2	2.6	0.4	0.2
Official Capital (Net)	-0.8	4.2	12.5	11.2	3.4
Private Capital (Net)	13.5	-11.8	-10.3	-4.3	-4.4
Capital Transaction	12.7	-7.6	2.2	-4.9	-0.9
TOTAL BALANCE	**4.6**	**-9.3**	**6.7**	**3.3**	**1.6**
Errors and Omissions	-0.7	-0.7	2.5	0.0	0.0
Monetary Movement	-3.9	-10.0	-9.2	-3.3	-1.6
Official Reserves	19.9	16.6	N/A	N/A	N/A

Source: Department of Finance

FY 2000 covered April to December. Starting with FY 2001, the fiscal year will coincide with the calender year.

APPENDIX 1.3: Selected Foreign Exchange Rates Against Rupiah

End of period	US$	Yen	Aus$	Sing$	Can$	UKPound
1994	2,200.0	22.1	1.713.2	1,506.1	1,568.6	3,441.2
1995	2,308.0	22.5	1,723.4	1,634.3	1,698.0	3,581.6
1996	2,383.0	20.6	1,902.9	1,705.0	1,745.3	4,037.0
1997	4,650.0	35.8	3,309.9	2,772.8	3,246.9	7,708.8
1998	8,025.0	70.0	4,923.4	4,835.8	5,182.1	13,336.0
1999						
January	8,950.0	77.0	5,613.9	5,291.2	5,896.3	14,743.4
February	8,730.0	73.1	5,435.9	5,072.1	5,776.9	13,994.2
March	8,685.0	72.0	5,458.6	5,015.9	5,749.4	13,995.5
April	8,260.0	69.2	5,440.5	4,868.3	5,637.1	13,312.7
May	8,105.0	66.7	5,254.9	4,686.3	5,498.1	12,984.3
June	6,726.0	55.7	4,448.9	3,954.2	4,555.8	10,591.8
July	6,875.0	59.7	4,474.6	4,072.6	4,565.0	11,099.7
August	7,565.0	68.3	4,823.8	4,491.5	5,067.8	12,039.3
September	8,386.0	78.3	5,477.3	4,922.0	5,719.0	13,790.0
October	6,900.0	65.8	4,448.8	4,135.0	4,681.5	11,314.0
November	7,425.0	72.8	4,727.1	4,414.1	5,038.0	11,915.3
December	7,100.0	69.5	4,622.1	4,260.4	4,886.3	11,494.9
2000						
January	7,425.0	69.5	4,742.0	4,347.2	5,138.6	12,037.8
February	7,505.0	68.2	4,607.0	4,377.4	5,165.9	11,984.4
March	7,590.0	71.9	4,600.7	4,415.9	5,213.3	12,095.1
April	7,945.0	74.6	4,680.0	4,659.2	5,376.6	12,501.5
May	8,620.0	81.1	4,959.5	4,982.1	5,728.7	12,914.1
June	8,735.0	82.8	5,227.9	5,045.2	5,888.1	13,265.0
July	9,003.0	82.3	5,238.4	5,193.3	6,088.5	13,539.2
August	8,290.0	77.8	4,758.9	4,818.8	5,612.7	12,059.5

Source: Bank Indonesia (middle exchange rates at the end of period)

APPENDIX 2: OIL AND GAS CONTRIBUTION TO THE ECONOMY

APPENDIX 2.1: Oil and Gas Contribution to Domestic Revenues

(Rp Billion)

FY	Domestic Revenues	Oil/Gas Revenues	Oil /Gas as % Total	Subsidy (Profit)	Subsidy (%)
1992/93	48,863	15,331	31.4	692	1.4
1993/94	56,113	12,503	22.3	1,280	2.3
1994/95	66,418	13,537	20.4	687	1.0
1995/96	73,014	16,055	22.0	--	--
1996/97	87,630	20,137	23.0	1,416	1.7
1997/98	108,184	35,357	32.7	15,866	14.6
1998/99	158,905	41,254	26.0	27,534	18.0
1999/00	201,692	56,303	27.9	9,986	7.6
2000 (Apr-Dec)	152,897	33,229	21.7	43,242	28.3
2001*	283,306	55,055	19.4	29,574	10.4

Source: Department of Finance *Budget

APPENDIX 2.2: Oil and Gas Contribution to Foreign Trade

($ Million)

Year	Exports			Imports		
	Oil and Gas	Total	Oil and Gas (%)	Oil and Gas	Total	Oil and Gas (%)
1990	11,071	25,675	43.1	1,921	21,837	8.8
1991	10,895	29,142	37.4	2,310	25,869	8.9
1992	10,671	33,967	31.4	2,115	27,280	7.7
1993	9,746	36,823	26.5	2,171	28,328	7.7
1994	9,694	40,053	24.2	2,367	31,984	7.4
1995	10,464	45,418	23.0	2,911	40,629	7.2
1996	11,722	49,815	23.5	3,596	42,929	8.4
1997	11,623	53,444	21.8	3,924	41,680	9.4
1998	7,872	48,848	16.1	2,654	27,337	9.7
1999	9,792	48,665	20.1	3,681	24,003	15.3
2000 (Jan-Jun)	6,468	29,269	22.1	2,643	13,652	19.4

Source: BPS – Central Bureau of Statistics

APPENDIX 3: SUMMARY OF OIL AND GAS STATISTICS

	1995	1996	1997	1998	1999	% Change
EXPLORATION						
New contracts signed	19	13	29	22	4	-81.8
Contracts extended	0	2	1	0	3	-
Totally relinquished contracts	6	5	7	3	3	0
No. of explration wells drilled	80	100	100	145	89	-38.6
Oil and gas discoveries	32	29	28	21	19	-9.5
No. exploration rigs	43	45	58	55	46	-16.3
Total development wells	616	814	891	832	847	1.80
No. of development rigs	49	58	64	61	45	-26.2
Expenditures (US$Mln)	3,058.1	3,562.5	4,772.8	4,828.5	4,048.8	-16.1
- Exploration & development	924.6	1,116.0	1,840.3	2,068.3	1,310.7	-36.6
- Production	1,749.2	1,976.8	2,435.3	2,303.0	2,249.9	-2.3
- dministrative	384.3	419.8	497.2	457.1	488.3	6.8
PRODUCTION						
Crude&condensate (1,000 Brl)	585,825	582,029	576,956	568,156	547,610	-3.6
Average (1,000 B/D)	1,605.0	1,594.6	1,580.7	1,556.6	1,500.3	-3.6
Crude oil	1,434.2	1,421.7	1,417.9	1,401.3	1,351.3	-3.6
Condensate	170.8	172.9	162.8	155.3	149.1	-4.0
Natural gas (BCF)	2,999.2	3,164.0	3,166.0	2,978.9	3,068.4	3.0
LPG (1000 MT)	2,940.8	3,227.7	2,786.7	2,343.9	2,263.5	-3.4
LNG (1000 MT)	25,215.6	26,261.8	27,136.7	27,179.9	29,812.4	9.7
EXPORT VALUES (1,000 Brl):						
Crude oil	254,677	258,677	261,992	247,246	250,904	1.5
Condensate	47,133	25,063	25,940	33,118	34,496	4.2
Refined products	78,389	77,349	71,786	58,897	56,496	-4.1
LPG (1,000 MT)	2,493	2,709	2,133	1,761	1,745	-0.9
LNG (MMBTU)	1,303,419	1,357,428	1,387,549	1,395,940	1,501,934	7.6
EXPORT VALUES (US$Mln):						
Crude	4,333	5,203	4,951	3,000	4,314	43.8
Condensate	814	509	507	445	636	42.9
Refined products	1,287	1,511	1,291	695	912	31.2
LNG	3,856	4,730	4,735	3,390	4,489	32.4
LPG	468	548	516	257	340	32.3
TOTAL	**10,758**	**12,501**	**12,000**	**7,787**	**10,691**	**37.3**
OIL REFINING (1000 Brl):						
Domestic crude/condensate	225,162	272,578	261,396	261,681	254,681	-2.7
Imported crude	70,801	69,669	71,163	78,028	85,364	9.4
Feedstocks/others	1,478	3,361	6,074	4,111	10,735	161.1
TOTAL	**297,442**	**345,608**	**338,633**	**343,820**	**350,781**	**2.0**
REFINERY OUTPUT (1000 Brl)						
Automotive diesel oil (ADO)	75,186	89,382	86,276	91,526	91,614	0.1
Kerosene	47,441	53,535	47,829	53,290	58,492	9.8

Appendix 3 (continued)

Mogas	43,168	60,815	67,253	65,743	73,081	11.2
Fuel oil	25,068	20,222	20,874	26,325	27,156	3.2
Industrial diesel oil (IDO)	4,175	6,302	4,893	7,793	8,130	4.3
Avtur	7,030	9,060	7,688	7,195	6,046	-16.0
Avgas	88	19	59	30	72	140.0
JP4/JP5	--	--	--	--	311	-
Subtotal Fuels (BBM)	**202,157**	**239,335**	**234,872**	**251,859**	**264,901**	**5.2**
LSWR	50,313	49,407	53,156	43,314	38,710	-10.6
Naptha	12,937	14,614	8,113	11,406	14,041	23.1
LOMC	1,944	2,907	3,354	1,440	472	-67.2
LPG	3,987	6,640	7,348	6,371	6,380	0.1
Asphalt	3,003	3,306	2,352	1,903	1,815	-4.6
Lub base oil	1,690	1,793	1,570	1,506	2,370	57.4
Cokes	1,916	1,742	2,071	1,867	1,882	0.8
Others	1,185	3,749	3,420	2,410	2,758	14.4
Intermediate, refining fuels and loses	18,310	22,115	22,377	25,578	17,452	-31.8
TOTAL OUTPUT	**297,442**	**345,608**	**338,633**	**343,820**	**350,781**	**2.0**
IMPORT VOLUMES (1,000 Brl)						
Crude oil	68,327	71,791	62,882	72,476	84,692	16.9
Oil products	50,756	60,906	94,994	54,054	79,902	47.8
TOTAL	**119,083**	**132,697**	**157,876**	**126,530**	**164,594**	**30.1**
IMPORT VALUES (US$Mln)						
Crude oil	1,229	1,507	1,292	977	1,501	53.6
Oil products	979	1,577	2,297	808	1,656	105.0
TOTAL	**2,208**	**3,084**	**3,589**	**1,785**	**3,157**	**76.9**
FUEL CONSUMPTION (Mln Liters)						
Transport	20,431	22,793	23,873	23,207	23,396	0.8
Industry	10,288	10,569	10,681	10,453	11,573	10.7
Household	9,145	9,682	9,878	10,055	11,852	17.9
Electricity	2,969	3,331	5,899	4,379	3,956	-9.7
TOTAL	**41,680**	**45,130**	**50,331**	**48,094**	**50,776**	**5.6**
DOMESTIC SALES (Mln Liters)						
Avgas	8	8	7	6	6	0
Avtur	1,033	1,138	1,168	797	653	-18.1
Mogas	9,190	10,081	10,831	10,972	11,515	4.9
Kerosene	9,253	9,782	9,967	10,145	11,927	17.6
ADO	16,962	18,806	21,839	19,674	20,149	2.4
IDO	1,592	1,371	1,411	1,272	1,518	19.3
Fuel oil	3,643	3,943	5,107	5,229	5,429	3.8
TOTAL	**41,680**	**45,130**	**50,330**	**48,094**	**51,197**	**6.5**
INTERNATIONAL SALES/BUNKER (Mln Liters)						
Avtur	711	877	921	577	466.3	-19.2
ADO	14	19	14	40	75	87.5

Appendix 3 (continued)

IDO	10	9	5	0	2	-
Fuel oil	419	63	274	5	86	1,620.0
TOTAL	**1,153**	**967**	**1,214**	**622**	**631**	**1.4**
DOMESTIC SALES OF NON-OIL FUELS						
Automotive lubs	120	163	180	150	N/A	-
Industrial lubes	180	224	218	246	N/A	-
LPG (1,000 MT)	629	715	829	813	877	7.9
CNG (Kl oil equivalent)	9,915	15,558	17,826	27,100	20,100	-25.8
Cokes	46	37	24	23	23	-
PTA	153	66	91	28	57	103.6

Source: MIGAS * Includes 2-D and 3-D seismic activity

APPENDIX 4: OIL RESOURCES AND RESERVES

APPENDIX 4.1: Distribution of Hydrocarbon Reserves

Location	Oil (Mln Brl)			Natural Gas (TSCF)		
	Proven	Potential	Total	Proven	Potential	Total
Aceh	53.3	19.7	73.0	4.1	6.7	10.8
North Sumatra	162.1	59.5	221.6	1.2	0.3	1.5
Natuna	127.0	180.2	307.2	30.5	19.0	49.5
Central Sumatra	2,732.0	2,973.1	5,705.1	0.3	1.0	1.3
South Sumatra	428.6	319.8	748.4	6.3	3.8	10.1
West Java	621.9	487.4	1,109.4	4.5	2.3	6.7
East Java	232.2	91.7	323.9	2.8	3.1	5.9
East Kalimantan	760.9	475.9	1,236.7	27.7	20.1	47.8
South Sulawesi	-	-	-	0.7	0.2	0.9
Irian Jaya	85.3	15.7	101.0	14.5	9.4	23.9
Total	**5,203.2**	**4,623.1**	**9,826.3**	**92.5**	**65.8**	**158.3**

Source: MIGAS, January 1, 1999

APPENDIX 4. 2: Oil and Gas Reserves and Resources

	Oil (Bln Brl)	Gas (TSCF)
Reserves		
Onshore	7.7	113.1
Offshore	2.1	45.2
Total	9.8	158.3
Resources		
Onshore	19.3	73.0
Offshore	19.2	141.4
Total	38.4	214.4

Source: MIGAS, January 1, 1999

APPENDIX 5: EXPLORATION

APPENDIX 5.1: Seismic Activity (Kms)

Year	Pertamina	COW	PSC		Total
			Onshore	Offshore	
1991	2,046	1,045	30,963	82,451	116,506
1992	2,711	456	6,988	45,679	55,835
1993	1,836	200	21,870	164,496	188,404
1994	1,544	--	7,303	59,733	68,580
1995	1,795	--	6,086	54,667	63,547
1996	292	--	10,638	50,408	61,338
1997*	1,064	--	96,951	371,183	469,198
1998*	1,625	--	26,270	279,877	307,772
1999*	2,023	-	27,334	145,901	175,258

* Data include 2-D and 3-D seismic activity

APPENDIX 5.2: Exploration Drilling

Year	No. of Wells Completed	Discovery Wells		Success Ratio of Wells	Depth (1,000 Ft)	Exploration Rigs
		Oil	Gas			
1991	138	11	12	27.4	828	65
1992	124	17	10	43.3	888	57
1993	114	11	14	43.8	882	50
1994	79	7	13	49.0	620	57
1995	80	16	16	53.3	613	43
1996	100	18	11	43.3	695	45
1997	100	14	14	40.6	752	40
1998	145	16	5	30.0	1,195	60
1999	89	10	9	45.0	16,216	46

Source: MIGAS

APPENDIX 5.3: Exploration Wells

Year	Pertamina	PSC		Total	Percent of Budget
		Onshore	Offshore		
1991	6	44	73	123	62
1992	15	45	63	124	63
1993	11	29	72	114	63
1994	9	31	35	75	75
1995	9	32	39	80	66
1996	12	39	49	100	60
1997	12	33	55	100	53
1998	5	68	72	145	54
1999	8	51	30	89	N/A

Source: MIGAS

APPENDIX 5.4: Exploration Drilling Results

Year		Oil	Gas	Dry	Total	Success Ratio (%)
1995	Wildcat	16	16	28	60	53.3
	Appraisal	4	10	6	20	70.0
	Total	**20**	**26**	**34**	**80**	**57.5**
1996	Wildcat	18	11	38	67	43.3
	Appraisal	9	13	11	33	66.7
	Total	**27**	**24**	**49**	**100**	**51.0**
1997	Wildcat	14	14	41	69	40.6
	Appraisal	9	9	13	31	58.1
	Total	**23**	**23**	**54**	**100**	**46.0**
1998	Wildcat	16	5	48	69	30.0
	Appraisal	32	22	22	76	71.0
	Total	**48**	**27**	**70**	**145**	**52.0**
1999	Wildcat	10	9	27	46	41.3
	Appraisal	18	13	12	43	72.1
	Total	**28**	**22**	**39**	**89**	**56.2**

Source: MIGAS

APPENDIX 5.5: Successful Wildcat Wells in 1999

Operator Contract Area	Well Name	Well Status	Depth (M)
Caltex			
1. CPI, Riau	Piala-1	Oil	1,219
2. CPI, Riau	Piala South-1	Oil	962
3. CPI, Riau	Menggul-1	Oil	1,422
4. CPI, Riau	Kue kecil-1	Gas	1,082
Conoco			
5. S. Natuna Sea B	Keong-1	Gas	1,920
Coparex			
6. C. Java, Blora	Rembang-1	Gas	2,225
Gulf Resources			
7. Kakap, Natuna Sea	Sotong-IX	Gas	3,773
JOB-Union			
8. Senoro- Toli	Senoro-1	Gas	2,286
Maxus-JPF			
9. SE. Sumatra	N. Gita-1	Oil&Gas	1,853
10. SE. Sumatra	ATTI-1	Oil	2,652
ExxonMobil			
11. Pase, N. Sumatra	Pase-AIX	Gas	2,768
Pertamina			
12. Prabumulih	KRD-1	Gas	1,852
13. Prabumulih	Petanang-1	Oil&Gas	1,850

14. Jambi	RCD-1	Gas	1,850

Apendix 5.5 (continued)

Unocal			
15. Makassar Str	Astina-1	Gas	1,977
16. N. Makssar	S. Seno-1	Oil&Gas	3,624
17. N. Makssar.	Pari-1	Oil&Gas	3,830
18. N. Makssar.	GEP-1	Gas	4,114
19. Rapak, E. Kalimantan	Aton-1	Oil&Gas	3,799

Source: MIGAS

APPENDIX 5.6: Successful Delineation Wells in 1999

Operator Contract Area	Well Name	Well Status	Depth (M)
Amerada Hess			
1. Lematang, S. Sum.	Singa-2	Gas	3,884
Conoco			
2. S. Natuna "B"	N. Belut-3	Gas	2,804
3. S. Natuna Sea B	Belut-5	Gas	1,676
4. S. Natuna Sea B	Tawes-	Oil&Gas	3,378
5. S. Natuna Sea B	Belanak-8	Oil&Gas	3,099
Gulf Resources			
6. S. Jambi	Teluk Rendah-2	Gas (15,236 MMSCF/D	1,831
7. S. Jambi	Hari-3	Gas	2,092
8. Corridor-Jambi	Suban-3	Oil (272 b/d)& Gas (27,820 MMSCF/D	2,540
9. Corridor-Jambi	Durian Mabuk-2	Oil&Gas	2,517
Saga			
10 Jambi Merang	Pulau Gading-3	gas	1,996
11. Jambi Merang	Pulau Gading-2	gas	2,507
Kondur Petroleum			
12. Malaca Str.	MSJ-53	Oil	2,961
KNOC			
13. NW Java	SBD-2	Oil	351
Maxus-JPF			
14. SE. Sumatra	ATTI-2	Oil&gas	2,686
15. SE. Sumatra	Rosalia-2	Oil	2,051
16. SE. Sumatra	N. Gita-3	Gas	2,003
Pertamina			
17.Prabumulih, S. Sum.	TPS-2	Oi&Gas	3,133
18. Jambi, S. Sum.	SPT-2	Oil (13.2 b/d)& Gas (134 MMSCF/D)	2,177
19. Beringin, S. Sum.	SOPA-B1	Oil	2,446
Unocal			
20. N. Makasar, E. Kal	N. Janaka-1	Oil	2,934

Apendix 5.6 (continued)

21. N. Makasar, E. Kal	Central Seno-2	Oil&Gas	2,685
22. N. Makasar, E. Kal	West Seno-8	Oil&Gas	3,021
23. N. Off. E. Kal.	Mahoni-1	Gas&Oil	2,162
24. N. Makasar, E. Kal	West Seno-4	Oil&Gas	3,163
25. Rapak, E. Kal.	Bangka-4	Gas&Oil	3,553
26. Rapak, E. Kal.	Bangka-2	Gas	2,972
27. Rapak, E. Kal.	Aton-3	Gas&Oil	2,580
Total			
28. Mahakam, E. Kal.	Metulang-2	Oil&Gas	4,415
Santa Fe			
29. Jabung-Jambi	Gemah-3	Gas	2,554
30. Jabung-Jambi	Gemah-4	Oil (1,591 b/d)& Gas MMSCF/D	1,986
ExxonMobil			
31. Pase, N. Sumatra	Pase-AB/ST3	Gas	2,675

Source: MIGAS

APPENDIX 5.7: Development Wells

Year	Pertamina	COW	PSC		Total	Budget
			Onshore	Offshore		
1991	65	15	486	75	641	664
1992	60	16	512	75	663	708
1993	40	7	474	123	644	637
1994	24	--	392	107	523	630
1995	18	--	510	88	616	655
1996	36	--	766	112	814	848
1997	44	--	702	145	891	1,078
1998	20	--	594	218	832	N/A
1999	32	--	629	186	847	N/A

Source: MIGAS

APPENDIX 5.8: Petroleum Company Expenditures

(US$Mln)

Year	Exploration/ Development	Production	Sub-Total	Others	Total
1985	1,777	1,351	2,528	286	2,814
1986	966	1,359	2,326	295	2,621
1987	583	1,000	1,584	216	1,800
1988	728	1,010	1,738	245	1,983
1989	831	1,303	2,134	285	2,419
1990	1,257	1,542	2,799	348	3,147
1991	1,339	1,684	3,023	427	3,450
1992	1,200	2,221	3,421	464	3,885
1993	1,250	2,155	3,405	382	3,874

Apendix 5.8 (continued)

1994	1,055	2,006	3,061	388	3,449
1995	925	1,749	2,674	384	3,058
1996	1,166	1,977	3,143	420	3,563
1997	1,841	2,435	4,276	497	4,773
1998	2,068	2,303	4,371	457	4,828
1999Budget	2,030	2,719	4,787	533	5,282
1999	1,311	2,250	3,561	488	4,049
2000 Budget	1,703	3,016	4,719	466	5,185

Source: MIGAS

APPENDIX 5.9: Petroleum Company Expenditures

(US$Mln)

Expenditure	1995	1996	1997	1998	1999	2000 Budget
A. Producing Areas	**2,819.8**	**3,257.0**	**3,944.7**	**3,954.2**	**3,715.2**	**4,665.0**
1. Exploration	256.1	272.3	448.8	531.0	236.8	336.0
- Seismic Survey	71.1	92.4	123.3	113.3	105.1	336.0
- Drilling	131.4	114.4	257.9	356.3	89.3	-
- Others	53.6	65.5	67.6	61.4	42.4	-
2. Development Drilling	473.3	656.9	792.2	908.1	790.3	701.8
3. Production	1,748.9	1,956.2	2,291.1	2,056.6	2,248.9	3,016.6
4. General Adm.	341.5	371.6	412.6	378.5	473.9	400.6
B. Non Producing Areas	**238.3**	**305.5**	**828.1**	**874.3**	**547.3**	**730.1**
1. Exploration	191.9	236.8	599.3	549.2	263.7	483.6
- Geologic Survey	23.1	16.4	19.2	11.8	7.1	483.6
- Seismic Survey	14.6	25.5	74.9	46.1	21.3	-
- Drilling	120.4	149.0	423.6	428.2	148.0	-
- Others	33.7	45.9	81.6	63.1	37.3	-
2. Development Drilling	3.3	-	-	-	19.9	-
3. Production	0.3	20.5	144.2	246.4	1.0	181.5
4. General Adm.	42.8	48.2	84.6	78.6	49.0	65.0
C. Total (A+B)	**3,058.1**	**3,562.5**	**4,772.8**	**4,828.5**	**4,048.8**	**5,385.1**
1. Exploration	448.0	509.1	1,048.1	1,080.2	500.5	1,019.6
- Geologic Survey	23.1	16.4	19.2	11.8	7.1	483.6
- Seismic Survey	85.7	117.9	198.2	159.4	126.4	536.0
- Drilling	251.9	263.5	681.5	784.5	287.3	-
- Others	87.3	111.4	149.2	124.5	79.7	-
2. Development Drilling	476.6	656.9	792.2	988.1	810.2	701.8
3. Production	1,749.2	1,976.8	2,435.3	2,303.0	2,249.9	3,198.1
4. General Adm.	384.3	419.8	497.2	457.1	488.3	465.6

Source: MIGAS

APPENDIX 6: PRODUCTION

APPENDIX 6.1: Crude and Condensate Production by Company

(1,000 B/D)

Company	1974	1980	1996	1997	1998	1999
Caltex	909.2	760.5	761.2	764.8	759.5	746.0
YPF/Maxus	54.2	82.2	138.5	140.5	148.2	140.1
Total	2.3	198.8	59.1	71.8	79.2	81.2
BP	89.5	133.8	92.4	83.4	74.4	71.5
Conoco	--	18.5	97.6	103.2	84.4	64.4
Unocal	101.4	108.8	79.9	95.6	75.6	63.9
Vico	2.5	23.3	63.3	53.0	60.8	54.7
ExxonMobil	--	61.3	88.9	61.3	49.0	42.3
Gulf Resources	19.3	7.0	64.4	55.8	45.3	45.1
Santa Fe	30.4	60.3	18.1	18.4	39.7	41.6
Pertamina *	110	81.7	38.4	41.6	38.9	44.2
Exspan	47.4	38.9	17.3	20.0	26.6	37.5
Talisman	--	--	20.6	22.7	25.4	20.0
Kondur Pet.	--	--	20.0	18.0	17.7	16.9
Husky/Sea Union	--	--	6.5	7.3	6.2	6.8
Amoseas	--	--	9.7	8.0	5.1	6.4
Genindo	--	--	4.3	3.9	3.2	2.7
GFB Resources	--	--	3.3	1.8	2.0	0.3
Surya Raya Teladan	--	--	1.8	1.8	1.8	1.7
Lirik Petroleum	--	--	1.4	1.7	1.4	0.4
Kodeco	--	--	0.9	0.9	1.3	1.8
Binawahana Petrindo	--	--	--	0.3	1.0	0.9
Citra Patenindo	--	--	1.3	0.8	0.9	1.5
Santos	1.4	0.9	0.8	0.7	0.7	0.7
Japex	--	--	1.7	1.4	0.7	0.6
Golden Spike/Kodel	--	--	0.8	0.9	0.7	0.5
Sebaku Intermega	--	--	--	0.7	0.6	0.6
Amerada Hess/Energy Eq.	--	--	0.3	0.3	0.3	0.2
Western Nusantara	--	--	--	0.1	0.2	--
Triton	--	-	0.6	--	--	--
Enterprise Oil	--	--	0.3	--	--	--
Petronusa	--	--	0.3	0.1	--	--
TOTAL	**1,374.9**	**1,576.0**	**1,594.8**	**1,580.7**	**1,556.6**	**1,500.3**

Source: Oil Industry * Pertamina-owned fields

MIGAS reported production in 1999 at 1,355.2 mb/d

APPENDIX 6.2: Crude and Condensate Production

(1,000 B/D)

Year/Month	Crude	Condensate	Total
1994	1,434.7	175.0	1,609.7
1995	1,434.2	170.8	1,605.0
1996	1,421.7	172.9	1,594.6
1997	1,417.9	162.8	1,580.7
1998	1,401.3	155.3	1,556.6
- January	1,384.7	172.5	1,557.2
- February	1,390.5	172.9	1,563.4
- March	1,387.2	160.9	1,548.1
- April	1,390.6	154.7	1,590.0
- May	1,403.6	150.7	1,557.2
- June	1,409.5	141.4	1,563.4
- July	1,410.3	157.7	1,548.1
- August	1,404.5	160.4	1,592.1
- September	1,399.3	141.1	1,572.6
- October	1,408.5	138.0	1,566.2
- November	1,414.0	158.3	1,568.0
- December	1,411.7	156.2	1,562.5
1999	**1,351.3**	**149.1**	**1,500.3**
- January	1,384.7	172.5	1,557.2
- February	1,390.5	172.9	1,563.4
- March	1,387.2	160.9	1,548.1
- April	1,352.3	137.6	1,489.9
- May	1,347.2	132.5	1,479.7
- June	1,354.1	149.4	1,503.5
- July	1,346.7	152.7	1,499.4
- August	1,340.5	150.5	1,491.0
- September	1,323.3	143.1	1,466.4
- October	1,337.5	149.0	1,486.5
- November	1,339.7	154.9	1,494.6
- December	1,326.4	157.4	1,483.8
2000			
- January	1,305.4	156.8	1,462.2
- February	1,316.3	164.2	1,480.5
- March	1,305.3	156.9	1,462.2
- April	1,283.9	122.4	1,406.3
- May	1,275.7	124.4	1,400.1

Source: Oil Industry

APPENDIX 6.4: Indonesian Crude Specification

Type of Crude - producer	API at 60° F	Pour Point	Water & Sendiment	Sulfur Content	Wax Content	Loading ports
Minas-Caltex	34.1	95	0.3	0.09	34.2	Dumai
Duri-Caltex	20.3	60	0.4	0.19	13	Dumai
Widuri-Maxus	33.3	113	0.05	0.07	39.3	Widuri marine terminal
Condensate-Mobil	54.3	-20	0	0.002	-	Blang Lancang
Cinta-YPF/Maxus	32.8	100.0	Trace	0.12	19.56	Cinta marine terminal
Attaka-Union	42.3	-10	0.12	0.09	4.22	Santan marine terminal
Arjuna-Arco	36.7	70	0.45	0.09	-	Arjuna marine terminal
Badak – Huffco	41.3	-15	Trace	0.08	7.35	Santan marine terminal
Lalang—Kondur Pet	39.2	90	0.05	0.11	27.42	Lalang marine terminal
Sepinggan-Union	31.7	20.0	0.01	0.11	-	Lawi-lawi marine terminal
Handil-Total	32.2	85	0.1	0.1	22.0	Senipah marine terminal
Walio-Trend	34.05	-20	0.05	0.72	-	Kasim marine terminal
Bakapai-Total	41.2	5	-	0.08	1.66	Senipah marine terminal
Bunyu-Pertamina	31.7	60	0.1	0.09	8.3	Bunyu
Kakap-Marathon	44.9	60	0.25	0.06		Natuna marine terminal
Jatibarang/Pertamina	29.0	110	0.5	0.07	24.6	Balongan
Arimbi-Arco	33.0	95	0.5	0.14	25.6	Balongan
Ikan Pari-Conoco	48	65		0.08	15.37	
NSC/Katapa-Asamera	50.8	-30		0.06		Pangkalan Susu
Udang-Conoco	39.1	95		0.05		Udang marine terminal

Source: Pertamina

APPENDIX 7: EXPORTS AND PRICES

APPENDIX 7.1: Crude and Condensate Exports

	1995	1996	1997	1998	1999
Volumes (1000 Brl)					
Crude	254,676.9	258,677.3	261,991.9	247,246.4	250,903.6
(1000B/D)	697.7	708.7	717.8	677.4	687.4
Condensate*	47,133.4	25,062.8	25,939.9	33,118.2	34,496.1
(1000B/D)	129.1	68.7	71.1	90.7	94.5
TOTAL	**301,810.3**	**283,740.1**	**287,931.8**	**280,364.6**	**285,399.7**
(B/D)	**826.9**	**777.4**	**788.8**	**768.1**	**781.9**
Values ($Mln):					
- Crude	4,333.4	5,203.3	4,950.8	3,000.4	4,313.5
- Condensate	814.3	508.5	507.3	444.5	636.0
TOTAL	**5,147.7**	**5,711.8**	**5,458.1**	**3,444.9**	**4,949.5**

Source: MIGAS *) Including condensate sales to local petrochemical industries.

APPENDIX 7.2: Crude and Condensate Exports by Destination

(1,000 Brl)

Country	1995	1996	1997	1998	1999
Japan	133,056.8	106,988.7	98,823.4	85,974.8	94,720.4
Australia	19,923.7	29,170.2	36,800.9	51,972.8	43,403.3
South Korea	30,274.5	35,219.6	41,060.6	36,891.3	45,873.1
China	42,698.6	50,237.5	44,433.2	28,980.8	31,568.1
USA	25,174.4	20,984.7	20,705.0	24,843.8	26,839.2
Singapore	24,242.4	23,173.1	22,190.4	21,583.7	12,105.6
Taiwan	17,319.5	8,026.2	11,354.4	10,150.3	10,435.1
Thailand	3,038.0	6,586.5	8,924.8	3,039.5	6,602.3
Philippines	2,398.5	1,512.9	3,088.9	1,013.7	420.0
New Zealand	3,684.0	1,840.7	550.1	778.2	670.3
Others	-	-	-	15,135.7	12,762.3
TOTAL	**301,810.2**	**283,740.1**	**287,931.8**	**280,364.6**	**285,399.7**

Source: MIGAS

APPENDIX 7.3: Crude Exports by Crude Stream

(1,000 Brl)

Crude streams	1995	1996	1997	1998	1999
Crudes					
Minas-Caltex	84,581.6	81,015.1	83,493.4	74,101.7	84,079.5
Duri-Caltex	47,548.3	49,143.4	46,000.0	58,538.7	66,771.2
Widuri-Maxus	21,796.8	23,337.2	25,510.8	24,775.6	22,245.4
Belida – Conoco	24,333.2	15,655.8	18,833.5	15,715.7	9,478.9
Cinta-YPF/Maxus	15,810.4	14,651.3	14,321.0	14,721.9	17,873.8
Attaka-Union	15,049.2	13.043.9	13,744.9	12,809.0	11,359.5
Arjuna-Arco	5,807.4	7,202.5	8,665.9	10,563.4	7,311.2
Badak – Huffco	2,035.1	1,344.4	1,299.9	8,452.7	6,993.6
Kerapu - Clyde P.	5,531.4	6,097.3	5,853.3	6,443.6	4,800.9
Lalang—Kondur Pet	4,864.4	3,675.5	3,748.4	4,347.9	3,058.7
Sepinggan-Union	350.8	279.2	3,761.4	4,326.8	3,111.0
Handil-Total	9,198.8	7,842.0	3,845.1	3,244.1	3,278.0
Mudi – Conoco	--	--	--	3,150.3	5,053.6
Walio-Trend	7,511.4	6,710.9	5,244.0	2,524.6	2,242.1
Anoa – Pertamina	2,515.8	3,571.8	2,735.0	1,980.4	2,250.7
Bakapai-Total	1,342.8	877.9	950.1	982.0	537.7
Sembilang – Conoco	1,481.0	817.8	200.0	347.0	375.0
Bunyu-Pertamina	1,406.5	2,215.3	2,139.2	221.0	--
Kakap-Marathon	865.2	--	--	--	--
Jatibarang/Pertamina	1,487.0	--	--	--	--
Arimbi-Arco	836.3	--	--	--	--
Camar	323.6	--	--	--	--
Geragai – Synergy	--	--	--	--	82.9
Condensate:					
Arun – Mobil	29,513.1	23,340.0	25,939.9	16,452.6	13,720.1
Bontang Mix-Vico	16,840.1	21,196.0	21,646.1	8,672.4	11,029.3
Senipah – Marathon	--	--	--	7,993.2	9,387.5
Condensate-Arco	780.2	1,722.8	--	--	359.1
TOTAL	**301,810.4**	**283,740.1**	**287,931.8**	**280,364.6**	**285,399.7**

APPENDIX 7.4: Exports of Crude Oil and Refined Products

Year/ Month	Crudes and Condensate		Refined Products		Total
	(1,000 Brl)	($ Mln)	(1,000 Brl)	($ Mln)	($ Mln)
1990	288,317	6,558.6	56,771	1,258.5	7,817.1
1991	330,495	6,467.5	56,588	991.6	7,459
1992	293,067	5,410.2	68,439	1,059.1	6,469.3
1993	283,280	4,795.0	58,235	903.5	5,698.5
1994	324,378	5,075.7	63,238	928.8	6,004.5
1995	300,722	5,148.0	79,347	1,286.8	6,434.8
1996	283,741	5,711.8	77,349	1,510.5	7,373.7
1997	289,932	5,458.1	71,786	1,291.2	6,749.3
1998	280,365	3,444.9	58,897	695.4	4,140.3
1999	285,400	4,949.5	56,496	912.2	5,861.7
January	25,036	275.4	4,624	48.1	323.5
February	23,850	250.9	4,465	44.0	294.9
March	30,500	365.9	4,363	47.2	413.1
April	23,338	349.4	4,458	61.4	410.8
May	23,886	377.9	5,618	82.3	460.2
June	19,363	305.9	3,865	57.0	362..9
July	28,191	565.5	5,543	93.0	658.5
August	25,825	501.5	5,443	99.1	600.6
September	24,264	523.6	3,893	74.5	598.1
October	21,657	480.7	6,121	129.7	610.4
November	19,368	453.8	3,941	87.4	541.2
December	21,686	516.8	4,156	87.6	604.4
2000					
January	20,455	496.0	6,540	145.1	641.1
February	19,871	525.3	9,199	143.0	668.3
March	19,061	511.0	9,641	185.7	696.7
April	18,291	440.7	5,166	129.5	570.2
May	17,350	478.6	4,344	113.2	591.8
June	18,635	554.0	3,964	108.2	662.2
Jan-Jun	113,664	2,955.7	35,856	824.7	3,780.4

Source: MIGAS

APPENDIX 7.5: Refined Product Exports

(1000 Brl)

Products	1995	1996	1997	1998	1999
LSWR	50,338.7	51,179.7	52,140.9	45,045.6	39,498.2
Naptha	6,674.6	7,701.9	6,561.2	5,983.4	8,160.6
IFO	3,659.4	1,645.0	205.5	-	-
DMAR	3,005.3	-	-	-	-
Avtur	2,777.7	753.7	474.5	-	-
Decant Oil	2,534.1	3,355.8	4,752.8	3,324.1	3,782.4
Gas Oil	2,279.2	3,272.4	1,343.1	-	-
Mogas	1,388.5	2,687.8	439.8	-	-
LOMC	983.4	2,113.0	2,676.5	1,305.7	517.3
Cokes	979.6	784.4	1,052.1	1,120.8	1,675.2
JP4/JP5	--	--	--	--	246.9
Others	3,768.3	3,855.4	2,139.2	2,117.2	2,838.4
TOTAL	**78,388.8**	**77,349.1**	**71,785.6**	**58,897.0**	**56,496.2**
Values ($Mln)	**1,286.8**	**1,510.5**	**1,291.1**	**695.4**	**912.2**

Source: MIGAS

APPENDIX 7.6: Net Oil Exports

(1000 Brl)

Exports/ Imports	1995	1996	1997	1998	1999
Exports	**379,579.0**	**361,089.1**	**359,717.4**	**339,261.6**	**341,895.9**
Crude and Condensate	301,810.4	283,740.1	287,931.8	280,364.6	285,399.7
Refined Products	78,388.8	77,349.0	71,785.6	58,897.0	56,496.2
Imports	**113,336.1**	**126,274.3**	**157,876.2**	**126,529.4**	**164,594.0**
Crude and Condensate	68,326.9	69,217.4	62,882.0	72,476.0	84,692.2
Refined Products	45,019.2	57,056.9	94,994.2	54,053.4	79,902.0
Net Exports	**276,654.1**	**234,814.3**	**201,841.2**	**212,732.2**	**177,301.9**

Source: MIGAS

APPENDIX 7.7: Government Crude Oil Selling Prices

(US$/Brl)

Crude	Mar 1994	Mar 1995	Apr 1996	June 1997	June 1998	July 1999	July 2000
SLC/Minas	14.46	18.2	19.33	17.77	11.91	18.11	30.18
Arun Condensate	14.58	17.89	18.31	48.47	12.70	17.95	29.95
Arjuna	14.59	18.04	19.52	18.39	12.68	18.17	29.65
Handil	14.25	17.67	19.17	17.77	11.91	18.11	29.75
Cinta	13.73	17.53	18.77	17.03	11.65	17.62	29.64
Duri	11.45	15.94	18.17	16.33	10.80	16.40	28.31
Attaka	15.09	18.22	20.09	19.09	13.13	18.47	30.17
Lalang	14.5	17.97	19.31	17.82	11.96	18.16	30.21
Walio Mix	14.26	18	19.13	17.57	11.71	17.91	29.95
Arimbi	13.44	16.89	18.37	--	11.63	17.02	28.50
NSC/Katapa	14.98	18.11	19.98	--	13.02	18.36	30.06
Jatibarang/Cemara	13.45	17.19	18.32	--	10.90	17.10	29.15
Bunyu Mix	14.16	17.9	19.03	17.77	11.91	18.11	30.15
Bakapai	15.09	18.22	20.08	19.09	13.13	18.47	30.17
Badak	15.09	18.22	20.08	19.09	13.13	18.41	30.17
Sepinggan/Yakin	14.39	17.84	19.32	18.39	12.68	18.11	29.65
Widuri	13.23	17.42	18.73	16.90	11.27	17.35	29.57
Belida	--	--	20.10	18.97	12.87	18.39	30.24
Anoa	15.49	18.62	20.49	19.49	13.63	18.87	30.57
Senipah Condensate	--	--	--	18.62	13.01	18.20	29.95
Kerapu	--	--	--	18.63	12.53	18.05	29.90
Sembilang	--	--	--	17.57	11.71	17.91	29.96
Camar	--	--	--	--	13.06	19.55	29.73
Mudi	--	--	--	--	12.68	18.07	29.25
Kaji	--	--	--	--	12.10	18.30	30.87

Source: Pertamina

APPENDIX 7.8: Crude Export Prices

(US$/Brl)

Year/ Month	Export Prices (Average)	I C P (US$/Brl)			
		Minas	Duri	Widuri	Belida
1995	17.06	17.40	15.82	16.75	17.54
1996	20.13	20.33	18.89	19.64	21.03
1997	18.96	19.00	17.55	18.17	20.10
1998	12.35	12.33	11.27	11.67	13.24
1999	17.34	17.60	16.37	16.96	18.09
January	11.00	10.99	10.27	10.40	11.81
February	9.02	10.56	9.70	10.04	11.26
March	12.00	12.03	11.12	11.46	12.83
April	14.97	15.20	14.05	14.52	15.85
May	15.82	16.20	14.80	15.58	16.08

Appendix 7.8 (continued)

June	15.80	16.27	14.72	15.61	16.21
July	17.57	18.11	16.40	17.35	18.39
August	19.42	19.95	18.53	18.80	20.51
September	21.58	21.80	20.73	21.06	22.94
October	22.20	22.38	20.88	21.81	23.07
November	23.43	23.74	22.41	23.32	23.76
December	23.83	24.22	22.79	23.55	24.32
2000					
January	24.22	24.57	23.17	23.98	24.85
February	25.91	26.24	24.90	25.63	26.58
March	26.78	27.19	25.66	26.53	27.47
April	24.07	24.12	23.34	2..52	24.64
May	27.57	27.96	26.98	27.34	28.16
June	29.73	30.68	28.96	29.99	30.03

Source: MIGAS

APPENDIX 8: IMPORTS

APPENDIX 8.1: Crude Oil Imports

(1,000 Brl)

Country	Crude	1995	1996	1997	1998	1999
Saudi Arabia	ALC	18,620.3	13,716.9	5,236.1	23,724.7	35,204.5
	Saharan C	1,213.6	-	-	-	-
Iran	ILC	13,634.2	23,815.6	22,269.3	10,445.0	-
China	Nanhai	4,211.6	2,383.3	6,639.5	2,671.3	4,434.2
	Xijiang	1,757.7	7,155.1	-	-	-
Malaysia	Tapis	2,081.5	-	1,053.5	7,836.5	9,151.0
	Dulang	1,375.8	2,746.8	4,986.3	3,343.3	924.2
	Bintulu	1,730.1	459.6	-	880.5	427.7
	Miri	430.4	1,413.0	431.7	897.8	1,176.4
	Labuhan	-	473.9	-	2,305.2	1,197.8
Australia	Harriet	3,564.7	1,866.1	4,283.2	3,437.2	-
	C Basin	3,111.8	2,486.3	2,652.5	-	-
	Varnard	3,021.2	528.7	105.3	-	563.8
	North W.S.	-	-	-	992.2	-
	Gipsland	-	-	-	618.2	621.0
	Pennington	893.3	-	-	-	-
	Barrow	250.5	1,609.1	1,011.3	-	125.4
	Skua	250.0	251.2	-	307.6	-
	Jabiru	-	1,589.1	-	1,323.3	431.3
	Challis	-	-	650.0	342.2	230.7
Libya	Sarir	1,817.3	959.3	930.7	-	-
Vietnam	Bach Ho	2,238.7	1,068.1	1,589.7	4,583.8	7,977.4
	Dai Hung	-	-	-	-	889.6
	Ruby	-	-	-	-	563.1
	Rang Dong	-	-	-	-	1,101.2
Nigeria	Qua Iboe	1,839.8	3,649.4	6,426.0	3,025.5	5,319.4
	Odudu	919.7	-	-	-	-
	Escravos	-	937.1	-	-	2,677.8
	Bonny LC	-	466.0	-	-	-
	Bonny MC	-	467.5	-	-	-
	Brass LC	3,744.8	919.4	-	-	891.2
Tunisia	Zarzaitine C	612.9	-	-	-	-
Brunei	Brunei LC	456.9	510.0	-	-	1,857.2
PNG	Kutubu	-	-	651.4	5,004.4	2,593.5
Yemen	Marib LC	-	600.1	578.3	609.3	-
Iraq	BLC	-	-	1,761.7	1,770.0	4,707.1
Pakistan	Badin	-	1,719.6	986.1	597.2	996.7
Thailand	Tantawan	-	-	639.5	482.1	630.0
TOTAL	**Volume**	**68,326.9**	**71,791.0**	**62,882.0**	**72,476.0**	**84,692.0**
	Value($Mln)	**1,229.1**	**1,506.7**	**1,292.0**	**976.7**	**1,501.2**

APPENDIX 8.2: Imports of Crude Oil and Refined Products

Year/ Month	Crudes		Refined Products		Total
	(1,000 Brl)	($ Mln)	(1,000 Brl)	($ Mln)	($ Mln)
1990	45,653.9	1,014.4	24,167.3	792.7	1,807.1
1991	40,718.0	814.0	22,668.4	674.5	1,488.5
1992	60,761.6	1,138.9	38,352.3	946.6	2,085.5
1993	56,425.3	924.9	47,468.9	1,034.9	1,959.8
1994	58,074.3	948.3	38,119.7	739.6	1,687.9
1995	68,326.9	1,229.1	50,765.0	978.8	2,207.9
1996	71,791.0	1,506.7	60,905.9	1,576.9	3,083.6
1997	62,882.0	1,292.0	94,994.2	2,296.8	3,588.8
1998	72,476.0	976.7	54,053.8	807.7	1,784.4
1999	84,692.0	1,501.2	79,902.0	1,656.4	3,157.6
January	8,229.8	96.7	8,412.2	110.8	207.5
February	7,873.4	86.9	4,252.1	63.9	150.8
March	7,665.8	102.2	2,992.9	45.2	147.4
April	9,110.9	143.3	2,878.4	41.0	184.3
May	6,242.3	101.0	3,516.9	57.4	158.4
June	6,179.5	100.8	5,175.1	88.8	189.6
July	6,975.0	133.7	9,727.6	198.4	332.1
August	7,939.4	165.8	7,991.8	182.3	348.1
September	6,850.7	157.1	10,609.3	261.7	418.8
October	7,214.2	164.7	14,620.8	196.5	361.2
November	4,051.0	96.6	7,510.5	192.0	288.6
December	5,737.0	143.7	7,226.3	185.0	328.7
2000					
January	6,603.3	171.2	5,917.8	167.4	338.6
February	3,868.0	102.5	6,138.3	186.2	288.7
March	8,484.0	230.8	8,168.6	260.1	490.9
April	5,410.8	129.9	6,704.4	185.1	315
May	4,949.0	143.1	6,197.3	183.7	326.8
June	6,811.0	205.0	6,853.6	209.9	414.9
Jan-Jun	36,126.1	982.5	39,980.0	1,192.4	2,174.9

APPENDIX 8.3: Imports of Oil Products

(1,000 Brl)

Oil Products	1996	1997	1998	1999
Gas Oil (ADO)	28,101.9	50,216.2	31,747.9	36,289.7
Fuel Oil	1,917.9	6,155.2	9,268.9	13,583.6
Kerosene/DPK	-	-	4,45.1	17,542.2
HOMC	1,155.7	-	3,678.5	10,049.0
IDO	4,151.0	5,846.2	1,008.4	2,296.0
Avgas	-	-	-	25.7
Avtur	14,213.5	19,608.9	3,505.0	-
HSFO	11,365.7	8,350.6	-	-
Paraxylene	-	-	-	115.6
TOTAL – Volume	**60,905.9**	**94,994.2**	**54,053.8**	**79,902.0**
Value (US$Mln)	**1,576.9**	**2,296.8**	**807.7**	**1,656.4**

Source: MIGAS

ADO (Automotive Diesel Oil), IDO (Industrial Diesel Oil), HOMC (High Octane Motor Coponent), DPK (Dual Purposes Kerosene), HSFO (High Sulfur Fuel Oil).

APPENDIX 9: DOWNSTREAM REFINERY

APPENDIX 9.1: Current Refinery Capacity

(1,000 B/D)

Refinery	Location	Installed Capacity	Effective Capacity	1999 Crude Processed	Crude Input
Pangkalan Brandan	N. Sumatra	5.0	5.0	3.8	Katapa/NSC
Dumai	C. Sumatra	120.0	120.0	126.7	Minas, Duri
Sungai Pakning	C. Sumatra	50.0	50.0	46.2	Minas, Lalang, Lirik
Musi	S. Sumatra	135.2	135.2	117.2	Minas, Geragai, Ramba, Jene, SPD, Talang Akar JPO, Rimau
Cilacap	C. Java	348.0	348.0	320.3	Minas, Arjuna, Ataka, Badak, Belida, Mudi and Imported Crudes
Balikpapan	E.Kalimantan	260.0	260.0	237.3	Tanjung, Belida, Minas, Attaka, Handil, Widuri, Badak, Sepinggan, Imported Crudes
Balongan	W. Java	125.0	125.0	101.0	Duri (80%), Minas(20%)
Kasim		10.0	10.0	5.9	Walio, Salawati
Cepu	C. Java	3.8	3.8	2.6	Cepu crude
TOTAL		**1,057.0**	**1,024.0**	**961.0**	**--**

Source: MIGAS

APPENDIX 9.2: Crude Intakes by Oil Refineries

(1,000 Brl)

Sources	1995	1996	1997	1998	1999
Crude Oil	222,129.2	265,314.1	253,680.0	252,213.4	250,073.4
Condensate	3,033.9	7,263.8	7,715.5	9,467.3	4,608.4
Imported Crudes	69,286.9	69,037.4	71,163.0	78,028.0	85,364.0
Imported HOMC	1,513.7	632.0	3,822.1	1,991.4	8,439.1
Feedstocks	911.4	1,571.8	456.2	639.9	444.4
Field Gas	567.4	1,788.8	1,796.3	1,480.0	1,851.4
TOTAL	**297,442.5**	**345,607.8**	**338,633.2**	**343,820.1**	**350,780.6**

Source: MIGAS

APPENDIX 9.3: Refinery Output

(1,000 Brl)

Refinery	1995	1996	1997	1998	1999
A. Fuel Oils (BBM)					
Pangkalan Brandan	800.4	719.6	1,054.0	1,552.8	956.9
Dumai	33,589.5	37,026.5	33,218.1	38,581.4	42,205.9
Sungai Pakning	5,095.3	5,337.1	5,144.2	5,288.2	5,164.6
Musi	24,238.7	23,602.0	22,089.3	23,315.9	28,57 4.8
Cilacap	82,593.1	77,972.7	81,292.8	93,061.0	93,474.1
Balikpapan	55,338.7	62,948.1	56,840.2	61,519.7	58,099.5
Balongan	--	31,248.0	34,793.5	26,396.8	34,068.4
Kasim	--	--	--	1,724.5	1,906.8
Cepu	501.0	481.0	440.1	418.4	449.4
Subtotal	**202,157.2**	**239,335.1**	**234,872.1**	**251,858.7**	**264,900.4**
B. Other Products					
Pangkalan Brandan	867.9	839.6	813.4	125.8	428.0
Dumai	11,857.2	9,177.5	9,741.6	3,662.8	4,029.4
Sungai Pakning	11,198.8	11,884.7	11,742.9	13,010.9	11,700.6
Musi	18,779.4	22,720.0	23,388.8	16,357.7	14,200.5
Cilacap	22,631.1	23,765.3	20,046.4	21,348.3	18,795.0
Balikpapan	29,391.0	32,339.8	31,101.1	29,656.3	28,533.0
Balongan	--	4,952.5	6,372.4	6,524.4	2,805.3
Kasim	--	--	--	774.5	241.1
Cepu	559.9	593.2	554.4	500.7	488.6
Subtotal	**95,285.3**	**106,272.7**	**103,761.1**	**91,961.3**	**81,221.5**
BBM & Other Products					
Pangkalan Brandan	1,668.7	1,559.2	1,867.4	1,678.6	1,384.9
Dumai	45,446.7	46,204.0	42,959.7	42,244.2	46,235.3
Sungai Pakning	16,294.1	17,221.8	16,887.1	18,299.1	16865.2
Musi	43,018.1	46,322.0	45,478.1	39,673.6	42,775.3
Cilacap	105,224.2	101,738.0	101,339.2	114,409.3	116,927.8
Balikpapan	84,729.7	95,287.9	87,941.3	91,176.0	86,632.5
Balongan	--	36,200.7	41,165.9	32,921.2	36,873.7
Kasim	--	--	--	2,498.9	2,147.9
Cepu	1,060.9	1,074.2	994.5	919.1	938.0
TOTAL	**297,442.5**	**345,607.8**	**338,633.2**	**343,820.1**	**350.780.6**

Source: MIGAS

APPENDIX 9.4: Refinery Output By Product

(1,000 Brl)

Oil Products	1995	1996	1997	1998	1999
a. Fuel Oils					
Automotive Diesel Oil	75,186.5	89,381.9	86,276.3	91,525.6	91,614.2
Mogas	43,168.0	60,814.6	67,252.8	65,743.0	73,080.6
Kerosene	47,440.8	53,535.1	47,829.1	53,290.1	58,491.5
Fuel Oil	25,067.8	20,221.8	20,874.5	26,324.5	27,155.6
Industrial Diesel Oil	4,175.7	6,302.5	4,829.6	7,792.6	8,130.0
Aviation Turbine	7,030.3	9,059.9	7,687.7	7,195.1	6,046.2
Avgas	--	--	59.1	29.9	71.6
Jet Petrol (JP-5)	--	--	--	--	310.8
Subtotal	**202,157.2**	**239,335.1**	**234,872.1**	**251,858.7**	**264,900.4**
b. Secondary Fuel					
LSWR	50,313.1	49,407.3	53,156.1	43,314.0	38,710.4
Naptha	12,937.3	14,614.0	8,113.4	11,405.8	14,041.3
LOMC	1,619.7	2,784.2	3,310.4	1,407.9	472.1
HOMC	324.9	123.2	43.5	32.0	-
Subtotal	**65,195.0**	**66,928.7**	**64,623.4**	**56,159.7**	**53,233.8**
c. Non Fuel					
LPG	3,987.9	6,639.7	7,347.8	6,371.1	6,379.8
Asphalt	3,022.7	3,305.7	2,352.1	1,902.6	1,814.7
Green Coke	1,916.2	1,742.1	2,071.2	1,866.8	1,882.2
Lube Base Oil	1,689.5	1,792.6	1,569.6	1,505.6	2,369.6
Residual	379.1	386.0	359.7	344.0	312.9
Polytam	207.3	255.1	336.0	215.6	349.2
Wax	181.4	156.4	158.4	194.5	165.8
SPBX 40B	72.0	149.2	149.2	141.0	127.4
Minarex	72.8	89.4	99.8	110.7	124.0
HAWS	--	--	--	57.2	100.5
Others	323.6	2,802.2	2,317.2	1,348.0	1,578.6
Subtotal	**11,779.7**	**17,229.0**	**16,761.0**	**14,057.2**	**15,204.7**
d. Intermediate	2,107.1	5,044.0	4,248.8	2,300.4	-1,360.1
e. Refining Fuel/Gas	14,399.0	16,120.6	15,843.9	17,110.8	16,643.0
f. Losses	1,804.4	950.4	2,284.0	2,335.4	2,168.8
GRAND TOTAL	**297,442.5**	**345,607.8**	**338,633.2**	**343,820.1**	**350,780.6**

Source: MIGAS

APPENDIX 10: OIL PRODUCT SUPPLY AND DEMAND

APPENDIX 10.1: Supply of Refined Products

(Million Brl)

Products	1993	1994	1995	1996	1997	1998	1999
REFINERY OUTPUT							
Automotive Diesel Oil	73.3	70.3	75.2	89.4	86.3	91.5	91.7
Mogas	46.5	46.0	43.2	60.8	67.1	65.7	73.1
Kerosene	47.5	51.3	47.4	53.5	47.8	53.3	58.5
Fuel Oil	26.7	25.5	25.1	20.2	20.9	26.3	27.2
Industrial Diesel Oil	12.3	7.5	4.2	6.3	4.9	7.8	8.1
Avtur	4.8	5.8	7.0	9.1	7.7	7.2	6.0
JP4/JP5	0.9	0.2	-	-	-	-	0.3
Avgas	0.04	0.1	0.1	-	0.1	-	-
LSWR	44.6	46.0	50.3	49.4	53.2	43.3	38.7
Naptha	15.9	13.2	12.9	14.6	8.1	11.4	14.0
Others	10.5	18.0	13.8	20.2	20.0	19.1	15.7
Refining Fuel Losses	15.3	14.5	18.2	22.1	22.4	22.2	16.6
TOTAL OUTPUT	**298.5**	**295.2**	**297.4**	**345.6**	**338.6**	**343.8**	**350.8**
IMPORTS							
Automotive Diesel Oil	27.3	20.6	20.1	28.1	50.2	31.7	36.0
Fuel Oil	7.2	4.2	2.7	1.9	6.2	9.3	13.4
Diesel Oil	-	3.7	4.4	4.2	5.8	1.0	2.3
Kerosene	-	-	-	13.9	19.6	8.3	17.6
Avtur	9.7	9.1	13.0	-	-	3.5	-
HOMC	2.0	0.6	2.1	1.2	4.8	3.7	10.0
HSFO	-	-	2.7	11.4	8.4	-	-
Others	1.1	-	-	0.2	-	-	0.6
TOTAL IMPORTS	**47.5**	**38.1**	**45.0**	**60.9**	**95.0**	**54.0**	**79.9**
SUPPLY							
Automotive Diesel Oil	99.6	90.9	95.3	117.5	136.5	123.2	127.7
Mogas	46.5	46.0	43.2	60.8	67.1	65.7	73.1
Kerosene	47.5	51.3	47.4	53.5	47.8	53.3	76.1
Fuel Oil	26.7	29.7	27.8	22.1	27.1	35.6	40.6
Industrial Diesel Oil	12.3	7.5	8.6	34.4	10.7	8.8	8.1
Avtur	14.5	14.9	20.0	23.2	27.3	10.7	6.0
JP4/JP5	0.9	0.2	-	-	-	-	0.3
Avgas	0.04	0.1	0.1	0.0	0.1	-	-
LSWR	44.6	46.0	50.3	49.4	53.2	43.3	38.7
Naptha	15.9	13.2	12.9	14.6	8.1	11.4	14.0
HOMC	2.0	0.6	2.1	1.2	4.8	3.7	10.0
HSFO	-	-	2.7	11.4	8.4	-	-
Others	35.46	32.9	32	18.4	42.5	42.1	36.1
TOTAL SUPPLY	**346.0**	**333.3**	**342.4**	**406.5**	**433.6**	**397.8**	**430.7**

APPENDIX 10.2: Product Supply

(Million Brl)

Supply	1994	1995	1996	1997	1998	1999
Domestic Refineries	295.2	297.4	345.6	338.6	343.8	350.8
Imports	38.1	45.0	60.9	95.0	54.0	79.9
TOTAL	**333.3**	**342.4**	**406.5**	**433.6**	**397.8**	**430.7**

APPENDIX 10.3: Consumption of Fuel Oils and Other Refined Products

Products	1994	1995	1996	1997	1998	1999
Fuel Oils (Million Liters)						
Auto Diesel	16,007.7	16,961.5	18,806.2	21,839.2	19,674.0	19,835.9
Gasoline	8,342.0	9,190.4	10,081.4	10,830.9	10,971.7	11,515.4
Kerosene	8,921.9	9,252.5	9,781.9	9,967.4	10,144.5	11,926.7
Fuel Oil	3,779.6	3,643.1	3,943.3	5,106.6	5,229.3	5,429.1
Industrial Diesel	1,770.4	1,591.5	1,371.2	1,411.3	1,271.8	1,518.4
Avtur	992.5	1,032.9	1,137.6	1,167.7	796.9	545.2
Avgas	7.9	8.0	8.0	7.4	5.7	5.6
Total	**39,822.0**	**41,679.9**	**45,129.6**	**50,330.5**	**48,099.7**	**50,776.3**
Others (1000 MT)						
LPG	548.3	629.4	717.0	828.9	812.8	876.6
Asphalt	495.9	516.7	487.0	389.4	287.2	298.9
Lub Oil	316.4	300.4	342.8	398.2	396.6	356.5
Methanol Mix	1.6	1.7	1.8	1.4	0.6	0.6
CNG (Klep)	5.6	9.9	15.6	17.8	27.1	20.1
Waxes	18.6	19.5	17.7	14.7	20.3	14.4
Cokes	101.7	46.1	37.0	24.4	22.6	22.7
PTA	64.8	153.3	65.5	90.5	27.6	57.4

Source: MIGAS

APPENDIX 10.4: Domestic Fuel Consumption by Sector

(Million Liters)

Year	Household	Transportation	Electric Power	Industry	Total	% Change
1990	7,853	13,315	4,304	6,704	32,176	13.1
1991	7,987	14,396	5,260	7,183	34,826	8.2
1992	8,459	15,271	5,869	8,121	37,721	8.3
1993	8,533	16,069	6,834	8,862	40,298	6.8
1994	8,804	17,990	3,831	9,197	39,822	-1.2
1995	9,145	19,640	2,969	9,926	41,680	4.7
1996	9,682	21,824	3,331	10,292	45,129	8.3
1997	9,861	23,877	5,898	10,698	50,334	11.5
1998	10,055	23,207	4,379	10,453	48,094	-4.5
1999	11,852	23,396	3,956	11,573	50,776	5.6

Source: MIGAS

APPENDIX 10.5: BBM Consumption and Subsidies

Fiscal Year	Consumption (Mln Liters)	Subsidy		
		Budget (Rp Bln)	Actual (Rp Bln)	Actual (US$Mln)
1991/92	36,239.8	1,187.0	929.9	464.9
1992/93	39,029.0	(801.0)	691.8	339.1
1993/94	41,375.2	(1,815.1)	1,279.9	611.4
1994/95	40,930.7	(2,519.0)	686.8	309.5
1995/96	43,114.8	(1,475.3)	--	--
1996/97	47,054.6	(827.8)	1,416.1	585.4
1997/98	51,762.2	(249.2)	9,814.2	1,178.8
1998/99	48,704.6	27,534.0	27,185.0	3,130.1
1999/00	51,891.9	9,985.8	35,839.0	4,479.9
2000 (Apr-Dec)	39,346.5	22,462.3	43,213.0	5,083.9
2001 (Budget)	58,810.0	36,396.1	--	--

Source: MIGAS
Figures in parentheses indicate net profit from domestic fuel sales

APPENDIX 10.6: Fuel Oil Specs in Indonesia

AVIATION GASOLINE (AVGAS 100)

No.	Property	Unit	Limits
1	Appearance		Clear, bright and visually free from solid matter and not dissolved water at ambient temperature
2	Color, visual		Green
3	Corrosion, copper strip		Maximum 1
4	Total sulfur	% m/m	Maximum 0.05
5	Existent gum	Mg/100ml	Maximum 3
6	Freezing point	°C	Maximum - 60
7	Specific energy	Mj/kg	Minimum 43.5
8	Reid vapour pressure at 37.8°C	K Pa	Minimum 38.0, Maximum 49.0
9	Lean mixture motor method octane number		Minimum 99.5
10	Knock rating performance number		Minimum 130
11	Final Boiling point	°C	Maximum 170
12	Evaporated temperature	°C	Minimum 135
13	Distillation residue	% v/v	Maximum 1.5
14	Tetraethyl lead content	Gram Pb/L	Maximum 1.12

AVIATION GASOLINE (AVGAS 100 Low Lead)

No.	Property	Unit	Limits
1	Appearance		Clear, bright and visually free from solid matter and not dissolved water at ambient temperature
2	Color, visual		Blue
3	Corrosion, copper strip		Maximum 1
4	Total sulfur	% m/m	Maximum 0.05
5	Existent gum	Mg/100ml	Maximum 3
6	Freezing point	°C	Maximum - 60
7	Specific energy	Mj/kg	Minimum 43.5
8	Reid vapour pressure at 37.8°C	K Pa	Minimum 38.0, Maximum 49.0
9	Lean mixture motor method octane number		Minimum 99.5
10	Knock rating performance number		Minimum 130
11	Final Boiling point	°C	Maximum 170
12	Evaporated temperature	°C	Minimum 135
13	Distillation residue	% v/v	Maximum 1.5
14	Tetraethyl lead content	Gram Pb/L	Maximum 0.56

AVIATION TURBINE (AVTUR)

No.	Property	Unit	Limits
1	Appearance		Clear, bright and visually free from solid matter and not dissolved water at ambient temperature
2	Total acidity	Mg KOH/g	Maximum 0.015
3	Aromatic	% Vol/Vol	Maximum 22.0
4	Aromatic and Hydrogen	% Vol/Vol	Maximum 25.0
5	Total sulfur	% mass	Maximum 0.30
6	Sulfur Mercaptan	% mass	Maximum 0.0030
7	Flash point	°C	Minimum 38
8	Density at 15°C	Kg/m3	Minimum 775, Max 840
6	Freezing point	°C	Maximum - 47
7	Viscosity at -°C20	Mm2/S	Maximum 8.0
8	Smoke point	Mm	Minimum 25
9	Napthalenes	% Vol/Vol	Maximum 3.0
10	Specific energy	Mj/kg	Minimum 42.8
11	Existent gum	Mg/100ml	Maximum 7

12	Thermal stability at 260°C Pressure differential	MmHg	Maximum 25

GASOLINE - SUPER T.T (Unleaded Gasoline)

No.	Property	Unit	Limits
1	Octane number	RON	Minimum 95.0
2	Color, visual		None
3	Lead content	Gram Pb/L	Maximum 0.005
4	Distillation residue	% Vol	Maximum 2.0
5	50% distillation volume	°C	Minimum 88, Maximum 125
6	Final Boiling point	°C	Maximum 205
7	Reid vapour pressure at 37.8°C	K Pa	Maximum 62
8	Existent gum	Mg/100ml	Maximum 4
9	Induction period	Minute	240
10	Total sulfur	% mass	Maximum 0.20
11	Corrosion, copper strip		Maximum 1
12	Alternative Sulfur Mercaptan	% mass	Maximum 0.0020

GASOLINE - PREMIX

No.	Property	Unit	Limits
1	Octane number	RON	Minimum 94.0
2	Color, visual		Red
3	Lead content	Gram Pb/L	Maximum 0.30
4	Distillation residue	% Vol	Maximum 2.0
5	50% distillation volume	°C	Minimum 88, Maximum 125
6	Final Boiling point	°C	Maximum 205
7	Reid vapour pressure at 37.8°C	K Pa	Maximum 62
8	Existent gum	Mg/100ml	Maximum 4
9	Induction period	Minute	Minimum 240
10	Total sulfur	% mass	Maximum 0.20
11	Corrosion, copper strip		Maximum 1
12	Alternative Sulfur Mercaptan	% mass	Maximum 0.0020
13	Oxygen	%Volume	Maximum 11
14	Color content	Gr/100 Lt	Maximum 0.13

GASOLINE – PREMIUM (Regular)

No.	Property	Unit	Limits
1	Octane number	RON	Minimum 88.0
2	Color, visual		Yellow
3	Lead content	Gram Pb/L	Maximum 0.30
4	Distillation residue	% Vol	Maximum 2.0
5	50% distillation volume	°C	Minimum 88, Maximum 125
6	Final boiling point	°C	Maximum 205
7	Reid vapour pressure at 37.8°C	K Pa	Maximum 62
8	Existent gum	Mg/100ml	Maximum 4
9	Induction period	Minute	Minimum 240
10	Total sulfur	% mass	Maximum 0.20
11	Corrosion, copper strip		Maximum 1
12	Alternative Sulfur Mercaptan	% mass	Maximum 0.0020
13	Color content	Gr/100 Lt	Maximum 0.13

KEROSENE

No.	Property	Unit	Limits
1	Density at 15°C	Kg/m3	Maximum 835
2	Smoke point	Mm	Minimum 15
3	Char value	Mg/Kg	Maximum 40
4	Distillation residue	% Vol	Maximum 2.0
5	Distillation volume at 200°C	%Vol	Minimum 18
6	Final boiling point	°C	Maximum 310
7	Flash point	°C	Minimum 38.0
8	Total sulfur	% mass	Maximum 0.20
9	Corrosion, copper strip		Maximum 1

AUTOMOTIVE DIESEL OIL (ADO)

No.	Property	Unit	Limits
1	Cetane number		Minimum 45
2	Density at 15°C	Kg/m3	Maximum 815, Maximum 870
3	Cinematic viscosity at 37.8°C	Mm2/sec	Minimum 1.6, Maximum 5.8
4	Pour point	°C	Maximum 18
5	Flash point	°C	Minimum 60
6	Distillation volume at 300°C	%Vol	Minimum 40
7	Sulfur content	% mass	Maximum 0.5
8	Conradson carbon residue	% mass	Maximum 0.1
9	Ash	%mass	Maximum 0.01
10	Water content	%mass	Maximum 0.05
11	Sediment	% mass	Maximum 0.01

INDUSTRIAL DIESEL OIL (IDO)

No.	Property	Unit	Limits
1	Specific gravity at 0/60°F		Minimum 0.840, Maximum 0.920
2	Viscosity redwood 1/100°F	Secs	Maximum 35, Maximum 45
3	Pour point	°F	Maximum 65
4	Sulfur content	% wt	Maximum 1.5
5	Conradson carbon residue	% wt	Maximum 1.0
6	Water content	%Vol	Maximum 1.5
7	Sediment	% wt	Maximum 0.02
8	Ash content	%wt	Maximum 0.02
9	Flash point	°F	Minimum 150
10	Strong acid number	Mg/KOH/gr	Maximum: Nil

FUEL OIL

No.	Property	Unit	Limits
1	Specific gravity at 60/60°F		Maximum 0.990
2	Viscosity redwood 1/100°F	Secs	Maximum 400, Maximum 1250
3	Pour point	°F	Maximum 80 - 90
4	Calorific value gros	BTU/lb	Minimum 18000
5	Sulfur content	% wt	Maximum 3.5
5	Conradson carbon residue	% wt	Maximum 14
6	Water content	%Vol	Maximum 0.75
7	Sediment	% wt	Maximum 0.15
8	Flash point	°F	Minimum 150
9	Strong acid number	Mg/KOH/gr	Maximum: Nil

APPENDIX 11: NATURAL GAS

APPENDIX 11.1: Natural Gas Production By Company

(MMSCF)

Company	1996	1997	1998	1999	1999 (%)	Change 98/99 (%)
Mobil	1,171,612	1,132,546	921,865	794,299	25.9	-13.8
Total	409,571	497,150	604,447	684,565	22.3	13.3
Vico	585,146	515,348	456,954	477,368	15.6	4.5
Arco	320,402	326,300	165,937	298,327	9.7	79.8
Pertamina	279,164	279,512	270,330	259,132	8.4	-4.1
Unocal	111,876	120,524	143,764	162,903	5.3	13.3
Gulf Resources	84,254	78,741	75,076	166,449	5.4	175.9
Caltex	46,145	46,336	57,000	68,252	2.2	19.7
Exspan	25,535	26,947	24,750	29,364	1.0	18.6
YPF/Maxus	20,587	24,400	26,292	24,430	0.8	-7.1
Santa Fe	16,362	14,555	9,111	20,107	0.7	120.7
Amoseas	18,660	25,428	16,033	16,451	0.5	2.6
Kodeco	10,944	9,375	7,051	10,108	0.3	43.4
Conoco	20,492	20,116	14,207	8,673	0.3	-39.0
Husky	9,456	7,567	9,697	8,090	0.3	-16.6
Talisman	6,354	7,777	7,557	6,883	0.2	-8.9
Japex	7,110	7,530	7,217	6,752	0.2	-6.4
Energy Equity	3,162	2,050	2,870	6,268	0.2	118.4
Etasatria/Exspan	2,321	4,946	10,936	5,770	0.2	-47.2
Citra Patenindo	7,634	6,686	4,653	5,345	0.2	14.9
Golden Spike	99	1,619	2,864	2,480	0.1	-13.4
Kondur Petroleum	2,257	2,046	2,149	2,125	0.1	-1.1
Genindo	1,343	1,595	1,593	1,637	0.1	2.8
Lapindo			-	1,281	-	-
GFB Resources	3,059	2,370	3,027	771	-	-74.5
Surya Teladan	230	362	317	293	-	-7.6
Western Nusantara	-	-	-	194	-	-
Petronusa	241	143	161	23	-	-85.7
Santos	-	2	13	7	-	-46.2
Lirik Petroleum	-	-	-	1	-	-
TOTAL	**3,164,016**	**3,166,035**	**2,978,852**	**3,068,349**	**100.0**	**3.0**

Source: MIGAS

APPENDIX 11.2: Natural Gas Production and Utilization

(BSCF)

Year	Gross Production	Own Use	Marketed		Flared
			Volume	%	
1990	2,159	454	1,538	71.2	167
1991	2,462	516	1,743	70.8	203
1992	2,583	526	1,840	71.2	217
1993	2,662	541	1,910	71.8	211
1994	2,942	594	2,162	73.5	186
1995	2,999	658	2,177	72.6	164
1996	3,164	701	2,287	72.3	176
1997	3,166	630	2,343	74.0	203
1998	2,979	469	2,316	77.7	194
1999	3,068	406	2,506	81.7	170
2000					
January	267	32	216	80.9	14
February	260	33	211	81.2	16
March	264	34	218	82.6	17
April	213	33	179	84.0	12
May	227	34	179	78.9	14
June	224	31	181	80.8	11

APPENDIX 11.3: Natural Gas Utilization

(MMSCF)

	1995	1996	1997	1998	1999	2000 Jan-Jun
Gross Production	2,999,229	3,164,016	3,166,035	2,978,852	3,068,351	1,472,876
Gas Injection	360,829	390,589	296,376	162,492	61,587	39,280
Gas Lift	157,133	158,997	157,962	154,062	167,118	84,044
Fuel Gas	140,069	151,074	158,438	152,246	177,486	79,270
Marketed						
LNG Plants	1,593,063	1,661,232	1,713,687	1,718,220	1,790,164	798,553
Fertilizer Plants	190,625	203,169	206,911	221,347	205,731	106,567
Electricity	208,988	233,087	231,713	220,502	210,109	107,985
Duri Steam Flood	-	-	-	-	131,990	47,934
City Gas	41,185	49,097	55,634	43,858	47,892	29,954
Steel Plants	40,025	40,643	36,147	32,843	29,297	18,122
Petrochemical Plants	17,150	18,453	19,417	27,610	16,553	15,193
Oil Refinery /LPG plants	75,300	69,430	73,740	37,872	52,182	28,530
Cement Plants	5,633	4,956	4,551	1,487	2,324	1,324
Others	5,270	6,867	5,029	10,575	20,037	221,336
Subtotal	**2,177,239**	**2,286,934**	**2,346,829**	**2,316,314**	**2,506,279**	**1,375,498**
Flared and Losses	163,959	176,422	188,320	196,738	155,881	79,380

Source: MIGAS

APPENDIX 11.4: Gas Pipeline Development Projects

No	Transmission projects	Cost est. ($ mln)	Size (”); length (km)	Flowrate MMSCF/D	Funding sources	Status/ schedule
1	Grissik - Duri .	310	28” ; 536	310-395	ADB, PGN JEXIM, EIB	Completed in Oct 1998
2	Grissik – Sakernan Parallel Line	84	28” ; 135	350	ADB, PGN, JEXIM, EIB	Engineering 1999-2002
3	Sakernan-Batam	276	28” ; 286	350	ADB, PGN JEXIM, EIB	Engineering 1999-2002
4	Batam - Singapore	41	28” ; 60	350	ADB, PGN JEXIM, EIB	Engineering 1999-2002
5	Batam distribution	25	8”- 20” ; 30	30	ADB, PGN JEXIM, EIB	1999-2002
6	West Java Distribution	120	8”-16” ; 174	250-550	MITI/OECF,PGN	Study 1999-2002
7	Pagar Dewa – Cilegon	460	36” ; 370	600	MITI/OECF,PGN	Study 1999-2002
8	Pagar Dewa - Grissik	180	28” ; 180	600	MITI/OECF,PGN	Study 1999-2002
9	Jambi - Lampung	50	4-8”; 222	50	MITI/OECF,PGN	Design 1999-2002
10	E. Kalimantan - Java	1100	32” ; 1100	700	Loan, PGN	2002-2005
11	Samarinda –Balikpapan	35	4-6” ; 100	50	Loan, PGN	2002-2005
12	Gresik - Semarang	210	28” ; 390	360	Loan, PGN	2004-2007
13	Sengkang - Ujung Pandang	80	16” ; 200	65	Loan, PGN	Study 2004-2007
14	East and Central Java Distribution	105	4-16” ; 300	700	Loan, PGN	2004-2007
15	Kondur-Minas	80	28” ; 80	200	Loan, PGN	MOU signed

Source: PGN

APPENDIX 12: LNG AND LPG

APPENDIX 12.1: LNG Production

(1,000 MT)

	1994	1995	1996	1997	1998	1999
Arun	12,523.4	11,540.4	11,355.0	11,522.7	10,844.7	11,416.6
Badak	14,112.7	13,675.2	14,906.8	15,614.0	16,335.2	18,395.8
TOTAL	**26,636.1**	**25,215.6**	**26,261.8**	**27,136.7**	**27,179.9**	**29,812.4**

Source: MIGAS

APPENDIX 12.2: LNG Exports

Year	Number of Cargoes	Total (Mln MBTU)	Total (1000MT)	Total (US$Mln)
1990	378	1,065	20,605	4,023.7
1991	403	1,162	22,481	4,044.3
1992	418	1,219	23,584	4,103.1
1993	431	1,256	24,300	3,936.3
1994	475	1,368	26,467	3,847.2
1995	N/A	1,287	24,899	3,856.3
1996	N/A	1,370	26,505	4,730.2
1997	N/A	1,388	26,896	4,734.9
1998	498	1,396	26,974	3,389.8
1999	N/A	1,502	28,956	4,489.1

Source: MIGAS

APPENDIX 12.3: LNG Exports by Destination

(1,000 MMBTU)

Destination	1995	1996	1997	1998	1999
Japan	833,188	955,772	936,318	927,141	958,655
Korea	350,052	335,742	372,244	371,646	432,762
Taiwan	103,696	78,552	78,987	97,153	110,519
TOTAL	**1,286,936**	**1,370,065**	**1,387,549**	**1,395,940**	**1,501,936**

Source: MIGAS

APPENDIX 12.4: Monthly LNG and LPG Exports

Year/ Month	LNG (MMBTU)	Value ($Million)	LPG (MT)	Value ($Million)	Total ($Million)
1994	1,359.2	3,847.2	2,636.4	346.7	4,193.9
1995	1,286.9	3,856.3	2,493.3	467.5	4,323.8
1996	1,370.1	4,730.2	2,712.3	547.9	5,278.1
1997	1,387.5	4,734.9	2,133.0	516.3	4,957.4
1998	1,395.9	3,389.8	1,761.3	257.1	3,645.7
1999	1,501.9	4,489.1	1,745.4	339.6	4,828.7
January	129.3	277.8	140.4	25.7	303.5
February	123.8	273.3	127.6	17.1	290.4
March	126.4	278.2	167.8	23.3	301.5
April	106.8	247.1	88.5	11.3	258.4
May	109.4	298.1	188.0	26.2	324.3
June	115.7	293.9	124.3	18.1	312
July	122.8	348.9	169.1	31.7	380.6
August	141.7	445.6	128.3	34.0	479.6
September	124.6	428.7	95.4	22.0	450.7
October	124.1	471.9	201.9	54.0	525.9
November	132.7	511.9	84.4	21.0	532.9
December	144.6	578.7	229.6	55.2	633.9
2000					
January	130.8	543.1	81.7	20.9	564.0
February	140.1	586.8	192.2	53.1	639.9
March	130.4	586.0	79.3	25.9	611.9
April	95.0	445.4	100.6	31.3	476.7
May	98.3	419.4	84.4	21.7	441.1
June	109.9	531.0	116.6	32.0	563.0
Jan-Jun	704.5	3111.7	654.8	184.9	3,296.6

Source: MIGAS

APPENDIX 12.5: LNG Sales Contracts (1999-2017)

Buyers	Sales Contracts	Contract Period	Mln MT per year	Field
I. Japan				
Kansai	1973 S/C	1977-2010	2.56	Arun/Badak (CIF)
	1981 Badak-II S/C	1983-2011	0.91	Badak (FOB)
	MOA for AR=AQ Ext. 96	1997- 1999	0.06	Badak (CIF)
Chubu	1973 S/C	1997-2010	2.14	Arun/Badak (CIF)
	1981 Badak-II S/C	1983-2011	1.70	Badak (FOB)
	MOA 1997	1997		Badak (CIF)
Kyushu	1973 S/C	1977-2010	1.55	Arun/Badak (CIF)
Osaka Gas	1973 S/C	1977-2010	1.30	Arun/Badak (CIF)
	1981 Badak-II S/C	1983-2011	0.45	Badak (FOB)
	1990 Badak –IV S/C	1994-2013	1.27	
	1992 MCGC S/C	1996-2015	0.07	Badak (CIF)
	MOA for AR=AQ Ext. 96	1997- 1999	0.11	Badak (CIF)
Nippon Steel	1973 S/C	1977-2010	0.54	Arun/Badak (CIF)
	Spot 96	1996		Badak (CIF)
	MOA for AR=AQ Ext. 96	1997- 1999	0.17	
Toho Gas	1973 S/C	1977-2010	0.06	Arun/Badak (CIF)
	1981 Badak-II S/C	1983-2011	0.57	Badak (FOB)
	1990 Badak –IV S/C	1994-2013	0.11	
	Spot 97	1997		Badak (CIF)
Tohoku	1981 Arun II S/C	1984-2004	3.00	Arun (FOB)
	Arun II, S/C 8/2000	2005-2009	0.83	
Tepco	1981 Arun II S/C	1984-2004	0.51	Arun (FOB)
	Arun II, S/C 8/2000	2005-2009	0.13	
Tokyo Gas	1990 Badak –IV S/C	1994-2013	0.92	Badak (FOB)
Hiroshima Gas	1992 MCGC S/C	1996-2015	0.08	Badak (CIF)
Nippon Gas	1992 MCGC S/C	1996-2015	0.05	Badak (CIF)
Subtotal Japan			**18.23**	
Korea Gas	1983 Arun-III S/C	1986-2007	2.28	Arun (CIF)
	1991 Korea-II S/C	1994-2014	2.05	Arun/Badak (FOB)
	1995 Badak-V S/C	1998-2017	1.02	CIF
	Korea Mid Term 1	1995-1999	1.53	Badak (CIF)
	Korea Mid Term 2	1996-1999	1.30	
	Korea MOA 97	1998		Badak (FOB)
Subtotal Korea			**8.19**	
CPC	1987 Badak-III S/C	1990-2009	1.57	Badak (CIF)
	1995 Badak-IV S/C	1998-2017	0.75	
	CPC MOA 97	1998		Badak (FOB)
Subtotal Taiwan			**3.05**	
GRAND TOTAL INDONESIA LNG EXPORT			**29.46**	

Source: MIGAS

Appendix 12.6: LPG Production

(MT)

	1995	1996	1997	1998	1999
Refineries					
Dumai	76,122	92,630	91,822	91,199	83,511
Musi	64,745	74,371	68,797	53,866	69,554
Cilacap	183,792	172,404	164,608	179,992	153,671
Balikpapan	85,964	90,888	60,351	65,846	45,097
Balongan	183,782	237,016	299,106	224,946	253,903
Sub Total	**594,405**	**667,309**	**684,684**	**615,849**	**605,736**
LPG Plants					
Arun/Mobil	1,253,142	1,142,596	664,746	445,522	216,249
Badak/Virginia	675,520	868,363	884,636	897,251	965,781
Arjuna/Arco	226,565	329,502	325,352	170,310	216,276
Santan/Union	115,687	118,405	142,859	132,078	181,805
Rantau/Pertamina	6,188	4,708	2,380	-	-
Mundu/Pertamina	16,663	21,018	17,699	17,450	14,685
Arar	4,509	6,164	6,075	5,243	4,269
Pangkalan Berandan	48,666	69,595	58,220	60,241	58,717
Sub Total	**2,346,938**	**2,560,351**	**2,101,868**	**1,728,095**	**1,657,782**
TOTAL	**2,941,345**	**3,227,660**	**2,786,651**	**2,343,944**	**2,263,518**

Source: MIGAS

APPENDIX 12.7: LPG Production, Domestic Sales and Exports

(MT)

Year	Production	Domestic Sales	Exports		Export Prices ($/MT)
			Volumes	US$Mln	
1990	2,745,884	317,419	2,602,057	378.2	145.35
1991	2,756,504	361,593	2,528,844	345.3	136.54
1992	2,785,009	413,852	2,470,334	355.7	145.61
1993	2,872,072	506,055	2,548,056	328.7	129.01
1994	2,894,219	548,250	2,566,495	342.8	133.50
1995	2,941,345	629,354	2,493,301	467.5	187.52
1996	3,227,664	810,436	2,709,320	547.4	202.03
1997	2,786,651	828,930	2,132,917	516.3	242.05
1998	2,343,944	799,900	1,761,305	257.1	146.00
1999	2,263,518	906,326	1,745,383	339.6	194.60

Source: MIGAS

APPENDIX 12.8: LPG Exports by Destination

Volume: 1,000 MT Value: US$1,000

	1994	1995	1996	1997	1998	1999
Volumes						
- Japan	2,363.1	2,119.8	2,206.6	1,745.8	1,475.2	1,369.7
- HongKong	28.5	105.8	106.6	31.2	29.3	45.4
- Taiwan	--	193.5	334.9	244.1	19.9	9.8
- Australia	23.0	29.9	43.3	54.7	18.8	11.7
- Singapore	116.8	.9	2.9	1.1	0.0	1.7
- Philippines	2.3	--	7.1	--	--	20.5
- China	--	--	--	--	--	200.1
- Others	32.7	43.4	10.9	56.1	217.6	86.5
TOTAL	**2,566.5**	**2,493.3**	**2,712.3**	**2,132.9**	**1,761.3**	**1,745.4**
Values						
- Japan	320,810	406,538	466,099	437,848	228,304	269,167
- HongKong	4,026	13,055	14,891	6,089	3,037	8,047
- Taiwan	--	33,592	57,304	50,391	2,675	1,826
- Australia	2,836	5,377	6,241	10,312	2,157	1,903
- Singapore	6,581	138	384	201	--	429
- Philippines	294	--	1,185	--	--	4,751
- China	--	--	--	--	--	35,558
- Others	8,204	8,846	1,758	11,326	20,613	17,910
TOTAL	**342,751**	**467,546**	**547,862**	**516,167**	**257,055**	**339,591**

Source: MIGAS

APPENDIX 13: PETROCHEMICAL

APPENDIX 13.1: Petrochemical Industry in Indonesia

(1000 MT)

Products (Producer)	1996	1997	1998	1999	2000 (Est)	2003 (Est)
1. Ammonia (Fertilizer Plants)						
- Production Capacity	4,220.0	4,220.0	4,220.0	4,220.0	4,220.0	6,021.6
- Domestic Demand	4,319.1	3,624.4	3,798.5	3,970.0	3,970.0	8,076.4
2. Methanol (Pertamina, Humpuss)						
- Production Capacity	990.0	990.0	990.0	990.0	990.0	990.0
- Domestic Demand	438.2	482.8	523.8	206.8	339.3	490.6
3. Benzene (Pertamina)						
- Production Capacity	123.0	123.0	123.0	123.0	123.0	123.0
- Domestic Demand	109.0	113.8	114.0	96.9	112.3	125.2
4. Paraxylene (Pertamina)						
- Production Capacity	270.0	270.0	270.0	270.0	270.0	270.0
- Domestic Demand	477.6	768.1	944.3	1,099.6	1,445.2	2,218.0
5. Ethylene (CAPC)						
- Production Capacity	520.0	520.0	520.0	520.0	520.0	520.0
- Domestic Demand	541.4	802.1	595.9	838.7	1,060.0	1,217.0
6. Propylene (Pertamina, CAPC)						
- Production Capacity	510.0	510.0	510.0	530.0	530.0	530.0
- Domestic Demand	522.6	464.2	437.1	521.0	600.0	670.0
7. Carbon Black (Continental, Cabot)						
- Production Capacity	135.0	135.0	135.0	135.0	135.0	135.0
- Domestic Demand	127.0	138.6	161.7	161.4	151.3	194.7
8. Terephtalic Acid (Pertamina, Bakrie, Amoco, Polysindo and Polyprima)						
- Production Capacity	1,200.0	1,700.0	1,800.0	1,800.0	1,800.0	1,800.0
- Domestic Demand	780.2	1,035.3	908.0	889.0	980.1	1,385.4
9. Ethylene Glycol (Prima)						
- Production Capacity	80.0	220.0	220.0	220.0	220.0	220.0
- Domestic Demand	348.8	372.0	523.4	547.5	481.5	498.2
10. Ethylene Dichloride (Asahimas, Sufindo)						
- Production Capacity	467.0	467.0	467.0	467.0	467.0	467.0
- Domestic Demand	237.1	249.1	112.7	321.4	323.5	300.4
11. Alkyl Benzene (Unggul Indah)						
- Production Capacity	120.0	220.0	220.0	220.0	220.0	220.0
- Domestic Demand	78.2	124.1	132.1	144.6	155.4	188.1
12. Vinyl Chloride Manomer (Asahimas Subentra)						
- Production Capacity	150.0	400.0	178.5		500.0	500.0
- Domestic Demand	257.8	330.8	414.6		330.1	384.5
13. Styrene Manomer (Styndomono)						
- Production Capacity	100.0	100.0	100.0	300.0	300.0	300.0
- Domestic Demand	120.1	134.1	96.4	227.4	361.1	402.9

Appendix 13 (continued)

14. Phthalic Anhydride (Petrowidada)						
- Production Capacity	30.0	70.0	70.0	70.0	70.0	70.0
- Domestic Demand	33.1	46.5	33.8	57.2	49.7	51.7
15. Maleic Anhydride (Petrowidada)						
- Production Capacity	2.0	2.0	14.0	14.0	14.0	14.0
- Domestic Demand	11.1	7.7	5.9	8.0	9.1	9.6
16. Melamine (Melamine Rezeki, N/A)						
- Production Capacity	20.0	70.0	70.0	70.0	70.0	70.0
- Domestic Demand	32.9	44.5	34.2	2.9	3.8	14.3
17. Alkyl Benzene Sulfonate (Timur Raya, Fideco, Aktif Indonesia, Mayar Kimindo, Sayap Mas)						
- Production Capacity	192.5	192.5	192.5	192.5	192.5	192.5
- Domestic Demand	162.6	177.5	141.7	57.8	66.9	166.6
18. Nylon Filament Yarn (Branta Mulya)						
- Production Capacity	22.0	22.0	22.0	22.0	42.0	42.0
- Domestic Demand	20.6	4.3	11.8	12.1	14.2	31.4
19. Formic acid (Sintas Kurama)						
- Production Capacity	11.0	11.0	11.0	11.0	11.0	11.0
- Domestic Demand	10.9	7.2	7.9	5.6	8.3	9.9
20. Polyol (Arco Chemical Indonesia)						
- Production Capacity	32.0	32.0	32.0	32.0	32.0	32.0
- Domestic Demand	42.0	45.3	23.1	24.6	26.7	32.4
21. Nylon Tyre Cord (Branta Mulya, Andayaniu Megah)						
- Production Capacity	46.0	46.0	46.0	46.0	46.0	46.0
- Domestic Demand	37.3	30.9	29.9	17.2	16.6	14.8
22. Dioctyl Ortho Phthalate (Petrokimia Nusantara, Eterma Buana Chemical)						
- Production Capacity	67.2	97.2	97.2	97.2	97.2	97.2
- Domestic Demand	62.1	53.5	48.0	31.2	35.7	44.0
23. Polyethylene (Petrokimia Nusantara, CAPC)						
- Production Capacity	550.0	550.0	550.0	750.0	750.0	750.0
- Domestic Demand	617.8	554.2	361.0	442.0	501.0	683.0
24. Polypropylene (Pertamina,Trypolyta, Polytama)						
- Production Capacity	570.0	600.0	600.0	600.0	600.0	600.0
- Domestic Demand	501.0	580.0	406.0	450.0	495.0	659.0
25. Polystyrene (Polychem Lindo, Royal Chemical, Pacific Indomas Plastic, Risyad Barasali)						
- Production Capacity	85.0	85.0	89.0	104.0	104.0	130.0
- Domestic Demand	109.8	117.8	72.1	56.8	86.0	131.0
26. Polyvinyl Cloride (Eastern Polymer, Standard Toyo Polymer, Asahimas Subentra)						
- Production Capacity	357.0	442.0	453.0	608.0	608.0	608.0
- Domestic Demand	303.0	378.0	122.0	184.0	253.0	328.0
27. Polyethylene Terepthalate (Indorama Synthetic, BKC,Polypet Karya Persada)						
- Production Capacity	166.0	166.0	166.0	166.0	166.0	166.0
- Domestic Demand	74.0	67.4	31.1	54.1	55.6	51.0
28. Acrylonitrile Butadiene Styrene (Risyad Brasali Styrindo)						
- Production Capacity	15.0	15.0	15.0	15.0	15.0	15.0

- Domestic Demand	23.9	26.7	19.6	12.3	9.9	7.0

Appendix 13 (continued)

29. Styrene Buitadiene Latex (BASF, Indolatex)						
- Production Capacity	45.0	45.0	93.0	93.0	93.0	93.0
- Domestic Demand	43.7	48.7	35.3	24.6	17.5	20.0
30. Alkyd Resin (8 companies)						
- Production Capacity	67.6	67.6	67.6	67.6	67.6	67.6
- Domestic Demand	17.6	20.4	24.4	36.3	43.8	35.6
31. Sythetic Resin Dispersion (12 companies)						
- Production Capacity	67.8	67.8	67.8	67.8	67.8	67.8
- Domestic Demand	28.6	31.2	16.8	33.8	39.5	55.6
32. Adhesive Resin (33 Companies)						
- Production Capacity	1,780.0	1,780.0	1,780.0	1,780.0	1,780.0	1,780.0
- Domestic Demand	1,334.0	1,424.5	1,325.7	1,258.8	1,227.2	1,406.1
33 Ethylene Vynil Acetate						
- Production Capacity	0	0	0	0	0	0
- Domestic Demand	48.5	50.0	37.6	35.4	36.1	38.3
34 Polyvinyl Alcohol						
- Production Capacity	0	0	0	0	0	0
- Domestic Demand	2.4	3.2	4.3	5.8	7.8	19.3
35 Polyvinyl Acetate						
- Production Capacity	0	0	0	0	0	0
- Domestic Demand	0.3	0.9	1.4	1.1	1.8	7.8
36 Epoxy Resin						
- Production Capacity	0	0	0	50.0	50.0	50.0
- Domestic Demand	5.9	7.3	3.0	13.3	15.7	40.8

Source: Department of Industry and Trade