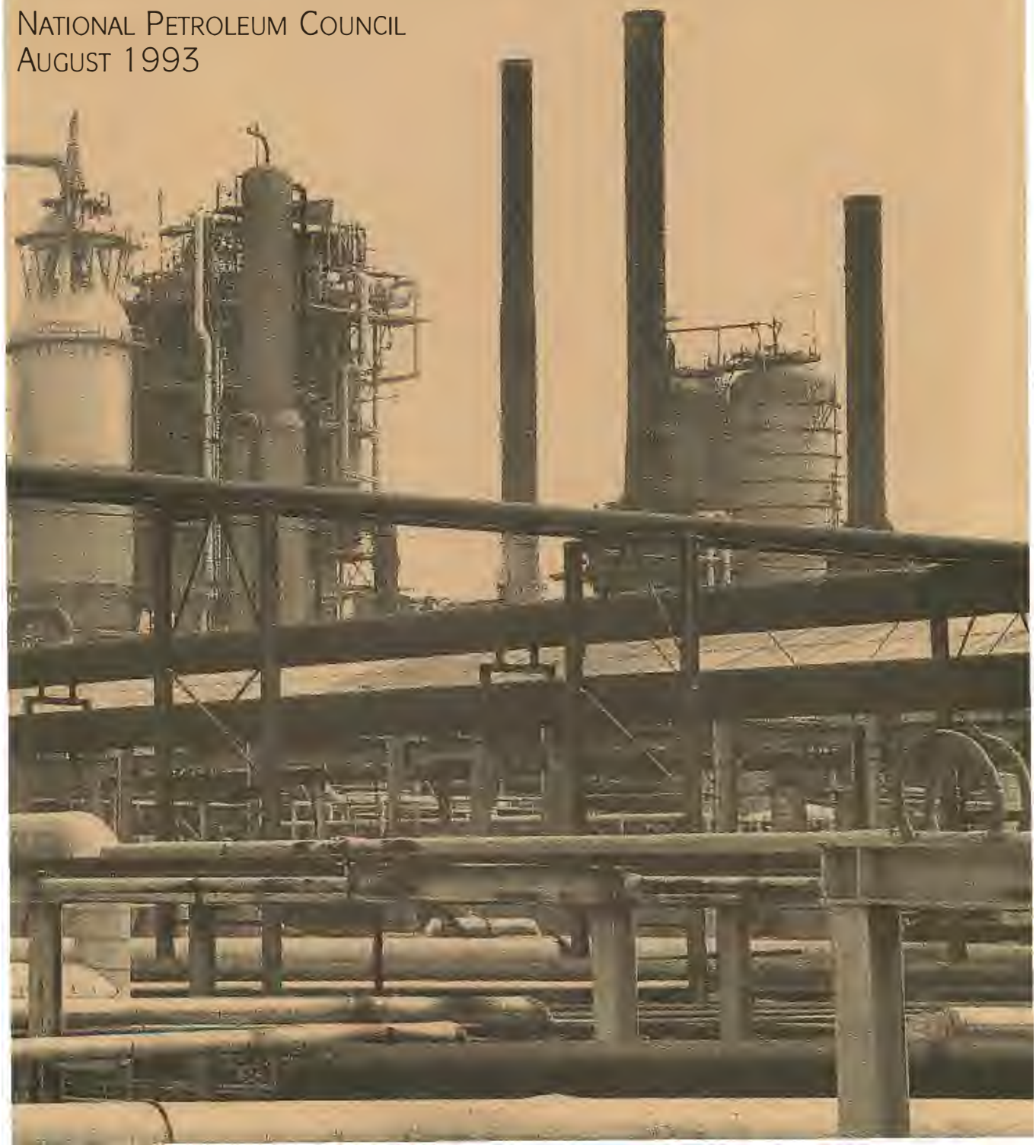
U.S. Petroleum Refining

Meeting Requirements for Cleaner Fuels and Refineries

Volume IV, Part 2–Supply, Demand, and Logistics Appendix

National Petroleum Council
August 1993



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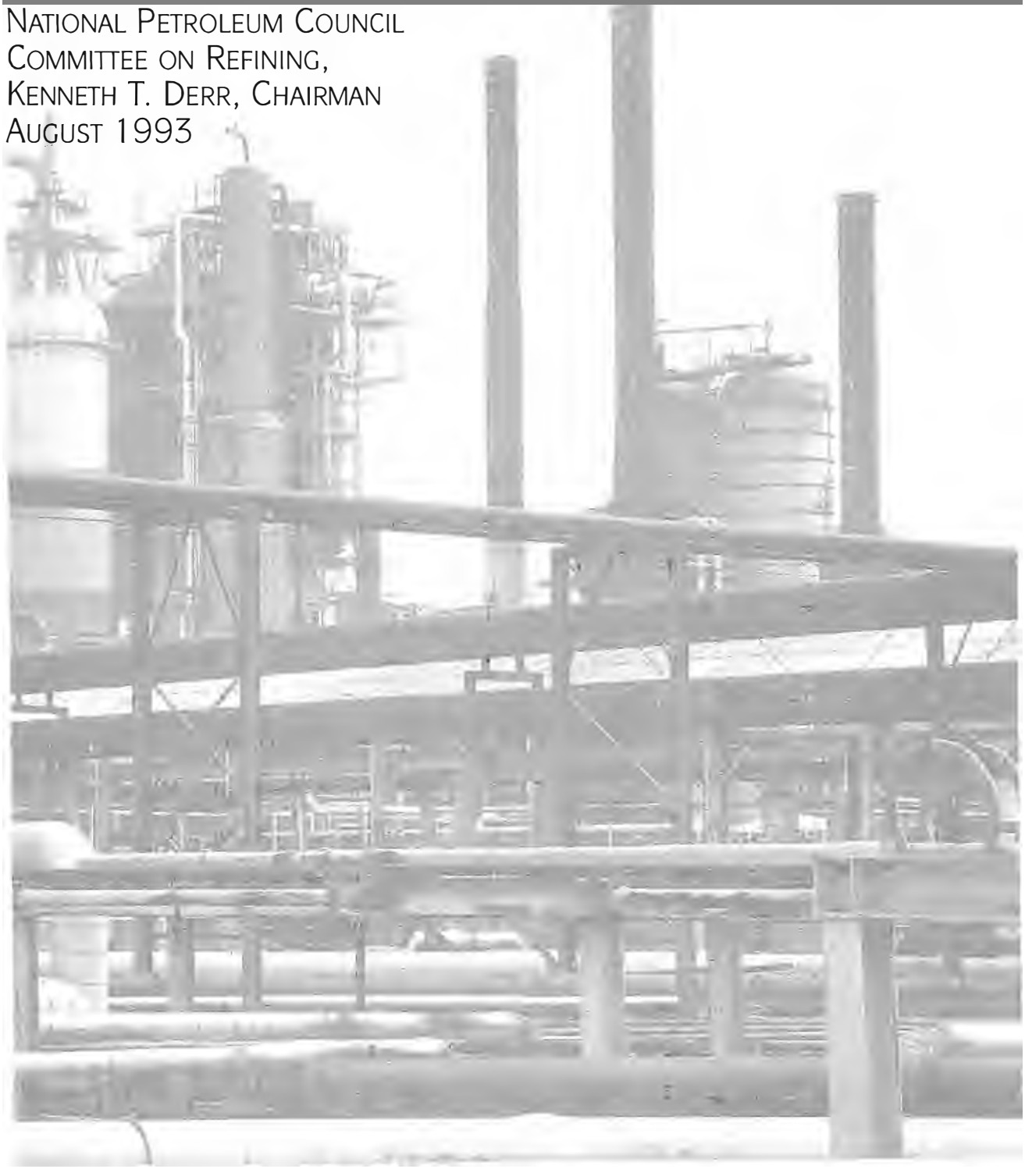
National Petroleum Council
Committee on Refining,
Kenneth T. Derr, Chairman
August 1993



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Part 2

Appendix L, Section VII-5

Summary Tables – Unit Capacity Information

This appendix tabulates the foreign regions' unit capacity for individual types of processing units. The increase in each unit type capacity is tabulated by region and covers the future years for the study. It is based on FC-1.

		UNIT CAPACITY INFORMATION-FOREIGN											DLF		
REGION: CAN	LP	06/16				08/27				10/22			REV. 12/31		
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	1851	78	183	10	2034	77	-0	-0	2034	76				
VAC. DIST.	BPSD	651	94	57	9	708	92	0	0	708	92				
% VAC		35				35				35					
GO FCCU	BPOD	372	100	22	6	394	100	0	0	394	100				
GO HYDROCRACKE	BPOD	169	100	8	5	177	100	0	0	177	100				
GO THERMAL CRA	BPOD	0		0		0		0		0					
% GO CONV.	BPOD	29				28				28					
RESID FCCU	BPOD	0		0		0		0		0					
RESID HYDROCRA	BPOD	18	100	28	156	46	100	0	0	46	100				
DELAYED COKER	BPOD	15	100	8	52	23	100	0	0	23	100				
FLUID COKER	BPOD	20	100	1	5	21	100	0	0	21	100				
FLEXICOKER	BPOD	0		0		0		0		0					
% RESID CONV.	BPOD	3				4				4					
FCC NAPH SPLIT	BPOD	47	100	0	0	47	9	40	86	87	100				
FCC DeC5	BPOD	0		0		0		0		0					
VISBREAKER	BPOD	50	100	4	7	53	52	0	0	53	79				
SOLV. DEASPH.	BPOD	0		0		0		0		0					
CC REFORMER	BPOD	114	100	0	0	114	100	0	0	114	100				
LP SR REFORMER	BPOD	242	46	0	0	242	81	0	0	242	73				
C4 ISOM	BPOD	10	0	0	0	10	0	0	0	10	0				
C5/C6ISOM	BPOD	19	0	43	226	62	3	0	0	62	16				
C3=POLY	BPOD	19	0	1	5	20	0	0	0	20	0				
HF ALKY	BPOD	35	100	1	3	36	100	0	0	36	100				
H2SO4 ALKY	BPOD	14	100	10	70	24	100	0	0	24	100				
RESID HDS	BPOD	26	0	1	5	27	78	0	0	27	0				
DIST HDS	BPOD	353	53	55	15	408	53	0	0	408	96				
FCC FEED HDS	BPOD	0		0		0		0		0					
NAPH HDS	BPOD	401	57	37	9	438	71	0	0	438	69				
MTBE	BPOD	0		0		0		0							
TAME	BPOD	0		0		0		0							
HYDROGEN	MMSC	300	91	86	29	386	79	0	0	386	84				
LP INVEST	MM$							31							

REGION: NWE	LP	06/11				09/09				12/10					
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	9178	88	687	7	9865	84	0	0	9865	83				
VAC. DIST.	BPSD	3800	87	72	2	3872	86	0	0	3872	84				
% VAC		41				39				39					
GO FCCU	BPOD	1273	100	156	12	1428	100	0	0	1428	100				
GO HYDROCRACKE	BPOD	192	100	108	56	300	100	0	0	300	100				
GO THERMAL CRA	BPOD	121	100	54	44	175	53	0	0	175	39				
% GO CONV.	BPOD	17				19				19					
RESID FCCU	BPOD	0		0		0		0		0					
RESID HYDROCRA	BPOD	0		0		0		0		0					
DELAYED COKER	BPOD	150	100	18	12	168	100	0	0	168	100				
FLUID COKER	BPOD	0		0		0		0		0					
FLEXICOKER	BPOD	27	100	1	5	28	100	0	0	28	100				
% RESID CONV.	BPOD	2				2				2					
FCC NAPH SPLIT	BPOD	89	100	352	396	441	96	0	0	441	53				
FCC DeC5	BPOD	0	0	0	0	0		34		34	100				
VISBREAKER	BPOD	722	97	85	12	807	85	0	0	807	85				
SOLV. DEASPH.	BPOD	12	100	1	5	13	100	0	0	13	100				
CC REFORMER	BPOD	517	100	128	25	645	100	-0	-0	645	100				
LP SR REFORMER	BPOD	792	100	96	12	888	73	0	0	888	57				
C4 ISOM	BPOD	18	0	4	22	22	0	0	0	22	100				
C5/C6ISOM	BPOD	80	0	98	123	178	8	0	0	178	8				
C3=POLY	BPOD	40	0	2	5	42	0	0	0	42	0				
HF ALKY	BPOD	91	100	36	40	127	100	0	0	127	100				
H2SO4 ALKY	BPOD	0		11		11	100	56	509	67	100				
RESID HDS	BPOD	11	100	0	0	11	100	0	0	11	100				
DIST HDS	BPOD	1759	69	360	20	2119	69	140	7	2258	100				
FCC FEED HDS	BPOD	692	100	35	5	726	100	0	0	726	100				
NAPH HDS	BPOD	1889	70	383	20	2272	58	0	0	2272	52				
MTBE	BPOD			22		22	100	36	166	57	100				
TAME	BPOD			0				4		4	100				
HYDROGEN	MMSC	548	64	452	82	1000	68	0	0	1000	89				
LP INVEST	MM$							1167							

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REGION: MED	LP	07/07				10/02				10/15					
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	7226	71	500	7	7727	66	-0	-0	7727	71				
VAC. DIST.	BPSD	1647	100	315	19	1962	100	-38	-2	1924	100				
% VAC		23				25				25					
GO FCCU	BPOD	570	100	147	26	717	100	0	0	717	100				
GO HYDROCRACKE	BPOD	78	100	222	283	300	100	0	0	300	100				
GO THERMAL CRA	BPOD	64	100	23	36	87	12	0	0	87	12				
% GO CONV.	BPOD	10				14				14					
RESID FCCU	BPOD	0		0		0		0		0					
RESID HYDROCRA	BPOD	0		17		17		0		17					
DELAYED COKER	BPOD	61	100	26	43	87	100	0	0	87	100				
FLUID COKER	BPOD	0		0		0		0		0					
FLEXICOKER	BPOD	0		0		0		0		0					
% RESID CONV.	BPOD	1				1				1					
FCC NAPH SPLIT	BPOD	263	100	62	23	325	100	98	30	422	86				
FCC DeC5	BPOD	0	0	0		0		59		59					
VISBREAKER	BPOD	328	100	-4	-1	324	100	0	0	324	100				
SOLV. DEASPH.	BPOD	0		0		0		0		0					
CC REFORMER	BPOD	163	100	26	16	189	100	0	0	189	100				
LP SR REFORMER	BPOD	628	67	0	0	628	59	0	0	628	59				
C4 ISOM	BPOD	16	0	2	13	18	0	0	0	18	0				
C5/C6ISOM	BPOD	50	0	49	98	99	4	0	0	99	17				
C3=POLY	BPOD	5	0	4	82	9	0	0	0	9	0				
HF ALKY	BPOD	36	100	0	0	36	100	0	0	36	100				
H2SO4 ALKY	BPOD	11	100	11	100	22	100	35	157	57	100				
RESID HDS	BPOD	0		30		30	100	89	291	119	100				
DIST HDS	BPOD	1020	85	83	8	1103	80	357	32	1460	100				
FCC FEED HDS	BPOD	57	100	3	5	60	100	0	0	60	100				
NAPH HDS	BPOD	967	62	98	10	1065	53	0	0	1065	58				
MTBE	BPOD			15		15	100	14	92	28	100				
TAME	BPOD			0		0		7		7	100				
HYDROGEN	MMSC	154	7	440	286	594		626	105	594					
LP INVEST	MM$							1362							

REGION: ME	LP	06/29				09/23				10/04				12/13	
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	5000	91	1594	32	6594	76	0	0	6594	80	0	0	6594	86
VAC. DIST.	BPSD	1509	73	349	23	1858	77	-0	-0	1858	73	0	0	1858	94
% VAC		30				28				28				28	
GO FCCU	BPOD	182	100	66	36	248	100	0	0	248	100	283	114	531	100
GO HYDROCRACKE	BPOD	326	100	109	33	434	100	0	0	434	100	0	0	434	100
GO THERMAL CRA	BPOD	0		0		0		0		0		0		0	
% GO CONV.	BPOD	10				10				10				15	
RESID FCCU	BPOD	0		0		0		0		0		0		0	
RESID HYDROCRA	BPOD	0		0		0		0		0		0		0	
DELAYED COKER	BPOD	60	100	3	5	63	100	0	0	63	100	0	0	63	100
FLUID COKER	BPOD	0		0		0		0		0		0		0	
FLEXICOKER	BPOD	0		0		0		0		0		0		0	
% RESID CONV.	BPOD	1				1				1				1	
FCC NAPH SPLIT	BPOD	0	0	26		26	100	44	171	69	62	172	249	241	100
FCC DeC5	BPOD	25	0	-25	-100	0		0		0		102		102	100
VISBREAKER	BPOD	243	19	81	33	324	11	0	0	324	54	0	0	324	100
SOLV. DEASPH.	BPOD	0		0		0		0		0		0		0	
CC REFORMER	BPOD	122	100	99	81	221	100	0	0	221	100	30	13	251	100
LP SR REFORMER	BPOD	326	50	48	15	374	82	0	0	374	100	0	0	374	100
C4 ISOM	BPOD	0		0		0		0		0		0		0	
C5/C6ISOM	BPOD	3	0	51	1821	54	0	0	0	54	48	0	0	54	48
C3=POLY	BPOD	1	100	0	0	1	100	0	0	1	0	0	0	1	0
HFALKY	BPOD	12	100	2	17	14	100	0	0	14	100	0	0	14	100
H2SO4 ALKY	BPOD	0		3		3	100	11	350	14	100	55	404	68	100
RESID HDS	BPOD	0		0		0		215		215	100	218		433	100
DIST HDS	BPOD	555	79	242	44	797	100	230	29	1026	100	289	28	1315	100
FCC FEED HDS	BPOD	0	67	32		32	100	38	119	69	100	0	0	69	100
NAPH HDS	BPOD	507	60	186	37	694	78	0	0	694	94	0	0	694	100
MTBE	BPOD			5		5	100	-2	-38	3	100	2	61	5	100
TAME	BPOD			0		0		0		0		0		0	
HYDROGEN	MMSC	1299	64	107	8	1406	79	0	0	1406	94	113	8	1519	100
LP INVEST	MM$							1465				4263			

REGION: LAT	LP	06/23				10/02				12/04				12/16	
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	7068	77	1148	16	8216	73	0	0	8216	82	0	0	8216	98
VAC. DIST.	BPSD	3005	67	626	21	3631	69	0	0	3631	91	0	0	3631	98
% VAC		43				44				44				44	
GO FCCU	BPOD	1071	100	292	27	1362	100	295	22	1657	100	359	22	2016	100
GO HYDROCRACKE	BPOD	22	100	179	833	201	100	0	0	201	100	0	0	201	100
GO THERMAL CRA	BPOD	0		0		0		0		0		0		0	
% GO CONV.	BPOD	15				19				23				27	
RESID FCCU	BPOD	0		0		0		0		0		0		0	
RESID HYDROCRA	BPOD	16	100	17	104	33	100	0	0	33	100	0	0	33	100
DELAYED COKER	BPOD	92	100	99	107	191	100	0	0	191	100	0	0	191	100
FLUID COKER	BPOD	0		0		0		0		0		0		0	
FLEXICOKER	BPOD	42	100	2	5	44	100	0	0	44	100	0	0	44	100
% RESID CONV.	BPOD	2				3				3				3	
FCC NAPH SPLIT	BPOD	111	100	179	161	290	100	140	48	429	89	0	0	429	87
FCC DeC5	BPOD	0	0	0		0		51		51	100	111	218	162	100
VISBREAKER	BPOD	371	100	217	58	587	100	0	0	587	54	0	0	587	100
SOLV. DEASPH.	BPOD	110	100	37	34	147	100	0	0	147	100	0	0	147	100
CC REFORMER	BPOD	47	100	0	0	47	100	23	50	70	100	176	251	246	100
LP SR REFORMER	BPOD	395	76	28	7	423	90	0	0	423	100	0	0	423	100
C4 ISOM	BPOD	28	100	1	4	29	0	0	0	29	100	0	0	29	100
C5/C6ISOM	BPOD	13	100	18	138	31	0	0	0	31	100	0	0	31	100
C3=POLY	BPOD	15	100	0	0	15	100	0	0	15	0	0	0	15	0
HF ALKY	BPOD	28	100	3	11	31	100	0	0	31	100	0	0	31	100
H2SO4 ALKY	BPOD	49	100	1	2	50	100	168	339	218	100	1	0	219	100
RESID HDS	BPOD	0		0		0		0		0		0		0	
DIST HDS	BPOD	765	60	331	43	1097	67	0	0	1097	100	92	8	1189	100
FCC FEED HDS	BPOD	409	100	33	8	442	100	0	0	442	100	0	0	442	100
NAPH HDS	BPOD	491	84	37	7	527	100	76	14	604	100	205	34	809	100
MTBE	BPOD			11		11	100	20	190	30	100	-0	-0	30	100
TAME	BPOD			0		0		6		6	100	12		18	100
HYDROGEN	MMSC	350	77	400	114	750	82	0	0	750	94	0	0	750	77
LP INVEST	MM$							3292				3699			

REGION: PAC	LP	09/25				09/29				12/08				12/22	
	YEAR	89	89	95-89	95-89	95	95	00-95	00-95	00	00	10-00	10-00	10	10
			% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili	Delta	% Change		% Utili
ATMOS. CRUDE DIS	BPSD	10097	78	1902	19	11999	79	0	0	11999	92	478	4	12477	100
VAC. DIST.	BPSD	3008	78	548	18	3556	74	0	0	3556	76	76	2	3632	83
% VAC		30				30				30				29	
GO FCCU	BPOD	839	100	403	48	1242	100	22	2	1264	100	255	20	1519	100
GO HYDROCRACKE	BPOD	288	100	165	57	454	100	0	0	454	100	463	102	917	100
GO THERMAL CRA	BPOD	68	0	3	5	71	0	0	0	71	0	0	0	71	100
% GO CONV.	BPOD	12				15				15				20	
RESID FCCU	BPOD	0		90		90	100	0	0	90	100	0	0	90	100
RESID HYDROCRA	BPOD	0		0		0		0		0		0		0	100
DELAYED COKER	BPOD	114	100	57	50	171	100	0	0	171	100	101	59	272	100
FLUID COKER	BPOD	0		0		0		0		0		0		0	
FLEXICOKER	BPOD	0		0		0		0		0		0		0	
% RESID CONV.	BPOD	1			0	2			0	2			0	3	
FCC NAPH SPLIT	BPOD	282	100	40	14	322	100	361	112	683	100	300	44	983	70
FCC DeC5	BPOD	0	0	0		0		0		0		0		0	
VISBREAKER	BPOD	260	100	99	38	359	100	0	0	359	100	44	12	403	100
SOLV. DEASPH.	BPOD	31	0	37	117	68	100	0	0	68	100	0	0	68	100
CC REFORMER	BPOD	207	100	145	70	352	100	0	0	352	100	10	3	362	100
LP SR REFORMER	BPOD	742	71	359	48	1101	69	0	0	1101	82	0	0	1101	100
C4 ISOM	BPOD	0		0		0		0		0		0		0	
C5/C6ISOM	BPOD	28	0	33	116	61	0	0	0	61	56	246	407	307	100
C3=POLY	BPOD	17	0	2	12	19	0	0	0	19	51	0	0	19	89
HF ALKY	BPOD	27	100	19	73	46	100	0	0	46	100	0	0	46	100
H2SO4 ALKY	BPOD	30	100	13	43	43	100	124	290	166	100	24	14	190	100
RESID HDS	BPOD	349	93	281	80	630	99	0	0	630	100	0	0	630	100
DIST HDS	BPOD	1625	29	768	47	2393	53	0	0	2393	81	-0	-0	2393	100
FCC FEED HDS	BPOD	740	14	196	27	936	21	-1	-0	935	23	-99	-11	836	11
NAPH HDS	BPOD	1209	61	544	45	1752	64	0	0	1752	73	-0	-0	1752	100
MTBE	BPOD			9		9	100	21	240	30	100	2	5	31	100
TAME	BPOD			0		0		0		0		0		0	
HYDROGEN	MMSC	1191	47	391	33	1582	75	0	0	1582	78	56	4	1638	
LP INVEST	MM$							876				5699			

Appendix L, Section VII-6

Regional Investments - 1995 Model Year

INVESTMENT ASSUMPTIONS

- All process unit investments were per the Facilities Task Group (FTG) except for the following which FTG did not develop:
  - Used Pace data for flexicoker, fluid coker, visbreaker, semi-regen reformer, C4 Isom, C3 Poly, HF/Alky, resid Hdc, resid Hds, sat gas plant, resid FCC.
  - Assumed SDA to be same investment cost as visbreaker.
- FCC and coker investments do include unsat gas plant investment requirements.
- Crude, CCR and hydrocracking investments do not include any funds for sat gas plant, which must be added separately.

Assumed increase in sat gas plant feed (1995 vs. 1989) in LP runs corresponds to new capacity added on calendar day basis (90% of stream day capacity).

- Parallel assumption on sulfur plant feed to estimate sulfur plant capacity addition.
- All new capacity added between 1989 and 1995 in Northwest Europe, Med, and Canada regions assumed to be retrofits in existing refineries (FTG estimate basis). For Pac Rim, Latin America, and Middle East refining regions in this period, 20% of capital additions were estimated/assumed to be part of grass roots refineries.
- Per FTG, offsites plus other one-time costs (site prep, startup, etc.) at 65% of onsites for retrofit capacity (total investment = 1.65 x onsites) and 100% of onsites for grass roots capacity (total investment = 2.00 x onsites).
- Area construction factors per FTG.
- Annual ROI factor of .24 (applied to total capital costs) consists of .172 for 10% DCF on investment plus .068 to cover fixed cash operating costs.
- Refinery production of hydrocarbon MJDN noted in the attachments and used in deriving cents/gallon costs are based on Foundation Case 1 (FC-1) LP runs for each region.

- Year 1995 investments are assumed to be underway or sunk, and not changeable. Therefore, total annual costs in $ Billion developed for FC-1 are assumed to be applicable to FC-2 and FC-3 also. (Results in unit costs for FC-2 and FC-3 higher than FC-1 because of the smaller demand divisors.)

- Attached estimates do not include remedial or catch-up foreign refinery (stationary) emission investments or costs. These have been developed separately.

TABLE APP.L.VII.6-1

FOREIGN REGIONS

FACILITIES COST - 1995 MODEL YEAR

	Total Investment $Millions	Annualized Invest./Fixed Optg. Costs*	
		$Million/Yr.	Cents/Gal. MJDN
Canada	1455	349	1.55
NWE	7000	1680	1.64
Med	4442	1066	2.01
Middle East	5009	1202	2.42
Latin America	7879	1884	2.90
Pac Rim	11918	2860	2.58

* Equates to total investment x 0.24 annualized factor for 10% ROI plus fixed operating costs on new facilities.

TABLE APP.L.VII.6-2

1995 MODEL YEAR - FACILITY COSTS
REGION - CANADA

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	2,033.7	1,851.3	182.4	50	150	0.33	60.8
Vac Crude	707.9	660.9	47.0	25	44	0.57	26.7
Sat G.P.	103.0	85.0	18.0	16.2	20	0.81	14.6
FCC	393.6	372.0	21.6	150	70	2.14	46.3
Resid FCC			0.0	275	70	3.93	0.0
Hdc	177.3	168.9	8.4	110	30	3.67	30.8
Resid Hdc	45.8	17.9	27.9	145	30	4.83	134.9
Delayed Coker	22.5	14.8	7.7	110	25	4.40	33.9
Fluid Coker	21.2	20.2	1.0	120	25	4.80	4.8
Flex Coker			0.0	201	25	8.04	0.0
Thermal Cracker			0.0	37	25	1.48	0.0
Visbreaker	53.3	49.8	3.5	27	25	1.08	3.8
SDA			0.0	27	25	1.08	0.0
CCR	113.6	113.6	0.0	50	35	1.43	0.0
PTR	242.1	242.1	0.0	26	20	1.30	0.0
C4 Isom	10.1	10.1	0.0	17.5	10	1.75	0.0
C5/C6 Isom	62.0	10.0	52.0	25	15	1.67	86.7
C3 Poly	20.4	19.4	1.0	55	19	2.89	2.9
HF Alky	35.7	34.7	1.0	55	19	2.89	2.9
H2SO4 Alky	24.2	14.2	10.0	55	19	2.89	28.9
Resid Hds	27.3	26.0	1.3	65	35	1.86	2.4
Dist Hds	408.1	353.4	54.7	25	30	0.83	45.6
FCC Fd Hdt			0.0	40	35	1.14	0.0
MTBE		0.0	0.0	10	2	5.00	0.0
Naphtha Hds	437.5	400.5	37.0	45	35	1.29	47.6
Hydrogen Plt, MMSCF	386.0	300.0	86.0	50	60	0.83	71.7
Sulfur Plt, LT/D	1398.0	1030.0	368.0	20	222	0.09	33.2
Total Onsite							678.3
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.0
Weighted Offsite Factor							0.65
OnSite + Offsite, $MM							1119.1
Area Factor							1.3
Tot. Region Invest. $MM							1454.9
Region MJDN Production, MBD *							1467.0
$ Invest/Daily Bbl MJDN							2.72
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							0.65
¢/Gal MJDN							1.55

* FC-1 reference case hydrocarbon MJDN volumes

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TABLE APP.L.VII.6-3

1995 MODEL YEAR - FACILITY COSTS
REGION - NW EUROPE

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	9,864.6	9,178.1	686.5	50	150	0.33	228.8
Vac Crude	3871.7	3310.3	561.4	25	44	0.57	319.0
Sat G.P.	333.0	286.0	47.0	16.2	20	0.81	38.1
FCC	1428.1	1272.5	155.6	150	70	2.14	333.4
Resid FCC			0.0	275	70	3.93	0.0
Hdc	299.7	192.1	107.6	110	30	3.67	394.5
Resid Hdc			0.0	145	30	4.83	0.0
Delayed Coker	167.9	150.4	17.5	110	25	4.40	77.0
Fluid Coker			0.0	120	25	4.80	0.0
Flex Coker	27.9	26.6	1.3	201	25	8.04	10.5
Thermal Cracker	174.8	121.3	53.5	37	25	1.48	79.2
Visbreaker	806.6	721.5	85.1	27	25	1.08	91.9
SDA	13.0	12.4	0.6	27	25	1.08	0.6
CCR	645.2	517.2	128.0	50	35	1.43	182.9
PTR	887.9	791.9	96.0	26	20	1.30	124.8
C4 Isom	21.9	17.9	4.0	17.5	10	1.75	7.0
C5/C6 Isom	178.0	80.0	98.0	25	15	1.67	163.3
C3 Poly	41.8	39.8	2.0	55	19	2.89	5.8
HF Alky	126.9	90.9	36.0	55	19	2.89	104.2
H2SO4 Alky	11.0		11.0	55	19	2.89	31.8
Resid Hds	10.8	10.8	0.0	65	35	1.86	0.0
Dist Hds	2118.5	1758.6	359.9	25	30	0.83	299.9
FCC Fd Hdt	726.1	691.5	34.6	40	35	1.14	39.5
MTBE	21.5	0.0	21.5	10	2	5.00	107.5
Naphtha Hds	2271.7	1889.2	382.5	45	35	1.29	491.8
Hydrogen Plt, MMSCF	603.4	548.0	55.4	50	60	0.83	46.2
Sulfur Plt, LT/D	5725.0	4778.0	947.0	20	222	0.09	85.3
Total Onsite							3263.1
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.0
Weighted Offsite Factor							0.65
OnSite + Offsite, $MM							5384.1
Area Factor							1.3
Tot. Region Invest. $MM							6999.3
Region MJDN Production, MBD *							6674.0
$ Invest/Daily Bbl MJDN							2.87
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							0.69
¢/Gal MJDN							1.64

* FC-1 reference case hydrocarbon MJDN volumes

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TABLE APP.L.VII.6-4

1995 MODEL YEAR - FACILITY COSTS
REGION - MED.

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	7,726.6	7,226.3	500.3	50	150	0.33	166.8
Vac Crude	2158.0	1745.5	412.5	25	44	0.57	234.4
Sat G.P.	205.0	191.0	14.0	16.2	20	0.81	11.3
FCC	716.8	570.1	146.7	150	70	2.14	314.4
Resid FCC			0.0	275	70	3.93	0.0
Hdc	300.2	78.3	221.9	110	30	3.67	813.6
Resid Hdc	17.1		17.1	145	30	4.83	82.7
Delayed Coker	86.6	60.6	26.0	110	25	4.40	114.4
Fluid Coker			0.0	120	25	4.80	0.0
Flex Coker			0.0	201	25	8.04	0.0
Thermal Cracker	87.1	63.9	23.2	37	25	1.48	34.3
Visbreaker	324.4	328.2	-3.8	27	25	1.08	-4.1
SDA			0.0	27	25	1.08	0.0
CCR	188.7	162.7	26.0	50	35	1.43	37.1
PTR	628.3	628.3	0.0	26	20	1.30	0.0
C4 Isom	17.5	15.5	2.0	17.5	10	1.75	3.5
C5/C6 Isom	98.9	49.9	49.0	25	15	1.67	81.7
C3 Poly	8.9	4.9	4.0	55	19	2.89	11.6
HF Alky	35.9	35.9	0.0	55	19	2.89	0.0
H2SO4 Alky	22.0	11.0	11.0	55	19	2.89	31.8
Resid Hds	30.4		30.4	65	35	1.86	56.5
Dist Hds	1102.8	1019.8	83.0	25	30	0.83	69.2
FCC Fd Hdt	59.7	56.9	2.8	40	35	1.14	3.2
MTBE	14.6	0.0	14.6	10	2	5.00	73.0
Naphtha Hds	1065.4	967.0	98.4	45	35	1.29	126.5
Hydrogen Plt, MMSCF	235.7	154.0	81.7	50	60	0.83	68.1
Sulfur Plt, LT/D	4036.0	2731.0	1305.0	20	222	0.09	117.6
Total Onsite							2447.5
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.0
Weighted Offsite Factor							0.65
OnSite + Offsite, $MM							4038.3
Area Factor							1.1
Tot. Region Invest. $MM							4442.2
Region MJDN Production, MBD *							3467.0
$ Invest/Daily Bbl MJDN							3.51
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							0.84
¢/Gal MJDN							2.01

* FC-1 reference case hydrocarbon MJDN volumes

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TABLE APP.L.VII.6-5

1995 MODEL YEAR - FACILITY COSTS
REGION - MID. EAST

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	6,594.0	5,000.0	1594.0	50	150	0.33	531.3
Vac Crude	1858.1	1508.7	349.4	25	44	0.57	198.5
Sat G.P.	211.0	173.0	38.0	16.2	20	0.81	30.8
FCC	248.0	181.9	66.1	150	70	2.14	141.6
Resid FCC			0.0	275	70	3.93	0.0
Hdc	434.3	325.5	108.8	110	30	3.67	398.9
Resid Hdc			0.0	145	30	4.83	0.0
Delayed Coker	63.4	60.4	3.0	110	25	4.40	13.2
Fluid Coker			0.0	120	25	4.80	0.0
Flex Coker			0.0	201	25	8.04	0.0
Thermal Cracker			0.0	37	25	1.48	0.0
Visbreaker	324.4	243.2	81.2	27	25	1.08	87.7
SDA			0.0	27	25	1.08	0.0
CCR	221.3	122.3	99.0	50	35	1.43	141.4
PTR	374.2	326.2	48.0	26	20	1.30	62.4
C4 Isom			0.0	17.5	10	1.75	0.0
C5/C6 Isom	53.8	2.8	51.0	25	15	1.67	85.0
C3 Poly	1.2	1.2	0.0	55	19	2.89	0.0
HF Alky	14.0	12.0	2.0	55	19	2.89	5.8
H2SO4 Alky	3.0		3.0	55	19	2.89	8.7
Resid Hds			0.0	65	35	1.86	0.0
Dist Hds	796.9	555.1	241.8	25	30	0.83	201.5
FCC Fd Hdt	31.5		31.5	40	35	1.14	36.0
MTBE	5.3	0.0	5.3	10	2	5.00	26.5
Naphtha Hds	693.7	507.3	186.4	45	35	1.29	239.7
Hydrogen Plt, MMSCF	1406.0	1299.0	107.0	50	60	0.83	89.2
Sulfur Plt, LT/D	4329.0	2900.0	1429.0	20	222	0.09	128.7
Total Onsite							2427.0
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.2
Weighted Offsite Factor							0.72
OnSite + Offsite, $MM							4174.4
Area Factor							1.2
Tot. Region Invest. $MM							5009.3
Region MJDN Production, MBD *							3240.0
$ Invest/Daily Bbl MJDN							4.24
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							1.02
¢/Gal MJDN							2.42

* FC-1 reference case hydrocarbon MJDN volumes

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TABLE APP.L.VII.6-6

1995 MODEL YEAR - FACILITY COSTS
REGION - LATIN AMER.

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	8,215.5	7,067.6	1147.9	50	150	0.33	382.6
Vac Crude	3631.3	3005.0	626.3	25	44	0.57	355.9
Sat G.P.	156.0	106.0	50.0	16.2	20	0.81	40.5
FCC	1362.0	1070.5	291.5	150	70	2.14	624.6
Resid FCC			0.0	275	70	3.93	0.0
Hdc	200.6	21.5	179.1	110	30	3.67	656.7
Resid Hdc	33.0	16.2	16.8	145	30	4.83	81.2
Delayed Coker	190.7	92.1	98.6	110	25	4.40	433.8
Fluid Coker			0.0	120	25	4.80	0.0
Flex Coker	43.9	41.9	2.0	201	25	8.04	16.1
Thermal Cracker			0.0	37	25	1.48	0.0
Visbreaker	587.3	370.8	216.5	27	25	1.08	233.8
SDA	146.0	109.5	36.5	27	25	1.08	39.4
CCR	46.7	46.7	0.0	50	35	1.43	0.0
PTR	422.8	394.8	28.0	26	20	1.30	36.4
C4 Isom	29.2	28.2	1.0	17.5	10	1.75	1.8
C5/C6 Isom	31.0	13.0	18.0	25	15	1.67	30.0
C3 Poly	14.6	14.6	0.0	55	19	2.89	0.0
HF Alky	30.8	27.8	3.0	55	19	2.89	8.7
H2SO4 Alky	49.7	48.7	1.0	55	19	2.89	2.9
Resid Hds			0.0	65	35	1.86	0.0
Dist Hds	1096.6	765.3	331.3	25	30	0.83	276.1
FCC Fd Hdt	441.5	409.0	32.5	40	35	1.14	37.1
MTBE	10.5	0.0	10.5	10	2	5.00	52.5
Naphtha Hds	527.4	490.9	36.5	45	35	1.29	46.9
Hydrogen Plt, MMSCF	685.0	350.0	335.0	50	60	0.83	279.2
Sulfur Plt, LT/D	4972.0	3126.0	1846.0	20	222	0.09	166.3
Total Onsite							3802.5
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.2
Weighted Offsite Factor							0.72
OnSite + Offsite, $MM							6540.4
Area Factor							1.2
Tot. Region Invest. $MM							7848.5
Region MJDN Production, MBD *							4233.0
$ Invest/Daily Bbl MJDN							5.08
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							1.22
¢/Gal MJDN							2.90

* FC-1 reference case hydrocarbon MJDN volumes

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TABLE APP.L.VII.6-7

1995 MODEL YEAR - FACILITY COSTS
REGION - PACIFIC RIM

	'95 Cap TBD	'89 Cap TBD	'95-'89 TBD	W/S Unit $MM	W/S Unit TBD	W/S Unit $MM/TBD	Onsite $MM
Atm Crude	11,998.7	10,097.0	1901.7	50	150	0.33	633.9
Vac Crude	3556.3	3008.0	548.3	25	44	0.57	311.5
Sat G.P.	373.0	259.0	114.0	16.2	20	0.81	92.3
FCC	1242.0	838.7	403.3	150	70	2.14	864.2
Resid FCC	90.0		90.0	275	70	3.93	353.6
Hdc	453.7	288.4	165.3	110	30	3.67	606.1
Resid Hdc			0.0	145	30	4.83	0.0
Delayed Coker	171.0	113.7	57.3	110	25	4.40	252.1
Fluid Coker			0.0	120	25	4.80	0.0
Flex Coker			0.0	201	25	8.04	0.0
Thermal Cracker	71.4	68.0	3.4	37	25	1.48	5.0
Visbreaker	359.2	260.1	99.1	27	25	1.08	107.0
SDA	67.9	31.3	36.6	27	25	1.08	39.5
CCR	351.6	206.6	145.0	50	35	1.43	207.1
PTR	1100.7	741.8	358.9	26	20	1.30	466.6
C4 Isom			0.0	17.5	10	1.75	0.0
C5/C6 Isom	60.5	28.0	32.5	25	15	1.67	54.2
C3 Poly	18.8	16.8	2.0	55	19	2.89	5.8
HF Alky	45.8	26.5	19.3	55	19	2.89	55.9
H2SO4 Alky	42.7	29.8	12.9	55	19	2.89	37.3
Resid Hds	629.5	348.9	280.6	65	35	1.86	521.1
Dist Hds	2393.4	1625.3	768.1	25	30	0.83	640.1
FCC Fd Hdt	935.0	739.6	195.4	40	35	1.14	223.3
MTBE	8.7	0.0	8.7	10	2	5.00	43.5
Naphtha Hds	1752.4	1208.9	543.5	45	35	1.29	698.8
Hydrogen Plt, MMSCF	1581.8	1191.0	390.8	50	60	0.83	325.7
Sulfur Plt, LT/D	7552.0	3283.0	4269.0	20	222	0.09	384.6
Total Onsite							6929.3
Offsite Factor (Retrofit)							0.65
Offsite Factor (Grass Roots)							1.0
Grass Roots Share							0.2
Weighted Offsite Factor							0.72
OnSite + Offsite, $MM							11918.4
Area Factor							1.0
Tot. Region Invest. $MM							11918.4
Region MJDN Production, MBD *							7246.0
$ Invest/Daily Bbl MJDN							4.51
ROI Factor							0.24
Capital Charge							
$/BBl MJDN							1.08
¢/Gal MJDN							2.58

* FC-1 reference case hydrocarbon MJDN volumes

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Table APP.L.VII.6-8

US Refining Industry
Increase in Process Unit Capacity
1995-1989 Reference Cases

		PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V exCA	TOTAL US
	NPC Regions	1,2,3,4	5,6,7	8	9	11,12	10,13	All
Unit	Capacity							
Atm. Crude	MBPD	0	55	166	14	0	64	298
Vac. Crude	MBPD	0	46	0	8	3	30	87
FCCU	MBPD	9	69	138	5	33	9	263
Resid FCCU	MBPD	0	0	0	0	0	0	0
Hydrocracker	MBPD	2	3	78	1	23	7	113
Resid Hydrocrack	MBPD	0	0	0	0	0	0	0
Delayed Coker	MBPD	0	4	82	2	60	0	148
Fluid Coker	MBPD	0	0	0	0	0	0	0
Flexicoker	MBPD	0	0	0	0	0	0	0
Visbreaker	MBPD	0	0	0	0	0	0	0
Solv. Deasphalter	MBPD	0	4	12	0	0	0	16
CC Reformer	MBPD	0	182	0	5	0	9	195
LP SR Reformer	MBPD	0	23	0	0	0	0	23
C4 Isom	MBPD	0	3	36	2	0	0	41
C5/C6 Isom	MBPD	18	11	52	0	9	0	90
C3= Poly	MBPD	0	0	0	0	0	0	0
HF Alkylation	MBPD	0	3	28	1	0	1	32
H2SO4 Alkylation	MBPD	10	6	14	0	17	2	48
Resid HDS	MBPD	0	0	18	0	0	0	18
Distillate HDS	MBPD	0	310	265	19	51	100	744
Added severity	MBPD	32	63	99	9	16	11	232
For CA LAD	MBPD					138		138
FCCU HDS	MBPD	0	0	0	15	75	0	90
Naphtha HDS	MBPD	0	17	38	3	0	7	64
MTBE	MBPD	13	25	62	0	14	2	116
Sulfur	LTD	15	355	794	83	104	96	1,447
Hydrogen Plant	MMSCFD	0	68	70	0	88	23	249

MBPD = Thousand Barrels per Day
MMSCFD = Million Standard Cubic Feet per Day
LTD = Long Tons per Day

Table APP.L.VII.6-9

US Refining Industry
Investment Cost of Process Unit Capacity Increases
1995-1989 Reference Cases

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V exCA	TOTAL US
NPC Regions	1,2,3,4	5,6,7	8	9	11,12	10,13	All
Process Unit Investment, million 1990 $							
Atm. Crude	0	17	53	4	0	20	95
Vac. Crude	0	25	0	4	2	16	48
FCCU	19	142	285	9	68	19	541
Resid FCCU	0	0	0	0	0	0	0
Hydrocracker	7	9	275	4	79	23	398
Resid Hydrocracker	0	0	0	0	0	0	0
Delayed Coker	0	15	346	10	253	0	624
Fluid Coker	1	0	0	0	0	0	1
Flexicoker	0	0	0	0	0	0	0
Visbreaker	0	0	0	0	0	0	0
Solv. Deasphalter	0	4	12	0	0	0	16
CC Reformer	0	249	0	7	0	12	268
LP SR Reformer	0	28	0	0	0	0	28
C4 Isom	0	5	61	3	0	0	68
C5/C6 Isom	29	18	84	0	14	0	145
C3= Poly	0	0	0	0	0	1	1
HF Alkylation	0	8	79	2	0	1	89
H2SO4 Alkylation	26	17	38	0	47	5	134
Resid HDS	0	0	32	0	0	0	32
Distillate HDS	26	298	291	23	54	89	781
For CA LAD	0	0	0	0	302	0	296
FCCU HDS	0	0	0	16	82	0	98
Naphtha HDS	0	21	47	3	0	9	79
Mtbe	63	118	296	2	69	9	558
Sulfur	1	31	69	7	9	8	125
Hydrogen Plant	0	54	56	0	71	19	200
TOTAL PROCESS UNITS	173	1,058	2,023	95	1,049	231	4,625
% Addon for offsite etc	65	65	65	65	85	65	
AREA FACTOR	1.2	1.2	1	1.2	1.2	1.2	
TOTAL PROJECT INVESTMENT	343	2,096	3,339	188	2,330	458	8,752

TABLE APP.L.VII.6-10

U.S. REFINING INDUSTRY
INVESTMENT COST OF PROCESS UNIT CAPACITY INCREASES
1995-1989 REFERENCE CASES

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
Process Investment, 1990 $M	344	2106	3356	189	2342	460
Low S Diesel (ULSD) portion	51	593	483	45	120	177
Low Arom Dsl (LAD) portion					673	
Unallocated Investment	293	1513	2873	144	1549	282

NOTE: Low Sulfur Diesel Capital Related Cost Allocation; California Low Aromatics Diesel Capital Related Cost Allocation; No Capital Related Costs allocated to reformulated gasolines in 1995. 1990 Dollars

Table APP.L.VII.6-11

US Refining Industry
Increase in Process Unit Capacity
2000-1995 Reference Cases

		PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V exCA	TOTAL US
NPC Regions		1,2,3,4	5,6,7	8	9	11,12	10,13	All
Unit	Capacity							
Atm. Crude	MBPD	0	0	0	0	0	0	0
Vac. Crude	MBPD	0	0	0	0	0	0	0
FCCU	MBPD	0	0	0	0	0	37	37
Resid FCCU	MBPD	0	0	0	0	0	0	0
Hydrocracker	MBPD	0	0	0	0	222	2	224
Naphtha Hydrocracker	MBPD	0	0	0	0	93	0	93
Resid Hydrocracker	MBPD	0	0	0	0	0	0	0
Delayed Coker	MBPD	0	0	0	0	0	0	0
Fluid Coker	MBPD	0	0	0	0	0	0	0
Flexicoker	MBPD	0	0	0	0	0	0	0
Visbreaker	MBPD	0	0	0	0	0	0	0
Solv. Deasphalter	MBPD	0	0	0	0	0	0	0
CC Reformer	MBPD	0	0	0	0	0	0	0
LP SR Reformer	MBPD	0	0	0	0	0	0	0
Lt Reform Saturation	MBPD	0	0	0	0	74	0	74
C4 Isom	MBPD	24	12	0	0	11	0	47
C5/C6 Isom	MBPD	0	0	0	0	42	0	42
C3= Poly	MBPD	0	0	0	0	0	0	0
HF Alkylation	MBPD	0	0	0	0	0	0	0
H2SO4 Alkylation	MBPD	0	0	0	4	26	1	32
Resid HDS	MBPD	0	0	0	0	0	0	0
Distillate HDS	MBPD	0	0	0	0	0	0	0
FCCU HDS	MBPD	0	0	0	0	0	25	25
Naphtha HDS	MBPD	0	0	0	0	54	0	54
MTBE	MBPD	0	0	0	0	0	2	2
TAME	MBPD	1	14	37	1	6	1	59
Hydrogen Plant	MMSCFD	0	0	0	0	362	14	376

Changes in capacity for "minor" process unit facilities added to produce reformulated gasoline and ultra low sulfur diesel fuel are not listed. These unlisted facilities are primarily fractionation facilities within other process units.

MBPD = Thousand Barrels per Day
MMSCFD = Million Standard Cubic Feet per Day

TABLE APP.L.VII.6-12

U.S. REFINING INDUSTRY
INVESTMENT COST OF PROCESS UNIT CAPACITY INCREASES
2000-1995 REFERENCE CASES
Process Investment, 1990 $M

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
Investment for Major Process Units	340	257	551	37	4149	295
Added Investment for Summer RVP*	424	537	954	20	0	0
TOTAL Process Investment	764	793	1505	57	4150	295
Portion for 2000 EPA Phase II RFG	764	793	1505	57	0	0
Portion for CARB Phase 2	0	0	0	0	4149	0
Unallocated to Specific Product	0	0	0	0	0	295**

*Added Investment for Summer RVP is Primarily Additional Fractionation Facilities.
** In FCI only.

NOTE: Low Sulfur Diesel Capital Related Cost Allocation; California Low Aromatics Diesel Capital Related Cost Allocation; No Capital Related Costs allocated to reformulated gasolines in 2000. All in 1990 Dollars.

NOTE: This section was incorrectly referenced twice in Volume I (Analyses & Results). The reference on page 181 should have been to Appendix L, Section VII-6. The reference on page 187 should have been to Appendix L, Section VII-8.

Appendix L, Section VII-7

This appendix tabulates the bunker fuel demand forecasts that were used as input for the future year foreign regional models. Closure to within 20 percent of these demand estimates was required for an acceptable LP solution.

BUNKER FUEL OUTLOOK - MBD

		FOUNDATION CASE - 1			FOUNDATION CASE - 2			FOUNDATION CASE - 3		
	1989	1995	2000	2010	1995	2000	2010	1995	2000	2010
Canada	9	9	10	10	9	10	10	9	9	9
Northwest Europe	346	363	385	430	349	369	414	349	363	402
Mediterranean/N. Africa	146	156	160	165	150	152	155	150	151	152
Middle East	210	248	270	319	236	242	265	236	239	252
Latin America	85	94	100	110	90	90	92	90	90	90
Pacific Rim	385	441	480	530	416	435	467	415	427	447
Total Modeled Regions	1,181	1,312	1,404	1,564	1,251	1,298	1,402	1,250	1,280	1,353

NOTE: This section was incorrectly referenced on page 181 of Volume I (Analyses & Results). The reference should have been to Appendix L, Section VII-9.

Appendix L, Section VII-8

Summary Tables – LP Case Comparisons (Foreign)

This appendix provides summaries of key results from the LP solutions to the foreign regional model runs. The summaries include crude runs, MJD makes, investment costs and marginal values of selected products. Full reports are included in the working paper 3.VII-1 (foreign) and Appendix L, Section VII-2 (U.S.).

LP CASE COMPARISON - FOREIGN REGIONS FC-1

		INPUT			TAME+	OUTPUT								PROCESS				
		SWNG	SWT	MTBE	MTBE	NON-US	US MJD	US EXP	RGN	RGN	RGN	RGN	HSFO	ATMO	DIST.	RESID.	TYPE MAJOR	INVES
	LP	CRDE	CRDE	PRCH	PROD	MJD EX	EXP(%LC)	M:J:D	MJD	M:J:D	NAPH	L+MSF	(FRCST)	CUT	CNV, %	CNV, %	UNIT INVEST	
REGION	DATE	MBPD	MBPD	MBPD	MBPD	MBPD	MBPD		MBPD		MBPD	MBPD	MBPD	DEGF	Note (1)	Note (2)	Note (3)	$MM
CAN 89*	06/16	186	0	0	0	0	130		1061	51:12:37	183	0	144	625	29	3		
CAN 95[R]*	08/27	305	160	28	0	50	130 (11%)	42:08:50	1131	53:13:34	183	116	20(29)	625	28	5		
CAN 00[R]*	10/22	289	160	27	0	0	130		1149	53:14:33	183	99	31(18)	625	28	4		31
CAN 10[00FC]	10/22	289	160	27	0	0	130		1149	53:14:33	183	99	31(18)	625	28	4		0
NWE 89*	06/11	1167	0	0	0	30	125		5577	39:11:50	590	530	762	700	17	2		
NWE 89[S]	09/14	1157	250	0	0	30	125		5577	39:11:50	590	530	754	700	17	2		
NWE 95*	09/09	1354	250	18	22	30	125 (2%)	72:08:20	5969	39:11:50	590	652	370(572)	700	19	2		
NWE 00*	12/10	1264	250	137	59	30	125		6006	39:12:49	590	597	567(489)	700	20	2	AL,DH	1167
NWE 10[00FC]	12/10	1264	250	137	59	30	125		6006	39:12:49	590	597	567(489)	700	20	2		0
MED 89*	07/07	540	300	0	0	110	75		2624	32:14:54	359	300	1231	700	10	1		
MED 89[S]	09/15	501	600	0	0	110	75		2624	32:14:54	359	300	1195	700	10	1		
MED 95	08/26	1032	600	4	15	110	94 (3%)	63:08:29	2923	32:14:54	359	907	803(605)	700	14	1		
MED 95[R]*	10/02	551	600	4	15	110	94		2923	32:14:54	359	907	345(605)	700	14	1		
MED 95[.9CR]	12/14	637	600	4	15	110	94		2923	32:14:54	359	907	438(605)	700	13	1		
MED 00	09/17	1288	600	35		110	75		3086	31:15:54	359	1189	678(297)	700	14	1	AL,DH	2156
MED 00[R]*	12/14	846	600	42	34	110	94		3086	31:15:54	359	1189	253(297)	700	14	1	AL,AR,DH	1357
MED 10[00FC]	12/14	846	600	42	34	110	94		3086	31:15:54	359	1189	253(297)	700	14	1		0
ME 89*	06/29	1877	0	0	0	367	53		1999	25:26:49	419	0	1353	725	10	0		
ME 95*	09/23	2331	0	5	2	367	84 (4%)	64:08:28	2375	27:24:49	419	0	1366(1055)	725	10	1		
ME 00*	10/04	2583	0	4	3	367	83		2708	28:22:50	419	172	1103(976)	725	10	1	AL,AR,DH,FH	1465
ME 10*	12/23	3174	0	70	5	367	83		3338	31:19:50	419	323	975(969)	725	14	1	AL,AR,CR,DH,FC,FH	3635
ME 10(H)	12/28	3244	0	81	5	367	167		3338	31:19:50	419	323	975(969)	725	14	1	AL,AR,CR,DH,FC,FH	4086
LAT 89*	06/22	573	0	0		25	430		2605	44:12:44	350	0	1621	675	15	2		
LAT 89[S]	09/23	555	287	0		25	430		2606	44:12:44	350	0	1604	675	15	2		
LAT 95	08/26	1263	287	64	36	25	430 (13%)	36:17:47	3402	45:11:44	350	419	1053(976)	675	19	3		
LAT 95[R]*	10/02	1118	287	64	11	25	430		3402	45:11:44	350	419	921(976)	675	19	3		
LAT 95[.9CR]	12/12	1362	287	64	11	25	430		3402	45:11:44	350	419	1185(976)	675	17	3		
LAT 00	09/16	2115	287	51	24	25	430		3975	45:11:44	350	800	952(655)	675	23	3	AL,AR,CR,FC	3240
LAT 00[R]*	12/04	1883	287	50	36	25	430		4004	45:11:44	350	800	692(655)	675	23	3	AL,CR,FC	3292
LAT 00[.9CR]	12/12	1930	287	49	36	25	430		4004	45:11:44	350	800	742(655)	675	23	3	AL,CR,FC	4073
LAT 00[PR]	01/14	1883	287	50	36	25	430		4004	45:11:44	350	800	692(655)	675	23	3	AL,CR,FC	3292
LAT 10[R]	12/29	3066	287	86	47	25	430		5001	45:12:43	350	800	601(599)	675	26	3	AL,CR,DC,DH,FC	4065
LAT 10(HR)	12/30	3493	287	86	47	25	860		5001	45:12:43	350	800	601(599)	675	27	4	AD,AL,CR,CK,DC,DH,FC	6601
PAC 89*	09/25	659	1265	0	0	0	0	0	5115	29:23:48	639	700	947(1328)	675	12	2		
PAC 95*	09/29	2271	1265	14	9	0	0	0	6430	30:22:48	839	1328	342(1043)	675	15	2		
PAC 95[.8C]	11/16	2902	1265	14	30	0	0	0	6430	30:22:48	839	1328	987(1043)	675	12	2		
PAC 00*	12/08	3719	1265	27	30	0	0	0	7324	30:22:48	839	1421	871(948)	675	15	2	AL	792
PAC 00[.8C]	12/12	3931	1265	26	31	0	0	0	7324	30:22:48	839	1421	1076(948)	675	14	2	AL,FC	1917
PAC 00[P]	01/14	3715	1265	27	30	0	0	0	7324	30:22:48	839	1421	871(948)	675	14	2	AL,FC	863
PAC 10(D)*	01/07	5231	1265	40	35	0	0	0	8834	28:23:49	839	1421	909(948)	675	13	2	AD/VD,AL,CK,CR,DC,FC	5852
PAC 10(DH)	01/07	5766	1265	100	40	0	609	0	8834	28:23:49	839	1421	913(948)	675	21	3	AD/VD,AL,CK,CR,DC,FC	6531
PAC 10(DP)	01/15	5232	1265	99	35	0	0	0	8834	28:23:49	839	1421	909(948)	675	20	3	AD/VD,AL,CK,CR,DC,FC	5662

	LP CASE COMPARISON- FOREIGN REGIONS FC-1 (CONT)																DLF					
	ECONOMICS						MJD COST/VOL $90										REV.01/25/93					
	LP MARGINAL VALUES							REF	HI													
	UP-LCL	UP-RF	JET-LC	ADO-L	ADO-U	LSFO	MJD	hcMJD	hcMJD	LO-REF	REF-HI	M'J'D'	M'REF	M'HI	J'REF	J'HI	D'REF	D'HI	X	Y	Z	
REGION	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	DATE	MBPD	MBPD	$/BBL	$/BBL	DATE	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	c/gal	c/gal	c/gal	
CAN 89*	18.44	(18.75)	18.56	18.61	18.57	(13.50)	08/18	130	260	18.88	19.49	08/17	19.05	19.33	19.35	19.52	19.52	19.54				
CAN 95(R)*	19.78	21.23	19.17	19.01	18.98	15.78	12/01	123	246	18.99	19.84	12/01	18.95	22.17	19.03	19.86	19.24	20.21	4.4			
CAN 00(R)*	21.44	22.70	19.52	19.24	19.03	15.07	12/04	123	246	18.79	20.21	12/04	18.73	19.72	18.79	19.83	18.75	20.63		2.3		
CAN 10[00FC]	21.44	22.70	19.52	19.24	19.03	15.07	12/04	123	246	18.79	20.21	12/04	18.73	19.72	18.79	19.83	18.75	20.63			1.8	
NWE 89*	21.67	(21.17)	20.96	20.92	20.87	13.54	08/19	125	250	20.66	21.12	08/18	20.52	20.81	21.83	21.83	21.76	21.76				
NWE 89[S]	21.74	(21.25)	21.05	21.00	20.95	13.42																
NWE 95*	20.62	22.05	20.16	20.12	20.23	14.70	12/01	113	226	19.54	20.62	12/01	19.44	20.64	19.56	20.61	19.63	20.60	3.9			
NWE 00*	22.61	23.44	20.24	20.32	20.32	14.74	12/11	113	225	20.83	21.01		20.94	21.39	20.81	20.85	20.80	21.05		2.8		
NWE 10[00FC]	22.61	23.44	20.24	20.32	20.32	14.74	12/11	113	225	20.83	21.01		20.94	21.39	20.81	20.85	20.80	21.05			1.5	
MED 89*	21.37	(22.25)	21.41	21.37	21.38	16.35	08/18	76	151	21.83	22.29	08/18	22.17	22.32	NR	NR	22.29	22.29				
MED 89[S]	21.39	(22.26)	21.41	21.42	21.43	14.54																
MED 95	20.19	21.31	19.85	19.98	20.47	18.16																
MED 95[R]*	20.23	21.35	19.72	19.80	19.85	15.84	12/01	87	173	19.77	20.25	12/01	19.58	20.12	19.77	20.27	19.85	20.37	3.2			
MED 95[.9C]	20.79	21.83	20.25	20.31	20.35	14.21																
MED 00	20.10	19.83	20.58	21.49	21.49	18.34																
MED 00[R]*	22.27	22.05	20.45	20.73	20.73	16.07	12/16	86	173	20.57	20.76	12/16	20.46	20.64	20.56	20.76	20.74	21.07		2.6		
MED 10[00]	22.27	22.05	20.45	20.73	20.73	16.07	12/16	86	173	20.57	20.76	12/16	20.46	20.64	20.56	20.76	20.74	21.07			1.9	
ME 89*	(18.72)	(18.65)	18.56	18.32	18.52	(12.51)	08/17	53	108	19.29	19.53	08/17	19.34	19.53	NR	NR	NR	NR				
ME 95*	19.86	20.79	19.42	18.88	19.85	(12.51)	12/01	77	153	20.03	21.33	12/01	19.94	21.04	20.05	21.27	20.19	21.56	3.9			
ME 00*	21.21	22.04	20.13	18.87	19.40	(14.89)	12/21	77	155	19.82	21.12	12/21	20.35	21.94	19.81	21.08	19.77	20.82		2.7		
ME 10*	23.59	23.76	20.39	19.33	19.92	(14.66)	12/28	77	153	21.35	21.50	12/28	22.22	22.28	21.31	21.41	21.11	21.14			3.8	
ME 10(H)	23.99	24.39	21.03	20.12	20.62	(13.65)		153														
LAT 89*	20.12	(21.24)	19.74	19.51	19.59	(13.60)	08/18	301	860	20.55	20.82	08/17	21.23	21.71	20.52	20.73	20.39	20.48				
LAT 89[S]	20.11	(21.24)	19.64	19.52	19.59	(13.60)																
LAT 95	21.70	22.87	20.67	19.44	19.86	16.10																
LAT 95[R]*	21.97	23.14	20.76	19.05	18.92	13.07	12/01	409	820	20.07	21.35	12/01	20.65	21.76	20.18	21.38	19.78	21.05	3.1			
LAT 95[.9C]	22.79	23.84	21.42	19.73	19.90	13.10																
LAT 00	23.30	24.70	21.61	20.61	20.76	17.81																
LAT 00[R]*	24.10	25.16	20.73	19.41	18.59	13.44	12/08	410	820	20.10	21.16	12/08	20.83	21.20	20.17	21.36	19.73	21.67		3.0		
LAT 00[.9C]	24.07	25.07	20.84	19.45	18.62	13.44																
LAT 00[PR]	24.10	25.16	20.76	19.43	18.58	13.41																
LAT 10[R]*	24.09	25.14	22.37	20.65	20.13	15.47	12/30	410	819	21.06	22.90	12/30	21.76	22.86	21.37	22.88	20.89	22.46			3.5	
LAT 10(HR)	25.01	26.08	29.34	25.77	24.70	13.59		819														
PAC 89*	16.70	(16.64)	19.02	19.35	19.06	14.63	09/29	(256)	512	(19.12)	19.52	09/29	NR	NR	NR	NR	NR	NR				
PAC 95*	16.98	18.38	19.02	18.91	19.08	15.22	12/01	(155)	620	(18.50)	19.14	12/01	(18.26)	19.32	(18.53)	19.10	(18.47)	19.13	1.9			
PAC 95[.8C]	17.82	19.35	19.41	19.30	19.48	14.62		0														
PAC 00*	18.04	18.03	19.85	19.60	19.69	15.14	12/09	(228)	609	(18.01)	18.50	12/09	(17.49)	17.95	(18.16)	18.57	(18.22)	18.61		2.8		
PAC 00[.8C]	18.07	18.03	19.85	19.60	19.68	15.14		0														
PAC 00[P]	18.07	18.02	19.85	19.60	19.69	15.14		0														
PAC 10(D)*	17.04	17.08	21.54	21.36	21.46	16.03	01/11	(244)	609	(19.73)	20.33	01/11	(19.20)	20.73	(19.75)	20.38	(19.78)	20.40			3.7	
PAC 10(DH)	21.76	21.68	16.00	21.96	22.08	15.74																
PAC 10(DP)	18.20	18.17	23.77	23.56	23.70	15.51																

NOTES:
* Denotes case selected at reference MJD for development of cost/volume curves
( ) Denotes marginal value taken from similar but lower quality grade product
[ ] Case suffix, [S]=sweet crude segregation for 89, [R]=resid fuel adj to higher S spec. for LP solution, [C]=0.8 or 0.9 downrating conversion capacity,
[H]=high MJD value, [P]=HSFO price $6.40 less than reference case, (D)=Hydrocracker yield adjusted for max distillate
(1) Based on total regional capacity of ThCrk, FCCU, HyCrk
(2) Based on total regional capacity of Resid FCCU, resid HyCrk, Coking
(3) AL=Alkylation, AD/VD=Atmos/Vac Crude Dist., AR=Atmos.Resid.Desulf, CK=Delayed Coking, CR=Cat Reforming, FC=FCCU,
DC=Dist.HyCracking, DH=Dist.Hydrodesulf., FH=FCC Feed Hydrodesulf., VB=Visbreaking, RC=Resid HyCracking
Excludes Naph.Hytreating, MTBE, TAME, Other Distillation, Sulfur, H2 Plant

LP CASE COMPARISON - FOREIGN REGIONS FC-3

			INPUT			TAME+	OUTPUT								PROCESS				
			SWNG	SWT	MTBE	MTBE	NON-US	US MJD	US EXP	RGN	RGN	RGN	RGN	HSFO	ATMO	DIST.	RESID.	TYPE MAJOR	INVES
		LP	CRDE	CRDE	PRCH	PROD	MJD EX	EXP(%LC)	M:J:D	MJD	M:J:D	NAPH	L+MSF	(FRCST)	CUT	CNV, %	CNV, %	UNIT INVEST	
REGION	FC	DATE	MBPD	MBPD	MBPD	MBPD	MBPD	MBPD		MBPD		MBPD	MBPD	MBPD	DEG F	Note (1)	Note (2)	Note (3)	$MM
CAN 95[R]	1	08/27	305	160	28	0	50	130	42:08:50	1131	53:13:34	183	116	20(29)	625	28	5		
CAN 00[R]	2	01/04	290	160	26	0	0	130	42:08:50	1105	51:12:37	183	171	7(10)	625	28	4		34
CAN 10[00FC]	2	01/04	290	160	26	0	0	130	42:08:50	1105	51:12:37	183	171	7(10)	625	28	4		0
NWE 95	3	09/28	794	250	16	22	30	125 (2%)	72:08:20	5600	39:11:50	590	572	392(589)	700	19	2		
NWE 00	2	01/12	795	250	122	56	30	125	72:08:20	5671	39:10:51	590	652	367(533)	700	20	2	AL	768
NWE 10[00FC]	2	01/12	795	250	122	56	30	125	72:08:20	5671	39:10:51	590	652	367(533)	700	20	2		0
MED 95[R]	3	10/06	217	600	3	15	110	94 (3%)	63:08:29	2698	32:14:54	359	907	245(619)	700	14	1		
MED 00[RI	2	01/14	534	600	30	39	110	94	63:08:29	2810	31:14:55	359	1241	175(310)	700	14	1	AL,DH,FH	1027
MED 00[R]	2	01/14	534	600	30	39	110	94	63:08:29	2810	31:14:55	359	1241	175(310)	700	14	1		0
ME 95	3	09/28	1904	0	6	1	367	83 (4%)	64:08:28	2170	26:25:49	419	0	1151(1035)	725	10	1		
ME 00	2	01/15	1872	0	4	3	367	83	64:08:28	2332	27:24:49	419	156	810(884)	725	10	1	AL,AR,DH,FH	1401
ME 10[00FC]	2	01/15	1872	0	4	3	367	83	64:08:28	2332	27:24:49	419	156	810(884)	725	10	1		0
LAT 95[R]	3	10/05	601	287	58	11	25	431 (13%)	36:17:47	3028	45:11:44	350	419	767(1005)	675	19	3		
LAT 00[R]	2	01/15	1004	287	49	24	25	431	36:17:47	3315	45:11:44	350	760	552(622)	675	23	3	AL	762
LAT 10[00FC]	2	01/15	1004	287	49	24	25	431	36:17:47	3315	45:11:44	350	760	552(622)	675	23	3		0
PAC 95	3	10/27	1312	1265	10	9	0	0	0	5593	29:23:48	839	1328	297(1005)	675	15	2		
PAC 00	3	01/13	2152	1265	10	34	0	0	0	5790	30:23:47	839	1565	747(919)	675	15	2	AL	576
PAC 10[00FC]	3	01/13	2152	1265	10	34	0	0	0	5790	30:23:47	839	1565	747(919)	675	15	2		0

		LP CASE COMPARISON - FOREIGN REGIONS FC-3 (CONT)															DLF				
		ECONOMICS						MJD COST/VOL $90									REV.01/25/93				
		LP MARGINAL VALUES							REF	HI											
		UP-LCL	UP-RF	JET-LC	ADO-L	ADO-U	LSFO	MJD	hcMJD	hcMJD	LO-REF	REF-HI	M'REF	M'HI	J'REF	J'HI	D'REF	D'HI	X	Y	Z
REGION	FC	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	DATE	MBPD	MBPD	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	$/BBL	c/gal	c/gal	c/gal
CAN 95[R]	1	19.78	21.23	19.17	19.01	18.98	15.78												4.5		
CAN 00[R]	2	20.15	21.56	18.47	18.53	18.52	16.42	01/11	123	246	18.11	19.15	17.99	19.26	18.13	19.14	18.60	19.20		2.3	
CAN 10[00FC]	2	20.15	21.56	18.47	18.53	18.52	16.42	01/11	123	246	18.11	19.15	17.99	19.26	18.13	19.14	18.60	19.20			1.8
NWE 95	3	20.82	21.43	19.82	19.77	19.69	14.84	12/01	113	225	18.77	19.97	18.57	19.95	18.95	19.78	19.06	19.77	3.9		
NWE 00	2	22.24	21.90	19.70	19.77	19.77	16.11	01/18	113	225	20.28	20.78	20.19	20.56	20.21	21.07	20.23	20.68		2.7	
NWE 10[00FC]	2	22.24	21.90	19.70	19.77	19.77	16.11	01/18	113	225	20.28	20.78	20.19	20.56	20.21	21.07	20.23	20.68			1.5
MED 95[R]	3	19.84	21.01	19.37	19.46	19.50	15.70	12/01	87	173	19.35	19.89	19.13	19.65	19.36	19.92	19.45	19.97	3.3		
MED 00[R]	2	21.75	21.53	20.33	20.64	20.64	16.03	01/19	87	173	18.74	20.66	18.61	20.41	18.75	20.85	19.50	20.06		2.7	
MED 00[R]	2	21.75	21.53	20.33	20.64	20.64	16.03	01/19	87	173	18.74	20.66	18.61	20.41	18.75	20.85	19.50	20.06			1.9
ME 95	3	18.95	20.02	18.62	18.54	18.65	(12.51)	12/01	77	153	18.84	19.12	18.68	19.17	18.77	19.05	18.92	19.35	3.5		
ME 00	2	19.86	20.90	19.86	19.00	19.42	(14.83)	01/11	77	153	19.22	19.81	19.19	20.08	19.23	19.99	19.29	19.98		2.7	
ME 10[00FC]	2	19.86	20.90	19.86	19.00	19.42	(14.83)	01/11	77	153	19.22	19.81	19.19	20.08	19.23	19.99	19.29	19.98			2.7
LAT 95[R]	3	20.66	21.89	20.22	18.72	18.51	13.09	12/01	409	818	19.13	20.26	19.29	20.56	19.27	20.35	19.34	19.72	3.8		
LAT 00[R]	2	22.51	24.00	20.45	19.54	18.95	13.46	01/18	405	809	19.89	20.53	20.21	20.85	19.96	20.63	19.52	20.49		2.0	
LAT 10[00FC]	2	22.51	24.00	20.45	19.54	18.95	13.46	01/18	405	809	19.89	20.53	20.21	20.85	19.96	20.63	19.52	20.49			2.8
PAC 95	3	16.31	18.00	18.31	18.20	18.38	15.97	12/01	(155)	620	(17.51)	18.26	(17.09)	18.24	(17.59)	18.24	(17.57)	18.26	2.1		
PAC 00	3	16.50	16.60	18.40	17.65	17.73	16.83	01/14	(245)	609	(17.40)	17.76	(17.09)	18.18	(17.41)	17.78	(17.31)	17.81		2.9	
PAC 10[00FC]	3	16.50	16.60	18.40	17.65	17.73	16.83	01/14	(245)	609	(17.40)	17.76	(17.09)	18.18	(17.41)	17.78	(17.31)	17.81			2.7

NOTE: This section was incorrectly referenced on page 181 of Volume I (Analyses & Results). The reference should have been to Appendix L, Section VII-10.

Appendix L, Section VII-9

Foreign Refining Policy, Pace Report

THE PACE CONSULTANTS INC. 4848 LOOP CENTRAL DRIVE II
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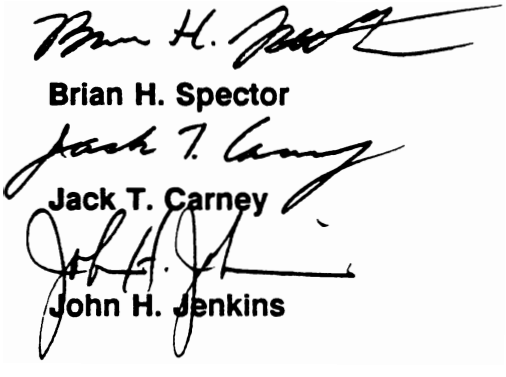
A Member of Jacobs Engineering Group

GOVERNMENT ENERGY POLICY ANALYSIS

Prepared For

NPC FOREIGN SUBGROUP

For PACE



Brian H. Spector

Jack T. Carney

John H. Jenkins

May 1992

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A

INTRODUCTION

The Pace Consultants Inc. was retained by the National Petroleum Council to define policies of foreign governments that could potentially impact the U.S. refining industry. There are two primary areas of this investigation: environmental policy and financial policy. Our examination of environmental policy has been segmented into two areas—policies relating to the specification of refined products such as sulfur content of diesel or aromatics content of gasoline, and legislation addressing the refining facility as a potential point source polluter. Such areas as water treating and hazardous waste are covered within this category. Our examination of financial policy of foreign governments and the potential impact on U.S. refineries includes primarily economic support of the industry either by tax policy, tariffs, or other non-free market mechanisms that can improve the competitiveness of a refiner outside the United States. Additionally, we examined three issue cases which may impact U.S. refining: foreign refiners' dumping of undesirable gasoline components into local gasoline pools; a proposed limit on bunker fuel sulfur content; and the importance of the former USSR to European refined products supply.

Our findings are based on conversations with personnel knowledgeable with the refining industry outside the United States, a written survey of foreign environmental compliance groups, public literature, and a number of recent Pace projects involving refinery clients outside the United States. The opinions stated herein are those of The Pace Consultants Inc. and do not reflect the opinions of the National Petroleum Council or its various members.

EXECUTIVE SUMMARY

OVERVIEW

Many professionals in the U.S. refining industry believe that the United States sets environmental policy for the world—that a law propagated in the United States will be adopted within a few years in Europe and that the rest of the industrialized world will follow over the next decade. Based on our information, we find this belief to be incorrect. Although the United States may have a leadership role in technologies relating to pollution control, air and water quality measurement, and analysis of cause, the Environmental Protection Agency does not "write the law" for the rest of the industrialized world. Rather, we find that foreign environmental agencies examine U.S. law, tailor regulations to their needs, and in some cases, actually precede the United States.

Of the various environmental initiatives and legislative efforts put forth, toxic substances are probably the most universally adopted around the world. For example, lead phasedown is in progress in Europe and has been legislated for much of the Far East and in many industrialized nations. In our judgment, benzene restrictions could follow, especially in Europe. Hazardous waste handling and disposal has also received considerable attention outside the United States. Legislation directed at hazardous waste disposal has been written in Europe, Japan, and many developing countries of the Far East. Other environmental issues such as acid rain and greenhouse effect are of more local interest and do not appear to enjoy a global following among environmental agencies.

PRODUCT SPECIFICATION TRENDS

Specifications on three main products are discussed in this report. For gasoline, we discuss lead phasedown, octane, aromatics, and 90% off point; for diesel fuel, sulfur content and cetane; and for residual fuel oil, sulfur and metals content.

Europe

Studying environmental trends in Europe is complicated by the presence of the European Community (EC). It is not clear whether the EC will mandate uniform specifications for the various countries by this decade. Even inside Europe, there is no uniformity of opinion on the role of the EC and environmental regulations. In interviews with refiners in European countries, Pace found that some believed the EC would have little or no effect on product specification while others believe that the EC would, over time, play an increasing role.

Lead phasedown is reality in Europe. All automobiles sold in Europe after 1992 must be equipped with a catalytic converter. This marks the end of the two-tier system in which smaller cars were exempt from no-lead legislation. Low-sulfur (.05 weight percent) motor diesel will also be a reality in Europe by 1996. Additionally, there is generally a trend to reduce sulfur from power generation sources either through reduction in fuel sulfur or by stack gas scrubbing. At this time, these rules vary widely by location and are not unified. Because acid rain is a critical local issue in Europe, we anticipate further pressure on sulfur content in fuel oil over the decade. Similarly, Europe is moving towards reducing the sulfur content of heating oil (No. 2 fuel oil). Sulfur in heating oil will be reduced to 0.2 wt % by 1994 and there are proposals to adopt even lower specifications by late in the decade.

Although there is no legislation in Europe regarding significant reductions of benzene in gasoline, there has been pressure to lower benzene content. We believe that such legislation will be developed during this decade. However, we do not foresee the adoption of U.S. style reformulated gasoline specifications over the next ten years in Europe. At this time, ozone attainment is a fledgling activity among environmentalists. Although there is air monitoring on the Continent and the United Kingdom, the system has not been integrated into a European monitoring network. In our judgment, substantial data must be obtained and analysis undertaken before such legislation is adopted. To date, European agencies have focused primarily on point source emission limits rather than considering air quality in a macro sense.

Although there has been a great deal of discussion about carbon tax in Europe, it appears that Europe is unlikely to act to limit fuel consumption without similar movements in the rest of the industrialized world.

Canada

While Canadian law more closely parallels U.S. law than most other countries, we foresee no rush toward reformulated gasoline in the country. Lead phasedown began in the early 1980's and is essentially complete. MMT is used as an octane enhancer in Canada. However, the entire matter of additives is now under review. No resolution is expected for at least five years. Although low-sulfur diesel is not yet mandated, our sources in Canada believe that the country will adopt .05% sulfur specifications by 1995. In the Eastern provinces, there is pressure to reduce sulfur in fuel oil. As on the U.S. East Coast, there is significant variance in specifications locally.

OECD Asia

Since over 80% of this region's refined product demand is in Japan, our comments about OECD Asia will usually be limited to Japan. Japan currently has only unleaded gasoline and is planning to limit sulfur in diesel fuel over the next few years. There are a number of specification changes being discussed in Japan. At this time, however, we are not aware that new specifications have officially been adopted.

Middle East

Though there have been discussions of instituting a lead phasedown in some countries in this region, the big consumers (Iran, Iraq, and Saudi Arabia) have been silent. Kuwait and the UAE expect to move towards unleaded by 1995. There has been no discussion of limiting sulfur in either diesel or residual fuel oil used for power generation.

Non-OECD Asia

Most of the developing countries of the Far East will adopt a lead phasedown program during the decade. The octane crunch created by the phasedown will necessitate at least a temporary increase in aromatics and benzene in Far Eastern gasoline pools. This is because this region has little catalytic cracking and is more dependent on reformate for gasoline feedstocks. Planned FCC expansions in this region are near 400,000 BPD (or 8% of crude capacity), however, indicating that less gasoline will be made from reformate in the future.

Latin America

Mexico has recently begun to actively discuss very major changes in product specifications, such as lead phasedown and a reduction in diesel sulfur to .05 wt percent. In our opinion, however, it will be very difficult for the refineries to simultaneously meet these specifications and supply a growing market, especially in view of the shutdown of Pemex's 105,000 BPD Azcapotzalco plant. A possible outcome is the use of higher quality fuels in the Mexico City area and a phased reduction of lead and higher sulfur fuels in the rest of the country. We do not, however, envision a complete change to either unleaded or low-sulfur diesel until well past the year 2000.

There is little talk of tightening environmental regulations in Venezuela and the rest of South America. Though Venezuela has proposed lead phasedown, we expect that effective implementation would likely not take place before 2000. Mexico has discussed plans to limit the sulfur content of diesel fuel to 0.05% by 2000. Whether or not this initiative can succeed is unclear. To date, no other Latin American countries have seriously discussed this issue.

Africa

We expect no tightening of any refined products specifications before the year 2000.

Former USSR/Eastern Europe

The environmental situation in Eastern Europe and the former USSR has been well publicized and there is little doubt that significant changes must be made over the next two decades. in our opinion, however, much of this activity will focus on clean up of existing land use problems and bringing point source emission standards for air and water up to an "acceptable" level. Although European product specifications and the movement of technology from the West will influence specifications in Eastern Europe, we do not foresee uniformity until well after 2000.

FACILITIES

While product specifications can be compared numerically, comparison of specifications that deal with the refinery as a facility—water, hazardous wastes, and land usage—are more qualitative. In any such analysis, it is first important to recognize several generic factors that make foreign regulations different than those in the United States:

- Environmental regulations, especially water regulations, are administrated at a far more local level than in the United States. As a result, local pressures such as unemployment can impact the degree to which refiners are forced to meet difficult regulations.

- Specifications frequently do not apply to existing facilities. In our environmental survey, fully half of the respondents stated that existing refineries are not forced to meet the same regulations as new units.

- Existing laws are not always enforced. Although many countries have adopted regulations written by the EPA as their official regulations, it is far less common for these regulations to be enforced. This is especially prevalent in poorer countries.

In general, we find that facility regulations tend to follow the same pattern as product specifications—legislation tends to be adapted to local situations.

Hazardous wastes disposal is an environmental "hot button" around the world. Essentially every respondent to our survey indicated that there was some type of law relating to hazardous waste management. However, the degree of regulation including manifesting, liability, and the other elements central to the Resource Conservation and Recovery Act (RCRA) and Superfund Amendments and Reauthorization Acts (SARA) varies widely. Europe's policy is nearest the United States with some type of manifesting and remedial clean-up activity present in all industrialized countries. Incineration is the predominant disposal route, although there has been some indication that wastes were previously dumped in Eastern Europe. Korea and Taiwan also have aggressive hazardous waste management

programs. By comparison, Latin America's waste management activities are much less advanced. In poorer countries of the world, it is probable that ocean dumping occurs.

Every country responding to our survey indicated that some type of refinery waste water treatment is currently required by law. Again, however, the level of treatment varies. Among less prosperous countries, regulations were significantly different for streams emptying into rivers than into the ocean.

In the developing Far East and parts of South America, the greatest threat to waterways is not refining, but municipal wastes. Since the refining industry is owned by the government in many of these areas, funds to deal with infrastructure development of the cities are given precedence over refinery clean-up projects. Although there are normally regulations on Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), and heavy metals throughout the world, the level of monitoring and enforcement varies. In Europe and Japan, water legislation is seen to be reasonably close to U.S. standards. Discussions with equipment vendors who sell to all three markets indicated that there is little difference in effluent specifications.

GOVERNMENT ECONOMIC POLICY

In almost every industrialized country and many developing economies outside the United States, the government has a close relationship with the refining industry. In some countries, the government completely owns the industry. In others, the government holds an equity position ranging from a few percent to majority ownership. As a result, the relationships between foreign governments and their industries are decidedly more intertwined than in the United States.

Government ownership and control does not guarantee profitability for foreign industry. Frequently, government goals—job formation, product supply security, hard currency generation—are substantially different than those of private industry. However, we believe that the relationship between government and industry outside the United States provides less uncertainty regarding future regulation and costs. Compare, for example, the status of hazardous waste disposal regulations in Europe with those in the United States. Although both have regulations requiring proper disposal, many European governments own and operate incineration facilities. In the United States, private industry is given the requirement to dispose of wastes, then left with the challenge of permitting incineration equipment or landfills.

ISSUES

Three issues have been identified that can, in our judgment, impact the U.S. refining industry:

- **Dumping**—In the United States, a refiner cannot make reformulated gasoline by simply reblending pools to put benzene and higher aromatic blendstocks into conventional gasoline. At this time, no such limits exist outside the United States. We believe that an offshore refiner who produces an increment of reformulated gasoline by "dumping" into local markets is at a significant cost advantage to a U.S. refiner.

- **Residual Fuel Oil Issues**—Currently, there are proposals to significantly lower sulfur content of bunker fuel. Although these are not law, such a ruling, in our judgment, would impact worldwide refining requirements. Additionally, many countries are tightening specifications on resid burned as fuel. We expect considerable pressure to produce low-sulfur/low-metals resid in the future.

- **Trends in Communist and Formerly-Communist Areas**—The former USSR has historically been a significant supplier of fuel oil, and especially distillate, into Europe. Prolonged interruption of this supply would seriously impact refined product trade in Europe, the U.S. East Coast, and the Caribbean.

DATA SOURCES AND METHODOLOGY

Data Sources

Pace completed its analysis of foreign environmental trends with aid from a variety of sources.

- Industry literature (e.g., *Oil and Gas Journal, Hydrocarbon Processing, Platts*, etc.) was very helpful, highlighting both current and forecast environmental standards.

- Conservation of Clean Air and Water Europe (CONCAWE), an industry group, has published numerous studies detailing the cost of various environmental initiatives.

- Recently, Pace completed a variety of studies relating specifically to refining construction and operation outside the United States. Areas covered in this work include Canada, the Caribbean, Europe, the Pacific Rim, and Venezuela.

- Interviews were conducted with both industry and government personnel abroad. These were invaluable in learning how laws are actually implemented.

- Pace distributed an environmental survey to 20 countries, asking questions about refined products specifications, refinery waste disposal and other environmental issues.

Survey

In an attempt to better define current and future environmental practices governing the refining industry outside the United States, Pace conducted a survey of major industrialized nations and several developing countries. Telephone calls were placed to consulates or embassies for each of the 20 target countries to obtain names and telephone and facsimile numbers for environmental authorities within the country. Our target list included the major countries of Europe, Canada, Mexico, Venezuela, Argentina, Japan, Korea, Taiwan, India and several developing countries in the Far East. A copy of the survey is shown as Appendix I. Questions focused on four areas:

FIGURE C-1

FOREIGN GOVERNMENT & THE REFINING INDUSTRY

	Government Ownership	Government Support	Objectives	Capital Formation	Market Interest	Environmental Authority	Ongoing Relationship
N.W. Europe	Some Equity	Grants, Tax Holidays,	Jobs	Private	Local & Export	Local	Relatively Poor
S.E. Europe	Some Equity	PLUS Loan Guarantees	Jobs	Private & Government	Local & Export	Local	Relatively Poor
Middle East OPEC	Equity	Total	Products vs Crude, Nationalism	Government & Private	Export	Federal	Good
Canada	Some Equity	Loan Guarantees, Grants	Jobs	Private	Local & Export	Local	Fair
Central & South America	Equity	Total, No Competition	Products vs Crude	Government & Private	Export	Federal	Good
Japan	MITI	Local Market Consideration, Tariffs	National Wealth	Private	Local	Local	Good
Caribbean Islands	Mostly Private	Grants, Tax Holidays	Jobs	Private	Export	Federal to Nonexistent	Fair to Good
Non-OECD Asia	Some Equity or Private	Grants, Tax Holidays, High Tariffs	Jobs/Economic Growth/Refining Self Sufficiency	Private	Local & Export	Federal	Good
United States	Private	Local Tax Relief	None	Private	Local	Federal/ Local	Poor

- Product specifications
- Water quality regulations
- Hazardous wastes
- Legislation and procedures.

While there were quantitative questions regarding specifications, most of the environmental practices questions were qualitative in nature.

We distributed twenty survey forms and received at least partial answers from one-half of those surveyed. The level of response varied considerably. Notably, our efforts to obtain data from Japan have met with minimal success. Overall, however, we are very satisfied with the survey. It has helped us form opinions on environmental regulations in nearly every world region as well as indicated future trends.

In most countries, the survey was completed by knowledgeable personnel within the environmental agency. In a few countries, however, we had to obtain information from personnel in operating companies rather than the environmental agency. Although we view these responses as generally accurate, we are concerned about the accuracy of our responses from Venezuela specifically.

GOVERNMENT RELATIONSHIP WITH THE REFINING INDUSTRY

Background

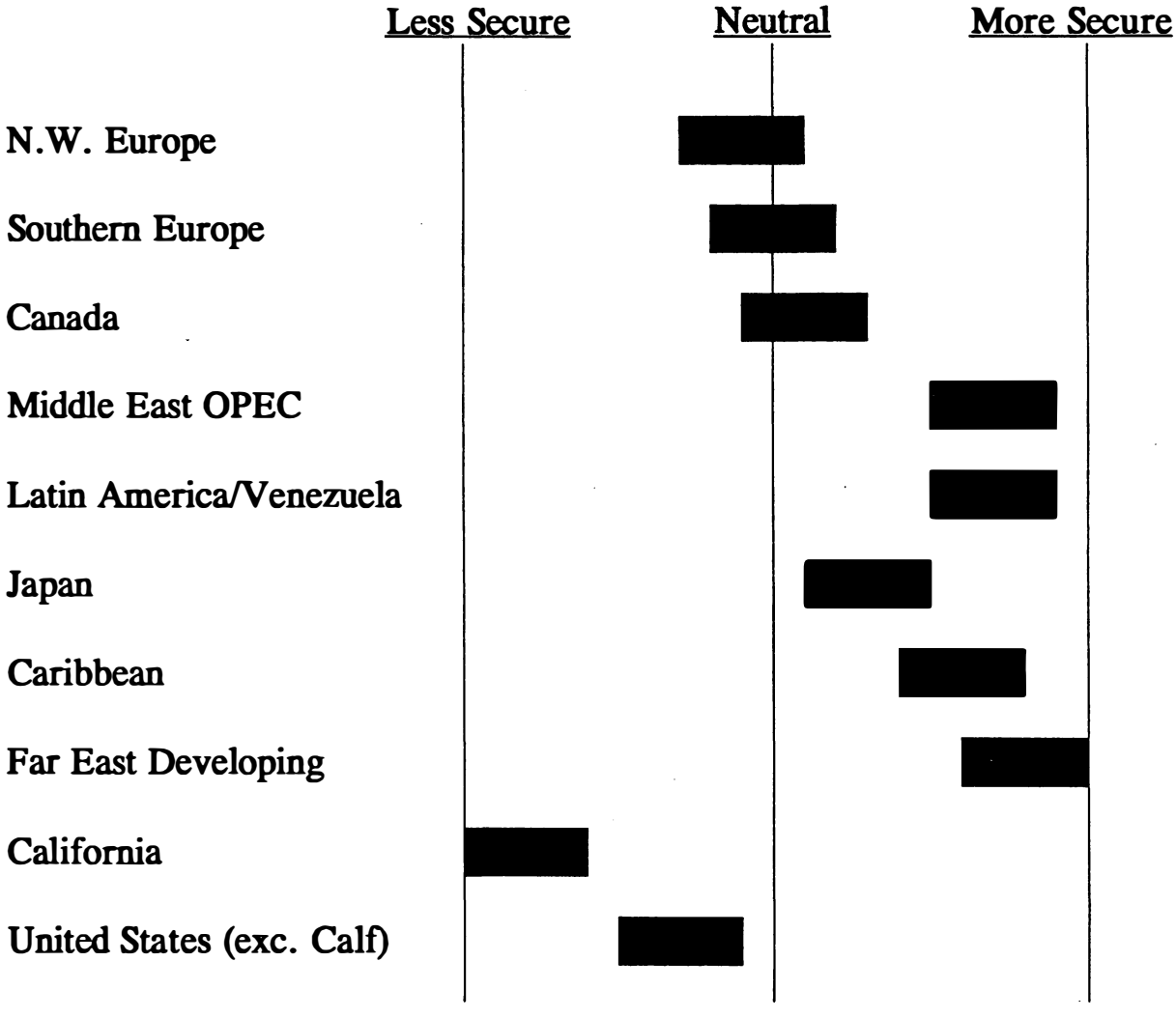
When discussing how future environmental trends may develop, it is useful to first detail the driving force behind the change. The level of government involvement in the refining industry often determines both the scope and severity of regulations. Through research, interviews, and analysis, Pace has evaluated how governments in various regions relate to their respective refining industries. Our results have been tabulated and appear as Figure C-1. Rather than discuss each country in detail, our comments on this topic will focus on different types of government/refining interrelationships.

Government Ownership

The United States is nearly unique in that there is minimal government ownership of crude oil production and no ownership of refining or marketing. Thus, the refining industry and the legislative agencies are separate entities. This distinction causes a divergence of goals; while the Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) only desire a cleaner environment, the oil companies must balance their environmental efforts with their need to generate income and survive. Thus, the passage and enforcement of new standards are likely to be more iterative in the United States than in regions where the refining and legislative bodies have similar aims.

FIGURE C-2

GOVERNMENT RELATIONSHIPS WITH THE REFINING INDUSTRY



In Europe, governments frequently have small equity positions in national oil interests. With this minority position, government ownership makes the regulatory process less complex, since the government is, to some degree, legislating its own behavior. The situation in Canada is similar with the government owning part of the country's refining industry. In both the Middle East and much of Central and South America, the government ownership of the oil industry is almost complete. Again, this eases the regulatory process.

Japan has no formal government ownership of refining assets, but through MITI exerts control over many aspects of Japanese industry. The existence of MITI will enable Japan to function more like a country in which the government has equity control than a country with distinct separation of government and industry.

The islands of the Caribbean are similar to the United States in that production, refining and marketing assets are privately held. In most of the Caribbean, however, there is only one real oil company per country, not a plethora like in the United States. Thus, while it may still be difficult for environmental authorities and industry to agree on an environmental program, it will no doubt be easier than in the United States.

Government Support and Ongoing Relationship

The level of government support in foreign refining ranges from tax holidays and loan guarantees in Europe and Canada to total support in countries with state-owned firms. Figure C-2 is a conceptual effort to rank the relationships between government and their indigenous refining industries. Government support of the refining industry is an indicator of their willingness to legislate constraining environmental regulations on it. Simply, the further to the left on Figure C-2 a particular government is, the more likely they are to pass laws making refining less profitable.

Objectives

Although refining is a fairly capital-intensive enterprise, many foreign governments' main objective in refining is job formation. The refinery itself may not employ many people, but, these governments' theorize, the downstream industries as well as offshoots (petrochemicals, etc.) are labor-intensive.

Another objective of government involvement in refining is unique to OPEC member countries: maximizing the value of crude oil production. By establishing refining centers near large markets, these crude producers are afforded an additional measure of market control. Additionally, by diversifying their holdings, they can better weather downturns in either industry. Saudi Arabia and Venezuela's recent forays into U.S. refining are examples of this sort of behavior.

A final type of governmental objective in refining is self-sufficiency. To reduce balance-of-payments deficits and aid industrialization, some non-OECD Asia governments foster

refinery development. They hope to consolidate their growing petroleum needs by limiting their dependence on foreign refiners. These nations also see petroleum refining as a necessary step on the industrialization ladder. Once refining is in place, profitable downstream industries can follow.

Market Interest

It is obvious that certain countries support refinery expansion primarily for export markets. For example, Brazil continues to invest heavily in its export refineries whose main customers are PADD 1 gasoline consumers. But even countries that add capacity to meet internal demand often over-build, reasoning that the excess product can be sold abroad. In time, they expect domestic demand will catch up with capacity and their exports will dwindle. These countries, if they have internal monopolies, can also subsidize exports by raising domestic prices. However, recently these governments have found it harder to raise capital for export-based refineries, as lending institutions worldwide have begun to demand higher levels of equity participation. Capital shortfalls, for example, have slowed Indonesian refinery construction plans significantly.

Environmental Authority

The level at which environmental regulations are enforced is critical to how various regions' environmental policies are implemented. For example, CARB supersedes EPA authority in California. Under U.S. law, states cannot legislate less than EPA standards, but they can require more. Thus, U.S. environmental authority is empowered at both the federal and local level, with the federal setting minimum standards.

Some countries in Europe, Canada, and Japan have far different systems. In each, the authority in the region, province, or prefecture supersedes federal authority. In Europe, for example, lesser-developed areas in a country have set environmental standards below federally set levels to encourage investment. Overall, the environmental authority in most European countries is empowered at a more local level than in the United States.

In Canada, federal law only sets the rules. The power of enforcement lies with the provinces. Additionally, similar to California, provinces can legislate tougher standards. Since the federal government has little enforcement power, the provinces can tailor their own standards.

In Japan, prefectures are empowered similar to provinces in Canada. Additionally, local or city authorities can legislate tougher standards than the prefectures. And while the imposed standards may be rigorous, the method of enforcement is more interactive in Japan than other countries. The environmental authorities confer with industry and together they reach agreements. This more conciliatory approach lends itself to greater compliance than in countries, like the United States, which have more adversarial systems.

In non-OECD Asia, Middle East, and Central and South America the environmental authority as it exists is federally based. Of course, many countries in these regions have only rudimentary environmental protection agencies, but when they develop, they will be federal authorities. However, industrial growth in many of these countries can take precedence over green agendas. Notable exceptions to this are South Korea, Singapore and Taiwan which have altered their approach after suffering some of the environmental penalties that can accompany rapid growth. Other less industrialized countries will likely be slow to learn this lesson. Their infrastructure is so rudimentary that legislating environmental laws before a problem exists will be next to impossible. There is, however, a school of thought that expects that as industrialized countries begin instituting environmental initiatives, other nations will follow suit. While this may occur in limited arenas, Pace believes that the sheer cost of environmental regulation will limit their unmitigated spread.

Summary

A government's relationship with the refining industry sets the tone for how environmental regulations are legislated and enforced. In the United States where there is little government support, the regulations sometimes appear to significantly limit refinery construction in places making it a less desirable activity. Clearly, California falls under this heading. This is not true for most other world regions. In Europe, Canada and Japan, which are closest to the United States in this regard, government and the refining industry share similar goals. Oil producers and lesser-developed countries view government interest in refining as vital to national economic health—a belief that can supersede environmental agendas. These attitudes carry over into how environmental legislation is proposed, passed, and enforced.

ENVIRONMENTAL TRENDS

Background

A variety of environmental trends have influenced both the tenor and content of recently passed regulations. This section will discuss how these trends have developed, what legislation they are fostering today, and where future pressure will be applied. Specifics regarding refined products specifications will be detailed in the next section.

Types of Legislation

In the simplest sense, environmental legislation can be seen as being the result of four different types of pressure or impetus:

- **Health Concerns**—Legislation relating to lead in gasoline, toxic, or safe drinking water is motivated primarily by the desire to protect human

health. As discussed above, the intensity of such legislation varies worldwide.

- **Air Quality**—Legislation dealing with ozone is directed toward the need to improve local air quality in cities. Gasoline reformulation is the most obvious example of such legislation. Although there is certainly a human health component of these initiatives, it is less direct than legislation relating to toxic.

- **"Other Living Things" Legislation**—Water pollution rules, acid rain concerns, land usage limitations and hazardous waste regulation are directed not only toward humans, but fish, fowl, animals, and trees.

- **Global Initiatives**—The Carbon Tax concept is an effort to see the world as a single ecosystem that should be protected globally. Such initiatives tend to be more conceptual in nature and thus carry less weight with the public than problems that are encountered in everyday life, such as cleaning up a dead river.

There are obviously overlapping interests in these four delineations, but the framework serves as a means of categorizing environmental rules.

Classifying Countries

With respect to environmental initiatives, it is reasonable to consider the countries of the world as being in one of four categories:

1. **Highly Developed Economies**—Major OECD nations (e.g., United States, Germany, and Japan).

2. **Newly Industrialized Economies**—Small countries that have recently experienced rapid industrialization (e.g., South Korea and Taiwan).

3. **Developing Economies**—Nations which may have significant industrial bases or large populations but have been hampered by large debts or poorly managed economies (e.g., Mexico and Brazil).

4. **Troubled Economies**—This category includes most countries in Africa, much of Eastern Europe, and the poorer countries of Asia.

The extent to which environmental legislation in a country has evolved is a function of its position on the economic ladder. Environmental rules cost money, thus economic tradeoffs

are part of environmental legislation. In wealthier economies, environmental pressures such as various global initiatives can be addressed while poorer countries react to more immediate and direct pressures. Obviously, countries in central Africa are more concerned with the logistics of feeding their people than the need for gasoline reformulation in their smoggy cities. Similarly, in most of Eastern Europe, getting their economies back on track, while not precluding environmental concerns, will likely take precedence over green initiatives.

ENVIRONMENTAL INITIATIVES

Carbon Tax

The growing concern about ozone depletion and greenhouse gases has led to calls for a carbon tax. This tax would be based on both the heat values of the fuels and their polluting qualities. Thus, different fuels would be taxed differently: coal most severely, oil moderately, and natural gas least. Using a tax incentive to foster a more environmentally benign fuel slate, encourage conservation, and expand alternative energy sources is clearly the intention of the proposed law. But since this issue has not been discussed seriously in the United States, the world's biggest CO_2 emitter, adoption of such laws outside the United States will be slow in our judgment.

The European Community (EC) has been evaluating a $10/bbl tax on carbon in fossil fuels. The proposed tax would be "fiscally neutral," meaning other taxes in each country would be reduced such that the total tax burden remains unchanged. Strong disagreement has come from two fronts. First, OPEC has registered its complaint since its oil is unfairly taxed already in the form of coal subsidies provided by Germany, France and Spain. Major European oil companies have also expressed vocal opposition, agreeing with OPEC's stance. Second, many EC members take the position that since the United States is responsible for more CO_2 emissions than Europe, the United States should move to curb emissions first. Additional dissent within the EC, driven by heavy industry's governmental pressure, makes any sort of binding resolution unlikely in the near term.

If passed, however, the economic effects of such a tax could be profound. Any increase in price will likely restrict demand. Without support, this will lead to a price drop which will hurt all crude oil producers. Additionally, the third world, which is responsible for a growing share of emissions, will likely forestall any plans to limit CO_2 emissions until they have become more industrialized. Since the intended effect of the carbon tax is a reduction in emissions, simply making it less expensive to use fossil fuels in areas without regulations will not work. Countries like India and Indonesia have flatly refused to discuss a carbon tax since they perceive increased CO_2 emissions as requisite for rapid development. In their view, it is unfair for nations that have already moved up the industrial ladder to hamper the progress of others.

TABLE C-1

1988 PER CAPITA TRANSPORTATION FUEL CONSUMPTION

City	Country	Population Density (Persons/Sq. Mile)	Gasoline Consumption (BPY[1]/Sq. Mile)	Diesel Consumption (BPY/Sq. Mile)	Total Transportation Fuels Consumption (BPY/Sq. Mile)
Los Angeles CMSA [2]	U.S.	15,777	169.4	29.9	199.3
New York CMSA [2]	U.S.	38,701	127.5	40.5	168.0
London	U.K.	16,480	57.2	20.7	77.9
Mexico City	Mexico	58,025	90.6	34.9	125.5
Tokyo	Japan	15,673	31.6	22.9	54.5

[1] BPY = Barrels Per Year

[2] CMSA = Consolidated Metropolitan Statistical Area

Sources: DOE/IEA International Petroleum Review, U.S. Statistical Abstract

Ozone

Ozone is undoubtedly the most discussed air quality issue. Photochemically sensitive compounds (e.g. Volatile Organic Compounds [VOC's], NO_x) are a contributing factor in the smog that blankets several cities with inversion problems. Los Angeles, Athens, and Mexico City are examples of where topography contributes to smog formation. Regulations requiring minimum oxygen content in gasoline have been passed for several "ozone and CO non-attainment" areas of the United States.

Although there are certainly cities with severe ozone problems outside the United States, the means of dealing with the problem differ. While reformulation of gasoline will be law in some areas of the United States and several other countries, it is unlikely to be adopted everywhere else for several reasons:

- Most countries consume far less gasoline than diesel fuel, thus reformulation would have a lesser effect on overall pollution.
- Fuel consumption per capita outside the United States is low by U.S. standards due to the extremely high taxes placed on refined products and the abundance of mass transportation.
- Since taxes, thus fuel prices, are high in other world regions, the cars of choice tend to be much more efficient than in the United States.
- Gasoline consumption per person per square mile, as shown in Table C-1, is far lower outside the United States.

Several cities where smog is a problem will likely move to curb VOC and NO_x emissions, either by requiring fuel reformulation, which helps the fuel burn more cleanly, or simply limiting the number of cars driven.

Acid Rain

Sulfur is emitted from autos, industries, and power plants as SO_2 and SO_3. These compounds are soluble in water, forming sulfurous (from SO_2) or sulfuric (from SO_3) acid, and return to earth as rain. This problem of acid rain is most pronounced in regions with large sulfur emissions nearby and igneous geology. The sulfur sources can also be miles away but along the prevailing wind's path (e.g., the U.S. Midwest polluting eastern Canada, the U.K. polluting Europe). Acid rain is often blamed for ruining the pH balance in lakes and rivers. This imbalance can lead to problems in fish breeding, oxygen starvation, and other harmful effects. But these problems are most pronounced in lakes with igneous formations. Regions with sedimentary geology have lake floors composed of limestone which buffers the acid, negating the rain's effects.

Thus, the eastern and midwestern United States, through Canadian pressure, and Europe have been at the forefront of the move to limit sulfur emission.

Green Parties

Background

During the 1980's, political parties with green agendas gained power in several areas and radical environmentalists were elected to legislative branches. These groups put saving the environment at the top of their priority list and received considerable public support. Germany especially was influenced by the Green Party and adopted many of the strictest environmental standards in Europe.

Europe

In Europe, these parties have lost most of their strength. Traditional political parties have adopted green agendas and sapped the Green's support. Pace does not expect Green parties to influence European refining in the foreseeable future. But since they have brought these issues into the mainstream, their agendas live on. Thus, though the political pressure to clean up the environment may be lessened somewhat, it has not dissipated.

Far East

In the Far East, Green parties have more strength than in Europe. Japan and South Korea, especially, have active green movements. We expect that, similar to Europe, these parties' agendas will be adopted by other parties and the Greens will lose power.

Summary

In both the Far East and Europe, some of the environmental issues on the green platform will continue to impact area refiners, since the driving force behind Green parties, public sensitivity to the environment's fragility, will likely persist long after the parties themselves have disappeared.

D

REFINED PRODUCT SPECIFICATIONS

OVERVIEW

As part of the analysis of product specifications, it is helpful to compare refined product usage patterns worldwide. Table D-1 compares usage of major products in parts of the world. As shown, product usage in the United States is far more weighted toward gasoline than the rest of the world. In Europe and the OECD Pacific, distillate is the main product while residual fuel oil has a significant market share in Latin America. It is therefore logical that product specifications are directed toward products and environmental problems which are most critical to each area.

GASOLINE

Background

California has passed the most stringent gasoline specifications in the world. Table D-2 presents these specifications and their dates of implementation. It is possible that the entire United States will move towards each of these specifications, though maybe at levels less severe than those legislated in California. Figure D-1 presents a timeline of U.S. gasoline specifications as well as forecasts of various world regions. Each specification is detailed below.

Lead

Limiting lead usage in gasoline is perhaps the best example of human health legislation. Most OECD members are currently phasing out leaded gasoline. United States consumption has dropped from 6.6 million BPD in 1974 to 380,000 in 1990. Pace expects lead to be slowly removed from the U.S. gasoline pool through 1995, when the Clean Air Act prohibits its use. As of January 1, 1992 all cars sold in Europe must use unleaded fuel. This is the first step towards removing lead from the gasoline pool. The OECD Pacific region is already practically lead free and other Pacific nations are instituting phasedowns as well.

In the developing economies, lead phasedown initiatives have been proposed, but not acted on yet. We expect these regions will begin to move towards unleaded gasoline after 2000.

Figure D-2 presents a summary of lead specifications in each region.

TABLE D-1

1989 MAJOR PRODUCT SLATE
% OF TOTAL DEMAND

	GASOLINE	DISTILLATES*	RESID
UNITED STATES	48	32	9
CANADA	37	35	12
N. EUROPE	26	44	14
S. EUROPE	17	38	31
OECD PACIFIC (Japan, Australia, New Zealand)	21	36	18
OTHER W. HEMISPHERE	29	31	27

* Includes light heating oil, jet fuel, and kerosene.

Conclusions:

Outside United States - less concentration on gasoline; no end point pressure.

TABLE D-2

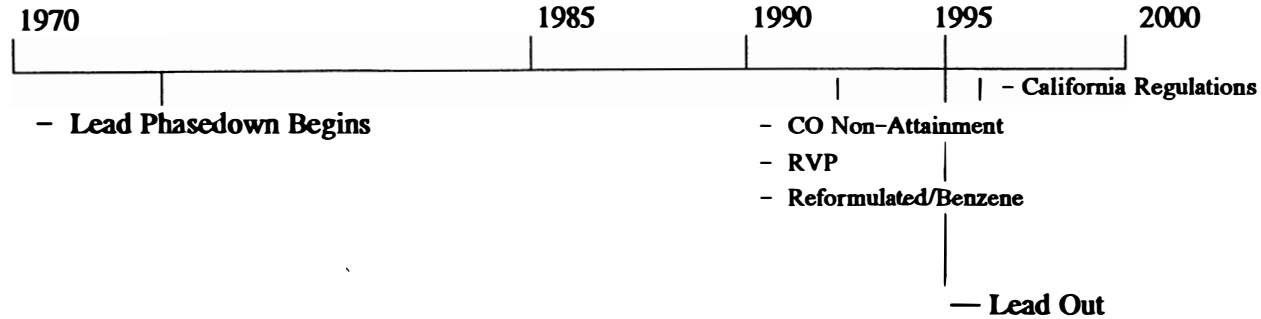
CALIFORNIA GASOLINE SPECIFICATIONS

Fuel Property	Amount in Conventional Gasoline	1996 Limits
Sulfur (wt ppm)	150	40
Benzene (vol %)	2.0	1.0
Aromatics (vol %)	32	25
Olefins (vol %)	9.9	6.0
Oxygen (wt %)	0	1.8-2.2
90% Off (°F)	330	300
50% Off (°F)	220	210
RVP (psi) *	8.5	7.0

** Applies during summer only.*

FIGURE D-1

U.S. GASOLINE TIMELINE



Region	1989 Demand (MMBPD)	Type of Specification: Lead Reduction	Benzene Reduction	Aromatics Reduction	Olefins Reduction	RVP Reduction	90% Off Reduction	Sulfur Reduction
Europe	3.0	Started 1992	Possibly by late 1990s	Post 2000	Post 2000	n.a.	Not Before 2000	Possibly by late 1990s
Japan	0.7	Completed 1988	Possibly by late 1990s			n.a.	Not Before 2000	Possibly by late 1990s
United States	7.3	Started 1974; Comp. 1995	1996	1996	Possibly 1997	1980–1995	Possibly late 1990s	Possibly late 1990s
California	0.9	Completed 1992	1996	1996	1996	1980–1996	1996	1996
Non-OECD Pacific	0.5	Completed Post 2000	Increasing	Increasing	Increasing	n.a.	n.a.	Not Before 2000

FIGURE D-2

LEAD LEVELS IN LEADED GASOLINE
(grams/liter)

Region	Current Range	Actual Average	Average Regional Specification	1995	2000	2010
Canada	0.03	0.03	0.03	0	0	0
N.W. Europe	0.15-0.25	0.17		Lower	0	0
Mediterranean		0.3	0.3	Lower	0	0
Middle East	0.0-0.53		0.34	Lower	Lower	0
Latin America			0.5	0.5	0.5	Possibly Lower
OECD Asia	0	0	0	0	0	0
Non-OECD Asia			0.2	Lower	Lower	0
China	0	0	0	0	0	0
USSR/Eastern Europe	0.65		0.65	0.65	Possibly Lower	Possibly Lower
United States	0.03	0.03	0.03	0	0	0

FIGURE D-3

CONTRIBUTION OF MAN-MADE BENZENE EMISSIONS (EUROPE)

	% OF TOTAL
GASOLINE ENGINES	80 - 85
PETROLEUM REFINERS	0.3 - 1.5
COKE OVENS	0.3 - 3.0
CHEMICAL INDUSTRY	1 - 11
HEATING, DOMESTIC	3 - 7
GASOLINE DISTRIBUTION	2.6 - 6.0
SOLVENT USES	1 - 4

SOURCE: OECD, 1986

Benzene, Aromatics, and Olefins

Benzene has been in the environmental spotlight recently and has been classified as a carcinogen. Now, its removal from the air and water has become a top priority in many countries. Based on data from CONCAWE, gasoline engines account for four-fifths of benzene emissions in urban areas as shown on Figure D-3. Thus, limiting the benzene content in gasoline has become a "hot button" item. Pressure to limit benzene is most intense in the United States where 1 volume percent maximum has been established for both California gasoline and U.S. reformulated.

As Figure D-4 shows, the United States has by far the lowest benzene concentration in its gasoline pool. Since benzene is a valuable chemical product in the United States, its extraction from gasoline components is profitable. This results in a lower nascent benzene concentration.

Europe's benzene levels average 2.7 percent. Table D-3 presents benzene levels for several European countries. Note that countries with little catalytic cracking will tend to have higher benzene concentrations in gasoline components. Sweden, where the current benzene average is 3.8%, has moved to reduce the maximum level to 3 percent. Pace expects that benzene levels will be decreased similarly in most industrialized nations over the forecast period.

Canada is also considering tightening their benzene specifications. The Canadian government, as well as Petro-Canada, are in constant contact with CARB, and obtain all their proposed regulations. It is likely that Canadian specifications will mirror U.S. ones. Unlike reformulation, which addresses a specific problem and thus may not be regulated everywhere, benzene's toxicity will lead to its reduction in most areas over the next decade.

Aromatics and olefins react with NO_x emissions to form ozone, thus contributing to smog formation. The United States will possibly tighten olefins and aromatics in the future, but perhaps not as severely as in California.

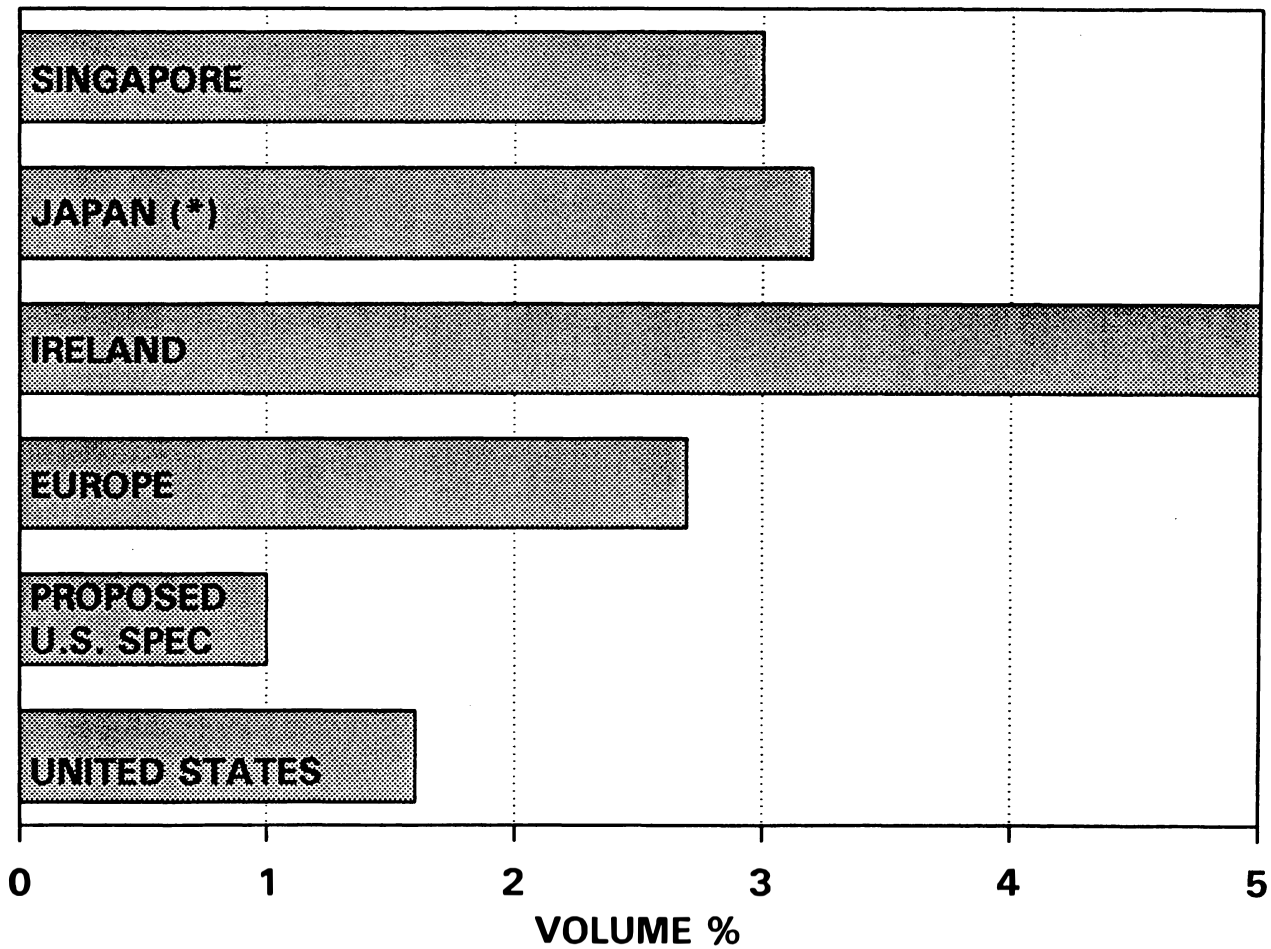
As they shift to unleaded gasoline, several large non-OECD Asia countries (South Korea, Indonesia) will necessarily increase benzene, aromatics, and olefin levels to boost clear pool octane. This situation will persist for several years, lasting until adequate catalytic cracking capacity is added to allow these countries to utilize significant amounts of cracked stocks in their gasoline pool.

RVP Reduction

The United States has made several RVP reductions over the years. The most stringent will take effect in California, where CARB has limited the maximum allowable pressure to 7.8 by 1993 and 7.0 psi by 1996.

FIGURE D-4

BENZENE IN GASOLINE - 1991



(*) Estimate

Source: CONCAWE

TABLE D-3

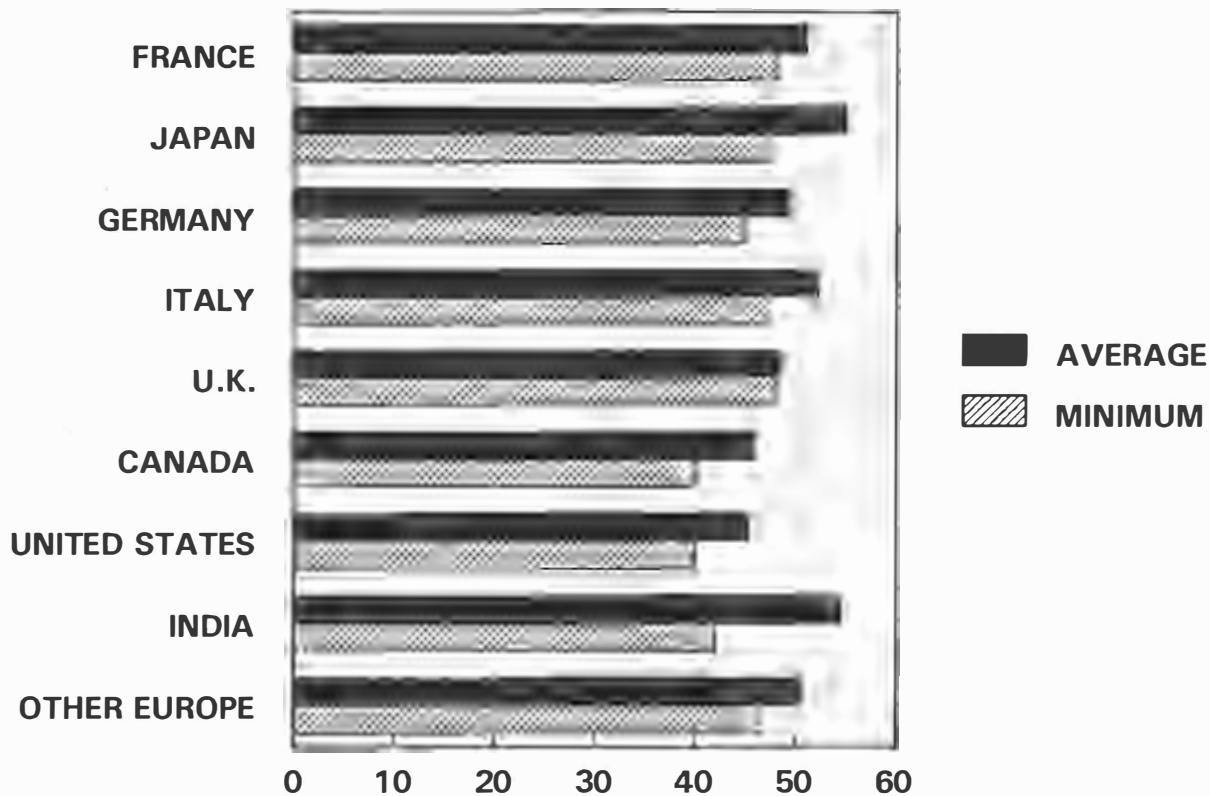
1989 EUROPEAN GASOLINE BENZENE CONCENTRATION

Country	Benzene (Vol. %)	Consumption (MBPD)
France	2.1	428
Germany	2.6	687
Italy	2.6	307
Spain	1.6	188
U.K.	3.4	559
Other Europe	2.8	642
Weighted Average	2.7	
Total		2,811

Source: CONCAWE

FIGURE D-5

DIESEL SPECIFICATIONS - 1991
CETANE INDEX



Source: Pace Consultants Inc.

RVP reduction is not an issue elsewhere since butanes have considerable value as a product and are usually removed from gasoline components during processing.

90 Percent Off Reduction

Only California has passed a regulation calling for a reduction in the cutpoint for gasoline. This rule has a double effect, when combined with the RVP reductions, of reducing the amount of hydrocarbons per barrel available for the gasoline pool. It is possible that the rest of the United States will follow California's lead, but not until the late 1990's.

Outside the United States, the 90% off point is generally lower than in the United States due to higher distillates demand. Thus, it is unlikely that this specification will be tightened anywhere else before the year 2000.

Sulfur Reduction

Since sulfur tends to concentrate in the heavier fractions of the barrel, meeting sulfur specifications in gasoline is usually not difficult. However, as shown in Table D-2, California has passed regulations limiting sulfur to a level at which it is expensive to remove. The United States might follow California's lead, though likely with a less stringent specification.

Since sulfur primarily comes from cracked gasoline stocks and, in countries outside the United States, gasoline is made mostly from reformate, gasoline sulfur content outside the United States tends to be lower. Thus, it is unlikely that this specification will be significantly tightened anywhere else before the year 2000.

DIESEL

Cetane

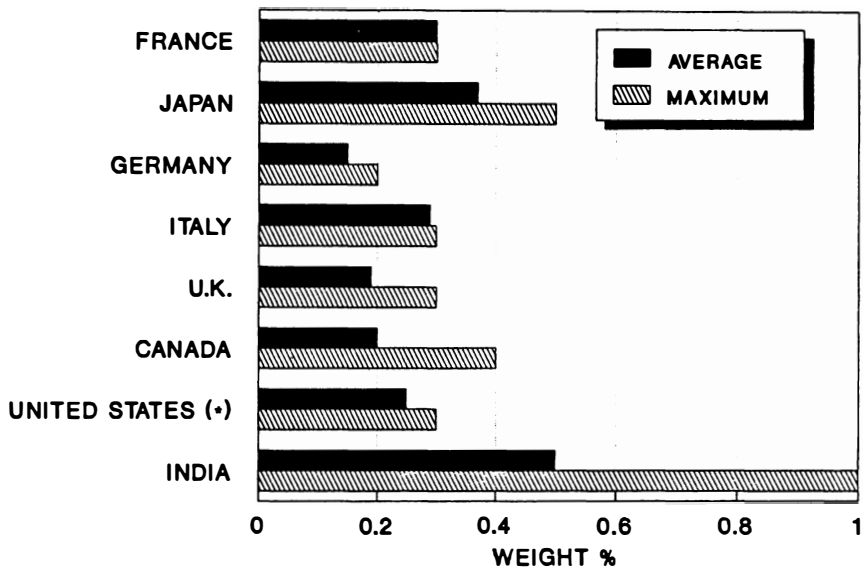
Like octane in gasoline, cetane is a performance specification for diesel fuel. Figure D-5 presents cetane averages and minimums for several large consuming nations. Note there is currently little pressure on the cetane specification. Since most diesel is made from virgin stocks, we expect that meeting cetane specifications will not be difficult throughout the forecast period.

Sulfur

Figure D-6 presents average and maximum sulfur content for several large consumers. Note that these countries represent roughly one-half of the estimated 7.4 million BPD of diesel consumed in the World Outside Communist and Formerly Communist Areas (WOCA) in 1989.

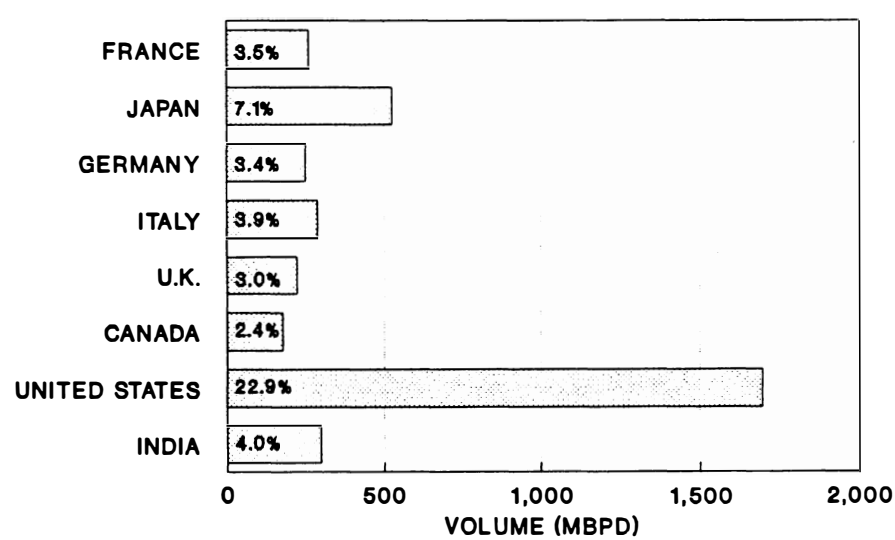
FIGURE D-6

DIESEL SPECIFICATIONS - 1991
SULFUR



(•) Typical maximum & average

1989 DIESEL CONSUMPTION
(% of WOCA)



- TOTAL WOCA VOLUME = 7,410 MBPD
- VOL. FROM ALL OTHER = 3,693 MBPD
- VOL. % FROM OTHER = 49.8%

The United States will require 0.05 wt% sulfur in all on-highway diesel by late 1993. Canada and Europe will follow suit in 1995 and 1996, respectively. Japan will reduce sulfur in diesel to 0.2 wt% in 1994 and 0.05 wt% in 1997. Most non-OECD Asia nations will legislate 0.2% sulfur by 2000. Mexico has plans to limit diesel sulfur to 0.05% by 2000 as well. At this time it is unclear whether sufficient capital will be available to reach this goal. Figure D-7 presents a summary of sulfur restriction regulations by region.

Figure D-8 presents a timeline of U.S. diesel specifications. Several regions' plans to move to lower sulfur grades are indicated as well.

Aromatics

Only California has discussed lowering the aromatics content of diesel fuel. Tentatively, diesel sold in California after 1993 can contain no more than 10% aromatics. Currently, aromatics average between 20 and 30 percent. There is a provision under the CARB regulation that will allow the sale of diesel fuel which matches the test fuel in performance and pollution, even if its aromatics content exceeds 10 percent. To date, no fuels have passed the test. Significant additional processing will be required to meet the new specification. At this time, the outcome of the regulation is uncertain.

If 10% aromatics becomes the norm in California, it is possible that the United States may look at limiting aromatics on a nationwide level. This action is unlikely before the late 1990's.

In both Europe and Japan, the high cetane specification guarantees lower aromatics. Thus it is unlikely that aromatics specifications will be tightened in these regions.

RESIDUAL FUEL OIL AND HEATING OIL

Background

Several issues concerning residual fuel oil will impact the cost of refining over the next several years. As the industry prepares for another round of conversion additions to meet forecast light products demand, the value of the bottom of the barrel continues to decrease. Countries are tightening their specifications on fuel oil burned for power generation and there has been talk of limiting the sulfur content of bunker fuels, a traditional sink for poor quality material.

Sulfur and Metals Limits in Residual Fuel Oil

Many nations now limit the allowable sulfur content of this fuel oil due to environmental concerns. The following table presents sulfur restrictions at several locations:

FIGURE D-7

SPECIFICATIONS FOR SULFUR IN DIESEL
(Weight Percent)

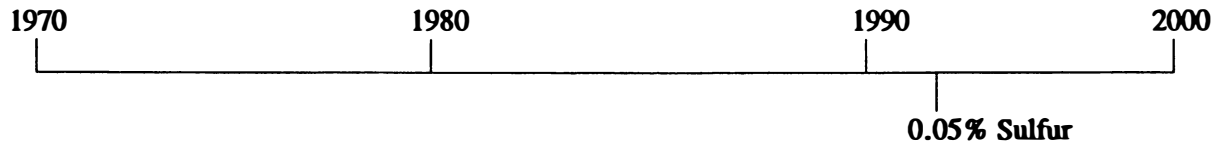
Region	Current Range	Actual Average	Average Regional Specification	1995	2000	2010
Canada	0.05-0.30	0.2	0.5	0.05	0.05	0.05
N.W. Europe		0.2	0.3	0.05 *(1)*	0.05	0.05
Mediterranean		0.3	0.4	0.05 *(1)*	0.05	0.05
Middle East		0.7	0.9	Lower	Lower	Lower
Latin America		0.6	1.0	1.0	0.05 *(2)*	0.05 *(2)*
OECD Asia		0.4	0.5	0.2	0.05	0.05
Non-OECD Asia	0.1-1.0	0.4	0.7	0.2	0.2	0.2
China		0.4	0.6	0.6	Possibly Lower	Possibly Lower
USSR/Eastern Europe		0.2	0.2	0.2	Possibly Lower	Possibly Lower
United States	0.05-0.30	0.2	0.2	0.05	0.05	0.05

(1) 1996 for these regions; not 1995.

(2) May be difficult due to capital constraints.

FIGURE D-8

U.S. DIESEL TIMELINE



Region	1990 Volume (MMBPD)	Type of Specification		
		Sulfur Reduction	0.05% Sulfur	Lower Aromatics
Europe	2.0		1995	Improbable, Spec on Cetane
Japan	0.6		1997	Improbable, Spec on Cetane
United States	1.7		1993	Possible
California	0.2		1993	Late 1993 ??
Non-OECD Asia	1.3	1995-2000		No
Middle East	0.6	1995-2000		No

Country/Region	Sulfur Maximum	Approximate 1990 Consumption (MBPD)
U.S. PADD 1	0.3-1.2	580,000
U.S. West Coast	0.25-1.0	250,000
Italy	1.0-3.0	574,000
USSR	N/A	2,817,000
China	N/A	653,000
Japan	0.5-3.0	851,000
Mexico	No limit*	463,000
Rest of World		6,305,000
Total		12,493,000

*Mexico plans on using scrubbers to limit SO_x emissions, not enforcing sulfur restrictions.

Points to note concerning residual fuel oil include:

- In Europe, Denmark, the Netherlands, Norway, Luxembourg, and Sweden all have 1% sulfur ceilings on residual fuel oil. By 1995, we expect that Austria, Finland, Germany and Switzerland will follow. Additionally, there is a proposal before the EC to limit the entire continent to 1% sulfur by 2000.

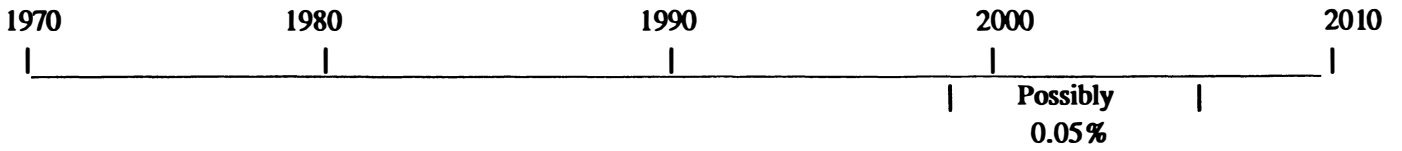
- In Canada, reducing the sulfur in residual fuel oil is part of a nationwide incentive to reduce overall SO_x emissions to 50% of 1980's level by 1994.

- Japan uses scrubbers now for its coal burning facilities. In general, Japan has been very aggressive in reducing SO_x emissions in the past, and we expect this trend to continue.

- In the Far East, regulations vary widely. While much of the region has fairly lax restrictions on sulfur content, some countries continue to tighten specifications. In South Korea, current levels of sulfur in residual fuel oil range from 1.6 to 2.5 percent. There are plans to reduce the maximum allowable sulfur content to 1% by 1995. Additionally, emission regulations near Seoul, South Korea are tighter than in the rest of the country.

FIGURE D-9

U.S. NO. 2 FUEL OIL TIMELINE



Region	1990 Volume (MMBPD)	Current Spec	Typical	Type of Specification	
				Sulfur Reduction	0.05% Sulfur
Europe	2.4	0.3	0.25	Possibly 0.2% by 1994; possibly 0.1 by 1998	after 2000
Japan	0.5	0.5	0.3 *	Possibly 0.2% by late 1990s	after 2000
United States	1.5	0.5	0.3	Possibly 0.05% by late 1990s	after 2000
California	< 0.1	0.5	0.2	Possibly 0.05% by late 1990s	after 2000
Non-OECD Asia	< 0.2	0.7	0.3	No change	after 2000
Middle East	0.6	1.0	0.5	No change	after 2000

(*) Estimate

In most regions, heating oil specification is the same as diesel specification.

- In Latin America and Africa, few tight sulfur restrictions exist. Mexico is planning to burn high sulfur residual fuel oil and scrub the stack gas to reduce SO_x emissions. They are pursuing this course of action because they believe it is cheaper. We expect little tightening of residual fuel oil sulfur restrictions in these regions through 2000.

Recently Italy and Germany passed regulations limiting the amount of nickel in residual fuel oil burned for power generation to 20 and 25 ppm, respectively. The perceived toxicity of organo-nickel compounds is behind the regulations.

Sulfur Limits in Heating Oil

Sulfur specifications for No. 2 heating oil are not as stringent as for No. 2 diesel fuel. While the United States has not yet moved towards restricting sulfur in heating oil, Europe will limit sulfur to 0.2 wt % by 1994 and is discussing further restrictions. Since this fuel comprises almost 50% of Northern Europe's and 25% of Southern Europe's distillate demand, any restrictions will have a telling effect. Additionally, in Europe distillates are a bigger market than in the United States. Distillate consumption in Europe is one and one-half times gasoline consumption; in the U.S. it is nearer one-half.

Tighter sulfur specifications in oil are under review in a number of industrialized countries, principally Japan. Since markets tend to be very local, lowering specifications in major metropolitan areas is a possibility. We are not aware of any new country-wide specifications at this time. Figure D-9 presents details of sulfur specifications for No. 2 heating oil.

FACILITY REGULATIONS

BACKGROUND

When analyzing regulations addressing the refinery as a facility—that is, hazardous waste, water treatment and air point sources—it is useful to compare the major elements of U.S. law with foreign regulation. In each area, we will therefore begin with a discussion of the major legal milestones in the United States then discuss differences worldwide.

AIR

In any country, regulation of refinery air emissions in interrelated with fuel and product specifications. Thus, analysis of trends is somewhat redundant to analysis of product specifications.

In the United States, the landmark legislation involving air quality is the Clean Air Act of 1970, which established standards for quality in U.S. cities. The other air related issues that have influenced U.S. refiners are more related to worker protection than ambient air standards. These include various OSHA regulations and NESHAP (National Emission Standards for Hazardous Air Pollutants).

Point source regulation of the U.S. refining industry includes standards for VOC emissions that mandate such practices as double seal pumps, flange leak detection programs, and tank design standards. Based on discussions with refiners in Europe, such practices are being adopted in Germany, the Netherlands and the other major industrialized Northern European countries. Southern Europe is reportedly several years behind, but is also working on VOC regulation. In general, even Northern Europe has been less aggressive than the United States regarding VOC and its role in ozone formation. Germany, for example, has pursued VOC regulations as hazardous pollutants rather than as a potential ozone precursor, and does not have an ambient ozone standard at this time.

In Canada, VOC's are recognized as both ozone precursors and toxic substances. There is an existing ozone standard that is reportedly more rigorous than the U.S. standard. VOC reduction activities include leak programs and storage tank design. The country has set a goal to reduce VOC's by 40% by the year 2000.

In the Far East, VOC is less aggressively regulated. In the developing economies, new storage tanks are typically installed with "level one" emission control systems similar to U.S. practice ten to fifteen years ago while existing tanks may not be controlled at all. Despite

Japan's obvious air quality problems, strict controls of VOC's are not required. Refining practices in Latin America regarding VOC control are similar to that of the Far East.

In the more developed economies, nitrous oxides are pursued more aggressively as an ozone precursor than are VOC's. Japan, for example, was the first country to use Selective Catalytic Reduction equipment on large combustion equipment. Canada is working to cap NO_x levels through new source standards, while Germany has adopted a very stringent NO_x limit. However, it is not clear whether refiners are strongly impacted by these regulations. Technically, NO_x reduction takes two forms—various burner technologies and combustion zone additives to reduce formation of NO_x and the more expensive technologies to reduce NO_x in stack gas. In the United States, most refineries are able to meet NO_x standards using low NO_x burners. Since NO_x standards are usually more rigorous as the size of the combustion device increases, stack gas treatment may be required only for power plants, and refiners outside the United States may not be greatly influenced.

Hazardous pollutant law is similar to U.S. law only in Northern Europe. In Germany, for example, there is a very aggressive set of standards for over 200 hazardous air pollutants including carcinogens, various inorganic dust particles and specific organic substances. Canada, similarly, has defined several toxic substances and is now establishing programs to set standards by industry. Outside of these areas, there is significantly less legislation regarding toxic. A program to define toxins and establish limits is underway in Japan, but implementation is seen as at least five to ten years away.

WATER

Major water legislation in the United States includes the FWPCA (1972), the Federal Water Pollution Control Act; CWA (1977), the Clean Water Act; and the WQA (1987), the Water Quality Act. Both CWA and WQA address process wastewater, and storm water runoff. Programs include the permitting, spill prevention and dredge and fill regulations. SDWA (1986), the Safe Drinking Water Act, established standards for drinking water and regulated underground injection.

As previously noted, comparison of water regulation is clouded by regional differences within specific countries and the fact that new source standards can be different than standards for existing refineries. The same is true for the United States—zero emission concepts are sometimes discussed as part of new source analysis but are not normally applied to existing systems.

Based on survey results, regulation of oil content, biological sludge, heavy metals and other wastes specific to water is standard throughout the world. All the respondents indicated that refinery water regulations were in place in their country. In half of the countries, storm water from refineries is addressed as part of the regulations and treatment of runoff is required. The recent activity in the United States regarding benzene emissions are, in fact, part of the NESHAP program and are related more to air than water. Nonetheless, it

appears that there is minimal, if any, activity outside the United States similar to the current NESHAP/benzene situation.

Again, European regulations on wastewater are closest to U.S. regulations. Several countries require treatment of storm water runoff, especially for new sources. Based on conversations with refinery personnel in Europe, regulations are less advanced in Southern Europe than in Northern Europe. Regulation in the central part of Germany, along the highly industrialized Ruhr and on the Rhine, are every bit as stringent as in the United States.

Because much of Canada's refining industry is along the Great Lakes or Saint Lawrence Seaway, wastewater regulations at the plants have generally been developed to be part of the international agreements between the United States and Canada on use of these bodies of water. We expect that there would be little difference in water treating cost between the United States and Canada.

While developing Far Eastern countries have considerable interest in hazardous waste, their water regulations are less advanced. Because population growth in the cities has been very rapid over the past decade in Korea, Taiwan, and Thailand, the major emphasis on water pollution is municipal waste. Metals levels in refinery waste water are regulated as part of hazardous waste activities, but overall water treatment for existing refinery specifications are generally less rigid than in the United States and Europe. Our source in India stated that water regulations are specific to rivers—based on his observations, refineries discharging into the ocean are almost unregulated.

Many of the refineries in Latin America are on or near the ocean. Since much of the area is dry and fresh water is at a premium, once-through sea water is normally used as the cooling medium. As a result, the volume of water from many existing refineries is enormous when compared to the United States. Until about 10 years ago, discharge water from the cooling system was not segregated from process water and storm water. As a result, process water was largely untreated. Over the past decade, there have been projects in many plants to segregate and treat process water prior to its release. It should also be noted that newer plants more typically use a closed cooling water loop rather than once-through sea water. Despite these improvements, we believe standards are well behind those of the United States.

HAZARDOUS WASTES

Background

For hazardous wastes, the major legislative reference points include RCRA (1976), the Resource Conservation and Recovery Act; CERCLA (1986), the Comprehensive Response, Compensations and Liability Act; and SARA (1986), the Superfund Amendments and Reauthorization Act. Briefly, RCRA established the manifest system and provided for "cradle to grave" responsibility for companies generating wastes, while both CERCLA and

SARA address releases of hazardous waste and their cleanup and establish the Superfund. Other significant legislation includes HSWA, Hazardous and Solid Waste Amendment in 1984, which expanded RCRA.

Based on survey results, we find hazardous waste to be a major environmental issue worldwide. In most of the surveyed countries, refinery wastes are considered hazardous and are the subject of specific legislation. Additionally, a manifesting system is in place in over half of those surveyed.

As would be anticipated, Europe's hazardous waste regulations are near U.S. standards. There is an active manifesting system in most countries, and, according to our sources, transportation of waste between countries is outlawed. This regulation was developed to eliminate the practice of "disposing" hazardous wastes in Eastern Europe, where the level of treatment was highly suspect. Most of the countries have active programs dealing with abandoned waste sites and cleanup. As is typical in Europe, there exist varying levels of federal involvement in regulation of both disposal and cleanup. In Germany, for example, regulation is established at the state level. It was learned that incineration is the primary disposal technique in Europe. Although land farming is still allowed in some locations, the practice is generally being phased out.

Hazardous waste regulation is also well established in the major industrial countries of the Far East. Although this would be anticipated in Japan, it should be noted that both Taiwan and Korea have well-developed hazardous waste programs. Here, the primary motivating force is land use. Since agriculture and fishing are important in developing countries of the Far East, there has been considerable emphasis on proper disposal. Although there are rules in the less developed countries such as Indonesia and India, private sources indicate that dumping is fairly widespread.

Canada's hazardous waste regulations are also similar to the United States. A manifest system exists, refiners are frequently required to monitor ground water, and sites must be remediated if a refinery is shut down. Land farming of hazardous wastes is allowed, but, according to our source, this practice is under review. Although many environmental regulations in Canada are applied at a local level, it appears that hazardous waste legislation is consistent in the entire country.

In Latin America, hazardous waste cleanup is still in its infancy. According to a U.S. based manufacturer of hazardous waste incineration equipment, the first large incinerator was purchased only recently in Mexico. The representative noted that Venezuela and the other major industrialized countries of South America had only recently discussed site remediation and the ongoing clean up of hazardous wastes generated by industry.

Cost

In order to better compare the cost of hazardous waste compliance, it is helpful to review waste clean up programs, costs, and funding. A recently published API discussion paper

entitled "The Cleanup of Inactive Hazardous Waste Sites in Selected Industrialized Countries" compares the legal status and estimated cost of cleanup in several European countries with the United States. The paper first notes that there is a significant difference in legal exposure among the countries. Under the U.S. Superfund program, companies must face strict liability (liability regardless of whether they are at fault or negligent), joint and several liability and retrospective liability. Of the European countries surveyed, none applied all three liability definitions. Although liability law is still evolving in Europe, only Sweden has legislated strict liability while the Netherlands was the only country where retrospective liability applies.

The survey also includes some rough estimation of costs to clean up existing inactive waste sites. Uncertainty about the scope of future clean up efforts makes direct comparison difficult, but the data available suggest that costs per capita range from $250 to as much as $2,000 in the various countries. The United States is the highest cost country at $2,000 per capita: only the Netherlands, at an estimated cost of $1500 per capita, is close to this figure. Several of the countries have adopted or plan to adopt elements of a "public works" approach to environmental cleanup activities, thereby lowering costs. In Austria, for example, those who volunteer to clean up sites share the costs with the federal government. It is the country's stated intent to avoid litigation costs.

A second source of information comparing cost is a CONCAWE report published in 1989 entitled "Oil Refineries Waste Survey - Disposal Methods, Quantities, and Costs." The report only discussed non-hazardous waste disposal and gave costs ranging up to $100/MT. Our sources indicate that comparable costs for hazardous waste disposal in Europe range between $500 and $1,000/MT. Thus, European disposal costs are between one-fourth and one-half of U.S. costs. This disparity is partially explained by the government's role in the European waste disposal business. Unlike in the United States, European governments are often involved in hazardous waste disposal. Points to note concerning this involvement include:

- Permit costs are less in Europe since the government is siting a facility for their own use.
- Insurance liability costs are lower in Europe.
- Transportation logistics are more expensive in the United States (i.e., waste from Ohio is currently disposed of in New Mexico).

F

ISSUE CASES

BACKGROUND

The intent of the following issue cases is to explore major items that could impact worldwide supply/demand balances and competitiveness. The issues were not examined in detail, but merely discussed so that the National Petroleum Council can determine whether they merit inclusion in further modeling work.

BUNKER FUEL SULFUR LIMITS

Background

The International Maritime Organization (IMO), a subgroup of the United Nations, is discussing a requirement limiting all bunker fuels to 1.5% sulfur level by 2000. This resolution is being discussed by the member countries. One item sure to be disputed is the authority of the IMO to enforce such limits.

If this legislation is passed it would have a tremendous impact on worldwide residual fuel oil balances. Current Pace estimates indicate that demand (1.5 to 2 million BPD) will be very difficult to meet without the addition of desulfurization capacity. Additionally, even if desulfurization capacity is added, the metals content in the available 1000+ fraction may make processing extremely expensive.

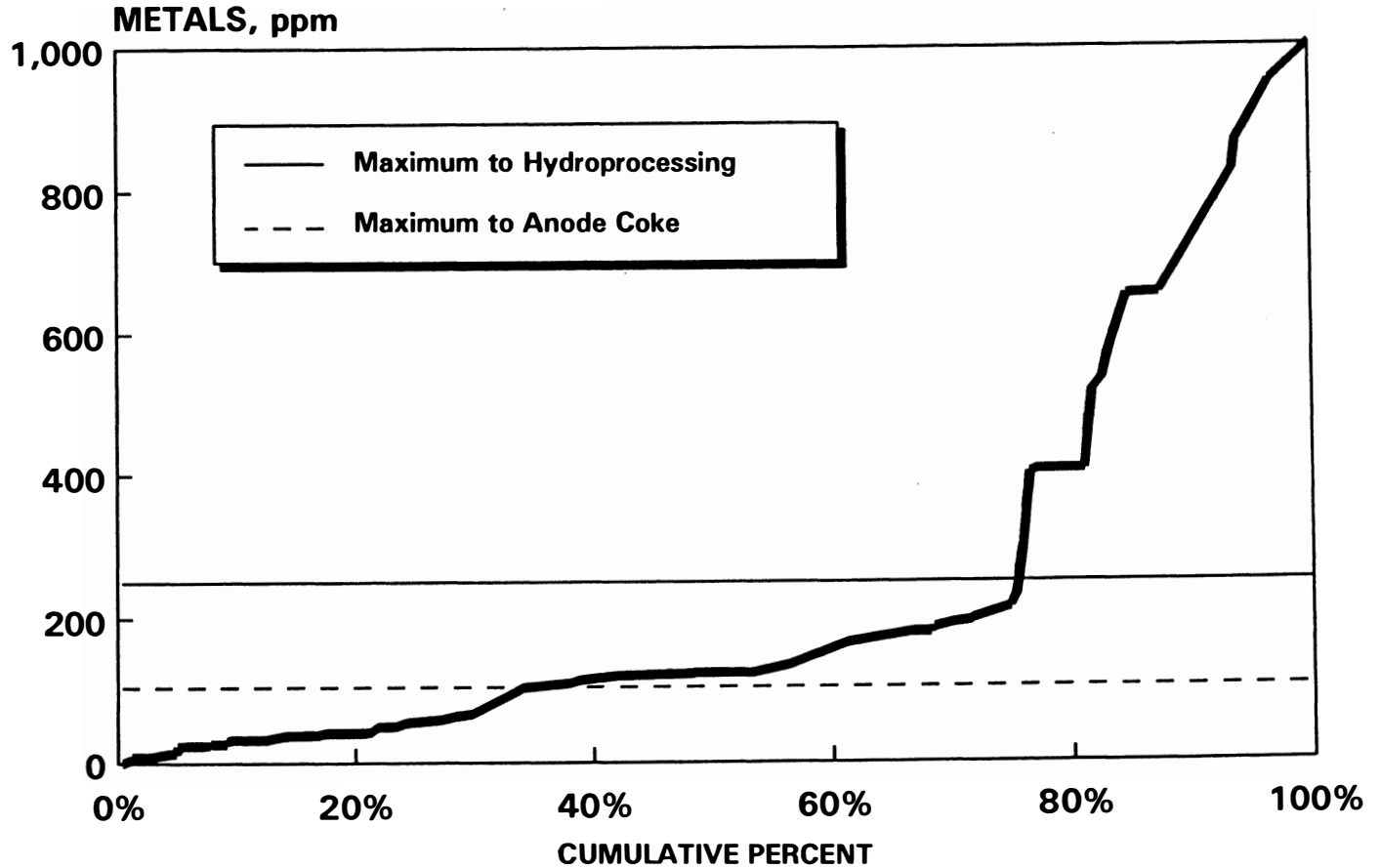
Availability of Low-Sulfur/Low-Metals Residual Fuel Oil

Since both of these issues, as well as the aforementioned discussion of tightening residual fuel oil specifications, deal with the availability of low-sulfur/low-metals residual fuel oil, Pace has examined the current supply of this material. Our analysis appears as Figures F-1 and F-2. **It should be noted that the individual crude oils portrayed in the metals/volume graph are not in the same order as in the sulfur/volume graph.**

Points to note concerning these figures include:

FIGURE F-1

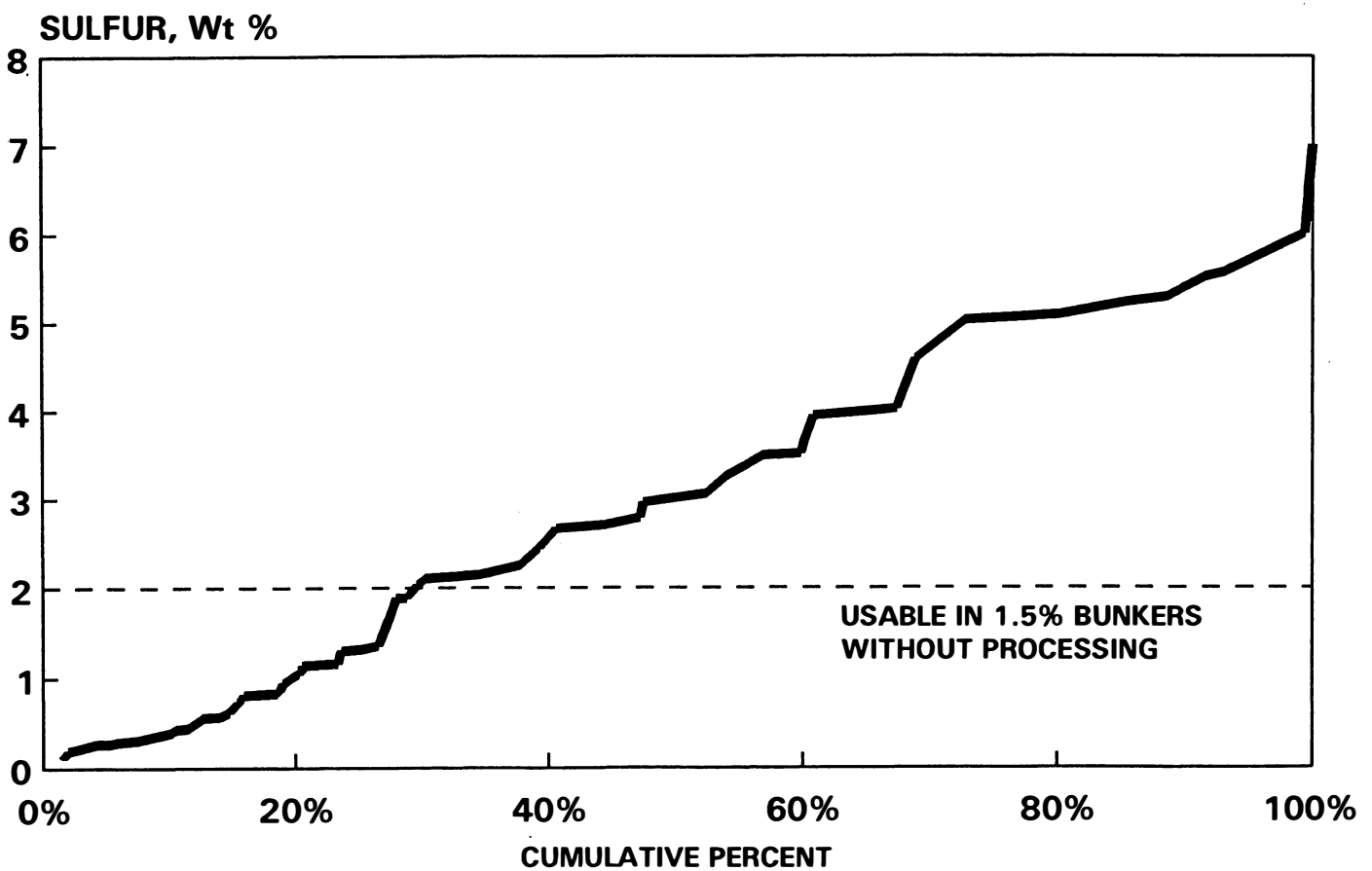
CUMULATIVE METALS IN 1990 WOCA 1000+



Note: 100% = 8.5 MMBPD

FIGURE F-2

CUMULATIVE SULFUR IN WOCA 1000+



- Total available 1000+ in WOCA for 1990 was roughly 8.5 million bbl/day. Of this, 4.4 million BPD went to residual fuel oil, 2.2 million BPD was used as coker feedstock, 1.2 million BPD was sold as asphalt, 500,000 BPD was used as conversion feedstock, and roughly 200,000 BPD went to lubes manufacture and other uses.

- As Figure F-1 shows, an important quality parameter in meeting low-sulfur residual fuel oil demand will be metals content since that determines what is hydroprocessable.

- In an optimal world, the worst feeds (highest sulfur and metals) would go to asphalt and fuel coke, the lowest sulfur residua to very low-sulfur fuel oil, etc.

- Given an estimate of low-sulfur fuel oil demand, anode coker feeds, and other low-sulfur/low-metals uses, we find that the available material to blend the proposed 1.5% sulfur bunker fuel ranges in sulfur between 2 and roughly 3.5 percent. In an optimal world, stocks with reasonably low metals content are available.

- Although such a stock could be desulfurized with traditional downflow fixed bed systems, there is insufficient capacity in the world. Thus, numerous new units would be required to meet this demand.

- In practice, the world cannot optimize the allocation of 1000+ as assumed by the graphs. This means that a portion of the low-sulfur bunker fuel would have to be produced from higher metals feedstock, challenging available technology.

Overall, we find that the requirements of legislation limiting bunker fuel sulfur content to 1.5% would far exceed the industry's current capabilities due to technical and logistical limits.

DUMPING

Dumping by Foreign Refiners

In the United States, a refiner cannot legally produce reformulated gasoline by simply rerouting regulated components such as benzene or aromatics into unreformulated pools. Under the Clean Air Act Amendments of 1990, the composition of non-reformulated gasoline cannot be degraded. Thus U.S. refiners must find ways to avoid production of regulated material or extract these compounds as a petrochemical product. At this time, no such constraint exists outside the United States. In other words, a refiner in the Caribbean can produce reformulated gasoline by increasing the benzene and aromatic content of gasoline sold in his country, or in some country other than the United States.

This procedure, known as "dumping," is far simpler and far less expensive than the procedure prescribed in the United States.

In an effort to quantify this advantage, at least in a preliminary sense, Pace performed several linear program runs to simulate a hypothetical refinery. The bases for these runs were as follows:

- A PADD 3 model assuming 1989 products, crudes, and units was used.
- Our base case consisted of two runs: the first simulated 1989 operations, while the second stipulated that 40% of the pool be reformulated, without dumping. Levels of aromatics and benzene were set at 1989 actuals.
- In the dumping case, 40% reformulated gasoline was produced, but the constraint on aromatics and benzene in non reformulated gasoline was removed. All products other than propane and fuel oil were fixed at the same level as in the base case.
- The model was allowed to build new equipment as required to meet reformulation specifications in both cases. Operating parameters on unit throughput, severity, and feedstock mode were allowed to vary.

Given 1989 prices, we computed an advantage of $0.96 per barrel of reformulated gasoline if dumping were allowed. Although the details of the model are beyond the scope of this discussion, the choices the model made are reasonable. If dumping is allowed, the refiner can buy less expensive natural gasoline as a blendstock, raise reformer severity and throughput and produce a less expensive total pool.

Our calculation of this advantage is premise laden; in other runs, we have computed advantages for the offshore refiner ranging from $0.25 to over $1.00/barrel. Clearly, though, dumping is a serious issue and U.S. refiners should treat it as such. At this time, there are no laws controlling dumping offshore. We anticipate legislation limiting benzene in European gasoline will be passed soon. This, and possible additional limits on aromatics in the European pool, will likely limit the ability of European refiners to dump undesirable components into their own gasoline pools. No such constraints or concerns are, in our judgment, probable in Latin America or the Far East.

EXPORTS BY U.S. REFINERS OF UNDESIRABLE GASOLINE BLENDSTOCKS

Background

Similar to the above analysis of foreign refiners routing undesirable blendstocks into local pools to meet tightening U.S. specifications, there is also the possibility that U.S. refiners

TABLE F-1

GASOLINE DEMAND - 1989
(MILLION BBL/DAY)

UNITED STATES	7.3
N. EUROPE	2.2
S. EUROPE	0.8
MIDDLE EAST	0.5
CANADA	0.6
OTHER W. HEMISPHERE	1.3
OECD PACIFIC	1.0
NON-OECD PACIFIC	0.5
CHINA	0.4
USSR/EAST EUROPE	1.8
TOTAL	17.0

Result: ***Niche Markets***

blend the material into gasoline sold offshore. Benzene and heavy aromatics will become increasingly difficult to utilize in the U.S. gasoline pool, and the possibility of U.S. refiners exporting them must be evaluated. The products can be exported into either petrochemical markets or as gasoline components. Both markets are briefly analyzed below.

Petrochemical Market Outlook

One outlet for undesirable U.S. gasoline blendstocks is the petrochemical industry. Refiners may hope to sell what amounts to low-value gasoline components in the United States as higher value petrochemicals abroad. Pace does not see this possibility as likely. Significant amounts of petrochemical capacity have come on stream in recent years and new expansions are expected. Both European and Far Eastern ethylene plants utilize naphtha as their main feed; thus the resultant product slate is long on benzene and other aromatics. Latin America is also not an export option since countries there typically exports small quantities of aromatics to the United States.

The only possible market for benzene and aromatics sold as petrochemicals may be Eastern Europe and the former Soviet Union. Clearly it will take five to ten years for these economies to recover. When they do, however, they will comprise a large untouched market where consumer goods may enjoy startling growth. This is not to say that these markets will require infusions of petrochemicals, merely that the potential for growth is present.

Exporting U.S. Gasoline Components

Another possible market for U.S. benzene and aromatics is foreign gasoline pools. As stated above, foreign refiners may route these components into their own gasoline pools to make U.S. exports out of less restricted components (i.e. alkylate). United States refiners may consider exporting their own benzene and aromatics to these countries. Pace does not expect that this approach will offer outlets of sufficient size to accommodate many refiners for two reasons. First, as Table F-1 shows, gasoline demand in major areas outside the United States is comparatively small, so the volumes involved may be insignificant. Second, Europe is currently discussing benzene specifications and will likely limit concentration in gasoline. Thus, U.S. blendstocks will likely not be welcome.

Thus, the only markets left for this type of export are Latin America and possibly the Far East. Lead phasedown is already a reality in the Far East and is being discussed in Latin America. As described in Section D, countries in the Far East are expecting an increase in aromatics levels in their gasoline in order to meet octane requirements. Thus, some additional aromatics may be required in that region. This demand, however, will be tempered by two factors: first, over 500,000 BPD of catalytic cracking capacity is slated to come on stream in the Far East by 1995. This capacity will limit the need for aromatics to boost octane. And second, as shown in Table F-1, total gasoline demand in the Far East is too small to provide a reliable, long-term sink for aromatics.

TABLE F-2

COMMUNIST AND FORMERLY COMMUNIST AREAS
OIL STATISTICS – 1989

	Oil Production		Refining Capacity		Average Refined Products Demand		Crude Oil Exports	Crude Oil Imports	Product Exports	Product Imports
	(MBPD)	(% Share)	(MBPD)	(% Share)	(MBPD)	(% Share)	(MBPD)	(MBPD)	(MBPD)	(MBPD)
Bulgaria	6	0.05	318	2.10	260	2.51		245	1	31
Czechoslovakia	3	0.03	482	3.19	302	2.91		327	33	16
Hungary	45	0.37	233	1.54	191	1.84	5	142	34	28
Poland	3	0.03	408	2.70	332	3.20		295	16	67
Romania	180	1.49	654	4.32	324	3.12		330	206	1
USSR [1]	11,764	97.15	12,386	81.87	8,634	83.16	2,826	396	1237	44
Yugoslavia	73	0.60	646	4.27	302	2.91				
Others	34	0.28	0	0.00	37	0.35			12	
Total USSR/ Eastern Europe	12,109		15,128		10,383		2,830	1,735	1,539	186
China	2,730		2,200		2,150		550	39	105	63
Grand Total	14,839		17,328		12,533		3,380	1,774	1,644	249

[1] *Estimate*

Source: DOE/EIA, PIW, Merrill Lynch

Mexico is discussing a lead phasedown and the rest of Latin America could follow sometime after 2000. If lead phasedown occurs, export of benzene containing blendstocks and aromatics may be desirable.

Summary

Some niche markets for these components may exist in the future, but the export of significant volumes of benzene and heavy aromatics from the United States appears unlikely at this time.

TRENDS IN COMMUNIST AND FORMERLY-COMMUNIST AREAS

Background

This section details trends in the former USSR and Eastern Europe. Since data from this region are rather scarce, few conclusions can be drawn. Nonetheless, the sheer size of these countries in terms of crude oil production (USSR) and possible light products demand create considerable forecast risks. This section will detail those risks, providing a perspective on how changes in these areas could impact worldwide balances.

USSR/Eastern Europe

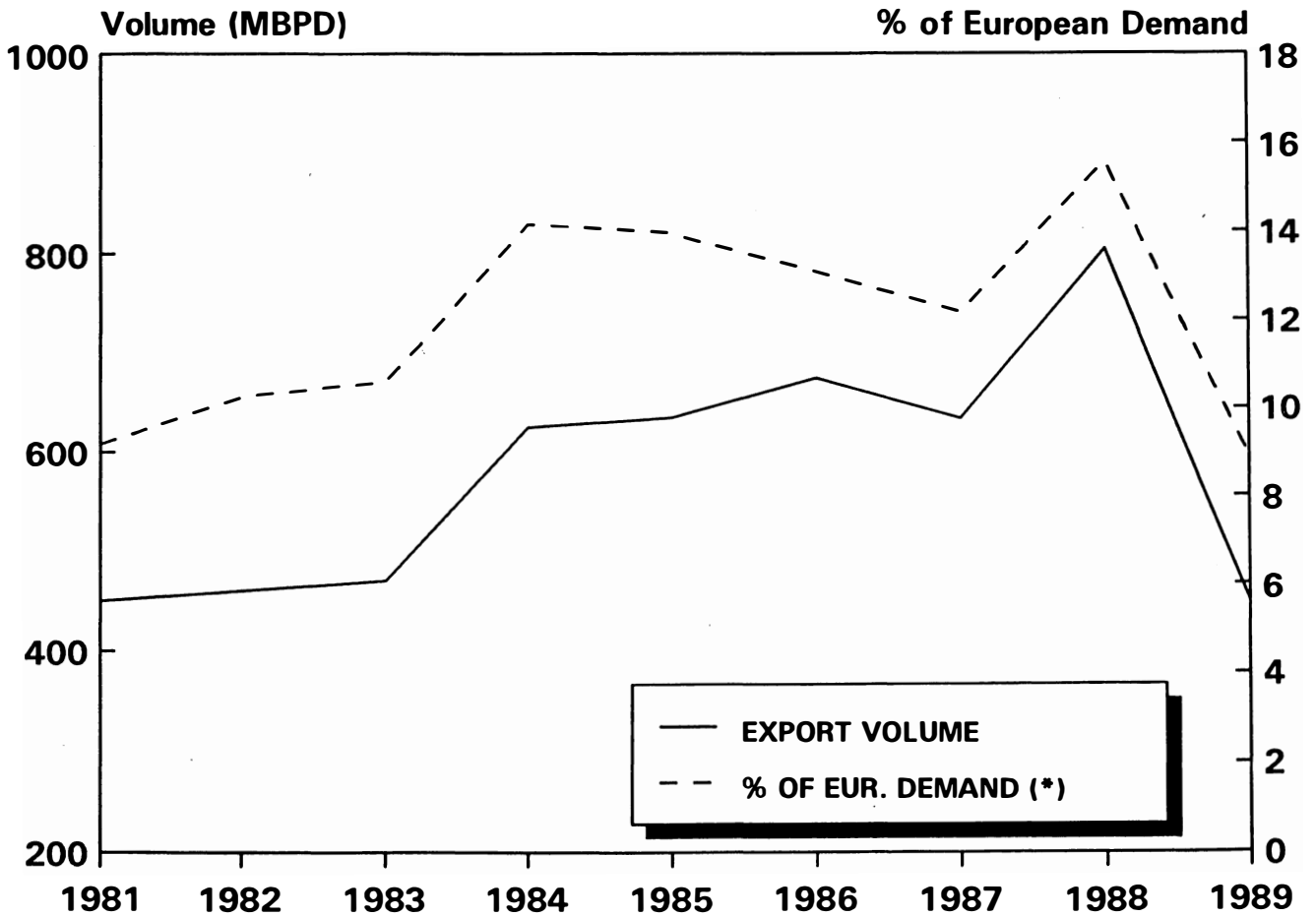
The upheavals occurring almost daily in these countries make any sort of rigorous forecast impossible. Recent refined products demand appears in Table F-2 along with estimated refinery capacities. Points to note concerning this table:

- Total refined products demand plus exports was roughly 11.7 million BPD in 1990, implying a 78% operating rate.
- Several countries (Czechoslovakia, Romania, and Yugoslavia) have spare capacity.
- Bulgaria and Poland are capacity tight and must import products to meet demand.

Pace expects that this region will continue to be able to supply its own demand through the year 2000.

FIGURE F-3

RUSSIAN DISTILLATE EXPORTS



NOTE: Includes exports to CPEs

(*) East & West Europe - excl. USSR

TRADE PATTERNS

Background

Eastern Europe and the USSR export significant volumes of crude oil and refined products to the west. As this region experiences what is sure to be a tumultuous political realignment, concerns have been voiced about the future of these exports. Figures F-3 and F-4 present the history of the USSR's exports of distillate and residual fuel oil to both East and West Europe. The figures also express these exports as a percentage of total European demand.

Distillate Fuel Oil

USSR exports of distillate fuel oil have comprised roughly 10% of East and West Europe's demand since 1981. This supply source is vital to the distillate supply/demand balance in these areas. If stemmed, either by increasing internal demand in the USSR or by declining production by Soviet refineries, the effect on European supply would be very significant. In fact, this increment of supply would be very difficult to replace. Even if European refineries run more crude oil, imports would still be needed to meet demand.

Fortunately, these exports are vital to the USSR's hard currency balance. At today's prices, 500,000 BPD of distillate exports bring in $4.3 billion/year. No matter how tight the internal situation becomes in the USSR, Pace believes these exports will continue near current levels throughout the forecast period.

Residual Fuel Oil

The USSR exports roughly 350,000 BPD of residual fuel oil into Europe, comprising almost 10% of demand. As with distillate, these exports are far too vital (providing $1.8 billion per year) to the USSR's trade balance to be discontinued. Much of this product is sold as E-4, an atmospheric tower bottom used as feed in European refineries.

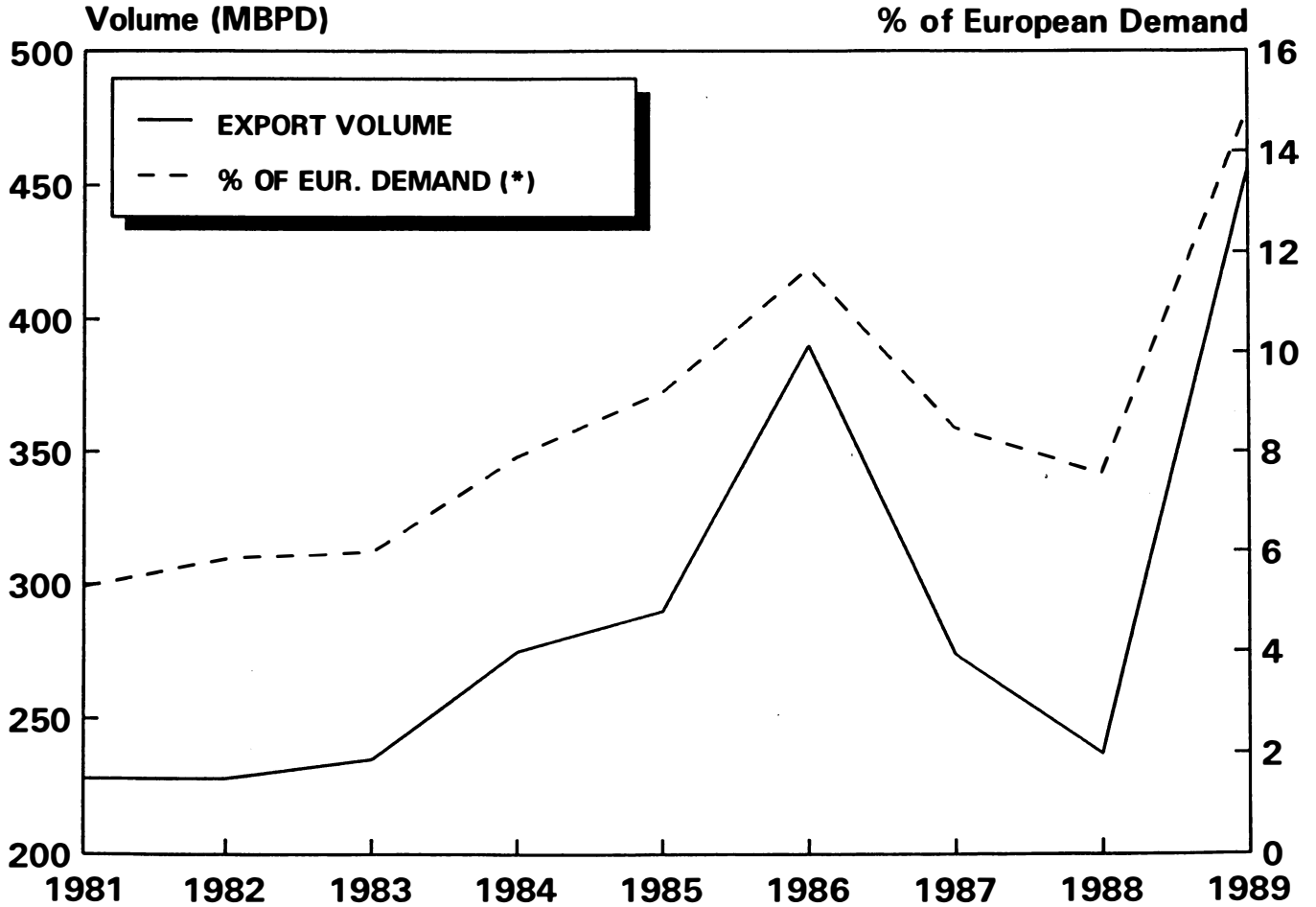
ENVIRONMENTAL REGULATIONS

Internal Consumption Requirements and Current Capacity

Table F-2 presents an estimate of USSR and East Europe's refined products supply/demand balance. Pace expects that some internal adjustment of these numbers has occurred since barrels produced are not sufficient to meet both internal demand and stated exports. Allowing for some creative accounting in this area, the USSR and East Europe appear to be almost in balance.

FIGURE F-4

RUSSIAN RESIDUAL FUEL OIL EXPORTS



NOTE: Includes exports to CPEs

(*) East & West Europe - excl. USSR

While internal needs may increase due to industrialization, supply logistics and the need to continue exports at current levels will temper any increases in real demand. Thus, Pace expects that USSR/East Europe refined product demand will not hinder West Europe's supply through the forecast period.

Ability to Meet EC Specifications

Distillate

The tightening specifications on refined products will not significantly affect USSR/East Europe distillate exports unless Europe moves to reduce sulfur content in No. 2 heating oil. If this does not occur, any exports not meeting the 0.05% sulfur content for diesel fuel sold in Europe will necessarily have to be sold as heating oil. If the specifications on heating oil do tighten, any exports not meeting the heating oil spec will have to be sold as an unfinished product.

Residual Fuel Oil

Since much of the residual fuel oil is consumed as refinery feedstock or bunkers, meeting environmental specifications will not be as difficult for this product. Again, hard currency needs will force this region to continue exports at current levels, even if specifications tighten.

APPENDIX

ENVIRONMENTAL PRACTICES SURVEY

The Pace Consultants Inc. has been retained by the National Petroleum Council to compare environmental rules and legislation pertaining to the refining industry between the United States and other major industrialized countries. The National Petroleum Council is a body made up of representatives of major U.S. oil companies that serve as an advisory group to the U.S. Secretary of Energy.

We would appreciate your assistance by filling out the survey and returning it to us by return telefax within the next week. Our telefax number is 713/661-8476. Alternately, you can call Messrs. Brian Spector, Karl Bartholomew, or John Jenkins in our offices with questions or with your results. The telephone number is 713/669-8800. We thank you for your help and consideration.

The survey has been divided into four groups: questions regarding product specifications for motor fuels used domestically; legislation regarding air and water pollution; legislation regarding hazardous waste; and general questions about your agency.

To meet this objective, we are asking the help of agencies responsible for implementation of environmental rules within each nation.

Product Specifications

Recently, the Congress of the United States passed an amendment to the Clean Air Act that changes the specifications for gasoline used in the most populous cities of the United States. The modifications are aimed at improving air quality primarily through a reduction of ozone and photochemical smog. Although the percentage of gasoline that must meet new specifications depends on the action of specific states, it is estimated that 25-50% of U.S. gasoline will be affected. In addition, specifications have been changed on diesel fuel used in all on-road transportation including automobiles and trucks.

In order to compare your current specifications and plans with those of the United States, we have provided a table listing current specifications, planned specifications, and specifications that are under review or consideration. For this table, the following criteria have been used:

- Current specifications are averages of specifications as of July 1991.
- New specifications refer to those that are now law and must be met within a defined time parameter.
- The term "under consideration" refers to any specification that is not yet law but is being considered or evaluated either by federal agencies or at state levels.

		Yes	No	Under Consideration
1.	Does your agency have a plan in place to greatly reduce or eliminate lead in gasoline?	___	___	___
2.	United States reformulated gasoline will have a maximum content of 1% benzene. Is benzene specified in your gasoline?	___	___	___
3.	United States reformulated gasoline will contain approximately 3.5% oxygen, probably using the additive methyl-tertiary-butyl-ether or ethanol. Will oxygenates be required in your gasoline?	___	___	___
4.	United States reformulated gasoline will have a maximum aromatics content. Although there is some uncertainty, the limit could be 25% by 1997. Will you have a similar specification?	___	___	___
5.	By October 1993, all on-road diesel used in the United States must have no greater than .05 weight percent sulfur. Are there similar plans or concepts in your country?	___	___	___

To the best of your ability, please provide us with current levels of lead, oxygen, benzene, and aromatics in your normal gasoline pool. If legislation has been passed to modify any of these levels, please provide both the new target and the date under the appropriate column.

		Current	Planned	Implementation Date	No Specification
6.	Level of lead gasoline, grams per liter.	___	___	___	___

		Current	Planned	Implementation Date	No Specification
7.	Benzene content of gasoline, LV percent.	___	___	___	___
8.	Oxygen content of gasoline, LV percent.	___	___	___	___
9.	Total aromatics in gasoline, LV percent.	___	___	___	___
10.	Sulfur content in motor diesel, weight percent.	___	___	___	___

		Yes	No	Implementation Date	Under Consideration
11.	In the event your country exports gasoline into the United States, it may be possible for refiners in your country to meet U.S. specifications by raising the benzene and aromatics content of gasoline used within your country. Has this been considered, and is legislation to prevent such blending under consideration?	___	___	___	___
12.	Specifications for sulfur in fuel vary greatly by location in the United States. However, there has been increasing pressure over the last five years to reduce sulfur in fuel used in the power industry. Is the same true in your country?	___	___	___	___

13. If sulfur specifications are being lowered, please provide the approximate percentage reduction and the date. _____(%) _____(Date)

Water Treating

While specifications for products can be compared numerically, it is difficult to numerically compare water pollution limits since the allowable levels of pollutants vary depending on area and waterway. We have therefore structured our questions to compare procedures and philosophy regarding water pollution control from refineries.

		Yes	No	Under Consideration
1.	Does your country have regulations requiring or governing the content or level of chemical oxygen demand (COD), biological oxygen demand (BOD), total dissolved solids (TDS), total suspended solids (TSS), and pH from water discharged from refineries?	___	___	___
2.	Does your country have specific legislation governing benzene content in discharged waters?	___	___	___
3.	Does your country have regulations governing the content of mercury, chromium, and other heavy metals from refinery wastewater?	___	___	___
4.	In the United States, rainwater in process areas and tank farms of refineries must be collected and treated as a wastewater. Is this true in your country?	___	___	___
5.	Must a refiner continuously monitor the quality of water being discharged?	___	___	___
6.	Does your environmental authority also sample refinery wastewater as a means of confirming compliance?	___	___	___

Hazardous Wastes

In the United States, certain wastes from refinery operations including sludges from API separators, dirt from heat exchanger cleaning, and certain spent catalysts are classified as hazardous waste that must be disposed of in an environmentally safe manner. Previously, some material could be "landfarmed," which is a process in which the sludge is spread over the ground and allowed to decay. Landfarming is now outlawed in the United States. Hazardous waste must now be handled either by putting the material in drums and burying it in an environmentally acceptable pit (landfill), or incineration. A previous practice for disposal, deep well injection, has also been eliminated.

Refiners must be permitted as generators of hazardous waste. Any hazardous waste produced must be accounted for by providing the U.S. Environmental Protection Agency (EPA) with a manifest showing the nature of the waste and its ultimate disposal. Generators are responsible for the safe disposal of waste, even if this service is contracted to another firm. In addition, refiners pay a "superfund" tax with monies being used to clean up any existing abandoned hazardous waste dumps in the country.

In order to compare with these practices, please define your country's procedures in the following areas:

		Yes	No	Under Consideration
1.	Are solid wastes from refineries such as oil sludges considered to be a hazardous waste?	___	___	___
2.	Does your country have a manifest system (paper document system tracking movements) for tracking hazardous waste material from the generator to the final disposal?	___	___	___
3.	Is deep well injection allowed?	___	___	___
4.	Is landfarming of refinery solid waste allowed?	___	___	___
5.	Are refiners required to monitor ground water and treat ground water if contamination is found?	___	___	___

		Yes	No	Under Consideration
6.	In the event that a refiner ceases operation at a site, is it necessary to remediate the ground and return the site to its original condition?	___	___	___

General Environmental Legislation and Procedures

Refiners wishing to build a new refinery or make significant modifications must obtain approval from the proper environmental authorities prior to construction. For new sources, an Environmental Impact Statement must be filed. The time required to obtain permits to build is at least one year and can stretch to over two years.

		Yes	No	Under Consideration
1.	Would an Environmental Impact Statement be required to construct a new facility in your country?	___	___	___
2.	Can local environmental authorities overrule federal environmental agencies?	___	___	___
3.	Do existing refineries have to meet the same environmental requirement laws as a new refinery?	___	___	___
4.	To your knowledge, are refiners currently spending new capital for environmental projects in your country?	___	___	___

	Yes	No	Under Consideration
5. Does the environmental agency in your country currently own and use continuous air monitoring equipment in cities and near refineries as a part of an air quality improvement program?	___	___	___

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Appendix L, Section VII-10

(Foreign) Refinery Stationary Emission, Health And Safety (EHS)

Discussions of U.S. environmental costs are included in Chapter Two.

A. Cost Development Assumptions

Key resources considered in developing foreign region environmental assessments included Expert Panel comments (Feb. 1992); the "Government Energy Policy Analysis" paper prepared by Pace for the Foreign Subgroup (FSG); and estimates of U.S. environmental costs provided by the Facilities Task Group (FTG), and Bechtel, as well as utilizing API reported historical cost data and NPC survey results.

1. Catch-up EHS Costs (Table APP.L.VII.10-1)

Overall, foreign regions today are estimated to be where the U.S. was roughly 5-20 years ago in terms of environmental regulations. In effort to recognize "catch-up" costs to bring foreign regions to those 1989 U.S. standards that appear likely to spread overseas, the following assumptions were made:

- As a baseline, an estimate was developed of costs incurred over the 1971-89 period (annualized cents/gallon MJDN costs, including amortization of capital) in bringing the U.S. refining industry to the level of environmental (stationery), health and safety (EHS) standards prevailing in the U.S. in 1989. The baseline estimate was derived using (1) API data on U.S. oil industry EHS investments reported for 1970-84 and (2) NPC Study Survey data on EHS costs for the 1986 forward period. (See Backup Table APP.L.VII.10-1)

  Adjustments were made (1) to convert all costs to 1990 dollars; (2) to exclude product quality related (non-stationary) costs; and (3) to recognize ongoing efficiency improvements and the likelihood that some EHS investments in the eighties were replacements for investments in the seventies that became technologically or environmentally obsolete.

- Canada and NWE in 1989 were estimated comparable to U.S. standards in 1985 and to have already reflected in 1989 costs, roughly 75% of U.S. 1970-89 baseline period costs. Thus, remaining "catch-up" costs to bring these two foreign regions to 1989 U.S. standards were assumed at 25% (100-75%) of above U.S. 1970-89 baseline period costs in cents/gallon MJDN.

- Similarly the Med region in 1989 was estimated to be where the U.S. was in 1980, with 50% of U.S. 1970-89 baseline period costs sunk. The Med is assumed to incur the remaining 50% as "catch-up" costs to be phased in by 2000.

- The Pac Rim, Middle East, Latin America were assumed to be comparable to U.S. in 1970, i.e. no U.S. baseline period costs sunk. Thus "catch-up" costs were assumed at 100% of U.S. 1970-89 baseline costs and phased in by 2010.

- The cents/gallon costs for each foreign region were then converted to annual $Billion, based on 1989 reference case MJDN volumes, on the premise that these environmental costs are for remediation of operations that existed in 1989.

2. New EHS Costs (Table APP.L.VII.10-2)

For the cost of new regulations implemented in the post 1989 period, unit costs (¢/Gal. MJDN) in each foreign region for all model years were estimated as a per cent of corresponding total U.S. unit costs in those same years. Percentages were estimated separately for:

air
water
solids/hazardous waste
health/safety

- Percentage estimates were strictly judgmental, as background resource documents were primarily qualitative in nature and offered some varying opinions.

- U.S. refinery emission costs were by and large remedial in nature, with new process facility investments in both U.S. and foreign areas assumed to meet prevailing environmental standards.

- In general, any new U.S.-type regulations applicable to the developed foreign regions - Canada, NWE, Med - that were lagging the U.S. in 1995, were assumed to reach U.S. standards and costs by 2010 or sooner. The less developed regions of Middle East and Latin America were assumed to lag the U.S. currently and in the future, but narrowing the gap as time goes on.

  The Pac Rim, with a mix of both developed (e.g., Japan, Australia, Singapore) and lesser developed countries (e.g., Malaysia, India), were estimated to be further along environmentally than the Middle East and Latin America.

- The foreign region cents per gallon costs for new regulations were then multiplied by FC-1 reference case MJDN volumes in 1995, 2000, and 2010 to give annual $Billion costs for those years.

3. Total EHS Costs (Table APP.L.VII.10-3)

Total annualized environmental costs ($Billion) in each of the model years for each region reflected the sum of "catch-up" costs and new environmental costs. These total costs were then adjusted using factors of 0.9 (Canada), 0.8 (Europe) and 0.7 (Latin America, Middle East, and Pac Rim).

These adjustments were intended to discount foreign region environmental costs/facilities relative to the U.S. to reflect:

- Average refinery process configurations in the foreign regions having fewer environmentally sensitive processes in place as percentages of crude capacity. For example, foreign regions have far fewer Coking Units, which require costly waste water treatment; or Hydrofluoric Acid (HF) Alkylation units, that in the U.S., require major modifications or replacement with alternative processes.

- A greater sharing of costs of emission control by local or federal governments in the foreign regions.

- More "grandfathering" and, in some lesser developed areas, lower levels of enforcement of environmental requirements.

The resulting environmental annual cost in $Billion was then converted back to cents/gallon based on FC-1 reference case MJDN volumes. For the other foundation cases:

- Year 1995 investments are assumed to be underway or sunk, and not changeable. Therefore, total annual costs in $Billion developed for FC-1 are assumed to be applicable to FC-2 and FC-3 also (Results in unit costs for FC-2 and FC-3 higher than FC-1 because of the smaller demand divisors).

- Year 2000 and 2010 investments are not yet fixed and could be altered depending on demand and supply outlook. In these years, unit costs (¢/gal) developed for FC-1 are assumed also to be applicable for FC-2 and FC-3. (The resulting total cost in $Billion will be lower in FC-2 and 3 because of the lower demands.)

TABLE APP.L.VII.10-1

FOREIGN REGIONS

ESTIMATED ANNUALIZED REFINERY EMISSION, HEALTH & SAFETY (EHS) COSTS

CATCH-UP COSTS

	Base 1970-89 U.S. Cent/Gal.	Canada (1985; 75% Sunk)(a)		NWE (1985; 75% Sunk)(a)		Med (1980; 50% Sunk)(a)		Pac Rim (1970; 0% Sunk)(a)		Middle East (1970; 0% Sunk)(a)		Latin America (1970; 0% Sunk)(a)	
		% (b)	Cent/Gal.	% (b)	Cent/Gal.	% (b)	Cent/Gal.	% (b)	Cent/Gal.	% (b)	Cent/Gal.	% (b)	Cent/Gal.
1995	3.73	25	0.93	25	0.93	25	0.93	35	1.31	35	1.31	35	1.31
2000	3.73	25	0.93	25	0.93	50	1.87	70	2.61	70	2.61	70	2.61
2010	3.73	25	0.93	25	0.93	50	1.87	100	3.73	100	3.73	100	3.73
1989 MJDN Volumes:													
MBD			1374		6322		3168		5754		2838		3410
Billions Gal./Yr.			21.1		96.9		48.6		88.2		43.5		52.3
Annual Catch-up Costs, $ Billions													
In 1995			0.20		0.90		0.45		1.16		0.57		0.69
In 2000			0.20		0.90		0.91		2.30		1.14		1.37
In 2010			0.20		0.90		0.91		3.29		1.62		1.95

(a) Denotes year U.S. is assumed to have achieved the same environmental standard levels prevailing in the foreign regions in 1989 and the % of U.S. 1970-89 baseline period costs assumed to have already been sunk in the foreign regions in 1989.

(b) % of U.S. 1970-89 baseline period EHS costs assumed to be spent in indicated year in catching-up or approaching standards prevailing in U.S. refineries in 1989.

TABLE APP.L.VII.10-2

FOREIGN REGIONS

ESTIMATED ANNUALIZED REFINERY EMISSION, HEALTH & SAFETY (EHS) COSTS

COSTS OF NEW (POST 1989) STANDARDS

		Base Post '89 U.S. Costs ¢/Gal. (c)	Canada %(c)	Canada ¢/Gal.	NWE %(c)	NWE ¢/Gal.	Med %(c)	Med ¢/Gal.	Pac Rim %(c)	Pac Rim ¢/Gal.	Middle East %(c)	Middle East ¢/Gal.	Latin America %(c)	Latin America ¢/Gal.
Air	1995	1.22	85	1.04	85	1.04	75	0.92	35	0.43	35	0.43	35	0.43
	2000	1.55	100	1.55	100	1.55	90	1.40	60	0.93	60	0.93	60	0.93
	2010	1.87	100	1.87	100	1.87	100	1.87	85	1.59	85	1.59	85	1.59
Water	1995	0.73	100	0.73	75	0.55	65	0.47	35	0.26	35	0.26	35	0.26
	2000	1.12	100	1.12	100	1.12	85	0.95	60	0.67	60	0.67	60	0.67
	2010	2.27	100	2.27	100	2.27	100	2.27	85	1.93	85	1.93	85	1.93
Solids	1995	0.40	100	0.40	75	0.30	65	0.26	60	0.24	25	0.10	25	0.10
	2000	1.35	100	1.35	100	1.35	85	1.15	80	1.08	50	0.68	50	0.68
	2010	1.51	100	1.51	100	1.51	100	1.51	100	1.51	75	1.13	75	1.13
H&S	1995	0.36	75	0.27	75	0.27	85	0.31	50	0.18	50	0.18	50	0.18
	2000	0.54	100	0.54	100	0.54	100	0.54	75	0.41	75	0.41	75	0.41
	2010	0.79	100	0.79	100	0.79	100	0.79	100	0.79	100	0.79	100	0.79
Total New Costs, ¢/Gal.														
	1995	2.71		2.44		2.15		1.96		1.10		0.96		0.96
	2000	4.56		4.56		4.56		4.03		3.09		2.68		2.68
	2010	6.44		6.44		6.44		6.44		5.82		5.44		5.44
MJDN, MBD (d)														
	1995			1467		6674		3467		7246		3240		4233
	2000			1435		6555		3573		8106		3570		4723
	2010			1435		6555		3573		9600		4132		5659
MJDN, Billion Gal./Yr.														
	1995			22.5		102.3		53.1		111.1		49.7		64.9
	2000			22.0		100.5		54.8		124.3		54.7		72.4
	2010			22.0		100.5		54.8		147.2		63.3		86.8
Annual New Costs, $ Billion														
	1995			0.55		2.20		1.04		1.22		0.48		0.62
	2000			1.00		4.58		2.21		3.84		1.47		1.94
	2010			1.42		6.47		3.53		8.57		3.45		4.72

(c) For given year, % of U.S. new costs assumed to be incurred in a particular foreign region in same year.

(d) FC1 reference case hydrocarbon MJDN volumes.

TABLE APP.L.VII.10-3

ESTIMATED ANNUALIZED REFINERY EMISSION, HEALTH & SAFETY (EHS) COSTS

ADJUSTED NEW & CATCH-UP COSTS

	Canada			NWE			Med			Pac Rim			Middle East			Latin America		
$ Billions	1995	2000	2010	1995	2000	2010	1995	2000	2010	1995	2000	2010	1995	2000	2010	1995	2000	2010
Catch-up (Table 1A)	0.20	0.20	0.20	0.90	0.90	0.90	0.45	0.91	0.91	1.16	2.30	3.29	0.57	1.14	1.62	0.69	1.37	1.95
New (Table 2A)	0.55	1.00	1.42	2.20	4.58	6.47	1.04	2.21	3.53	1.22	3.84	8.57	0.48	1.47	3.45	0.62	1.94	4.72
Total	0.75	1.20	1.62	3.10	5.48	7.37	1.49	3.12	4.44	2.38	6.14	11.86	1.05	2.61	5.07	1.31	3.31	6.67
Ajustment Factor (d)	—	0.9	—	—	0.8	—	—	0.8	—	—	0.7	—	—	0.7	—	—	0.7	—
Adjusted Total																		
$ Billion	0.68	1.08	1.458	2.48	4.38	5.90	1.19	2.50	3.55	1.67	4.30	8.30	0.74	1.83	3.55	0.92	2.32	4.67
¢/Gal.(Ref. Case)	3.0	4.9	6.6	2.4	4.4	5.9	2.2	4.6	6.5	1.5	3.5	5.6	1.5	3.3	5.6	1.4	3.2	5.4
Memo: Billions Gal./Yr. (e)	22.5	22.0	22.0	102.3	100.5	100.5	53.1	54.8	54.8	111.1	124.3	147.2	49.7	54.7	63.3	64.9	72.4	86.8

(d) Multiplier to adjust U.S. base to a foreign base to recognize lower percentage of processes that involve costly environmental remediation (e.g., coker and HF alkylation units) in the foreign area; greater sharing of some emission control costs burden by governments in foreign regions than occurs in the U.S.; and less rigorous enforcement of regulations in less developed areas.

(e) Reference case hydrocarbon MJDN volumes.

Section VII-11

EIA Integrated Petroleum Supply Reporting System

This appendix provides the EIA data from which the exports from the U.S. were derived.

UNITED STATES EXPORTS

(Thousands of Barrels)

NPC REGION	COUNTRY	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CA	CANADA	174	3463	7890	6646	9898	7681	7704	9112	9107	7106	6451
	SUBTOTAL (PER DAY)	**0**	**9**	**22**	**18**	**27**	**21**	**21**	**25**	**25**	**19**	**18**
LA	ARGENTINA	0	0	431	0	0	479	220	0	0	489	107
LA	BAHAMAS,THE	62	541	928	3149	4004	3517	3182	3752	3601	3276	2698
LA	BARBADOS	35	3	1	0	1	2	2	40	2	0	62
LA	BELIZE	0	0	0	416	624	527	0	40	106	100	65
LA	BERMUDA	0	0	26	283	220	156	13	46	1	18	25
LA	BOLIVIA	0	0	0	0	0	0	147	0	0	1	1
LA	BRAZIL	0	201	0	0	82	164	308	733	20	3589	6531
LA	CAYMAN ISLS	6	0	0	39	0	33	0	5	81	56	209
LA	CHILE	1	0	382	0	222	132	424	788	421	993	740
LA	COLOMBIA	100	3	1	510	2	0	151	1140	100	677	108
LA	COSTA RICA	1	10	2	6	310	11	21	495	1460	1413	1910
LA	DOMINCAN REPUBL	0	0	0	0	331	136	145	329	587	553	748
LA	ECUADOR	703	2352	1267	492	184	218	72	30	38	10	428
LA	EL SALVADOR	0	0	0	48	177	127	205	368	612	1095	1189
LA	FALKLAND ISLS	0	0	0	0	142	38	0	0	0	0	0
LA	FRENCH WEST IND	0	0	0	0	0	0	0	0	0	1	0
LA	GUATEMALA	148	150	0	1495	2026	1970	2473	3117	4173	5096	4323
LA	GUYANA	0	0	0	0	0	0	0	1	0	0	2
LA	HAITI	0	0	0	1	18	0	4	3	5	2	0
LA	HONDURAS	100	1	0	0	103	148	115	29	105	1093	2100
LA	JAMAICA	0	0	25	41	392	413	1031	865	1297	746	374
LA	LEE-WINDWARD IL	0	0	0	0	0	27	0	0	3	112	1
LA	MEXICO	10516	447	517	491	3347	2049	798	4804	7814	16911	25041

UNITED STATES EXPORTS

(Thousands of Barrels)

NPC REGION	COUNTRY	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
LA	NETHERLANDS ANT	16	1540	1709	517	400	419	90	488	1929	4025	2345
LA	NICARAGUA	0	0	0	0	0	0	0	0	27	10	0
LA	PANAMA	769	876	1661	1373	1088	614	1486	2130	1658	3062	2261
LA	PARAGUAY	0	0	0	0	0	0	0	0	1	0	182
LA	PERU	0	601	576	18	624	1468	3952	2147	616	542	2866
LA	PUERTO RICO	1037	1	2	4	658	949	571	2178	332	736	1887
LA	SURINAM	1	0	0	1	0	0	0	0	0	0	0
LA	URUGUAY	0	0	0	0	45	0	16	392	187	9	8
LA	VENEZUELA	0	0	2	2	158	3	262	3176	1761	2683	699
LA	VIRGIN ISLS	346	0	0	197	0	31	19	87	5	276	847
	SUBTOTAL (PER DAY)	**38**	**18**	**21**	**25**	**42**	**37**	**43**	**74**	**74**	**130**	**158**
ME	BAHRAIN	0	0	0	0	0	0	0	1	3	6	1
ME	CYPRUS	0	0	0	0	0	0	0	0	275	0	0
ME	IRAN	0	0	0	0	0	0	0	0	0	1056	534
ME	IRAQ	0	0	0	0	0	0	0	0	1	0	0
ME	ISRAEL	0	0	0	0	22	21	487	929	1097	979	309
ME	JORDAN	1	0	0	0	0	0	0	0	1	2	2
ME	KUWAIT	0	0	0	0	0	0	0	0	1	1	3
ME	LEBANON	0	0	0	0	1	0	0	0	330	6	16
ME	OMAN	0	0	0	0	0	0	0	0	0	0	0
ME	QATAR	0	0	0	0	0	0	0	0	3	0	0
ME	SAUDI ARABIA	0	3	1	1	1	0	0	29	7	1791	15
ME	SYRIA	0	0	0	0	0	0	0	0	5	15	5
ME	UNITED ARAB EMR	0	0	0	5	2	1	0	0	7	4	149
ME	YEMEN (SANAA)	0	0	0	0	0	0	0	0	0	0	0
	SUBTOTAL (PER DAY)	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**5**	**11**	**3**

UNITED STATES EXPORTS

(Thousands of Barrels)

NPC REGION	COUNTRY	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MED	ALGERIA	0	0	0	0	0	0	0	1	0	0	0
MED	CANARY ISLS	289	204	0	0	0	0	0	0	0	0	0
MED	EGYPT	226	0	0	0	0	0	0	7	1	13	37
MED	GIBRALTAR	0	115	0	0	448	0	0	0	257	0	0
MED	GREECE	1797	0	0	0	0	0	0	2	588	3	8
MED	ITALY	833	539	1	360	160	583	3	245	2793	3689	1096
MED	LIBYA	0	0	0	0	0	0	0	0	0	0	0
MED	PORTUGAL	80	0	0	0	0	0	0	0	0	0	0
MED	SPAIN	443	1191	994	3319	1979	1315	529	595	2278	1093	1141
MED	TUNISIA	0	0	0	0	0	0	0	0	0	0	0
MED	TURKEY	0	0	0	125	0	0	0	0	0	62	1
	SUBTOTAL (PER DAY)	**10**	**6**	**3**	**10**	**7**	**5**	**1**	**2**	**16**	**13**	**6**
NMR	ANGOLA	35	11	0	0	0	0	0	0	0	0	0
NMR	CHINA	0	0	0	1	308	0	138	409	2	2165	8111
NMR	EQUATRAL GUINEA	0	0	0	0	0	0	0	0	0	0	0
NMR	FRENCH GUIANA	0	0	0	0	0	0	0	0	0	0	0
NMR	GHANA	0	0	141	0	0	0	0	0	0	0	0
NMR	GUINEA	0	0	0	0	0	0	0	0	0	1	1
NMR	HUNGARY	0	0	0	0	0	0	0	0	0	0	1
NMR	IVORY COAST	0	0	249	202	7	0	0	0	0	30	1
NMR	LIBERIA	0	0	0	0	0	0	0	1	0	1	0
NMR	MOZAMBIQUE	0	0	0	0	0	0	0	15	0	0	0
NMR	NIGERIA	300	1117	0	0	0	0	0	2	0	0	278
NMR	PAPUA NEW GUNEA	0	0	37	175	0	0	220	0	0	0	0

UNITED STATES EXPORTS

(Thousands of Barrels)

NPC REGION	COUNTRY	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
NMR	POLAND	0	0	0	32	0	188	377	440	459	2	0
NMR	ROMANIA	0	0	0	0	0	0	0	0	0	0	183
NMR	SENEGAL	0	0	309	0	7	0	0	0	199	0	0
NMR	SOMALIA	0	1	0	0	0	0	0	0	0	0	0
NMR	SOUTH AFRICA	229	1	0	0	0	1	1	1	1	1	354
NMR	SUDAN	0	0	0	0	0	0	0	0	0	0	0
NMR	UNN SOV SOC REP	0	0	0	0	0	0	0	0	0	11	283
NMR	WESTERN AFRICA	0	0	0	0	0	0	0	0	0	0	0
NMR	ZAIRE	0	0	0	0	0	0	0	0	2	0	0
	SUBTOTAL (PER DAY)	**2**	**3**	**2**	**1**	**1**	**1**	**2**	**2**	**2**	**6**	**25**
NWE	AUSTRIA	0	1	1	0	0	0	0	0	0	3	1
NWE	BELGIUM	100	72	0	0	216	0	0	11	145	383	328
NWE	DENMARK	0	240	0	0	0	0	2	0	314	1	0
NWE	FINLAND	0	0	0	0	0	0	0	0	2	1	1
NWE	FRANCE	1485	770	2	317	626	350	0	4	1700	6589	949
NWE	GERMANY, FD (W)	597	2	0	289	239	1	3	732	7	169	74
NWE	ICELAND	0	0	0	0	0	0	0	0	0	0	0
NWE	IRELAND	0	0	1	0	0	0	0	1	1	0	0
NWE	NETHERLANDS	3336	3730	1	3967	6186	1240	101	581	9063	15149	8682
NWE	NORWAY	1095	0	0	0	0	0	1	0	1	2	1
NWE	SWEDEN	901	215	0	0	452	59	1	0	4	275	1
NWE	SWITZERLAND	915	398	0	225	0	0	1	1	1	94	0
NWE	UNITED KINGDOM	555	658	14	306	330	294	83	35	392	828	908
	SUBTOTAL (PER DAY)	**25**	**17**	**0**	**14**	**22**	**5**	**1**	**4**	**32**	**64**	**30**

UNITED STATES EXPORTS

(Thousands of Barrels)

NPC REGION	COUNTRY	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
PR	AUSTRALIA	213	439	270	394	1352	1414	256	1799	757	1265	762
PR	BANGLADESH	0	171	0	0	0	0	0	0	0	0	0
PR	CAMEROON	7	0	0	0	0	0	0	0	0	0	0
PR	FRNCH PACI IS	472	183	490	858	155	0	392	90	0	665	831
PR	HONG KONG	1	99	0	247	509	0	0	122	15	1138	640
PR	INDIA	194	68	0	483	0	0	0	1	2016	7458	1874
PR	INDONESIA	1	468	1	0	0	0	0	0	0	1361	675
PR	JAPAN	5934	4981	3322	3241	12714	14904	15868	13554	8880	4960	10018
PR	KOREA, REPUB OF	1318	1033	706	1850	1728	1992	717	503	4460	7996	17952
PR	MALAYSIA	0	1	0	0	0	0	0	10	1	2	0
PR	NEW ZEALAND	166	454	744	519	822	540	1	20	846	185	975
PR	OTH PACIFIC ISL	0	0	0	0	0	0	12	18	0	0	147
PR	PAKISTAN	0	0	0	0	0	0	0	0	251	3240	536
PR	PHILIPPINES	40	0	0	0	32	0	1	0	0	113	1604
PR	SINGAPORE	1097	1975	100	403	662	576	327	1041	2514	4729	7139
PR	SOUTHN PAC IS	0	0	0	0	0	0	3	14	0	0	0
PR	SRI LANKA	0	0	0	1	0	0	0	0	0	0	0
PR	TAIWAN	1	0	920	0	1567	1229	788	2510	2119	2781	2391
PR	THAILAND	30	31	30	1	3	0	0	3	34	0	239
PR	TRST TER OF PAC	0	0	136	0	0	0	0	1	1	0	0
	SUBTOTAL (PER DAY)	**26**	**27**	**18**	**22**	**54**	**57**	**50**	**54**	**60**	**98**	**125**
	TOTAL (PER DAY)	**101**	**80**	**65**	**91**	**152**	**126**	**119**	**164**	**213**	**342**	**365**

Note: Totals may not equal sum of components due to independent rounding.

Appendix L, Section VIII-1

Layer Cost Calculations

This appendix provides summaries of the calculations used to generate the layered cost buildups for foreign and U.S. products.

		1995 - 1989 FC-1 FOREIGN REFINERY COST LAYERS						DLF	
								REV 01/07	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	95 LP DATES		08/27	09/09	10/02	09/23	10/02	09/29	TOTALS
	89 LP DATES		06/16	06/11	07/07	06/29	06/22	09/25	
'89 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1374	6322	3169	2840	3410	5117	22232
'95 QUANTITIES									
	Pool M	MB/D	704	2441	1048	746	1680	1912	8531
	US M	MB/D	55	90	60	53	156	0	414
	Region MJD	MB/D	1131	5969	2923	2375	3502	6430	22330
	Export MJD	MB/D	51	30	110	367	25	0	583
	US MJD	MB/D	130	125	94	83	431	0	863
	LS Distillate<0.05%S	MB/D	53	20	24	24	162	0	283
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	7	5	1	4	3	19
	Purchased MTBE	MB/D	28	18	4	5	64	14	132
	Produced MTBE	MB/D	0	22	15	2	11	9	59
	US MTBE	MB/D	7	12	8	7	21	0	54
	Non-US MTBE	MB/D	20	28	11	-0	54	23	136
MJD	TOTAL MJD	MB/D	1312	6124	3127	2825	3958	6430	23776
MJDN	TOTAL MJDN	MB/D	1495	6714	3486	3244	4308	7269	26516
hcMJD	MJD - MTBE	MB/D	1284	6084	3108	2818	3883	6407	23585
hcMJDN	MJDN - MTBE	MB/D	1467	6674	3467	3237	4233	7246	26325
'95 - '89 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'95 - '89 STOCK BALANCE EFFECTS									
	95 LP Out (ExMJDN) 89$	M$/D	5010	30982	26231	22041	26999	34543	
	95 LP Inputs 89$	M$/D	30876	149034	86665	79626	102286	152580	
DSB(95)(1)	Delta Stock Bal (95) 90$		26940	122951	62942	59975	78411	122935	474153
	89 LP Out (ExMJDN) 89$	M$/D	3668	33720	27155	21170	26196	31423	
	89 LP Inputs 89$	M$/D	28036	146675	86104	72038	91300	126260	
DSB(89)(2)	Delta Stock Bal (95) 90$	M$/D	25390	117643	61395	52979	67806	98773	423976
'95 - '89 VARIABLE OPERATING COST									
	95 Utility Cost 89$	M$/D	619	2112	1361	1216	1542	2605	9455
	89 Utility Cost 89$	M$/D	518	1878	920	934	1118	1630	6998
'95 - '89 CAPITAL RECOVERY (ExLSD Invest)									
AI/FSG (3)	Invest @10% 91$	M$/D	956	4602	2921	3293	5162	7836	
AIHDS (3)	HDS Invest 91$	M$/D	64	423	83	262	359	694	
AIHDS/DeB (4)	HDS DeB Invest	M$/D	25	0	89	87	80	0	
	HDS Util for LSD	%	20	0	0	3	15	0	
AILSD	HDS Invest for LSD	M$/D	18	0	0	10	66	0	
AIXLSD (5)	Invest ExLSD@10% 91$	M$/D	963	4602	3010	3370	5176	7836	
MTIL (6)	MTI+L 91$ (Incl in AIXLSD)	M$/D							
CR (7)	CAPITAL RCVRY 90$	M$/D	929	4441	2905	3252	4995	7562	24083
'95 - '89 ENVIRONMENTAL RECOVERY									
ENV (8)	ENVRNMNTL 90$	M$/D	1863	6794	3260	2027	2521	4575	21040
LS DIST COST LAYER (per '95 D<0.05%S)									
AILSD (9)	Invest LSD @10% 91$	M$/D	18	0	0	10	66	0	
MTIL (6)	MTI+L LSD (Incl in AILSD)	M$/D							
AA' (10)	LS Distillate	c/GAL	0.80	0.00	0.00	1.04	0.97	0.00	
MTBE COST LAYER (per '95M only)									
	MTBE (per US M)	c/GAL	11.73	10.83	10.28	9.44	11.31	0.00	
	MTBE (per Non-US M)	c/GAL	2.78	0.98	0.91	-0.00	3.00	0.93	
UNIT COST LAYERS (per '95 hcMJDN)									
A' (11)	PROC.CAPTL.RELATED	c/GAL	1.51	1.58	1.99	2.39	2.81	2.48	2.18
B' (11)	ENVIRONMENTAL	c/GAL	3.01	2.45	2.29	1.56	1.56	1.66	1.90
DSB (12)	Delta Stock Bal (95-89)	c/GAL	-0.11	-0.19	-1.22	-0.13	-1.36	-2.34	-1.06
VOC (13)	Var. Oper. Cost (95-89)	c/GAL	0.05	0.02	0.11	0.05	0.04	0.04	0.05
C'	STK.BAL+VOC	c/GAL	-0.07	-0.17	-1.12	-0.08	-1.32	-2.29	-1.01
X':	ALL LAYERS 90$	c/GAL	4.45	3.87	3.17	3.87	3.05	1.85	3.07

CALCULATION FORMULA
(1) DSB Delta Stock Bal (Year2)(90$)=((Year2 Inputs89$-Year2 Outputs 89$))*1.0415
(2) DSB Delta Stock Bal (Year1)(90$)=((Year1 Inputs89$-Year1 Outputs 89$))*1.0415
(3) IFSG Investment taken from FTG/FSG Tables
(4) AIHDS/DeB Invest for HDS Debottlenecking assumes 10% of HDS capacity as new HDS, if % desulf > 85%
(5) AIXLSD Annualized Investment Excl LSD 91$=Invest (ExLSD)91$*.24*1000/365
(6) MTI+L Maint Taxes Insur + Labor included in I/FSG Tables
(7) CR Capital Recovery=(AI 91$)*0.965
(8) ENV Environmental Recovery=(Air,Water,Solids,H&S)+(89 Catchup)*adj.factor (per FSG Table)
(9) AILSD Ann. Invest LSD 91$ = ILSD 91$*0.24*1000/365
(10) AA' Spec. LSD Layer =(AILSD+MTIL/LSD 91$)*0.965*100/((LSDist Yr2-Yr1)*42)
(11) A'= (CR*100)/(hcMJDN Year2*42)
(12) B'= From FSG Tables
(13) DSB=(DSB Year2/hcMJDN Year2)-(DSB Year1/hcMJDN Year1)
(14) VOC=(Util Year2/hcMJDN Year2)-(Util Year1/hcMJDN Year1)

		2000 - 1995 FC-1 FOREIGN REFINERY COST LAYERS						DLF	
								REV 01/22	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	00 LP DATES		10/22	12/10	12/14	10/04	12/04	12/08	TOTALS
	95 LP DATES		08/27	09/09	10/02	09/23	10/02	09/29	
'95 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1467	6674	3467	3307	4233	7246	26394
'00 QUANTITIES									
	Pool M	MB/D	657	2431	1089	867	1982	2196	9222
	US M	MB/D	55	90	60	53	155	0	413
	Region MJD	MB/D	1149	6006	3086	2708	4004	7324	24277
	Export MJD	MB/D	0	30	110	367	25	0	532
	US MJD	MB/D	130	125	94	83	430	0	862
	LS Dist<0.05%S	MB/D	436	3018	1743	66	187	0	5450
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	20	12	1	12	10	55
	Purchased MTBE	MB/D	28	137	42	4	50	27	288
	Produced MTBE/TAME	MB/D	0	59	34	3	36	30	162
	US MTBE/TAME	MB/D	7	12	8	7	20	0	54
	Non-US MTBE/TAME	MB/D	20	184	69	0	66	57	396
MJD	TOTAL MJD	MB/D	1279	6161	3290	3158	4459	7324	25671
MJDN	TOTAL MJDN	MB/D	1462	6751	3649	3577	4809	8163	28411
hcMJD	MJD - MTBE	MB/D	1252	5965	3214	3151	4373	7267	25221
hcMJDN	MJDN - MTBE	MB/D	1435	6555	3573	3570	4723	8106	27961
'00 - '95 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'00 - '95 STOCK BALANCE EFFECTS									
	00 LP Out (ExMJD) 89$	M$/D	4309	29219	31347	21468	30511	44872	
	00 LP Inputs 89$	M$/D	30334	150559	93352	83908	115454	177700	
DSB(00)(1)	Delta Stock Bal (95) 90$		27105	126375	64578	65031	88469	138341	509899
	95 LP Out (ExMJD) 89$	M$/D	4999	30982	26231	22038	26999	34543	
	95 LP Inputs 89$	M$/D	30876	149034	86671	79624	102406	152580	
DSB(95)(2)	Delta Stock Bal (95) 90$		26951	122951	62949	59975	78536	122936	474297
'00 - '95 VARIABLE OPERATING COST									
	00 Utility Cost 89$	M$/D	623	2210	1413	1587	1855	3022	10710
	95 Utility Cost 89$	M$/D	619	2112	1361	1216	1542	2605	9455
'00 - '95 CAPITAL RECOVERY (Ex LSD Invest)									
ILP	00 LP Invest 91$	MM$	31	1167	1357	1465	3292	876	8188
	00 LP FOC	M$/D	5	197	226	230	516	146	
IHDS	HDS Invest New 91$	MM$	0	267	555	407	0	0	
IHDS/DeB (3)	HDS DeB 91$	MM$	(95)	393	(95)	(95)	(95)	2706	
	HDS Util for LSD	%	84	96	93	7	70	0	
ILSD	HDS Invest for LSD 91$	MM$	0	634	516	27	0	0	
AIXLSD (4)	Invest ExLSD @10% 91$	M$/D	15	434	394	674	1542	1678	3836
FOC (5)	FOC Ex LSD 91$	M$/D	5	79	130	225	516	146	
CR (6)	CAP RCVRY Ex LSD 90$	M$/D	19	495	505	867	1986	1760	5633
CR95	CAP RCVRY 95 LSD 90$	M$/D	-58	-392	-154	-23	-252	0	-879
'00 - '95 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1096	5261	3589	2987	3835	7206	23974
LS DIST COST LAYER (Per '00 D<0.05%S)									
AILSD (8)	Invest LSD @10% 91$	M$/D	0	297	242	13	0	0	
FOC/LSD	FOC LSD 91$	M$/D	0	118	96	5	0	0	
DD' (9)	LS Distillate 90$	c/GAL	0.00	0.32	0.45	0.61	0.00	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '00 US M)	c/GAL	11.75	10.94	10.64	9.30	11.02	0.00	
	MTBE (per '00 Non-US M)	c/GAL	2.97	6.51	5.39	0.01	3.04	2.01	
UNIT MJD COST LAYERS (per '00 hcMJDN)									
D' (10)	CAPITAL.RECY 00-95	c/GAL	-0.06	0.04	0.23	0.56	0.87	0.52	0.40
E' (11)	ENVIRON RECY 00-95	c/GAL	1.82	1.91	2.39	1.99	1.93	2.12	2.04
DSB (12)	Delta Stock Bal (00-95)	c/GAL	0.52	0.86	-0.08	0.08	0.18	0.10	0.27
VOC (13)	Var. Oper. Cost (00-95)	c/GAL	0.01	0.02	0.00	0.08	0.03	0.01	0.03
F'	STK.BAL+VOC	c/GAL	0.54	0.88	-0.08	0.16	0.21	0.11	0.29
Y':	ALL LAYERS 90$	c/GAL	2.29	2.83	2.55	2.71	3.01	2.75	2.74

CALCULATION FORMULA 2000
(1) DSB Delta Stock Bal (Year2)(90$)=((Year2 Inputs89$-Year2 Outputs 89$))*1.0415
(2) DSB Delta Stock Bal (Year1)(90$)=((Year1 Inputs89$-Year1 Outputs 89$))*1.0415
(3) IHDS/DeB Invest for HDS Debottlenecking assumes 10% of HDS capacity as new HDS, if % desulf. > 85%
(4) AIXLSD Annualized Investment Excl LSD 91$=Invest (ExLSD)91$ * 0.24 * 1000 / 365
(5) FOC Fixed Oper Cost = LP Added Fixed Costs (Less HDS)
(6) CR Capital Recovery 90$ = (AI+FOC)*0.965. CR95 indicates 95 HDS investment utilized in 00 for LSD.
(7) ENV Environmental Recovery=(Air,Water,Solids,H&S)*adj.factor (per FSG Table)
(8) AILSD Annual Invest LSD 91$ = ILSD 91$*0.24*1000/365
(9) DD' Spec. LSD Layer = (AILSD+FOC/LSD 91$)*0.965*100/(LSDist Yr2*42)
(10) D'= (CR*100)/(hcMJDN Year2*42). Excludes 95 HDS investment utilized in 00
(11) E'= From FSG Tables ('00-'95)
(12) DSB=(DSB Year2/hcMJDN Year2)-(DSB Year1/hcMJDN Year1)
(13) VOC=(Util Year2/hcMJDN Year2)-(Util Year1/hcMJDN Year1)

		2010 - 2000 FC-1 FOREIGN REFINERY COST LAYERS						DLF	
		'10 same as 00 FC-1						REV 01/25	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	10 LP DATES		10/22*	12/10*	12/14*	12/23	12/29	01/07	TOTALS
	00 LP DATES		10/22*	12/10	12/14	10/04	12/04	12/08	
'00 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1435	6555	3573	3570	4723	8106	27962
	LS Dist<0.05%S	MB/D	436	3018	1743	66	187	0	5450
'10 QUANTITIES									
	Pool M	MB/D	657	2431	1089	1132	2416	2511	10236
	US M	MB/D	55	90	60	53	155	0	413
	Region MJD	MB/D	1149	6006	3086	3338	5001	8834	27414
	Export MJD	MB/D	0	30	110	367	25	0	532
	US MJD	MB/D	130	125	94	83	430	0	862
	LS Dist<0.05%S	MB/D	436	3018	1743	66	187	0	5450
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	20	12	2	15	12	59
	Purchased MTBE	MB/D	28	137	42	70	104	40	420
	Produced MTBE/TAME	MB/D	0	59	34	5	43	35	176
	US MTBE/TAME	MB/D	7	12	8	7	21	0	55
	Non-US MTBE/TAME	MB/D	20	184	69	68	127	74	542
MJD	TOTAL MJD	MB/D	1279	6161	3290	3788	5456	8834	28808
MJDN	TOTAL MJDN	MB/D	1462	6751	3649	4207	5806	9673	31548
hcMJD	MJD - MTBE	MB/D	1252	5965	3214	3713	5309	8760	28212
hcMJDN	MJDN - MTBE	MB/D	1435	6555	3573	4132	5659	9599	30952
'10 - '00 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'10 - '00 STOCK BALANCE EFFECTS									
	10 LP Out (ExMJD) 89$	M$/D	4309	30933	31343	23882	36642	44042	
	10 LP Inputs 89$	M$/D	30334	150550	93349	95420	137030	202308	
DSB(10)(1)	Delta Stock Bal (10) 90$		27105	124582	64579	74506	104554	164834	560161
	00 LP Out (ExMJD) 89$	M$/D	4309	30933	31343	21468	30511	44872	
	00 LP Inputs 89$	M$/D	30334	150550	93349	83908	115454	177700	
DSB(00)(2)	Delta Stock Bal (00) 90$		27105	124582	64579	65031	88469	138341	508107
'10 - '00 VARIABLE OPERATING COST									
	10 Utility Cost 89$	M$/D	623	2210	1413	1873	2080	3772	11971
	00 Utility Cost 89$	M$/D	623	2210	1413	1587	1855	3022	10710
'10 - '00 CAPITAL RECOVERY (Ex LSD Invest)									
ILP	10 LP Invest 91$	MM$	0	0	0	3635	4065	5852	13552
	10 LP FOC	M$/D	0	0	0	588	641	966	
IHDS	HDS Invest New 91$	MM$	0	0	0	393	447	0	
IHDS/DeB (3)	HDS DeB 91$	MM$	(95)	(00)	(95)	(95)	(95)	(00)	
	HDS Util for LSD	%	84	96	93	2	2	0	
ILSD	HDS Invest for LSD 91$	MM$	0	0	0	8	11	0	
AIXLSD (4)	Invest ExLSD @10% 91$	M$/D	0	0	0	1699	1899	2742	6349
FOC (5)	FOC Ex LSD 91$	M$/D	0	0	0	587	639	966	
CR (6)	CAP RCVRY Ex LSD 90$	M$/D	0	0	0	2206	2450	3578	8233
CR00	CAP RCVRY 00 LSD 90$	M$/D	0	0	0	0	0	0	0
'10 - '00 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1096	4109	2877	4712	6619	10959	30372
LS DIST COST LAYER (Per '10 D<0.05%S)									
AILSD (8)	Invest LSD @10% 91$	M$/D	0	0	0	4	5	0	
FOC/LSD	FOC LSD 91$	M$/D	0	0	0	1	2	0	
HH' (9)	LS Distillate 90$	c/GAL	0.00	0.00	0.00	0.18	0.09	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '10 US M)	c/GAL	11.76	10.94	10.64	9.71	11.18	0.00	
	MTBE (per '10 Non-US M)	c/GAL	2.97	6.51	5.39	4.69	4.74	2.28	
UNIT MJD COST LAYERS (per '10 hcMJDN)									
H' (10)	CAPITAL RECY 10-00	c/GAL	0.00	0.00	0.00	1.27	1.03	0.89	0.63
I' (11)	ENVIRON RECY 10-00	c/GAL	1.82	1.49	1.92	2.72	2.78	2.72	2.34
DSB (12)	Delta Stock Bal (10-00)	c/GAL	0.01	0.00	0.00	-0.19	-0.26	0.11	-0.07
VOC (13)	Var. Oper. Cost (10-00)	c/GAL	0.00	0.00	0.00	0.01	-0.03	0.02	0.00
J'	STK BAL+VOC	c/GAL	0.01	0.00	0.00	-0.18	-0.28	0.13	-0.07
Z':	ALL LAYERS 90$	c/GAL	1.83	1.49	1.92	3.81	3.53	3.73	2.90

		1995 - 1989 FC-2 FOREIGN REFINERY COST LAYERS						DLF	
			*Same as FC-1					REV 03/04	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	95 LP DATES		08/27*	09/28	10/06	09/28	10/05	10/27	TOTALS
	89 LP DATES		06/16*	06/11*	07/07*	06/29*	06/22*	09/25*	
'89 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1374	6322	3169	2840	3410	5117	22232
'95 QUANTITIES									
	Pool M	MB/D	704	2289	985	668	1507	1619	7772
	US M	MB/D	55	90	60	53	156	0	414
	Region MJD	MB/D	1131	5600	2698	2195	3105	5643	20372
	Export MJD	MB/D	51	30	110	367	25	0	583
	US MJD	MB/D	130	125	94	83	431	0	863
	LS Distillate<0.05%S	MB/D	53	20	24	24	162	0	283
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	7	5	0	4	3	19
	Purchased MTBE	MB/D	28	16	3	6	58	10	121
	Produced MTBE	MB/D	0	22	15	1	11	9	57
	US MTBE	MB/D	7	12	8	7	21	0	54
	Non-US MTBE	MB/D	20	28	10	0	48	19	123
MJD	TOTAL MJD	MB/D	1312	5755	2902	2645	3561	5643	21818
MJDN	TOTAL MJDN	MB/D	1495	6345	3261	3064	3911	6482	24558
hcMJD	MJD - MTBE	MB/D	1284	5718	2884	2638	3492	5624	21640
hcMJDN	MJDN - MTBE	MB/D	1467	6308	3243	3057	3842	6463	24380
'95 - '89 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'95 - '89 STOCK BALANCE EFFECTS									
	95 LP Out (ExMJDN) 89$	M$/D							
	95 LP Inputs 89$	M$/D							
DSB(95)(1)	Delta Stock Bal (95) 90$		26940	115352	58385	56473	72320	108921	438391
	89 LP Out (ExMJDN) 89$	M$/D							
	89 LP Inputs 89$	M$/D							
DSB(89)(2)	Delta Stock Bal (95) 90$	M$/D	25380	117643	61395	52979	67806	98773	423976
'95 - '89 VARIABLE OPERATING COST									
	95 Utility Cost 89$	M$/D	619	1994	1316	1200	1478	2136	8743
	89 Utility Cost 89$	M$/D	518	1878	920	934	1118	1630	6998
'95 - '89 CAPITAL RECOVERY									
AI/FSG (3)	Invest @10% 91$	M$/D	956	4602	2921	3293	5162	7836	
AIHDS (3)	HDS Invest 91$	M$/D	64	423	83	262	359	694	
IHDS/DeB (4)	HDS DeB Invest	M$/D	25	0	89	87	80	0	
	HDS Util for LSD	%	20	0	0	1	18	0	
AILSD	HDS Invest for LSD	M$/D	18	0	0	5	77	0	
AIXLSD (5)	Invest ExLSD@10% 91$	M$/D	963	4602	3010	3375	5165	7836	
MTIL (6)	MTI+L 91$ (Incl in AIXLSD)	M$/D							0
CR (7)	CAPITAL RCVRY 90$	M$/D	929	4441	2905	3257	4984	7562	24079
'95 - '89 ENVIRONMENTAL RECOVERY									
ENV (8)	ENVRNMNTL 90$	M$/D	1863	6794	3260	2027	2521	4575	21040
LS DIST COST LAYER (per '95 D<0.05%S)									
AILSD (9)	Invest LSD@10% 91$	M$/D	18	0	0	5	77	0	
MTIL (6)	MTI+L LSD (Incl in AILSD)	M$/D							
AA' (10)	LS Distillate	c/GAL	0.77	0.00	0.00	0.43	1.09	0.00	
MTBE COST LAYER (per M only)									
	MTBE (per '95 US M)	c/GAL	11.73	10.58	10.37	9.65	11.33	0.00	
	MTBE (per '95 Non-US M)	c/GAL	2.78	0.98	0.87	0.00	3.01	0.91	
UNIT COST LAYERS (per '95 hcMJDN)									
A' (11)	PROC.CAPTL.RELATED	c/GAL	1.51	1.68	2.13	2.54	3.09	2.79	2.35
B' (12)	ENVIRONMENTAL	c/GAL	3.02	2.56	2.39	1.58	1.56	1.69	2.05
DSB (13)	Delta Stock Bal (95-89)	c/GAL	-0.11	-0.32	-1.38	-0.18	-1.06	-2.45	-1.09
VOC (14)	Var. Oper. Cost (95-89)	c/GAL	0.05	0.02	0.12	0.07	0.06	0.01	0.05
C'	STK.BAL+VOC	c/GAL	-0.07	-0.30	-1.26	-0.11	-1.00	-2.44	-1.04
X':	ALL LAYERS 90$	c/GAL	4.47	3.94	3.27	4.00	3.65	2.03	3.36

		2000 - 1995 FC-2 FOREIGN REFINERY COST LAYERS						DLF Rev 03/04	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	00 LP Adjustments								TOTALS
	95 LP Adjustments								
'95 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1467	6308	3243	3057	3842	6463	24380
'00 QUANTITIES									
(2)	Pool M	MB/D	656	2334	1023	780	1725	1882	8400
(2)	US M	MB/D	55	90	60	53	155	0	413
(1)	Region MJD	MB/D	1148	5796	2888	2420	3439	6047	21738
(2)	Export MJD	MB/D	0	30	110	367	25	0	532
(2)	US MJD	MB/D	130	125	94	83	430	0	862
(2)	LS Dist<0.05%S	MB/D	457	2883	1698	66	187	0	5291
(2)	Naphtha	MB/D	183	590	359	419	350	839	2740
(2)	Purchased MeOH	MB/D	0	19	13	1	8	12	53
(2)	Purchased MTBE	MB/D	26	122	30	4	49	10	241
(2)	Produced MTBE/TAME	MB/D	0	56	39	3	24	44	165
(2)	US MTBE/TAME	MB/D	7	12	8	7	20	0	54
(2)	Non-US MTBE/TAME	MB/D	19	166	61	0	52	53	352
MJD	TOTAL MJD	MB/D	1278	5951	3090	2870	3894	6047	23130
MJDN	TOTAL MJDN	MB/D	1461	6541	3449	3289	4244	6886	25870
hcMJD	MJD - MTBE	MB/D	1252	5773	3022	2863	3822	5994	22724
hcMJDN	MJDN - MTBE	MB/D	1435	6363	3381	3282	4172	6833	25464
'00 - '95 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'00 - '95 STOCK BALANCE EFFECTS									
	00 LP Out (ExMJD) 89$	M$/D							
	00 LP Inputs 89$	M$/D							
DSB(00)(3)	Delta Stock Bal (00) 90$		27105	120997	60740	59421	78012	115697	461972
	95 LP Out (ExMJD) 89$	M$/D							
	95 LP Inputs 89$	M$/D							
DSB(95)(4)	Delta Stock Bal (95) 90$		26940	115352	58385	56473	72320	108921	438391
'00 - '95 VARIABLE OPERATING COST									
(5)	00 Utility Cost 89$	M$/D	610	2172	1332	1543	1708	2267	9632
	95 Utility Cost 89$	M$/D	619	1994	1316	1200	1478	2136	8743
'00 - '95 CAPITAL RECOVERY (Ex LSD invest)									
ILP(6)	00 Invest from LP 91$	MM$	34	973	1121	1416	1227	626	5397
IHDS (6)	HDS Invest New 91$	MM$	0	0	311	202	0	0	
IHDS/DeB (6)	HDS DeB 91$	MM$	(95)	393	(95)	(95)	(95)	2706	
	HDS Util for LSD	%	87	97	85	6	15	0	
ILSD	HDS Invest for LSD 91$	MM$	0	381	264	11	0	0	
AIXLSD	Invest ExLSD @10% 91$	M$/D	16	461	401	658	575	1561	2529
	FOC from LP	M$/D	6	145	264	218	120	118	
	FOC HDS DeB @.068 fa	M$/D	0	73	0	0	0	504	
FOC	FOC ExLSD 91$	M$/D	6	147	215	216	120	622	
CR	CAP RCVRY Ex LSD 90$	M$/D	21	587	594	844	671	2107	4824
'00 - '95 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1097	5104	3393	2743	3381	6084	21803
LS DIST COST LAYER (Per '00 D<0.05%S)									
AILSD	Invest LSD @10% 91$	M$/D	0	179	124	5	0	0	
FOC/LSD	FOC LSD 91$	M$/D	0	71	49	2	0	0	
DD'	LS Distillate	c/GAL	0.00	0.20	0.23	0.25	0.00	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '00 US M)	c/GAL	11.75	10.94	10.64	9.44	10.96	0.00	
	MTBE (per '00 Non-US M)	c/GAL	2.80	6.13	5.09	0.00	2.82	2.19	
UNIT MJD COST LAYERS (per '00 hcMJDN)									
D'	CAPITAL.RECY 00-95	c/GAL	0.04	0.22	0.42	0.61	0.38	0.73	0.45
E'	ENVIRON RECY 00-95	c/GAL	1.82	1.91	2.39	1.99	1.93	2.12	2.04
DSB	Delta Stock Bal (00-95)	c/GAL	0.53	0.73	-0.04	-0.37	-0.12	0.08	0.16
VOC	Var. Oper. Cost (00-95)	c/GAL	0.00	0.03	-0.01	0.08	0.03	0.00	0.02
F'	STK.BAL+VOC	c/GAL	0.53	0.76	-0.05	-0.29	-0.10	0.08	0.18
Y':	ALL LAYERS 90$	c/GAL	2.39	2.89	2.76	2.31	2.22	2.94	2.67

		2010 - 2000 FC-2 FOREIGN REFINERY COST LAYERS						DLF Rev 03/05
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	10 LP DATES (FC-1,2,3)		01/04(2)	01/12(2)	01/14(2)	01/05(2)	01/15(2)	01/13(3)	TOTALS
	00 LP DATES (FC-1,2,3)		08/27(1)	09/28(3)	10/06(3)	09/28(3)	10/05(3)	10/27(3)	
'00 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1435	6363	3381	3282	4172	6833	25466
'10 QUANTITIES									
	Pool M	MB/D	623	2303	1007	731	1633	1758	8055
	US M	MB/D	55	90	60	53	155	0	413
	Region MJD	MB/D	1166	5886	2960	2563	3834	6458	22867
	Export MJD	MB/D	0	30	110	367	25	0	532
	US MJD	MB/D	130	125	94	83	430	0	862
	LS Dist<0.05%S	MB/D	457	2883	1698	66	187	0	5291
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	19	13	1	8	12	53
	Purchased MTBE	MB/D	26	122	30	4	49	10	241
	Produced MTBE/TAME	MB/D	0	56	39	3	24	44	165
	US MTBE/TAME	MB/D	7	12	8	7	20	0	54
	Non-US MTBE/TAME	MB/D	19	166	61	0	52	53	352
MJD	TOTAL MJD	MB/D	1296	5041	3164	3013	4289	6458	24261
MJDN	TOTAL MJDN	MB/D	1479	6631	3523	3432	4639	7297	27001
hcMJD	MJD - MTBE	MB/D	1270	5863	3096	3006	4217	6405	23855
hcMJDN	MJDN - MTBE	MB/D	1459	6453	3455	3425	4567	7244	26595
'10 - '00 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'10 - '00 STOCK BALANCE EFFECTS									
	10 LP Out (ExMJD) 89$	M$/D							
	10 LP Inputs 89$	M$/D							
DSB(00)(1)	Delta Stock Bal (10) 90$		27105	122324	62221	61844	84968	123003	481465
	00 LP Out (ExMJD) 89$	M$/D							
	00 LP Inputs 89$	M$/D							
DSB(95)(2)	Delta Stock Bal (00) 90$		27105	120997	60740	59421	78012	115697	461972
'10 - '00 VARIABLE OPERATING COST									
	10 Utility Cost 89$	M$/D	623	2190	1363	1604	1805	2481	10066
	00 Utility Cost 89$	M$/D	610	2172	1332	1543	1708	2267	9632
'10 - '00 CAPITAL RECOVERY (Ex LSD Invest)									
ILP	10 Invest from LP 91$	MM$	0	0	0	895	1310	1293	3498
IHDS	HDS Invest New 91$	MM$	0	0	0	0	0	0	
IHDS/DeB (3)	HDS DeB 91$	MM$	(95)	(00)	(95)	(95)	(95)	(00)	
	HDS Util for LSD	%	87	93	89	6	15	0	
ILSD	HDS Invest for LSD 91$	MM$	0	0	0	0	0	0	
AIXLSD (4)	Invest ExLSD @10% 91$	M$/D	0	0	0	419	614	606	1639
	FOC from LP	M$/D	0	0	0	0	0	0	0
	FOC HDS DeB @.068 fa	M$/D	0	0	0	0	0	0	
FOC (5)	FOC ExLSD 91$	M$/D	0	0	0	0	0	0	
CR (6)	CAP RCVRY Ex LSD 90$	M$/D	0	0	0	405	592	585	1581
'10 - '00 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1110	4038	2786	3913	5332	8275	25454
LS DIST COST LAYER (Per '10 D<0.05%S)									
AILSD (8)	Invest LSD @10% 91$	M$/D	0	0	0	0	0	0	
FOC/LSD	FOC LSD 91$	M$/D	0	0	0	0	0	0	
HH' (9)	LS Distillate	c/GAL	0.00	0.00	0.00	0.00	0.00	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '10 US M)	c/GAL	11.75	10.94	10.64	9.44	10.96	0.00	
	MTBE (per '10 Non-US M)	c/GAL	2.96	6.22	5.17	0.00	3.00	2.34	
UNIT MJD COST LAYERS (per '10 hcMJDN)									
H' (10)	CAPITAL.RECY 10-00	c/GAL	0.00	0.00	0.00	0.28	0.31	0.19	0.14
I' (11)	ENVIRON RECY 10-00	c/GAL	1.82	1.49	1.92	2.72	2.78	2.72	2.28
DSB (12)	Delta Stock Bal (10-00)	c/GAL	-0.23	-0.06	0.05	-0.05	-0.09	0.05	-0.04
VOC (13)	Var. Oper. Cost (10-00)	c/GAL	0.00	-0.00	0.00	-0.00	-0.01	0.01	0.00
J'	STK.BAL+VOC	c/GAL	-0.23	-0.06	0.05	-0.05	-0.11	0.06	-0.04
Z':	ALL LAYERS 90$	c/GAL	1.59	1.43	1.97	2.95	2.98	2.97	2.38

		1995-1989 FC-3 FOREIGN REFINERY COST LAYERS						DLF	
			*Same as FC-1					REV 01/22	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	95 LP DATES		08/27*	09/28	10/06	09/28	10/05	10/27	TOTALS
	89 LP DATES		06/16*	06/11*	07/07*	06/29*	06/22*	09/25*	
'89 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1374	6322	3169	2840	3410	5117	22232
'95 QUANTITIES									
	Pool M	MB/D	704	2289	985	668	1507	1619	7772
	US M	MB/D	55	90	60	53	156	0	414
	Region MJD	MB/D	1131	5600	2698	2170	3028	5593	20220
	Export MJD	MB/D	51	30	110	367	25	0	583
	US MJD	MB/D	130	125	94	153	431	0	933
	LS Distillate<0.05%S	MB/D	53	20	24	24	162	0	283
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	7	5	0	4	3	19
	Purchased MTBE	MB/D	28	16	3	6	58	10	121
	Produced MTBE	MB/D	0	22	15	1	11	9	57
	US MTBE	MB/D	7	12	8	7	21	0	54
	Non-US MTBE	MB/D	20	26	10	0	48	19	123
MJD	TOTAL MJD	MB/D	1312	5755	2902	2690	3484	5593	21736
MJDN	TOTAL MJDN	MB/D	1495	6345	3261	3109	3834	6432	24476
hcMJD	MJD - MTBE	MB/D	1284	5718	2884	2683	3415	5574	21558
hcMJDN	MJDN - MTBE	MB/D	1467	6308	3243	3102	3765	6413	24298
'95 - '89 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'95 - '89 STOCK BALANCE EFFECTS									
	95 LP Out (ExMJDN) 89$	M$/D	5010	28714	24945	19258	24841	33787	
	95 LP Inputs 89$	M$/D	30876	139470	81004	73014	93127	137509	
DSB(95)(1)	Delta Stock Bal (95) 90$		26940	115352	58385	55987	71120	108027	435811
	89 LP Out (ExMJDN) 89$	M$/D	3668	33720	27155	21170	26196	31423	
	89 LP Inputs 89$	M$/D	28036	146675	86104	72038	91300	126260	
DSB(89)(2)	Delta Stock Bal (95) 90$	M$/D	25380	117643	61395	52979	67806	98773	423976
'95 - '89 VARIABLE OPERATING COST									
	95 Utility Cost 89$	M$/D	619	1994	1316	1198	1465	2106	8698
	89 Utility Cost 89$	M$/D	518	1878	920	934	1118	1630	6998
'95 - '89 CAPITAL RECOVERY									
AI/FSG (3)	Invest @10% 91$	M$/D	956	4602	2921	3293	5162	7836	
AIHDS (3)	HDS Invest 91$	M$/D	64	423	83	262	359	694	
IHDS/DeB (4)	HDS DeB Invest	M$/D	25	0	89	87	80	0	
	HDS Util for LSD	%	20	0	0	1	18	0	
AILSD	HDS Invest for LSD	M$/D	18	0	0	5	77	0	
AIXLSD (5)	Invest ExLSD@10% 91$	M$/D	963	4602	3010	3375	5165	7836	
MTIL (6)	MTI+L 91$ (incl in AIXLSD	M$/D							0
CR (7)	CAPITAL RCVRY 90$ *	M$/D	929	4441	2905	3257	4984	7562	24079
'95 - '89 ENVIRONMENTAL RECOVERY									
ENV (8)	ENVRNMNTL 90$ *	M$/D	1863	6794	3260	2027	2521	4575	21040
LS DIST COST LAYER (per '95 D<0.05%S)									
AILSD (9)	Invest LSD@10% 91$	M$/D	18	0	0	5	77	0	
MTIL (6)	MTI+L LSD (Incl in AILSD)	M$/D							
AA' (10)	LS Distillate	c/GAL	0.77	0.00	0.00	0.43	1.09	0.00	
MTBE COST LAYER (per M only)									
	MTBE (per '95 US M)	c/GAL	11.73	10.58	10.37	9.65	11.33	0.00	
	MTBE (per '95 Non-US M)	c/GAL	2.78	0.98	0.87	0.00	3.01	0.91	
UNIT COST LAYERS (per '95 hcMJDN)									
A' (11)	PROC.CAPTL.RELATED	c/GAL	1.51	1.68	2.13	2.50	3.15	2.81	2.36
B' (12)	ENVIRONMENTAL	c/GAL	3.02	2.56	2.39	1.56	1.59	1.70	2.06
DSB (13)	Delta Stock Bal (95-89)	c/GAL	-0.11	-0.32	-1.38	-0.61	-0.99	-2.46	-1.14
VOC (14)	Var. Oper. Cost (95-89)	c/GAL	0.05	0.02	0.12	0.06	0.06	0.01	0.04
C'	STK.BAL+VOC	c/GAL	-0.07	-0.30	-1.26	-0.55	-0.93	-2.45	-1.09
X':	ALL LAYERS 90$	c/GAL	4.47	3.94	3.27	3.51	3.82	2.06	3.33

		2000 - 1995 FC-3 FOREIGN REFINERY COST LAYERS						DLF Rev 01/25
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	00 LP DATES (FC-1,2,3)		01/04(2)	01/12(2)	01/14(2)	01/05(2)	01/15(2)	01/13(3)	TOTALS
	95 LP DATES (FC-1,2,3)		08/27(1)	09/28(3)	10/06(3)	09/28(3)	10/05(3)	10/27(3)	
'95 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1467	6308	3243	3102	3765	6413	24298
'00 QUANTITIES									
	Pool M	MB/D	623	2303	1007	731	1633	1758	8055
	US M	MB/D	55	90	60	53	155	0	413
	Region MJD	MB/D	1105	5671	2810	2392	3315	5790	21023
	Export MJD	MB/D	0	30	110	367	25	0	532
	US MJD	MB/D	130	125	94	83	430	0	862
	LS Dist<0.05%S	MB/D	457	2883	1698	66	187	0	5291
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	19	13	1	8	12	53
	Purchased MTBE	MB/D	26	122	30	4	49	10	241
	Produced MTBE/TAME	MB/D	0	56	39	3	24	44	165
	US MTBE/TAME	MB/D	7	12	8	7	20	0	54
	Non-US MTBE/TAME	MB/D	19	166	61	0	52	53	352
MJD	TOTAL MJD	MB/D	1235	5826	3014	2782	3770	5790	22417
MJDN	TOTAL MJDN	MB/D	1418	6416	3373	3201	4120	6629	25157
hcMJD	MJD - MTBE	MB/D	1209	5648	2946	2775	3698	5737	22011
hcMJDN	MJDN - MTBE	MB/D	1392	6238	3305	3194	4048	6576	24751
'00 - '95 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.38	32.60	29.46	34.09	31.14	
'00 - '95 STOCK BALANCE EFFECTS									
	00 LP Out (ExMJD) 89$	M$/D	5088	29167	30842	17374	27437	45119	
	00 LP Inputs 89$	M$/D	30264	141980	87703	72782	100082	161817	
DSB(00)(1)	Delta Stock Bal (00) 90$		26220	117495	59221	57707	75659	111128	447428
	95 LP Out (ExMJD) 89$	M$/D	4999	28716	24945	19258	24841	33787	
	95 LP Inputs 89$	M$/D	30876	139470	81004	73014	93127	137509	
DSB(95)(2)	Delta Stock Bal (95) 90$		26951	115350	58385	55987	71120	108027	435821
'00 - '95 VARIABLE OPERATING COST									
	00 Utility Cost 89$	M$/D	610	2147	1300	1529	1675	2115	9376
	95 Utility Cost 89$	M$/D	619	1994	1316	1198	1465	2106	8698
'00 - '95 CAPITAL RECOVERY (Ex LSD Invest)									
ILP	00 Invest from LP 91$	MM$	34	847	1027	1401	762	576	4647
IHDS	HDS Invest New 91$	MM$	0	0	311	202	0	0	
IHDS/DeB (3)	HDS DeB 91$	MM$	(95)	393	(95)	(95)	(95)	2706	
	HDS Util for LSD	%	87	97	85	6	15	0	
ILSD	HDS Invest for LSD 91$	MM$	0	381	264	11	0	0	
AIXLSD (4)	Invest ExLSD @10% 91$	M$/D	16	402	357	651	357	1538	2177
	FOC from LP	M$/D	6	145	264	218	120	118	
	FOC HDS DeB @.068 fa	M$/D	0	73	0	0	0	504	
FOC (5)	FOC ExLSD 91$	M$/D	6	147	215	216	120	622	
CR (6)	CAP RCVRY Ex LSD 90$	M$/D	21	530	552	837	461	2084	4485
'00 - '95 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1064	5004	3317	2670	3281	5855	21190
LS DIST COST LAYER (Per '00 D<0.05%S)									
AILSD (8)	Invest LSD @10% 91$	M$/D	0	179	124	5	0	0	
FOC/LSD	FOC LSD 91$	M$/D	0	71	49	2	0	0	
DD' (9)	LS Distillate	c/GAL	0.00	0.20	0.23	0.25	0.00	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '00 US M)	c/GAL	11.75	10.94	10.64	9.44	10.96	0.00	
	MTBE (per '00 Non-US M)	c/GAL	2.96	6.22	5.17	0.00	3.00	2.34	
UNIT MJD COST LAYERS (per '00 hcMJDN)									
D' (10)	CAPITAL.RECY 00-95	c/GAL	0.04	0.20	0.40	0.62	0.27	0.75	0.43
E' (11)	ENVIRON RECY 00-95	c/GAL	1.82	1.91	2.39	1.99	1.93	2.12	2.04
DSB (12)	Delta Stock Bal (00-95)	c/GAL	0.47	0.55	-0.08	0.02	-0.20	0.05	0.14
VOC (13)	Var. Oper. Cost (00-95)	c/GAL	0.02	0.03	-0.01	0.10	0.03	-0.01	0.02
F'	STK.BAL+VOC	c/GAL	0.49	0.58	-0.10	0.11	-0.17	0.05	0.16
Y':	ALL LAYERS 90$	c/GAL	2.34	2.69	2.69	2.73	2.03	2.92	2.63

		2010 - 2000 FC-3 FOREIGN REFINERY COST LAYERS						DLF Rev 01/25	
CODE		UNITS	CAN	NWE	MED	ME	LAT	PAC	FOREIGN
	10 LP DATES (FC-1,2,3)		01/04(2)	01/12(2)	01/14(2)	01/05(2)	01/15(2)	01/13(3)	TOTALS
	00 LP DATES (FC-1,2,3)		08/27(1)	09/28(3)	10/06(3)	09/28(3)	10/05(3)	10/27(3)	
'00 QUANTITIES									
hcMJDN	MJDN - MTBE	MB/D	1392	6238	3305	3194	4048	6576	24753
'10 QUANTITIES									
	Pool M	MB/D	623	2303	1007	731	1633	1758	8055
	US M	MB/D	55	90	60	53	155	0	413
	Region MJD	MB/D	1105	5671	2810	2332	3315	5790	21023
	Export MJD	MB/D	0	30	110	367	25	0	532
	US MJD	MB/D	130	125	94	83	430	0	862
	LS Dist<0.05%S	MB/D	457	2883	1698	66	187	0	5291
	Naphtha	MB/D	183	590	359	419	350	839	2740
	Purchased MeOH	MB/D	0	19	13	1	8	12	53
	Purchased MTBE	MB/D	26	122	30	4	49	10	241
	Produced MTBE/TAME	MB/D	0	56	39	9	24	44	165
	US MTBE/TAME	MB/D	7	12	8	7	20	0	54
	Non-US MTBE/TAME	MB/D	19	166	61	0	52	63	362
MJD	TOTAL MJD	MB/D	1235	5826	3014	2782	3770	5790	22417
MJDN	TOTAL MJDN	MB/D	1418	6416	3373	3201	4120	6629	25157
hcMJD	MJD - MTBE	MB/D	1209	5648	2946	2775	3698	5737	22011
hcMJDN	MJDN - MTBE	MB/D	1392	6238	3305	3194	4048	6576	24751
'10 - '00 MTBE LAYER									
	Cost MTBE 89$	$/B	35.69	33.98	32.60	29.46	34.09	31.14	
'10 - '00 STOCK BALANCE EFFECTS									
	10 LP Out (ExMJD) 89$	M$/D	5088	29167	30838	17374	27437	45119	
	10 LP Inputs 89$	M$/D	30264	141980	87703	72782	100082	151828	
DSB(00)(1)	Delta Stock Bal (10) 90$		26220	117495	59224	57707	75659	111137	447443
	00 LP Out (ExMJD) 89$	M$/D	5088	29167	30838	17374	27437	45119	
	00 LP Inputs 89$	M$/D	30264	141980	87703	72782	100081	151828	
DSB(95)(2)	Delta Stock Bal (00) 90$		26220	117495	59224	57707	75659	111137	447443
'10 - '00 VARIABLE OPERATING COST									
	10 Utility Cost 89$	M$/D	610	2147	1300	1529	1675	2115	9376
	00 Utility Cost 89$	M$/D	610	2147	1300	1529	1675	2115	9376
'10 - '00 CAPITAL RECOVERY (Ex LSD Invest)									
ILP	10 Invest from LP 91$	MM$	0	0	0	0	0	0	0
IHDS	HDS Invest New 91$	MM$	0	0	0	0	0	0	
IHDS/DeB (3)	HDS DeB 91$	MM$	(95)	(00)	(95)	(95)	(95)	(00)	
	HDS Util for LSD	%	87	93	89	6	15	0	
ILSD	HDS Invest for LSD 91$	MM$	0	0	0	0	0	0	
AIXLSD (4)	Invest ExLSD @10% 91$	M$/D	0	0	0	0	0	0	0
	FOC from LP	M$/D	0	0	0	0	0	0	0
	FOC HDS DeB @ 068 fa	M$/D	0	0	0	0	0	0	
FOC (5)	FOC ExLSD 91$	M$/D	0	0	0	0	0	0	
CR (6)	CAP RCVRY Ex LSD 90$	M$/D	0	0	0	0	0	0	0
'10 - '00 ENVIRONMENTAL RECOVERY									
ENV (7)	ENVRNMNTL 90$	M$/D	1064	3904	2665	3649	4726	7512	23519
LS DIST COST LAYER (Per '10 D<0.05%S)									
AILSD (8)	Invest LSD @10% 91$	M$/D	0	0	0	0	0	0	
FOC/LSD	FOC LSD 91$	M$/D	0	0	0	0	0	0	
HH' (9)	LS Distillate	c/GAL	0.00	0.00	0.00	0.00	0.00	0.00	
MTBE/TAME COST LAYER (per M only)									
	MTBE (per '10 US M)	c/GAL	11.75	10.94	10.64	9.44	10.96	0.00	
	MTBE (per '10 Non-US M)	c/GAL	2.96	6.22	5.17	0.00	3.00	2.34	
UNIT MJD COST LAYERS (per '10 hcMJDN)									
H' (10)	CAPITAL RECY 10-00	c/GAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
I' (11)	ENVIRON RECY 10-00	c/GAL	1.82	1.49	1.92	2.72	2.78	2.72	2.26
DSB (12)	Delta Stock Bal (10-00)	c/GAL	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
VOC (13)	Var. Oper. Cost (10-00)	c/GAL	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
J'	STK BAL+VOC	c/GAL	0.00	0.00	0.00	-0.00	0.00	0.00	0.00
Z':	ALL LAYERS 90$	c/GAL	1.82	1.49	1.92	2.72	2.78	2.72	2.26

It was required that the FSG provide estimates for the G investment layer for years 2000 and K for 2010. Estimates were provided only for LAT and PAC, since these are the only foreign regions which show significant investment in all types of refinery process facilities simulating complete new "grass roots" refineries. It was necessary to estimate G and K using the cost increment on the existing two-step cost/volume curves between reference and high U.S. MJD volume, then assume that such cost would apply for a G and K layer above the high point.

The FSG estimated that the following G and K layers will apply above the high MJD points for the LAT and PAC regions:

Region	2000 LAT	2000 PAC	2010 LAT	2010 PAC
MJD Vol Range, MBPD	415-826	459-609	415-831	459-609
MJD Vol Incr., MBPD	411	150	416	150
Delta Cost, $/BBL (Reference-High)	1.18	0.48	2.63	1.28
G/K Increment, MBPD (Above High)	+400	+400	+400	+400
Cost Assumed, $/BBL	1.50	1.00	3.00	2.00

These layers compare with the 6 $/BBL estimate for the U.S.A. The foreign numbers are lower than the U.S., considering that the cost of producing incremental MJD from incremental crude plus conversion will be less costly than from conversion (coking) alone.

CALCULATION OF 1995-1989 LAYER "A" CAPITAL RELATED PROCESS COSTS

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
A Capital Related Process M$/D						
PQPV Capital Recovery	162	993	1581	89	1103	217
PQPV MTI&L	64	392	625	35	436	86
TOTAL A	226	1385	2206	124	1540	302
MEMO: Allocated to Reformulated Products M$/D						
EPA Low Sulfur Diesel	34	390	318	30	79	117
CARB Low Aromatics Diesel	0	0	0	0	443	0
Ref & Oxyg Gasoline	0	0	0	0	0	0
CA PH2 Ref Gasoline	0	0	0	0	0	0
MEMO: Unallocated to specific product	193	995	1889	95	1018	186
hcMJDN in 1995 Reference Case MBPD	1154	2611	5320	398	1607	512
1995-1989 Layer	**PADD I**	**PADD II**	**PADD III**	**PADD IV**	**PADD VC**	**PADD VOC**
Cents ('90$)/Gallon hcMJDN						
A Capital Related Process For All Light Product, cpg	0.40	0.91	0.85	0.57	1.51	0.86

U.S. REFINING INDUSTRY
INVESTMENT COST OF PROCESS UNIT CAPACITY INCREASES
1995-1989 REFERENCE CASES
Allocation of Capital Related Costs, (1990 $ & cents)

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
Cap Rec on ULSD, M$/D	24	280	228	21	56	84
MTI&L on ULSD, M$/D	10	111	90	8	22	33
TOTAL on ULSD, M$/D	34	390	318	30	79	117
ULSD, MBPD	290.9	565.5	894.2	82.4	147.7	103.3
"AA" Layer on ULSD, cpg	0.28	1.64	0.83	0.86	1.27	2.69
Cap Rec on LAD, M$/D					317	
MTI&L on LAD, M$/D					125	
TOTAL on LAD, M$/D					443	
LAD, MBPD	0.0	0.0	0.0	0.0	154.9	0.0
"AA" Layer on LAD, cpg					6.81	

NOTE: Low Sulfur Diesel Capital Related Cost Allocation; California Low Aromatics Diesel Capital Related Cost Allocation;

ULSD = Ultra Low Sulfur Diesel: 0.05% sulfur diesel fuel.
LAD = Low Aromatics Diesel for California

The following tables have the detailed calculations for the environmental cost layers, B, E, and I.

ENVIRONMENTAL EXPENSE DATA		NPC REGION												PADD						
		1	2	3	4	5	6	7	8	9	10	11	12	13	I	II	III	IV	VC	VOC	US
1989																					
O&M	$MM/YR	0	196	5	12	315	47	92	1057	113	68	118	227	36	212	454	1057	113	345	104	2285
1990																					
INVESTMENT	$MM	0	111	7	15	182	31	60	503	54	40	72	125	34	133	273	503	54	197	73	1234
1995																					
INVESTMENT '91-'95	$MM	0	999	60	87	1902	295	555	5903	416	365	647	1069	274	1145	2752	5903	416	1716	639	12571
INVESTMENT '90-'95	$MM	0	1109	67	102	2084	326	615	6406	470	405	719	1194	308	1278	3025	6406	470	1913	713	13805
OTE 1991-1995	$MM	0	297	24	43	624	135	229	2018	213	126	259	485	106	364	988	2018	213	744	232	4559
O&M 1995	$MM/YR	0	332	11	24	556	82	136	1756	106	117	212	343	72	367	774	1756	106	555	189	3747
2000																					
INVESTMENT '96-'00	$MM	0	898	64	130	1557	256	607	3765	527	368	603	1097	315	1093	2420	3765	527	1700	683	10187
OTE 1996-2000	$MM	0	135	4	8	169	28	80	452	81	49	85	152	30	147	277	452	81	237	79	1273
O&M INCREASE FROM 1995 TO 2000	$MM/YR	0	208	18	35	350	59	149	853	147	84	122	238	76	261	558	853	147	360	160	2339
2010																					
INVESTMENT '01-'10	$MM	0	1221	82	171	2097	331	757	5106	650	490	796	1423	406	1474	3185	5106	650	2219	896	13530
OTE 2001-2010	$MM	0	129	4	6	157	25	73	420	76	46	81	143	28	138	255	420	76	224	74	1186
O&M INCREASE FROM 2000 TO 2010	$MM/YR	0	109	7	14	177	28	66	424	58	43	66	120	33	130	271	424	58	186	76	1144

ENVIRONMENTAL COSTS	NPC REGION													PADD						TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	I	II	III	IV	V CA	VexCA	US
1989 ENVIRONMENTAL EXPENSES																				
1.0*O&M $MM/YR	0	196	5	12	315	47	92	1057	113	68	118	227	36	212	454	1057	113	345	104	2285
1995 ENVIRONMENTAL COST INCREASE FROM 1989																				
'89 BACKGROUND O&M $MM/YR	0	-196	-5	-12	-315	-47	-92	-1057	-113	-68	-118	-227	-36	-212	-454	-1057	-113	-345	-104	-2285
0.172*'90-'95 INVESTMENT	0	191	12	18	358	56	106	1102	81	70	124	205	53	220	520	1102	81	329	123	2375
0.2*'91-'95 OTE	0	59	5	9	125	27	46	404	43	25	52	97	21	73	198	404	43	149	46	912
1.0*'95 O&M	0	332	11	24	556	82	136	1756	106	117	212	343	72	367	774	1756	106	555	189	3747
SUM ENVIRONMENTAL INCREASE FROM 1989	0	386	22	39	724	118	196	2205	117	143	270	418	110	447	1038	2205	117	688	254	4748
LIGHT PRODUCT hcMJDN MBPCD	0	1027	52	75	1710	274	627	5320	398	359	619	988	154	1154	2611	5320	398	1607	512	11602
"B" = 1995 ENVIRONMENTAL LAYER cpg	0.00	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	2.53	2.59	2.70	1.91	2.79	3.23	2.67
2000 ENVIRONMENTAL COST INCREASE FROM 1989																				
'89 BACKGROUND O&M $MM/YR	0	-196	-5	-12	-315	-47	-92	-1057	-113	-68	-118	-227	-36	-212	-454	-1057	-113	-345	-104	-2285
CARRYOVER '95 INVEST CHARGE	0	191	12	18	358	56	106	1102	81	70	124	205	53	220	520	1102	81	329	123	2375
CARRYOVER '95 OTE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRYOVER '95 O&M	0	332	11	24	556	82	136	1756	106	117	212	343	72	367	774	1756	106	555	189	3747
0.172*'96-2000 INVESTMENT	0	154	11	22	268	44	104	648	91	63	104	189	54	188	416	648	91	292	117	1752
0.2*'96-2000 OTE	0	27	1	2	34	6	16	90	16	10	17	30	6	29	55	90	16	47	16	255
1.0*O&M INCREASE FROM 1995 TO 2000	0	208	18	35	350	59	149	853	147	84	122	238	76	261	558	853	147	360	160	2339
SUM ENVIRONMENTAL INCREASE FROM 1989	0	716	47	89	1251	200	419	3392	328	275	461	778	225	853	1870	3392	328	1239	501	8182
LIGHT PRODUCT hcMJDN MBPCD	0	1022	52	75	1714	275	628	5322	403	376	640	1022	161	1148	2617	5322	403	1663	537	11689
TOTAL ENVIRONMENTAL COST INCREASE cpg	0.00	4.57	5.99	7.77	4.76	4.75	4.35	4.16	5.30	4.78	4.69	4.97	9.12	4.84	4.66	4.16	5.30	4.86	6.08	4.57
"E" = 2000 ENVIRONMENTAL LAYER cpg	0.00	2.12	3.17	4.42	2.00	1.93	2.32	1.45	3.39	2.17	1.85	2.21	4.44	2.32	2.07	1.45	3.39	2.07	2.85	1.90
FOR LOW REGULATION SENSITIVITY																				
- 60% 1996-2000 INVEST $MM/YR	0	93	7	13	161	26	63	389	54	38	62	113	33	113	250	389	54	175	70	1051
- 80% 1996-2000 OTE	0	16	1	1	20	3	10	54	10	6	10	18	4	18	33	54	10	28	9	153
- 80% O&M INCREASE '95 TO 2000	0	125	11	21	210	35	89	512	88	50	73	143	46	157	335	512	88	216	96	1403
TOTAL REDUCTION	0	234	18	35	391	65	162	955	152	94	146	274	82	287	618	955	152	420	176	2607
SUM ENVIRONMENTAL INCREASE FROM 1989	0	482	30	54	860	135	257	2437	175	181	315	504	144	566	1252	2437	175	819	325	5574
LIGHT PRODUCT hcMJDN MBPCD	0	1022	52	75	1714	275	628	5322	403	376	640	1022	161	1148	2617	5322	403	1663	537	11689
TOTAL ENVIRONMENTAL COST INCREASE cpg	0.00	3.08	3.74	4.68	3.27	3.20	2.67	2.99	2.84	3.14	3.21	3.22	5.82	3.21	3.12	2.99	2.84	3.21	3.94	3.11
"E" = 2000 ENVIRON SENS LAYER cpg	0.00	0.63	0.92	1.33	0.51	0.38	0.64	0.28	0.93	0.54	0.37	0.46	1.13	0.69	0.53	0.28	0.93	0.42	0.71	0.44

ENVIRONMENTAL COSTS, $MM/YR	REGION 1	2	3	4	5	6	7	8	9	10	11	12	13	PADD I	II	III	IV	VC	VOC	TOTAL US
2010 ENVIRONMENTAL COST INCREASE FROM 1989																				
'89 BACKGROUND O&M	0	-196	-5	-12	-315	-47	-92	-1057	-113	-68	-118	-227	-36	-212	-454	-1057	-113	-345	-104	-2285
CARRYOVER '95 INVEST CHARGE	0	191	12	18	358	56	106	1102	81	70	124	205	53	220	520	1102	81	329	123	2375
CARRYOVER '95 OTE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRYOVER '95 O&M	0	332	11	24	556	82	136	1756	106	117	212	343	72	367	774	1756	106	555	189	3747
CARRYOVER 2000 INVEST CHARGE	0	154	11	22	268	44	104	648	91	63	104	189	54	188	416	648	91	292	117	1752
CARRYOVER 2000 OTE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRYOVER 2000 O&M	0	208	18	35	350	59	149	853	147	84	122	238	76	261	558	853	147	360	160	2339
0.172*2001-2010 INVESTMENT	0	210	14	29	361	57	130	878	112	84	137	245	70	253	548	878	112	382	154	2327
0.2*2001-2010 OTE	0	13	0	1	16	3	7	42	8	5	8	14	3	14	25	42	8	22	7	119
1.0*O&M INCREASE FROM 2001 TO 2010	0	109	7	14	177	28	66	424	58	43	66	120	33	130	271	424	58	186	76	1144
SUM ENVIRONMENTAL INCREASE FROM 1989	0	1021	68	131	1770	282	606	4646	489	398	655	1127	325	1220	2658	4646	489	1782	722	11517
FOR FCII AND FCIII																				
LIGHT PRODUCT hcMJDN MBPCD	0	1022	52	75	1714	275	628	5322	403	376	640	1022	161	1148	2617	5322	403	1663	537	11689
TOTAL ENVIRONMENTAL COST INCREASE cpg	0.00	6.52	8.57	11.46	6.74	6.69	6.29	5.69	7.91	6.90	6.67	7.19	13.16	6.93	6.63	5.69	7.91	6.99	8.78	6.43
"I" = 2010 ENVIRONMENTAL LAYER cpg	0.00	1.95	2.57	3.68	1.98	1.94	1.94	1.54	2.61	2.12	1.98	2.22	4.04	2.09	1.97	1.54	2.61	2.13	2.70	1.86
FOR FCI																				
LIGHT PRODUCT hcMJDN MBPCD	0	1085	55	79	1821	292	667	5653	428	399	680	1086	171	1219	2780	5653	428	1766	570	12416
TOTAL ENVIRONMENTAL COST INCREASE cpg	0.00	6.14	8.07	10.79	6.34	6.30	5.93	5.36	7.45	6.50	6.28	6.77	12.40	6.53	6.24	5.36	7.45	6.58	8.27	6.05
"I" = 2010 ENVIRONMENTAL LAYER cpg	0.00	1.57	2.08	3.02	1.58	1.55	1.57	1.20	2.15	1.72	1.59	1.80	3.27	1.68	1.58	1.20	2.15	1.72	2.19	1.49

U.S. REFINING INDUSTRY
CALCULATION OF LAYER "C"
NET STOCK BALANCE COSTS
ALL IN 1990 $

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
1989 hcMJDN, MBPD	1154	2600	5327	403	1526	500
1995 hcMJDN, MBPD	1154	2611	5320	398	1607	512
2000 hcMJDN, MBPD	1148	2617	5322	403	1663	537
1989 Raw Material Cost	27654	63653	119852	9747	36258	12758
1995 Raw Material Cost	31124	65191	120478	9892	40860	13182
2000 Raw Material Cost	31067	67454	126768	10068	41762	13280
1989 Variable Op Cost	528	1207	2958	155	1138	273
1995 Variable Op Cost	495	1231	3320	150	1233	275
2000 Variable Op Cost	519	1165	3385	156	1529	284
1989 Byproduct Credit	6078	7294	18976	1002	7666	2968
1995 Byproduct Credit	9832	8554	20481	1179	10555	3248
2000 Byproduct Credit	9746	11397	27273	1291	10836	3046
Calculate hcMJDN Cost for 1989 Raw Material + Variable Op Costs - Byproduct Credit, M$/D	22104	57566	103833	8900	29729	10062
CPG of hcMJDN	45.60	52.71	46.41	52.62	46.40	47.92
Calculate hcMJDN Cost for 1995 Raw Material + Variable Op Costs - Byproduct Credit, M$/D	21786	57867	103315	8863	31537	10208
ULSD, MBPD	291	566	894	82	148	103
LAD, MBPD					155	
Less ULSD & LAD OP Cost	122	238	376	35	257	43
Net hcMJDN Cost for 1995	21664	57630	102939	8829	31280	10165
CPG of hcMJDN	44.71	52.55	46.07	52.82	46.34	47.23
Delta 1995-1989 Layer "C", CPG	-0.89	-0.16	-0.34	0.19	-0.06	-0.69
Calculate hcMJDN Cost for 2000 Raw Material + Variable Op Costs - Byproduct Credit, M$/D	21838	57220	102878	8932	32454	10518
Less ULSD & LAD Op Cost	122	238	376	35	257	43
Net hcMJDN Cost for 2000	21716	56983	102502	8898	32197	10475
CPG of hcMJDN	45.04	51.84	45.86	52.53	46.11	46.45
Delta 2000-1989 Layer "F", CPG (Applies only for FC-I in PADD V, non-CA sector.)	DOES NOT APPLY		DNA	DNA	DNA	-1.47
Credit for Increased hcMJDN						
hcMJDN Change, MBPD	-5.6	6.1	1.7	5.3	55.3	DNA

U.S. REFINING INDUSTRY
CALCULATION OF LAYER "C"
NET STOCK BALANCE COSTS
ALL IN 1990 $

(CONTINUED)

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
Credit hcMJDN @'95 cpg	-105	135	33	118	1076	DNA
Delta Net hcMJDN Cost for 2000, M$/D	157	-782	-470	-48	-159	DNA
Phase II Rfg, MBPD	680	879	1867	27	0	0
CARB Phase 2 Rfg, MBPD	0	0	0	0	1020	0
Allocate all Stock Balance Delta to Phase II RFG						
Stock Balance, M$/D	157	-782	-470	-48	DNA	DNA
Layer, CPG	0.55	-2.12	-0.60	-4.24	DNA	DNA
Allocate all Stock Balance Delta to CARB Phase 2 RFG						
Stock Balance, M$/D	DNA	DNA	DNA	DNA	-159	DNA
Layer, CPG	DNA	DNA	DNA	DNA	-0.37	DNA

Byproduct values in 1990$/bbl and byproduct volumes in the 1989, 1995, and 2000 reference cases for each PADD are shown. The total byproduct credit for each PADD and year is calculated and shown.

BYPRODUCT SALES
PRODUCT VALUES, 1990$/BBL

	I	II	III	IV	VC	VOC
C3=	15.81	25.18	14.77	0.00	25.18	0.00
C4=	13.54	0.00	20.83	0.00	0.00	0.00
S	0.01	0.01	0.01	0.01	0.01	0.01
C3	9.83	9.83	9.83	9.83	9.83	9.83
BUTANE	0.00	0.00	12.64	0.00	12.64	12.64
L/MSFO	18.71	16.96	18.06	16.96	17.14	17.14
HSFO	15.07	14.05	14.05	14.05	14.74	14.45
ASPHALT	20.43	20.43	20.43	20.43	20.43	20.43
NAPHTHA	22.91	22.91	22.91	22.91	22.91	0.00
GASOIL	18.75	18.75	18.75	18.75	18.75	0.00
LUBES	37.03	37.03	37.03	37.03	37.03	0.00
F COKE	0.01	0.00	0.01	0.01	0.01	0.00
EXTRACT	20.83	15.62	15.62	15.62	20.83	0.00
D COKE	0.01	0.01	0.01	0.01	0.01	0.01
MTBE	37.18	37.18	37.18	37.18	37.18	37.18

BYPRODUCT SALES
VOLUMES, 1989 (MBPD)

	I	II	III	IV	VC	VOC
C3=	12.900	36.260	64.285	0.000	36.580	0.000
C4=	2.300	0.000	8.800	0.000	0.000	0.000
S	5.478	8.637	33.605	1.105	10.429	1.999
C3	37.292	93.088	219.581	11.525	75.576	15.750
BUTANE	0.000	0.000	0.000	0.000	14.533	4.264
L/MSFO	100.300	13.300	90.500	2.800	22.500	44.700
HSFO	41.957	60.616	261.572	10.017	224.236	124.227
ASPHALT	88.500	140.500	103.700	28.600	53.400	9.700
NAPHTHA	0.000	0.000	0.000	0.000	0.000	0.000
GASOIL	0.300	22.100	185.200	0.500	7.900	0.000
LUBES	24.300	24.700	112.300	2.000	21.900	0.000
F COKE	5.723	0.000	1.993	0.345	9.245	0.000
EXTRACT	12.200	12.100	40.100	2.100	3.700	0.000
D COKE	7.648	64.721	147.419	4.463	74.650	19.519
MTBE	0.000	0.000	0.000	0.000	0.000	0.000

BYPRODUCT SALES
VOLUMES, 1995 (MBPD)

	I	II	III	IV	VC	VOC
C3=	12.900	14.838	64.300	0.000	0.000	0.000
C4=	2.300	0.000	8.800	0.000	0.000	0.000
S	5.649	9.842	36.304	1.386	11.400	2.326
C3	31.608	89.740	224.860	11.354	72.531	16.475
BUTANE	0.000	0.000	0.000	0.000	0.000	0.000
L/MSFO	100.300	13.300	90.500	2.800	22.500	44.700
HSFO	41.626	61.267	141.614	12.795	168.699	113.691
ASPHALT	85.600	135.800	100.300	24.800	51.600	9.400
NAPHTHA	0.000	0.000	0.000	0.000	0.000	0.000
GASOIL	0.300	25.200	211.100	0.600	9.000	0.000
LUBES	23.500	23.900	108.500	1.900	21.200	0.000
F COKE	5.694	0.000	1.993	0.345	9.245	0.000
EXTRACT	11.900	11.800	39.000	2.000	3.600	0.000
D COKE	7.425	66.189	167.680	5.400	88.087	18.282
MTBE	105.177	50.984	77.459	5.932	139.604	13.049

BYPRODUCT SALES
VOLUMES, 2000 (MBPD)

	I	II	III	IV	VC	VOC
C3=	12.900	2.519	64.300	0.000	0.000	0.000
C4=	2.300	0.000	8.800	0.000	0.000	0.000
S	5.514	9.326	34.885	1.337	11.517	2.646
C3	32.207	152.508	216.875	11.129	92.065	17.557
BUTANE	0.000	0.000	0.000	0.000	23.833	0.000
L/MSFO	100.300	13.300	90.500	2.800	22.500	44.700
HSFO	44.231	62.881	144.437	12.698	135.697	90.314
ASPHALT	82.600	131.200	96.800	23.900	49.900	9.100
NAPHTHA	0.000	0.000	0.000	0.000	0.000	0.000
GASOIL	0.400	27.400	229.900	0.600	9.800	0.000
LUBES	22.600	23.000	104.600	1.900	20.400	0.000
F COKE	5.929	0.000	1.993	0.345	9.245	0.000
EXTRACT	11.500	11.400	37.900	2.000	3.500	0.000
D COKE	7.425	66.102	167.680	5.516	88.087	17.498
MTBE	104.386	121.068	257.982	9.556	140.185	16.586

BYPRODUCT SALES
VALUES, 1989 (M$/D)

C3=	204	913	949	0	921	0
C4=	31	0	183	0	0	0
S	0	0	0	0	0	0
C3	367	915	2159	113	743	155
BUTANE	0	0	0	0	184	54
L/MSFO	1876	226	1634	47	386	766
HSFO	632	852	3675	141	3305	1795
ASPHALT	1808	2871	2119	584	1091	198
NAPHTHA	0	0	0	0	0	0
GASOIL	6	414	3472	9	148	0
LUBES	900	915	4158	74	811	0
F COKE	0	0	0	0	0	0
EXTRACT	254	189	626	33	77	0
D COKE	0	1	2	0	1	0
MTBE	0	0	0	0	0	0
TOTAL	6078	7295	18978	1002	7667	2968

U.S. REFINING INDUSTRY
CALCULATION OF 2000-1995 LAYER "D"
CAPITAL RELATED PROCESS COSTS
2000-1995 LAYER

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
"D" Capital Related Process						
Capital Recovery, M 1990 $/D	360	374	709	27	1955	139
MTI&L, M$/D	142	150	290	10	702	51
TOTAL "D", M$/D	502	524	999	37	2657	190
MEMO: Allocated to Reformed Product, M$/D						
EPA Low Sulfur Diesel	0	0	0	0	0	0
CARB Low Aromatics Diesel	0	0	0	0	0	0
Ref & Oxyg Gasoline	502	524	999	37	0	0
CA PH2 Ref Gasoline	0	0	0	0	2657	0
MEMO: Unallocated	0	0	0	0	0	190
hcMJDN in 2000 Reference Case MBPD	1149	2628	5351	404	1667	538
2000 - 1995 Layer Cents ('90$)/Gallon hcMJDN	**PADD I**	**PADD II**	**PADD III**	**PADD IV**	**PADD VC**	**PADD VOC**
"D" Capital Related Process For All Light Product, cpg	0.00	0.00	0.00	0.00	0.00	0.88*

* In FCI only.

BYPRODUCT SALES
VALUES, 1995 (M$/D)

C3=	204	374	950	0	0	0
C4=	31	0	183	0	0	0
S	0	0	0	0	0	0
C3	311	882	2211	112	713	162
BUTANE	0	0	0	0	0	0
L/MSFO	1876	226	1634	47	386	766
HSFO	627	861	1990	180	2486	1642
ASPHALT	1749	2775	2050	507	1054	192
NAPHTHA	0	0	0	0	0	0
GASOIL	6	472	3957	11	169	0
LUBES	870	885	4017	70	785	0
F COKE	0	0	0	0	0	0
EXTRACT	248	184	609	31	75	0
D COKE	0	1	2	0	1	0
MTBE	3911	1896	2880	221	5191	485
TOTAL	9833	8555	20483	1179	10860	3248

BYPRODUCT SALES
VALUES, 2000 (M$/D)

C3=	204	63	950	0	0	0
C4=	31	0	183	0	0	0
S	0	0	0	0	0	0
C3	317	1499	2132	109	905	173
BUTANE	0	0	0	0	301	0
L/MSFO	1876	226	1634	47	386	766
HSFO	667	883	2029	178	2000	1305
ASPHALT	1688	2681	1978	488	1020	186
NAPHTHA	0	0	0	0	0	0
GASOIL	7	514	4310	11	184	0
LUBES	837	852	3873	70	755	0
F COKE	0	0	0	0	0	0
EXTRACT	240	178	592	31	73	0
D COKE	0	1	2	0	1	0
MTBE	3881	4501	9592	355	5212	617
TOTAL	9748	11398	27276	1292	10837	3046

U.S. REFINING INDUSTRY
CALCULATION OF 2000-1995 LAYER "D"
CAPITAL RELATED PROCESS COSTS
2000-1995 REFERENCE CASES

	PADD I	PADD II	PADD III	PADD IV	PADD V CA	PADD V ex CA
NPC Regions	**1, 2, 3, 4**	**5, 6, 7**	**8**	**9**	**11, 12**	**10, 13**
EPA Phase II RFG for 2000 portion						
Capital Recovery, M$/D	360	374	709	27	0	0
MTI&L, M$/D	142	150	290	11	0	0
TOTAL, M$/D	502	523	999	37	0	0
EPA Phase II Rfg for 2000, MBPD	780	879	1867	27	0	0
"DD" Rfg Layer, cpg	1.76	1.42	1.27	3.24	DNA	DNA
CARB Phase 2 Rfg Portion, M$/D						
Capital Recovery	0	0	0	0	1955	0
MTI & L	0	0	0	0	702	0
TOTAL	0	0	0	0	2658	0
CARB Phase 2 Rfg, MBPD	0	0	0	0	1020	0
"DD" Layer, cpg					6.21	

Appendix L, Section VIII-2

Layered Cost Buildup (ABC) Tables

This appendix is the computer generated summary of individual U.S. light product costs for future years for the foundation cases. It shows the layered cost buildups for the 13 U.S. and 6 foreign regions. Tables for FC-1, 2, and 3 as well as the environmental sensitivity issue case are included.

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CONVENTIONAL UNLEADED REGULAR GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	0		0.63	0.63	0.63	0.33	0.33	0.33	0.21	0.51	0.53	1.04	1.04	0.53	0.89	0.89	0.89	0.89	0.89	0.89
SUB-TOTAL (X)	T		2.59	2.96	3.49	3.84	3.90	3.12	3.42	3.18	3.31	5.33	5.25	5.39	5.34	3.94	4.75	4.05	4.76	2.74
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE			62.28	62.65	64.73	62.92	66.18	62.33	61.43	64.91	65.99	66.72	67.96	85.27	63.76	59.76	59.75	58.03	52.62	56.70
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		-1.92	-1.92	-1.92	-1.13	-1.13	-1.13	-0.92	-1.12	-0.03	-1.45	-1.45	-0.03	-	-	-	-	-	-
SUB-TOTAL (Y)			0.20	1.25	2.50	0.85	0.78	1.17	0.51	2.26	1.50	0.39	0.74	3.77	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I		62.48	63.90	67.23	63.77	66.96	63.50	61.94	67.17	67.49	67.11	68.70	89.04	66.06	62.77	62.58	60.57	55.33	59.56
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE			64.05	65.98	70.25	65.37	68.53	65.09	63.17	69.32	69.21	68.71	70.52	92.32	67.89	66.30	64.07	62.49	59.14	63.56

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CO NON-ATTAINMENT REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-0.70	-0.70	-0.70	-2.43	-2.43	-2.43	-1.49	-3.00	-1.13	-0.80	-0.80	-1.13	-0.81	-0.81	-0.81	-0.81	-0.81	-0.81
SUB-TOTAL (X)	T	1.26	1.63	2.16	1.08	1.14	0.36	1.72	-0.33	1.65	3.49	3.41	3.73	3.64	2.24	3.05	2.35	3.06	1.04
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE		60.95	61.32	63.40	60.16	63.42	59.57	59.73	61.40	64.33	64.88	66.12	83.61	62.06	58.06	58.05	56.33	50.92	55.00
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)		-2.35	-2.35	-2.35	-0.67	-0.67	-0.67	-1.49	-0.31	0.25	-4.21	-4.21	0.25	-	-	-	-	-	-
SUB-TOTAL (Y)	P	-0.23	0.82	2.07	1.31	1.24	1.63	-0.06	3.07	1.78	-2.37	-2.02	4.05	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	60.72	62.14	65.47	61.47	64.66	61.20	59.67	64.47	66.11	62.51	64.10	87.66	64.36	61.07	60.88	58.87	53.63	57.86
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE		62.29	64.22	68.49	63.07	66.23	62.79	60.90	66.62	67.83	64.11	65.92	90.94	66.19	64.60	62.37	60.79	57.44	61.86

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	0.17	0.17	0.17	-1.03	-1.03	-1.03	-0.68	-1.24	-0.27	0.07	0.07	-0.27	-	-	-	-	-	-
SUB-TOTAL (X)	T	2.13	2.50	3.03	2.48	2.54	1.76	2.53	1.43	2.51	4.36	4.28	4.59	4.45	3.05	3.86	3.16	3.87	1.85
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE		61.82	62.19	64.27	61.56	64.82	60.97	60.54	63.16	65.19	65.75	66.99	84.47	62.87	58.87	58.86	57.14	51.73	55.81
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	0.63	0.63	0.63	-1.15	-1.15	-1.15	0.34	-2.96	0.62	-2.48	-2.48	0.62	-	-	-	-	-	-
SUB-TOTAL (Y)		4.51	5.56	6.81	2.25	2.18	2.57	3.04	3.66	3.42	3.12	3.47	5.69	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	66.33	67.75	71.08	63.81	67.00	63.54	63.58	66.82	68.61	68.87	70.46	90.16	65.17	61.88	61.69	59.68	54.44	58.67
	C								2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE		67.90	69.83	74.10	65.41	68.57	65.13	64.81	68.97	70.33	70.47	72.28	93.44	67.00	65.41	63.18	61.60	58.25	62.67

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CO-REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-0.17	-0.17	-0.17	-1.75	-1.75	-1.75	-1.12	-2.10	-0.70	-0.41	-0.41	-0.70	-0.44	-0.44	-0.44	-0.44	-0.44	-0.44
SUB-TOTAL (X)	T	1.79	2.16	2.69	1.76	1.82	1.04	2.09	0.57	2.08	3.88	3.80	4.16	4.01	2.61	3.42	2.72	3.43	1.41
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE			61.48	61.85	63.93	60.84	64.10	60.25	60.10	62.30	64.76	65.27	66.51	84.04	62.43	58.43	58.42	56.70	51.29	55.37
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	0.51	0.51	0.51	-1.03	-1.03	-1.03	0.20	-2.76	0.69	-3.20	-3.20	0.69	-	-	-	-	-	-
SUB-TOTAL (Y)		4.39	5.44	6.69	2.37	2.30	2.69	2.90	3.86	3.49	2.40	2.75	5.76	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	65.87	67.29	70.62	63.21	66.40	62.94	63.00	66.16	68.25	67.67	69.26	89.80	64.73	61.44	61.25	59.24	54.00	58.23
	C																		
2010 COSTS (1990 DOLLARS)																			
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE			67.44	69.37	73.64	64.81	67.97	64.53	64.23	68.31	69.97	69.27	71.08	93.08	66.56	64.97	62.74	61.16	57.81	62.23

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CONVENTIONAL UNLEADED PREMIUM GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		0.38	0.38	0.38	0.24	0.24	0.24	0.14	0.33	0.34	0.61	0.61	0.34	0.61	0.61	0.61	0.61	0.61	0.61
SUB-TOTAL (X)	T		2.34	2.71	3.24	3.75	3.81	3.03	3.35	3.00	3.12	4.90	4.82	5.20	5.06	3.66	4.47	3.77	4.48	2.46
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE			68.59	68.96	75.00	72.83	74.31	68.28	67.51	71.18	72.78	72.86	73.88	90.71	70.03	66.03	66.04	64.33	58.91	62.99
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		-1.93	-1.93	-1.93	-1.14	-1.14	-1.14	-0.90	-1.06	-0.02	-2.19	-2.19	-0.02	-	-	-	-	-	-
SUB-TOTAL (Y)			0.19	1.24	2.49	0.84	0.77	1.16	0.53	2.32	1.51	-0.35	-	3.78	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I		68.78	70.20	77.49	73.67	75.08	69.44	68.04	73.50	74.29	72.51	73.88	94.49	72.33	69.04	68.87	66.87	61.62	65.86
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE			70.35	72.28	80.51	75.27	76.65	71.03	69.27	75.65	76.01	74.11	75.70	97.77	74.16	72.57	70.36	68.79	65.43	69.85

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CO NON-ATTAINMENT PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-0.49	-0.49	-0.49	-1.56	-1.56	-1.56	-0.97	-1.97	-0.74	-0.59	-0.59	-0.74	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
SUB-TOTAL (X)	T	1.47	1.84	2.37	1.95	2.01	1.23	2.24	0.70	2.04	3.70	3.62	4.12	3.95	2.55	3.36	2.66	3.37	1.35
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE		67.72	68.09	74.13	71.03	72.51	66.48	66.40	68.88	71.70	71.66	72.68	89.63	68.92	64.92	64.93	63.22	57.80	61.88
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	-2.21	-2.21	-2.21	-0.84	-0.84	-0.84	-1.26	-0.52	0.16	-3.99	-3.99	0.16	-	-	-	-	-	-
SUB-TOTAL (Y)		-0.09	0.96	2.21	1.14	1.07	1.46	0.17	2.86	1.69	-2.15	-1.80	3.96	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	67.63	69.05	76.34	72.17	73.58	67.94	66.57	71.74	73.39	69.51	70.88	93.59	71.22	67.93	67.76	65.76	60.51	64.75
	C																		
2010 COSTS (1990 DOLLARS)																			
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE		69.20	71.13	79.36	73.77	75.15	69.53	67.80	73.89	75.11	71.11	72.70	96.87	73.05	71.46	69.25	67.68	64.32	68.74

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	0.12	0.12	0.12	-0.82	-0.82	-0.82	-0.47	-0.71	-0.35	0.10	0.10	-0.35	-	-	-	-	-	-
SUB-TOTAL (X)	T	2.08	2.45	2.98	2.69	2.75	1.97	2.74	1.96	2.43	4.39	4.31	4.51	4.45	3.05	3.86	3.16	3.87	1.85
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE		68.33	68.70	74.74	71.77	73.25	67.22	66.90	70.14	72.09	72.35	73.37	90.02	69.42	65.42	65.43	63.72	58.30	62.38
									2000 COSTS (1990 DOLLARS)										
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	0.60	0.60	0.60	-1.30	-1.30	-1.30	0.12	-3.78	0.73	-2.48	-2.48	0.73	-	-	-	-	-	-
SUB-TOTAL (Y)		4.48	5.53	6.78	2.10	2.03	2.42	2.82	2.84	3.53	3.12	3.47	5.80	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	72.81	74.23	81.52	73.87	75.28	69.64	69.72	72.98	75.62	75.47	76.84	95.82	71.72	68.43	68.26	66.26	61.01	65.25
	C								2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE		74.38	76.31	84.54	75.47	76.85	71.23	70.95	75.13	77.34	77.07	78.66	99.10	73.55	71.96	69.75	68.18	64.82	69.24

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- CO-REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-0.12	-0.12	-0.12	-1.30	-1.30	-1.30	-0.76	-1.29	-0.64	-0.22	-0.22	-0.64	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29
SUB-TOTAL (X)	T	1.84	2.21	2.74	2.21	2.27	1.49	2.45	1.38	2.14	4.07	3.99	4.22	4.16	2.76	3.57	2.87	3.58	1.56
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25*
1995 ADJUSTED VALUE			68.09	68.46	74.50	71.29	72.77	66.74	66.61	69.56	71.80	72.03	73.05	89.73	69.13	65.13	65.14	63.43	58.01	62.09
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	0.54	0.54	0.54	-1.22	-1.22	-1.22	0.01	-3.64	0.78	-2.96	-2.96	0.78	-	-	-	-	-	-
SUB-TOTAL (Y)		4.42	5.47	6.72	2.18	2.11	2.50	2.71	2.98	3.58	2.64	2.99	5.85	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11*
2000 ADJUSTED VALUE	I	72.51	73.93	81.22	73.47	74.88	69.24	69.32	72.54	75.38	74.67	76.04	95.58	71.43	68.14	67.97	65.97	60.72	64.96
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2010 ADJUSTED VALUE		74.08	76.01	84.24	75.07	76.45	70.83	70.55	74.69	77.10	76.27	77.86	98.86	73.26	71.67	69.46	67.89	64.53	68.95

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON KEROSENE JET FUEL

		U.S. REGIONS											FOREIGN REGIONS				
		3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE	58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	54.60	53.24	53.60	57.36
NETBACK REVISION	-	-	-	-	-	-	-	-	-					-	-	-2.07	-1.26	-6.69	-5.99*
SUB-TOTAL	58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	52.52	51.98	46.90	51.37
SCALING FACTOR	-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19		-	0.60	2.07	1.26	0.50	
1989 ADJUSTED VALUE	58.90	59.21	58.81	59.20	57.12	57.70	55.35	55.50	56.47	58.59	58.85	58.61	61.00	55.88	54.86	54.60	53.24	47.40	51.37
1995 COSTS (1990 DOLLARS)																			
1990 $ ADJ VALUE	61.34	61.67	61.26	61.66	59.49	60.09	57.65	57.80	58.81	61.02	61.29	61.04	63.53	58.20	57.13	56.86	55.45	49.37	53.50
PROC CAP: AVG (A)		0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O																		
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.45	3.05	3.86	3.16	3.87	1.85
OTHER COSTS																			2.26*
1995 ADJUSTED VALUE		63.63	63.59	64.52	63.00	63.66	60.44	61.01	61.48	63.80	65.58	65.25	68.39	62.65	60.18	60.72	58.61	53.24	57.61
2000 COSTS (1990 DOLLARS)																			
PROC CAP: AVG (D)									0.84			0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A												-	-					
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	30	.43	3.38	2.16	84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P									-1.47			-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P																		
SUB-TOTAL (Y)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS																			0.12*
2000 ADJUSTED VALUE		65.75	66.76	68.94	64.98	65.57	62.74	62.44	64.86	65.33	67.42	67.44	72.19	64.95	63.19	63.55	61.15	55.95	60.48
	C	2010 COSTS (1990 DOLLARS)																	
PROC CAP: AVG (H)	A														1.03			1.27	0.89
SPEC (HH)																			
ENVIRO FACILITY (I)	B	.57	2.08	3.02	1.60	.57	.59	1.23	2.15	I.72	I.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)														0.01	-0.28			-0.18	0.13
SPEC (JJ)																			
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS																			0.27*
2010 ADJUSTED VALUE		67.32	68.84	71.96	66.58	67.14	64.33	63.67	67.01	67.05	69.02	69.26	75.47	66.78	66.72	65.04	63.07	59.76	64.49

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLLUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- ON-HIGHWAY DIESEL FUEL (0.05 % SULFUR)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			0.28	0.28	0.28	1.64	1.64	1.64	0.85	0.86	2.69	1.27	1.27	2.69	0.80	0.97	-	-	1.04	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB-TOTAL (X)	T	3.24	3.61	4.14	6.15	6.21	5.43	5.06	4.53	6.47	6.56	6.48	8.55	6.25	5.02	4.86	4.16	5.91	2.85
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.32*
1995 ADJUSTED VALUE		61.06	61.01	63.51	61.27	61.61	59.85	59.32	60.01	65.30	64.20	63.25	68.33	61.57	60.72	54.43	55.12	51.44	56.10
									2000 COSTS (1990 DOLLARS)										
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	0.45	0.61	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)	P	2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.30	3.01	3.15	2.99	3.32	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74*
2000 ADJUSTED VALUE	I	63.18	64.18	67.93	63.25	63.52	62.15	60.75	63.39	66.83	66.04	65.44	72.13	63.87	63.73	57.58	58.11	54.76	59.59
	C								2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	0.09	-	-	0.18	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.62	1.49	1.92	3.99	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46*
2010 ADJUSTED VALUE		64.75	66.26	70.95	64.85	65.09	63.74	61.98	65.54	68.55	67.64	67.26	75.41	65.70	67.35	59.07	60.03	58.75	63.79

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- OFF HIGHWAY DIESEL FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.45	3.05	3.86	3.16	3.87	1.85
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.28*
1995 ADJUSTED VALUE		59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.77	58.75	53.43	54.12	49.40	54.06
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.30	3.01	2.83	2.54	2.71	2.75
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.13*
2000 ADJUSTED VALUE	I	61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	63.14	63.77	63.17	68.44	62.07	61.76	56.26	56.66	52.11	56.94
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28*
2010 ADJUSTED VALUE		63.47	64.98	69.67	62.21	62.45	61.10	60.13	63.68	64.86	65.37	64.99	71.72	63.90	65.29	57.75	58.58	55.92	60.96

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I -- CENTS PER GALLON -- OTHER DISTILLATE

		U.S. REGIONS											FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.01	1.56	2.45	2.29	1.56	1.66	
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.45	3.05	3.86	3.16	3.87	1.85	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.28*	
1995 ADJUSTED VALUE		59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.77	58.75	53.43	54.12	49.40	54.06	
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11	
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Y)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.30	3.01	2.83	2.54	2.71	2.75	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.13*	
2000 ADJUSTED VALUE	I	61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	63.14	63.77	63.17	68.44	62.07	61.76	56.26	56.66	52.11	56.94	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	-	-	1.27	0.89	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	0.01	-0.28	-	-	-0.18	0.13	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.83	3.53	1.49	1.92	3.81	3.74	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28*	
2010 ADJUSTED VALUE		63.47	64.98	69.67	62.21	62.45	61.10	60.13	63.68	64.86	65.37	64.99	71.72	63.90	65.29	57.75	58.58	55.92	60.96	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 3, 1993 TIME 15:17

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CONVENTIONAL UNLEADED REGULAR GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O	0.63	0.63	0.63	0.33	0.33	0.33	0.21	0.51	0.53	1.04	1.04	0.53	0.89	0.89	0.89	0.89	0.89	0.89
SUB-TOTAL (X)	T	2.59	2.96	3.49	3.84	3.90	3.12	3.42	3.18	3.31	5.33	5.25	5.39	5.35	4.54	4.83	4.15	4.90	2.93
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*
1995 ADJUSTED VALUE		62.28	62.65	64.73	62.92	66.18	62.33	61.43	64.91	65.99	66.72	67.96	85.27	63.77	60.36	59.83	58.13	52.76	56.84
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)		-1.92	-1.92	-1.92	-1.13	-1.13	-1.13	-0.92	-1.12	-0.03	-1.45	-1.45	-0.03	-	-	-	-	-	-
	P																		
SUB-TOTAL (Y)		0.20	1.25	2.50	0.85	0.78	1.17	0.51	2.26	1.50	0.39	0.74	3.77	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*
2000 ADJUSTED VALUE	I	62.48	63.90	67.23	63.77	66.96	63.50	61.94	67.17	67.49	67.11	68.70	89.04	66.16	62.57	62.72	60.89	55.07	59.30
	C																		
2010 COSTS (1990 DOLLARS)																			
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*
2010 ADJUSTED VALUE		64.05	65.98	70.25	65.37	68.53	65.09	63.17	69.32	69.21	68.71	70.52	92.32	67.75	65.55	64.15	62.86	58.02	62.44

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CO NON-ATTAINMENT REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44	
SPEC (CC)	O	-0.70	-0.70	-0.70	-2.43	-2.43	-2.43	-1.49	-3.00	-1.13	-0.80	-0.80	-1.13	-0.81	-0.81	-0.81	-0.81	-0.81	-0.81	
SUB-TOTAL (X)	T	1.26	1.63	2.16	1.08	1.14	0.36	1.72	-0.33	1.65	3.49	3.41	3.73	3.65	2.84	3.13	2.45	3.20	1.23	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*	
1995 ADJUSTED VALUE		60.95	61.32	63.40	60.16	63.42	59.57	59.73	61.40	64.33	64.88	66.12	83.61	62.07	58.66	58.13	56.43	51.06	55.14	
2000 COSTS (1990 DOLLARS)																				
PRDC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08	
SPEC (FF)	P	-2.35	-2.35	-2.35	-0.67	-0.67	-0.67	-1.49	-0.31	0.25	-4.21	-4.21	0.25	-	-	-	-	-	-	
SUB-TOTAL (Y)		-0.23	0.82	2.07	1.31	1.24	1.63	-0.06	3.07	1.78	-2.37	-2.02	4.05	2.39	2.21	2.89	2.76	2.31	2.93	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*	
2000 ADJUSTED VALUE	I	60.72	62.14	65.47	61.47	64.66	61.20	59.67	64.47	66.11	62.51	64.10	87.66	64.46	60.87	61.02	59.19	53.37	57.60	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*	
2010 ADJUSTED VALUE		62.29	64.22	68.49	63.07	66.23	62.79	60.90	66.62	67.83	64.11	65.92	90.94	66.05	63.85	62.45	61.16	56.32	60.74	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44	
SPEC (CC)	O	0.17	0.17	0.17	-1.03	-1.03	-1.03	-0.68	-1.24	-0.27	0.07	0.07	-0.27	-	-	-	-	-	-	
SUB-TOTAL (X)	T	2.13	2.50	3.03	2.48	2.54	1.76	2.53	1.43	2.51	4.36	4.28	4.59	4.46	3.65	3.94	3.26	4.01	2.04	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*	
1995 ADJUSTED VALUE		61.82	62.19	64.27	61.56	64.82	60.97	60.54	63.16	65.19	65.75	66.99	84.47	62.88	59.47	58.94	57.24	51.87	55.95	
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08	
SPEC (FF)	P	0.63	0.63	0.63	-1.15	-1.15	-1.15	0.34	-2.96	0.62	-2.48	-2.48	0.62	-	-	-	-	-	-	
SUB-TOTAL (Y)		4.51	5.56	6.81	2.25	2.18	2.57	3.04	3.66	3.42	3.12	3.47	5.69	2.39	2.21	2.89	2.76	2.31	2.93	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*	
2000 ADJUSTED VALUE	I	66.33	67.75	71.08	63.81	67.00	63.54	63.58	66.82	68.61	68.87	70.46	90.16	65.27	61.68	61.83	60.00	54.18	58.41	
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*	
2010 ADJUSTED VALUE		67.90	69.83	74.10	65.41	68.57	65.13	64.81	68.97	70.33	70.47	72.28	93.44	66.86	64.66	63.26	61.97	57.13	61.55	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CO-REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS											FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44	
SPEC (CC)	O	-0.17	-0.17	-0.17	-1.75	-1.75	-1.75	-1.12	-2.10	-0.70	-0.41	-0.41	-0.70	-0.44	-0.44	-0.44	-0.44	-0.44	-0.44	
SUB-TOTAL (X)	T	1.79	2.16	2.69	1.76	1.82	1.04	2.09	0.57	2.08	3.88	3.80	4.16	4.02	3.21	3.50	2.82	3.57	1.60	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*	
1995 ADJUSTED VALUE		61.48	61.85	63.93	60.84	64.10	60.25	60.10	62.30	64.76	65.27	66.51	84.04	62.44	59.03	58.50	56.80	51.43	55.51	
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73	
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08	
SPEC (FF)	P	0.51	0.51	0.51	-1.03	-1.03	-1.03	0.20	-2.76	0.69	-3.20	-3.20	0.69	-	-	-	-	-	-	
SUB-TOTAL (Y)		4.39	5.44	6.69	2.37	2.30	2.69	2.90	3.86	3.49	2.40	2.75	5.76	2.39	2.21	2.89	2.76	2.31	2.93	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*	
2000 ADJUSTED VALUE	I	65.87	67.29	70.62	63.21	66.40	62.94	63.00	66.16	68.25	67.67	69.26	89.80	64.83	61.24	61.39	59.56	53.74	57.97	
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*	
2010 ADJUSTED VALUE		67.44	69.37	73.64	64.81	67.97	64.53	64.23	68.31	69.97	69.27	71.08	93.08	66.42	64.22	62.82	61.53	56.69	61.11	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CONVENTIONAL UNLEADED PREMIUM GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O	0.38	0.38	0.38	0.24	0.24	0.24	0.14	0.33	0.34	0.61	0.61	0.34	0.61	0.61	0.61	0.61	0.61	0.61
SUB-TOTAL (X)	T	2.34	2.71	3.24	3.75	3.81	3.03	3.35	3.00	3.12	4.90	4.82	5.20	5.07	4.26	4.55	3.87	4.62	2.65
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*
1995 ADJUSTED VALUE			68.59	68.96	75.00	72.83	74.31	68.28	67.51	71.18	72.78	72.86	73.88	90.71	70.04	66.63	66.12	64.43	59.05	63.13
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)	P	-1.93	-1.93	-1.93	-1.14	-1.14	-1.14	-0.90	-1.06	-0.02	-2.19	-2.19	-0.02	-	-	-	-	-	-
SUB-TOTAL (Y)		0.19	1.24	2.49	0.84	0.77	1.16	0.53	2.32	1.51	-0.35	-	3.78	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*
2000 ADJUSTED VALUE	I	68.78	70.20	77.49	73.67	75.08	69.44	68.04	73.50	74.29	72.51	73.88	94.49	72.43	68.84	69.01	67.19	61.36	65.60
	C								2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*
2010 ADJUSTED VALUE			70.35	72.28	80.51	75.27	76.65	71.03	69.27	75.65	76.01	74.11	75.70	97.77	74.02	71.82	70.44	69.16	64.31	68.73

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CO NON-ATTAINMENT PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O		-0.49	-0.49	-0.49	-1.56	-1.56	-1.56	-0.97	-1.97	-0.74	-0.59	-0.59	-0.74	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
SUB-TOTAL (X)	T		1.47	1.84	2.37	1.95	2.01	1.23	2.24	0.70	2.04	3.70	3.62	4.12	3.96	3.15	3.44	2.76	3.51	1.54
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*
1995 ADJUSTED VALUE			67.72	68.09	74.13	71.03	72.51	66.48	66.40	68.88	71.70	71.66	72.68	89.63	68.93	65.52	65.01	63.32	57.94	62.02
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)			-2.21	-2.21	-2.21	-0.84	-0.84	-0.84	-1.26	-0.52	0.16	-3.99	-3.99	0.16	-	-	-	-	-	-
SUB-TOTAL (Y)	P		-0.09	0.96	2.21	1.14	1.07	1.46	0.17	2.86	1.69	-2.15	-1.80	3.96	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*
2000 ADJUSTED VALUE	I		67.63	69.05	76.34	72.17	73.58	67.94	66.57	71.74	73.39	69.51	70.88	93.59	71.32	67.73	67.90	66.08	60.25	64.49
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*
2010 ADJUSTED VALUE			69.20	71.13	79.36	73.77	75.15	69.53	67.80	73.89	75.11	71.11	72.70	96.87	72.91	70.71	69.33	68.05	63.20	67.62

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
										1995 COSTS (1990 DOLLARS)										
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	D	0.12	0.12	0.12	-0.82	-0.82	-0.82	-0.47	-0.71	-0.35	0.10	0.10	-0.35	-	-	-	-	-	-
SUB-TOTAL (X)	T	2.08	2.45	2.98	2.69	2.75	1.97	2.74	1.96	2.43	4.39	4.31	4.51	4.46	3.65	3.94	3.26	4.01	2.04
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*
1995 ADJUSTED VALUE		68.33	68.70	74.74	71.77	73.25	67.22	66.90	70.14	72.09	72.35	73.37	90.02	69.43	66.02	65.51	63.82	58.44	62.52
										2000 COSTS (1990 DOLLARS)										
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)	P	0.60	0.60	0.60	-1.30	-1.30	-1.30	0.12	-3.78	0.73	-2.48	-2.48	0.73	-	-	-	-	-	-
SUB-TOTAL (Y)		4.48	5.53	6.78	2.10	2.03	2.42	2.82	2.84	3.53	3.12	3.47	5.80	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*
2000 ADJUSTED VALUE	I	72.81	74.23	81.52	73.87	75.28	69.64	69.72	72.98	75.62	75.47	76.84	95.82	71.82	68.23	68.40	66.58	60.75	64.99
	C									2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*
2010 ADJUSTED VALUE		74.38	76.31	84.54	75.47	76.85	71.23	70.95	75.13	77.34	77.07	78.66	99.10	73.41	71.21	69.83	68.55	63.70	68.12

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- CO-REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44	
SPEC (CC)	O	-0.12	-0.12	-0.12	-1.30	-1.30	-1.30	-0.76	-1.29	-0.64	-0.22	-0.22	-0.64	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29	
SUB-TOTAL (X)	T	1.84	2.21	2.74	2.21	2.27	1.49	2.45	1.38	2.14	4.07	3.99	4.22	4.17	3.36	3.65	2.97	3.72	1.75	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20*	
1995 ADJUSTED VALUE		68.09	68.46	74.50	71.29	72.77	66.74	66.61	69.56	71.80	72.03	73.05	89.73	69.14	65.73	65.22	63.53	58.15	62.23	
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08	
SPEC (FF)	P	0.54	0.54	0.54	-1.22	-1.22	-1.22	0.01	-3.64	0.78	-2.96	-2.96	0.78	-	-	-	-	-	-	
SUB-TOTAL (Y)		4.42	5.47	6.72	2.18	2.11	2.50	2.71	2.98	3.58	2.64	2.99	5.85	2.39	2.21	2.89	2.76	2.31	2.93	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.47*	
2000 ADJUSTED VALUE	I	72.51	73.93	81.22	73.47	74.88	69.24	69.32	72.54	75.38	74.67	76.04	95.58	71.53	67.94	68.11	66.29	60.46	64.70	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17*	
2010 ADJUSTED VALUE		74.08	76.01	84.24	75.07	76.45	70.83	70.55	74.69	77.10	76.27	77.86	98.86	73.12	70.92	69.54	68.26	63.41	67.83	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- KEROSENE JET FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	54.60	53.24	53.60	57.36
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-2.07	-1.26	-6.69	-5.99*
SUB-TOTAL		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	52.52	51.98	46.90	51.37
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	-	0.60	2.07	1.26	0.50	-
1989 ADJUSTED VALUE		58.90	59.21	58.81	59.20	57.12	57.70	55.35	55.50	56.47	58.59	58.85	58.61	61.00	55.88	54.86	54.60	53.24	47.40	51.37
								1995 COSTS (1990 DOLLARS)												
1990 $ ADJ VALUE		61.34	61.67	61.26	61.66	59.49	60.09	57.65	57.80	58.81	61.02	61.29	61.04	63.53	58.20	57.13	56.86	55.45	49.37	53.50
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.65	3.94	3.26	4.01	2.04
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.21*
1995 ADJUSTED VALUE		63.63	63.59	64.52	63.00	63.66	60.44	61.01	61.48	63.80	65.58	65.25	68.39	62.66	60.78	60.80	58.71	53.38	57.75
								2000 COSTS (1990 DOLLARS)												
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.46*
2000 ADJUSTED VALUE	I	65.75	66.76	68.94	64.98	65.57	62.74	62.44	64.86	65.33	67.42	67.44	72.19	65.05	62.99	63.69	61.47	55.69	60.22
	C							2010 COSTS (1990 DOLLARS)												
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18*
2010 ADJUSTED VALUE		67.32	68.84	71.96	66.58	67.14	64.33	63.67	67.01	67.05	69.02	69.26	75.47	66.64	65.97	65.12	63.44	58.64	63.37

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- ON-HIGHWAY DIESEL FUEL (0.05 % SULFUR)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
										1995 COSTS (1990 DOLLARS)										
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			0.28	0.28	0.28	1.64	1.64	1.64	0.85	0.86	2.69	1.27	1.27	2.69	0.77	1.09	-	-	0.43	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB-TOTAL (X)	T		3.24	3.61	4.14	6.15	6.21	5.43	5.06	4.53	6.47	6.56	6.48	8.55	6.23	5.74	4.94	4.26	5.44	3.04
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.66*
1995 ADJUSTED VALUE			61.06	61.01	63.51	61.27	61.61	59.85	59.32	60.01	65.30	64.20	63.25	68.33	61.55	61.44	54.51	55.22	50.97	55.63
										2000 COSTS (1990 DOLLARS)										
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	0.23	0.25	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)	P		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.39	2.21	3.09	2.99	2.56	2.93
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.20*
2000 ADJUSTED VALUE	I		63.18	64.18	67.93	63.25	63.52	62.15	60.75	63.39	66.83	66.04	65.44	72.13	63.94	63.65	57.60	58.21	53.53	58.36
	C									2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			64.75	66.26	70.95	64.85	65.09	63.74	61.98	65.54	68.55	67.64	67.26	75.41	65.53	66.63	59.03	60.18	56.48	61.52

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- OFF HIGHWAY DIESEL FUEL

		U.S. REGIONS											FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T		1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.65	3.94	3.26	4.01	2.04
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.23*
1995 ADJUSTED VALUE			59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.78	59.35	53.51	54.22	49.54	54.20
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P																			
SUB-TOTAL (Y)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.45*
2000 ADJUSTED VALUE	I		61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	63.14	63.77	63.17	68.44	62.17	61.56	56.40	56.98	51.85	56.68
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			63.47	64.98	69.67	62.21	62.45	61.10	60.13	63.68	64.86	65.37	64.99	71.72	63.76	64.54	57.83	58.95	54.80	59.84

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE II -- CENTS PER GALLON -- OTHER DISTILLATE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.09	1.68	2.13	2.54	2.79
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.56	2.56	2.39	1.58	1.69
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.00	-0.30	-1.26	-0.11	-2.44
SPEC (CC)	O		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T		1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.65	3.94	3.26	4.01	2.04
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.23*
1995 ADJUSTED VALUE			59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.78	59.35	53.51	54.22	49.54	54.20
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	0.04	0.38	0.22	0.42	0.61	0.73
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.16	1.84	2.19	4.43	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.53	-0.10	0.76	-0.05	-0.29	0.08
SPEC (FF)	P		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	1.53	1.84	2.19	3.80	2.39	2.21	2.89	2.76	2.31	2.93
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.45*
2000 ADJUSTED VALUE	I		61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	63.14	63.77	63.17	68.44	62.17	61.56	56.40	56.98	51.85	56.68
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	-	-	0.28	0.19
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-0.23	-0.11	-0.06	0.05	-0.05	0.06
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.57	2.08	3.02	1.60	1.57	1.59	1.23	2.15	1.72	1.60	1.82	3.28	1.59	2.98	1.43	1.97	2.95	2.97
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			63.47	64.98	69.67	62.21	62.45	61.10	60.13	63.68	64.86	65.37	64.99	71.72	63.76	64.54	57.83	58.95	54.80	59.84

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 18, 1993 TIME 9:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CONVENTIONAL UNLEADED REGULAR GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45	
SPEC (CC)	O	0.63	0.63	0.63	0.33	0.33	0.33	0.21	0.51	0.53	1.04	1.04	0.53	0.89	0.89	0.89	0.89	0.89	0.89	
SUB-TOTAL (X)	T	2.59	2.96	3.49	3.84	3.90	3.12	3.42	3.18	3.31	5.33	5.25	5.39	5.35	4.70	4.83	4.15	4.40	2.95	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*	
1995 ADJUSTED VALUE		62.28	62.65	64.73	62.92	66.18	62.33	61.43	64.91	65.99	66.72	67.96	85.27	63.77	60.52	59.83	58.13	52.26	56.34	
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75	
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05	
SPEC (FF)	P	-1.92	-1.92	-1.92	-1.13	-1.13	-1.13	-0.92	-1.12	-0.03	-1.45	-1.45	-0.03	-	-	-	-	-	-	
SUB-TOTAL (Y)		0.20	1.25	2.50	0.85	0.78	1.17	0.51	2.26	2.37	0.39	0.74	4.85	2.35	2.03	2.69	2.69	2.72	2.92	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*	
2000 ADJUSTED VALUE	I	62.48	63.90	67.23	63.77	66.96	63.50	61.94	67.17	68.36	67.11	68.70	90.12	66.12	62.55	62.52	60.82	54.98	59.21	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*	
2010 ADJUSTED VALUE		64.43	66.48	70.92	65.77	68.92	65.46	63.50	69.79	70.49	69.10	70.94	94.17	67.94	65.33	64.01	62.74	57.70	62.12	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CO NON-ATTAINMENT REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
								1995 COSTS (1990 DOLLARS)												
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-0.70	-0.70	-0.70	-2.43	-2.43	-2.43	-1.49	-3.00	-1.13	-0.80	-0.80	-1.13	-0.81	-0.81	-0.81	-0.81	-0.81	-0.81
SUB-TOTAL (X)	T		1.26	1.63	2.16	1.08	1.14	0.36	1.72	-0.33	1.65	3.49	3.41	3.73	3.65	3.00	3.13	2.45	2.70	1.25
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			60.95	61.32	63.40	60.16	63.42	59.57	59.73	61.40	64.33	64.88	66.12	83.61	62.07	58.82	58.13	56.43	50.56	54.64
								2000 COSTS (1990 DOLLARS)												
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)			-2.35	-2.35	-2.35	-0.67	-0.67	-0.67	-1.49	-0.31	0.25	-4.21	-4.21	0.25	-	-	-	-	-	-
	P																			
SUB-TOTAL (Y)			-0.23	0.82	2.07	1.31	1.24	1.63	-0.06	3.07	2.65	-2.37	-2.02	5.13	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		60.72	62.14	65.47	61.47	64.66	61.20	59.67	64.47	66.98	62.51	64.10	88.74	64.42	60.85	60.82	59.12	53.28	57.51
	C							2010 COSTS (1990 DOLLARS)												
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			62.67	64.72	69.16	63.47	66.62	63.16	61.23	67.09	69.11	64.50	66.34	92.79	66.24	63.63	62.31	61.04	56.00	60.42

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		0.17	0.17	0.17	-1.03	-1.03	-1.03	-0.68	-1.24	-0.27	0.07	0.07	-0.27	-	-	-	-	-	-
SUB-TOTAL (X)	T		2.13	2.50	3.03	2.48	2.54	1.76	2.53	1.43	2.51	4.36	4.28	4.59	4.46	3.81	3.94	3.26	3.51	2.06
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			61.82	62.19	64.27	61.56	64.82	60.97	60.54	63.16	65.19	65.75	66.99	84.47	62.88	59.63	58.94	57.24	51.37	55.45
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		0.63	0.63	0.63	-1.15	-1.15	-1.15	0.34	-2.96	0.62	-2.48	-2.48	0.62	-	-	-	-	-	-
SUB-TOTAL (Y)			4.51	5.56	6.81	2.25	2.18	2.57	3.04	3.66	4.29	3.12	3.47	6.77	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		66.33	67.75	71.08	63.81	67.00	63.54	63.58	66.82	69.48	68.87	70.46	91.24	65.23	61.66	61.63	59.93	54.09	58.32
	C							2010 COSTS (1990 DOLLARS)												
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			68.28	70.33	74.77	65.81	68.96	65.50	65.14	69.44	71.61	70.86	72.70	95.29	67.05	64.44	63.12	61.85	56.81	61.23

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CO-REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-0.17	-0.17	-0.17	-1.75	-1.75	-1.75	-1.12	-2.10	-0.70	-0.41	-0.41	-0.70	-0.44	-0.44	-0.44	-0.44	-0.44	-0.44
SUB-TOTAL (X)	T		1.79	2.16	2.69	1.76	1.82	1.04	2.09	0.57	2.08	3.88	3.80	4.16	4.02	3.37	3.50	2.82	3.07	1.62
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			61.48	61.85	63.93	60.84	64.10	60.25	60.10	62.30	64.76	65.27	66.51	84.04	62.44	59.19	58.50	56.80	50.93	55.01
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		0.51	0.51	0.51	-1.03	-1.03	-1.03	0.20	-2.76	0.69	-3.20	-3.20	0.69	-	-	-	-	-	-
SUB-TOTAL (Y)			4.39	5.44	6.69	2.37	2.30	2.69	2.90	3.86	4.36	2.40	2.75	6.84	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		65.87	67.29	70.62	63.21	66.40	62.94	63.00	66.16	69.12	67.67	69.26	90.88	64.79	61.22	61.19	59.49	53.65	57.88
	C									2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			67.82	69.87	74.31	65.21	68.36	64.90	64.56	68.78	71.25	69.66	71.50	94.93	66.61	64.00	62.68	61.41	56.37	60.79

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CONVENTIONAL UNLEADED PREMIUM GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		0.38	0.38	0.38	0.24	0.24	0.24	0.14	0.33	0.34	0.61	0.61	0.34	0.61	0.61	0.61	0.61	0.61	0.61
SUB-TOTAL (X)	T		2.34	2.71	3.24	3.75	3.81	3.03	3.35	3.00	3.12	4.90	4.82	5.20	5.07	4.42	4.55	3.87	4.12	2.67
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			68.59	68.96	75.00	72.83	74.31	68.28	67.51	71.18	72.78	72.86	73.88	90.71	70.04	66.79	66.12	64.43	58.55	62.63
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		-1.93	-1.93	-1.93	-1.14	-1.14	-1.14	-0.90	-1.06	-0.02	-2.19	-2.19	-0.02	-	-	-	-	-	-
SUB-TOTAL (Y)			0.19	1.24	2.49	0.84	0.77	1.16	0.53	2.32	2.38	-0.35	-	4.86	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		68.78	70.20	77.49	73.67	75.08	69.44	68.04	73.50	75.16	72.51	73.88	95.57	72.39	68.82	68.81	67.12	61.27	65.51
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			70.73	72.78	81.18	75.67	77.04	71.40	69.60	76.12	77.29	74.50	76.12	99.62	74.21	71.60	70.30	69.04	63.99	68.41

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CO NON-ATTAINMENT PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-0.49	-0.49	-0.49	-1.56	-1.56	-1.56	-0.97	-1.97	-0.74	-0.59	-0.59	-0.74	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
SUB-TOTAL (X)	T		1.47	1.84	2.37	1.95	2.01	1.23	2.24	0.70	2.04	3.70	3.62	4.12	3.96	3.31	3.44	2.76	3.01	1.56
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			67.72	68.09	74.13	71.03	72.51	66.48	66.40	68.88	71.70	71.66	72.68	89.63	68.93	65.68	65.01	63.32	57.44	61.52
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		-2.21	-2.21	-2.21	-0.84	-0.84	-0.84	-1.26	-0.52	0.16	-3.99	-3.99	0.16	-	-	-	-	-	-
SUB-TOTAL (Y)			-0.09	0.96	2.21	1.14	1.07	1.46	0.17	2.86	2.56	-2.15	-1.80	5.04	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		67.63	69.05	76.34	72.17	73.58	67.94	66.57	71.74	74.26	69.51	70.88	94.67	71.28	67.71	67.70	66.01	60.16	64.40
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			69.58	71.63	80.03	74.17	75.54	69.90	68.13	74.36	76.39	71.50	73.12	98.72	73.10	70.49	69.19	67.93	62.88	67.30

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45	
SPEC (CC)	O	0.12	0.12	0.12	-0.82	-0.82	-0.82	-0.47	-0.71	-0.35	0.10	0.10	-0.35	-	-	-	-	-	-	
SUB-TOTAL (X)	T	2.08	2.45	2.98	2.69	2.75	1.97	2.74	1.96	2.43	4.39	4.31	4.51	4.46	3.81	3.94	3.26	3.51	2.06	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*	
1995 ADJUSTED VALUE		68.33	68.70	74.74	71.77	73.25	67.22	66.90	70.14	72.09	72.35	73.37	90.02	69.43	66.18	65.51	63.82	57.94	62.02	
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75	
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05	
SPEC (FF)	P	0.60	0.60	0.60	-1.30	-1.30	-1.30	0.12	-3.78	0.73	-2.48	-2.48	0.73	-	-	-	-	-	-	
SUB-TOTAL (Y)		4.48	5.53	6.78	2.10	2.03	2.42	2.82	2.84	4.40	3.12	3.47	6.88	2.35	2.03	2.69	2.69	2.72	2.92	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*	
2000 ADJUSTED VALUE	I	72.81	74.23	81.52	73.87	75.28	69.64	69.72	72.98	76.49	75.47	76.84	96.90	71.78	68.21	68.20	66.51	60.66	64.90	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*	
2010 ADJUSTED VALUE		74.76	76.81	85.21	75.87	77.24	71.60	71.28	75.60	78.62	77.46	79.08	100.95	73.60	70.99	69.69	68.43	63.38	67.80	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- CO-REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-0.12	-0.12	-0.12	-1.30	-1.30	-1.30	-0.76	-1.29	-0.64	-0.22	-0.22	-0.64	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29
SUB-TOTAL (X)	T		1.84	2.21	2.74	2.21	2.27	1.49	2.45	1.38	2.14	4.07	3.99	4.22	4.17	3.52	3.65	2.97	3.22	1.77
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.68*
1995 ADJUSTED VALUE			68.09	68.46	74.50	71.29	72.77	66.74	66.61	69.56	71.80	72.03	73.05	89.73	69.14	65.89	65.22	63.53	57.65	61.73
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		0.54	0.54	0.54	-1.22	-1.22	-1.22	0.01	-3.64	0.78	-2.96	-2.96	0.78	-	-	-	-	-	-
SUB-TOTAL (Y)			4.42	5.47	6.72	2.18	2.11	2.50	2.71	2.98	4.45	2.64	2.99	6.93	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.05*
2000 ADJUSTED VALUE	I		72.51	73.93	81.22	73.47	74.88	69.24	69.32	72.54	76.25	74.67	76.04	96.66	71.49	67.92	67.91	66.22	60.37	64.61
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			74.46	76.51	84.91	75.47	76.84	71.20	70.88	75.16	78.38	76.66	78.28	100.71	73.31	70.70	69.40	68.14	63.09	67.51

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- KEROSENE JET FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	54.60	53.24	53.60	57.36
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-2.07	-1.26	-6.69	-5.99*
SUB-TOTAL		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	52.52	51.98	46.90	51.37
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	-	0.60	2.07	1.26	0.50	-
1989 ADJUSTED VALUE		58.90	59.21	58.81	59.20	57.12	57.70	55.35	55.50	56.47	58.59	58.85	58.61	61.00	55.88	54.86	54.60	53.24	47.40	51.37
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		61.34	61.67	61.26	61.66	59.49	60.09	57.65	57.80	58.81	61.02	61.29	61.04	63.53	58.20	57.13	56.86	55.45	49.37	53.50
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T		1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.81	3.94	3.26	3.51	2.06
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.69*
1995 ADJUSTED VALUE			63.63	63.59	64.52	63.00	63.66	60.44	61.01	61.48	63.80	65.58	65.25	68.39	62.66	60.94	60.80	58.71	52.88	57.25
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P																			
SUB-TOTAL (Y)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.04*
2000 ADJUSTED VALUE	I		65.75	66.76	68.94	64.98	65.57	62.74	62.44	64.86	66.20	67.42	67.44	73.27	65.01	62.97	63.49	61.40	55.60	60.13
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20*
2010 ADJUSTED VALUE			67.70	69.34	72.63	66.98	67.53	64.70	64.00	67.48	68.33	69.41	69.68	77.32	66.83	65.75	64.98	63.32	58.32	63.05

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- ON-HIGHWAY DIESEL FUEL (0.05 % SULFUR)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			0.28	0.28	0.28	1.64	1.64	1.64	0.85	0.86	2.69	1.27	1.27	2.69	0.77	0.93	-	-	1.00	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70	
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45	
SPEC (CC)	O	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
SUB-TOTAL (X)	T	3.24	3.61	4.14	6.15	6.21	5.43	5.06	4.53	6.47	6.56	6.48	8.55	6.23	5.74	4.94	4.26	5.51	3.06	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.71*	
1995 ADJUSTED VALUE		61.06	61.01	63.51	61.27	61.61	59.85	59.32	60.01	65.30	64.20	63.25	68.33	61.55	61.44	54.51	55.22	51.04	55.70	
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75	
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	0.23	0.25	-	
ENVIRO FACILITY (E)		2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05	
SPEC (FF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Y)	P	2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	2.35	2.03	2.89	2.92	2.97	2.92	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22*	
2000 ADJUSTED VALUE	I	63.18	64.18	67.93	63.25	63.52	62.15	60.75	63.39	67.70	66.04	65.44	73.21	63.90	63.47	57.40	58.14	54.01	58.84	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*	
2010 ADJUSTED VALUE		65.13	66.76	71.62	65.25	65.48	64.11	62.31	66.01	69.83	68.03	67.68	77.26	65.72	66.25	58.89	60.06	56.73	61.77	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- OFF HIGHWAY DIESEL FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T		1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.81	3.94	3.26	3.51	2.06
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71*
1995 ADJUSTED VALUE			59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.78	59.51	53.51	54.22	49.04	53.70
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.03*
2000 ADJUSTED VALUE	I		61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	64.01	63.77	63.17	69.52	62.13	61.54	56.20	56.91	51.76	56.59
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*
2010 ADJUSTED VALUE			63.85	65.48	70.34	62.61	62.84	61.47	60.46	64.15	66.14	65.76	65.41	73.57	63.95	64.32	57.69	58.83	54.48	59.52

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE III -- CENTS PER GALLON -- OTHER DISTILLATE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	3.15	1.68	2.13	2.50	2.81
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	3.02	1.59	2.56	2.39	1.56	1.70
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-0.93	-0.30	-1.26	-0.55	-2.45
SPEC (CC)	O		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T		1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	4.46	3.81	3.94	3.26	3.51	2.06
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71*
1995 ADJUSTED VALUE			59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	59.78	59.51	53.51	54.22	49.04	53.70
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.27	0.20	0.40	0.62	0.75
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	1.82	1.93	1.91	2.39	1.99	2.12
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-	-	-	-	0.49	-0.17	0.58	-0.10	0.11	0.05
SPEC (FF)	P		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)			2.12	3.17	4.42	1.98	1.91	2.30	1.43	3.38	2.40	1.84	2.19	4.88	2.35	2.03	2.69	2.69	2.72	2.92
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-0.03*
2000 ADJUSTED VALUE	I		61.90	62.90	66.65	60.61	60.88	59.51	58.90	61.53	64.01	63.77	63.17	69.52	62.13	61.54	56.20	56.91	51.76	56.59
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		1.95	2.58	3.69	2.00	1.96	1.96	1.56	2.62	2.13	1.99	2.24	4.05	1.82	2.78	1.49	1.92	2.72	2.72
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*
2010 ADJUSTED VALUE			63.85	65.48	70.34	62.61	62.84	61.47	60.46	64.15	66.14	65.76	65.41	73.57	63.95	64.32	57.69	58.83	54.48	59.52

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 15, 1993 TIME 10:41

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CONVENTIONAL UNLEADED REGULAR GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		0.63	0.63	0.63	0.33	0.33	0.33	0.21	0.51	0.53	1.04	1.04	0.53	0.89	0.89	0.89	0.89	0.89	0.89
SUB-TOTAL (X)	T		2.59	2.96	3.49	3.84	3.90	3.12	3.42	3.18	3.31	5.33	5.25	5.39	2.33	2.38	2.30	1.76	3.20	1.08
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			62.28	62.65	64.73	62.92	66.18	62.33	61.43	64.91	65.99	66.72	67.96	85.27	60.75	58.20	57.30	55.74	51.06	55.14
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		-1.92	-1.92	-1.92	-1.13	-1.13	-1.13	-0.92	-1.12	-0.03	-1.45	-1.45	-0.03	-	-	-	-	-	-
SUB-TOTAL (Y)			-1.29	-1.00	-0.59	-0.64	-0.77	-0.51	-0.66	-0.20	-0.14	-1.09	-1.01	0.46	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		60.99	61.65	64.14	62.28	65.41	61.82	60.77	64.71	65.85	65.63	66.95	85.73	61.23	59.28	58.22	55.89	51.78	56.01
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			60.99	61.65	64.14	62.28	65.41	61.82	60.77	64.71	65.85	65.63	66.95	85.73	61.23	59.28	58.22	55.89	51.78	56.20

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CO NON-ATTAINMENT REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		-0.70	-0.70	-0.70	-2.43	-2.43	-2.43	-1.49	-3.00	-1.13	-0.80	-0.80	-1.13	-0.81	-0.81	-0.81	-0.81	-0.81	-0.81
SUB-TOTAL (X)	T		1.26	1.63	2.16	1.08	1.14	0.36	1.72	-0.33	1.65	3.49	3.41	3.73	0.63	0.68	0.60	0.06	1.50	-0.62
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			60.95	61.32	63.40	60.16	63.42	59.57	59.73	61.40	64.33	64.88	66.12	83.61	59.05	56.50	55.60	54.04	49.36	53.44
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)			-2.35	-2.35	-2.35	-0.67	-0.67	-0.67	-1.49	-0.31	0.25	-4.21	-4.21	0.25	-	-	-	-	-	-
SUB-TOTAL (Y)			-1.72	-1.43	-1.02	-0.18	-0.31	-0.05	-1.23	0.61	0.14	-3.85	-3.77	0.74	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		59.23	59.89	62.38	59.98	63.11	59.52	58.50	62.01	64.47	61.03	62.35	84.35	59.53	57.58	56.52	54.19	50.08	54.31
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			59.23	59.89	62.38	59.98	63.11	59.52	58.50	62.01	64.47	61.03	62.35	84.35	59.53	57.58	56.52	54.19	50.08	54.50

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		0.17	0.17	0.17	-1.03	-1.03	-1.03	-0.68	-1.24	-0.27	0.07	0.07	-0.27	-	-	-	-	-	-
SUB-TOTAL (X)	T		2.13	2.50	3.03	2.48	2.54	1.76	2.53	1.43	2.51	4.36	4.28	4.59	1.44	1.49	1.41	0.87	2.31	0.19
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			61.82	62.19	64.27	61.56	64.82	60.97	60.54	63.16	65.19	65.75	66.99	84.47	59.86	57.31	56.41	54.85	50.17	54.25
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)			0.63	0.63	0.63	-1.15	-1.15	-1.15	0.34	-2.96	0.62	-2.48	-2.48	0.62	-	-	-	-	-	-
	P																			
SUB-TOTAL (Y)			3.02	3.31	3.72	0.76	0.63	0.89	1.87	1.20	1.78	1.64	1.72	2.38	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		64.84	65.50	67.99	62.32	65.45	61.86	62.41	64.36	66.97	67.39	68.71	86.85	60.34	58.39	57.33	55.00	50.89	55.12
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			64.84	65.50	67.99	62.32	65.45	61.86	62.41	64.36	66.97	67.39	68.71	86.85	60.34	58.39	57.33	55.00	50.89	55.31

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CO-REFORMULATED REGULAR GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	52.33	51.83	52.14	55.95
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.45	-1.45	-6.50	-6.30*
SUB-TOTAL		57.00	56.60	56.60	58.80	57.20	61.70	58.40	55.70	60.10	60.90	59.90	61.40	76.70	54.07	52.52	50.88	50.38	45.64	49.66
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.93	1.45	0.31	-
1989 ADJUSTED VALUE		57.00	57.31	57.31	58.80	56.72	59.80	56.85	55.70	59.27	60.19	58.95	60.21	76.70	56.10	53.60	52.81	51.83	45.95	49.66
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		59.37	59.69	59.69	61.24	59.08	62.28	59.21	58.01	61.73	62.68	61.39	62.71	79.88	58.42	55.82	55.00	53.98	47.86	51.72
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-	-
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29	
SPEC (CC)	O	-0.17	-0.17	-0.17	-1.75	-1.75	-1.75	-1.12	-2.10	-0.70	-0.41	-0.41	-0.70	-0.44	-0.44	-0.44	-0.44	-0.44	-0.44	
SUB-TOTAL (X)	T	1.79	2.16	2.69	1.76	1.82	1.04	2.09	0.57	2.08	3.88	3.80	4.16	1.00	1.05	0.97	0.43	1.87	-0.25	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*	
1995 ADJUSTED VALUE		61.48	61.85	63.93	60.84	64.10	60.25	60.10	62.30	64.76	65.27	66.51	84.04	59.42	56.87	55.97	54.41	49.73	53.81	
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52	
SPEC (DD)	A	1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-	
ENVIRO FACILITY (E)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11	
SPEC (FF)	P	0.51	0.51	0.51	-1.03	-1.03	-1.03	0.20	-2.76	0.69	-3.20	-3.20	0.69	-	-	-	-	-	-	
SUB-TOTAL (Y)		2.90	3.19	3.60	0.88	0.75	1.01	1.73	1.40	1.85	0.92	1.00	2.45	0.48	1.08	0.92	0.15	0.72	0.63	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*	
2000 ADJUSTED VALUE	I	64.38	65.04	67.53	61.72	64.85	61.26	61.83	63.70	66.61	66.19	67.51	86.49	59.90	57.95	56.89	54.56	50.45	54.68	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*	
2010 ADJUSTED VALUE		64.38	65.04	67.53	61.72	64.85	61.26	61.83	63.70	66.61	66.19	67.51	86.49	59.90	57.95	56.89	54.56	50.45	54.87	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CONVENTIONAL UNLEADED PREMIUM GASOLINE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	0.38	0.38	0.38	0.24	0.24	0.24	0.14	0.33	0.34	0.61	0.61	0.34	0.61	0.61	0.61	0.61	0.61	0.61
SUB-TOTAL (X)	T	2.34	2.71	3.24	3.75	3.81	3.03	3.35	3.00	3.12	4.90	4.82	5.20	2.05	2.10	2.02	1.48	2.92	0.80
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE		68.59	68.96	75.00	72.83	74.31	68.28	67.51	71.18	72.78	72.86	73.88	90.71	67.02	64.47	63.59	62.04	57.35	61.43
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)		-1.93	-1.93	-1.93	-1.14	-1.14	-1.14	-0.90	-1.06	-0.02	-2.19	-2.19	-0.02	-	-	-	-	-	-
	P																		
SUB-TOTAL (Y)		-1.30	-1.01	-0.60	-0.65	-0.78	-0.52	-0.64	-0.14	-0.13	-1.83	-1.75	0.47	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I	67.29	67.95	74.40	72.18	73.53	67.76	66.87	71.04	72.65	71.03	72.13	91.18	67.50	65.55	64.51	62.19	58.07	62.31
	C																		
2010 COSTS (1990 DOLLARS)																			
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE		67.29	67.95	74.40	72.18	73.53	67.76	66.87	71.04	72.65	71.03	72.13	91.18	67.50	65.55	64.51	62.19	58.07	62.49

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CO NON-ATTAINMENT PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		-0.49	-0.49	-0.49	-1.56	-1.56	-1.56	-0.97	-1.97	-0.74	-0.59	-0.59	-0.74	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
SUB-TOTAL (X)	T		1.47	1.84	2.37	1.95	2.01	1.23	2.24	0.70	2.04	3.70	3.62	4.12	0.94	0.99	0.91	0.37	1.81	-0.31
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			67.72	68.09	74.13	71.03	72.51	66.48	66.40	68.88	71.70	71.66	72.68	89.63	65.91	63.36	62.48	60.93	56.24	60.32
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		-2.21	-2.21	-2.21	-0.84	-0.84	-0.84	-1.26	-0.52	0.16	-3.99	-3.99	0.16	-	-	-	-	-	-
SUB-TOTAL (Y)			-1.58	-1.29	-0.88	-0.35	-0.48	-0.22	-1.00	0.40	0.05	-3.63	-3.55	0.65	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		66.14	66.80	73.25	70.68	72.03	66.26	65.40	69.28	71.75	68.03	69.13	90.28	66.39	64.44	63.40	61.08	56.96	61.20
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			66.14	66.80	73.25	70.68	72.03	66.26	65.40	69.28	71.75	68.03	69.13	90.28	66.39	64.44	63.40	61.08	56.96	61.38

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		0.12	0.12	0.12	-0.82	-0.82	-0.82	-0.47	-0.71	-0.35	0.10	0.10	-0.35	-	-	-	-	-	-
SUB-TOTAL (X)	T		2.08	2.45	2.98	2.69	2.75	1.97	2.74	1.96	2.43	4.39	4.31	4.51	1.44	1.49	1.41	0.87	2.31	0.19
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			68.33	68.70	74.74	71.77	73.25	67.22	66.90	70.14	72.09	72.35	73.37	90.02	66.41	63.86	62.98	61.43	56.74	60.82
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		0.60	0.60	0.60	-1.30	-1.30	-1.30	0.12	-3.78	0.73	-2.48	-2.48	0.73	-	-	-	-	-	-
SUB-TOTAL (Y)			2.99	3.28	3.69	0.61	0.48	0.74	1.65	0.38	1.89	1.64	1.72	2.49	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		71.32	71.98	78.43	72.38	73.73	67.96	68.55	70.52	73.98	73.99	75.09	92.51	66.89	64.94	63.90	61.58	57.46	61.70
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			71.32	71.98	78.43	72.38	73.73	67.96	68.55	70.52	73.98	73.99	75.09	92.51	66.89	64.94	63.90	61.58	57.46	61.88

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- CO-REFORMULATED PREMIUM GASOLINE (HYDROCARBON PORTION)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	58.64	58.14	58.45	62.26
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.48	-1.48	-6.52	-6.30*
SUB-TOTAL		63.30	62.90	62.90	68.90	66.80	69.60	64.20	61.60	66.30	67.60	66.20	67.50	82.10	60.36	58.81	57.17	56.67	51.93	55.97
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	2.02	1.07	1.95	1.48	0.33	-
1989 ADJUSTED VALUE		63.30	63.61	63.61	68.90	66.32	67.70	62.65	61.60	65.47	66.89	65.25	66.31	82.10	62.38	59.88	59.12	58.14	52.26	55.97
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		65.93	66.25	66.25	71.76	69.08	70.50	65.25	64.16	68.18	69.66	67.96	69.06	85.51	64.97	62.37	61.57	60.56	54.43	58.29
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		-0.12	-0.12	-0.12	-1.30	-1.30	-1.30	-0.76	-1.29	-0.64	-0.22	-0.22	-0.64	-0.29	-0.29	-0.29	-0.29	-0.29	-0.29
SUB-TOTAL (X)	T		1.84	2.21	2.74	2.21	2.27	1.49	2.45	1.38	2.14	4.07	3.99	4.22	1.15	1.20	1.12	0.58	2.02	-0.10
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.35*
1995 ADJUSTED VALUE			68.09	68.46	74.50	71.29	72.77	66.74	66.61	69.56	71.80	72.03	73.05	89.73	66.12	63.57	62.69	61.14	56.45	60.53
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		1.76	1.76	1.76	1.42	1.42	1.42	1.27	3.24	1.27	3.76	3.76	1.27	-	-	-	-	-	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		0.54	0.54	0.54	-1.22	-1.22	-1.22	0.01	-3.64	0.78	-2.96	-2.96	0.78	-	-	-	-	-	-
SUB-TOTAL (Y)			2.93	3.22	3.63	0.69	0.56	0.82	1.54	0.52	1.94	1.16	1.24	2.54	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24*
2000 ADJUSTED VALUE	I		71.02	71.68	78.13	71.98	73.33	67.56	68.15	70.08	73.74	73.19	74.29	92.27	66.60	64.65	63.61	61.29	57.17	61.41
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19*
2010 ADJUSTED VALUE			71.02	71.68	78.13	71.98	73.33	67.56	68.15	70.08	73.74	73.19	74.29	92.27	66.60	64.65	63.61	61.29	57.17	61.59

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- KEROSENE JET FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	54.60	53.24	53.60	57.36
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-2.07	-1.26	-6.69	-5.99*
SUB-TOTAL		58.90	58.50	58.10	59.20	57.60	59.60	56.90	55.50	57.30	59.30	59.80	59.80	61.00	55.88	54.26	52.52	51.98	46.90	51.37
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	-	0.60	2.07	1.26	0.50	-
1989 ADJUSTED VALUE		58.90	59.21	58.81	59.20	57.12	57.70	55.35	55.50	56.47	58.59	58.85	58.61	61.00	55.88	54.86	54.60	53.24	47.40	51.37
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		61.34	61.67	61.26	61.66	59.49	60.09	57.65	57.80	58.81	61.02	61.29	61.04	63.53	58.20	57.13	56.86	55.45	49.37	53.50
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	1.44	1.49	1.41	0.87	2.31	0.19
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.36*
1995 ADJUSTED VALUE		63.63	63.59	64.52	63.00	63.66	60.44	61.01	61.48	63.80	65.58	65.25	68.39	59.64	58.62	58.27	56.32	51.68	56.05
									2000 COSTS (1990 DOLLARS)											
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	-0.11	0.36	0.44	0.49	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25*
2000 ADJUSTED VALUE	I	64.26	64.51	65.85	63.49	64.02	61.06	61.27	62.40	63.69	65.94	65.69	68.88	60.12	59.70	59.19	56.47	52.40	56.93
	C								2010 COSTS (1990 DOLLARS)											
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20*
2010 ADJUSTED VALUE		64.26	64.51	65.85	63.49	64.02	61.06	61.27	62.40	63.69	65.94	65.69	68.88	60.12	59.70	59.19	56.47	52.40	57.13

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- ON-HIGHWAY DIESEL FUEL (0.05 % SULFUR)

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
1995 COSTS (1990 DOLLARS)																				
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			0.28	0.28	0.28	1.64	1.64	1.64	0.85	0.86	2.69	1.27	1.27	2.69	0.80	0.97	-	-	1.04	-
ENVIRO FACILITY (B)	N		2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)			-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUB-TOTAL (X)	T		3.24	3.61	4.14	6.15	6.21	5.43	5.06	4.53	6.47	6.56	6.48	8.55	3.24	3.46	2.41	1.87	4.35	1.19
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.42*
1995 ADJUSTED VALUE			61.06	61.01	63.51	61.27	61.61	59.85	59.32	60.01	65.30	64.20	63.25	68.33	58.56	59.16	51.98	52.83	49.88	54.54
2000 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (D)			-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	0.45	0.61	-
ENVIRO FACILITY (E)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P		-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)			0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	-0.11	0.36	0.44	0.49	0.48	1.08	1.24	0.60	1.33	0.63
OTHER COSTS	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.87*
2000 ADJUSTED VALUE	I		61.69	61.93	64.84	61.76	61.97	60.47	59.58	60.93	65.19	64.56	63.69	68.82	59.04	60.24	53.22	53.43	51.21	56.04
	C																			
2010 COSTS (1990 DOLLARS)																				
PROC CAP: AVG (H)	A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*
2010 ADJUSTED VALUE			61.69	61.93	64.84	61.76	61.97	60.47	59.58	60.93	65.19	64.56	63.69	68.82	59.04	60.24	53.22	53.43	51.21	56.25

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- OFF HIGHWAY DIESEL FUEL

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
									1995 COSTS (1990 DOLLARS)											
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	1.44	1.49	1.41	0.87	2.31	0.19
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38*
1995 ADJUSTED VALUE		59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	56.76	57.19	50.98	51.83	47.84	52.50
									2000 COSTS (1990 DOLLARS)										
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (E)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Y)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	-0.11	0.36	0.44	0.49	0.48	1.08	0.92	0.15	0.72	0.63
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*
2000 ADJUSTED VALUE	I	60.41	60.65	63.56	59.12	59.33	57.83	57.73	59.07	61.50	62.29	61.42	65.13	57.24	58.27	51.90	51.98	48.56	53.39
	C								2010 COSTS (1990 DOLLARS)										
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (I)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL (Z)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*
2010 ADJUSTED VALUE		60.41	60.65	63.56	59.12	59.33	57.83	57.73	59.07	61.50	62.29	61.42	65.13	57.24	58.27	51.90	51.98	48.56	53.60

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

PRODUCT COSTS BY SUPPLY REGION -- FOUNDATION CASE I (ENVIRONMENTAL SENSITIVITY) -- CENTS PER GALLON -- OTHER DISTILLATE

		U.S. REGIONS												FOREIGN REGIONS					
		1	2	3	4	5	6	7	8	9	10	11	12	13	CAN	LATIN	NWE	MED	MID E	FAR E
PUBLISHED PRICE		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	50.93	50.24	49.90	54.21
NETBACK REVISION		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-1.36	-1.24	-6.31	-6.27*
SUB-TOTAL		55.20	54.80	54.40	57.00	53.40	55.10	53.80	52.10	54.10	57.20	56.30	55.70	57.40	52.88	51.45	49.57	49.00	43.60	47.94
SCALING FACTOR		-	0.71	0.71	-	-0.48	-1.90	-1.55	-	-0.83	-0.71	-0.95	-1.19	-	0.24	2.02	-1.98	-0.07	0.12	-
1989 ADJUSTED VALUE		55.20	55.51	55.11	57.00	52.92	53.20	52.25	52.10	53.27	56.49	55.35	54.51	57.40	53.12	53.48	47.60	48.93	43.71	47.94
		1995 COSTS (1990 DOLLARS)																		
1990 $ ADJ VALUE		57.49	57.82	57.40	59.37	55.12	55.40	54.42	54.26	55.48	58.83	57.64	56.77	59.78	55.32	55.70	49.57	50.96	45.53	49.93
PROC CAP: AVG (A)			0.40	0.40	0.40	0.91	0.91	0.91	0.85	0.57	0.86	1.51	1.51	0.86	1.51	2.81	1.58	1.99	2.39	2.48
SPEC (AA)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRO FACILITY (B)	N	2.45	2.82	3.35	2.76	2.82	2.04	2.70	1.91	2.61	2.84	2.76	4.69	-	-	-	-	-	-	-
OPER: AVG (C)		-0.89	-0.89	-0.89	-0.16	-0.16	-0.16	-0.34	0.19	-0.69	-0.06	-0.06	-0.69	-0.07	-1.32	-0.17	-1.12	-0.08	-2.29	
SPEC (CC)	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (X)	T	1.96	2.33	2.86	3.51	3.57	2.79	3.21	2.67	2.78	4.29	4.21	4.86	1.44	1.49	1.41	0.87	2.31	0.19	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38*	
1995 ADJUSTED VALUE		59.78	59.73	62.23	58.63	58.97	57.21	57.47	58.15	61.61	61.93	60.98	64.64	56.76	57.19	50.98	51.83	47.84	52.50	
		2000 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (D)		-	-	-	-	-	-	-	-	0.84	-	-	0.84	-0.06	0.87	0.04	0.23	0.56	0.52	
SPEC (DD)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (E)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	0.52	0.36	0.44	1.12	-	-	-	-	-	-	
OPER: AVG (F)	P	-	-	-	-	-	-	-	-	-1.47	-	-	-1.47	0.54	0.21	0.88	-0.08	0.16	0.11	
SPEC (FF)	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Y)		0.63	0.92	1.33	0.49	0.36	0.62	0.26	0.92	-0.11	0.36	0.44	0.49	0.48	1.08	0.92	0.15	0.72	0.63	
OTHER COSTS	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26*	
2000 ADJUSTED VALUE	I	60.41	60.65	63.56	59.12	59.33	57.83	57.73	59.07	61.50	62.29	61.42	65.13	57.24	58.27	51.90	51.98	48.56	53.39	
	C	2010 COSTS (1990 DOLLARS)																		
PROC CAP: AVG (H)	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (HH)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENVIRO FACILITY (I)	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OPER: AVG (J)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPEC (JJ)	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL (Z)	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OTHER COSTS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21*	
2010 ADJUSTED VALUE		60.41	60.65	63.56	59.12	59.33	57.83	57.73	59.07	61.50	62.29	61.42	65.13	57.24	58.27	51.90	51.98	48.56	53.60	

* = CORRECTION NECESSARY TO KEEP THE PACIFIC RIM IN TRANSPORTATION PARITY WITH THE MIDDLE EAST

DUE TO INDEPENDENT ROUNDING, COSTS MAY NOT ADD TO TOTALS NATIONAL PETROLEUM COUNCIL MARCH 1, 1993 TIME 14:18

Appendix L, Section VIII-3

Cost-Volume Relationships and Supplemental Material

Cost-volume relationships were developed for the cases shown below in Table APP.L.VIII.3-1. Relationships for other foundation cases and/or years were developed by similarity or interpolation.

TABLE APP.L.VIII.3-1

SUMMARY OF COST-VOLUME STUDIES

	1995			2000			2010		
PADD I		*			*				
PADD II		*			*				
PADD III		*			*				
PADD IV		*			*				
PADD VC		*			*				
PADD VOC		*			*				
CASE	FC1	FC2	FC3	FC1	FC2	FC3	FC1	FC2	FC3
CANADA	*		*	*		*	*		*
NW EUR	*		*	*		*	*		*
MEDITERR	*		*	*		*	*		*
MID EAST	*		*	*		*	*		*
LAT AM	*		*	*		*	*		*
PAC RIM	*		*	*		*	*		*

Cost-volume relationships are represented in the following series of step graphs.

In comparing the cost-volume relationships for each region over time, variations in product specifications, investment levels, overbuilding, etc. preclude comparisons on an absolute basis. Each relationship is stand-alone.

Octane adjustments for imported gasolines

As noted in Section 3.VIII.F and elsewhere, the presence of oxygenates in the gasoline boosts octane. Foreign regions were modeled to produce reformulated regular gasoline for export to the United States. Cost differences between reformulated regular gasoline and other grades of gasoline developed in the U.S. PADD III modeling effort were used to establish product cost differentials for the various grades of import gasolines. This was assumed to be adequate to compensate for octane and vapor pressure variations between the 4 types of regular and 4 types

of premium being used in the U.S. logistics model. These factors are shown in Table APP.L.VIII.3-2.

TABLE APP.L.VIII.3-2

ADJUSTMENT TO GASOLINE FROM FOREIGN REGIONS (HYDROCARBON ONLY)
(MODELED RFG = 0)
(Cents per Gallon)

	Regular		Premium	
	1995	2000	1995	2000
Unleaded	+0.89	-0.47	+0.61	-0.51
CO gasoline	-0.81	-2.74	-0.50	-1.98
RFG (HC only)	0	0	0	0
Oxygenated RFG (CO/ozone)	-0.44	-0.58	-0.29	-0.40

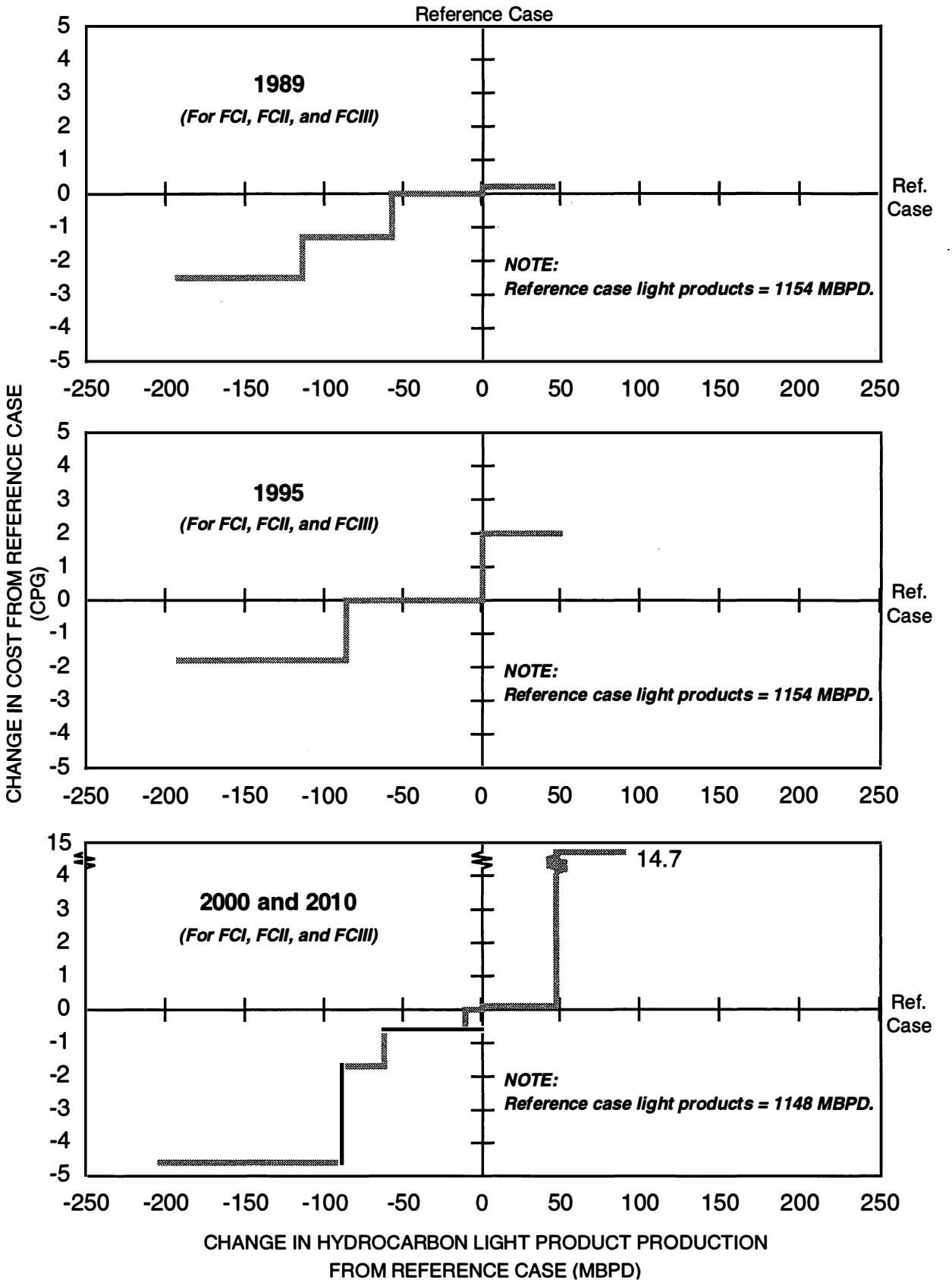
Thus these adjustments appear in the layered cost buildups for foreign sourced gasolines to adjust their values to represent to U.S. grades of product.

New Capacity Costs

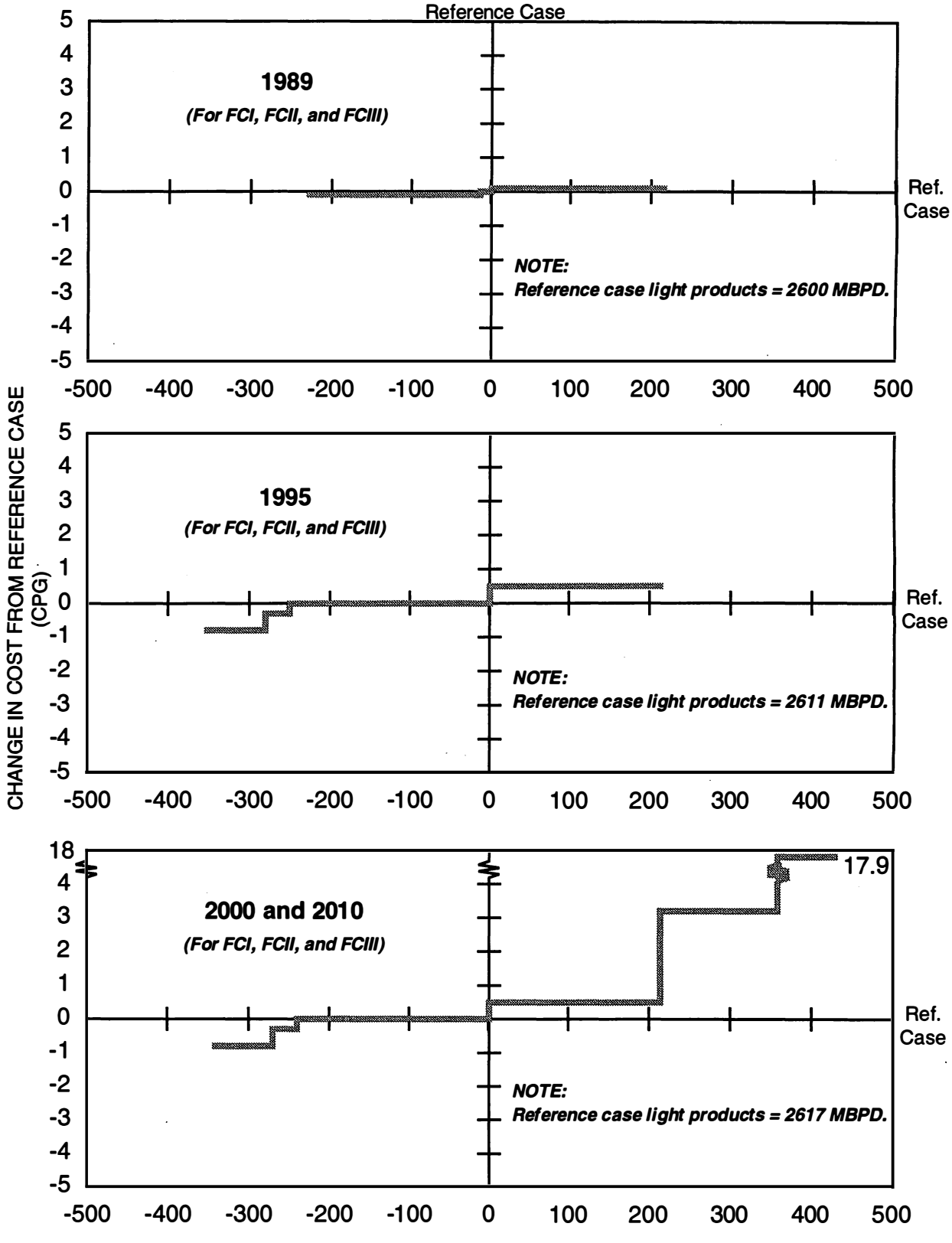
The increase in cost of additional light product beyond that of the current operating U.S. refining industry was estimated based on a fuel oil reduction project in an existing refinery, not a new refinery since that is a higher cost route to additional light products. Additional of cokers or other vacuum resid conversion facilities is and has been the type of fuel oil reduction project employed by U.S. refineries in the 1980s and early 1990s. The refining industry model was used to simulate the addition of coking capacity in PADD III in the year 2000. The coker was sized so that the fuel oil production at the high crude run (about 9 percent over the reference case crude run) was the same as that at the reference case. About 91 MBPD of fuel oil was converted to about 65 MBPD of light products by the simulated projects with an investment of $1.4 billion. The resulting product shifts are shown on the PADD III summary tables for 2000. Including the capital charge for the investment, the increase in cost of these additional light products was $6.15/barrel (see Pace Report in Appendix L, Section VII-2 for details). The same project type and cost were used in other U.S. PADDs, except for PADD V outside of California.

In PADD V exCA, in the model there is enough vacuum gas oil potentially available to feed a conventional cracking project (rather than a more expensive coking project). This type of project is included in the PADD V exCA cost-volume relationship for FC-1 in the year 2000.

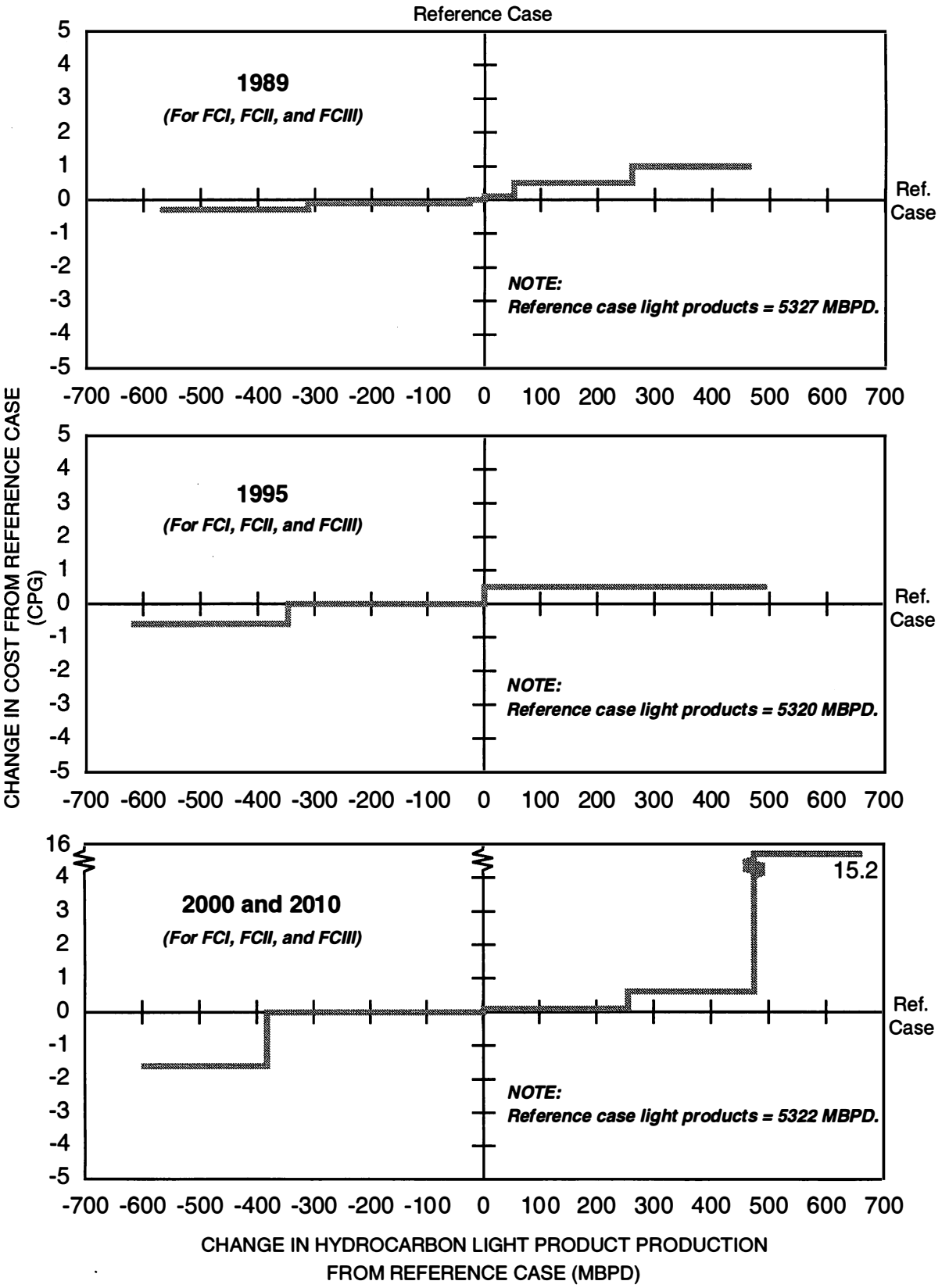
Cost-Volume Relationship
PADD I (Sum of NPC Regions 1 through 4)



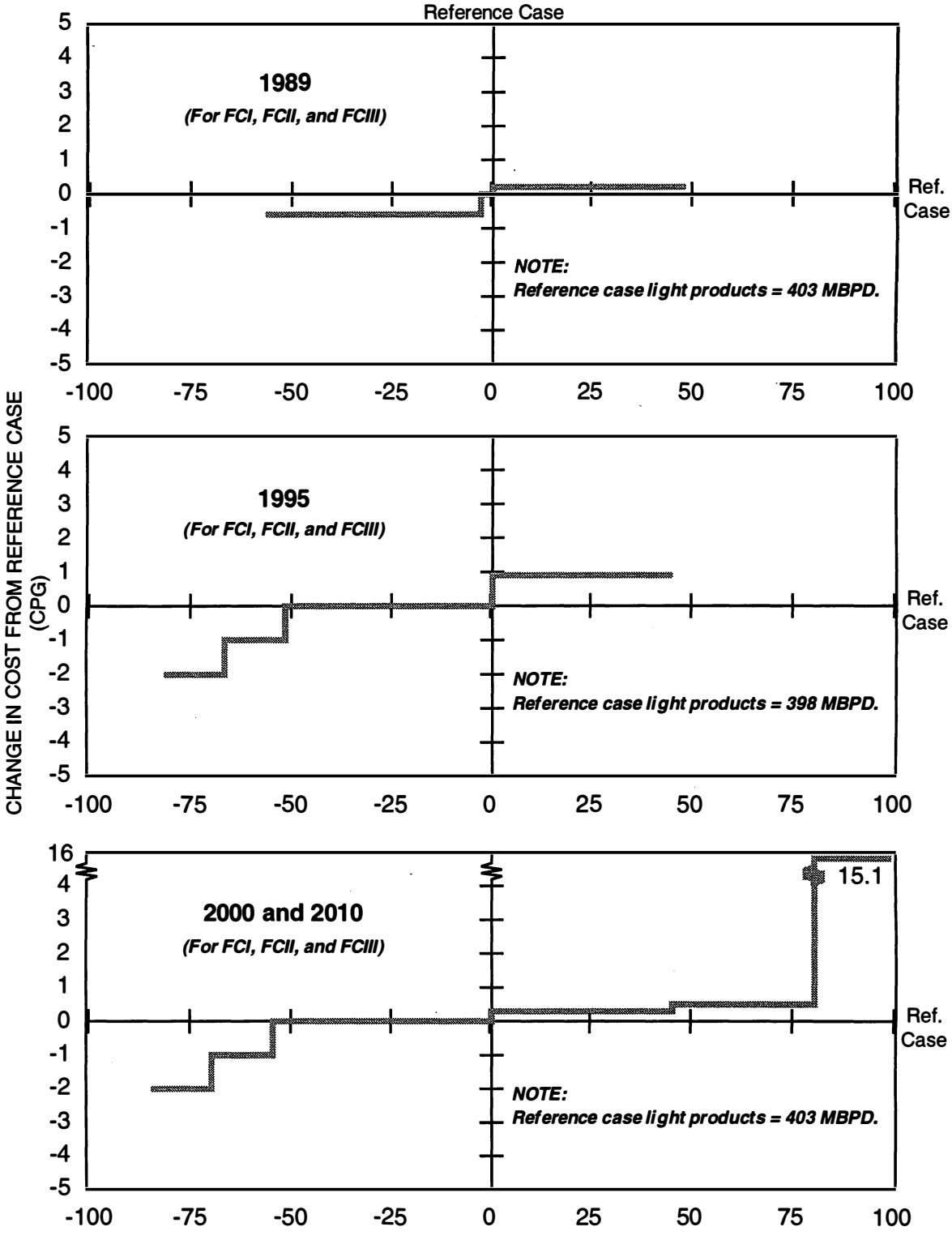
Cost-Volume Relationship
PADD II (Sum of NPC Regions 5 through 7)



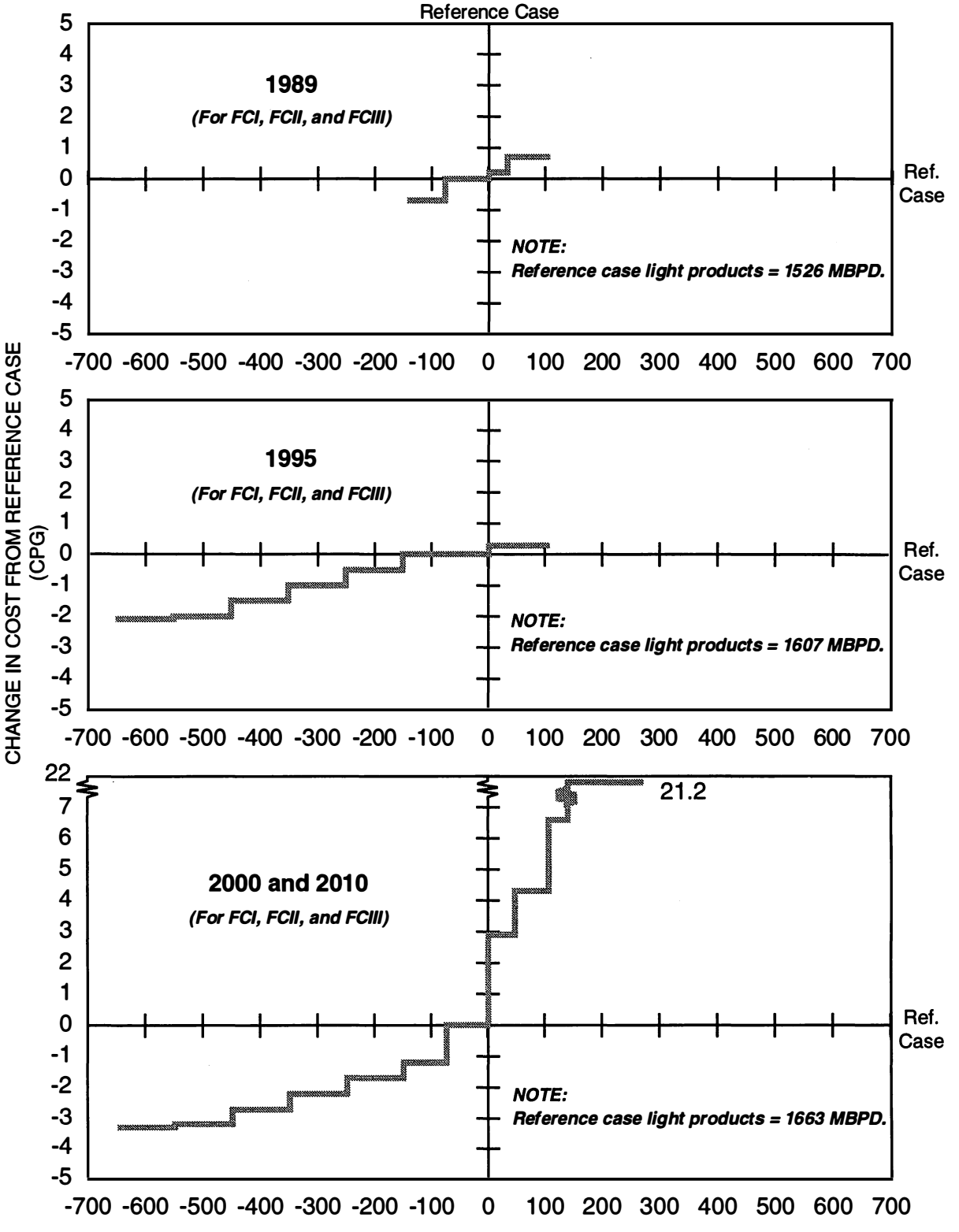
Cost-Volume Relationship
PADD III (NPC Region 8)



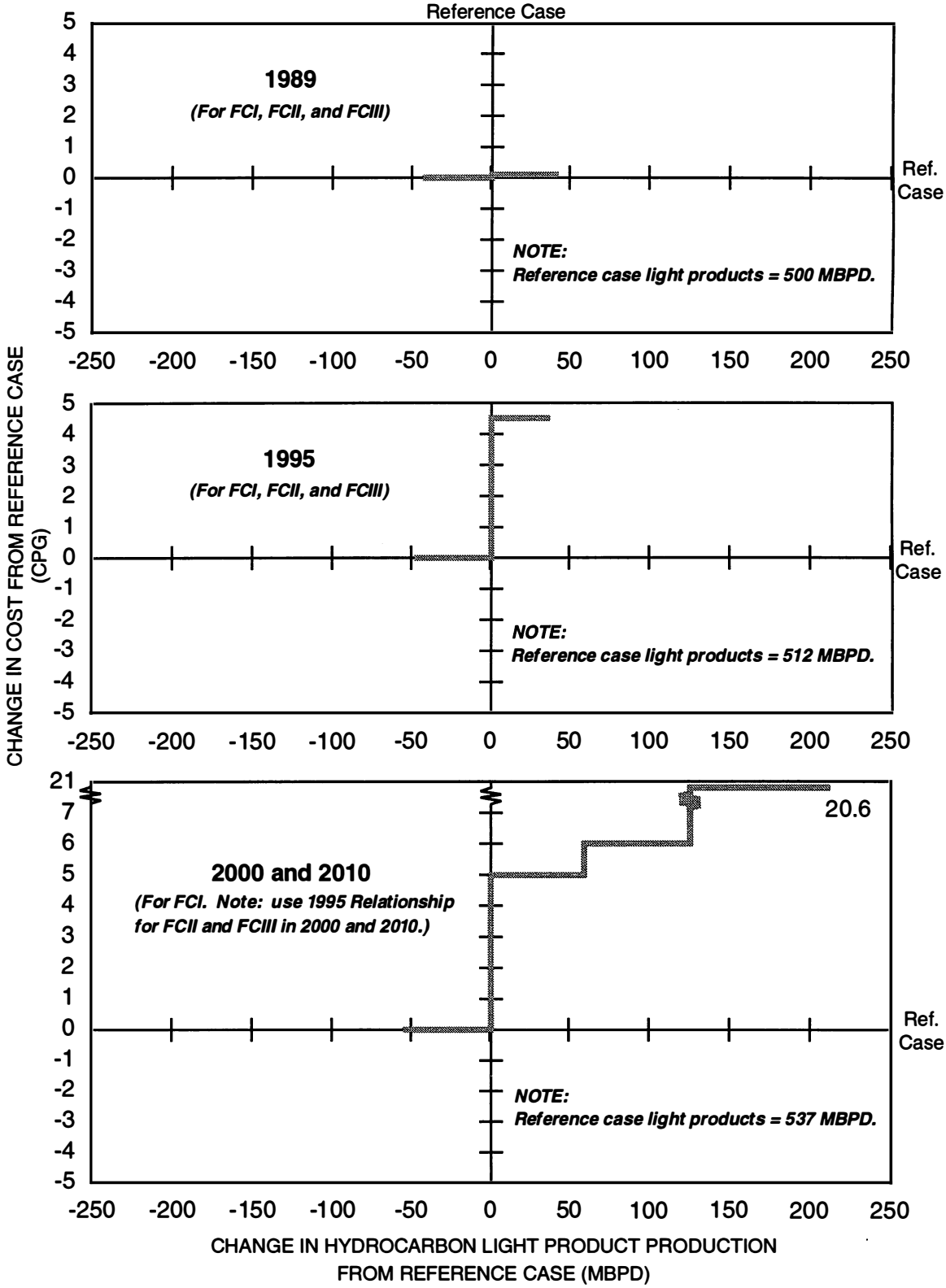
Cost-Volume Relationship
PADD IV (NPC Region 9)



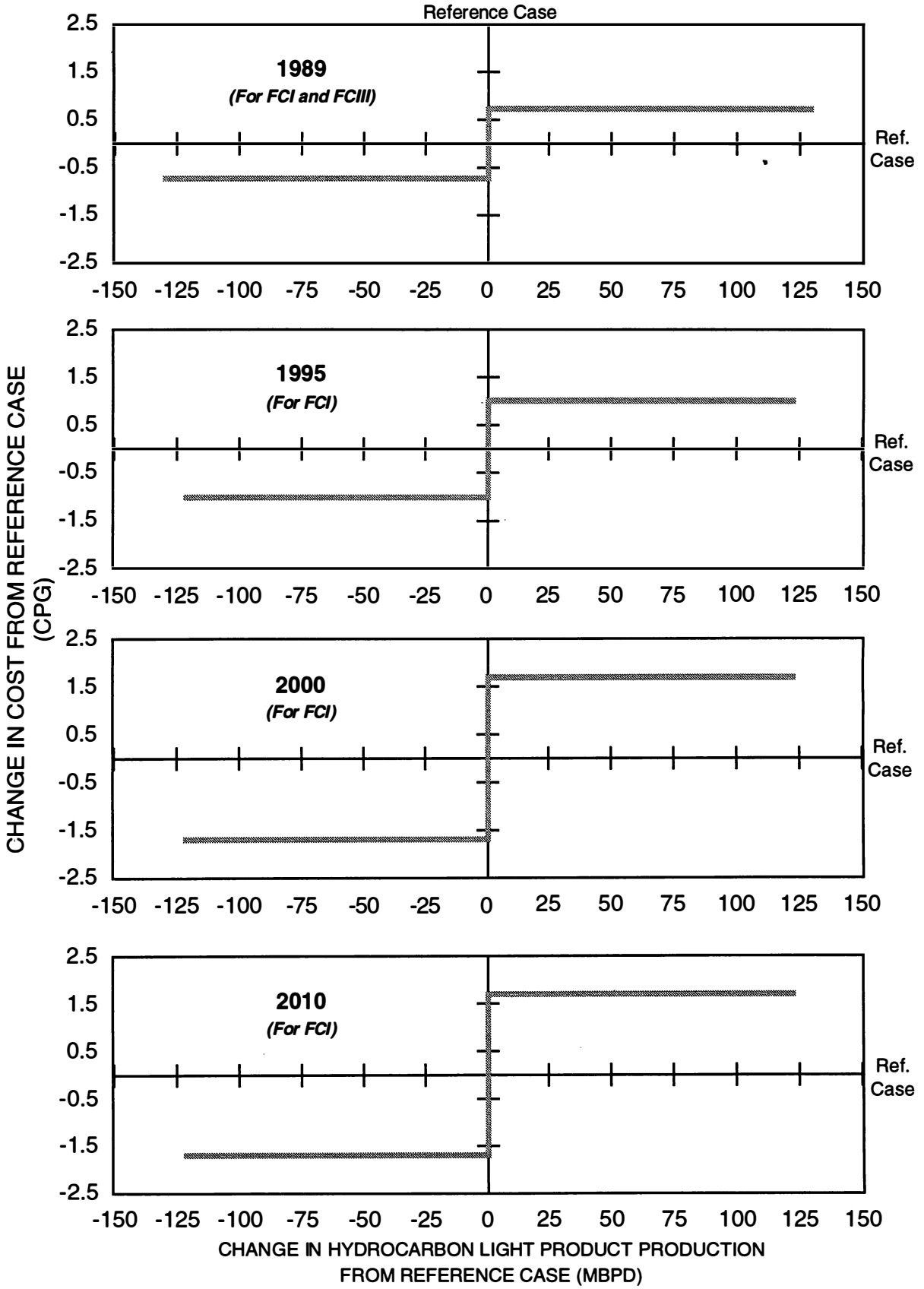
Cost-Volume Relationship
PADD VC (Sum of NPC Regions 11 and 12)



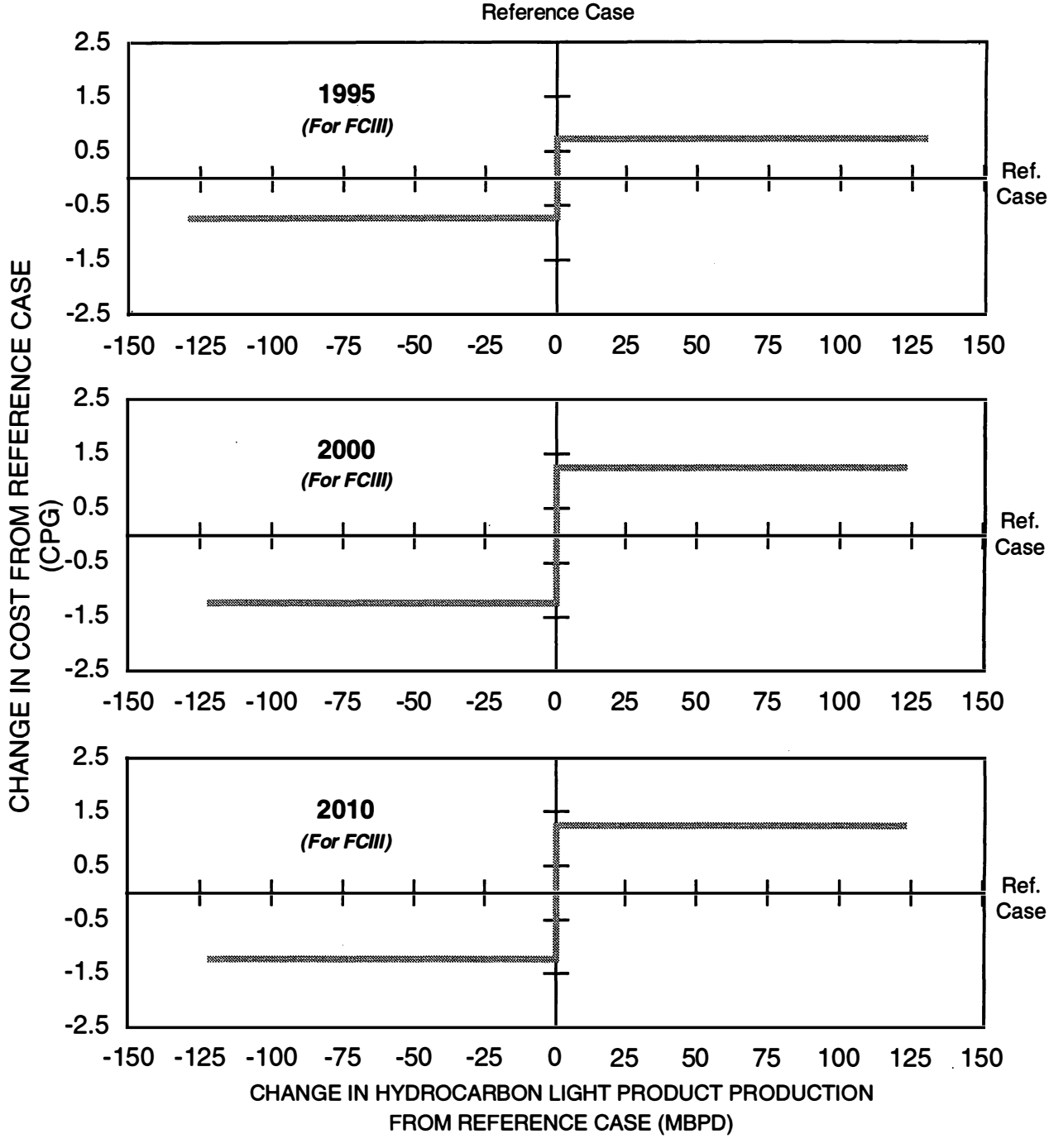
Cost-Volume Relationship
PADD VOC (Sum of NPC Regions 10 and 13)



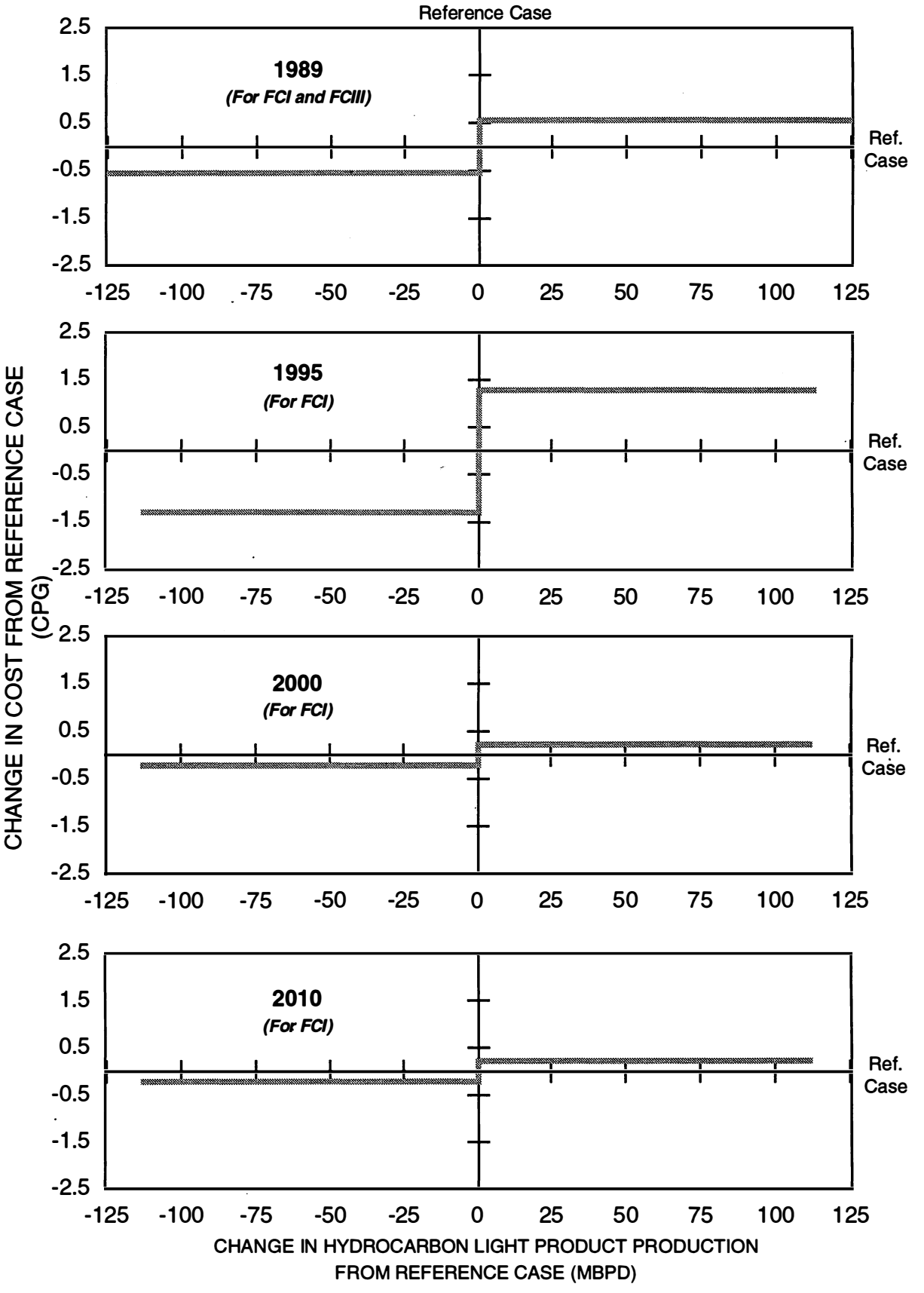
Cost-Volume Relationship
Canada



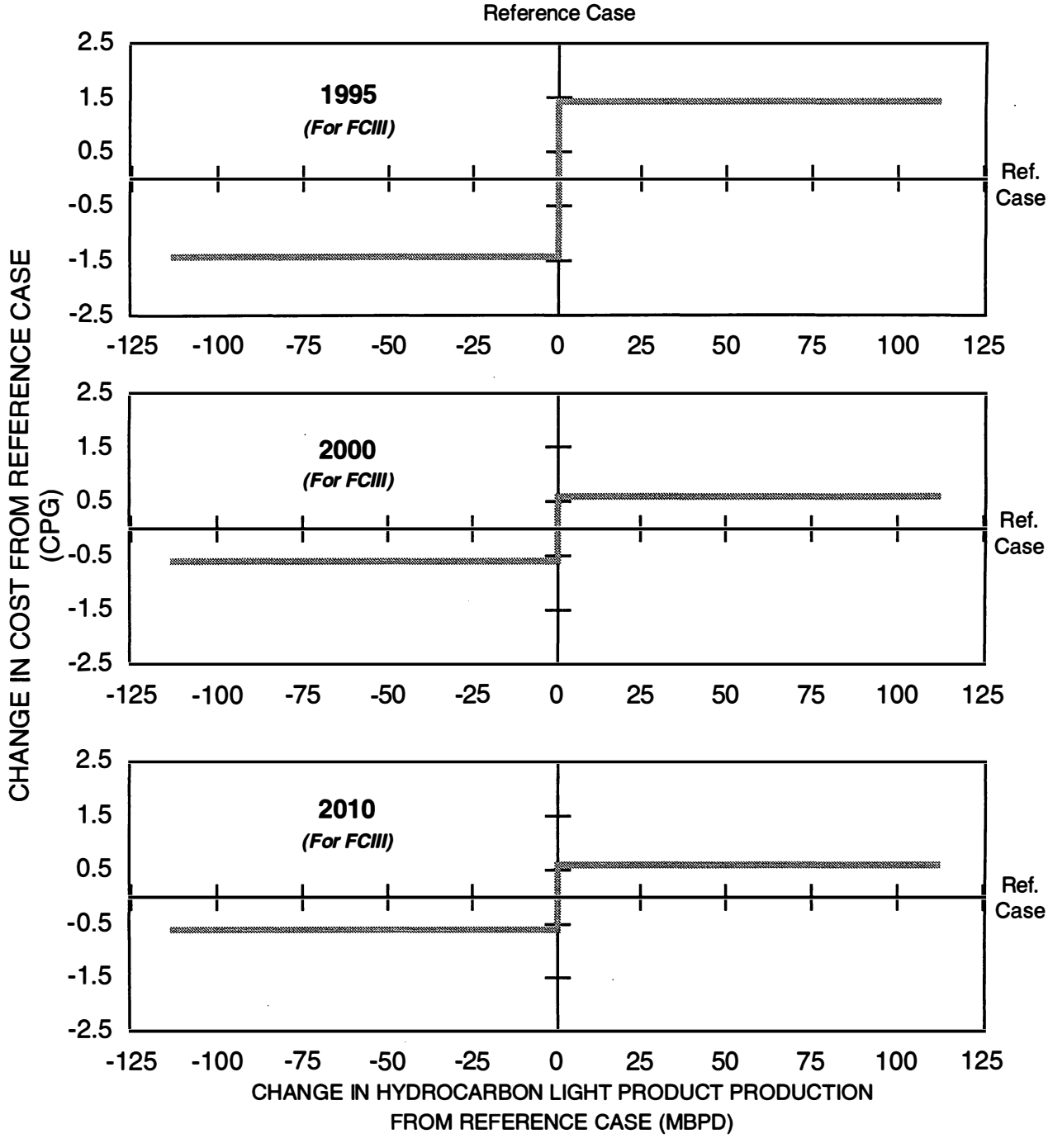
Cost-Volume Relationship
Canada



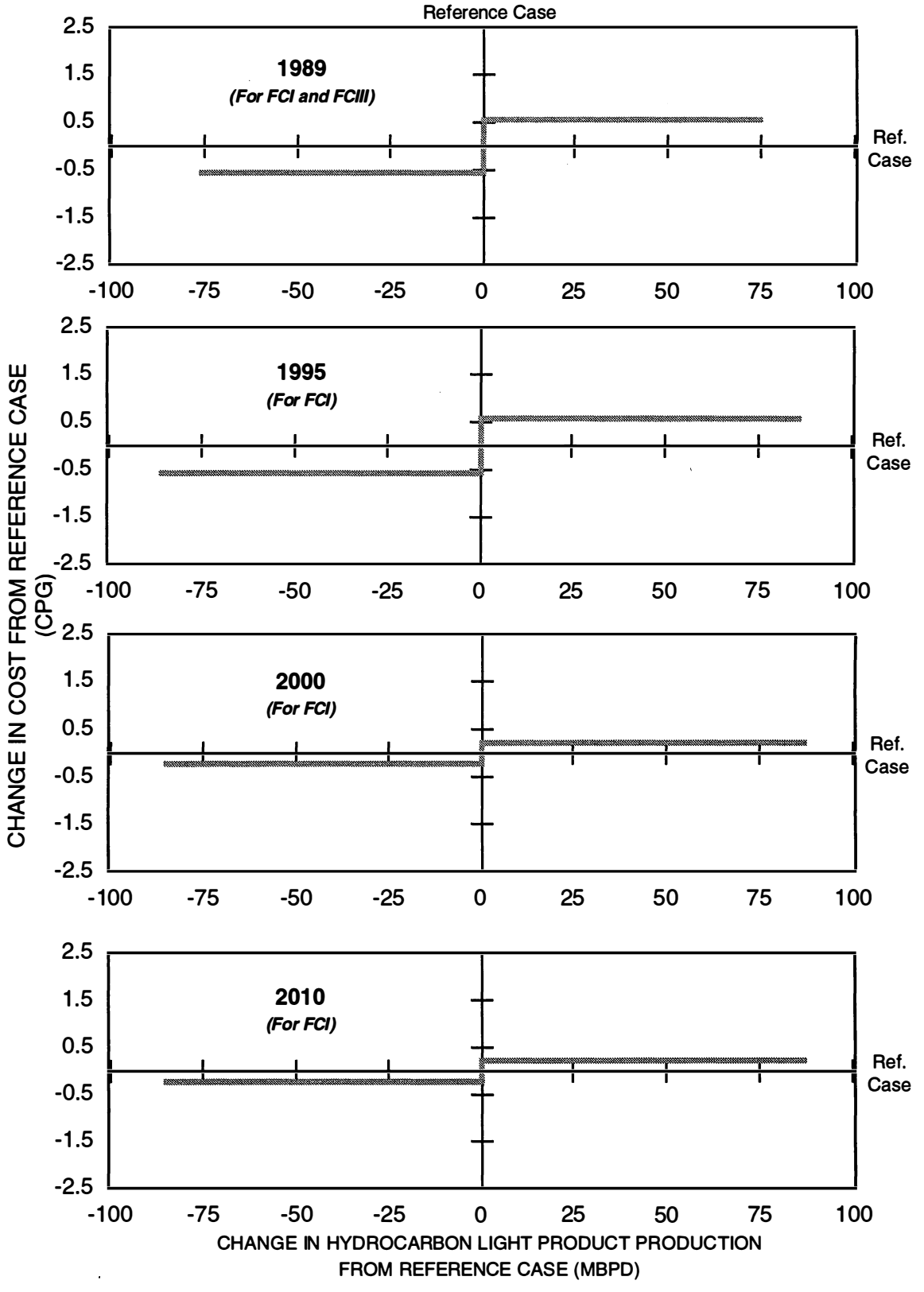
Cost-Volume Relationship
Northwest Europe



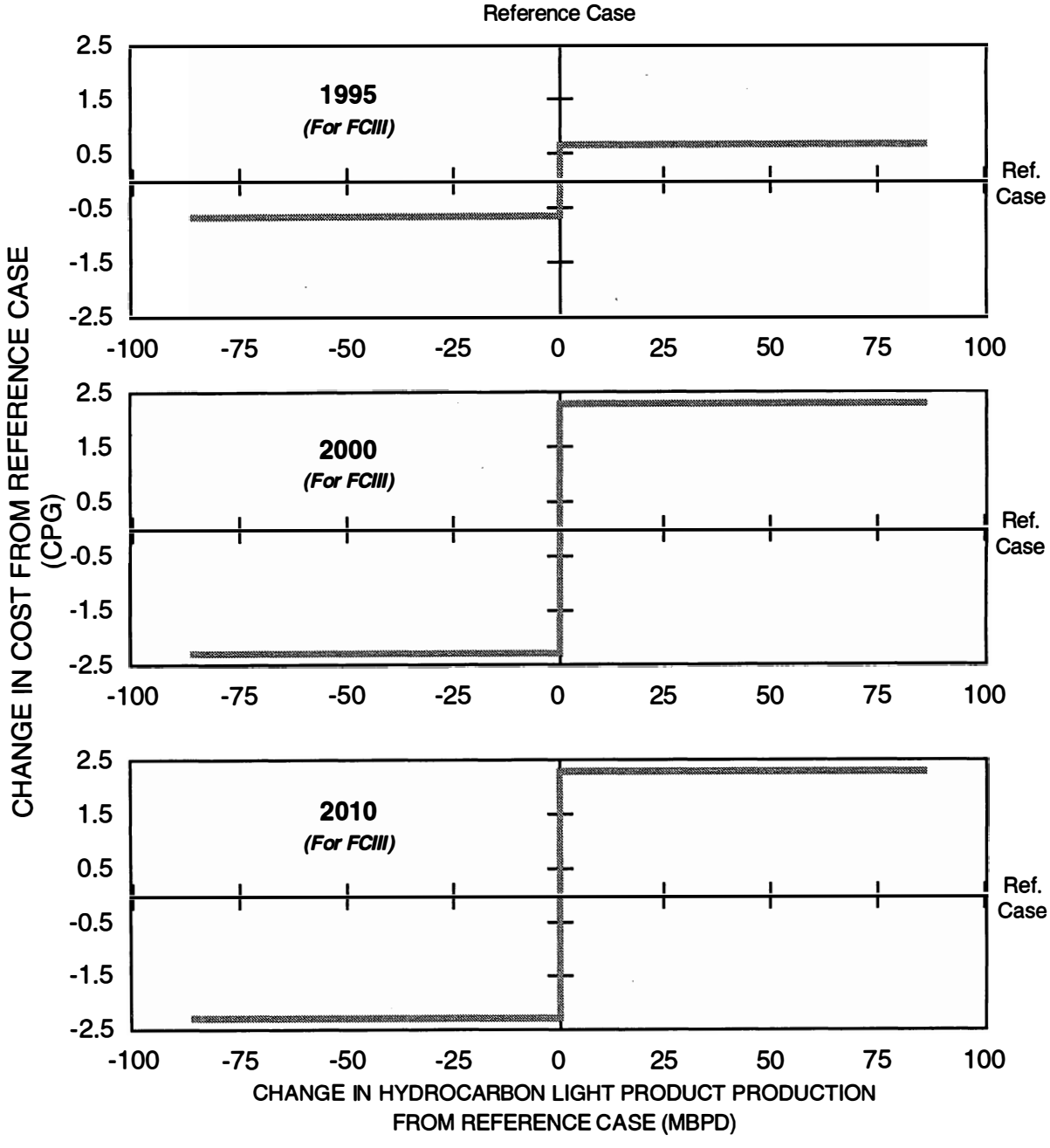
Cost-Volume Relationship
Northwest Europe



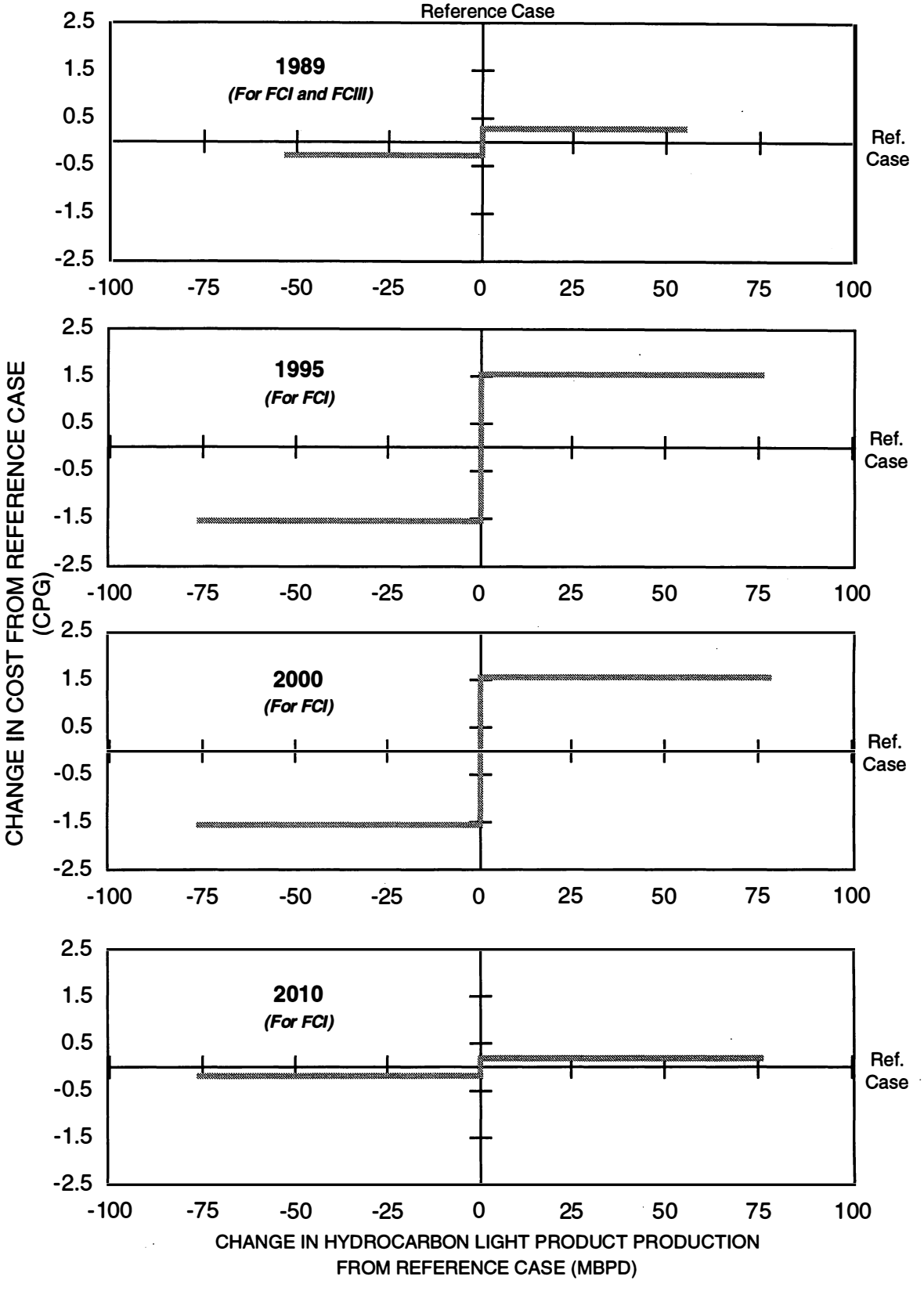
Cost-Volume Relationship
Mediterranean



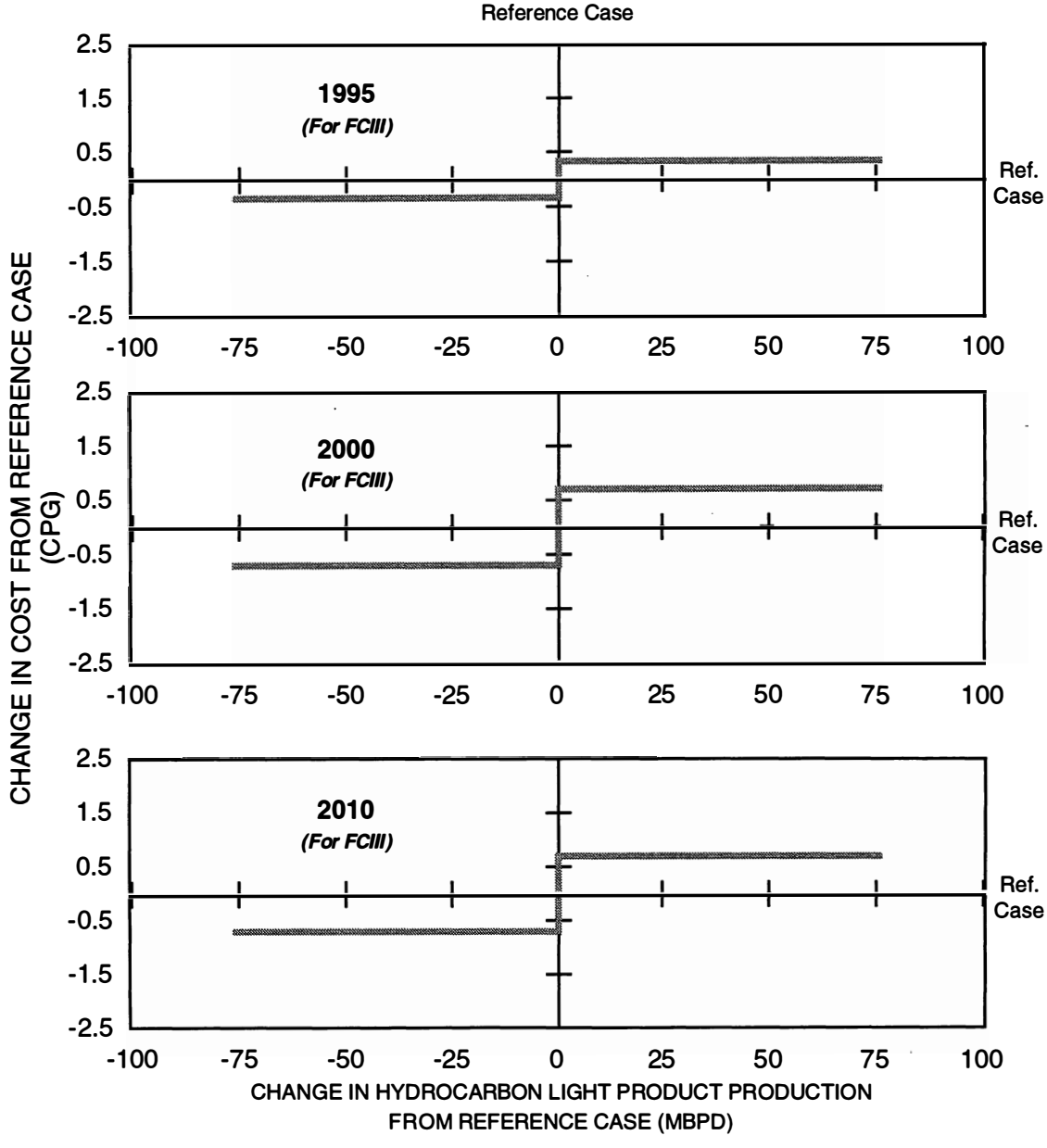
Cost-Volume Relationship
Mediterranean



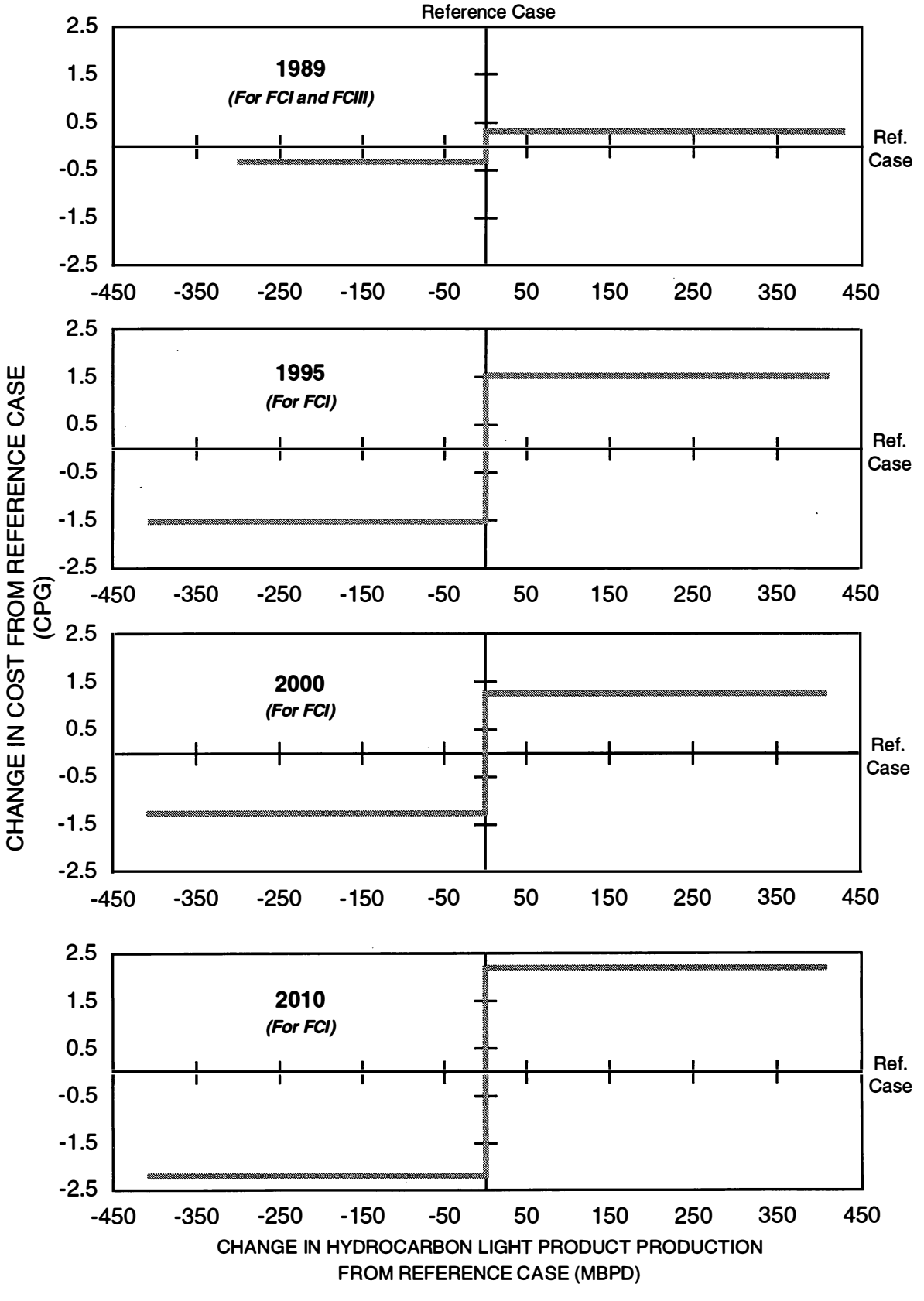
Cost-Volume Relationship
Middle East



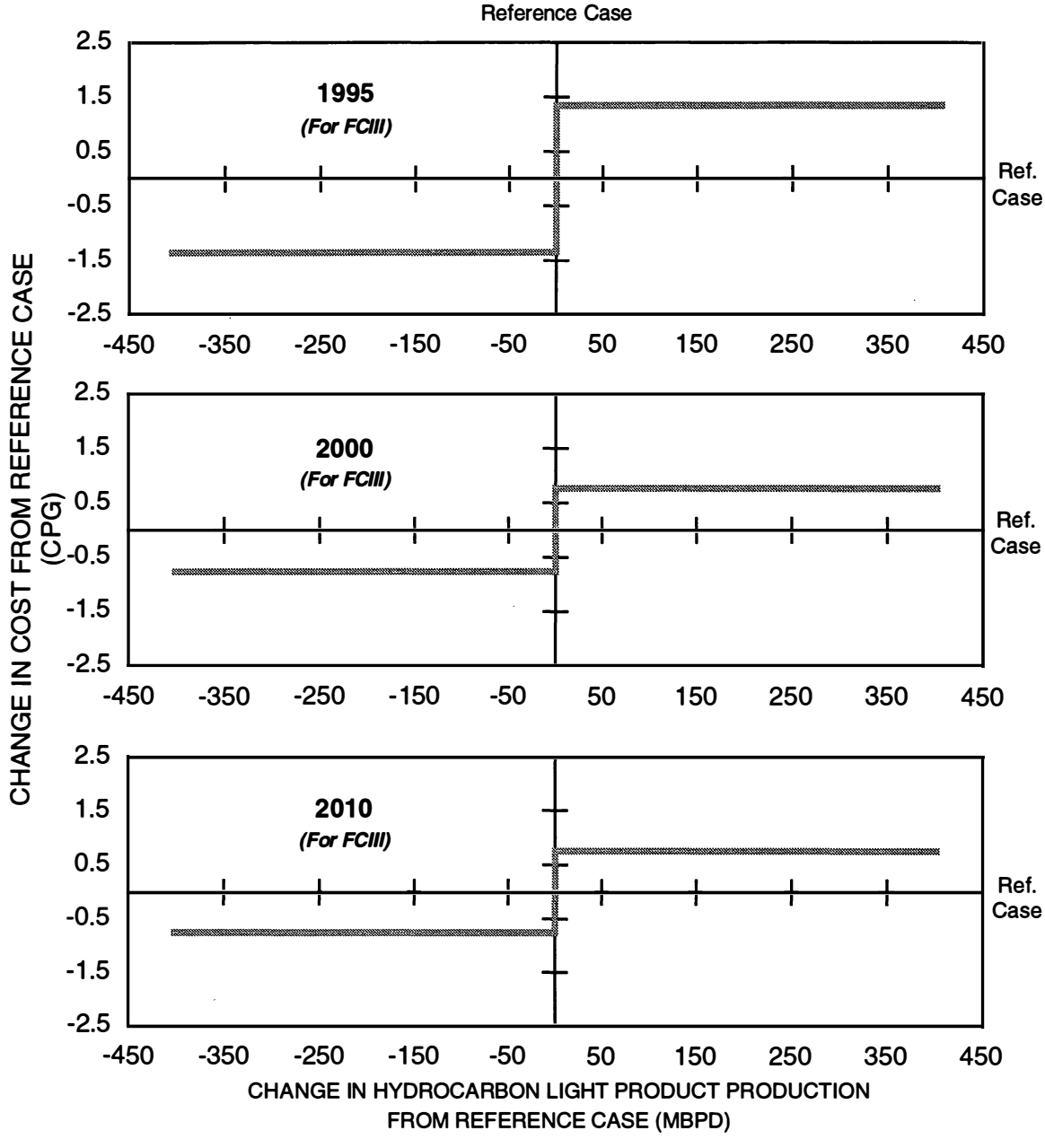
Cost-Volume Relationship
Middle East



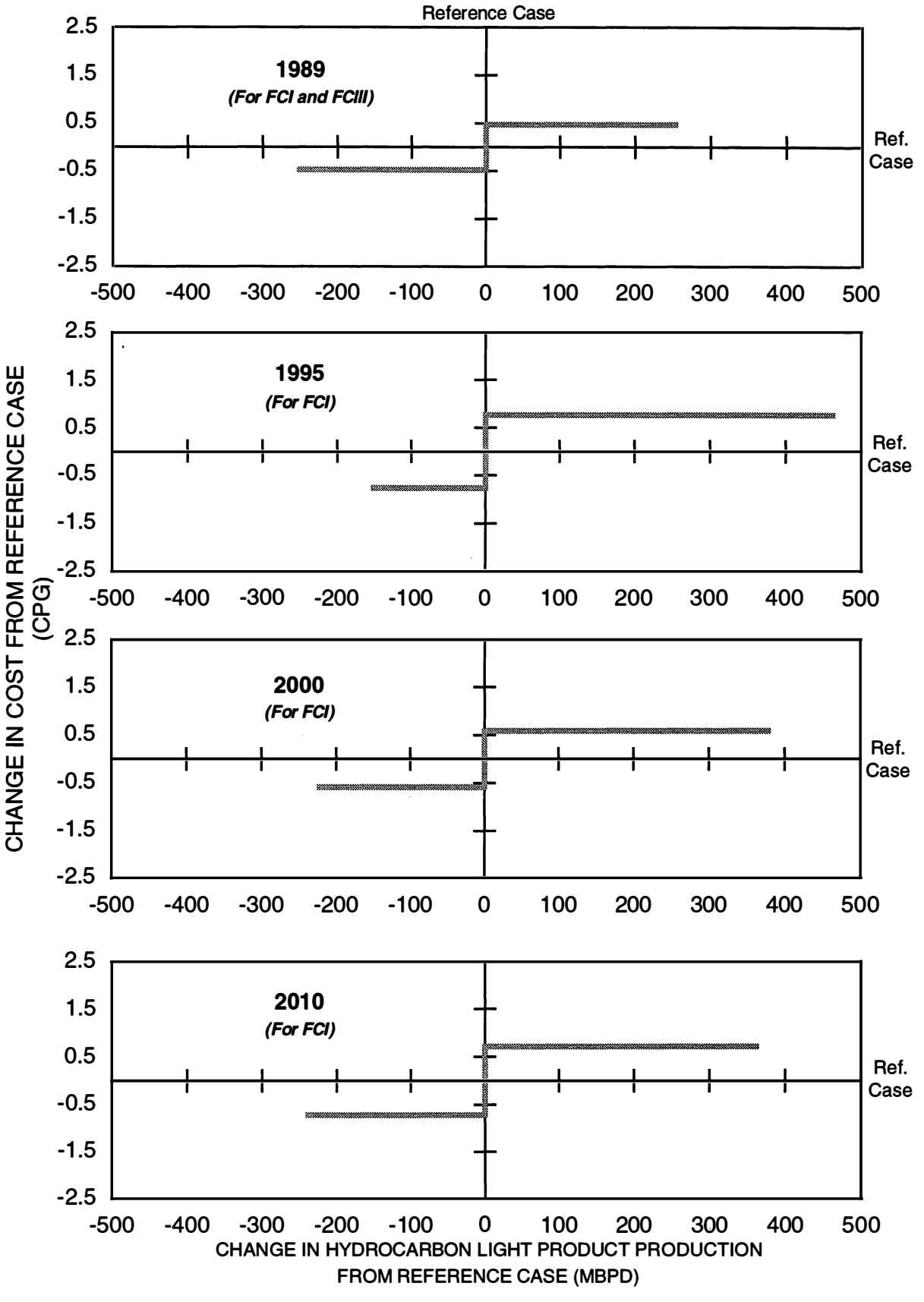
Cost-Volume Relationship
Latin America



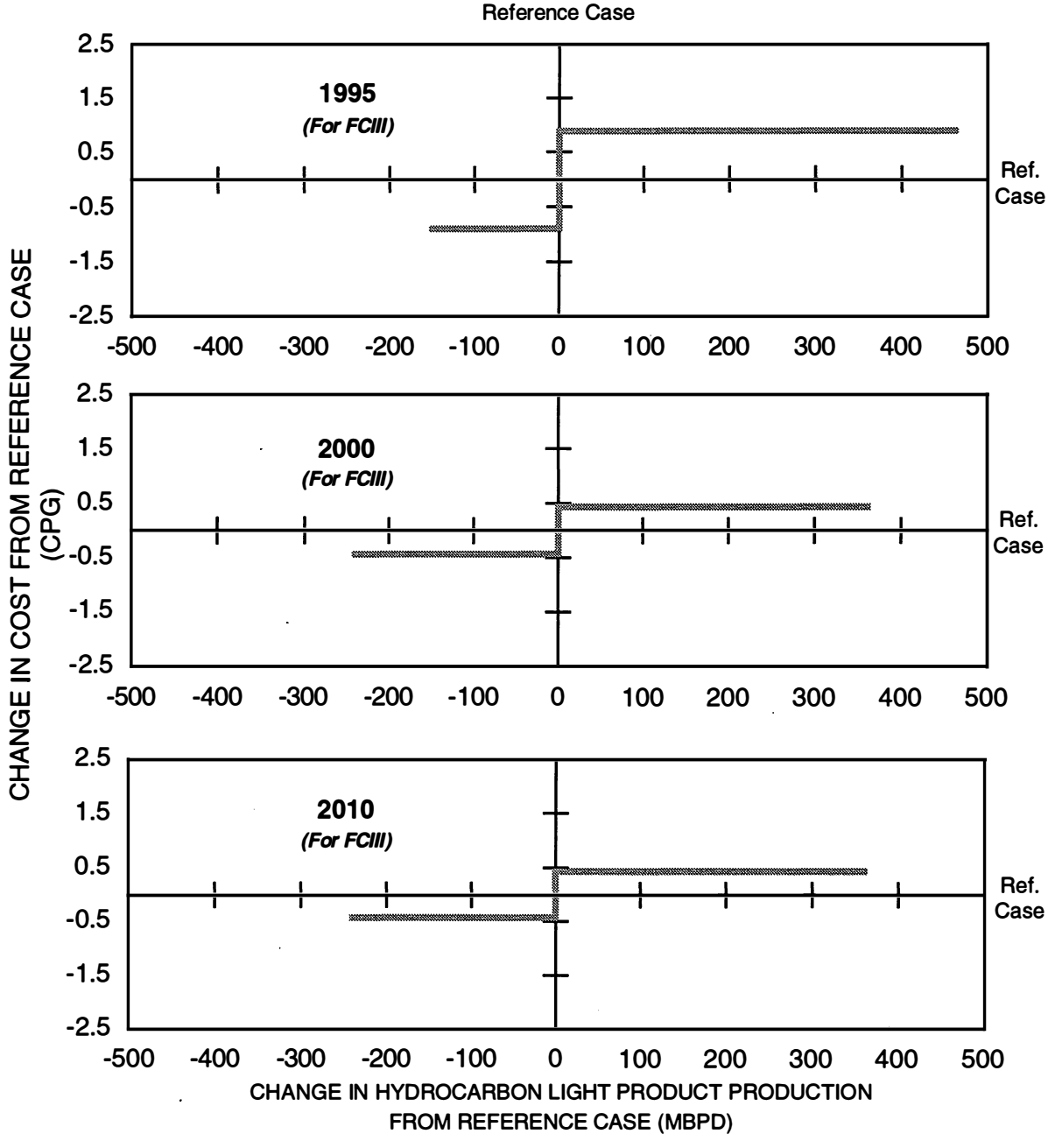
Cost-Volume Relationship
Latin America



Cost-Volume Relationship
Pacific Rim



Cost-Volume Relationship
Pacific Rim



Appendix L, Section IX-1

Summary Regional/PADD Model Output Tables

The attached material is summary information from the logistics model output used in the analysis of U.S. refinery viability relative to product imports. The analysis is discussed in Chapter Three of the main report. The attached material indicates the U.S. refinery output, product imports, and U.S. flag tanker use for each of the Foundation Case runs as well as for 1989. The data are displayed by PADD district and by Refining Study region.

U. S. REFINERY PRODUCT OUTPUT, PRODUCT IMPORTS, AND DOMESTIC TANKER USE

U. S. Region	EIA 1989	Logistics Model 1989	1995-I	1995-III	2000-I	2000-I(E)	2000-III	2010-I	2010-II	2010-III
					Refinery Output, Thousand Barrels/Day[1]					
PADD - I	1176	1140	1151	1151	1234	1254	1174	1241	1184	1090
- II	2578	2581	2615	2592	2906	2865	2624	3056	2704	2344
- III	5125	5169	5237	5237	5610	4989	4968	5849	5455	4856
- IV	401	360	383	383	355	388	340	487	340	325
- V - Calif	1473	1488	1351	1316	1502	1438	1338	1736	1426	1253
- V - Other	492	488	484	480	508	508	422	521	494	395
Total	11245	11226	11221	11159	12115	11442	10866	12890	11603	10263
					U. S. Imports, Thousand Barrels/Day[1]					
PADD - I	671	711	633	418	464	1071	298	994	125	3
- II	14	25	20	20	20	20	-	20	-	-
- III	42	-	-	-	-	-	-	-	-	-
- IV	3	3	3	3	3	3	-	-	-	-
- V - Calif	10	16	61	56	27	72	1	41	2	1
- V - Other	17	21	54	37	58	79	57	66	1	2
Total	757	776	771	534	572	1245	356	1121	128	6
					U. S. Flag Tanker Usage, Number					
Total		27	30	36	35	26	36	18	38	37

(1) Total of modeled products--gasoline plus jet fuel plus distillates.
Refinery produced MTBE and MTBE purchases for blending at refineries are included.
Purchases of MTBE and ethanol for terminal blending are excluded.

1995 REGIONAL REFINERY PRODUCT OUTPUT/PRODUCT IMPORT AND DOMESTIC TANKER USE

	1989 Calibration Cases, Thousand Barrels/Day[1]				1995 Foundation Cases, Thousand Barrels/Day[1]			
	Refining Product Output		Product Imports		Refining Model Output		Product Imports	
Region	Model	EIA*	Model	EIA*	I	III	I	III
1	-	-	507	276	-	-	535	410
2	1016	1031	81	307	1024	1024	-	-
3	49	69	118	80	54	54	91	1
4	75	76	5	8	73	73	7	7
5	1675	1694	20	7	1647	1647	20	20
6	269	277	5	7	295	272	-	-
7	637	607	-	-	673	673	-	-
8	5169	5125	-	42	5237	5237	-	-
9	360	401	3	3	383	383	3	3
10	351	342	13	9	334	334	34	24
11	555	556	-	4	517	502	14	12
12	933	917	16	6	834	814	47	44
13	137	150	8	8	150[3]	146[3]	20	13
Total	11226	11245	776	757	11221	11159	771	534

*Estimated after correcting for exports, inventory change, distillate #4 in distillate, and non-modeled imports.

	Product Imports to U.S.			Product Imports	
	Model	EIA		I	III
14	121	117		123	123
15	489	434		330	140
16	49	79		75	-
17	60	75		87	90
18	55	50		78	155[2]
19	2	2		78	26
Total	776	757		771	534

Domestic Tankers	Model	Availability	Tanker Usage	
(Clean ex Chemicals)	27	38	30	36

(1) Total of modeled products--gasoline plus jet fuel plus distillates. Data exclude terminal blended MTBE and ethanol purchases.
(2) Maximum (ex grassroots capacity) as limited by model input. (3) Minimum as limited by model input.

2000 REGIONAL REFINERY PRODUCT OUTPUT/PRODUCT IMPORT AND DOMESTIC TANKER USE

	1989 Calibration Cases, Thousand Barrels/Day[1]				2000 Foundation Cases, Thousand Barrels/Day[1]					
	Refining Product Output		Product Imports		Refining Model Output			Product Imports		
Region	Model	EIA*	Model	EIA*	I	I-Env Δ	III	I	I-Env Δ	III
1	-	-	507	276	-	-	-	457	621	293
2	1016	1031	81	307	1112[2]	1127[2]	1057	-	331	-
3	49	69	118	80	57	59[2]	54	-	109	-
4	75	76	5	8	65	68	63	7	10	5
5	1675	1694	20	7	1921	1880	1698	20	20	-
6	269	227	5	7	297	297	256	-	-	-
7	637	607	-	-	688	688	670	-	-	-
8	5169	5125	-	42	5610	4989	4968	-	-	-
9	360	401	3	3	355	388	340	3	3	-
10	351	342	13	9	358	358	291	20	41	40
11	555	556	-	4	581	542	503	-	11	-
12	933	917	16	6	921	896	835	27	61	1
13	137	150	8	8	150[3]	150[3]	131[3]	38	38	17
Total	11226	11245	776	757	12115	11442	10866	572	1245	356

*Estimated after correcting for exports, inventory change, distillate #4 in distillate and non-modeled imports.

	Product Imports to U.S.		Product Imports		
	Model	EIA	I	I-Env Δ	III
14	121	117	123	123	123
15	489	434	150	414	126
16	49	79	-	225[2]	-
17	60	75	173[2]	173[2]	28
18	55	50	79	82	77
19	2	2	47	228	2
Total	776	757	572	1245	356

Domestic Tankers	Model	Availability	Tanker Usage		
(Clean ex Chemicals)	27	38	35	26	36

(1) Total of modeled products--gasoline plus jet fuel plus distillates. Data exclude terminal blended MTBE and ethanol purchases.
(2) Maximum (ex grassroots capacity) as limited by model input. (3) Minimum as limited by model input.

2010 REGIONAL REFINERY PRODUCT OUTPUT/PRODUCT IMPORT AND DOMESTIC TANKER USE

	1989 Calibration Cases, Thousand Barrels/Day[1]				2010 Foundation Cases, Thousand Barrels/Day[1]					
	Refining Product Output		Product Imports		Refining Model Output			Product Imports		
Region	Model	EIA*	Model	EIA*	I	II	III	I	II	III
1	-	-	507	276	-	-	-	642	125	3
2	1016	1031	81	307	1114[2]	1070	980	249	-	-
3	49	69	118	80	59[2]	54	50	93	-	-
4	75	76	5	8	68	60	60[3]	10	-	-
5	1675	1694	20	7	2024[2]	1760	1554[3]	20	-	-
6	269	277	5	7	311[2]	273	238[3]	-	-	-
7	637	607	-	-	721[2]	671	552[3]	-	-	-
8	5169	5125	-	42	5849[2]	5455	4856	-	-	-
9	360	401	3	3	487[2]	340	325[3]	-	-	-
10	351	342	13	9	371	363	264[3]	4	-	2
11	555	556	-	4	676	566	491	4	-	-
12	933	917	16	6	1060	860	762	37	2	1
13	137	150	8	8	150[3]	131[3]	131[3]	62	1	-
Total	11226	11245	776	757	12890	11603	10263	1121	128	6

*Estimated after correcting for exports, inventory change, distillate #4 in distillate, and non-modeled imports.

	Product Imports to U.S.			Product Imports		
	Model	EIA		I	II	III
14	121	117		224	123	1
15	489	434		410	1	1
16	49	79		225[2]	-	-
17	60	75		173[2]	1	1
18	55	50		87	1	1
19	2	2		2	2	2
Total	776	757		1121	128	6

Domestic Tankers	Model	Availability	Tanker Usage		
(Clean ex Chemicals)	27	38	18	38	37

(1) Total of modeled products--gasoline plus jet fuel plus distillates. Data exclude terminal blended MTBE and ethanol purchases.
(2) Maximum (ex grassroots capacity) as limited by model input. (3) Minimum as limited by model input.

DETAILED REGIONAL PRODUCT FLOWS

The following tables show the detailed flows of products among the various regions depicted in the study. These flows should be used only in a directional sense. There are many fine adjustments that could be made to the assumptions that would change the specifics of the flows. Every analyst needs to be aware of the assumptions used and reported on in this report before using these regional flows.

The tables show product produced in a region (left) and product consumed in a region (right). The volumes are in barrels per day by type. The product type designations are generally self explanatory.

As an example, the 1995 Foundation Case I Central Atlantic detail indicates that 115,261 barrels per day (B/D) of unleaded regular motor gasoline is produced in the region and moved by pipeline to the Appalachian Region 1. Another 124,000 B/D of the product is produced and consumed in the region. The total unleaded regular motor gasoline production for the region is 239,261 B/D. The right side of the table indicates that all of the unleaded regular motor gasoline consumed in the region comes from local sources. On the other hand, the regular reformulated motor gasoline demand of 144,000 B/D is supplied from two sources. Local production provides 56,529 B/D. The remainder is supplied by pipeline from the Gulf Coast. The transshipment detail is indicated in the package as Transshipment (PADD III - LA - CA) where LA is a Lower Atlantic destination and CA is a Central Atlantic destination. When product is moved by tanker, the number of tanker equivalents per year is in the Number column.

Additional detail on specific product flows can be found in Working Paper 1.

CALIBRATION CASE — 1989

U.S. and Foreign Supply/Demand Balances By Product

CALIBRATION CASE (1989)

NEW ENGLAND

SUPPLY			DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
				LEADED REGULAR			
				MIDDLE EST	5,000	35 DWT TANKER FF	0.02
				UNLEADED REG.			
				CANADA REF	20,705	35 DWT TANKER FF	0.07
				NW EUROPE	23,875	35 DWT TANKER FF	0.09
				MEDITER	52,476	35 DWT TANKER FF	0.19
				MIDDLE EST	21,841	35 DWT TANKER FF	0.08
				CARIB/S.A.	78,103	35 DWT TANKER FF	0.28
				SUBTOTAL:	197,000		
				UNLEADED MIDGRADE			
				REGION 8	41,000	35 DWT TANKER AF	0.15
				UNLEADED PREMIUM			
				REGION 8	45,486	35 DWT TANKER AF	0.16
				CANADA REF	2,117	35 DWT TANKER FF	0.01
				CARIB/S.A.	72,397	35 DWT TANKER FF	0.26
				SUBTOTAL:	120,000		
				KERO JET			
				CARIB/S.A.	49,000	35 DWT TANKER FF	0.18
				DIESEL- ON HWY			
				REGION 8	55,000	35 DWT TANKER AF	0.20
				DIESEL- OFF HWY			
				REGION 8	12,000	35 DWT TANKER AF	0.04
				2 OIL			
				CANADA REF	62,112	35 DWT TANKER FF	0.22
				NW EUROPE	25,000	35 DWT TANKER FF	0.09
				CARIB/S.A.	93,839	35 DWT TANKER FF	0.34
				SUBTOTAL:	180,951		
				TOTAL:	659,951		

CALIBRATION CASE (1989)

CENTRAL ATLANTIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
APPALACH 1	5,494	PIPELINE		REGION 2	12,476	LOCAL DIST.	
CENT ATLAN	12,476	LOCAL DIST.		MEDITER	7,524	35 DWT TANKER FF	0.03
SUBTOTAL:	17,970			SUBTOTAL:	20,000		
UNLEADED REG.				UNLEADED REG.			
APPALACH 1	59,914	PIPELINE		REGION 2	325,878	LOCAL DIST.	
CENT ATLAN	325,878	LOCAL DIST.		TRSHP 8-2	132,549	PIPELINE	
SUBTOTAL:	385,792			SUBTOTAL:	458,427		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
APPALACH 1	26,000	PIPELINE		TRSHP 8-2	96,000	PIPELINE	
UNLEADED PREMIUM				UNLEADED PREMIUM			
APPALACH 1	69,000	PIPELINE		REGION 2	80,996	LOCAL DIST.	
CENT ATLAN	80,996	LOCAL DIST.		TRSHP 8-2	222,004	PIPELINE	
SUBTOTAL:	149,996			SUBTOTAL:	303,000		
KERO JET				KERO JET			
APPALACH 1	12,517	PIPELINE		REGION 2	69,530	LOCAL DIST.	
CENT ATLAN	69,530	LOCAL DIST.		TRSHP 8-2	152,437	PIPELINE	
SUBTOTAL:	82,047			SUBTOTAL:	221,967		
DIESEL- ON HWY				DIESEL- ON HWY			
APPALACH 1	41,000	PIPELINE		REGION 2	56,214	LOCAL DIST.	
CENT ATLAN	56,214	LOCAL DIST.		TRSHP 8-2	83,786	PIPELINE	
SUBTOTAL:	97,214			SUBTOTAL:	140,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
APPALACH 1	8,798	PIPELINE		REGION 2	36,000	LOCAL DIST.	
CENT ATLAN	36,000	LOCAL DIST.					
SUBTOTAL:	44,798			SUBTOTAL:	36,000		
2 OIL				2 OIL			
APPALACH 1	45,895	PIPELINE		REGION 2	166,124	LOCAL DIST.	
CENT ATLAN	166,124	LOCAL DIST.		CARIB/S.A.	73,371	35 DWT TANKER FF	0.26
				TRSHP 8-2	50,003	PIPELINE	
SUBTOTAL:	212,019			SUBTOTAL:	289,498		
TOTAL:	1,015,837			TOTAL:	1,564,892		

CALIBRATION CASE (1989)

LOWER ATLANTIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
LOW ATLAN	863	LOCAL DIST.		REGION 3	863	LOCAL DIST.	
				REGION 8	25,760	35 DWT TANKER AF	0.09
				TRSHP 8-2	65,377	LOCAL DIST.	
SUBTOTAL:	863			SUBTOTAL:	92,000		
UNLEADED REG.				UNLEADED REG.			
LOW ATLAN	26,985	LOCAL DIST.		REGION 3	26,985	LOCAL DIST.	
				REGION 8	184,450	35 DWT TANKER AF	0.66
				TRSHP 8-2	383,565	LOCAL DIST.	
SUBTOTAL:	26,985			SUBTOTAL:	595,000		
				UNLEADED MIDGRADE			
				REGION 8	40,950	35 DWT TANKER AF	0.15
				TRSHP 8-2	76,050	LOCAL DIST.	
				SUBTOTAL:	117,000		
				UNLEADED PREMIUM			
				REGION 8	131,820	35 DWT TANKER AF	0.47
				TRSHP 8-2	206,180	LOCAL DIST.	
				SUBTOTAL:	338,000		
KERO JET				KERO JET			
LOW ATLAN	3,941	LOCAL DIST.		REGION 3	3,941	LOCAL DIST.	
				REGION 8	93,280	35 DWT TANKER AF	0.33
				CARIB/S.A.	21,645	35 DWT TANKER FF	0.08
				TRSHP 8-2	93,134	LOCAL DIST.	
SUBTOTAL:	3,941			SUBTOTAL:	212,000		
DIESEL- ON HWY				DIESEL- ON HWY			
LOW ATLAN	12,754	LOCAL DIST.		REGION 3	12,754	LOCAL DIST.	
				REGION 8	29,540	35 DWT TANKER AF	0.11
				TRSHP 8-2	168,706	LOCAL DIST.	
SUBTOTAL:	12,754			SUBTOTAL:	211,000		
				DIESEL- OFF HWY			
				REGION 8	7,350	35 DWT TANKER AF	0.03
				TRSHP 8-2	41,650	LOCAL DIST.	
				SUBTOTAL:	49,000		
2 OIL				2 OIL			
LOW ATLAN	4,251	LOCAL DIST.		REGION 3	4,251	LOCAL DIST.	
				REGION 8	9,990	35 DWT TANKER AF	0.04
				CARIB/S.A.	96,759	35 DWT TANKER FF	0.35
SUBTOTAL:	4,251			SUBTOTAL:	111,000		
TOTAL:	48,795			TOTAL:	1,725,000		

CALIBRATION CASE (1989)

REF DIST APPALACHIAN 1

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
APPALACH 1	1,506	LOCAL DIST.		REGION 2	5,494	PIPELINE	
				REGION 4	1,506	LOCAL DIST.	
SUBTOTAL:	1,506			SUBTOTAL:	7,000		
UNLEADED REG.				UNLEADED REG.			
APPALACH 1	47,132	LOCAL DIST.		REGION 2	59,914	PIPELINE	
				REGION 4	47,132	LOCAL DIST.	
				REGION 5	6,502	5000 BBL BARGE	1.30
				REGION 5	6,453	PIPELINE	
				CANADA REF	5,000	5000 BBL BARGE	1.00
SUBTOTAL:	47,132			SUBTOTAL:	125,000		
				UNLEADED MIDGRADE			
				REGION 2	26,000	PIPELINE	
				UNLEADED PREMIUM			
				REGION 2	69,000	PIPELINE	
KERO JET				KERO JET			
APPALACH 1	5,483	LOCAL DIST.		REGION 2	12,517	PIPELINE	
				REGION 4	5,483	LOCAL DIST.	
SUBTOTAL:	5,483			SUBTOTAL:	18,000		
				DIESEL- ON HWY			
				REGION 2	41,000	PIPELINE	
DIESEL- OFF HWY				DIESEL- OFF HWY			
APPALACH 1	5,202	LOCAL DIST.		REGION 2	8,798	PIPELINE	
				REGION 4	5,202	LOCAL DIST.	
SUBTOTAL:	5,202			SUBTOTAL:	14,000		
2 OIL				2 OIL			
APPALACH 1	15,606	LOCAL DIST.		REGION 2	45,895	PIPELINE	
				REGION 4	15,606	LOCAL DIST.	
				REGION 5	8,498	5000 BBL BARGE	1.70
SUBTOTAL:	15,606			SUBTOTAL:	70,000		
TOTAL:	74,930			TOTAL:	370,000		

CALIBRATION CASE (1989)

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
ILL,IND,KY	42,586	LOCAL DIST.		REGION 5	42,586	LOCAL DIST.	
				REGION 7	1,024	PIPELINE	
				REGION 8	5,040	5000 BBL BARGE	1.01
				REGION 8	8,400	PIPELINE	
				TRSHP 8-2	14,950	PIPELINE	
SUBTOTAL:	42,586			SUBTOTAL:	72,000		
UNLEADED REG.				UNLEADED REG.			
APPALACH 1	6,502	5000 BBL BARGE	1.30	REGION 5	804,735	LOCAL DIST.	
APPALACH 1	6,453	PIPELINE		REGION 8	35,960	5000 BBL BARGE	7.19
ILL,IND,KY	804,735	LOCAL DIST.		TRSHP 8-2	58,305	PIPELINE	
SUBTOTAL:	817,689			SUBTOTAL:	899,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
ILL,IND,KY	84,190	LOCAL DIST.		REGION 5	84,190	LOCAL DIST.	
				REGION 8	5,080	5000 BBL BARGE	1.02
				REGION 8	16,800	PIPELINE	
				TRSHP 8-2	20,930	PIPELINE	
SUBTOTAL:	84,190			SUBTOTAL:	127,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
ILL,IND,KY	153,442	LOCAL DIST.		REGION 5	153,442	LOCAL DIST.	
				REGION 8	10,640	5000 BBL BARGE	2.13
				REGION 8	36,400	PIPELINE	
				CANADA REF	17,678	PIPELINE	
				TRSHP 8-2	47,840	PIPELINE	
SUBTOTAL:	153,442			SUBTOTAL:	266,000		
KERO JET				KERO JET			
ILL,IND,KY	122,798	LOCAL DIST.		REGION 5	122,798	LOCAL DIST.	
				REGION 8	10,740	5000 BBL BARGE	2.15
				REGION 8	25,200	PIPELINE	
				CANADA REF	2,322	PIPELINE	
				TRSHP 8-2	17,940	PIPELINE	
SUBTOTAL:	122,798			SUBTOTAL:	179,000		
DIESEL- ON HWY				DIESEL- ON HWY			
ILL,IND,KY	247,376	LOCAL DIST.		REGION 5	247,376	LOCAL DIST.	
				REGION 8	16,704	5000 BBL BARGE	3.34
				TRSHP 8-2	23,920	PIPELINE	
SUBTOTAL:	247,376			SUBTOTAL:	288,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
ILL,IND,KY	65,815	LOCAL DIST.		REGION 5	65,815	LOCAL DIST.	
				REGION 8	3,700	5000 BBL BARGE	0.74
				TRSHP 8-2	4,485	PIPELINE	
SUBTOTAL:	65,815			SUBTOTAL:	74,000		

CALIBRATION CASE (1989)

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
2 OIL				2 OIL			
APPALACH 1	8,498	5000 BBL BARGE	1.70	REGION 5	132,440	LOCAL DIST.	
ILL,IND,KY	132,440	LOCAL DIST.		REGION 8	7,600	5000 BBL BARGE	1.52
				TRSHP 8-2	11,960	PIPELINE	
SUBTOTAL:	140,938			SUBTOTAL:	152,000		
TOTAL:	1,674,835			TOTAL:	2,057,000		

CALIBRATION CASE (1989)

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
MIN,WIS,DK	16,670	LOCAL DIST.		REGION 6	16,670	LOCAL DIST.	
				REGION 7	21,330	PIPELINE	
				CANADA REF	5,000	5000 BBL BARGE	1.00
SUBTOTAL:	16,670			SUBTOTAL:	43,000		
UNLEADED REG.				UNLEADED REG.			
MIN,WIS,DK	121,747	LOCAL DIST.		REGION 6	121,747	LOCAL DIST.	
				REGION 7	105,253	PIPELINE	
SUBTOTAL:	121,747			SUBTOTAL:	227,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
MIN,WIS,DK	4,260	LOCAL DIST.		REGION 6	4,260	LOCAL DIST.	
				REGION 7	4,740	PIPELINE	
SUBTOTAL:	4,260			SUBTOTAL:	9,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
MIN,WIS,DK	21,802	LOCAL DIST.		REGION 6	21,802	LOCAL DIST.	
				REGION 7	15,198	PIPELINE	
SUBTOTAL:	21,802			SUBTOTAL:	37,000		
KERO JET				KERO JET			
MIN,WIS,DK	22,116	LOCAL DIST.		REGION 6	22,116	LOCAL DIST.	
				REGION 7	3,884	PIPELINE	
SUBTOTAL:	22,116			SUBTOTAL:	26,000		
DIESEL- ON HWY				DIESEL- ON HWY			
MIN,WIS,DK	34,945	LOCAL DIST.		REGION 6	34,945	LOCAL DIST.	
				REGION 7	28,055	PIPELINE	
SUBTOTAL:	34,945			SUBTOTAL:	63,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
MIN,WIS,DK	17,410	LOCAL DIST.		REGION 6	17,410	LOCAL DIST.	
				REGION 7	16,590	PIPELINE	
SUBTOTAL:	17,410			SUBTOTAL:	34,000		
2 OIL				2 OIL			
MIN,WIS,DK	29,560	LOCAL DIST.		REGION 6	29,560	LOCAL DIST.	
				REGION 7	28,440	PIPELINE	
SUBTOTAL:	29,560			SUBTOTAL:	58,000		
TOTAL:	268,509			TOTAL:	497,000		

CALIBRATION CASE (1989)

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
ILL,IND,KY	1,024	PIPELINE		REGION 7	57,065	LOCAL DIST.	
MIN,WIS,DK	21,330	PIPELINE		REGION 8	28,935	PIPELINE	
OK,KAN,MO	57,065	LOCAL DIST.					
ROCKY MT	3,089	PIPELINE					
SUBTOTAL:	82,507			SUBTOTAL:	86,000		
UNLEADED REG.				UNLEADED REG.			
MIN,WIS,DK	105,253	PIPELINE		REGION 7	93,315	LOCAL DIST.	
OK,KAN,MO	93,315	LOCAL DIST.		REGION 8	253,685	PIPELINE	
SUBTOTAL:	198,568			SUBTOTAL:	347,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
MIN,WIS,DK	4,740	PIPELINE		REGION 7	11,000	LOCAL DIST.	
OK,KAN,MO	11,000	LOCAL DIST.					
SUBTOTAL:	15,740			SUBTOTAL:	11,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
MIN,WIS,DK	15,198	PIPELINE		REGION 7	58,000	LOCAL DIST.	
OK,KAN,MO	58,000	LOCAL DIST.					
ROCKY MT	10,000	PIPELINE					
SUBTOTAL:	83,198			SUBTOTAL:	58,000		
KERO JET				KERO JET			
MIN,WIS,DK	3,884	PIPELINE		REGION 7	32,334	LOCAL DIST.	
OK,KAN,MO	32,334	LOCAL DIST.		REGION 8	50,666	PIPELINE	
ROCKY MT	10,068	PIPELINE					
SUBTOTAL:	46,286			SUBTOTAL:	83,000		
DIESEL- ON HWY				DIESEL- ON HWY			
MIN,WIS,DK	28,055	PIPELINE		REGION 7	102,910	LOCAL DIST.	
OK,KAN,MO	102,910	LOCAL DIST.		REGION 8	21,090	PIPELINE	
SUBTOTAL:	130,966			SUBTOTAL:	124,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
MIN,WIS,DK	16,590	PIPELINE		REGION 8	48,000	PIPELINE	
2 OIL				2 OIL			
MIN,WIS,DK	28,440	PIPELINE		REGION 7	34,779	LOCAL DIST.	
OK,KAN,MO	34,779	LOCAL DIST.		REGION 8	13,221	PIPELINE	
SUBTOTAL:	63,219			SUBTOTAL:	48,000		
TOTAL:	637,074			TOTAL:	805,000		

CALIBRATION CASE (1989)

PAD DISTRICT III

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
ILL,IND,KY	5,040	5000 BBL BARGE	1.01	REGION 8	104,000	LOCAL DIST.	
ILL,IND,KY	8,400	PIPELINE					
LOW ATLAN	25,760	35 DWT TANKER AF	0.09				
OK,KAN,MO	28,935	PIPELINE					
PAD III	104,000	LOCAL DIST.					
ROCKY MT	7,310	PIPELINE					
SOUTH PAD5	8,700	PIPELINE					
TRSHP 8-2	80,327	PIPELINE					
SUBTOTAL:	268,472			SUBTOTAL:	104,000		
UNLEADED REG.				UNLEADED REG.			
ILL,IND,KY	35,960	5000 BBL BARGE	7.19	REGION 8	659,000	LOCAL DIST.	
LOW ATLAN	184,450	35 DWT TANKER AF	0.66				
OK,KAN,MO	253,685	PIPELINE					
PAD III	659,000	LOCAL DIST.					
ROCKY MT	16,322	PIPELINE					
SOUTH PAD5	24,360	PIPELINE					
TRSHP 8-2	574,418	PIPELINE					
SUBTOTAL:	1,748,196			SUBTOTAL:	659,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
ILL,IND,KY	5,080	5000 BBL BARGE	1.02	REGION 8	59,000	LOCAL DIST.	
ILL,IND,KY	16,800	PIPELINE					
LOW ATLAN	40,950	35 DWT TANKER AF	0.15				
NEW ENGLND	41,000	35 DWT TANKER AF	0.15				
PAD III	59,000	LOCAL DIST.					
TRSHP 8-2	192,980	PIPELINE					
SUBTOTAL:	355,810			SUBTOTAL:	59,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
ILL,IND,KY	10,640	5000 BBL BARGE	2.13	REGION 8	211,000	LOCAL DIST.	
ILL,IND,KY	36,400	PIPELINE					
LOW ATLAN	131,820	35 DWT TANKER AF	0.47				
NEW ENGLND	45,486	35 DWT TANKER AF	0.16				
PAD III	211,000	LOCAL DIST.					
ROCKY MT	4,300	PIPELINE					
SOUTH PAD5	6,960	PIPELINE					
TRSHP 8-2	476,024	PIPELINE					
SUBTOTAL:	922,630			SUBTOTAL:	211,000		
KERO JET				KERO JET			
ILL,IND,KY	10,740	5000 BBL BARGE	2.15	REGION 8	236,000	LOCAL DIST.	
ILL,IND,KY	25,200	PIPELINE					
LOW ATLAN	93,280	35 DWT TANKER AF	0.33				
OK,KAN,MO	50,666	PIPELINE					
PAD III	236,000	LOCAL DIST.					
ROCKY MT	6,450	PIPELINE					
SOUTH PAD5	6,960	PIPELINE					
TRSHP 8-2	263,510	PIPELINE					
SUBTOTAL:	692,807			SUBTOTAL:	236,000		

CALIBRATION CASE (1989)

PAD DISTRICT III

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
DIESEL- ON HWY				DIESEL- ON HWY			
ILL,IND,KY	16,704	5000 BBL BARGE	3.34	REGION 8	239,000	LOCAL DIST.	
LOW ATLAN	29,540	35 DWT TANKER AF	0.11				
NEW ENGLND	55,000	35 DWT TANKER AF	0.20				
OK,KAN,MO	21,090	PIPELINE					
PAD III	239,000	LOCAL DIST.					
ROCKY MT	3,458	PIPELINE					
SOUTH PAD5	7,540	PIPELINE					
TRSHP 8-2	276,412	PIPELINE					
SUBTOTAL:	648,744			SUBTOTAL:	239,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
ILL,IND,KY	3,700	5000 BBL BARGE	0.74	REGION 8	114,000	LOCAL DIST.	
LOW ATLAN	7,350	35 DWT TANKER AF	0.03				
NEW ENGLND	12,000	35 DWT TANKER AF	0.04				
OK,KAN,MO	48,000	PIPELINE					
PAD III	114,000	LOCAL DIST.					
ROCKY MT	2,580	PIPELINE					
SOUTH PAD5	3,480	PIPELINE					
TRSHP 8-2	46,135	PIPELINE					
SUBTOTAL:	237,245			SUBTOTAL:	114,000		
2 OIL				2 OIL			
ILL,IND,KY	7,600	5000 BBL BARGE	1.52	REGION 8	200,000	LOCAL DIST.	
LOW ATLAN	9,990	35 DWT TANKER AF	0.04				
OK,KAN,MO	13,221	PIPELINE					
PAD III	200,000	LOCAL DIST.					
ROCKY MT	2,580	PIPELINE					
TRSHP 8-2	61,963	PIPELINE					
SUBTOTAL:	295,354			SUBTOTAL:	200,000		
TOTAL:	5,169,257			TOTAL:	1,822,000		

CALIBRATION CASE (1989)

ROCKY MOUNTAIN

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
PACIFIC NW	5,695	PIPELINE		REGION 7	3,089	PIPELINE	
ROCKY MT	55,601	LOCAL DIST.		REGION 8	7,310	PIPELINE	
				REGION 9	55,601	LOCAL DIST.	
SUBTOTAL:	61,296			SUBTOTAL:	66,000		
UNLEADED REG.				UNLEADED REG.			
PACIFIC NW	10,050	PIPELINE		REGION 8	16,322	PIPELINE	
ROCKY MT	109,678	LOCAL DIST.		REGION 9	109,678	LOCAL DIST.	
				CANADA REF	3,000	TRUCK 5M gal/1000	
SUBTOTAL:	119,728			SUBTOTAL:	129,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
ROCKY MT	10	LOCAL DIST.		REGION 9	10	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC NW	3,350	PIPELINE		REGION 7	10,000	PIPELINE	
ROCKY MT	14,700	LOCAL DIST.		REGION 8	4,300	PIPELINE	
				REGION 9	14,700	LOCAL DIST.	
SUBTOTAL:	18,050			SUBTOTAL:	29,000		
KERO JET				KERO JET			
PACIFIC NW	7,035	PIPELINE		REGION 7	10,068	PIPELINE	
ROCKY MT	34,482	LOCAL DIST.		REGION 8	6,450	PIPELINE	
				REGION 9	34,482	LOCAL DIST.	
SUBTOTAL:	41,517			SUBTOTAL:	51,000		
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC NW	6,700	PIPELINE		REGION 8	3,458	PIPELINE	
ROCKY MT	45,542	LOCAL DIST.		REGION 9	45,542	LOCAL DIST.	
SUBTOTAL:	52,242			SUBTOTAL:	49,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
PACIFIC NW	3,350	PIPELINE		REGION 8	2,580	PIPELINE	
ROCKY MT	29,420	LOCAL DIST.		REGION 9	29,420	LOCAL DIST.	
SUBTOTAL:	32,770			SUBTOTAL:	32,000		
2 OIL				2 OIL			
PACIFIC NW	6,030	PIPELINE		REGION 8	2,580	PIPELINE	
ROCKY MT	28,420	LOCAL DIST.		REGION 9	28,420	LOCAL DIST.	
SUBTOTAL:	34,450			SUBTOTAL:	31,000		
TOTAL:	360,063			TOTAL:	387,010		

CALIBRATION CASE (1989)

PACIFIC NORTHWEST

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
PACIFIC NW	64,305	LOCAL DIST.		REGION 9	5,695	PIPELINE	
				REGION 10	64,305	LOCAL DIST.	
SUBTOTAL:	64,305			SUBTOTAL:	70,000		
UNLEADED REG.				UNLEADED REG.			
PACIFIC NW	115,950	LOCAL DIST.		REGION 9	10,050	PIPELINE	
				REGION 10	115,950	LOCAL DIST.	
SUBTOTAL:	115,950			SUBTOTAL:	126,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
PACIFIC NW	10	LOCAL DIST.		REGION 10	10	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC NW	24,666	LOCAL DIST.		REGION 9	3,350	PIPELINE	
				MIDDLE EST	10,984	35 DWT TANKER FF	0.04
				REGION 10	24,666	LOCAL DIST.	
SUBTOTAL:	24,666			SUBTOTAL:	39,000		
KERO JET				KERO JET			
PACIFIC NW	55,965	LOCAL DIST.		REGION 9	7,035	PIPELINE	
SOUTH PADS	3,857	35 DWT TANKER AF	0.01	REGION 10	55,965	LOCAL DIST.	
SUBTOTAL:	59,822			SUBTOTAL:	63,000		
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC NW	38,300	LOCAL DIST.		REGION 9	6,700	PIPELINE	
				REGION 10	38,300	LOCAL DIST.	
SUBTOTAL:	38,300			SUBTOTAL:	45,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
PACIFIC NW	16,650	LOCAL DIST.		REGION 9	3,350	PIPELINE	
				REGION 10	16,650	LOCAL DIST.	
SUBTOTAL:	16,650			SUBTOTAL:	20,000		
2 OIL				2 OIL			
PACIFIC NW	31,794	LOCAL DIST.		REGION 9	6,030	PIPELINE	
				REGION 10	31,794	LOCAL DIST.	
				CANADA W.	2,176	35 DWT TANKER FF	0.01
SUBTOTAL:	31,794			SUBTOTAL:	40,000		
TOTAL:	351,498			TOTAL:	403,010		

CALIBRATION CASE (1989)

CENTRAL PAD V.

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
CNTRL PAD5	55,000	LOCAL DIST.		REGION 11	55,000	LOCAL DIST.	
SOUTH PAD5	528	35 DWT TANKER AF	0.00				
SUBTOTAL:	55,528			SUBTOTAL:	55,000		
UNLEADED REG.				UNLEADED REG.			
CNTRL PAD5	196,170	LOCAL DIST.		REGION 11	196,170	LOCAL DIST.	
SOUTH PAD5	4,503	35 DWT TANKER AF	0.02				
SUBTOTAL:	200,673			SUBTOTAL:	196,170		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
CNTRL PAD5	4,000	LOCAL DIST.		REGION 11	4,000	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
CNTRL PAD5	87,000	LOCAL DIST.		REGION 11	87,000	LOCAL DIST.	
KERO JET				KERO JET			
CNTRL PAD5	98,000	LOCAL DIST.		REGION 11	98,000	LOCAL DIST.	
PACIFIC	8,395	35 DWT TANKER AF	0.03				
SUBTOTAL:	106,395			SUBTOTAL:	98,000		
DIESEL- ON HWY				DIESEL- ON HWY			
CNTRL PAD5	57,000	LOCAL DIST.		REGION 11	57,000	LOCAL DIST.	
DIESEL- OFF HWY				DIESEL- OFF HWY			
CNTRL PAD5	23,000	LOCAL DIST.		REGION 11	23,000	LOCAL DIST.	
PACIFIC	3,240	35 DWT TANKER AF	0.01				
SUBTOTAL:	26,240			SUBTOTAL:	23,000		
2 OIL				2 OIL			
CNTRL PAD5	14,000	LOCAL DIST.		REGION 11	14,000	LOCAL DIST.	
PACIFIC	4,073	35 DWT TANKER AF	0.01				
SUBTOTAL:	18,073			SUBTOTAL:	14,000		
TOTAL:	554,908			TOTAL:	534,170		

CALIBRATION CASE (1989)

SOUTHERN PAD V

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
SOUTH PAD5	105,037	LOCAL DIST.		REGION 8	8,700	PIPELINE	
				REGION 11	528	35 DWT TANKER AF	0.00
				MIDDLE EST	735	35 DWT TANKER FF	0.00
				REGION 12	105,037	LOCAL DIST.	
SUBTOTAL:	105,037			SUBTOTAL:	115,000		
UNLEADED REG.				UNLEADED REG.			
SOUTH PAD5	351,137	LOCAL DIST.		REGION 8	24,360	PIPELINE	
				REGION 11	4,503	35 DWT TANKER AF	0.02
				REGION 12	351,137	LOCAL DIST.	
SUBTOTAL:	351,137			SUBTOTAL:	380,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
SOUTH PAD5	7,000	LOCAL DIST.		REGION 12	7,000	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
SOUTH PAD5	139,142	LOCAL DIST.		REGION 8	6,960	PIPELINE	
				MIDDLE EST	10,898	35 DWT TANKER FF	0.04
				REGION 12	139,142	LOCAL DIST.	
SUBTOTAL:	139,142			SUBTOTAL:	157,000		
KERO JET				KERO JET			
SOUTH PAD5	160,828	LOCAL DIST.		REGION 8	6,960	PIPELINE	
				REGION 10	3,857	35 DWT TANKER AF	0.01
				REGION 12	160,828	LOCAL DIST.	
				CARIB/S.A.	4,355	35 DWT TANKER FF	0.02
SUBTOTAL:	160,828			SUBTOTAL:	176,000		
DIESEL- ON HWY				DIESEL- ON HWY			
SOUTH PAD5	103,460	LOCAL DIST.		REGION 8	7,540	PIPELINE	
				REGION 12	103,460	LOCAL DIST.	
SUBTOTAL:	103,460			SUBTOTAL:	111,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
SOUTH PAD5	42,520	LOCAL DIST.		REGION 8	3,480	PIPELINE	
				REGION 12	42,520	LOCAL DIST.	
SUBTOTAL:	42,520			SUBTOTAL:	46,000		
2 OIL				2 OIL			
SOUTH PAD5	24,000	LOCAL DIST.		REGION 12	24,000	LOCAL DIST.	
TOTAL:	933,124			TOTAL:	1,016,000		

CALIBRATION CASE (1989)

PACIFIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
PACIFIC	4,777	LOCAL DIST.		MIDDLE EST	223	35 DWT TANKER FF	0.00
				REGION 13	4,777	LOCAL DIST.	
SUBTOTAL:	4,777			SUBTOTAL:	5,000		
UNLEADED REG.				UNLEADED REG.			
PACIFIC	18,681	LOCAL DIST.		FAR EAST	1,000	35 DWT TANKER FF	0.00
				MIDDLE EST	3,319	35 DWT TANKER FF	0.01
				REGION 13	18,681	LOCAL DIST.	
SUBTOTAL:	18,681			SUBTOTAL:	23,000		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
PACIFIC	10	LOCAL DIST.		REGION 13	10	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.	
KERO JET				KERO JET			
PACIFIC	66,105	LOCAL DIST.		REGION 11	8,395	35 DWT TANKER AF	0.03
				FAR EAST	500	35 DWT TANKER FF	0.00
				MIDDLE EST	1,000	35 DWT TANKER FF	0.00
				REGION 13	66,105	LOCAL DIST.	
SUBTOTAL:	66,105			SUBTOTAL:	76,000		
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC	12,000	LOCAL DIST.		REGION 13	12,000	LOCAL DIST.	
DIESEL- OFF HWY				DIESEL- OFF HWY			
PACIFIC	2,760	LOCAL DIST.		REGION 11	3,240	35 DWT TANKER AF	0.01
				REGION 13	2,760	LOCAL DIST.	
SUBTOTAL:	2,760			SUBTOTAL:	6,000		
2 OIL				2 OIL			
PACIFIC	22,715	LOCAL DIST.		REGION 11	4,073	35 DWT TANKER AF	0.01
				FAR EAST	500	35 DWT TANKER FF	0.00
				MIDDLE EST	1,000	35 DWT TANKER FF	0.00
				REGION 13	22,715	LOCAL DIST.	
				CANADA W.	712	35 DWT TANKER FF	0.00
SUBTOTAL:	22,715			SUBTOTAL:	29,000		
TOTAL:	137,049			TOTAL:	161,010		

CALIBRATION CASE (1989)

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR				LEADED REGULAR			
ILL,IND,KY	14,950	PIPELINE		REGION 8	80,327	PIPELINE	
LOW ATLAN	65,377	LOCAL DIST.					
SUBTOTAL:	80,327			SUBTOTAL:	80,327		
UNLEADED REG.				UNLEADED REG.			
CENT ATLAN	132,549	PIPELINE		REGION 8	574,418	PIPELINE	
ILL,IND,KY	58,305	PIPELINE					
LOW ATLAN	383,565	LOCAL DIST.					
SUBTOTAL:	574,418			SUBTOTAL:	574,418		
UNLEADED MIDGRADE				UNLEADED MIDGRADE			
CENT ATLAN	96,000	PIPELINE		REGION 8	192,980	PIPELINE	
ILL,IND,KY	20,930	PIPELINE					
LOW ATLAN	76,050	LOCAL DIST.					
SUBTOTAL:	192,980			SUBTOTAL:	192,980		
UNLEADED PREMIUM				UNLEADED PREMIUM			
CENT ATLAN	222,004	PIPELINE		REGION 8	476,024	PIPELINE	
ILL,IND,KY	47,840	PIPELINE					
LOW ATLAN	206,180	LOCAL DIST.					
SUBTOTAL:	476,024			SUBTOTAL:	476,024		
KERO JET				KERO JET			
CENT ATLAN	152,437	PIPELINE		REGION 8	263,510	PIPELINE	
ILL,IND,KY	17,940	PIPELINE					
LOW ATLAN	93,134	LOCAL DIST.					
SUBTOTAL:	263,510			SUBTOTAL:	263,511		
DIESEL- ON HWY				DIESEL- ON HWY			
CENT ATLAN	83,786	PIPELINE		REGION 8	276,412	PIPELINE	
ILL,IND,KY	23,920	PIPELINE					
LOW ATLAN	168,706	LOCAL DIST.					
SUBTOTAL:	276,412			SUBTOTAL:	276,412		
DIESEL- OFF HWY				DIESEL- OFF HWY			
ILL,IND,KY	4,485	PIPELINE		REGION 8	46,135	PIPELINE	
LOW ATLAN	41,650	LOCAL DIST.					
SUBTOTAL:	46,135			SUBTOTAL:	46,135		
2 OIL				2 OIL			
CENT ATLAN	50,003	PIPELINE		REGION 8	61,963	PIPELINE	
ILL,IND,KY	11,960	PIPELINE					
SUBTOTAL:	61,963			SUBTOTAL:	61,963		
TOTAL:	1,971,769			TOTAL:	1,971,769		

CALIBRATION CASE (1989)

CANADA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR							
MIN,WIS,DK	5,000	5000 BBL BARGE	1.00				
UNLEADED REG.							
APPALACH 1	5,000	5000 BBL BARGE	1.00				
NEW ENGLND	20,705	35 DWT TANKER FF	0.07				
ROCKY MT	3,000	TRUCK 5M gal/1000					
SUBTOTAL:	28,705						
UNLEADED PREMIUM							
ILL,IND,KY	17,678	PIPELINE					
NEW ENGLND	2,117	35 DWT TANKER FF	0.01				
SUBTOTAL:	19,795						
KERO JET							
ILL,IND,KY	2,322	PIPELINE					
2 OIL							
CANADA W.	2,888	LOCAL DIST.					
NEW ENGLND	62,112	35 DWT TANKER FF	0.22				
SUBTOTAL:	65,000						
TOTAL:	120,822						

CALIBRATION CASE (1989)

CARIBBEAN/VENEZUELA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLEADED REG.							
NEW ENGLND	78,103	35 DWT TANKER FF	0.28				
UNLEADED PREMIUM							
NEW ENGLND	72,397	35 DWT TANKER FF	0.26				
KERO JET							
LOW ATLAN	21,645	35 DWT TANKER FF	0.08				
NEW ENGLND	49,000	35 DWT TANKER FF	0.18				
SOUTH PADS	4,355	35 DWT TANKER FF	0.02				
SUBTOTAL:	75,000						
2 OIL							
CENT ATLAN	73,371	35 DWT TANKER FF	0.26				
LOW ATLAN	96,759	35 DWT TANKER FF	0.35				
NEW ENGLND	93,839	35 DWT TANKER FF	0.34				
SUBTOTAL:	263,968						
TOTAL:	489,468						

CALIBRATION CASE (1989)

NORTHWEST EUROPE

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
UNLEADED REG.							
NEW ENGLND	23,875	35 DWT TANKER FF	0.09				
2 OIL							
NEW ENGLND	25,000	35 DWT TANKER FF	0.09				
TOTAL:	48,875						

CALIBRATION CASE (1989)

MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
LEADED REGULAR							
CENT ATLAN	7,524	35 DWT TANKER FF	0.03				
UNLEADED REG.							
NEW ENGLND	52,476	35 DWT TANKER FF	0.19				
TOTAL:	60,000						

CALIBRATION CASE (1989)

MIDDLE EAST

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REGULAR							
NEW ENGLND	5,000	35 DWT TANKER FF	0.02				
PACIFIC	223	35 DWT TANKER FF	0.00				
SOUTH PAD5	735	35 DWT TANKER FF	0.00				
SUBTOTAL:	5,958						
UNLEADED REG.							
NEW ENGLND	21,841	35 DWT TANKER FF	0.08				
PACIFIC	3,319	35 DWT TANKER FF	0.01				
SUBTOTAL:	25,160						
UNLEADED PREMIUM							
PACIFIC NW	10,984	35 DWT TANKER FF	0.04				
SOUTH PAD5	10,898	35 DWT TANKER FF	0.04				
SUBTOTAL:	21,882						
KERO JET							
PACIFIC	1,000	35 DWT TANKER FF	0.00				
2 OIL							
PACIFIC	1,000	35 DWT TANKER FF	0.00				
TOTAL:	55,000						

CALIBRATION CASE (1989)

FAR EAST

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLEADED REG.							
PACIFIC	1,000	35 DWT TANKER FF	0.00				
KERO JET							
PACIFIC	500	35 DWT TANKER FF	0.00				
2 OIL							
PACIFIC	500	35 DWT TANKER FF	0.00				
TOTAL:	2,000						

VALIDATION CASE — 1987

U.S. and Foreign Supply/Demand Balances By Product

VALIDATION CASE (1987)

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
				LEADED REG			
				MIDDLE EST	52,000	35 DWT TANKER FF	0.19
				UNLEADED REG.			
				REGION 8	50,047	35 DWT TANKER AF	0.18
				NW EUROPE	90,000	35 DWT TANKER FF	0.32
				CARIB/S.A.	51,953	35 DWT TANKER FF	0.19
				SUBTOTAL:	192,000		
				UNLEADED PREMIUM			
				REGION 8	116,000	35 DWT TANKER AF	0.41
				KERO JET			
				MIDDLE EST	1,000	35 DWT TANKER FF	0.00
				CARIB/S.A.	33,000	35 DWT TANKER FF	0.12
				SUBTOTAL:	34,000		
				DIESEL- ON HWY			
				REGION 8	52,000	35 DWT TANKER AF	0.19
				DIESEL- OFF HWY			
				REGION 8	12,000	35 DWT TANKER AF	0.04
				2 OIL			
				CANADA REF	63,100	35 DWT TANKER FF	0.23
				CARIB/S.A.	101,379	35 DWT TANKER FF	0.36
				SUBTOTAL:	164,479		
				TOTAL:	622,479		

VALIDATION CASE (1987)

CENTRAL ATLANTIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
APPALACH 1	17,970	PIPELINE		MEDITER	122,438	35 DWT TANKER FF	0.44
				MIDDLE EST	1,000	35 DWT TANKER FF	0.00
SUBTOTAL:	17,970			SUBTOTAL:	123,438		
UNLEADED REG.				UNLEADED REG.			
APPALACH 1	97,236	PIPELINE		REGION 2	314,556	LOCAL DIST.	
CENT ATLAN	314,556	LOCAL DIST.		TRSHP 8-2	144,378	PIPELINE	
SUBTOTAL:	411,792			SUBTOTAL:	458,934		
UNLEADED PREMIUM				UNLEADED PREMIUM			
APPALACH 1	64,000	PIPELINE		REGION 2	85,996	LOCAL DIST.	
CENT ATLAN	85,996	LOCAL DIST.		TRSHP 8-2	203,004	PIPELINE	
SUBTOTAL:	149,996			SUBTOTAL:	289,000		
KERO JET				KERO JET			
APPALACH 1	7,679	PIPELINE		REGION 2	74,368	LOCAL DIST.	
CENT ATLAN	74,368	LOCAL DIST.		TRSHP 8-2	82,632	PIPELINE	
SUBTOTAL:	82,047			SUBTOTAL:	157,000		
DIESEL- ON HWY				DIESEL- ON HWY			
APPALACH 1	32,159	PIPELINE		REGION 2	126,000	LOCAL DIST.	
CENT ATLAN	126,000	LOCAL DIST.					
SUBTOTAL:	158,159			SUBTOTAL:	126,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
CENT ATLAN	18,857	LOCAL DIST.		REGION 2	18,857	LOCAL DIST.	
				TRSHP 8-2	16,143	PIPELINE	
SUBTOTAL:	18,857			SUBTOTAL:	35,000		
2 OIL				2 OIL			
APPALACH 1	50,478	PIPELINE		REGION 2	126,538	LOCAL DIST.	
CENT ATLAN	126,538	LOCAL DIST.		TRSHP 8-2	153,870	PIPELINE	
SUBTOTAL:	177,016			SUBTOTAL:	280,408		
TOTAL:	1,015,837			TOTAL:	1,469,780		

VALIDATION CASE (1987)

LOWER ATLANTIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
LOW ATLAN	28,242	LOCAL DIST.		REGION 3	28,242	LOCAL DIST.	
				REGION 8	70,470	35 DWT TANKER AF	0.25
				MEDITER	7,562	35 DWT TANKER FF	0.03
				TRSHP 8-2	136,726	LOCAL DIST.	
SUBTOTAL:	28,242			SUBTOTAL:	243,000		
				UNLEADED REG.			
				REGION 8	184,140	35 DWT TANKER AF	0.66
				TRSHP 8-2	373,860	LOCAL DIST.	
				SUBTOTAL:	558,000		
				UNLEADED PREMIUM			
				REGION 8	117,780	35 DWT TANKER AF	0.42
				TRSHP 8-2	184,220	LOCAL DIST.	
				SUBTOTAL:	302,000		
KERO JET				KERO JET			
LOW ATLAN	3,995	LOCAL DIST.		REGION 3	3,995	LOCAL DIST.	
				REGION 8	60,840	35 DWT TANKER AF	0.22
				TRSHP 8-2	104,149	LOCAL DIST.	
SUBTOTAL:	3,995			SUBTOTAL:	168,984		
DIESEL- ON HWY				DIESEL- ON HWY			
LOW ATLAN	8,848	LOCAL DIST.		REGION 3	8,848	LOCAL DIST.	
				REGION 8	44,640	35 DWT TANKER AF	0.16
				TRSHP 8-2	132,512	LOCAL DIST.	
SUBTOTAL:	8,848			SUBTOTAL:	186,000		
				DIESEL- OFF HWY			
				REGION 8	19,760	35 DWT TANKER AF	0.07
				TRSHP 8-2	32,240	LOCAL DIST.	
				SUBTOTAL:	52,000		
2 OIL				2 OIL			
LOW ATLAN	7,709	LOCAL DIST.		REGION 3	7,709	LOCAL DIST.	
				REGION 8	26,670	35 DWT TANKER AF	0.10
				CARIB/S.A.	92,621	35 DWT TANKER FF	0.33
SUBTOTAL:	7,709			SUBTOTAL:	127,000		
TOTAL:	48,795			TOTAL:	1,636,984		

VALIDATION CASE (1987)

REF DIST APPALACHIAN 1

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
APPALACH 1	27,030	LOCAL DIST.		REGION 2	17,970	PIPELINE	
				REGION 4	27,030	LOCAL DIST.	
SUBTOTAL:	27,030			SUBTOTAL:	45,000		
UNLEADED REG.				UNLEADED REG.			
APPALACH 1	17,764	LOCAL DIST.		REGION 2	97,236	PIPELINE	
				REGION 4	17,764	LOCAL DIST.	
				CANADA REF	5,000	5000 BBL BARGE	1.00
SUBTOTAL:	17,764			SUBTOTAL:	120,000		
				UNLEADED PREMIUM			
				REGION 2	64,000	PIPELINE	
KERO JET				KERO JET			
APPALACH 1	6,321	LOCAL DIST.		REGION 2	7,679	PIPELINE	
				REGION 4	6,321	LOCAL DIST.	
SUBTOTAL:	6,321			SUBTOTAL:	14,000		
DIESEL- ON HWY				DIESEL- ON HWY			
APPALACH 1	4,841	LOCAL DIST.		REGION 2	32,159	PIPELINE	
				REGION 4	4,841	LOCAL DIST.	
SUBTOTAL:	4,841			SUBTOTAL:	37,000		
				DIESEL- OFF HWY			
				REGION 5	13,000	5000 BBL BARGE	2.60
2 OIL				2 OIL			
APPALACH 1	14,522	LOCAL DIST.		REGION 2	50,478	PIPELINE	
				REGION 4	14,522	LOCAL DIST.	
				REGION 5	2,000	5000 BBL BARGE	0.40
SUBTOTAL:	14,522			SUBTOTAL:	67,000		
TOTAL:	70,478			TOTAL:	360,000		

VALIDATION CASE (1987)

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
ILL,IND,KY	259,790	LOCAL DIST.		REGION 5	259,790	LOCAL DIST.	
				REGION 8	18,300	5000 BBL BARGE	3.66
				TRSHP 8-2	26,910	PIPELINE	
SUBTOTAL:	259,790			SUBTOTAL:	305,000		
UNLEADED REG.				UNLEADED REG.			
ILL,IND,KY	579,749	LOCAL DIST.		REGION 5	579,749	LOCAL DIST.	
				REGION 8	33,160	5000 BBL BARGE	6.63
				REGION 8	117,600	PIPELINE	
				TRSHP 8-2	98,491	PIPELINE	
SUBTOTAL:	579,749			SUBTOTAL:	829,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
ILL,IND,KY	181,512	LOCAL DIST.		REGION 5	181,512	LOCAL DIST.	
				REGION 8	8,800	5000 BBL BARGE	1.76
				REGION 8	8,758	PIPELINE	
				TRSHP 8-2	20,930	PIPELINE	
SUBTOTAL:	181,512			SUBTOTAL:	220,000		
KERO JET				KERO JET			
ILL,IND,KY	95,001	LOCAL DIST.		REGION 5	95,001	LOCAL DIST.	
				REGION 8	11,280	5000 BBL BARGE	2.26
				REGION 8	19,600	PIPELINE	
				TRSHP 8-2	15,119	PIPELINE	
SUBTOTAL:	95,001			SUBTOTAL:	141,000		
DIESEL- ON HWY				DIESEL- ON HWY			
ILL,IND,KY	197,985	LOCAL DIST.		REGION 5	197,985	LOCAL DIST.	
				REGION 8	16,590	5000 BBL BARGE	3.32
				TRSHP 8-2	22,425	PIPELINE	
SUBTOTAL:	197,985			SUBTOTAL:	237,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
APPALACH 1	13,000	5000 BBL BARGE	2.60	REGION 5	74,930	LOCAL DIST.	
ILL,IND,KY	74,930	LOCAL DIST.		REGION 8	6,090	5000 BBL BARGE	1.22
				TRSHP 8-2	5,980	PIPELINE	
SUBTOTAL:	87,930			SUBTOTAL:	87,000		
2 OIL				2 OIL			
APPALACH 1	2,000	5000 BBL BARGE	0.40	REGION 5	127,740	LOCAL DIST.	
ILL,IND,KY	127,740	LOCAL DIST.		REGION 8	10,290	5000 BBL BARGE	2.06
				TRSHP 8-2	8,970	PIPELINE	
SUBTOTAL:	129,740			SUBTOTAL:	147,000		
TOTAL:	1,531,707			TOTAL:	1,966,000		

VALIDATION CASE (1987)

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
MIN,WIS,DK	41,970	LOCAL DIST.		REGION 6	41,970	LOCAL DIST.	
				REGION 7	45,030	PIPELINE	
SUBTOTAL:	41,970			SUBTOTAL:	87,000		
UNLEADED REG.				UNLEADED REG.			
MIN,WIS,DK	115,118	LOCAL DIST.		REGION 6	115,118	LOCAL DIST.	
				REGION 7	69,882	PIPELINE	
				CANADA REF	5,000	5000 BBL BARGE	1.00
SUBTOTAL:	115,118			SUBTOTAL:	190,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
MIN,WIS,DK	24,005	LOCAL DIST.		REGION 6	24,005	LOCAL DIST.	
				REGION 7	5,995	PIPELINE	
SUBTOTAL:	24,005			SUBTOTAL:	30,000		
KERO JET				KERO JET			
MIN,WIS,DK	22,000	LOCAL DIST.		REGION 6	22,000	LOCAL DIST.	
DIESEL- ON HWY				DIESEL- ON HWY			
MIN,WIS,DK	54,661	LOCAL DIST.		REGION 6	54,661	LOCAL DIST.	
				REGION 7	2,339	PIPELINE	
SUBTOTAL:	54,661			SUBTOTAL:	57,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
MIN,WIS,DK	8,123	LOCAL DIST.		REGION 6	8,123	LOCAL DIST.	
				REGION 7	16,590	PIPELINE	
				REGION 9	8,287	PIPELINE	
SUBTOTAL:	8,123			SUBTOTAL:	33,000		
2 OIL				2 OIL			
MIN,WIS,DK	26,897	LOCAL DIST.		REGION 6	26,897	LOCAL DIST.	
				REGION 7	24,813	PIPELINE	
				REGION 9	1,290	PIPELINE	
SUBTOTAL:	26,897			SUBTOTAL:	53,000		
TOTAL:	292,774			TOTAL:	472,000		

VALIDATION CASE (1987)

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
MIN,WIS,DK	45,030	PIPELINE		REGION 7	164,000	LOCAL DIST.	
OK,KAN,MO	164,000	LOCAL DIST.					
ROCKY MT	17,362	PIPELINE					
SUBTOTAL:	226,392			SUBTOTAL:	164,000		
UNLEADED REG.				UNLEADED REG.			
MIN,WIS,DK	69,882	PIPELINE		REGION 7	50,160	LOCAL DIST.	
OK,KAN,MO	50,160	LOCAL DIST.		REGION 8	240,840	PIPELINE	
SUBTOTAL:	120,042			SUBTOTAL:	291,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
MIN,WIS,DK	5,995	PIPELINE		REGION 7	40,000	LOCAL DIST.	
OK,KAN,MO	40,000	LOCAL DIST.					
ROCKY MT	6,000	PIPELINE					
SUBTOTAL:	51,995			SUBTOTAL:	40,000		
KERO JET				KERO JET			
OK,KAN,MO	45,994	LOCAL DIST.		REGION 7	45,994	LOCAL DIST.	
ROCKY MT	3,639	PIPELINE		REGION 8	6,006	PIPELINE	
SUBTOTAL:	49,634			SUBTOTAL:	52,000		
DIESEL- ON HWY				DIESEL- ON HWY			
MIN,WIS,DK	2,339	PIPELINE		REGION 7	115,000	LOCAL DIST.	
OK,KAN,MO	115,000	LOCAL DIST.					
SUBTOTAL:	117,339			SUBTOTAL:	115,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
MIN,WIS,DK	16,590	PIPELINE		REGION 7	16,363	LOCAL DIST.	
OK,KAN,MO	16,363	LOCAL DIST.		REGION 8	37,637	PIPELINE	
SUBTOTAL:	32,953			SUBTOTAL:	54,000		
2 OIL				2 OIL			
MIN,WIS,DK	24,813	PIPELINE		REGION 7	46,000	LOCAL DIST.	
OK,KAN,MO	46,000	LOCAL DIST.					
SUBTOTAL:	70,813			SUBTOTAL:	46,000		
TOTAL:	669,168			TOTAL:	762,000		

VALIDATION CASE (1987)

PAD DISTRICT III

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
ILL,IND,KY	18,300	5000 BBL BARGE	3.66	REGION 8	266,000	LOCAL DIST.	
LOW ATLAN	70,470	35 DWT TANKER AF	0.25				
PAD III	266,000	LOCAL DIST.					
ROCKY MT	9,890	PIPELINE					
SOUTH PAD5	6,670	PIPELINE					
TRSHP 8-2	163,636	PIPELINE					
SUBTOTAL:	534,966			SUBTOTAL:	266,000		
UNLEADED REG.				UNLEADED REG.			
ILL,IND,KY	33,160	5000 BBL BARGE	6.63	REGION 8	592,000	LOCAL DIST.	
ILL,IND,KY	117,600	PIPELINE					
LOW ATLAN	184,140	35 DWT TANKER AF	0.66				
NEW ENGLND	50,047	35 DWT TANKER AF	0.18				
OK,KAN,MO	240,840	PIPELINE					
PAD III	592,000	LOCAL DIST.					
ROCKY MT	15,910	PIPELINE					
SOUTH PAD5	22,040	PIPELINE					
TRSHP 8-2	616,729	PIPELINE					
SUBTOTAL:	1,872,466			SUBTOTAL:	592,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
ILL,IND,KY	8,800	5000 BBL BARGE	1.76	REGION 8	178,000	LOCAL DIST.	
ILL,IND,KY	8,758	PIPELINE					
LOW ATLAN	117,780	35 DWT TANKER AF	0.42				
NEW ENGLND	116,000	35 DWT TANKER AF	0.41				
PAD III	178,000	LOCAL DIST.					
ROCKY MT	2,580	PIPELINE					
SOUTH PAD5	5,220	PIPELINE					
TRSHP 8-2	408,154	PIPELINE					
SUBTOTAL:	845,292			SUBTOTAL:	178,000		
KERO JET				KERO JET			
ILL,IND,KY	11,280	5000 BBL BARGE	2.26	REGION 8	370,000	LOCAL DIST.	
ILL,IND,KY	19,600	PIPELINE					
LOW ATLAN	60,840	35 DWT TANKER AF	0.22				
OK,KAN,MO	6,006	PIPELINE					
PAD III	370,000	LOCAL DIST.					
ROCKY MT	7,310	PIPELINE					
SOUTH PAD5	6,960	PIPELINE					
TRSHP 8-2	201,899	PIPELINE					
SUBTOTAL:	683,895			SUBTOTAL:	370,000		
DIESEL- ON HWY				DIESEL- ON HWY			
ILL,IND,KY	16,590	5000 BBL BARGE	3.32	REGION 8	211,000	LOCAL DIST.	
LOW ATLAN	44,640	35 DWT TANKER AF	0.16				
NEW ENGLND	52,000	35 DWT TANKER AF	0.19				
PAD III	211,000	LOCAL DIST.					
ROCKY MT	3,870	PIPELINE					
SOUTH PAD5	6,960	PIPELINE					
TRSHP 8-2	154,937	PIPELINE					
SUBTOTAL:	489,997			SUBTOTAL:	211,000		

VALIDATION CASE (1987)

PAD DISTRICT III

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
DIESEL- OFF HWY				DIESEL- OFF HWY			
ILL,IND,KY	6,090	5000 BBL BARGE	1.22	REGION 8	144,000	LOCAL DIST.	
LOW ATLAN	19,760	35 DWT TANKER AF	0.07				
NEW ENGLND	12,000	35 DWT TANKER AF	0.04				
OK,KAN,MO	37,637	PIPELINE					
PAD III	144,000	LOCAL DIST.					
ROCKY MT	2,580	PIPELINE					
SOUTH PAD5	2,900	PIPELINE					
TRSHP 8-2	54,363	PIPELINE					
SUBTOTAL:	279,330			SUBTOTAL:	144,000		
2 OIL				2 OIL			
ILL,IND,KY	10,290	5000 BBL BARGE	2.06	REGION 8	195,000	LOCAL DIST.	
LOW ATLAN	26,670	35 DWT TANKER AF	0.10				
PAD III	195,000	LOCAL DIST.					
ROCKY MT	860	PIPELINE					
SOUTH PAD5	1,160	PIPELINE					
TRSHP 8-2	162,840	PIPELINE					
SUBTOTAL:	396,820			SUBTOTAL:	195,000		
TOTAL:	5,102,767			TOTAL:	1,956,000		

VALIDATION CASE (1987)

ROCKY MOUNTAIN

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
PACIFIC NW	7,035	PIPELINE		REGION 7	17,362	PIPELINE	
ROCKY MT	62,748	LOCAL DIST.		REGION 8	9,890	PIPELINE	
				REGION 9	62,748	LOCAL DIST.	
SUBTOTAL:	69,783			SUBTOTAL:	90,000		
UNLEADED REG.				UNLEADED REG.			
PACIFIC NW	9,045	PIPELINE		REGION 8	15,910	PIPELINE	
ROCKY MT	102,090	LOCAL DIST.		REGION 9	102,090	LOCAL DIST.	
SUBTOTAL:	111,135			SUBTOTAL:	118,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC NW	2,680	PIPELINE		REGION 7	6,000	PIPELINE	
ROCKY MT	7,420	LOCAL DIST.		REGION 8	2,580	PIPELINE	
				REGION 9	7,420	LOCAL DIST.	
SUBTOTAL:	10,100			SUBTOTAL:	16,000		
KERO JET				KERO JET			
PACIFIC NW	7,035	PIPELINE		REGION 7	3,639	PIPELINE	
ROCKY MT	33,051	LOCAL DIST.		REGION 8	7,310	PIPELINE	
				REGION 9	33,051	LOCAL DIST.	
SUBTOTAL:	40,086			SUBTOTAL:	44,000		
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC NW	2,680	PIPELINE		REGION 8	3,870	PIPELINE	
ROCKY MT	44,130	LOCAL DIST.		REGION 9	44,130	LOCAL DIST.	
SUBTOTAL:	46,810			SUBTOTAL:	48,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
MIN,WIS,DK	8,287	PIPELINE		REGION 8	2,580	PIPELINE	
PACIFIC NW	2,010	PIPELINE		REGION 9	29,420	LOCAL DIST.	
ROCKY MT	29,420	LOCAL DIST.					
SUBTOTAL:	39,717			SUBTOTAL:	32,000		
2 OIL				2 OIL			
MIN,WIS,DK	1,290	PIPELINE		REGION 8	860	PIPELINE	
PACIFIC NW	3,350	PIPELINE		REGION 9	24,140	LOCAL DIST.	
ROCKY MT	24,140	LOCAL DIST.					
SUBTOTAL:	28,780			SUBTOTAL:	25,000		
TOTAL:	346,411			TOTAL:	373,000		

VALIDATION CASE (1987)

PACIFIC NORTHWEST

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
PACIFIC NW	80,965	LOCAL DIST.		REGION 9	7,035	PIPELINE	
				REGION 10	80,965	LOCAL DIST.	
SUBTOTAL:	80,965			SUBTOTAL:	88,000		
UNLEADED REG.				UNLEADED REG.			
PACIFIC NW	95,536	LOCAL DIST.		REGION 9	9,045	PIPELINE	
				REGION 10	95,536	LOCAL DIST.	
SUBTOTAL:	95,536			SUBTOTAL:	104,581		
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC NW	21,823	LOCAL DIST.		REGION 9	2,680	PIPELINE	
				REGION 11	5,497	35 DWT TANKER AF	0.02
				FAR EAST	1,000	35 DWT TANKER FF	0.00
				REGION 10	21,823	LOCAL DIST.	
SUBTOTAL:	21,823			SUBTOTAL:	31,000		
KERO JET				KERO JET			
PACIFIC NW	55,965	LOCAL DIST.		REGION 9	7,035	PIPELINE	
SOUTH PAD5	1,928	35 DWT TANKER AF	0.01	REGION 10	55,965	LOCAL DIST.	
SUBTOTAL:	57,893			SUBTOTAL:	63,000		
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC NW	36,320	LOCAL DIST.		REGION 9	2,680	PIPELINE	
				REGION 10	36,320	LOCAL DIST.	
SUBTOTAL:	36,320			SUBTOTAL:	39,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
PACIFIC NW	12,433	LOCAL DIST.		REGION 9	2,010	PIPELINE	
				REGION 11	8,557	35 DWT TANKER AF	0.03
				REGION 10	12,433	LOCAL DIST.	
SUBTOTAL:	12,433			SUBTOTAL:	23,000		
2 OIL				2 OIL			
PACIFIC NW	35,195	LOCAL DIST.		REGION 9	3,350	PIPELINE	
				REGION 11	1,455	35 DWT TANKER AF	0.01
				REGION 10	35,195	LOCAL DIST.	
SUBTOTAL:	35,195			SUBTOTAL:	40,000		
TOTAL:	340,165			TOTAL:	388,581		

VALIDATION CASE (1987)

CENTRAL PAD V

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
CNTRL PAD5	72,803	LOCAL DIST.		REGION 11	72,803	LOCAL DIST.	
SOUTH PAD5	36,046	35 DWT TANKER AF	0.13				
SUBTOTAL:	108,849			SUBTOTAL:	72,803		
UNLEADED REG.				UNLEADED REG.			
CNTRL PAD5	176,068	LOCAL DIST.		REGION 11	176,068	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
CNTRL PAD5	70,000	LOCAL DIST.		REGION 11	70,000	LOCAL DIST.	
PACIFIC NW	5,497	35 DWT TANKER AF	0.02				
SUBTOTAL:	75,497			SUBTOTAL:	70,000		
KERO JET				KERO JET			
CNTRL PAD5	92,000	LOCAL DIST.		REGION 11	92,000	LOCAL DIST.	
SOUTH PAD5	7,466	35 DWT TANKER AF	0.03				
SUBTOTAL:	99,466			SUBTOTAL:	92,000		
DIESEL- ON HWY				DIESEL- ON HWY			
CNTRL PAD5	40,000	LOCAL DIST.		REGION 11	40,000	LOCAL DIST.	
DIESEL- OFF HWY				DIESEL- OFF HWY			
CNTRL PAD5	25,000	LOCAL DIST.		REGION 11	25,000	LOCAL DIST.	
PACIFIC NW	8,557	35 DWT TANKER AF	0.03				
SUBTOTAL:	33,557			SUBTOTAL:	25,000		
2 OIL				2 OIL			
CNTRL PAD5	19,000	LOCAL DIST.		REGION 11	19,000	LOCAL DIST.	
PACIFIC	1,036	35 DWT TANKER AF	0.00				
PACIFIC NW	1,455	35 DWT TANKER AF	0.01				
SUBTOTAL:	21,491			SUBTOTAL:	19,000		
TOTAL:	554,928			TOTAL:	494,871		

VALIDATION CASE (1987)

SOUTHERN PAD V

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
SOUTH PAD5	111,377	LOCAL DIST.		REGION 8	6,670	PIPELINE	
				REGION 11	36,046	35 DWT TANKER AF	0.13
				REGION 12	111,377	LOCAL DIST.	
SUBTOTAL:	111,377			SUBTOTAL:	154,093		
UNLEADED REG.				UNLEADED REG.			
SOUTH PAD5	319,960	LOCAL DIST.		REGION 8	22,040	PIPELINE	
				REGION 12	319,960	LOCAL DIST.	
SUBTOTAL:	319,960			SUBTOTAL:	342,000		
UNLEADED PREMIUM				UNLEADED PREMIUM			
SOUTH PAD5	119,780	LOCAL DIST.		REGION 8	5,220	PIPELINE	
				REGION 12	119,780	LOCAL DIST.	
SUBTOTAL:	119,780			SUBTOTAL:	125,000		
KERO JET				KERO JET			
SOUTH PAD5	147,146	LOCAL DIST.		REGION 8	6,960	PIPELINE	
				REGION 11	7,466	35 DWT TANKER AF	0.03
				FAR EAST	500	35 DWT TANKER FF	0.00
				REGION 10	1,928	35 DWT TANKER AF	0.01
				REGION 12	147,146	LOCAL DIST.	
SUBTOTAL:	147,146			SUBTOTAL:	164,000		
DIESEL- ON HWY				DIESEL- ON HWY			
SOUTH PAD5	75,040	LOCAL DIST.		REGION 8	6,960	PIPELINE	
				REGION 12	75,040	LOCAL DIST.	
SUBTOTAL:	75,040			SUBTOTAL:	82,000		
DIESEL- OFF HWY				DIESEL- OFF HWY			
SOUTH PAD5	43,508	LOCAL DIST.		REGION 8	2,900	PIPELINE	
				REGION 13	592	35 DWT TANKER AF	0.00
				REGION 12	43,508	LOCAL DIST.	
SUBTOTAL:	43,508			SUBTOTAL:	47,000		
2 OIL				2 OIL			
SOUTH PAD5	32,761	LOCAL DIST.		REGION 8	1,160	PIPELINE	
				REGION 12	32,761	LOCAL DIST.	
SUBTOTAL:	32,761			SUBTOTAL:	33,921		
TOTAL:	849,571			TOTAL:	948,014		

VALIDATION CASE (1987)

PACIFIC

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
PACIFIC	7,000	LOCAL DIST.		REGION 13	7,000	LOCAL DIST.	
UNLEADED REG.				UNLEADED REG.			
PACIFIC	22,000	LOCAL DIST.		REGION 13	22,000	LOCAL DIST.	
UNLEADED PREMIUM				UNLEADED PREMIUM			
PACIFIC	8,000	LOCAL DIST.		REGION 13	8,000	LOCAL DIST.	
KERO JET				KERO JET			
PACIFIC	63,000	LOCAL DIST.		REGION 13	63,000	LOCAL DIST.	
DIESEL- ON HWY				DIESEL- ON HWY			
PACIFIC	8,000	LOCAL DIST.		REGION 13	8,000	LOCAL DIST.	
DIESEL- OFF HWY				DIESEL- OFF HWY			
PACIFIC	6,000	LOCAL DIST.		REGION 13	6,000	LOCAL DIST.	
SOUTH PAD5	592	35 DWT TANKER AF	0.00				
SUBTOTAL:	6,592			SUBTOTAL:	6,000		
2 OIL				2 OIL			
PACIFIC	22,464	LOCAL DIST.		REGION 11	1,036	35 DWT TANKER AF	0.00
				FAR EAST	500	35 DWT TANKER FF	0.00
				MIDDLE EST	1,000	35 DWT TANKER FF	0.00
				REGION 13	22,464	LOCAL DIST.	
SUBTOTAL:	22,464			SUBTOTAL:	25,000		
TOTAL:	137,056			TOTAL:	139,000		

VALIDATION CASE (1987)

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
LEADED REG				LEADED REG			
ILL,IND,KY	26,910	PIPELINE		REGION 8	163,636	PIPELINE	
LOW ATLAN	136,726	LOCAL DIST.					
SUBTOTAL:	163,636			SUBTOTAL:	163,636		
UNLEADED REG.				UNLEADED REG.			
CENT ATLAN	144,378	PIPELINE		REGION 8	616,729	PIPELINE	
ILL,IND,KY	98,491	PIPELINE					
LOW ATLAN	373,860	LOCAL DIST.					
SUBTOTAL:	616,729			SUBTOTAL:	616,729		
UNLEADED PREMIUM				UNLEADED PREMIUM			
CENT ATLAN	203,004	PIPELINE		REGION 8	408,154	PIPELINE	
ILL,IND,KY	20,930	PIPELINE					
LOW ATLAN	184,220	LOCAL DIST.					
SUBTOTAL:	408,154			SUBTOTAL:	408,154		
KERO JET				KERO JET			
CENT ATLAN	82,632	PIPELINE		REGION 8	201,899	PIPELINE	
ILL,IND,KY	15,119	PIPELINE					
LOW ATLAN	104,149	LOCAL DIST.					
SUBTOTAL:	201,899			SUBTOTAL:	201,899		
DIESEL- ON HWY				DIESEL- ON HWY			
ILL,IND,KY	22,425	PIPELINE		REGION 8	154,937	PIPELINE	
LOW ATLAN	132,512	LOCAL DIST.					
SUBTOTAL:	154,937			SUBTOTAL:	154,937		
DIESEL- OFF HWY				DIESEL- OFF HWY			
CENT ATLAN	16,143	PIPELINE		REGION 8	54,363	PIPELINE	
ILL,IND,KY	5,980	PIPELINE					
LOW ATLAN	32,240	LOCAL DIST.					
SUBTOTAL:	54,363			SUBTOTAL:	54,363		
2 OIL				2 OIL			
CENT ATLAN	153,870	PIPELINE		REGION 8	162,840	PIPELINE	
ILL,IND,KY	8,970	PIPELINE					
SUBTOTAL:	162,840			SUBTOTAL:	162,840		
TOTAL:	1,762,558			TOTAL:	1,762,558		

VALIDATION CASE (1987)

CANADA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLEADED REG.							
APPALACH 1	5,000	5000 BBL BARGE	1.00				
MIN,WIS,DK	5,000	5000 BBL BARGE	1.00				
SUBTOTAL:	10,000						
2 OIL							
NEW ENGLND	63,100	35 DWT TANKER FF	0.23				
TOTAL:	73,100						

VALIDATION CASE (1987)

CARIBBEAN/VENEZUELA

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLEADED REG.							
NEW ENGLND	51,953	35 DWT TANKER FF	0.19				
KERO JET							
NEW ENGLND	33,000	35 DWT TANKER FF	0.12				
2 OIL							
LOW ATLAN	92,621	35 DWT TANKER FF	0.33				
NEW ENGLND	101,379	35 DWT TANKER FF	0.36				
SUBTOTAL:	194,000						
TOTAL:	278,953						

VALIDATION CASE (1987)

NORTHWEST EUROPE

SUPPLY				DEMAND			
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLEADED REG.							
NEW ENGLND	90,000	35 DWT TANKER FF	0.32				
TOTAL:	90,000						

VALIDATION CASE (1987)

MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
LEADED REG							
CENT ATLAN	122,438	35 DWT TANKER FF	0.44				
LOW ATLAN	7,562	35 DWT TANKER FF	0.03				
SUBTOTAL:	130,000						
TOTAL:	130,000						

VALIDATION CASE (1987)

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
LEADED REG							
CENT ATLAN	1,000	35 DWT TANKER FF	0.00				
NEW ENGLND	52,000	35 DWT TANKER FF	0.19				
SUBTOTAL:	53,000						
KERO JET							
NEW ENGLND	1,000	35 DWT TANKER FF	0.00				
2 OIL							
PACIFIC	1,000	35 DWT TANKER FF	0.00				
TOTAL:	55,000						

VALIDATION CASE (1987)

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER
UNLEADED PREMIUM							
PACIFIC NW	1,000	35 DWT TANKER FF	0.00				
KERO JET							
SOUTH PAD5	500	35 DWT TANKER FF	0.00				
2 OIL							
PACIFIC	500	35 DWT TANKER FF	0.00				
TOTAL:	2,000						

FOUNDATION CASE I — 1995

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -STANDARD UNLD				
				CANADA REF	28,744	35 DWT TANKER FF	0.10	
				FAR EAST	14,643	35 DWT TANKER FF	0.05	
				MEDITER	58,004	35 DWT TANKER FF	0.21	
				MIDDLE EST	17,218	35 DWT TANKER FF	0.06	
				CARIB/S.A.	8,391	35 DWT TANKER FF	0.03	
				SUBTOTAL:	127,000			-127,000
				REG -H/C CO NONATT				
				NW EUROPE	15,548	35 DWT TANKER FF	0.06	
				MIDDLE EST	21,492	35 DWT TANKER FF	0.08	
				SUBTOTAL:	37,040			-37,040
				REG -REFORMULATED				
				REGION 8	23,000	35 DWT TANKER AF	0.08	
				REG -H/C REFORMUL				
				REGION 8	22,224	35 DWT TANKER AF	0.08	
				MID -STANDARD UNLD				
				NW EUROPE	26,000	35 DWT TANKER FF	0.09	
				MID -CO NON ATTAIN				
				NW EUROPE	8,000	35 DWT TANKER FF	0.03	
				MID -CO-REFORMUL				
				NW EUROPE	7,000	35 DWT TANKER FF	0.03	
				MID -REFORMULATED				
				NW EUROPE	7,000	35 DWT TANKER FF	0.03	
				PRM -STANDARD UNLD				
				REGION 8	45,354	35 DWT TANKER AF	0.16	
				FAR EAST	1,772	35 DWT TANKER FF	0.01	
				CARIB/S.A.	3,873	35 DWT TANKER FF	0.01	
				SUBTOTAL:	51,000			-51,000
				PRM -CO NON ATTAIN				
				REGION 8	10,961	35 DWT TANKER AF	0.04	
				PRM -H/C CO NONATT				
				REGION 8	3,369	35 DWT TANKER AF	0.01	
				MEDITER	2,611	35 DWT TANKER FF	0.01	
				SUBTOTAL:	5,980			-5,980

NEW ENGLAND

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -H/C REFORMUL				
				NW EUROPE	1,786	35 DWT TANKER FF	0.01	
				MEDITER	20,737	35 DWT TANKER FF	0.07	
				SUBTOTAL:	22,523			-22,523
				MTBE				
				MERCH MTBE	4,536	35 DWT TANKER AF	0.02	
				ETHANOL				
				REGION 5	4,736	RAIL 10M gal/500		
				KERO/JET				
				CANADA REF	13,535	35 DWT TANKER FF	0.05	
				NW EUROPE	2,308	35 DWT TANKER FF	0.01	
				MEDITER	934	35 DWT TANKER FF	0.00	
				CARIB/S.A.	35,223	35 DWT TANKER FF	0.13	
				SUBTOTAL:	52,000			-52,000
				DIESEL- ON HWY				
				CANADA REF	38,673	35 DWT TANKER FF	0.14	
				NW EUROPE	6,946	35 DWT TANKER FF	0.02	
				MEDITER	4,023	35 DWT TANKER FF	0.01	
				CARIB/S.A.	10,357	35 DWT TANKER FF	0.04	
				SUBTOTAL:	60,000			-60,000
				DIESEL- OFF HWY				
				CANADA REF	12,000	35 DWT TANKER FF	0.04	
				OTH DIESEL/NO2 OIL				
				NW EUROPE	1,061	35 DWT TANKER FF	0.00	
				MEDITER	373	35 DWT TANKER FF	0.00	
				CARIB/S.A.	166,567	35 DWT TANKER FF	0.59	
				SUBTOTAL:	168,000			-168,000
				TOTAL:	649,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	115,261	PIPELINE		REGION 2	124,000	LOCAL DIST.		
CENT ATLAN	124,000	LOCAL DIST.						
SUBTOTAL:	239,261			SUBTOTAL:	124,000			115,261
REG -H/C CO NONATT				REG -H/C CO NONATT				
CENT ATLAN	12,038	LOCAL DIST.		REGION 2	12,038	LOCAL DIST.		
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	56,529	LOCAL DIST.		REGION 2	56,529	LOCAL DIST.		
				TRSHP 8-2	87,471	PIPELINE		
SUBTOTAL:	56,529			SUBTOTAL:	144,000			-87,471
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	17,147	LOCAL DIST.		REGION 2	17,147	LOCAL DIST.		
				TRSHP 8-2	171,757	PIPELINE		
SUBTOTAL:	17,147			SUBTOTAL:	188,904			-171,757
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	89	PIPELINE		REGION 2	33,000	LOCAL DIST.		
CENT ATLAN	33,000	LOCAL DIST.						
SUBTOTAL:	33,089			SUBTOTAL:	33,000			89
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
APPALACH 1	1,000	PIPELINE		REGION 2	6,000	LOCAL DIST.		
CENT ATLAN	6,000	LOCAL DIST.						
SUBTOTAL:	7,000			SUBTOTAL:	6,000			1,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	43,000	LOCAL DIST.		REGION 2	43,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
CENT ATLAN	35,000	LOCAL DIST.		REGION 2	35,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	56,000	PIPELINE		REGION 2	62,000	LOCAL DIST.		
CENT ATLAN	62,000	LOCAL DIST.						
SUBTOTAL:	118,000			SUBTOTAL:	62,000			56,000
				PRM -CO NON ATTAIN				
				TRSHP 8-2	9,000	PIPELINE		
				PRM -CO-REFORMUL				
				TRSHP 8-2	116,000	PIPELINE		

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -REFORMULATED				
				TRSHP 8-2	79,000	PIPELINE		
				ETHANOL				
				REGION 5	16,058	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	11,658	PIPELINE		REGION 2	88,865	LOCAL DIST.		
CENT ATLAN	88,865	LOCAL DIST.		TRSHP 8-2	151,135	PIPELINE		
SUBTOTAL:	100,523			SUBTOTAL:	240,000			-139,477
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	3,087	PIPELINE		REGION 2	152,000	LOCAL DIST.		
CENT ATLAN	152,000	LOCAL DIST.						
SUBTOTAL:	155,087			SUBTOTAL:	152,000			3,087
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	5,004	PIPELINE		TRSHP 8-2	38,000	PIPELINE		-32,996
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	65,000	PIPELINE		REGION 2	136,792	LOCAL DIST.		
CENT ATLAN	136,792	LOCAL DIST.		TRSHP 8-2	125,208	PIPELINE		
SUBTOTAL:	201,792			SUBTOTAL:	262,000			-60,208
TOTAL:	1,023,469			TOTAL:	1,560,000			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	199,360	35 DWT TANKER AF	0.71	
				TRSHP 8-2	440,351	LOCAL DIST.		
				SUBTOTAL:	639,711			-639,711
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
LOW ATLAN	14,223	LOCAL DIST.		REGION 3	14,223	LOCAL DIST.		
REG -H/C CO NONATT				REG -H/C CO NONATT				
LOW ATLAN	9,689	LOCAL DIST.		REGION 3	9,689	LOCAL DIST.		
				CARIB/S.A.	1,216	35 DWT TANKER FF	0.00	
SUBTOTAL:	9,689			SUBTOTAL:	10,905			-1,216
				MID -STANDARD UNLD				
				REGION 8	62,280	35 DWT TANKER AF	0.22	
				TRSHP 8-2	110,720	LOCAL DIST.		
				SUBTOTAL:	173,000			-173,000
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
LOW ATLAN	7,000	LOCAL DIST.		REGION 3	7,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
LOW ATLAN	5,495	LOCAL DIST.		REGION 3	5,495	LOCAL DIST.		
				REGION 8	106,600	35 DWT TANKER AF	0.38	
				TRSHP 8-2	154,594	LOCAL DIST.		
SUBTOTAL:	5,495			SUBTOTAL:	266,689			-261,194
				PRM -H/C CO NONATT				
				TRSHP 8-2	8,496	LOCAL DIST.		
				MTBE				
				MERCH MTBE	1,504	35 DWT TANKER AF	0.01	
				ETHANOL				
				REGION 5	3,471	RAIL 10M gal/500		
KERO/JET				KERO/JET				
LOW ATLAN	3,675	LOCAL DIST.		REGION 3	3,675	LOCAL DIST.		
				REGION 8	100,760	35 DWT TANKER AF	0.36	
				TRSHP 8-2	124,565	LOCAL DIST.		
SUBTOTAL:	3,675			SUBTOTAL:	229,000			-225,325
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	8,548	LOCAL DIST.		REGION 3	8,548	LOCAL DIST.		
				REGION 8	31,920	35 DWT TANKER AF	0.11	
				TRSHP 8-2	187,532	LOCAL DIST.		
SUBTOTAL:	8,548			SUBTOTAL:	228,000			-219,452

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
LOW ATLAN	5,388	LOCAL DIST.		REGION 3	5,388	LOCAL DIST.		
				REGION 8	7,950	35 DWT TANKER AF	0.03	
				TRSHP 8-2	39,662	LOCAL DIST.		
SUBTOTAL:	5,388			SUBTOTAL:	53,000			-47,612
				OTH DIESEL/NO2 OIL				
				REGION 8	10,500	35 DWT TANKER AF	0.04	
				CARIB/S.A.	89,899	35 DWT TANKER FF	0.32	
				TRSHP 8-2	4,601	LOCAL DIST.		
				SUBTOTAL:	105,000			-105,000
TOTAL:	54,018			TOTAL:	1,740,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	16,739	LOCAL DIST.		REGION 2	115,261	PIPELINE		
				REGION 4	16,739	LOCAL DIST.		
SUBTOTAL:	16,739			SUBTOTAL:	132,000			-115,261
				REG -H/C CO NONATT				
				REGION 5	1,852	5000 BBL BARGE	0.37	
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	29,911	LOCAL DIST.		REGION 2	89	PIPELINE		
				REGION 4	29,911	LOCAL DIST.		
SUBTOTAL:	29,911			SUBTOTAL:	30,000			-89
				MID -CO NON ATTAIN				
				REGION 2	1,000	PIPELINE		
				PRM -STANDARD UNLD				
				REGION 2	56,000	PIPELINE		
				PRM -H/C CO NONATT				
				CANADA REF	1,852	5000 BBL BARGE	0.37	
				ETHANOL				
				REGION 5	296	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	7,342	LOCAL DIST.		REGION 2	11,658	PIPELINE		
				REGION 4	7,342	LOCAL DIST.		
SUBTOTAL:	7,342			SUBTOTAL:	19,000			-11,658
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	11,923	LOCAL DIST.		REGION 2	3,087	PIPELINE		
				REGION 4	11,923	LOCAL DIST.		
				REGION 5	12,504	5000 BBL BARGE	2.50	
				REGION 5	10,485	PIPELINE		
				CANADA REF	5,000	5000 BBL BARGE	1.00	
SUBTOTAL:	11,923			SUBTOTAL:	43,000			-31,077
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	7,500	LOCAL DIST.		REGION 2	5,004	PIPELINE		
				REGION 4	7,500	LOCAL DIST.		
				REGION 5	2,496	5000 BBL BARGE	0.50	
SUBTOTAL:	7,500			SUBTOTAL:	15,000			-7,500
				OTH DIESEL/NO2 OIL				
				REGION 2	65,000	PIPELINE		
TOTAL:	73,416			TOTAL:	365,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	610,953	LOCAL DIST.		REGION 5	610,953	LOCAL DIST.		
				REGION 8	25,480	5000 BBL BARGE	5.10	
				REGION 8	75,732	PIPELINE		
				TRSHP 8-2	58,305	PIPELINE		
SUBTOTAL:	610,953			SUBTOTAL:	770,470			-159,517
				REG -CO NON ATTAIN				
				TRSHP 8-2	4,485	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
APPALACH 1	1,852	5000 BBL BARGE	0.37	REGION 5	25,085	LOCAL DIST.		
ILL,IND,KY	25,085	LOCAL DIST.		REGION 8	1,320	5000 BBL BARGE	0.26	
SUBTOTAL:	26,937			SUBTOTAL:	26,405			532
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	153,600	LOCAL DIST.		REGION 5	153,600	LOCAL DIST.		
				REGION 8	6,400	5000 BBL BARGE	1.28	
SUBTOTAL:	153,600			SUBTOTAL:	160,000			-6,400
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	58,020	LOCAL DIST.		REGION 5	58,020	LOCAL DIST.		
				REGION 8	4,480	5000 BBL BARGE	0.90	
				REGION 8	19,600	PIPELINE		
				TRSHP 8-2	29,900	PIPELINE		
SUBTOTAL:	58,020			SUBTOTAL:	112,000			-53,980
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	18,320	LOCAL DIST.		REGION 5	18,320	LOCAL DIST.		
				REGION 8	880	5000 BBL BARGE	0.18	
				REGION 8	2,800	PIPELINE		
SUBTOTAL:	18,320			SUBTOTAL:	22,000			-3,680
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	88,143	LOCAL DIST.		REGION 5	88,143	LOCAL DIST.		
				REGION 7	6,697	PIPELINE		
				REGION 8	5,600	5000 BBL BARGE	1.12	
				REGION 8	22,400	PIPELINE		
				CANADA REF	20,000	PIPELINE		
				TRSHP 8-2	32,890	PIPELINE		
SUBTOTAL:	88,143			SUBTOTAL:	175,730			-87,587

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -H/C CO NONATT				
				REGION 8	280	5000 BBL BARGE	0.06	
				REGION 8	3,296	PIPELINE		
				TRSHP 8-2	2,906	PIPELINE		
				SUBTOTAL:	6,482			-6,482
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	28,299	LOCAL DIST.		REGION 5	28,299	LOCAL DIST.		
				REGION 7	2,581	PIPELINE		
				REGION 8	1,520	5000 BBL BARGE	0.30	
				REGION 8	5,600	PIPELINE		
SUBTOTAL:	28,299			SUBTOTAL:	38,000			-9,701
				MTBE				
				MERCH MTBE	3,231	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	296	RAIL 10M gal/500		REGION 5	21,428	RAIL 10M gal/500		
CNTRL PAD5	976	RAIL 10M gal/500						
CENT ATLAN	16,058	RAIL 10M gal/500						
ILL,IND,KY	21,428	RAIL 10M gal/500						
LOW ATLAN	3,471	RAIL 10M gal/500						
MIN,WIS,DK	4,042	RAIL 10M gal/500						
NEW ENGLND	4,736	RAIL 10M gal/500						
OK,KAN,MO	5,800	RAIL 10M gal/500						
PAD III	3,500	RAIL 10M gal/500						
PACIFIC NW	3,686	RAIL 10M gal/500						
ROCKY MT	2,683	RAIL 10M gal/500						
SOUTH PAD5	2,699	RAIL 10M gal/500						
SUBTOTAL:	69,375			SUBTOTAL:	21,428			47,947
KERO/JET				KERO/JET				
ILL,IND,KY	162,262	LOCAL DIST.		REGION 5	162,262	LOCAL DIST.		
				REGION 8	11,580	5000 BBL BARGE	2.32	
				REGION 8	8,693	PIPELINE		
				TRSHP 8-2	10,465	PIPELINE		
SUBTOTAL:	162,262			SUBTOTAL:	193,000			-30,738
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	12,504	5000 BBL BARGE	2.50	REGION 5	268,489	LOCAL DIST.		
APPALACH 1	10,485	PIPELINE		REGION 8	18,096	5000 BBL BARGE	3.62	
ILL,IND,KY	268,489	LOCAL DIST.		TRSHP 8-2	25,415	PIPELINE		
SUBTOTAL:	291,478			SUBTOTAL:	312,000			-20,522
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	2,496	5000 BBL BARGE	0.50	REGION 5	71,515	LOCAL DIST.		
ILL,IND,KY	71,515	LOCAL DIST.		REGION 8	4,000	5000 BBL BARGE	0.80	
				TRSHP 8-2	4,485	PIPELINE		
SUBTOTAL:	74,011			SUBTOTAL:	80,000			-5,989

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	129,590	LOCAL DIST.		REGION 5	129,590	LOCAL DIST.		
				REGION 8	7,450	5000 BBL BARGE	1.49	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	129,590			SUBTOTAL:	149,000			-19,410
TOTAL:	1,716,214			TOTAL:	2,081,231			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	111,285	LOCAL DIST.		REGION 6	111,285	LOCAL DIST.		
				REGION 7	79,866	PIPELINE		
SUBTOTAL:	111,285			SUBTOTAL:	191,151			-79,866
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	10,117	LOCAL DIST.		REGION 6	10,117	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
SUBTOTAL:	10,117			SUBTOTAL:	26,854			-16,737
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	10,415	LOCAL DIST.		REGION 6	10,415	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
				REGION 9	10,625	PIPELINE		
SUBTOTAL:	10,415			SUBTOTAL:	40,000			-29,585
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	3,890	LOCAL DIST.		REGION 6	3,890	LOCAL DIST.		
				REGION 7	7,110	PIPELINE		
SUBTOTAL:	3,890			SUBTOTAL:	11,000			-7,110
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	1,470	LOCAL DIST.		REGION 6	1,470	LOCAL DIST.		
				REGION 9	530	PIPELINE		
SUBTOTAL:	1,470			SUBTOTAL:	2,000			-530
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	16,757	LOCAL DIST.		REGION 6	16,757	LOCAL DIST.		
				REGION 7	7,492	PIPELINE		
SUBTOTAL:	16,757			SUBTOTAL:	24,249			-7,492
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
MIN,WIS,DK	929	LOCAL DIST.		REGION 6	929	LOCAL DIST.		
				REGION 7	2,775	PIPELINE		
SUBTOTAL:	929			SUBTOTAL:	3,704			-2,775
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	3,630	LOCAL DIST.		REGION 6	3,630	LOCAL DIST.		
				REGION 7	2,370	PIPELINE		
SUBTOTAL:	3,630			SUBTOTAL:	6,000			-2,370
				ETHANOL				
				REGION 5	4,042	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	21,616	LOCAL DIST.		REGION 6	21,616	LOCAL DIST.		
				REGION 9	6,384	PIPELINE		
SUBTOTAL:	21,616			SUBTOTAL:	28,000			-6,384
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	66,437	LOCAL DIST.		REGION 6	66,437	LOCAL DIST.		
				REGION 7	2,563	PIPELINE		
SUBTOTAL:	66,437			SUBTOTAL:	69,000			-2,563
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	18,947	LOCAL DIST.		REGION 6	18,947	LOCAL DIST.		
				REGION 7	13,466	PIPELINE		
				REGION 9	4,587	PIPELINE		
SUBTOTAL:	18,947			SUBTOTAL:	37,000			-18,053
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	27,930	LOCAL DIST.		REGION 6	27,930	LOCAL DIST.		
				REGION 7	26,070	PIPELINE		
SUBTOTAL:	27,930			SUBTOTAL:	54,000			-26,070
TOTAL:	295,423			TOTAL:	499,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	79,866	PIPELINE		REGION 7	166,055	LOCAL DIST.		
OK,KAN,MO	166,055	LOCAL DIST.		REGION 8	243,947	PIPELINE		
SUBTOTAL:	245,921			SUBTOTAL:	410,002			-164,081
REG -H/C CO NONATT								
MIN,WIS,DK	16,737	PIPELINE						
REG -REFORMULATED								
MIN,WIS,DK	18,960	PIPELINE						
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	7,110	PIPELINE		REGION 8	26,000	PIPELINE		-18,890
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	6,697	PIPELINE		REGION 7	54,198	LOCAL DIST.		
MIN,WIS,DK	7,492	PIPELINE						
OK,KAN,MO	54,198	LOCAL DIST.						
SUBTOTAL:	68,387			SUBTOTAL:	54,198			14,189
PRM -H/C CO NONATT								
MIN,WIS,DK	2,775	PIPELINE						
PRM -REFORMULATED								
ILL,IND,KY	2,581	PIPELINE						
MIN,WIS,DK	2,370	PIPELINE						
SUBTOTAL:	4,951							4,951
				ETHANOL				
				REGION 5	5,800	RAIL 10M gal/500		
KERO/JET				KERO/JET				
OK,KAN,MO	67,046	LOCAL DIST.		REGION 7	67,046	LOCAL DIST.		
				REGION 8	23,954	PIPELINE		
SUBTOTAL:	67,046			SUBTOTAL:	91,000			-23,954
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	2,563	PIPELINE		REGION 7	134,000	LOCAL DIST.		
OK,KAN,MO	134,000	LOCAL DIST.						
SUBTOTAL:	136,563			SUBTOTAL:	134,000			2,563
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	13,466	PIPELINE		REGION 7	53,000	LOCAL DIST.		
OK,KAN,MO	53,000	LOCAL DIST.						
SUBTOTAL:	66,466			SUBTOTAL:	53,000			13,466

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	26,070	PIPELINE		REGION 7	12,266	LOCAL DIST.		
OK,KAN,MO	12,266	LOCAL DIST.		REGION 8	37,734	PIPELINE		
SUBTOTAL:	38,336			SUBTOTAL:	50,000			-11,664
TOTAL:	673,253			TOTAL:	824,000			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	25,480	5000 BBL BARGE	5.10	REGION 8	633,703	LOCAL DIST.		
ILL,IND,KY	75,732	PIPELINE						
LOW ATLAN	199,360	35 DWT TANKER AF	0.71					
OK,KAN,MO	243,947	PIPELINE						
PAD III	633,703	LOCAL DIST.						
ROCKY MT	22,500	PIPELINE						
SOUTH PAD5	27,550	PIPELINE						
TRSHP 8-2	498,656	PIPELINE						
SUBTOTAL:	1,726,928			SUBTOTAL:	633,703			1,093,225
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
PAD III	12,000	LOCAL DIST.		REGION 8	12,000	LOCAL DIST.		
ROCKY MT	5,625	PIPELINE						
TRSHP 8-2	4,485	PIPELINE						
SUBTOTAL:	22,110			SUBTOTAL:	12,000			10,110
REG -H/C CO NONATT								
ILL,IND,KY	1,320	5000 BBL BARGE	0.26					
SOUTH PAD5	22,909	PIPELINE						
SUBTOTAL:	24,229							24,229
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	6,400	5000 BBL BARGE	1.28	REGION 8	90,000	LOCAL DIST.		
NEW ENGLND	23,000	35 DWT TANKER AF	0.08					
PAD III	90,000	LOCAL DIST.						
TRSHP 8-2	87,471	PIPELINE						
SUBTOTAL:	206,871			SUBTOTAL:	90,000			116,871
REG -H/C REFORMUL								
NEW ENGLND	22,224	35 DWT TANKER AF	0.08					
TRSHP 8-2	171,757	PIPELINE						
SUBTOTAL:	193,981							193,981
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	4,480	5000 BBL BARGE	0.90	REGION 8	95,000	LOCAL DIST.		
ILL,IND,KY	19,600	PIPELINE						
LOW ATLAN	62,280	35 DWT TANKER AF	0.22					
OK,KAN,MO	26,000	PIPELINE						
PAD III	95,000	LOCAL DIST.						
ROCKY MT	4,500	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	140,620	PIPELINE						
SUBTOTAL:	353,430			SUBTOTAL:	95,000			258,430
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
PAD III	1,000	LOCAL DIST.						
ROCKY MT	1,125	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	4,850			SUBTOTAL:	1,000			3,850

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	10,385	PIPELINE		REGION 8	22,500	PIPELINE		
ROCKY MT	107,473	LOCAL DIST.		REGION 9	107,473	LOCAL DIST.		
SUBTOTAL:	117,858			SUBTOTAL:	129,973			-12,115
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
PACIFIC NW	5,245	PIPELINE		REGION 8	5,625	PIPELINE		
ROCKY MT	2,578	LOCAL DIST.		REGION 9	2,578	LOCAL DIST.		
SUBTOTAL:	7,823			SUBTOTAL:	8,203			-380
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	4,078	PIPELINE		REGION 9	24,814	LOCAL DIST.		
ROCKY MT	24,814	LOCAL DIST.						
SUBTOTAL:	28,892			SUBTOTAL:	24,814			4,078
REG -REFORMULATED								
MIN,WIS,DK	10,625	PIPELINE						
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 8	4,500	PIPELINE		
ROCKY MT	11,500	LOCAL DIST.		REGION 9	11,500	LOCAL DIST.		
				CANADA REF	3,000	TRUCK 5M gal/1000		
SUBTOTAL:	11,835			SUBTOTAL:	19,000			-7,165
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	530	PIPELINE		REGION 8	1,125	PIPELINE		
PACIFIC NW	335	PIPELINE		REGION 9	5,875	LOCAL DIST.		
ROCKY MT	5,875	LOCAL DIST.						
SUBTOTAL:	6,740			SUBTOTAL:	7,000			-260
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	2,010	PIPELINE		REGION 8	5,250	PIPELINE		
ROCKY MT	17,077	LOCAL DIST.		REGION 9	17,077	LOCAL DIST.		
SUBTOTAL:	19,087			SUBTOTAL:	22,327			-3,240
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	1,005	PIPELINE		REGION 8	2,250	PIPELINE		
ROCKY MT	4,750	LOCAL DIST.		REGION 9	4,750	LOCAL DIST.		
SUBTOTAL:	5,755			SUBTOTAL:	7,000			-1,245
				ETHANOL				
				REGION 5	2,683	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	6,384	PIPELINE		REGION 8	12,000	PIPELINE		
PACIFIC NW	7,370	PIPELINE		REGION 9	43,000	LOCAL DIST.		
ROCKY MT	43,000	LOCAL DIST.						
SUBTOTAL:	56,754			SUBTOTAL:	55,000			1,754

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	3,350	PIPELINE		REGION 8	6,750	PIPELINE		
ROCKY MT	46,250	LOCAL DIST.		REGION 9	46,250	LOCAL DIST.		
SUBTOTAL:	49,600			SUBTOTAL:	53,000			-3,400
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	4,587	PIPELINE		REGION 8	3,750	PIPELINE		
PACIFIC NW	1,675	PIPELINE		REGION 9	31,250	LOCAL DIST.		
ROCKY MT	31,250	LOCAL DIST.						
SUBTOTAL:	37,512			SUBTOTAL:	35,000			2,512
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,680	PIPELINE		REGION 8	4,500	PIPELINE		
ROCKY MT	27,500	LOCAL DIST.		REGION 9	27,500	LOCAL DIST.		
SUBTOTAL:	30,180			SUBTOTAL:	32,000			-1,820
TOTAL:	382,661			TOTAL:	396,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	93,317	LOCAL DIST.		REGION 9	10,385	PIPELINE		
				FAR EAST	34,098	35 DWT TANKER FF	0.12	
				REGION 10	93,317	LOCAL DIST.		
SUBTOTAL:	93,317			SUBTOTAL:	137,800			-44,483
				REG -CO NON ATTAIN				
				REGION 9	5,245	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	38,291	LOCAL DIST.		REGION 9	4,078	PIPELINE		
				REGION 10	38,291	LOCAL DIST.		
SUBTOTAL:	38,291			SUBTOTAL:	42,369			-4,078
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	6,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	6,665	LOCAL DIST.		
SUBTOTAL:	6,665			SUBTOTAL:	7,000			-335
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PACIFIC NW	1,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	1,665	LOCAL DIST.		
SUBTOTAL:	1,665			SUBTOTAL:	2,000			-335
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	21,890	LOCAL DIST.		REGION 9	2,010	PIPELINE		
				REGION 10	21,890	LOCAL DIST.		
SUBTOTAL:	21,890			SUBTOTAL:	23,900			-2,010
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	7,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	7,995	LOCAL DIST.		
SUBTOTAL:	7,995			SUBTOTAL:	9,000			-1,005
PRM -H/C CO NONATT								
SOUTH PAD5	756	35 DWT TANKER AF	0.00					
PRM -H/C REFORMUL								
SOUTH PAD5	606	35 DWT TANKER AF	0.00					
				MTBE				
				CANADA W.	1,453	35 DWT TANKER FF	0.01	
				ETHANOL				
				REGION 5	3,686	RAIL 10M gal/500		

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CNTRL PAD5	1,152	35 DWT TANKER AF	0.00	REGION 9	7,370	PIPELINE		
PACIFIC NW	60,630	LOCAL DIST.		REGION 10	60,630	LOCAL DIST.		
SUBTOTAL:	61,782			SUBTOTAL:	68,000			-6,218
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	44,650	LOCAL DIST.		REGION 9	3,350	PIPELINE		
				REGION 10	44,650	LOCAL DIST.		
SUBTOTAL:	44,650			SUBTOTAL:	48,000			-3,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	20,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	20,325	LOCAL DIST.		
SUBTOTAL:	20,325			SUBTOTAL:	22,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	36,320	LOCAL DIST.		REGION 9	2,680	PIPELINE		
				REGION 10	36,320	LOCAL DIST.		
SUBTOTAL:	36,320			SUBTOTAL:	39,000			-2,680
TOTAL:	334,263			TOTAL:	409,453			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	138,500	LOCAL DIST.		REGION 11	138,500	LOCAL DIST.		
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
CNTRL PAD5	22,390	LOCAL DIST.		REGION 11	22,390	LOCAL DIST.		
REG -H/C CO NONATT				REG -H/C CO NONATT				
CNTRL PAD5	68,456	LOCAL DIST.		REGION 11	68,456	LOCAL DIST.		
				MID -STANDARD UNLD				
				MIDDLE EST	12,000	35 DWT TANKER FF	0.04	
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	45,900	LOCAL DIST.		REGION 11	45,900	LOCAL DIST.		
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
CNTRL PAD5	29,320	LOCAL DIST.		REGION 11	29,320	LOCAL DIST.		
				MTBE				
				CANADA W.	8,096	35 DWT TANKER FF	0.03	
				MERCH MTBE	3,361	35 DWT TANKER AF	0.01	
				SUBTOTAL:	11,457			-11,457
				ETHANOL				
				REGION 5	976	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	102,767	LOCAL DIST.		REGION 11	102,767	LOCAL DIST.		
				REGION 10	1,152	35 DWT TANKER AF	0.00	
				CARIB/S.A.	2,081	35 DWT TANKER FF	0.01	
SUBTOTAL:	102,767			SUBTOTAL:	106,000			-3,233
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	61,000	LOCAL DIST.		REGION 11	61,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	25,000	LOCAL DIST.		REGION 11	25,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	15,000	LOCAL DIST.		REGION 11	15,000	LOCAL DIST.		
TOTAL:	517,334			TOTAL:	545,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	41,350	LOCAL DIST.		REGION 8	27,550	PIPELINE		
				REGION 12	41,350	LOCAL DIST.		
SUBTOTAL:	41,350			SUBTOTAL:	68,900			-27,550
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	34,867	LOCAL DIST.		REGION 8	22,909	PIPELINE		
				REGION 12	34,867	LOCAL DIST.		
SUBTOTAL:	34,867			SUBTOTAL:	57,776			-22,909
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	26,360	LOCAL DIST.		REGION 12	26,360	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	276,892	LOCAL DIST.		REGION 12	276,892	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	950	PIPELINE		
				MIDDLE EST	3,050	35 DWT TANKER FF	0.01	
				SUBTOTAL:	4,000			-4,000
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	3,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	3,050	LOCAL DIST.		
SUBTOTAL:	3,050			SUBTOTAL:	4,000			-950
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	17,000	LOCAL DIST.		REGION 12	17,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	8,711	LOCAL DIST.		MIDDLE EST	4,289	35 DWT TANKER FF	0.02	
				REGION 12	8,711	LOCAL DIST.		
SUBTOTAL:	8,711			SUBTOTAL:	13,000			-4,289
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	10,250	LOCAL DIST.		REGION 8	4,750	PIPELINE		
				REGION 12	10,250	LOCAL DIST.		
SUBTOTAL:	10,250			SUBTOTAL:	15,000			-4,750
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	5,203	LOCAL DIST.		REGION 8	5,591	PIPELINE		
				REGION 10	756	35 DWT TANKER AF	0.00	
				REGION 12	5,203	LOCAL DIST.		
SUBTOTAL:	5,203			SUBTOTAL:	11,551			-6,347

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	69,903	LOCAL DIST.		FAR EAST	13,874	35 DWT TANKER FF	0.05	
				MIDDLE EST	13,705	35 DWT TANKER FF	0.05	
				REGION 10	606	35 DWT TANKER AF	0.00	
				REGION 13	3,200	35 DWT TANKER AF	0.01	
				REGION 12	69,903	LOCAL DIST.		
SUBTOTAL:	69,903			SUBTOTAL:	101,289			-31,386
				MTBE				
				MERCH MTBE	50,533	35 DWT TANKER AF	0.18	
				ETHANOL				
				REGION 5	2,699	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	165,623	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	165,623	LOCAL DIST.		
				CARIB/S.A.	12,027	35 DWT TANKER FF	0.04	
SUBTOTAL:	165,623			SUBTOTAL:	190,000			-24,377
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	106,700	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 12	106,700	LOCAL DIST.		
SUBTOTAL:	106,700			SUBTOTAL:	120,000			-13,300
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	44,300	LOCAL DIST.		REGION 8	5,700	PIPELINE		
				REGION 12	44,300	LOCAL DIST.		
SUBTOTAL:	44,300			SUBTOTAL:	50,000			-5,700
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	24,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	24,050	LOCAL DIST.		
SUBTOTAL:	24,050			SUBTOTAL:	25,000			-950
TOTAL:	834,259			TOTAL:	1,034,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	21,000	LOCAL DIST.		REGION 13	21,000	LOCAL DIST.		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	2,549	LOCAL DIST.		REGION 13	2,549	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.		
PRM -H/C REFORMUL								
SOUTH PAD5	3,200	35 DWT TANKER AF	0.01					
				MTBE				
				CANADA W.	451	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	68,778	LOCAL DIST.		FAR EAST	9,474	35 DWT TANKER FF	0.03	
				MIDDLE EST	3,747	35 DWT TANKER FF	0.01	
				REGION 13	68,778	LOCAL DIST.		
SUBTOTAL:	68,778			SUBTOTAL:	82,000			-13,222
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	14,000	LOCAL DIST.		REGION 13	14,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	6,000	LOCAL DIST.		REGION 13	6,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	21,472	LOCAL DIST.		FAR EAST	4,428	35 DWT TANKER FF	0.02	
				MIDDLE EST	2,101	35 DWT TANKER FF	0.01	
				REGION 13	21,472	LOCAL DIST.		
SUBTOTAL:	21,472			SUBTOTAL:	28,000			-6,528
TOTAL:	149,999			TOTAL:	167,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	58,305	PIPELINE		REGION 8	498,656	PIPELINE		
LOW ATLAN	440,351	LOCAL DIST.						
SUBTOTAL:	498,656			SUBTOTAL:	498,656			
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
ILL,IND,KY	4,485	PIPELINE		REGION 8	4,485	PIPELINE		
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	87,471	PIPELINE		REGION 8	87,471	PIPELINE		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	171,757	PIPELINE		REGION 8	171,757	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	29,900	PIPELINE		REGION 8	140,620	PIPELINE		
LOW ATLAN	110,720	LOCAL DIST.						
SUBTOTAL:	140,620			SUBTOTAL:	140,620			
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	32,890	PIPELINE		REGION 8	187,484	PIPELINE		
LOW ATLAN	154,594	LOCAL DIST.						
SUBTOTAL:	187,484			SUBTOTAL:	187,484			
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
CENT ATLAN	9,000	PIPELINE		REGION 8	9,000	PIPELINE		
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	116,000	PIPELINE		REGION 8	116,000	PIPELINE		
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
ILL,IND,KY	2,906	PIPELINE		REGION 8	11,402	PIPELINE		
LOW ATLAN	8,496	LOCAL DIST.						
SUBTOTAL:	11,402			SUBTOTAL:	11,402			0
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	79,000	PIPELINE		REGION 8	79,000	PIPELINE		

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	151,135	PIPELINE		REGION 8	286,166	PIPELINE		
ILL,IND,KY	10,465	PIPELINE						
LOW ATLAN	124,565	LOCAL DIST.						
SUBTOTAL:	286,166			SUBTOTAL:	286,166			
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	25,415	PIPELINE		REGION 8	212,947	PIPELINE		
LOW ATLAN	187,532	LOCAL DIST.						
SUBTOTAL:	212,947			SUBTOTAL:	212,947			
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	38,000	PIPELINE		REGION 8	82,147	PIPELINE		
ILL,IND,KY	4,485	PIPELINE						
LOW ATLAN	39,662	LOCAL DIST.						
SUBTOTAL:	82,147			SUBTOTAL:	82,147			
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	125,208	PIPELINE		REGION 8	141,769	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	4,601	LOCAL DIST.						
SUBTOTAL:	141,769			SUBTOTAL:	141,769			
TOTAL:	2,030,400			TOTAL:	2,030,400			

MERCHANT MTBE

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 5	3,231	PIPELINE						
CNTRL PAD5	3,361	35 DWT TANKER AF	0.01					
LOW ATLAN	1,504	35 DWT TANKER AF	0.01					
NEW ENGLND	4,536	35 DWT TANKER AF	0.02					
SOUTH PAD5	50,533	35 DWT TANKER AF	0.18					
SUBTOTAL:	63,166							63,166
TOTAL:	63,166							

CANADA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	-- NET --
REG -STANDARD UNLD								
NEW ENGLND	28,744	35 DWT TANKER FF	0.10					
MID -STANDARD UNLD								
ROCKY MT	3,000	TRUCK 5M gal/1000						
PRM -STANDARD UNLD								
ILL,IND,KY	20,000	PIPELINE						
PRM -H/C CO NONATT								
APPALACH 1	1,852	5000 BBL BARGE	0.37					
KERO/JET								
NEW ENGLND	13,535	35 DWT TANKER FF	0.05					
DIESEL- ON HWY								
APPALACH 1	5,000	5000 BBL BARGE	1.00					
NEW ENGLND	38,673	35 DWT TANKER FF	0.14					
SUBTOTAL:	43,673							43,673
DIESEL- OFF HWY								
NEW ENGLND	12,000	35 DWT TANKER FF	0.04					
TOTAL:	122,805							

CARIBBEAN/VENEZUELA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD								
NEW ENGLND	8,391	35 DWT TANKER FF	0.03					
REG -H/C CO NONATT								
LOW ATLAN	1,216	35 DWT TANKER FF	0.00					
PRM -STANDARD UNLD								
NEW ENGLND	3,873	35 DWT TANKER FF	0.01					
KERO/JET								
CNTRL PAD5	2,081	35 DWT TANKER FF	0.01					
NEW ENGLND	35,223	35 DWT TANKER FF	0.13					
SOUTH PAD5	12,027	35 DWT TANKER FF	0.04					
SUBTOTAL:	49,331							49,331
DIESEL- ON HWY								
NEW ENGLND	10,357	35 DWT TANKER FF	0.04					
OTH DIESEL/NO2 OIL								
LOW ATLAN	89,899	35 DWT TANKER FF	0.32					
NEW ENGLND	166,567	35 DWT TANKER FF	0.59					
SUBTOTAL:	256,465							256,465
TOTAL:	329,635							

NORTHWEST EUROPE

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C CO NONATT								
NEW ENGLND	15,548	35 DWT TANKER FF	0.06					
MID -STANDARD UNLD								
NEW ENGLND	26,000	35 DWT TANKER FF	0.09					
MID -CO NON ATTAIN								
NEW ENGLND	8,000	35 DWT TANKER FF	0.03					
MID -CO-REFORMUL								
NEW ENGLND	7,000	35 DWT TANKER FF	0.03					
MID -REFORMULATED								
NEW ENGLND	7,000	35 DWT TANKER FF	0.03					
PRM -H/C REFORMUL								
NEW ENGLND	1,786	35 DWT TANKER FF	0.01					
KERO/JET								
NEW ENGLND	2,308	35 DWT TANKER FF	0.01					
DIESEL- ON HWY								
NEW ENGLND	6,946	35 DWT TANKER FF	0.02					
OTH DIESEL/NO2 OIL								
NEW ENGLND	1,061	35 DWT TANKER FF	0.00					
TOTAL:	75,648							

MEDITERRANEAN

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
REG -STANDARD UNLD							
NEW ENGLND	58,004	35 DWT TANKER FF	0.21				
PRM -H/C CO NONATT							
NEW ENGLND	2,611	35 DWT TANKER FF	0.01				
PRM -H/C REFORMUL							
NEW ENGLND	20,737	35 DWT TANKER FF	0.07				
KERO/JET							
NEW ENGLND	934	35 DWT TANKER FF	0.00				
DIESEL- ON HWY							
NEW ENGLND	4,023	35 DWT TANKER FF	0.01				
OTH DIESEL/NO2 OIL							
NEW ENGLND	373	35 DWT TANKER FF	0.00				
TOTAL:	86,683						

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD								
NEW ENGLND	17,218	35 DWT TANKER FF	0.06					
REG -H/C CO NONATT								
NEW ENGLND	21,492	35 DWT TANKER FF	0.08					
MID -STANDARD UNLD								
CNTRL PAD5	12,000	35 DWT TANKER FF	0.04					
SOUTH PAD5	3,050	35 DWT TANKER FF	0.01					
SUBTOTAL:	15,050							15,050
MID -REFORMULATED								
SOUTH PAD5	4,289	35 DWT TANKER FF	0.02					
PRM -H/C REFORMUL								
SOUTH PAD5	13,705	35 DWT TANKER FF	0.05					
KERO/JET								
PACIFIC	3,747	35 DWT TANKER FF	0.01					
OTH DIESEL/NO2 OIL								
PACIFIC	2,101	35 DWT TANKER FF	0.01					
TOTAL:	77,602							

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD								
NEW ENGLND	14,643	35 DWT TANKER FF	0.05					
PACIFIC NW	34,098	35 DWT TANKER FF	0.12					
SUBTOTAL:	48,740							48,740
PRM -STANDARD UNLD								
NEW ENGLND	1,772	35 DWT TANKER FF	0.01					
PRM -H/C REFORMUL								
SOUTH PAD5	13,874	35 DWT TANKER FF	0.05					
KERO/JET								
PACIFIC	9,474	35 DWT TANKER FF	0.03					
OTH DIESEL/NO2 OIL								
PACIFIC	4,428	35 DWT TANKER FF	0.02					
TOTAL:	78,289							

FOUNDATION CASE III — 1995

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				UNLD REG -STANDARD				
				REGION 8	32,716	35 DWT TANKER AF	0.12	
				MEDITER	62,433	35 DWT TANKER FF	0.22	
				MIDDLE EST	31,851	35 DWT TANKER FF	0.11	
				SUBTOTAL:	127,000			-127,000
				UNLD REG -H/C CO				
				CANADA REF	22,939	35 DWT TANKER FF	0.08	
				MIDDLE EST	14,101	35 DWT TANKER FF	0.05	
				SUBTOTAL:	37,040			-37,040
				UNLD REG -OZ NON A				
				REGION 8	23,000	35 DWT TANKER AF	0.08	
				UNLD REG -H/C OZ				
				REGION 8	22,224	35 DWT TANKER AF	0.08	
				UNLD MID -STANDARD				
				MIDDLE EST	26,000	35 DWT TANKER FF	0.09	
				UNLD MID -CO NON A				
				MEDITER	8,000	35 DWT TANKER FF	0.03	
				UNLD MID-CO/OZ NON				
				MEDITER	7,000	35 DWT TANKER FF	0.03	
				UNLD MID -OZ NON A				
				MEDITER	7,000	35 DWT TANKER FF	0.03	
				UNLD PRM -STANDARD				
				REGION 8	51,000	35 DWT TANKER AF	0.18	
				UNLD PRM-CO/OZ NON				
				REGION 8	840	35 DWT TANKER AF	0.00	
				UNLD PRM -H/C CO				
				REGION 8	15,293	35 DWT TANKER AF	0.05	
				UNLD PRM -OZ NON A				
				REGION 8	13,000	35 DWT TANKER AF	0.05	

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				UNLD PRM -H/C OZ				
				REGION 8	10,331	35 DWT TANKER AF	0.04	
				MTBE				
				MERCH MTBE	4,536	35 DWT TANKER AF	0.02	
				ETHANOL				
				REGION 5	4,736	RAIL 10M gal/500		
				KERO/JET				
				REGION 8	41,459	35 DWT TANKER AF	0.15	
				CANADA REF	5,205	35 DWT TANKER FF	0.02	
				NW EUROPE	402	35 DWT TANKER FF	0.00	
				MEDITER	934	35 DWT TANKER FF	0.00	
				SUBTOTAL:	48,000			-48,000
				DIESEL- ON HWY				
				REGION 8	4,191	35 DWT TANKER AF	0.01	
				CANADA REF	52,809	35 DWT TANKER FF	0.19	
				SUBTOTAL:	57,000			-57,000
				DIESEL- OFF HWY				
				CANADA REF	12,000	35 DWT TANKER FF	0.04	
				OTH DIESEL/NO2 OIL				
				NW EUROPE	19	35 DWT TANKER FF	0.00	
				MEDITER	4,396	35 DWT TANKER FF	0.02	
				MIDDLE EST	15,802	35 DWT TANKER FF	0.06	
				CARIB/S.A.	138,783	35 DWT TANKER FF	0.50	
				SUBTOTAL:	159,000			-159,000
				TOTAL:	633,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
APPALACH 1	114,295	PIPELINE		REGION 2	124,000	LOCAL DIST.		
CENT ATLAN	124,000	LOCAL DIST.						
SUBTOTAL:	238,295			SUBTOTAL:	124,000			114,295
UNLD REG -H/C CO				UNLD REG -H/C CO				
CENT ATLAN	12,038	LOCAL DIST.		REGION 2	12,038	LOCAL DIST.		
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
CENT ATLAN	56,529	LOCAL DIST.		REGION 2	56,529	LOCAL DIST.		
				TRSHP 8-2	87,471	PIPELINE		
SUBTOTAL:	56,529			SUBTOTAL:	144,000			-87,471
UNLD REG -H/C OZ				UNLD REG -H/C OZ				
CENT ATLAN	45,894	LOCAL DIST.		REGION 2	45,894	LOCAL DIST.		
				TRSHP 8-2	143,010	PIPELINE		
SUBTOTAL:	45,894			SUBTOTAL:	188,904			-143,010
UNLD MID -STANDARD				UNLD MID -STANDARD				
CENT ATLAN	33,000	LOCAL DIST.		REGION 2	33,000	LOCAL DIST.		
UNLD MID -CO NON A				UNLD MID -CO NON A				
APPALACH 1	1,000	PIPELINE		REGION 2	6,000	LOCAL DIST.		
CENT ATLAN	6,000	LOCAL DIST.						
SUBTOTAL:	7,000			SUBTOTAL:	6,000			1,000
UNLD MID-CO/OZ NON				UNLD MID-CO/OZ NON				
CENT ATLAN	43,000	LOCAL DIST.		REGION 2	43,000	LOCAL DIST.		
UNLD MID -OZ NON A				UNLD MID -OZ NON A				
CENT ATLAN	35,000	LOCAL DIST.		REGION 2	35,000	LOCAL DIST.		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
APPALACH 1	55,727	PIPELINE		REGION 2	62,000	LOCAL DIST.		
CENT ATLAN	62,000	LOCAL DIST.						
SUBTOTAL:	117,727			SUBTOTAL:	62,000			55,727
				UNLD PRM -CO NON A				
				TRSHP 8-2	9,000	PIPELINE		
				UNLD PRM-CO/OZ NON				
				TRSHP 8-2	116,000	PIPELINE		
				UNLD PRM -OZ NON A				
				TRSHP 8-2	79,000	PIPELINE		

CENTRAL ATLANTIC

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	16,058	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	7,894	PIPELINE		REGION 2	83,854	LOCAL DIST.		
CENT ATLAN	83,854	LOCAL DIST.		TRSHP 8-2	135,146	PIPELINE		
SUBTOTAL:	91,748			SUBTOTAL:	219,000			-127,252
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	29,653	PIPELINE		REGION 2	144,000	LOCAL DIST.		
CENT ATLAN	144,000	LOCAL DIST.						
SUBTOTAL:	173,653			SUBTOTAL:	144,000			29,653
				DIESEL- OFF HWY				
				TRSHP 8-2	36,000	PIPELINE		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	53,015	PIPELINE		REGION 2	116,570	LOCAL DIST.		
CENT ATLAN	116,570	LOCAL DIST.		TRSHP 8-2	133,430	PIPELINE		
SUBTOTAL:	169,585			SUBTOTAL:	250,000			-80,415
TOTAL:	1,023,469			TOTAL:	1,517,000			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				UNLD REG -STANDARD				
				REGION 8	199,360	35 DWT TANKER AF	0.71	
				TRSHP 8-2	440,351	LOCAL DIST.		
				SUBTOTAL:	639,711			-639,711
UNLD REG -CO NON A				UNLD REG -CO NON A				
LOW ATLAN	14,223	LOCAL DIST.		REGION 3	14,223	LOCAL DIST.		
UNLD REG -H/C CO				UNLD REG -H/C CO				
LOW ATLAN	9,689	LOCAL DIST.		REGION 3	9,689	LOCAL DIST.		
				CARIB/S.A.	1,216	35 DWT TANKER FF	0.00	
SUBTOTAL:	9,689			SUBTOTAL:	10,905			-1,216
				UNLD MID -STANDARD				
				REGION 8	62,280	35 DWT TANKER AF	0.22	
				TRSHP 8-2	110,720	LOCAL DIST.		
				SUBTOTAL:	173,000			-173,000
UNLD MID -CO NON A				UNLD MID -CO NON A				
LOW ATLAN	7,000	LOCAL DIST.		REGION 3	7,000	LOCAL DIST.		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
LOW ATLAN	5,495	LOCAL DIST.		REGION 3	5,495	LOCAL DIST.		
				REGION 8	106,600	35 DWT TANKER AF	0.38	
				TRSHP 8-2	154,594	LOCAL DIST.		
SUBTOTAL:	5,495			SUBTOTAL:	266,689			-261,194
				UNLD PRM -H/C CO				
				TRSHP 8-2	8,496	LOCAL DIST.		
				MTBE				
				MERCH MTBE	1,504	35 DWT TANKER AF	0.01	
				ETHANOL				
				REGION 5	3,471	RAIL 10M gal/500		
KERO/JET				KERO/JET				
LOW ATLAN	3,675	LOCAL DIST.		REGION 3	3,675	LOCAL DIST.		
				REGION 8	91,520	35 DWT TANKER AF	0.33	
				TRSHP 8-2	112,805	LOCAL DIST.		
SUBTOTAL:	3,675			SUBTOTAL:	208,000			-204,325
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	8,548	LOCAL DIST.		REGION 3	8,548	LOCAL DIST.		
				REGION 8	30,380	35 DWT TANKER AF	0.11	
				TRSHP 8-2	178,072	LOCAL DIST.		
SUBTOTAL:	8,548			SUBTOTAL:	217,000			-208,452

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
LOW ATLAN	5,388	LOCAL DIST.		REGION 3	5,388	LOCAL DIST.		
				REGION 8	7,500	35 DWT TANKER AF	0.03	
				TRSHP 8-2	37,112	LOCAL DIST.		
SUBTOTAL:	5,388			SUBTOTAL:	50,000			-44,612
				OTH DIESEL/NO2 OIL				
				REGION 8	10,100	35 DWT TANKER AF	0.04	
				TRSHP 8-2	90,900	LOCAL DIST.		
				SUBTOTAL:	101,000			-101,000
TOTAL:	54,018			TOTAL:	1,701,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
APPALACH 1	17,705	LOCAL DIST.		REGION 2	114,295	PIPELINE		
				REGION 4	17,705	LOCAL DIST.		
SUBTOTAL:	17,705			SUBTOTAL:	132,000			-114,295
				UNLD REG -H/C CO				
				REGION 5	1,852	5000 BBL BARGE	0.37	
UNLD MID -STANDARD				UNLD MID -STANDARD				
APPALACH 1	30,000	LOCAL DIST.		REGION 4	30,000	LOCAL DIST.		
				UNLD MID -CO NON A				
				REGION 2	1,000	PIPELINE		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
APPALACH 1	273	LOCAL DIST.		REGION 2	55,727	PIPELINE		
				REGION 4	273	LOCAL DIST.		
SUBTOTAL:	273			SUBTOTAL:	56,000			-55,727
				UNLD PRM -H/C CO				
				CANADA REF	1,852	5000 BBL BARGE	0.37	
				ETHANOL				
				REGION 5	296	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	5,308	LOCAL DIST.		REGION 2	7,894	PIPELINE		
				REGION 4	5,308	LOCAL DIST.		
				CANADA REF	4,798	5000 BBL BARGE	0.96	
SUBTOTAL:	5,308			SUBTOTAL:	18,000			-12,692
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	12,347	LOCAL DIST.		REGION 2	29,653	PIPELINE		
				REGION 4	12,347	LOCAL DIST.		
SUBTOTAL:	12,347			SUBTOTAL:	42,000			-29,653
				DIESEL- OFF HWY				
				REGION 5	15,000	5000 BBL BARGE	3.00	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	7,783	LOCAL DIST.		REGION 2	53,015	PIPELINE		
				REGION 4	7,783	LOCAL DIST.		
				CANADA REF	202	5000 BBL BARGE	0.04	
SUBTOTAL:	7,783			SUBTOTAL:	61,000			-53,217
TOTAL:	73,416			TOTAL:	359,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
ILL,IND,KY	642,434	LOCAL DIST.		REGION 5	642,434	LOCAL DIST.		
				REGION 8	25,480	5000 BBL BARGE	5.10	
				REGION 8	42,756	PIPELINE		
				TRSHP 8-2	59,800	PIPELINE		
SUBTOTAL:	642,434			SUBTOTAL:	770,470			-128,036
				UNLD REG -CO NON A				
				TRSHP 8-2	4,485	PIPELINE		
UNLD REG -H/C CO				UNLD REG -H/C CO				
APPALACH 1	1,852	5000 BBL BARGE	0.37	REGION 5	25,085	LOCAL DIST.		
ILL,IND,KY	25,085	LOCAL DIST.		REGION 8	1,320	5000 BBL BARGE	0.26	
SUBTOTAL:	26,937			SUBTOTAL:	26,405			532
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
ILL,IND,KY	153,600	LOCAL DIST.		REGION 5	153,600	LOCAL DIST.		
				REGION 8	6,400	5000 BBL BARGE	1.28	
SUBTOTAL:	153,600			SUBTOTAL:	160,000			-6,400
UNLD MID -STANDARD				UNLD MID -STANDARD				
ILL,IND,KY	58,020	LOCAL DIST.		REGION 5	58,020	LOCAL DIST.		
				REGION 8	4,480	5000 BBL BARGE	0.90	
				REGION 8	19,600	PIPELINE		
				TRSHP 8-2	29,900	PIPELINE		
SUBTOTAL:	58,020			SUBTOTAL:	112,000			-53,980
UNLD MID -CO NON A				UNLD MID -CO NON A				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
UNLD MID -OZ NON A				UNLD MID -OZ NON A				
ILL,IND,KY	18,320	LOCAL DIST.		REGION 5	18,320	LOCAL DIST.		
				REGION 8	880	5000 BBL BARGE	0.18	
				REGION 8	2,800	PIPELINE		
SUBTOTAL:	18,320			SUBTOTAL:	22,000			-3,680
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
ILL,IND,KY	91,733	LOCAL DIST.		REGION 5	91,733	LOCAL DIST.		
				REGION 8	5,600	5000 BBL BARGE	1.12	
				REGION 8	25,200	PIPELINE		
				CANADA REF	17,317	PIPELINE		
				TRSHP 8-2	35,880	PIPELINE		
SUBTOTAL:	91,733			SUBTOTAL:	175,730			-83,997

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				UNLD PRM -H/C CO				
				REGION 8	280	5000 BBL BARGE	0.06	
				CANADA REF	2,683	PIPELINE		
				TRSHP 8-2	3,519	PIPELINE		
				SUBTOTAL:	6,482			-6,482
UNLD PRM -OZ NON A				UNLD PRM -OZ NON A				
ILL,IND,KY	30,470	LOCAL DIST.		REGION 5	30,470	LOCAL DIST.		
				REGION 7	410	PIPELINE		
				REGION 8	1,520	5000 BBL BARGE	0.30	
				REGION 8	5,600	PIPELINE		
SUBTOTAL:	30,470			SUBTOTAL:	38,000			-7,530
				MTBE				
				MERCH MTBE	3,486	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	296	RAIL 10M gal/500		REGION 5	21,428	RAIL 10M gal/500		
CNTRL PADS	1,113	RAIL 10M gal/500						
CENT ATLAN	16,058	RAIL 10M gal/500						
ILL,IND,KY	21,428	RAIL 10M gal/500						
LOW ATLAN	3,471	RAIL 10M gal/500						
MIN,WIS,DK	3,917	RAIL 10M gal/500						
NEW ENGLND	4,736	RAIL 10M gal/500						
OK,KAN,MO	5,800	RAIL 10M gal/500						
PAD III	3,500	RAIL 10M gal/500						
PACIFIC NW	3,686	RAIL 10M gal/500						
ROCKY MT	2,683	RAIL 10M gal/500						
SOUTH PADS	2,687	RAIL 10M gal/500						
SUBTOTAL:	69,375			SUBTOTAL:	21,428			47,947
KERO/JET				KERO/JET				
ILL,IND,KY	156,470	LOCAL DIST.		REGION 5	156,470	LOCAL DIST.		
				REGION 8	10,560	5000 BBL BARGE	2.11	
				TRSHP 8-2	8,970	PIPELINE		
SUBTOTAL:	156,470			SUBTOTAL:	176,000			-19,530
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	257,280	LOCAL DIST.		REGION 5	257,280	LOCAL DIST.		
				REGION 8	14,800	5000 BBL BARGE	2.96	
				TRSHP 8-2	23,920	PIPELINE		
SUBTOTAL:	257,280			SUBTOTAL:	296,000			-38,720
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	68,665	LOCAL DIST.		
ILL,IND,KY	68,665	LOCAL DIST.		REGION 8	3,850	5000 BBL BARGE	0.77	
				TRSHP 8-2	4,485	PIPELINE		
SUBTOTAL:	83,665			SUBTOTAL:	77,000			6,665
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	122,940	LOCAL DIST.		REGION 5	122,940	LOCAL DIST.		
				REGION 8	7,100	5000 BBL BARGE	1.42	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	122,940			SUBTOTAL:	142,000			-19,060
TOTAL:	1,716,468			TOTAL:	2,038,486			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
MIN,WIS,DK	101,264	LOCAL DIST.		REGION 6	101,264	LOCAL DIST.		
				REGION 7	89,887	PIPELINE		
SUBTOTAL:	101,264			SUBTOTAL:	191,151			-89,887
UNLD REG -H/C CO				UNLD REG -H/C CO				
MIN,WIS,DK	9,852	LOCAL DIST.		REGION 6	9,852	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
				REGION 9	264	PIPELINE		
SUBTOTAL:	9,852			SUBTOTAL:	26,854			-17,002
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
MIN,WIS,DK	9,735	LOCAL DIST.		REGION 6	9,735	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
				REGION 9	11,305	PIPELINE		
SUBTOTAL:	9,735			SUBTOTAL:	40,000			-30,265
UNLD MID -STANDARD				UNLD MID -STANDARD				
MIN,WIS,DK	3,890	LOCAL DIST.		REGION 6	3,890	LOCAL DIST.		
				REGION 7	7,110	PIPELINE		
SUBTOTAL:	3,890			SUBTOTAL:	11,000			-7,110
UNLD MID -CO NON A				UNLD MID -CO NON A				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
UNLD MID -OZ NON A				UNLD MID -OZ NON A				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
MIN,WIS,DK	14,318	LOCAL DIST.		REGION 6	14,318	LOCAL DIST.		
				REGION 7	9,931	PIPELINE		
SUBTOTAL:	14,318			SUBTOTAL:	24,249			-9,931
				UNLD PRM -CO NON A				
				REGION 7	1,690	PIPELINE		
UNLD PRM -H/C CO				UNLD PRM -H/C CO				
MIN,WIS,DK	1,339	LOCAL DIST.		REGION 6	1,339	LOCAL DIST.		
				REGION 7	800	PIPELINE		
SUBTOTAL:	1,339			SUBTOTAL:	2,139			-800
UNLD PRM -OZ NON A				UNLD PRM -OZ NON A				
MIN,WIS,DK	3,630	LOCAL DIST.		REGION 6	3,630	LOCAL DIST.		
				REGION 7	2,370	PIPELINE		
SUBTOTAL:	3,630			SUBTOTAL:	6,000			-2,370
				ETHANOL				
				REGION 5	3,917	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	16,031	LOCAL DIST.		REGION 6	16,031	LOCAL DIST.		
				REGION 9	9,969	PIPELINE		
SUBTOTAL:	16,031			SUBTOTAL:	26,000			-9,969
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	63,287	LOCAL DIST.		REGION 6	63,287	LOCAL DIST.		
				REGION 9	1,713	PIPELINE		
SUBTOTAL:	63,287			SUBTOTAL:	65,000			-1,713
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	19,063	LOCAL DIST.		REGION 6	19,063	LOCAL DIST.		
				REGION 7	13,392	PIPELINE		
				REGION 9	2,545	PIPELINE		
SUBTOTAL:	19,063			SUBTOTAL:	35,000			-15,937
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	25,930	LOCAL DIST.		REGION 6	25,930	LOCAL DIST.		
				REGION 7	26,070	PIPELINE		
SUBTOTAL:	25,930			SUBTOTAL:	52,000			-26,070
TOTAL:	272,338			TOTAL:	489,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
MIN,WIS,DK	89,887	PIPELINE		REGION 7	162,747	LOCAL DIST.		
OK,KAN,MO	162,747	LOCAL DIST.		REGION 8	247,255	PIPELINE		
SUBTOTAL:	252,634			SUBTOTAL:	410,002			-157,368
UNLD REG -H/C CO								
MIN,WIS,DK	16,737	PIPELINE						
UNLD REG -OZ NON A								
MIN,WIS,DK	18,960	PIPELINE						
UNLD MID -STANDARD				UNLD MID -STANDARD				
MIN,WIS,DK	7,110	PIPELINE		REGION 8	26,000	PIPELINE		-18,890
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
MIN,WIS,DK	9,931	PIPELINE		REGION 7	54,198	LOCAL DIST.		
OK,KAN,MO	54,198	LOCAL DIST.						
SUBTOTAL:	64,130			SUBTOTAL:	54,198			9,931
UNLD PRM -CO NON A								
MIN,WIS,DK	1,690	PIPELINE						
UNLD PRM -H/C CO								
MIN,WIS,DK	800	PIPELINE						
UNLD PRM -OZ NON A								
ILL,IND,KY	410	PIPELINE						
MIN,WIS,DK	2,370	PIPELINE						
SUBTOTAL:	2,780							2,780
				ETHANOL				
				REGION 5	5,800	RAIL 10M gal/500		
KERO/JET				KERO/JET				
OK,KAN,MO	43,949	LOCAL DIST.		REGION 7	43,949	LOCAL DIST.		
				REGION 8	38,051	PIPELINE		
SUBTOTAL:	43,949			SUBTOTAL:	82,000			-38,051
DIESEL- ON HWY				DIESEL- ON HWY				
OK,KAN,MO	127,000	LOCAL DIST.		REGION 7	127,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	13,392	PIPELINE		REGION 7	50,000	LOCAL DIST.		
OK,KAN,MO	50,000	LOCAL DIST.						
SUBTOTAL:	63,392			SUBTOTAL:	50,000			13,392
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	26,070	PIPELINE		REGION 7	48,000	LOCAL DIST.		
OK,KAN,MO	48,000	LOCAL DIST.						
SUBTOTAL:	74,070			SUBTOTAL:	48,000			26,070
TOTAL:	673,253			TOTAL:	803,000			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
ILL,IND,KY	25,480	5000 BBL BARGE	5.10	REGION 8	633,703	LOCAL DIST.		
ILL,IND,KY	42,756	PIPELINE						
LOW ATLAN	199,360	35 DWT TANKER AF	0.71					
NEW ENGLND	32,716	35 DWT TANKER AF	0.12					
OK,KAN,MO	247,255	PIPELINE						
PAD III	633,703	LOCAL DIST.						
ROCKY MT	23,250	PIPELINE						
SOUTH PAD5	28,500	PIPELINE						
TRSHP 8-2	500,151	PIPELINE						
SUBTOTAL:	1,733,171			SUBTOTAL:	633,703			1,099,468
UNLD REG -CO NON A				UNLD REG -CO NON A				
PAD III	12,000	LOCAL DIST.		REGION 8	12,000	LOCAL DIST.		
ROCKY MT	5,625	PIPELINE						
TRSHP 8-2	4,485	PIPELINE						
SUBTOTAL:	22,110			SUBTOTAL:	12,000			10,110
UNLD REG -H/C CO								
ILL,IND,KY	1,320	5000 BBL BARGE	0.26					
SOUTH PAD5	22,909	PIPELINE						
SUBTOTAL:	24,229							24,229
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
ILL,IND,KY	6,400	5000 BBL BARGE	1.28	REGION 8	90,000	LOCAL DIST.		
NEW ENGLND	23,000	35 DWT TANKER AF	0.08					
PAD III	90,000	LOCAL DIST.						
TRSHP 8-2	87,471	PIPELINE						
SUBTOTAL:	206,871			SUBTOTAL:	90,000			116,871
UNLD REG -H/C OZ								
NEW ENGLND	22,224	35 DWT TANKER AF	0.08					
TRSHP 8-2	143,010	PIPELINE						
SUBTOTAL:	165,234							165,234
UNLD MID -STANDARD				UNLD MID -STANDARD				
ILL,IND,KY	4,480	5000 BBL BARGE	0.90	REGION 8	95,000	LOCAL DIST.		
ILL,IND,KY	19,600	PIPELINE						
LOW ATLAN	62,280	35 DWT TANKER AF	0.22					
OK,KAN,MO	26,000	PIPELINE						
PAD III	95,000	LOCAL DIST.						
ROCKY MT	4,500	PIPELINE						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	140,620	PIPELINE						
SUBTOTAL:	354,380			SUBTOTAL:	95,000			259,380

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD MID -CO NON A				UNLD MID -CO NON A				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
PAD III	1,000	LOCAL DIST.						
ROCKY MT	1,125	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	4,850			SUBTOTAL:	1,000			3,850
UNLD MID -OZ NON A				UNLD MID -OZ NON A				
ILL,IND,KY	880	5000 BBL BARGE	0.18	REGION 8	13,000	LOCAL DIST.		
ILL,IND,KY	2,800	PIPELINE						
PAD III	13,000	LOCAL DIST.						
SUBTOTAL:	16,680			SUBTOTAL:	13,000			3,680
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
ILL,IND,KY	5,600	5000 BBL BARGE	1.12	REGION 8	148,797	LOCAL DIST.		
ILL,IND,KY	25,200	PIPELINE						
LOW ATLAN	106,600	35 DWT TANKER AF	0.38					
NEW ENGLND	51,000	35 DWT TANKER AF	0.18					
PAD III	148,797	LOCAL DIST.						
ROCKY MT	5,250	PIPELINE						
SOUTH PAD5	4,750	PIPELINE						
TRSHP 8-2	190,473	PIPELINE						
SUBTOTAL:	537,670			SUBTOTAL:	148,797			388,874
UNLD PRM -CO NON A				UNLD PRM -CO NON A				
PAD III	2,000	LOCAL DIST.		REGION 8	2,000	LOCAL DIST.		
ROCKY MT	2,250	PIPELINE						
TRSHP 8-2	9,000	PIPELINE						
SUBTOTAL:	13,250			SUBTOTAL:	2,000			11,250
UNLD PRM-CO/OZ NON								
NEW ENGLND	840	35 DWT TANKER AF	0.00					
TRSHP 8-2	116,000	PIPELINE						
SUBTOTAL:	116,840							116,840
UNLD PRM -H/C CO								
ILL,IND,KY	280	5000 BBL BARGE	0.06					
NEW ENGLND	15,293	35 DWT TANKER AF	0.05					
SOUTH PAD5	5,591	PIPELINE						
TRSHP 8-2	12,015	PIPELINE						
SUBTOTAL:	33,179							33,179
UNLD PRM -OZ NON A				UNLD PRM -OZ NON A				
ILL,IND,KY	1,520	5000 BBL BARGE	0.30	REGION 8	19,000	LOCAL DIST.		
ILL,IND,KY	5,600	PIPELINE						
NEW ENGLND	13,000	35 DWT TANKER AF	0.05					
PAD III	19,000	LOCAL DIST.						
TRSHP 8-2	79,000	PIPELINE						
SUBTOTAL:	118,120			SUBTOTAL:	19,000			99,120

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD PRM -H/C OZ								
NEW ENGLND	10,331	35 DWT TANKER AF	0.04					
				ETHANOL				
				REGION 5	3,500	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	10,560	5000 BBL BARGE	2.11	REGION 8	233,000	LOCAL DIST.		
LOW ATLAN	91,520	35 DWT TANKER AF	0.33					
NEW ENGLND	41,459	35 DWT TANKER AF	0.15					
OK,KAN,MO	38,051	PIPELINE						
PAD III	233,000	LOCAL DIST.						
ROCKY MT	11,250	PIPELINE						
SOUTH PAD5	11,400	PIPELINE						
TRSHP 8-2	256,921	PIPELINE						
SUBTOTAL:	694,160			SUBTOTAL:	233,000			461,160
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	14,800	5000 BBL BARGE	2.96	REGION 8	247,000	LOCAL DIST.		
LOW ATLAN	30,380	35 DWT TANKER AF	0.11					
NEW ENGLND	4,191	35 DWT TANKER AF	0.01					
PAD III	247,000	LOCAL DIST.						
ROCKY MT	3,375	PIPELINE						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	201,992	PIPELINE						
SUBTOTAL:	514,088			SUBTOTAL:	247,000			267,088
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	3,850	5000 BBL BARGE	0.77	REGION 8	117,000	LOCAL DIST.		
LOW ATLAN	7,500	35 DWT TANKER AF	0.03					
PAD III	117,000	LOCAL DIST.						
ROCKY MT	3,046	PIPELINE						
SOUTH PAD5	5,700	PIPELINE						
TRSHP 8-2	77,597	PIPELINE						
SUBTOTAL:	214,693			SUBTOTAL:	117,000			97,693
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	7,100	5000 BBL BARGE	1.42	REGION 8	200,000	LOCAL DIST.		
LOW ATLAN	10,100	35 DWT TANKER AF	0.04					
PAD III	200,000	LOCAL DIST.						
ROCKY MT	2,250	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	236,290	PIPELINE						
SUBTOTAL:	456,690			SUBTOTAL:	200,000			256,690
TOTAL:	5,236,548			TOTAL:	1,815,000			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
PACIFIC NW	10,720	PIPELINE		REGION 8	23,250	PIPELINE		
ROCKY MT	106,723	LOCAL DIST.		REGION 9	106,723	LOCAL DIST.		
SUBTOTAL:	117,443			SUBTOTAL:	129,973			-12,530
UNLD REG -CO NON A				UNLD REG -CO NON A				
PACIFIC NW	5,245	PIPELINE		REGION 8	5,625	PIPELINE		
ROCKY MT	2,578	LOCAL DIST.		REGION 9	2,578	LOCAL DIST.		
SUBTOTAL:	7,823			SUBTOTAL:	8,203			-380
UNLD REG -H/C CO				UNLD REG -H/C CO				
MIN,WIS,DK	264	PIPELINE		REGION 9	24,814	LOCAL DIST.		
PACIFIC NW	4,078	PIPELINE						
ROCKY MT	24,814	LOCAL DIST.						
SUBTOTAL:	29,156			SUBTOTAL:	24,814			4,342
UNLD REG -OZ NON A								
MIN,WIS,DK	11,305	PIPELINE						
UNLD MID -STANDARD				UNLD MID -STANDARD				
PACIFIC NW	335	PIPELINE		REGION 8	4,500	PIPELINE		
ROCKY MT	11,500	LOCAL DIST.		REGION 9	11,500	LOCAL DIST.		
				CANADA REF	3,000	TRUCK 5M gal/1000		
SUBTOTAL:	11,835			SUBTOTAL:	19,000			-7,165
UNLD MID -CO NON A				UNLD MID -CO NON A				
PACIFIC NW	335	PIPELINE		REGION 8	1,125	PIPELINE		
ROCKY MT	5,875	LOCAL DIST.		REGION 9	5,875	LOCAL DIST.		
SUBTOTAL:	6,210			SUBTOTAL:	7,000			-790
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
PACIFIC NW	2,010	PIPELINE		REGION 8	5,250	PIPELINE		
ROCKY MT	17,077	LOCAL DIST.		REGION 9	17,077	LOCAL DIST.		
SUBTOTAL:	19,087			SUBTOTAL:	22,327			-3,240
UNLD PRM -CO NON A				UNLD PRM -CO NON A				
PACIFIC NW	1,005	PIPELINE		REGION 8	2,250	PIPELINE		
ROCKY MT	4,750	LOCAL DIST.		REGION 9	4,750	LOCAL DIST.		
SUBTOTAL:	5,755			SUBTOTAL:	7,000			-1,245
				ETHANOL				
				REGION 5	2,683	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	9,969	PIPELINE		REGION 8	11,250	PIPELINE		
PACIFIC NW	7,035	PIPELINE		REGION 9	39,750	LOCAL DIST.		
ROCKY MT	39,750	LOCAL DIST.						
SUBTOTAL:	56,754			SUBTOTAL:	51,000			5,754

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	1,713	PIPELINE		REGION 8	3,375	PIPELINE		
PACIFIC NW	3,350	PIPELINE		REGION 9	46,625	LOCAL DIST.		
ROCKY MT	46,625	LOCAL DIST.						
SUBTOTAL:	51,688			SUBTOTAL:	50,000			1,688
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	2,545	PIPELINE		REGION 8	3,046	PIPELINE		
PACIFIC NW	1,675	PIPELINE		REGION 9	29,954	LOCAL DIST.		
ROCKY MT	29,954	LOCAL DIST.						
SUBTOTAL:	34,174			SUBTOTAL:	33,000			1,174
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,680	PIPELINE		REGION 8	2,250	PIPELINE		
ROCKY MT	28,750	LOCAL DIST.		REGION 9	28,750	LOCAL DIST.		
SUBTOTAL:	31,430			SUBTOTAL:	31,000			430
TOTAL:	382,661			TOTAL:	386,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
PACIFIC NW	102,828	LOCAL DIST.		REGION 9	10,720	PIPELINE		
				FAR EAST	24,252	35 DWT TANKER FF	0.09	
				REGION 10	102,828	LOCAL DIST.		
SUBTOTAL:	102,828			SUBTOTAL:	137,800			-34,972
				UNLD REG -CO NON A				
				REGION 9	5,245	PIPELINE		
UNLD REG -H/C CO				UNLD REG -H/C CO				
PACIFIC NW	38,291	LOCAL DIST.		REGION 9	4,078	PIPELINE		
				REGION 10	38,291	LOCAL DIST.		
SUBTOTAL:	38,291			SUBTOTAL:	42,369			-4,078
UNLD MID -STANDARD				UNLD MID -STANDARD				
PACIFIC NW	6,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	6,665	LOCAL DIST.		
SUBTOTAL:	6,665			SUBTOTAL:	7,000			-335
UNLD MID -CO NON A				UNLD MID -CO NON A				
PACIFIC NW	1,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	1,665	LOCAL DIST.		
SUBTOTAL:	1,665			SUBTOTAL:	2,000			-335
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
CNTRL PAD5	2,350	35 DWT TANKER AF	0.01	REGION 9	2,010	PIPELINE		
PACIFIC NW	21,890	LOCAL DIST.		REGION 10	21,890	LOCAL DIST.		
SUBTOTAL:	24,240			SUBTOTAL:	23,900			340
UNLD PRM -CO NON A				UNLD PRM -CO NON A				
PACIFIC NW	7,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	7,995	LOCAL DIST.		
SUBTOTAL:	7,995			SUBTOTAL:	9,000			-1,005
UNLD PRM -H/C CO								
CNTRL PAD5	1,320	35 DWT TANKER AF	0.00					
				MTBE				
				CANADA W.	1,453	35 DWT TANKER FF	0.01	
				ETHANOL				
				REGION 5	3,686	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	54,965	LOCAL DIST.		REGION 9	7,035	PIPELINE		
				REGION 10	54,965	LOCAL DIST.		
SUBTOTAL:	54,965			SUBTOTAL:	62,000			-7,035

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	42,650	LOCAL DIST.		REGION 9	3,350	PIPELINE		
				REGION 10	42,650	LOCAL DIST.		
SUBTOTAL:	42,650			SUBTOTAL:	46,000			-3,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	19,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	19,325	LOCAL DIST.		
SUBTOTAL:	19,325			SUBTOTAL:	21,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	34,320	LOCAL DIST.		REGION 9	2,680	PIPELINE		
				REGION 10	34,320	LOCAL DIST.		
SUBTOTAL:	34,320			SUBTOTAL:	37,000			-2,680
TOTAL:	334,263			TOTAL:	398,453			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
CNTRL PAD5	138,500	LOCAL DIST.		REGION 11	138,500	LOCAL DIST.		
UNLD REG -CO NON A				UNLD REG -CO NON A				
CNTRL PAD5	22,390	LOCAL DIST.		REGION 11	22,390	LOCAL DIST.		
UNLD REG -H/C CO				UNLD REG -H/C CO				
CNTRL PAD5	68,598	LOCAL DIST.		REGION 11	68,598	LOCAL DIST.		
				UNLD MID -STANDARD				
				MIDDLE EST	12,000	35 DWT TANKER FF	0.04	
UNLD MID -CO NON A				UNLD MID -CO NON A				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
CNTRL PAD5	43,550	LOCAL DIST.		REGION 11	43,550	LOCAL DIST.		
				REGION 10	2,350	35 DWT TANKER AF	0.01	
SUBTOTAL:	43,550			SUBTOTAL:	45,900			-2,350
UNLD PRM -H/C CO				UNLD PRM -H/C CO				
CNTRL PAD5	28,001	LOCAL DIST.		REGION 11	28,001	LOCAL DIST.		
				REGION 10	1,320	35 DWT TANKER AF	0.00	
SUBTOTAL:	28,001			SUBTOTAL:	29,320			-1,320
				MTBE				
				CANADA W.	8,096	35 DWT TANKER FF	0.03	
				MERCH MTBE	3,082	35 DWT TANKER AF	0.01	
				SUBTOTAL:	11,178			-11,178
				ETHANOL				
				REGION 5	1,113	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	96,000	LOCAL DIST.		REGION 11	96,000	LOCAL DIST.		
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	59,000	LOCAL DIST.		REGION 11	59,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	23,000	LOCAL DIST.		REGION 11	23,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	14,000	LOCAL DIST.		REGION 11	14,000	LOCAL DIST.		
TOTAL:	502,040			TOTAL:	530,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
SOUTH PAD5	11,059	LOCAL DIST.		REGION 8	28,500	PIPELINE		
				MIDDLE EST	29,341	35 DWT TANKER FF	0.10	
				REGION 12	11,059	LOCAL DIST.		
SUBTOTAL:	11,059			SUBTOTAL:	68,900			-57,841
UNLD REG -H/C CO				UNLD REG -H/C CO				
SOUTH PAD5	34,855	LOCAL DIST.		REGION 8	22,909	PIPELINE		
				REGION 12	34,855	LOCAL DIST.		
SUBTOTAL:	34,855			SUBTOTAL:	57,764			-22,909
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
SOUTH PAD5	35,071	LOCAL DIST.		REGION 12	35,071	LOCAL DIST.		
UNLD REG -H/C OZ				UNLD REG -H/C OZ				
SOUTH PAD5	269,152	LOCAL DIST.		REGION 12	269,152	LOCAL DIST.		
				UNLD MID -STANDARD				
				REGION 8	1,900	PIPELINE		
				MIDDLE EST	2,100	35 DWT TANKER FF	0.01	
				SUBTOTAL:	4,000			-4,000
UNLD MID -CO NON A				UNLD MID -CO NON A				
SOUTH PAD5	3,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	3,050	LOCAL DIST.		
SUBTOTAL:	3,050			SUBTOTAL:	4,000			-950
UNLD MID-CO/OZ NON				UNLD MID-CO/OZ NON				
SOUTH PAD5	17,000	LOCAL DIST.		REGION 12	17,000	LOCAL DIST.		
				UNLD MID -OZ NON A				
				MIDDLE EST	13,000	35 DWT TANKER FF	0.05	
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
SOUTH PAD5	10,250	LOCAL DIST.		REGION 8	4,750	PIPELINE		
				REGION 12	10,250	LOCAL DIST.		
SUBTOTAL:	10,250			SUBTOTAL:	15,000			-4,750
UNLD PRM -H/C CO				UNLD PRM -H/C CO				
SOUTH PAD5	5,960	LOCAL DIST.		REGION 8	5,591	PIPELINE		
				REGION 12	5,960	LOCAL DIST.		
SUBTOTAL:	5,960			SUBTOTAL:	11,551			-5,591
UNLD PRM -H/C OZ				UNLD PRM -H/C OZ				
SOUTH PAD5	99,149	LOCAL DIST.		REGION 13	2,140	35 DWT TANKER AF	0.01	
				REGION 12	99,149	LOCAL DIST.		
SUBTOTAL:	99,149			SUBTOTAL:	101,289			-2,140

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				MTBE				
				MERCH MTBE	49,586	35 DWT TANKER AF	0.18	
				ETHANOL				
				REGION 5	2,687	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	161,600	LOCAL DIST.		REGION 8	11,400	PIPELINE		
				REGION 12	161,600	LOCAL DIST.		
SUBTOTAL:	161,600			SUBTOTAL:	173,000			-11,400
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	102,650	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	102,650	LOCAL DIST.		
SUBTOTAL:	102,650			SUBTOTAL:	115,000			-12,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	41,300	LOCAL DIST.		REGION 8	5,700	PIPELINE		
				REGION 12	41,300	LOCAL DIST.		
SUBTOTAL:	41,300			SUBTOTAL:	47,000			-5,700
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	23,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	23,050	LOCAL DIST.		
SUBTOTAL:	23,050			SUBTOTAL:	24,000			-950
TOTAL:	814,146			TOTAL:	1,008,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
PACIFIC	21,000	LOCAL DIST.		REGION 13	21,000	LOCAL DIST.		
UNLD REG -H/C CO				UNLD REG -H/C CO				
PACIFIC	2,549	LOCAL DIST.		REGION 13	2,549	LOCAL DIST.		
UNLD MID -STANDARD				UNLD MID -STANDARD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.		
UNLD PRM -H/C OZ								
SOUTH PAD5	2,140	35 DWT TANKER AF	0.01					
				MTBE				
				CANADA W.	451	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	62,310	LOCAL DIST.		FAR EAST	2,153	35 DWT TANKER FF	0.01	
				MIDDLE EST	10,537	35 DWT TANKER FF	0.04	
				REGION 13	62,310	LOCAL DIST.		
SUBTOTAL:	62,310			SUBTOTAL:	75,000			-12,690
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	11,000	LOCAL DIST.		REGION 13	11,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	6,000	LOCAL DIST.		REGION 13	6,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	28,000	LOCAL DIST.		REGION 13	28,000	LOCAL DIST.		
TOTAL:	145,999			TOTAL:	157,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
UNLD REG -STANDARD				UNLD REG -STANDARD				
ILL,IND,KY	59,800	PIPELINE		REGION 8	500,151	PIPELINE		
LOW ATLAN	440,351	LOCAL DIST.						
SUBTOTAL:	500,151			SUBTOTAL:	500,151			-0
UNLD REG -CO NON A				UNLD REG -CO NON A				
ILL,IND,KY	4,485	PIPELINE		REGION 8	4,485	PIPELINE		
UNLD REG -OZ NON A				UNLD REG -OZ NON A				
CENT ATLAN	87,471	PIPELINE		REGION 8	87,471	PIPELINE		
UNLD REG -H/C OZ				UNLD REG -H/C OZ				
CENT ATLAN	143,010	PIPELINE		REGION 8	143,010	PIPELINE		
UNLD MID -STANDARD				UNLD MID -STANDARD				
ILL,IND,KY	29,900	PIPELINE		REGION 8	140,620	PIPELINE		
LOW ATLAN	110,720	LOCAL DIST.						
SUBTOTAL:	140,620			SUBTOTAL:	140,620			
UNLD MID -CO NON A				UNLD MID -CO NON A				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
UNLD PRM -STANDARD				UNLD PRM -STANDARD				
ILL,IND,KY	35,880	PIPELINE		REGION 8	190,473	PIPELINE		
LOW ATLAN	154,594	LOCAL DIST.						
SUBTOTAL:	190,474			SUBTOTAL:	190,474			
UNLD PRM -CO NON A				UNLD PRM -CO NON A				
CENT ATLAN	9,000	PIPELINE		REGION 8	9,000	PIPELINE		
UNLD PRM-CO/OZ NON				UNLD PRM-CO/OZ NON				
CENT ATLAN	116,000	PIPELINE		REGION 8	116,000	PIPELINE		
UNLD PRM -H/C CO				UNLD PRM -H/C CO				
ILL,IND,KY	3,519	PIPELINE		REGION 8	12,015	PIPELINE		
LOW ATLAN	8,496	LOCAL DIST.						
SUBTOTAL:	12,015			SUBTOTAL:	12,015			
UNLD PRM -OZ NON A				UNLD PRM -OZ NON A				
CENT ATLAN	79,000	PIPELINE		REGION 8	79,000	PIPELINE		

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	135,146	PIPELINE		REGION 8	256,921	PIPELINE		
ILL,IND,KY	8,970	PIPELINE						
LOW ATLAN	112,805	LOCAL DIST.						
SUBTOTAL:	256,921			SUBTOTAL:	256,921			-0
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	23,920	PIPELINE		REGION 8	201,992	PIPELINE		
LOW ATLAN	178,072	LOCAL DIST.						
SUBTOTAL:	201,992			SUBTOTAL:	201,992			
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	36,000	PIPELINE		REGION 8	77,597	PIPELINE		
ILL,IND,KY	4,485	PIPELINE						
LOW ATLAN	37,112	LOCAL DIST.						
SUBTOTAL:	77,597			SUBTOTAL:	77,597			0
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	133,430	PIPELINE		REGION 8	236,290	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	90,900	LOCAL DIST.						
SUBTOTAL:	236,290			SUBTOTAL:	236,290			
TOTAL:	2,056,522			TOTAL:	2,056,522			

MERCHANT MTBE

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 5	3,486	PIPELINE						
CNTRL PAD5	3,082	35 DWT TANKER AF	0.01					
LOW ATLAN	1,504	35 DWT TANKER AF	0.01					
NEW ENGLND	4,536	35 DWT TANKER AF	0.02					
SOUTH PAD5	49,586	35 DWT TANKER AF	0.18					
SUBTOTAL:	62,195							62,195
TOTAL:	62,195							

CANADA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
UNLD REG -H/C CO								
NEW ENGLND	22,939	35 DWT TANKER FF	0.08					
UNLD MID -STANDARD								
ROCKY MT	3,000	TRUCK 5M gal/1000						
UNLD PRM -STANDARD								
ILL,IND,KY	17,317	PIPELINE						
UNLD PRM -H/C CO								
APPALACH 1	1,852	5000 BBL BARGE	0.37					
ILL,IND,KY	2,683	PIPELINE						
SUBTOTAL:	4,535							4,535
KERO/JET								
APPALACH 1	4,798	5000 BBL BARGE	0.96					
NEW ENGLND	5,205	35 DWT TANKER FF	0.02					
SUBTOTAL:	10,003							10,003
DIESEL- ON HWY								
NEW ENGLND	52,809	35 DWT TANKER FF	0.19					
DIESEL- OFF HWY								
NEW ENGLND	12,000	35 DWT TANKER FF	0.04					
OTH DIESEL/NO2 OIL								
APPALACH 1	202	5000 BBL BARGE	0.04					
TOTAL:	122,805							

CARIBBEAN/VENEZUELA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
UNLD REG -H/C CO								
LOW ATLAN	1,216	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	138,783	35 DWT TANKER FF	0.50					
TOTAL:	139,999							

FOUNDATION CASE F3 (1995) 17. 1. 1

NORTHWEST EUROPE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
KERO/JET							
NEW ENGLND	402	35 DWT TANKER FF	0.00				
OTH DIESEL/NO2 OIL							
NEW ENGLND	19	35 DWT TANKER FF	0.00				
TOTAL:	421						

FOUNDATION CASE F3 (1995) 18. 1. 1

MEDITERRANEAN

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
UNLD REG -STANDARD							
NEW ENGLND	62,433	35 DWT TANKER FF	0.22				
UNLD MID -CO NON A							
NEW ENGLND	8,000	35 DWT TANKER FF	0.03				
UNLD MID-CO/OZ NON							
NEW ENGLND	7,000	35 DWT TANKER FF	0.03				
UNLD MID -OZ NON A							
NEW ENGLND	7,000	35 DWT TANKER FF	0.03				
KERO/JET							
NEW ENGLND	934	35 DWT TANKER FF	0.00				
OTH DIESEL/NO2 OIL							
NEW ENGLND	4,396	35 DWT TANKER FF	0.02				
TOTAL:	89,764						

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
UNLD REG -STANDARD								
NEW ENGLND	31,851	35 DWT TANKER FF	0.11					
SOUTH PAD5	29,341	35 DWT TANKER FF	0.10					
SUBTOTAL:	61,192							61,192
UNLD REG -H/C CO								
NEW ENGLND	14,101	35 DWT TANKER FF	0.05					
UNLD MID -STANDARD								
CNTRL PAD5	12,000	35 DWT TANKER FF	0.04					
NEW ENGLND	26,000	35 DWT TANKER FF	0.09					
SOUTH PAD5	2,100	35 DWT TANKER FF	0.01					
SUBTOTAL:	40,100							40,100
UNLD MID -OZ NON A								
SOUTH PAD5	13,000	35 DWT TANKER FF	0.05					
KERO/JET								
PACIFIC	10,537	35 DWT TANKER FF	0.04					
OTH DIESEL/NO2 OIL								
NEW ENGLND	15,802	35 DWT TANKER FF	0.06					
TOTAL:	154,732							

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
UNLD REG -STANDARD								
PACIFIC NW	24,252	35 DWT TANKER FF	0.09					
KERO/JET								
PACIFIC	2,153	35 DWT TANKER FF	0.01					
TOTAL:	26,405							

FOUNDATION CASE I — 2000

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -H/C REFORMUL				
				CANADA REF	10,762	35 DWT TANKER FF	0.04	
				FAR EAST	27,798	35 DWT TANKER FF	0.10	
				MEDITER	160,245	35 DWT TANKER FF	0.57	
				SUBTOTAL:	198,805			-198,805
				MID -CO-REFORMUL				
				REGION 8	16,000	35 DWT TANKER AF	0.06	
				MID -REFORMULATED				
				REGION 8	11,835	35 DWT TANKER AF	0.04	
				MIDDLE EST	22,165	35 DWT TANKER FF	0.08	
				SUBTOTAL:	34,000			-34,000
				PRM -H/C REFORMUL				
				REGION 8	86,341	35 DWT TANKER AF	0.31	
				MTBE				
				MERC MTBE	31,043	35 DWT TANKER AF	0.11	
				ETHANOL				
				REGION 5	4,810	RAIL 10M gal/500		
				KERO/JET				
				REGION 8	50,371	35 DWT TANKER AF	0.18	
				CANADA REF	3,218	35 DWT TANKER FF	0.01	
				NW EUROPE	387	35 DWT TANKER FF	0.00	
				MEDITER	5,024	35 DWT TANKER FF	0.02	
				SUBTOTAL:	59,000			-59,000
				DIESEL- ON HWY				
				CANADA REF	63,000	35 DWT TANKER FF	0.23	
				DIESEL- OFF HWY				
				CANADA REF	14,000	35 DWT TANKER FF	0.05	
				OTH DIESEL/NO2 OIL				
				MEDITER	7,558	35 DWT TANKER FF	0.03	
				CARIB/S.A.	142,442	35 DWT TANKER FF	0.51	
				SUBTOTAL:	150,000			-150,000
				TOTAL:	657,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	247,605	LOCAL DIST.		REGION 2	247,605	LOCAL DIST.		
				TRSHP 8-2	32,395	PIPELINE		
SUBTOTAL:	247,605			SUBTOTAL:	280,000			-32,395
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	207,424	LOCAL DIST.		REGION 2	207,424	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	50,000	LOCAL DIST.		REGION 2	50,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	26,000	PIPELINE		REGION 2	71,000	LOCAL DIST.		
CENT ATLAN	71,000	LOCAL DIST.						
SUBTOTAL:	97,000			SUBTOTAL:	71,000			26,000
PRM -STANDARD UNLD								
APPALACH 1	1,252	PIPELINE						
				PRM -CO-REFORMUL				
				TRSHP 8-2	129,000	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	50,000	PIPELINE		REGION 2	68,197	LOCAL DIST.		
CENT ATLAN	68,197	LOCAL DIST.		TRSHP 8-2	78,803	PIPELINE		
SUBTOTAL:	118,197			SUBTOTAL:	147,000			-28,803
				MTBE				
				MERC MTBE	36,142	35 DWT TANKER AF	0.13	
				ETHANOL				
				REGION 5	16,576	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	12,330	PIPELINE		REGION 2	64,004	LOCAL DIST.		
CENT ATLAN	64,004	LOCAL DIST.		TRSHP 8-2	206,996	PIPELINE		
SUBTOTAL:	76,334			SUBTOTAL:	271,000			-194,666
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	39,437	PIPELINE		REGION 2	165,000	LOCAL DIST.		
CENT ATLAN	165,000	LOCAL DIST.						
SUBTOTAL:	204,437			SUBTOTAL:	165,000			39,437

CENTRAL ATLANTIC

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	10,514	PIPELINE		REGION 2	42,000	LOCAL DIST.		
CENT ATLAN	42,000	LOCAL DIST.						
SUBTOTAL:	52,514			SUBTOTAL:	42,000			10,514
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	34,000	PIPELINE		REGION 2	23,253	LOCAL DIST.		
CENT ATLAN	23,253	LOCAL DIST.		TRSHP 8-2	227,747	PIPELINE		
SUBTOTAL:	57,253			SUBTOTAL:	251,000			-193,747
TOTAL:	1,112,015			TOTAL:	1,666,142			

LOWER ATLANTIC

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	110,080	35 DWT TANKER AF	0.39	
				TRSHP 8-2	239,898	LOCAL DIST.		
				SUBTOTAL:	349,978			-349,978
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	24,968	LOCAL DIST.		REGION 3	24,968	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 8	100,480	35 DWT TANKER AF	0.36	
				TRSHP 8-2	213,520	LOCAL DIST.		
				SUBTOTAL:	314,000			-314,000
				REG -H/C REFORMUL				
				TRSHP 8-2	956	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	34,200	35 DWT TANKER AF	0.12	
				TRSHP 8-2	55,800	LOCAL DIST.		
				SUBTOTAL:	90,000			-90,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	8,000	LOCAL DIST.		REGION 3	8,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	31,280	35 DWT TANKER AF	0.11	
				TRSHP 8-2	60,720	LOCAL DIST.		
				SUBTOTAL:	92,000			-92,000
				PRM -STANDARD UNLD				
				REGION 8	58,480	35 DWT TANKER AF	0.21	
				TRSHP 8-2	79,642	LOCAL DIST.		
				SUBTOTAL:	138,122			-138,122
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	6,107	LOCAL DIST.		REGION 3	6,107	LOCAL DIST.		
				TRSHP 8-2	3,893	LOCAL DIST.		
SUBTOTAL:	6,107			SUBTOTAL:	10,000			-3,893
				PRM -REFORMULATED				
				REGION 8	54,210	35 DWT TANKER AF	0.19	
				TRSHP 8-2	84,790	LOCAL DIST.		
				SUBTOTAL:	139,000			-139,000
				ETHANOL				
				REGION 5	976	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,716	LOCAL DIST.		REGION 3	3,716	LOCAL DIST.		
				REGION 8	56,760	35 DWT TANKER AF	0.20	
				TRSHP 8-2	197,524	LOCAL DIST.		
SUBTOTAL:	3,716			SUBTOTAL:	258,000			-254,284
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	9,217	LOCAL DIST.		REGION 3	9,217	LOCAL DIST.		
				REGION 8	35,000	35 DWT TANKER AF	0.13	
				TRSHP 8-2	205,783	LOCAL DIST.		
SUBTOTAL:	9,217			SUBTOTAL:	250,000			-240,783
DIESEL- OFF HWY				DIESEL- OFF HWY				
LOW ATLAN	4,882	LOCAL DIST.		REGION 3	4,882	LOCAL DIST.		
				REGION 8	8,555	35 DWT TANKER AF	0.03	
				TRSHP 8-2	45,563	LOCAL DIST.		
SUBTOTAL:	4,882			SUBTOTAL:	59,000			-54,118
				OTH DIESEL/NO2 OIL				
				REGION 8	12,535	35 DWT TANKER AF	0.04	
				TRSHP 8-2	96,465	LOCAL DIST.		
				SUBTOTAL:	109,000			-109,000
TOTAL:	56,891			TOTAL:	1,844,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	26,000	LOCAL DIST.		REGION 4	26,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 5	15,000	5000 BBL BARGE	3.00	
				REGION 5	96,000	PIPELINE		
				SUBTOTAL:	111,000			-111,000
				REG -H/C REFORMUL				
				REGION 5	2,778	5000 BBL BARGE	0.56	
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 2	26,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	6,748	LOCAL DIST.		REGION 2	1,252	PIPELINE		
				REGION 4	6,748	LOCAL DIST.		
SUBTOTAL:	6,748			SUBTOTAL:	8,000			-1,252
				PRM -REFORMULATED				
				REGION 2	50,000	PIPELINE		
				PRM -H/C REFORMUL				
				CANADA REF	1,852	5000 BBL BARGE	0.37	
				ETHANOL				
				REGION 5	370	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	9,670	LOCAL DIST.		REGION 2	12,330	PIPELINE		
				REGION 4	9,670	LOCAL DIST.		
SUBTOTAL:	9,670			SUBTOTAL:	22,000			-12,330
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	9,563	LOCAL DIST.		REGION 2	39,437	PIPELINE		
				REGION 4	9,563	LOCAL DIST.		
SUBTOTAL:	9,563			SUBTOTAL:	49,000			-39,437
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	6,486	LOCAL DIST.		REGION 2	10,514	PIPELINE		
				REGION 4	6,486	LOCAL DIST.		
SUBTOTAL:	6,486			SUBTOTAL:	17,000			-10,514

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REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				OTH DIESEL/NO2 OIL				
				REGION 2	34,000	PIPELINE		
				REGION 5	22,000	PIPELINE		
				CANADA REF	5,000	5000 BBL BARGE	1.00	
				SUBTOTAL:	61,000			-61,000
TOTAL:	64,468			TOTAL:	381,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	250,330	LOCAL DIST.		REGION 5	250,330	LOCAL DIST.		
				REGION 8	12,080	5000 BBL BARGE	2.42	
				REGION 8	47,600	PIPELINE		
				TRSHP 8-2	59,800	PIPELINE		
SUBTOTAL:	250,330			SUBTOTAL:	369,810			-119,480
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	550,340	LOCAL DIST.		
APPALACH 1	96,000	PIPELINE		REGION 8	22,440	5000 BBL BARGE	4.49	
ILL,IND,KY	550,340	LOCAL DIST.		TRSHP 8-2	22,220	PIPELINE		
SUBTOTAL:	661,340			SUBTOTAL:	595,000			66,340
REG -H/C REFORMUL				REG -H/C REFORMUL				
APPALACH 1	2,778	5000 BBL BARGE	0.56	REGION 5	24,845	LOCAL DIST.		
ILL,IND,KY	24,845	LOCAL DIST.		REGION 8	1,360	5000 BBL BARGE	0.27	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	27,623			SUBTOTAL:	31,484			-3,861
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	29,450	LOCAL DIST.		REGION 5	29,450	LOCAL DIST.		
				REGION 8	2,200	5000 BBL BARGE	0.44	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	29,450			SUBTOTAL:	55,000			-25,550
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	87,565	LOCAL DIST.		REGION 5	87,565	LOCAL DIST.		
				REGION 8	3,960	5000 BBL BARGE	0.79	
				TRSHP 8-2	7,475	PIPELINE		
SUBTOTAL:	87,565			SUBTOTAL:	99,000			-11,435
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	30,340	LOCAL DIST.		REGION 5	30,340	LOCAL DIST.		
				REGION 7	5,351	PIPELINE		
				REGION 8	2,760	5000 BBL BARGE	0.55	
				REGION 8	11,200	PIPELINE		
				CANADA REF	20,000	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	30,340			SUBTOTAL:	87,590			-57,251

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	95,853	LOCAL DIST.		REGION 5	95,853	LOCAL DIST.		
				REGION 8	4,960	5000 BBL BARGE	0.99	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	13,387	PIPELINE		
SUBTOTAL:	95,853			SUBTOTAL:	131,000			-35,147
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	4,442	LOCAL DIST.		REGION 5	4,442	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,760	PIPELINE		
SUBTOTAL:	4,442			SUBTOTAL:	6,482			-2,040
				MTBE				
				MERC MTBE	60,307	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	370	RAIL 10M gal/500		REGION 5	12,634	RAIL 10M gal/500		
CNTRL PAD5	5,644	RAIL 10M gal/500						
CENT ATLAN	16,576	RAIL 10M gal/500						
ILL,IND,KY	12,634	RAIL 10M gal/500						
LOW ATLAN	976	RAIL 10M gal/500						
MIN,WIS,DK	4,190	RAIL 10M gal/500						
NEW ENGLND	4,810	RAIL 10M gal/500						
OK,KAN,MO	5,300	RAIL 10M gal/500						
PAD III	3,270	RAIL 10M gal/500						
PACIFIC NW	2,608	RAIL 10M gal/500						
ROCKY MT	2,817	RAIL 10M gal/500						
SOUTH PAD5	10,179	RAIL 10M gal/500						
SUBTOTAL:	69,374			SUBTOTAL:	12,634			56,740
KERO/JET				KERO/JET				
ILL,IND,KY	195,395	LOCAL DIST.		REGION 5	195,395	LOCAL DIST.		
				REGION 8	13,140	5000 BBL BARGE	2.63	
				TRSHP 8-2	10,465	PIPELINE		
SUBTOTAL:	195,395			SUBTOTAL:	219,000			-23,605
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	294,865	LOCAL DIST.		REGION 5	294,865	LOCAL DIST.		
				REGION 8	19,720	5000 BBL BARGE	3.94	
				TRSHP 8-2	25,415	PIPELINE		
SUBTOTAL:	294,865			SUBTOTAL:	340,000			-45,135
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	81,420	LOCAL DIST.		REGION 5	81,420	LOCAL DIST.		
				REGION 8	4,600	5000 BBL BARGE	0.92	
				TRSHP 8-2	5,980	PIPELINE		
SUBTOTAL:	81,420			SUBTOTAL:	92,000			-10,580

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	22,000	PIPELINE		REGION 5	135,290	LOCAL DIST.		
ILL,IND,KY	135,290	LOCAL DIST.		REGION 8	7,750	5000 BBL BARGE	1.55	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	157,290			SUBTOTAL:	155,000			2,290
TOTAL:	1,990,513			TOTAL:	2,261,307			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	105,461	LOCAL DIST.		REGION 6	105,461	LOCAL DIST.		
				REGION 7	87,690	PIPELINE		
SUBTOTAL:	105,461			SUBTOTAL:	193,151			-87,690
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	11,969	LOCAL DIST.		REGION 6	11,969	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
SUBTOTAL:	11,969			SUBTOTAL:	28,706			-16,737
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	13,852	LOCAL DIST.		REGION 6	13,852	LOCAL DIST.		
				REGION 9	4,577	PIPELINE		
SUBTOTAL:	13,852			SUBTOTAL:	18,429			-4,577
				REG -H/C REFORMUL				
				REGION 9	26,109	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	5,260	LOCAL DIST.		REGION 6	5,260	LOCAL DIST.		
				REGION 7	4,740	PIPELINE		
SUBTOTAL:	5,260			SUBTOTAL:	10,000			-4,740
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	3,000	LOCAL DIST.		REGION 6	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	15,312	LOCAL DIST.		REGION 6	15,312	LOCAL DIST.		
				REGION 7	8,937	PIPELINE		
SUBTOTAL:	15,312			SUBTOTAL:	24,249			-8,937
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
MIN,WIS,DK	3,704	LOCAL DIST.		REGION 6	3,704	LOCAL DIST.		
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	1,075	LOCAL DIST.		REGION 6	1,075	LOCAL DIST.		
				REGION 9	5,925	PIPELINE		
SUBTOTAL:	1,075			SUBTOTAL:	7,000			-5,925
				MTBE				
				MERC MTBE	3,463	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	4,190	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	19,273	LOCAL DIST.		REGION 6	19,273	LOCAL DIST.		
				REGION 7	12,727	PIPELINE		
SUBTOTAL:	19,273			SUBTOTAL:	32,000			-12,727
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	64,030	LOCAL DIST.		REGION 6	64,030	LOCAL DIST.		
				REGION 7	10,970	PIPELINE		
SUBTOTAL:	64,030			SUBTOTAL:	75,000			-10,970
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	23,040	LOCAL DIST.		REGION 6	23,040	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
SUBTOTAL:	23,040			SUBTOTAL:	42,000			-18,960
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	29,300	LOCAL DIST.		REGION 6	29,300	LOCAL DIST.		
				REGION 7	23,700	PIPELINE		
SUBTOTAL:	29,300			SUBTOTAL:	53,000			-23,700
TOTAL:	297,275			TOTAL:	526,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	87,690	PIPELINE		REGION 7	62,841	LOCAL DIST.		
OK,KAN,MO	62,841	LOCAL DIST.		REGION 8	270,561	PIPELINE		
ROCKY MT	15,993	PIPELINE						
SUBTOTAL:	166,524			SUBTOTAL:	333,402			-166,878
REG -H/C CO NONATT								
MIN,WIS,DK	16,737	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	92,000	LOCAL DIST.		REGION 7	92,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	16,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	10,740			SUBTOTAL:	16,000			-5,260
MID -CO NON ATTAIN								
ROCKY MT	2,210	PIPELINE						
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	11,000	LOCAL DIST.		REGION 7	11,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	5,351	PIPELINE		REGION 7	40,298	LOCAL DIST.		
MIN,WIS,DK	8,937	PIPELINE						
OK,KAN,MO	40,298	LOCAL DIST.						
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	60,586			SUBTOTAL:	40,298			20,288
PRM -H/C CO NONATT								
ROCKY MT	1,547	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	17,000	LOCAL DIST.		REGION 7	17,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	8,784	5000 BBL BARGE	1.76	
				ETHANOL				
				REGION 5	5,300	RAIL 10M gal/500		

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	12,727	PIPELINE		REGION 7	28,977	LOCAL DIST.		
OK,KAN,MO	28,977	LOCAL DIST.		REGION 8	73,023	PIPELINE		
ROCKY MT	2,347	PIPELINE						
SUBTOTAL:	44,052			SUBTOTAL:	102,000			-57,948
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	10,970	PIPELINE		REGION 7	146,000	LOCAL DIST.		
OK,KAN,MO	146,000	LOCAL DIST.						
ROCKY MT	577	PIPELINE						
SUBTOTAL:	157,547			SUBTOTAL:	146,000			11,547
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	18,960	PIPELINE		REGION 7	53,780	LOCAL DIST.		
OK,KAN,MO	53,780	LOCAL DIST.		REGION 8	6,220	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	78,740			SUBTOTAL:	60,000			18,740
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	23,700	PIPELINE		REGION 8	55,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	29,700			SUBTOTAL:	55,000			-25,300
TOTAL:	688,383			TOTAL:	886,784			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	12,080	5000 BBL BARGE	2.42	REGION 8	504,552	LOCAL DIST.		
ILL,IND,KY	47,600	PIPELINE						
LOW ATLAN	110,080	35 DWT TANKER AF	0.39					
OK,KAN,MO	270,561	PIPELINE						
PAD III	504,552	LOCAL DIST.						
ROCKY MT	26,970	PIPELINE						
SOUTH PAD5	15,200	PIPELINE						
TRSHP 8-2	299,698	PIPELINE						
SUBTOTAL:	1,286,741			SUBTOTAL:	504,552			782,189
REG -CO NON ATTAIN								
ROCKY MT	13,950	PIPELINE						
REG -CO-REFORMUL				REG -CO-REFORMUL				
PAD III	7,000	LOCAL DIST.		REGION 8	7,000	LOCAL DIST.		
SOUTH PAD5	15,923	PIPELINE						
SUBTOTAL:	22,923			SUBTOTAL:	7,000			15,923
REG -H/C CO NONATT				REG -H/C CO NONATT				
PAD III	4,630	LOCAL DIST.		REGION 8	4,630	LOCAL DIST.		
SOUTH PAD5	6,709	PIPELINE						
SUBTOTAL:	11,339			SUBTOTAL:	4,630			6,709
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	22,440	5000 BBL BARGE	4.49	REGION 8	247,000	LOCAL DIST.		
LOW ATLAN	100,480	35 DWT TANKER AF	0.36					
PAD III	247,000	LOCAL DIST.						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	268,135	PIPELINE						
SUBTOTAL:	650,405			SUBTOTAL:	247,000			403,405
REG -H/C REFORMUL								
ILL,IND,KY	1,360	5000 BBL BARGE	0.27					
TRSHP 8-2	6,234	PIPELINE						
SUBTOTAL:	7,594							7,594
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	2,200	5000 BBL BARGE	0.44	REGION 8	76,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	34,200	35 DWT TANKER AF	0.12					
OK,KAN,MO	16,000	PIPELINE						
PAD III	76,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	70,750	PIPELINE						
SUBTOTAL:	214,080			SUBTOTAL:	76,000			138,080

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
NEW ENGLND	16,000	35 DWT TANKER AF	0.06					
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	19,725			SUBTOTAL:	1,000			18,725
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	3,960	5000 BBL BARGE	0.79	REGION 8	37,000	LOCAL DIST.		
LOW ATLAN	31,280	35 DWT TANKER AF	0.11					
NEW ENGLND	11,835	35 DWT TANKER AF	0.04					
PAD III	37,000	LOCAL DIST.						
TRSHP 8-2	68,195	PIPELINE						
SUBTOTAL:	152,270			SUBTOTAL:	37,000			115,270
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,760	5000 BBL BARGE	0.55	REGION 8	120,548	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	58,480	35 DWT TANKER AF	0.21					
PAD III	120,548	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	97,582	PIPELINE						
SUBTOTAL:	299,000			SUBTOTAL:	120,548			178,452
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	3,800	PIPELINE						
TRSHP 8-2	132,893	PIPELINE						
SUBTOTAL:	137,693			SUBTOTAL:	1,000			136,693
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	4,960	5000 BBL BARGE	0.99	REGION 8	54,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	54,210	35 DWT TANKER AF	0.19					
PAD III	54,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	176,980	PIPELINE						
SUBTOTAL:	308,850			SUBTOTAL:	54,000			254,850
PRM -H/C REFORMUL								
ILL,IND,KY	280	5000 BBL BARGE	0.06					
NEW ENGLND	86,341	35 DWT TANKER AF	0.31					
TRSHP 8-2	1,760	PIPELINE						
SUBTOTAL:	88,381							88,381
				MTBE				
				MERC MTBE	69,841	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,270	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	13,140	5000 BBL BARGE	2.63	REGION 8	289,000	LOCAL DIST.		
LOW ATLAN	56,760	35 DWT TANKER AF	0.20					
NEW ENGLND	50,371	35 DWT TANKER AF	0.18					
OK,KAN,MO	73,023	PIPELINE						
PAD III	289,000	LOCAL DIST.						
ROCKY MT	15,810	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	414,984	PIPELINE						
SUBTOTAL:	926,388			SUBTOTAL:	289,000			637,388
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	19,720	5000 BBL BARGE	3.94	REGION 8	282,000	LOCAL DIST.		
LOW ATLAN	35,000	35 DWT TANKER AF	0.13					
PAD III	282,000	LOCAL DIST.						
ROCKY MT	8,370	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	231,198	PIPELINE						
SUBTOTAL:	589,588			SUBTOTAL:	282,000			307,588
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	4,600	5000 BBL BARGE	0.92	REGION 8	141,000	LOCAL DIST.		
LOW ATLAN	8,555	35 DWT TANKER AF	0.03					
OK,KAN,MO	6,220	PIPELINE						
PAD III	141,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	5,700	PIPELINE						
TRSHP 8-2	51,543	PIPELINE						
SUBTOTAL:	223,197			SUBTOTAL:	141,000			82,197

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	7,750	5000 BBL BARGE	1.55	REGION 8	231,000	LOCAL DIST.		
LOW ATLAN	12,535	35 DWT TANKER AF	0.04					
OK,KAN,MO	55,000	PIPELINE						
PAD III	231,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	336,172	PIPELINE						
SUBTOTAL:	648,987			SUBTOTAL:	231,000			417,987
TOTAL:	5,609,810			TOTAL:	2,070,841			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	5,360	PIPELINE		REGION 7	15,993	PIPELINE		
ROCKY MT	80,910	LOCAL DIST.		REGION 8	26,970	PIPELINE		
				REGION 9	80,910	LOCAL DIST.		
SUBTOTAL:	86,270			SUBTOTAL:	123,873			-37,603
				REG -CO NON ATTAIN				
				REGION 8	13,950	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	789	PIPELINE		REGION 9	12,084	LOCAL DIST.		
ROCKY MT	12,084	LOCAL DIST.						
SUBTOTAL:	12,873			SUBTOTAL:	12,084			789
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	4,577	PIPELINE		REGION 9	13,000	LOCAL DIST.		
PACIFIC NW	1,673	PIPELINE						
ROCKY MT	13,000	LOCAL DIST.						
SUBTOTAL:	19,250			SUBTOTAL:	13,000			6,250
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	26,109	PIPELINE		REGION 9	8,334	LOCAL DIST.		
PACIFIC NW	8,675	PIPELINE						
ROCKY MT	8,334	LOCAL DIST.						
SUBTOTAL:	43,117			SUBTOTAL:	8,334			34,783
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	2,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	2,420	LOCAL DIST.		
				CANADA REF	3,000	TRUCK 5M gal/1000		
SUBTOTAL:	2,755			SUBTOTAL:	17,000			-14,245
				MID -CO NON ATTAIN				
				REGION 7	2,210	PIPELINE		
				REGION 8	2,790	PIPELINE		
				SUBTOTAL:	5,000			-5,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	2,000	LOCAL DIST.		REGION 9	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	7,747	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	7,747	LOCAL DIST.		
SUBTOTAL:	8,752			SUBTOTAL:	19,327			-10,575
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	335	PIPELINE		REGION 8	2,790	PIPELINE		-2,455
PRM -CO-REFORMUL								
PACIFIC NW	1,340	PIPELINE						
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
ROCKY MT	1,426	LOCAL DIST.		REGION 7	1,547	PIPELINE		
				REGION 9	1,426	LOCAL DIST.		
SUBTOTAL:	1,426			SUBTOTAL:	2,972			-1,547
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	5,925	PIPELINE		REGION 9	3,000	LOCAL DIST.		
PACIFIC NW	2,010	PIPELINE						
ROCKY MT	3,000	LOCAL DIST.						
SUBTOTAL:	10,935			SUBTOTAL:	3,000			7,935
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ROCKY MT	1,852	LOCAL DIST.		REGION 9	1,852	LOCAL DIST.		
				ETHANOL				
				REGION 5	2,817	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	7,705	PIPELINE		REGION 7	2,347	PIPELINE		
ROCKY MT	44,843	LOCAL DIST.		REGION 8	15,810	PIPELINE		
				REGION 9	44,843	LOCAL DIST.		
SUBTOTAL:	52,548			SUBTOTAL:	63,000			-10,452
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	3,350	PIPELINE		REGION 7	577	PIPELINE		
ROCKY MT	49,053	LOCAL DIST.		REGION 8	8,370	PIPELINE		
				REGION 9	49,053	LOCAL DIST.		
SUBTOTAL:	52,403			SUBTOTAL:	58,000			-5,597
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	1,675	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	28,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	28,420	LOCAL DIST.		
SUBTOTAL:	30,095			SUBTOTAL:	40,000			-9,905

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,680	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	23,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	23,420	LOCAL DIST.		
SUBTOTAL:	26,100			SUBTOTAL:	35,000			-8,900
TOTAL:	354,721			TOTAL:	426,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	78,440	LOCAL DIST.		REGION 9	5,360	PIPELINE		
				REGION 10	78,440	LOCAL DIST.		
SUBTOTAL:	78,440			SUBTOTAL:	83,800			-5,360
				REG -CO NON ATTAIN				
				REGION 11	7,148	35 DWT TANKER AF	0.03	
				REG -CO-REFORMUL				
				REGION 11	12,315	35 DWT TANKER AF	0.04	
				REG -H/C CO NONATT				
				REGION 9	789	PIPELINE		
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	57,327	LOCAL DIST.		REGION 9	1,673	PIPELINE		
				REGION 10	57,327	LOCAL DIST.		
SUBTOTAL:	57,327			SUBTOTAL:	59,000			-1,673
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	20,665	LOCAL DIST.		REGION 9	8,675	PIPELINE		
				REGION 10	20,665	LOCAL DIST.		
SUBTOTAL:	20,665			SUBTOTAL:	29,340			-8,675
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	3,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	3,665	LOCAL DIST.		
SUBTOTAL:	3,665			SUBTOTAL:	4,000			-335
				MID -CO NON ATTAIN				
				REGION 11	1,000	35 DWT TANKER AF	0.00	
				MID -CO-REFORMUL				
				REGION 11	2,000	35 DWT TANKER AF	0.01	
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	2,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	2,330	LOCAL DIST.		
SUBTOTAL:	2,330			SUBTOTAL:	3,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	13,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	13,995	LOCAL DIST.		
SUBTOTAL:	13,995			SUBTOTAL:	15,000			-1,005

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -CO NON ATTAIN				
				REGION 9	335	PIPELINE		
				REGION 11	665	35 DWT TANKER AF	0.00	
				SUBTOTAL:	1,000			-1,000
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PACIFIC NW	1,126	LOCAL DIST.		REGION 9	1,340	PIPELINE		
				REGION 11	5,534	35 DWT TANKER AF	0.02	
				REGION 10	1,126	LOCAL DIST.		
SUBTOTAL:	1,126			SUBTOTAL:	8,000			-6,874
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	8,990	LOCAL DIST.		REGION 9	2,010	PIPELINE		
				REGION 10	8,990	LOCAL DIST.		
SUBTOTAL:	8,990			SUBTOTAL:	11,000			-2,010
				MTBE				
				CANADA W.	6,608	35 DWT TANKER FF	0.02	
				ETHANOL				
				REGION 5	2,608	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	5,645	35 DWT TANKER AF	0.02	REGION 9	7,705	PIPELINE		
PACIFIC NW	68,295	LOCAL DIST.		REGION 10	68,295	LOCAL DIST.		
SOUTH PAD5	11,923	35 DWT TANKER AF	0.04					
SUBTOTAL:	85,863			SUBTOTAL:	76,000			9,863
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	50,650	LOCAL DIST.		REGION 9	3,350	PIPELINE		
				REGION 10	50,650	LOCAL DIST.		
SUBTOTAL:	50,650			SUBTOTAL:	54,000			-3,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	23,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	23,325	LOCAL DIST.		
SUBTOTAL:	23,325			SUBTOTAL:	25,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	11,797	LOCAL DIST.		REGION 9	2,680	PIPELINE		
				REGION 11	2,469	35 DWT TANKER AF	0.01	
				MIDDLE EST	20,054	35 DWT TANKER FF	0.07	
				REGION 10	11,797	LOCAL DIST.		
SUBTOTAL:	11,797			SUBTOTAL:	37,000			-25,203
TOTAL:	358,174			TOTAL:	438,608			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	6,000	LOCAL DIST.		REGION 11	6,000	LOCAL DIST.		
REG -CO NON ATTAIN								
PACIFIC NW	7,148	35 DWT TANKER AF	0.03					
REG -CO-REFORMUL								
PACIFIC NW	12,315	35 DWT TANKER AF	0.04					
REG -REFORMULATED				REG -REFORMULATED				
CNTRL PAD5	28,261	LOCAL DIST.		REGION 11	28,261	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	195,747	LOCAL DIST.		REGION 11	195,747	LOCAL DIST.		
MID -CO NON ATTAIN								
PACIFIC NW	1,000	35 DWT TANKER AF	0.00					
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
PACIFIC NW	2,000	35 DWT TANKER AF	0.01					
SUBTOTAL:	11,000			SUBTOTAL:	9,000			2,000
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	13,000	LOCAL DIST.		REGION 11	13,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -CO NON ATTAIN								
PACIFIC NW	665	35 DWT TANKER AF	0.00					
PRM -CO-REFORMUL								
PACIFIC NW	5,534	35 DWT TANKER AF	0.02					
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	71,080	LOCAL DIST.		REGION 11	71,080	LOCAL DIST.		

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				MTBE				
				CARIB/S.A.	7,327	35 DWT TANKER FF	0.03	
				CANADA W.	13,941	35 DWT TANKER FF	0.05	
				SUBTOTAL:	21,267			-21,267
				ETHANOL				
				REGION 5	5,644	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	114,355	LOCAL DIST.		REGION 11	114,355	LOCAL DIST.		
				REGION 10	5,645	35 DWT TANKER AF	0.02	
SUBTOTAL:	114,355			SUBTOTAL:	120,000			-5,645
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	66,000	LOCAL DIST.		REGION 11	66,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	28,000	LOCAL DIST.		REGION 11	28,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	17,000	LOCAL DIST.		REGION 11	17,000	LOCAL DIST.		
PACIFIC NW	2,469	35 DWT TANKER AF	0.01					
SUBTOTAL:	19,469			SUBTOTAL:	17,000			2,469
TOTAL:	580,575			TOTAL:	582,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	46	LOCAL DIST.		REGION 8	15,200	PIPELINE		
				MIDDLE EST	18,455	35 DWT TANKER FF	0.07	
				REGION 13	1,200	35 DWT TANKER AF	0.00	
				REGION 12	46	LOCAL DIST.		
SUBTOTAL:	46			SUBTOTAL:	34,900			-34,854
				REG -CO-REFORMUL				
				REGION 8	15,923	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	15,031	LOCAL DIST.		REGION 8	6,709	PIPELINE		
				REGION 12	15,031	LOCAL DIST.		
SUBTOTAL:	15,031			SUBTOTAL:	21,740			-6,709
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	34,120	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	34,120	LOCAL DIST.		
SUBTOTAL:	34,120			SUBTOTAL:	46,470			-12,350
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	334,855	LOCAL DIST.		REGION 12	334,855	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	950	PIPELINE		
				MIDDLE EST	2,050	35 DWT TANKER FF	0.01	
				SUBTOTAL:	3,000			-3,000
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	19,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	19,050	LOCAL DIST.		
SUBTOTAL:	19,050			SUBTOTAL:	20,000			-950
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	16,000	LOCAL DIST.		REGION 12	16,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	4,150	LOCAL DIST.		REGION 8	2,850	PIPELINE		
				REGION 12	4,150	LOCAL DIST.		
SUBTOTAL:	4,150			SUBTOTAL:	7,000			-2,850
				PRM -CO-REFORMUL				
				REGION 8	3,800	PIPELINE		

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	2,436	LOCAL DIST.		REGION 8	1,118	PIPELINE		
				REGION 12	2,436	LOCAL DIST.		
SUBTOTAL:	2,436			SUBTOTAL:	3,554			-1,118
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	115,772	LOCAL DIST.		REGION 12	115,772	LOCAL DIST.		
				MTBE				
				CARIB/S.A.	6,387	35 DWT TANKER FF	0.02	
				MERC MTBE	31,521	35 DWT TANKER AF	0.11	
				SUBTOTAL:	37,908			-37,908
				ETHANOL				
				REGION 5	10,179	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	182,671	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 10	11,923	35 DWT TANKER AF	0.04	
				REGION 12	182,671	LOCAL DIST.		
				CARIB/S.A.	7,105	35 DWT TANKER FF	0.03	
SUBTOTAL:	182,671			SUBTOTAL:	215,000			-32,329
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	118,700	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 12	118,700	LOCAL DIST.		
SUBTOTAL:	118,700			SUBTOTAL:	132,000			-13,300
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	50,300	LOCAL DIST.		REGION 8	5,700	PIPELINE		
				REGION 12	50,300	LOCAL DIST.		
SUBTOTAL:	50,300			SUBTOTAL:	56,000			-5,700
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	27,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	27,050	LOCAL DIST.		
SUBTOTAL:	27,050			SUBTOTAL:	28,000			-950
TOTAL:	921,180			TOTAL:	1,105,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	23,000	LOCAL DIST.		REGION 13	23,000	LOCAL DIST.		
SOUTH PAD5	1,200	35 DWT TANKER AF	0.00					
SUBTOTAL:	24,200			SUBTOTAL:	23,000			1,200
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	2,549	LOCAL DIST.		REGION 13	2,549	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.		
				MTBE				
				CANADA W.	451	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	71,250	LOCAL DIST.		FAR EAST	10,370	35 DWT TANKER FF	0.04	
				MIDDLE EST	8,734	35 DWT TANKER FF	0.03	
				REGION 13	71,250	LOCAL DIST.		
				CARIB/S.A.	646	35 DWT TANKER FF	0.00	
				CANADA W.	2,000	35 DWT TANKER FF	0.01	
SUBTOTAL:	71,250			SUBTOTAL:	93,000			-21,750
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	14,000	LOCAL DIST.		REGION 13	14,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	7,000	LOCAL DIST.		REGION 13	7,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	18,000	LOCAL DIST.		FAR EAST	8,154	35 DWT TANKER FF	0.03	
				MIDDLE EST	7,846	35 DWT TANKER FF	0.03	
				REGION 13	18,000	LOCAL DIST.		
SUBTOTAL:	18,000			SUBTOTAL:	34,000			-16,000
TOTAL:	149,999			TOTAL:	187,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	59,800	PIPELINE		REGION 8	299,698	PIPELINE		
LOW ATLAN	239,898	LOCAL DIST.						
SUBTOTAL:	299,698			SUBTOTAL:	299,698			-0
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	32,395	PIPELINE		REGION 8	268,135	PIPELINE		
ILL,IND,KY	22,220	PIPELINE						
LOW ATLAN	213,520	LOCAL DIST.						
SUBTOTAL:	268,135			SUBTOTAL:	268,135			0
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	6,234	PIPELINE		
LOW ATLAN	956	LOCAL DIST.						
SUBTOTAL:	6,234			SUBTOTAL:	6,234			0
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	70,750	PIPELINE		
LOW ATLAN	55,800	LOCAL DIST.						
SUBTOTAL:	70,750			SUBTOTAL:	70,750			
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	7,475	PIPELINE		REGION 8	68,195	PIPELINE		
LOW ATLAN	60,720	LOCAL DIST.						
SUBTOTAL:	68,195			SUBTOTAL:	68,195			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	97,582	PIPELINE		
LOW ATLAN	79,642	LOCAL DIST.						
SUBTOTAL:	97,582			SUBTOTAL:	97,582			
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	129,000	PIPELINE		REGION 8	132,893	PIPELINE		
LOW ATLAN	3,893	LOCAL DIST.						
SUBTOTAL:	132,893			SUBTOTAL:	132,893			
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	78,803	PIPELINE		REGION 8	176,980	PIPELINE		
ILL,IND,KY	13,387	PIPELINE						
LOW ATLAN	84,790	LOCAL DIST.						
SUBTOTAL:	176,980			SUBTOTAL:	176,980			-0
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	1,760	PIPELINE		REGION 8	1,760	PIPELINE		

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TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	206,996	PIPELINE		REGION 8	414,984	PIPELINE		
ILL,IND,KY	10,465	PIPELINE						
LOW ATLAN	197,524	LOCAL DIST.						
SUBTOTAL:	414,984			SUBTOTAL:	414,984			
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	25,415	PIPELINE		REGION 8	231,198	PIPELINE		
LOW ATLAN	205,783	LOCAL DIST.						
SUBTOTAL:	231,198			SUBTOTAL:	231,198			
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	5,980	PIPELINE		REGION 8	51,543	PIPELINE		
LOW ATLAN	45,563	LOCAL DIST.						
SUBTOTAL:	51,543			SUBTOTAL:	51,543			0
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	227,747	PIPELINE		REGION 8	336,172	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	96,465	LOCAL DIST.						
SUBTOTAL:	336,172			SUBTOTAL:	336,172			
TOTAL:	2,157,619			TOTAL:	2,157,619			

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MERCHANT MTBE

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 2	36,142	35 DWT TANKER AF	0.13					
REGION 5	60,307	PIPELINE						
REGION 7	8,784	5000 BBL BARGE	1.76					
REGION 8	69,841	LOCAL DIST.						
MIN,WIS,DK	3,463	RAIL 10M gal/500						
NEW ENGLND	31,043	35 DWT TANKER AF	0.11					
SOUTH PAD5	31,521	35 DWT TANKER AF	0.11					
SUBTOTAL:	241,101							241,101
TOTAL:	241,101							

CANADA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	10,762	35 DWT TANKER FF	0.04					
MID -STANDARD UNLD								
ROCKY MT	3,000	TRUCK 5M gal/1000						
PRM -STANDARD UNLD								
ILL,IND,KY	20,000	PIPELINE						
PRM -H/C REFORMUL								
APPALACH 1	1,852	5000 BBL BARGE	0.37					
KERO/JET								
CANADA W.	2,000	LOCAL DIST.						
NEW ENGLND	3,218	35 DWT TANKER FF	0.01					
SUBTOTAL:	5,218							5,218
DIESEL- ON HWY								
NEW ENGLND	63,000	35 DWT TANKER FF	0.23					
DIESEL- OFF HWY								
NEW ENGLND	14,000	35 DWT TANKER FF	0.05					
OTH DIESEL/NO2 OIL								
APPALACH 1	5,000	5000 BBL BARGE	1.00					
TOTAL:	122,832							

CARIBBEAN/VENEZUELA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MTBE								
CNTRL PAD5	7,327	35 DWT TANKER FF	0.03					
SOUTH PAD5	6,387	35 DWT TANKER FF	0.02					
SUBTOTAL:	13,713							13,713
KERO/JET								
PACIFIC	646	35 DWT TANKER FF	0.00					
SOUTH PAD5	7,105	35 DWT TANKER FF	0.03					
SUBTOTAL:	7,751							7,751
OTH DIESEL/NO2 OIL								
NEW ENGLND	142,442	35 DWT TANKER FF	0.51					
TOTAL:	163,907							

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NORTHWEST EUROPE

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
KERO/JET								
NEW ENGLND	387	35 DWT TANKER FF	0.00					
TOTAL:	387							

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MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	160,245	35 DWT TANKER FF	0.57					
KERO/JET								
NEW ENGLND	5,024	35 DWT TANKER FF	0.02					
OTH DIESEL/NO2 OIL								
NEW ENGLND	7,558	35 DWT TANKER FF	0.03					
TOTAL:	172,827							

MIDDLE EAST

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD								
SOUTH PAD5	18,455	35 DWT TANKER FF	0.07					
MID -STANDARD UNLD								
SOUTH PAD5	2,050	35 DWT TANKER FF	0.01					
MID -REFORMULATED								
NEW ENGLND	22,165	35 DWT TANKER FF	0.08					
KERO/JET								
PACIFIC	8,734	35 DWT TANKER FF	0.03					
OTH DIESEL/NO2 OIL								
PACIFIC	7,846	35 DWT TANKER FF	0.03					
PACIFIC NW	20,054	35 DWT TANKER FF	0.07					
SUBTOTAL:	27,900							27,900
TOTAL:	79,303							

FAR EAST

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
NEW ENGLND	27,798	35 DWT TANKER FF	0.10					
KERO/JET								
PACIFIC	10,370	35 DWT TANKER FF	0.04					
OTH DIESEL/NO2 OIL								
PACIFIC	8,154	35 DWT TANKER FF	0.03					
TOTAL:	46,323							

FOUNDATION CASE I — 2000
(ENVIRONMENTAL SENSITIVITY)

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
				NW EUROPE	44,730	35 DWT TANKER FF	0.16	
				FAR EAST	154,076	35 DWT TANKER FF	0.55	
				SUBTOTAL:	198,805			-198,805
MID -CO-REFORMUL								
				CARIB/S.A.	16,000	35 DWT TANKER FF	0.06	
MID -REFORMULATED								
				MIDDLE EST	17,344	35 DWT TANKER FF	0.06	
				CARIB/S.A.	16,656	35 DWT TANKER FF	0.06	
				SUBTOTAL:	34,000			-34,000
PRM -H/C REFORMUL								
				CANADA REF	7,984	35 DWT TANKER FF	0.03	
				NW EUROPE	78,357	35 DWT TANKER FF	0.28	
				SUBTOTAL:	86,342			-86,342
MTBE								
				MERC MTBE	31,043	35 DWT TANKER AF	0.11	
ETHANOL								
				REGION 5	4,810	RAIL 10M gal/500		
KERO/JET								
				CANADA REF	5,218	35 DWT TANKER FF	0.02	
				NW EUROPE	32,095	35 DWT TANKER FF	0.11	
				MEDITER	13,983	35 DWT TANKER FF	0.05	
				CARIB/S.A.	7,705	35 DWT TANKER FF	0.03	
				SUBTOTAL:	59,000			-59,000
DIESEL- ON HWY								
				CANADA REF	63,000	35 DWT TANKER FF	0.23	
DIESEL- OFF HWY								
				CANADA REF	14,000	35 DWT TANKER FF	0.05	
OTH DIESEL/NO2 OIL								
				NW EUROPE	70,179	35 DWT TANKER FF	0.25	
				MEDITER	4,572	35 DWT TANKER FF	0.02	
				CARIB/S.A.	75,249	35 DWT TANKER FF	0.27	
				SUBTOTAL:	150,000			-150,000
				TOTAL:	657,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	104,496	PIPELINE		REGION 2	280,000	LOCAL DIST.		
CENT ATLAN	280,000	LOCAL DIST.						
SUBTOTAL:	384,496			SUBTOTAL:	280,000			104,496
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	45,926	LOCAL DIST.		REGION 2	45,926	LOCAL DIST.		
				FAR EAST	7,227	35 DWT TANKER FF	0.03	
				MEDITER	154,271	35 DWT TANKER FF	0.55	
SUBTOTAL:	45,926			SUBTOTAL:	207,424			-161,498
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	50,000	LOCAL DIST.		REGION 2	50,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	26,000	PIPELINE		REGION 2	71,000	LOCAL DIST.		
CENT ATLAN	71,000	LOCAL DIST.						
SUBTOTAL:	97,000			SUBTOTAL:	71,000			26,000
PRM -STANDARD UNLD								
APPALACH 1	1,252	PIPELINE						
				PRM -CO-REFORMUL				
				TRSHP 8-2	129,000	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	50,000	PIPELINE		REGION 2	54,480	LOCAL DIST.		
CENT ATLAN	54,480	LOCAL DIST.		TRSHP 8-2	92,520	PIPELINE		
SUBTOTAL:	104,480			SUBTOTAL:	147,000			-42,520
				MTBE				
				MERC MTBE	50,566	35 DWT TANKER AF	0.18	
				ETHANOL				
				REGION 5	16,576	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	9,699	PIPELINE		REGION 2	147,848	LOCAL DIST.		
CENT ATLAN	147,848	LOCAL DIST.		TRSHP 8-2	123,152	PIPELINE		
SUBTOTAL:	157,547			SUBTOTAL:	271,000			-113,453
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	165,000	LOCAL DIST.		REGION 2	165,000	LOCAL DIST.		

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	39,083	LOCAL DIST.		REGION 2	39,083	LOCAL DIST.		
				TRSHP 8-2	2,917	PIPELINE		
SUBTOTAL:	39,083			SUBTOTAL:	42,000			-2,917
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	81,655	LOCAL DIST.		REGION 2	81,655	LOCAL DIST.		
				CARIB/S.A.	169,345	35 DWT TANKER FF	0.60	
SUBTOTAL:	81,655			SUBTOTAL:	251,000			-169,345
TOTAL:	1,126,438			TOTAL:	1,680,566			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	110,080	35 DWT TANKER AF	0.39	
				TRSHP 8-2	239,898	LOCAL DIST.		
				SUBTOTAL:	349,978			-349,978
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	12,208	LOCAL DIST.		REGION 3	12,208	LOCAL DIST.		
REG -REFORMULATED				REG -REFORMULATED				
LOW ATLAN	9,956	LOCAL DIST.		REGION 3	9,956	LOCAL DIST.		
				REGION 8	100,480	35 DWT TANKER AF	0.36	
				TRSHP 8-2	203,564	LOCAL DIST.		
SUBTOTAL:	9,956			SUBTOTAL:	314,000			-304,044
				REG -H/C REFORMUL				
				CARIB/S.A.	12,772	35 DWT TANKER FF	0.05	
				MID -STANDARD UNLD				
				REGION 8	34,200	35 DWT TANKER AF	0.12	
				TRSHP 8-2	55,800	LOCAL DIST.		
				SUBTOTAL:	90,000			-90,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	8,000	LOCAL DIST.		REGION 3	8,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	31,280	35 DWT TANKER AF	0.11	
				TRSHP 8-2	60,720	LOCAL DIST.		
				SUBTOTAL:	92,000			-92,000
				PRM -STANDARD UNLD				
				REGION 8	58,480	35 DWT TANKER AF	0.21	
				TRSHP 8-2	79,642	LOCAL DIST.		
				SUBTOTAL:	138,122			-138,122
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	10,000	LOCAL DIST.		REGION 3	10,000	LOCAL DIST.		
				PRM -REFORMULATED				
				REGION 8	54,210	35 DWT TANKER AF	0.19	
				TRSHP 8-2	84,790	LOCAL DIST.		
				SUBTOTAL:	139,000			-139,000
				ETHANOL				
				REGION 5	1,921	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,890	LOCAL DIST.		REGION 3	3,890	LOCAL DIST.		
				REGION 8	56,760	35 DWT TANKER AF	0.20	
				TRSHP 8-2	197,350	LOCAL DIST.		
SUBTOTAL:	3,890			SUBTOTAL:	258,000			-254,110
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	9,649	LOCAL DIST.		REGION 3	9,649	LOCAL DIST.		
				REGION 8	35,000	35 DWT TANKER AF	0.13	
				TRSHP 8-2	205,351	LOCAL DIST.		
SUBTOTAL:	9,649			SUBTOTAL:	250,000			-240,351
DIESEL- OFF HWY				DIESEL- OFF HWY				
LOW ATLAN	5,111	LOCAL DIST.		REGION 3	5,111	LOCAL DIST.		
				REGION 8	8,555	35 DWT TANKER AF	0.03	
				TRSHP 8-2	45,334	LOCAL DIST.		
SUBTOTAL:	5,111			SUBTOTAL:	59,000			-53,889
				OTH DIESEL/NO2 OIL				
				REGION 8	12,535	35 DWT TANKER AF	0.04	
				CARIB/S.A.	96,465	35 DWT TANKER FF	0.34	
				SUBTOTAL:	109,000			-109,000
TOTAL:	58,814			TOTAL:	1,844,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	26,000	LOCAL DIST.		REGION 4	26,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 2	104,496	PIPELINE		
				REGION 5	6,504	5000 BBL BARGE	1.30	
				SUBTOTAL:	111,000			-111,000
				REG -H/C REFORMUL				
				CANADA REF	2,778	5000 BBL BARGE	0.56	
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 2	26,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	6,748	LOCAL DIST.		REGION 2	1,252	PIPELINE		
				REGION 4	6,748	LOCAL DIST.		
SUBTOTAL:	6,748			SUBTOTAL:	8,000			-1,252
				PRM -REFORMULATED				
				REGION 2	50,000	PIPELINE		
				PRM -H/C REFORMUL				
				CANADA REF	1,852	5000 BBL BARGE	0.37	
				ETHANOL				
				REGION 5	370	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	10,187	LOCAL DIST.		REGION 2	9,699	PIPELINE		
				REGION 4	10,187	LOCAL DIST.		
				REGION 5	2,115	5000 BBL BARGE	0.42	
SUBTOTAL:	10,187			SUBTOTAL:	22,000			-11,813
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	6,975	LOCAL DIST.		REGION 4	6,975	LOCAL DIST.		
				REGION 5	6,381	5000 BBL BARGE	1.28	
				REGION 5	35,644	PIPELINE		
SUBTOTAL:	6,975			SUBTOTAL:	49,000			-42,025

ENVIRONMENTAL CASE (2000) 4. 2. 1

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	12,000	LOCAL DIST.		REGION 4	12,000	LOCAL DIST.		
				CANADA REF	5,000	5000 BBL BARGE	1.00	
SUBTOTAL:	12,000			SUBTOTAL:	17,000			-5,000
				OTH DIESEL/NO2 OIL				
				REGION 5	61,000	PIPELINE		
TOTAL:	67,910			TOTAL:	381,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	250,330	LOCAL DIST.		REGION 5	250,330	LOCAL DIST.		
				REGION 8	12,080	5000 BBL BARGE	2.42	
				REGION 8	47,600	PIPELINE		
				TRSHP 8-2	59,800	PIPELINE		
SUBTOTAL:	250,330			SUBTOTAL:	369,810			-119,480
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	6,504	5000 BBL BARGE	1.30	REGION 5	550,340	LOCAL DIST.		
ILL,IND,KY	550,340	LOCAL DIST.		REGION 8	22,440	5000 BBL BARGE	4.49	
				TRSHP 8-2	22,220	PIPELINE		
SUBTOTAL:	556,845			SUBTOTAL:	595,000			-38,155
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	24,845	LOCAL DIST.		REGION 5	24,845	LOCAL DIST.		
				REGION 8	1,360	5000 BBL BARGE	0.27	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	24,845			SUBTOTAL:	31,484			-6,639
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	29,450	LOCAL DIST.		REGION 5	29,450	LOCAL DIST.		
				REGION 8	2,200	5000 BBL BARGE	0.44	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	29,450			SUBTOTAL:	55,000			-25,550
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	87,565	LOCAL DIST.		REGION 5	87,565	LOCAL DIST.		
				REGION 8	3,960	5000 BBL BARGE	0.79	
				TRSHP 8-2	7,475	PIPELINE		
SUBTOTAL:	87,565			SUBTOTAL:	99,000			-11,435
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	13,727	LOCAL DIST.		REGION 5	13,727	LOCAL DIST.		
				REGION 7	21,963	PIPELINE		
				REGION 8	2,760	5000 BBL BARGE	0.55	
				REGION 8	11,200	PIPELINE		
				CANADA REF	20,000	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	13,727			SUBTOTAL:	87,590			-73,863

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	95,853	LOCAL DIST.		REGION 5	95,853	LOCAL DIST.		
				REGION 8	4,960	5000 BBL BARGE	0.99	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	13,387	PIPELINE		
SUBTOTAL:	95,853			SUBTOTAL:	131,000			-35,147
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	4,442	LOCAL DIST.		REGION 5	4,442	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,760	PIPELINE		
SUBTOTAL:	4,442			SUBTOTAL:	6,482			-2,040
				MTBE				
				MERC MTBE	48,071	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	370	RAIL 10M gal/500		REGION 5	12,634	RAIL 10M gal/500		
CNTRL PADS	5,644	RAIL 10M gal/500						
CENT ATLAN	16,576	RAIL 10M gal/500						
ILL,IND,KY	12,634	RAIL 10M gal/500						
LOW ATLAN	1,921	RAIL 10M gal/500						
MIN,WIS,DK	4,190	RAIL 10M gal/500						
NEW ENGLND	4,810	RAIL 10M gal/500						
OK,KAN,MO	5,300	RAIL 10M gal/500						
PAD III	3,270	RAIL 10M gal/500						
PACIFIC NW	3,519	RAIL 10M gal/500						
ROCKY MT	2,974	RAIL 10M gal/500						
SOUTH PADS	8,167	RAIL 10M gal/500						
SUBTOTAL:	69,375			SUBTOTAL:	12,634			56,741
KERO/JET				KERO/JET				
APPALACH 1	2,115	5000 BBL BARGE	0.42	REGION 5	195,395	LOCAL DIST.		
ILL,IND,KY	195,395	LOCAL DIST.		REGION 8	13,140	5000 BBL BARGE	2.63	
				TRSHP 8-2	10,465	PIPELINE		
SUBTOTAL:	197,510			SUBTOTAL:	219,000			-21,490
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	6,381	5000 BBL BARGE	1.28	REGION 5	294,865	LOCAL DIST.		
APPALACH 1	35,644	PIPELINE		REGION 8	19,720	5000 BBL BARGE	3.94	
ILL,IND,KY	294,865	LOCAL DIST.		TRSHP 8-2	25,415	PIPELINE		
SUBTOTAL:	336,890			SUBTOTAL:	340,000			-3,110
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	81,420	LOCAL DIST.		REGION 5	81,420	LOCAL DIST.		
				REGION 8	4,600	5000 BBL BARGE	0.92	
				TRSHP 8-2	5,980	PIPELINE		
SUBTOTAL:	81,420			SUBTOTAL:	92,000			-10,580

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	61,000	PIPELINE		REGION 5	135,290	LOCAL DIST.		
ILL,IND,KY	135,290	LOCAL DIST.		REGION 8	7,750	5000 BBL BARGE	1.55	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	196,290			SUBTOTAL:	155,000			41,290
TOTAL:	1,949,767			TOTAL:	2,249,071			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	105,461	LOCAL DIST.		REGION 6	105,461	LOCAL DIST.		
				REGION 7	87,690	PIPELINE		
SUBTOTAL:	105,461			SUBTOTAL:	193,151			-87,690
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	11,969	LOCAL DIST.		REGION 6	11,969	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
SUBTOTAL:	11,969			SUBTOTAL:	28,706			-16,737
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	13,852	LOCAL DIST.		REGION 6	13,852	LOCAL DIST.		
				REGION 9	5,007	PIPELINE		
SUBTOTAL:	13,852			SUBTOTAL:	18,859			-5,007
				REG -H/C REFORMUL				
				REGION 9	25,729	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	5,260	LOCAL DIST.		REGION 6	5,260	LOCAL DIST.		
				REGION 7	4,740	PIPELINE		
SUBTOTAL:	5,260			SUBTOTAL:	10,000			-4,740
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	3,000	LOCAL DIST.		REGION 6	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	18,102	LOCAL DIST.		REGION 6	18,102	LOCAL DIST.		
				REGION 7	6,147	PIPELINE		
SUBTOTAL:	18,102			SUBTOTAL:	24,249			-6,147
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
MIN,WIS,DK	914	LOCAL DIST.		REGION 6	914	LOCAL DIST.		
				REGION 7	2,790	PIPELINE		
SUBTOTAL:	914			SUBTOTAL:	3,704			-2,790
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	1,075	LOCAL DIST.		REGION 6	1,075	LOCAL DIST.		
				REGION 9	5,925	PIPELINE		
SUBTOTAL:	1,075			SUBTOTAL:	7,000			-5,925
				MTBE				
				MERC MTBE	3,412	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	4,190	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	19,273	LOCAL DIST.		REGION 6	19,273	LOCAL DIST.		
				REGION 7	12,727	PIPELINE		
SUBTOTAL:	19,273			SUBTOTAL:	32,000			-12,727
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	64,030	LOCAL DIST.		REGION 6	64,030	LOCAL DIST.		
				REGION 7	10,970	PIPELINE		
SUBTOTAL:	64,030			SUBTOTAL:	75,000			-10,970
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	23,040	LOCAL DIST.		REGION 6	23,040	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
SUBTOTAL:	23,040			SUBTOTAL:	42,000			-18,960
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	29,300	LOCAL DIST.		REGION 6	29,300	LOCAL DIST.		
				REGION 7	23,700	PIPELINE		
SUBTOTAL:	29,300			SUBTOTAL:	53,000			-23,700
TOTAL:	297,275			TOTAL:	526,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	87,690	PIPELINE		REGION 7	64,611	LOCAL DIST.		
OK,KAN,MO	64,611	LOCAL DIST.		REGION 8	268,790	PIPELINE		
SUBTOTAL:	152,301			SUBTOTAL:	333,402			-181,100
REG -H/C CO NONATT								
MIN,WIS,DK	16,737	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	92,000	LOCAL DIST.		REGION 7	92,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	16,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	10,740			SUBTOTAL:	16,000			-5,260
MID -CO NON ATTAIN								
ROCKY MT	2,210	PIPELINE						
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	11,000	LOCAL DIST.		REGION 7	11,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	21,963	PIPELINE		REGION 7	40,298	LOCAL DIST.		
MIN,WIS,DK	6,147	PIPELINE						
OK,KAN,MO	40,298	LOCAL DIST.						
ROCKY MT	5,156	PIPELINE						
SUBTOTAL:	73,566			SUBTOTAL:	40,298			33,267
PRM -H/C CO NONATT								
MIN,WIS,DK	2,790	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	17,000	LOCAL DIST.		REGION 7	17,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	8,784	5000 BBL BARGE	1.76	
				ETHANOL				
				REGION 5	5,300	RAIL 10M gal/500		

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	12,727	PIPELINE		REGION 7	31,325	LOCAL DIST.		
OK,KAN,MO	31,325	LOCAL DIST.		REGION 8	70,675	PIPELINE		
SUBTOTAL:	44,052			SUBTOTAL:	102,000			-57,948
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	10,970	PIPELINE		REGION 7	146,000	LOCAL DIST.		
OK,KAN,MO	146,000	LOCAL DIST.						
SUBTOTAL:	156,970			SUBTOTAL:	146,000			10,970
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	18,960	PIPELINE		REGION 7	60,000	LOCAL DIST.		
OK,KAN,MO	60,000	LOCAL DIST.						
SUBTOTAL:	78,960			SUBTOTAL:	60,000			18,960
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	23,700	PIPELINE		REGION 7	6,357	LOCAL DIST.		
OK,KAN,MO	6,357	LOCAL DIST.		REGION 8	48,643	PIPELINE		
SUBTOTAL:	30,057			SUBTOTAL:	55,000			-24,943
TOTAL:	688,383			TOTAL:	886,784			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	12,080	5000 BBL BARGE	2.42	REGION 8	504,552	LOCAL DIST.		
ILL,IND,KY	47,600	PIPELINE						
LOW ATLAN	110,080	35 DWT TANKER AF	0.39					
OK,KAN,MO	268,790	PIPELINE						
PAD III	504,552	LOCAL DIST.						
ROCKY MT	26,970	PIPELINE						
SOUTH PAD5	15,200	PIPELINE						
TRSHP 8-2	299,698	PIPELINE						
SUBTOTAL:	1,284,970			SUBTOTAL:	504,552			780,418
REG -CO NON ATTAIN								
ROCKY MT	11,830	PIPELINE						
REG -CO-REFORMUL				REG -CO-REFORMUL				
PAD III	7,000	LOCAL DIST.		REGION 8	7,000	LOCAL DIST.		
SOUTH PAD5	15,923	PIPELINE						
SUBTOTAL:	22,923			SUBTOTAL:	7,000			15,923
REG -H/C CO NONATT				REG -H/C CO NONATT				
PAD III	4,630	LOCAL DIST.		REGION 8	4,630	LOCAL DIST.		
ROCKY MT	2,496	PIPELINE						
SOUTH PAD5	6,709	PIPELINE						
SUBTOTAL:	13,835			SUBTOTAL:	4,630			9,205
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	22,440	5000 BBL BARGE	4.49	REGION 8	247,000	LOCAL DIST.		
LOW ATLAN	100,480	35 DWT TANKER AF	0.36					
PAD III	247,000	LOCAL DIST.						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	225,784	PIPELINE						
SUBTOTAL:	608,054			SUBTOTAL:	247,000			361,054
REG -H/C REFORMUL								
ILL,IND,KY	1,360	5000 BBL BARGE	0.27					
TRSHP 8-2	5,279	PIPELINE						
SUBTOTAL:	6,639							6,639
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	2,200	5000 BBL BARGE	0.44	REGION 8	76,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	34,200	35 DWT TANKER AF	0.12					
OK,KAN,MO	16,000	PIPELINE						
PAD III	76,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	70,750	PIPELINE						
SUBTOTAL:	214,080			SUBTOTAL:	76,000			138,080

PAD DISTRICT III

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	3,725			SUBTOTAL:	1,000			2,725
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	3,960	5000 BBL BARGE	0.79	REGION 8	37,000	LOCAL DIST.		
LOW ATLAN	31,280	35 DWT TANKER AF	0.11					
PAD III	37,000	LOCAL DIST.						
TRSHP 8-2	68,195	PIPELINE						
SUBTOTAL:	140,435			SUBTOTAL:	37,000			103,435
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,760	5000 BBL BARGE	0.55	REGION 8	120,548	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	58,480	35 DWT TANKER AF	0.21					
PAD III	120,548	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	97,582	PIPELINE						
SUBTOTAL:	299,000			SUBTOTAL:	120,548			178,452
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	3,800	PIPELINE						
TRSHP 8-2	129,000	PIPELINE						
SUBTOTAL:	133,800			SUBTOTAL:	1,000			132,800
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	4,960	5000 BBL BARGE	0.99	REGION 8	54,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	54,210	35 DWT TANKER AF	0.19					
PAD III	54,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	190,697	PIPELINE						
SUBTOTAL:	322,567			SUBTOTAL:	54,000			268,567

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL								
ILL,IND,KY	280	5000 BBL BARGE	0.06					
TRSHP 8-2	1,760	PIPELINE						
SUBTOTAL:	2,040							2,040
				MTBE				
				MERC MTBE	61,791	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,270	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	13,140	5000 BBL BARGE	2.63	REGION 8	289,000	LOCAL DIST.		
LOW ATLAN	56,760	35 DWT TANKER AF	0.20					
OK,KAN,MO	70,675	PIPELINE						
PAD III	289,000	LOCAL DIST.						
ROCKY MT	15,435	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	330,967	PIPELINE						
SUBTOTAL:	789,277			SUBTOTAL:	289,000			500,277
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	19,720	5000 BBL BARGE	3.94	REGION 8	282,000	LOCAL DIST.		
LOW ATLAN	35,000	35 DWT TANKER AF	0.13					
PAD III	282,000	LOCAL DIST.						
ROCKY MT	8,370	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	230,766	PIPELINE						
SUBTOTAL:	589,156			SUBTOTAL:	282,000			307,156
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	4,600	5000 BBL BARGE	0.92	REGION 8	141,000	LOCAL DIST.		
LOW ATLAN	8,555	35 DWT TANKER AF	0.03					
PAD III	141,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	5,700	PIPELINE						
TRSHP 8-2	54,231	PIPELINE						
SUBTOTAL:	219,666			SUBTOTAL:	141,000			78,666
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	7,750	5000 BBL BARGE	1.55	REGION 8	231,000	LOCAL DIST.		
LOW ATLAN	12,535	35 DWT TANKER AF	0.04					
OK,KAN,MO	48,643	PIPELINE						
PAD III	231,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	11,960	PIPELINE						
SUBTOTAL:	318,418			SUBTOTAL:	231,000			87,418
TOTAL:	4,989,111			TOTAL:	2,062,791			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	5,360	PIPELINE		REGION 8	26,970	PIPELINE		
ROCKY MT	96,903	LOCAL DIST.		REGION 9	96,903	LOCAL DIST.		
SUBTOTAL:	102,263			SUBTOTAL:	123,873			-21,610
				REG -CO NON ATTAIN				
				REGION 8	11,830	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	789	PIPELINE		REGION 8	2,496	PIPELINE		
ROCKY MT	11,552	LOCAL DIST.		REGION 9	11,552	LOCAL DIST.		
SUBTOTAL:	12,341			SUBTOTAL:	14,048			-1,707
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	5,007	PIPELINE		REGION 9	13,000	LOCAL DIST.		
PACIFIC NW	1,673	PIPELINE						
ROCKY MT	13,000	LOCAL DIST.						
SUBTOTAL:	19,680			SUBTOTAL:	13,000			6,680
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	25,729	PIPELINE		REGION 9	8,334	LOCAL DIST.		
PACIFIC NW	8,675	PIPELINE						
ROCKY MT	8,334	LOCAL DIST.						
SUBTOTAL:	42,737			SUBTOTAL:	8,334			34,403
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	2,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	2,420	LOCAL DIST.		
				CANADA REF	3,000	TRUCK 5M gal/1000		
SUBTOTAL:	2,755			SUBTOTAL:	17,000			-14,245
				MID -CO NON ATTAIN				
				REGION 7	2,210	PIPELINE		
				REGION 8	2,790	PIPELINE		
				SUBTOTAL:	5,000			-5,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	2,000	LOCAL DIST.		REGION 9	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 7	5,156	PIPELINE		
ROCKY MT	8,590	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	8,590	LOCAL DIST.		
SUBTOTAL:	9,595			SUBTOTAL:	19,327			-9,731

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -CO NON ATTAIN				
				REGION 8	2,790	PIPELINE		
PRM -CO-REFORMUL								
PACIFIC NW	1,340	PIPELINE						
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
PACIFIC NW	394	PIPELINE		REGION 9	2,972	LOCAL DIST.		
ROCKY MT	2,972	LOCAL DIST.						
SUBTOTAL:	3,367			SUBTOTAL:	2,972			394
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	5,925	PIPELINE		REGION 9	3,000	LOCAL DIST.		
PACIFIC NW	2,010	PIPELINE						
ROCKY MT	3,000	LOCAL DIST.						
SUBTOTAL:	10,935			SUBTOTAL:	3,000			7,935
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ROCKY MT	1,852	LOCAL DIST.		REGION 9	1,852	LOCAL DIST.		
				ETHANOL				
				REGION 5	2,974	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	7,705	PIPELINE		REGION 8	15,435	PIPELINE		
ROCKY MT	47,565	LOCAL DIST.		REGION 9	47,565	LOCAL DIST.		
SUBTOTAL:	55,270			SUBTOTAL:	63,000			-7,730
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	3,350	PIPELINE		REGION 8	8,370	PIPELINE		
ROCKY MT	49,630	LOCAL DIST.		REGION 9	49,630	LOCAL DIST.		
SUBTOTAL:	52,980			SUBTOTAL:	58,000			-5,020
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	1,675	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	34,420	LOCAL DIST.		REGION 9	34,420	LOCAL DIST.		
SUBTOTAL:	36,095			SUBTOTAL:	40,000			-3,905
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,680	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	29,420	LOCAL DIST.		REGION 9	29,420	LOCAL DIST.		
SUBTOTAL:	32,100			SUBTOTAL:	35,000			-2,900
TOTAL:	387,981			TOTAL:	426,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	78,440	LOCAL DIST.		REGION 9	5,360	PIPELINE		
				REGION 10	78,440	LOCAL DIST.		
SUBTOTAL:	78,440			SUBTOTAL:	83,800			-5,360
				REG -CO NON ATTAIN				
				REGION 11	7,148	35 DWT TANKER AF	0.03	
				REG -H/C CO NONATT				
				REGION 9	789	PIPELINE		
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	57,327	LOCAL DIST.		REGION 9	1,673	PIPELINE		
				REGION 10	57,327	LOCAL DIST.		
SUBTOTAL:	57,327			SUBTOTAL:	59,000			-1,673
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	19,563	LOCAL DIST.		REGION 9	8,675	PIPELINE		
				FAR EAST	12,506	35 DWT TANKER FF	0.04	
				REGION 10	19,563	LOCAL DIST.		
SUBTOTAL:	19,563			SUBTOTAL:	40,744			-21,181
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	3,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	3,665	LOCAL DIST.		
SUBTOTAL:	3,665			SUBTOTAL:	4,000			-335
				MID -CO NON ATTAIN				
				REGION 11	1,000	35 DWT TANKER AF	0.00	
MID -CO-REFORMUL				MID -CO-REFORMUL				
PACIFIC NW	2,000	LOCAL DIST.		REGION 10	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	2,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	2,330	LOCAL DIST.		
SUBTOTAL:	2,330			SUBTOTAL:	3,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	13,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	13,995	LOCAL DIST.		
SUBTOTAL:	13,995			SUBTOTAL:	15,000			-1,005
				PRM -CO NON ATTAIN				
				REGION 11	536	35 DWT TANKER AF	0.00	

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PACIFIC NW	6,660	LOCAL DIST.		REGION 9	1,340	PIPELINE		
				REGION 10	6,660	LOCAL DIST.		
SUBTOTAL:	6,660			SUBTOTAL:	8,000			-1,340
				PRM -H/C CO NONATT				
				REGION 9	394	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	2,906	LOCAL DIST.		REGION 9	2,010	PIPELINE		
				MIDDLE EST	6,084	35 DWT TANKER FF	0.02	
				REGION 10	2,906	LOCAL DIST.		
SUBTOTAL:	2,906			SUBTOTAL:	11,000			-8,094
				MTBE				
				CANADA W.	7,029	35 DWT TANKER FF	0.03	
				CANADA W.	70	35 DWT TANKER FF	0.00	
				SUBTOTAL:	7,098			-7,098
				ETHANOL				
				REGION 5	3,519	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	13,345	35 DWT TANKER AF	0.05	REGION 9	7,705	PIPELINE		
PACIFIC NW	68,295	LOCAL DIST.		REGION 10	68,295	LOCAL DIST.		
SOUTH PAD5	4,188	35 DWT TANKER AF	0.01					
SUBTOTAL:	85,828			SUBTOTAL:	76,000			9,828
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	50,650	LOCAL DIST.		REGION 9	3,350	PIPELINE		
				REGION 10	50,650	LOCAL DIST.		
SUBTOTAL:	50,650			SUBTOTAL:	54,000			-3,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	23,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	23,325	LOCAL DIST.		
SUBTOTAL:	23,325			SUBTOTAL:	25,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	11,763	LOCAL DIST.		REGION 9	2,680	PIPELINE		
				MIDDLE EST	22,557	35 DWT TANKER FF	0.08	
				REGION 10	11,763	LOCAL DIST.		
SUBTOTAL:	11,763			SUBTOTAL:	37,000			-25,237
TOTAL:	358,453			TOTAL:	439,029			

CENTRAL PAD V

SUPPLY PRODUCT/DESTINATION	B/D	MODE	NUMBER	DEMAND PRODUCT/SOURCE	B/D	MODE	NUMBER	NET
				REG -STANDARD UNLD				
				FAR EAST	6,000	35 DWT TANKER FF	0.02	
REG -CO NON ATTAIN								
PACIFIC NW	7,148	35 DWT TANKER AF	0.03					
REG -REFORMULATED				REG -REFORMULATED				
CNTRL PAD5	53,394	LOCAL DIST.		REGION 11	53,394	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	173,416	LOCAL DIST.		REGION 11	173,416	LOCAL DIST.		
MID -CO NON ATTAIN								
PACIFIC NW	1,000	35 DWT TANKER AF	0.00					
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	7,845	LOCAL DIST.		REGION 11	7,845	LOCAL DIST.		
				MIDDLE EST	5,155	35 DWT TANKER FF	0.02	
SUBTOTAL:	7,845			SUBTOTAL:	13,000			-5,155
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -CO NON ATTAIN								
PACIFIC NW	536	35 DWT TANKER AF	0.00					
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	71,080	LOCAL DIST.		REGION 11	71,080	LOCAL DIST.		
				MTBE				
				CARIB/S.A.	5,015	35 DWT TANKER FF	0.02	
				CANADA W.	13,450	35 DWT TANKER FF	0.05	
				SUBTOTAL:	18,465			-18,465
				ETHANOL				
				REGION 5	5,644	RAIL 10M gal/500		

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CNTRL PAD5	106,655	LOCAL DIST.		REGION 11	106,655	LOCAL DIST.		
				REGION 10	13,345	35 DWT TANKER AF	0.05	
SUBTOTAL:	106,655			SUBTOTAL:	120,000			-13,345
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	66,000	LOCAL DIST.		REGION 11	66,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	28,000	LOCAL DIST.		REGION 11	28,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	17,000	LOCAL DIST.		REGION 11	17,000	LOCAL DIST.		
TOTAL:	542,075			TOTAL:	582,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	15,200	PIPELINE		
				FAR EAST	19,700	35 DWT TANKER FF	0.07	
				SUBTOTAL:	34,900			-34,900
				REG -CO-REFORMUL				
				REGION 8	15,923	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	15,031	LOCAL DIST.		REGION 8	6,709	PIPELINE		
				REGION 12	15,031	LOCAL DIST.		
SUBTOTAL:	15,031			SUBTOTAL:	21,740			-6,709
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	50,120	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	50,120	LOCAL DIST.		
SUBTOTAL:	50,120			SUBTOTAL:	62,470			-12,350
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	318,557	LOCAL DIST.		REGION 12	318,557	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	950	PIPELINE		
				MIDDLE EST	2,050	35 DWT TANKER FF	0.01	
				SUBTOTAL:	3,000			-3,000
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	19,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	19,050	LOCAL DIST.		
SUBTOTAL:	19,050			SUBTOTAL:	20,000			-950
				MID -REFORMULATED				
				MIDDLE EST	16,000	35 DWT TANKER FF	0.06	
				PRM -STANDARD UNLD				
				REGION 8	2,850	PIPELINE		
				MIDDLE EST	2,950	35 DWT TANKER FF	0.01	
				REGION 13	1,200	35 DWT TANKER AF	0.00	
				SUBTOTAL:	7,000			-7,000
				PRM -CO-REFORMUL				
				REGION 8	3,800	PIPELINE		

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	2,436	LOCAL DIST.		REGION 8	1,118	PIPELINE		
				REGION 12	2,436	LOCAL DIST.		
SUBTOTAL:	2,436			SUBTOTAL:	3,554			-1,118
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	115,772	LOCAL DIST.		REGION 12	115,772	LOCAL DIST.		
				MTBE				
				CARIB/S.A.	2,785	35 DWT TANKER FF	0.01	
				MERC MTBE	37,433	35 DWT TANKER AF	0.13	
				SUBTOTAL:	40,218			-40,218
				ETHANOL				
				REGION 5	8,167	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	177,548	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 10	4,188	35 DWT TANKER AF	0.01	
				REGION 12	177,548	LOCAL DIST.		
				CARIB/S.A.	19,964	35 DWT TANKER FF	0.07	
SUBTOTAL:	177,548			SUBTOTAL:	215,000			-37,452
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	118,700	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 12	118,700	LOCAL DIST.		
SUBTOTAL:	118,700			SUBTOTAL:	132,000			-13,300
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	50,300	LOCAL DIST.		REGION 8	5,700	PIPELINE		
				REGION 12	50,300	LOCAL DIST.		
SUBTOTAL:	50,300			SUBTOTAL:	56,000			-5,700
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	27,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	27,050	LOCAL DIST.		
SUBTOTAL:	27,050			SUBTOTAL:	28,000			-950
TOTAL:	895,563			TOTAL:	1,105,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	23,000	LOCAL DIST.		REGION 13	23,000	LOCAL DIST.		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	2,549	LOCAL DIST.		REGION 13	2,549	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.		
SOUTH PAD5	1,200	35 DWT TANKER AF	0.00					
SUBTOTAL:	11,200			SUBTOTAL:	10,000			1,200
				MTBE				
				CANADA W.	451	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	63,491	LOCAL DIST.		FAR EAST	20,172	35 DWT TANKER FF	0.07	
				MIDDLE EST	9,337	35 DWT TANKER FF	0.03	
				REGION 13	63,491	LOCAL DIST.		
SUBTOTAL:	63,491			SUBTOTAL:	93,000			-29,509
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	14,000	LOCAL DIST.		REGION 13	14,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	7,000	LOCAL DIST.		REGION 13	7,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	25,759	LOCAL DIST.		FAR EAST	7,790	35 DWT TANKER FF	0.03	
				MIDDLE EST	451	35 DWT TANKER FF	0.00	
				REGION 13	25,759	LOCAL DIST.		
SUBTOTAL:	25,759			SUBTOTAL:	34,000			-8,241
TOTAL:	149,999			TOTAL:	187,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY PRODUCT/DESTINATION	B/D	MODE	NUMBER	DEMAND PRODUCT/SOURCE	B/D	MODE	NUMBER	NET
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	59,800	PIPELINE		REGION 8	299,698	PIPELINE		
LOW ATLAN	239,898	LOCAL DIST.						
SUBTOTAL:	299,698			SUBTOTAL:	299,698			-0
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	22,220	PIPELINE		REGION 8	225,784	PIPELINE		
LOW ATLAN	203,564	LOCAL DIST.						
SUBTOTAL:	225,784			SUBTOTAL:	225,784			
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	5,279	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	70,750	PIPELINE		
LOW ATLAN	55,800	LOCAL DIST.						
SUBTOTAL:	70,750			SUBTOTAL:	70,750			
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	7,475	PIPELINE		REGION 8	68,195	PIPELINE		
LOW ATLAN	60,720	LOCAL DIST.						
SUBTOTAL:	68,195			SUBTOTAL:	68,195			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	97,582	PIPELINE		
LOW ATLAN	79,642	LOCAL DIST.						
SUBTOTAL:	97,582			SUBTOTAL:	97,582			
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	129,000	PIPELINE		REGION 8	129,000	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	92,520	PIPELINE		REGION 8	190,697	PIPELINE		
ILL,IND,KY	13,387	PIPELINE						
LOW ATLAN	84,790	LOCAL DIST.						
SUBTOTAL:	190,697			SUBTOTAL:	190,697			
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	1,760	PIPELINE		REGION 8	1,760	PIPELINE		
KERO/JET				KERO/JET				
CENT ATLAN	123,152	PIPELINE		REGION 8	330,967	PIPELINE		
ILL,IND,KY	10,465	PIPELINE						
LOW ATLAN	197,350	LOCAL DIST.						
SUBTOTAL:	330,967			SUBTOTAL:	330,967			

ENVIRONMENTAL CASE (2000) 14. 2. 1

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	25,415	PIPELINE		REGION 8	230,766	PIPELINE		
LOW ATLAN	205,351	LOCAL DIST.						
SUBTOTAL:	230,766			SUBTOTAL:	230,766			-0
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	2,917	PIPELINE		REGION 8	54,231	PIPELINE		
ILL,IND,KY	5,980	PIPELINE						
LOW ATLAN	45,334	LOCAL DIST.						
SUBTOTAL:	54,231			SUBTOTAL:	54,231			-0
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	11,960	PIPELINE		REGION 8	11,960	PIPELINE		
TOTAL:	1,718,162			TOTAL:	1,718,162			

ENVIRONMENTAL CASE (2000) 15. 1. 1

MERCHANT MTBE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 2	50,566	35 DWT TANKER AF	0.18					
REGION 5	48,071	PIPELINE						
REGION 7	8,784	5000 BBL BARGE	1.76					
REGION 8	61,791	LOCAL DIST.						
MIN,WIS,DK	3,412	RAIL 10M gal/500						
NEW ENGLND	31,043	35 DWT TANKER AF	0.11					
SOUTH PAD5	37,433	35 DWT TANKER AF	0.13					
SUBTOTAL:	241,101							241,101
TOTAL:	241,101							

ENVIRONMENTAL CASE (2000) 16. 1. 1

CANADA

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
APPALACH 1	2,778	5000 BBL BARGE	0.56					
MID -STANDARD UNLD								
ROCKY MT	3,000	TRUCK 5M gal/1000						
PRM -STANDARD UNLD								
ILL,IND,KY	20,000	PIPELINE						
PRM -H/C REFORMUL								
APPALACH 1	1,852	5000 BBL BARGE	0.37					
NEW ENGLND	7,984	35 DWT TANKER FF	0.03					
SUBTOTAL:	9,836							9,836
KERO/JET								
NEW ENGLND	5,218	35 DWT TANKER FF	0.02					
DIESEL- ON HWY								
NEW ENGLND	63,000	35 DWT TANKER FF	0.23					
DIESEL- OFF HWY								
APPALACH 1	5,000	5000 BBL BARGE	1.00					
NEW ENGLND	14,000	35 DWT TANKER FF	0.05					
SUBTOTAL:	19,000							19,000
TOTAL:	122,832							

CARIBBEAN/VENEZUELA

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
LOW ATLAN	12,772	35 DWT TANKER FF	0.05					
MID -CO-REFORMUL								
NEW ENGLND	16,000	35 DWT TANKER FF	0.06					
MID -REFORMULATED								
NEW ENGLND	16,656	35 DWT TANKER FF	0.06					
MTBE								
CNTRL PAD5	5,015	35 DWT TANKER FF	0.02					
SOUTH PAD5	2,785	35 DWT TANKER FF	0.01					
SUBTOTAL:	7,800							7,800
KERO/JET								
NEW ENGLND	7,705	35 DWT TANKER FF	0.03					
SOUTH PAD5	19,964	35 DWT TANKER FF	0.07					
SUBTOTAL:	27,669							27,669
OTH DIESEL/NO2 OIL								
CENT ATLAN	169,345	35 DWT TANKER FF	0.60					
LOW ATLAN	96,465	35 DWT TANKER FF	0.34					
NEW ENGLND	75,249	35 DWT TANKER FF	0.27					
SUBTOTAL:	341,059							341,059
TOTAL:	421,955							

ENVIRONMENTAL CASE (2000) 17. 1. 1

NORTHWEST EUROPE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
NEW ENGLND	44,730	35 DWT TANKER FF	0.16					
PRM -H/C REFORMUL								
NEW ENGLND	78,357	35 DWT TANKER FF	0.28					
KERO/JET								
NEW ENGLND	32,095	35 DWT TANKER FF	0.11					
OTH DIESEL/NO2 OIL								
NEW ENGLND	70,179	35 DWT TANKER FF	0.25					
TOTAL:	225,360							

ENVIRONMENTAL CASE (2000) 18. 1. 1

MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
CENT ATLAN	154,271	35 DWT TANKER FF	0.55					
KERO/JET								
NEW ENGLND	13,983	35 DWT TANKER FF	0.05					
OTH DIESEL/NO2 OIL								
NEW ENGLND	4,572	35 DWT TANKER FF	0.02					
TOTAL:	172,826							

ENVIRONMENTAL CASE (2000) 19. 1. 1

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MID -STANDARD UNLD								
SOUTH PAD5	2,050	35 DWT TANKER FF	0.01					
MID -REFORMULATED								
CNTRL PAD5	5,155	35 DWT TANKER FF	0.02					
NEW ENGLND	17,344	35 DWT TANKER FF	0.06					
SOUTH PAD5	16,000	35 DWT TANKER FF	0.06					
SUBTOTAL:	38,499							38,499
PRM -STANDARD UNLD								
SOUTH PAD5	2,950	35 DWT TANKER FF	0.01					
PRM -REFORMULATED								
PACIFIC NW	6,084	35 DWT TANKER FF	0.02					
KERO/JET								
PACIFIC	9,337	35 DWT TANKER FF	0.03					
OTH DIESEL/NO2 OIL								
PACIFIC	451	35 DWT TANKER FF	0.00					
PACIFIC NW	22,557	35 DWT TANKER FF	0.08					
SUBTOTAL:	23,008							23,008
TOTAL:	81,928							

FAR EAST

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE / NUMBER	PRODUCT/SOURCE	B/D	MODE / NUMBER	
REG -STANDARD UNLD						
CNTRL PADS	6,000	35 DWT TANKER FF 0.02				
SOUTH PADS	19,700	35 DWT TANKER FF 0.07				
SUBTOTAL:	25,700					25,700
REG -H/C REFORMUL						
CENT ATLAN	7,227	35 DWT TANKER FF 0.03				
NEW ENGLND	154,076	35 DWT TANKER FF 0.55				
PACIFIC NW	12,506	35 DWT TANKER FF 0.04				
SUBTOTAL:	173,808					173,808
KERO/JET						
PACIFIC	20,172	35 DWT TANKER FF 0.07				
OTH DIESEL/NO2 OIL						
PACIFIC	7,790	35 DWT TANKER FF 0.03				
TOTAL:	227,471					

FOUNDATION CASE III — 2000

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -REFORMULATED				
				REGION 8	80,752	35 DWT TANKER AF	0.29	
				REG -H/C REFORMUL				
				CANADA REF	64,835	35 DWT TANKER FF	0.23	
				NW EUROPE	333	35 DWT TANKER FF	0.00	
				MEDITER	26,514	35 DWT TANKER FF	0.09	
				MIDDLE EST	20,602	35 DWT TANKER FF	0.07	
				SUBTOTAL:	112,285			-112,285
				MID -CO-REFORMUL				
				REGION 8	15,000	35 DWT TANKER AF	0.05	
				MID -REFORMULATED				
				REGION 8	31,000	35 DWT TANKER AF	0.11	
				PRM -H/C REFORMUL				
				REGION 8	80,261	35 DWT TANKER AF	0.29	
				MTBE				
				MERC MTBE	19,262	35 DWT TANKER AF	0.07	
				ETHANOL				
				REGION 5	4,440	RAIL 10M gal/500		
				KERO/JET				
				REGION 8	44,976	35 DWT TANKER AF	0.16	
				CANADA REF	701	35 DWT TANKER FF	0.00	
				NW EUROPE	12	35 DWT TANKER FF	0.00	
				MEDITER	310	35 DWT TANKER FF	0.00	
				SUBTOTAL:	46,000			-46,000
				DIESEL- ON HWY				
				REGION 2	14,635	5000 BBL BARGE	2.93	
				CANADA REF	41,365	35 DWT TANKER FF	0.15	
				SUBTOTAL:	56,000			-56,000
				DIESEL- OFF HWY				
				REGION 2	61	5000 BBL BARGE	0.01	
				CANADA REF	10,939	35 DWT TANKER FF	0.04	
				SUBTOTAL:	11,000			-11,000
				OTH DIESEL/NO2 OIL				
				NW EUROPE	43	35 DWT TANKER FF	0.00	
				MEDITER	1,405	35 DWT TANKER FF	0.01	
				CARIB/S.A.	125,552	35 DWT TANKER FF	0.45	
				SUBTOTAL:	127,000			-127,000
				TOTAL:	583,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	260,000	LOCAL DIST.		REGION 2	260,000	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	190,756	LOCAL DIST.		REGION 2	190,756	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	47,000	LOCAL DIST.		REGION 2	47,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	24,000	PIPELINE		REGION 2	65,000	LOCAL DIST.		
CENT ATLAN	65,000	LOCAL DIST.						
SUBTOTAL:	89,000			SUBTOTAL:	65,000			24,000
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
APPALACH 1	176	PIPELINE		TRSHP 8-2	119,000	PIPELINE		-118,824
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	47,000	PIPELINE		REGION 2	70,587	LOCAL DIST.		
CENT ATLAN	70,587	LOCAL DIST.		TRSHP 8-2	66,413	PIPELINE		
SUBTOTAL:	117,587			SUBTOTAL:	137,000			-19,413
PRM -H/C REFORMUL								
APPALACH 1	1,537	PIPELINE						
				MTBE				
				MERC MTBE	36,161	35 DWT TANKER AF	0.13	
				ETHANOL				
				REGION 5	15,244	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	2,570	PIPELINE		REGION 2	69,457	LOCAL DIST.		
CENT ATLAN	69,457	LOCAL DIST.		TRSHP 8-2	140,543	PIPELINE		
SUBTOTAL:	72,027			SUBTOTAL:	210,000			-137,973
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	141,000	LOCAL DIST.		REGION 2	141,000	LOCAL DIST.		
NEW ENGLND	14,635	5000 BBL BARGE	2.93					
SUBTOTAL:	155,635			SUBTOTAL:	141,000			14,635
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	6,716	PIPELINE		TRSHP 8-2	36,000	PIPELINE		
NEW ENGLND	61	5000 BBL BARGE	0.01					
SUBTOTAL:	6,777			SUBTOTAL:	36,000			-29,223

FOUNDATION CASE F3 (2000) 2. 2. 1

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	53,000	PIPELINE		REGION 2	63,759	LOCAL DIST.		
CENT ATLAN	63,759	LOCAL DIST.		TRSHP 8-2	150,241	PIPELINE		
SUBTOTAL:	116,759			SUBTOTAL:	214,000			-97,241
TOTAL:	1,057,254			TOTAL:	1,471,161			

LOWER ATLANTIC

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -STANDARD UNLD				
				REGION 8	101,760	35 DWT TANKER AF	0.36	
				TRSHP 8-2	221,318	LOCAL DIST.		
				SUBTOTAL:	323,078			-323,078
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	23,985	LOCAL DIST.		REGION 3	23,985	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 8	92,800	35 DWT TANKER AF	0.33	
				TRSHP 8-2	197,200	LOCAL DIST.		
				SUBTOTAL:	290,000			-290,000
				REG -H/C REFORMUL				
				TRSHP 8-2	939	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	31,080	35 DWT TANKER AF	0.11	
				TRSHP 8-2	52,920	LOCAL DIST.		
				SUBTOTAL:	84,000			-84,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	7,000	LOCAL DIST.		REGION 3	7,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	28,900	35 DWT TANKER AF	0.10	
				TRSHP 8-2	56,100	LOCAL DIST.		
				SUBTOTAL:	85,000			-85,000
				PRM -STANDARD UNLD				
				REGION 8	54,180	35 DWT TANKER AF	0.19	
				TRSHP 8-2	73,942	LOCAL DIST.		
				SUBTOTAL:	128,122			-128,122
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	5,981	LOCAL DIST.		REGION 3	5,981	LOCAL DIST.		
				TRSHP 8-2	3,019	LOCAL DIST.		
SUBTOTAL:	5,981			SUBTOTAL:	9,000			-3,019
				PRM -REFORMULATED				
				REGION 8	50,310	35 DWT TANKER AF	0.18	
				TRSHP 8-2	78,690	LOCAL DIST.		
				SUBTOTAL:	129,000			-129,000
				ETHANOL				
				REGION 5	875	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,509	LOCAL DIST.		REGION 3	3,509	LOCAL DIST.		
				REGION 8	44,000	35 DWT TANKER AF	0.16	
				TRSHP 8-2	152,491	LOCAL DIST.		
SUBTOTAL:	3,509			SUBTOTAL:	200,000			-196,491
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	8,703	LOCAL DIST.		REGION 3	8,703	LOCAL DIST.		
				REGION 8	29,820	35 DWT TANKER AF	0.11	
				TRSHP 8-2	174,477	LOCAL DIST.		
SUBTOTAL:	8,703			SUBTOTAL:	213,000			-204,297
				DIESEL- OFF HWY				
				REGION 8	7,250	35 DWT TANKER AF	0.03	
				TRSHP 8-2	42,750	LOCAL DIST.		
				SUBTOTAL:	50,000			-50,000
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
LOW ATLAN	4,610	LOCAL DIST.		REGION 3	4,610	LOCAL DIST.		
				REGION 8	10,695	35 DWT TANKER AF	0.04	
				TRSHP 8-2	77,695	LOCAL DIST.		
SUBTOTAL:	4,610			SUBTOTAL:	93,000			-88,390
TOTAL:	53,788			TOTAL:	1,637,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				-- NET --
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	24,000	LOCAL DIST.		REGION 4	24,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 5	15,000	5000 BBL BARGE	3.00	
				REGION 5	87,000	PIPELINE		
				SUBTOTAL:	102,000			-102,000
				REG -H/C REFORMUL				
				REGION 5	2,778	5000 BBL BARGE	0.56	
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 2	24,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				PRM -CO-REFORMUL				
				REGION 2	176	PIPELINE		
				PRM -REFORMULATED				
				REGION 2	47,000	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
APPALACH 1	152	LOCAL DIST.		REGION 2	1,537	PIPELINE		
				REGION 4	152	LOCAL DIST.		
SUBTOTAL:	152			SUBTOTAL:	1,689			-1,537
				ETHANOL				
				REGION 5	357	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	9,430	LOCAL DIST.		REGION 2	2,570	PIPELINE		
				REGION 4	9,430	LOCAL DIST.		
				CANADA REF	5,000	5000 BBL BARGE	1.00	
SUBTOTAL:	9,430			SUBTOTAL:	17,000			-7,570
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	9,000	LOCAL DIST.		REGION 4	9,000	LOCAL DIST.		
				REGION 5	31,000	PIPELINE		
SUBTOTAL:	9,000			SUBTOTAL:	40,000			-31,000

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	8,284	LOCAL DIST.		REGION 2	6,716	PIPELINE		
				REGION 4	8,284	LOCAL DIST.		
SUBTOTAL:	8,284			SUBTOTAL:	15,000			-6,716
				OTH DIESEL/NO2 OIL				
				REGION 2	53,000	PIPELINE		
TOTAL:	62,866			TOTAL:	339,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	220,209	LOCAL DIST.		REGION 5	220,209	LOCAL DIST.		
				REGION 8	11,160	5000 BBL BARGE	2.23	
				REGION 8	47,600	PIPELINE		
				TRSHP 8-2	62,790	PIPELINE		
SUBTOTAL:	220,209			SUBTOTAL:	341,759			-121,550
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	506,525	LOCAL DIST.		
APPALACH 1	87,000	PIPELINE		REGION 8	20,760	5000 BBL BARGE	4.15	
ILL,IND,KY	506,525	LOCAL DIST.		TRSHP 8-2	23,715	PIPELINE		
SUBTOTAL:	608,525			SUBTOTAL:	551,000			57,525
REG -H/C REFORMUL				REG -H/C REFORMUL				
APPALACH 1	2,778	5000 BBL BARGE	0.56	REGION 5	23,073	LOCAL DIST.		
ILL,IND,KY	23,073	LOCAL DIST.		REGION 8	1,280	5000 BBL BARGE	0.26	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	25,851			SUBTOTAL:	29,632			-3,781
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	25,610	LOCAL DIST.		REGION 5	25,610	LOCAL DIST.		
				REGION 8	2,040	5000 BBL BARGE	0.41	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	25,610			SUBTOTAL:	51,000			-25,390
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	4,265	LOCAL DIST.		REGION 5	4,265	LOCAL DIST.		
				REGION 8	240	5000 BBL BARGE	0.05	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	4,265			SUBTOTAL:	6,000			-1,735
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	80,845	LOCAL DIST.		REGION 5	80,845	LOCAL DIST.		
				REGION 8	3,680	5000 BBL BARGE	0.74	
				TRSHP 8-2	7,475	PIPELINE		
SUBTOTAL:	80,845			SUBTOTAL:	92,000			-11,155
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	30,703	LOCAL DIST.		REGION 5	30,703	LOCAL DIST.		
				REGION 7	17,978	PIPELINE		
				REGION 8	2,520	5000 BBL BARGE	0.50	
				REGION 8	11,200	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	30,703			SUBTOTAL:	80,341			-49,638
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	83,263	LOCAL DIST.		REGION 5	83,263	LOCAL DIST.		
				REGION 8	4,560	5000 BBL BARGE	0.91	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	16,377	PIPELINE		
SUBTOTAL:	83,263			SUBTOTAL:	121,000			-37,737

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	4,442	LOCAL DIST.		REGION 5	4,442	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,760	PIPELINE		
SUBTOTAL:	4,442			SUBTOTAL:	6,482			-2,040
				MTBE				
				MERC MTBE	51,717	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	357	RAIL 10M gal/500		REGION 5	11,786	RAIL 10M gal/500		
CNTRL PAD5	5,206	RAIL 10M gal/500						
CENT ATLAN	15,244	RAIL 10M gal/500						
ILL,IND,KY	11,786	RAIL 10M gal/500						
LOW ATLAN	875	RAIL 10M gal/500						
MIN,WIS,DK	3,868	RAIL 10M gal/500						
NEW ENGLND	4,440	RAIL 10M gal/500						
OK,KAN,MO	4,900	RAIL 10M gal/500						
PAD III	3,070	RAIL 10M gal/500						
PACIFIC NW	3,774	RAIL 10M gal/500						
ROCKY MT	3,528	RAIL 10M gal/500						
SOUTH PAD5	12,327	RAIL 10M gal/500						
SUBTOTAL:	69,375			SUBTOTAL:	11,786			57,589
KERO/JET				KERO/JET				
ILL,IND,KY	150,830	LOCAL DIST.		REGION 5	150,830	LOCAL DIST.		
				REGION 8	10,200	5000 BBL BARGE	2.04	
				TRSHP 8-2	8,970	PIPELINE		
SUBTOTAL:	150,830			SUBTOTAL:	170,000			-19,170
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	31,000	PIPELINE		REGION 5	249,260	LOCAL DIST.		
ILL,IND,KY	249,260	LOCAL DIST.		REGION 8	16,820	5000 BBL BARGE	3.36	
				TRSHP 8-2	23,920	PIPELINE		
SUBTOTAL:	280,260			SUBTOTAL:	290,000			-9,740
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	69,615	LOCAL DIST.		REGION 5	69,615	LOCAL DIST.		
				REGION 8	3,900	5000 BBL BARGE	0.78	
				TRSHP 8-2	4,485	PIPELINE		
SUBTOTAL:	69,615			SUBTOTAL:	78,000			-8,385
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	113,440	LOCAL DIST.		REGION 5	113,440	LOCAL DIST.		
				REGION 8	6,600	5000 BBL BARGE	1.32	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	113,440			SUBTOTAL:	132,000			-18,560
TOTAL:	1,767,235			TOTAL:	2,012,717			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	86,821	LOCAL DIST.		REGION 6	86,821	LOCAL DIST.		
				REGION 7	92,430	PIPELINE		
SUBTOTAL:	86,821			SUBTOTAL:	179,251			-92,430
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	11,312	LOCAL DIST.		REGION 6	11,312	LOCAL DIST.		
				REGION 7	14,616	PIPELINE		
SUBTOTAL:	11,312			SUBTOTAL:	25,928			-14,616
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	14,927	LOCAL DIST.		REGION 6	14,927	LOCAL DIST.		
				REGION 9	6,116	PIPELINE		
SUBTOTAL:	14,927			SUBTOTAL:	21,043			-6,116
				REG -H/C REFORMUL				
				REGION 9	20,269	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,260	LOCAL DIST.		REGION 6	4,260	LOCAL DIST.		
				REGION 7	4,740	PIPELINE		
SUBTOTAL:	4,260			SUBTOTAL:	9,000			-4,740
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	3,000	LOCAL DIST.		REGION 6	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	13,449	LOCAL DIST.		REGION 6	13,449	LOCAL DIST.		
				REGION 7	7,800	PIPELINE		
SUBTOTAL:	13,449			SUBTOTAL:	21,249			-7,800
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
MIN,WIS,DK	3,590	LOCAL DIST.		REGION 6	3,590	LOCAL DIST.		
				REGION 7	114	PIPELINE		
SUBTOTAL:	3,590			SUBTOTAL:	3,704			-114
				PRM -REFORMULATED				
				REGION 9	7,000	PIPELINE		
				MTBE				
				MERC MTBE	2,688	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	3,868	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	13,216	LOCAL DIST.		REGION 6	13,216	LOCAL DIST.		
				REGION 7	8,884	PIPELINE		
				REGION 9	2,900	PIPELINE		
SUBTOTAL:	13,216			SUBTOTAL:	25,000			-11,784
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	41,413	LOCAL DIST.		REGION 6	41,413	LOCAL DIST.		
				REGION 7	21,587	PIPELINE		
SUBTOTAL:	41,413			SUBTOTAL:	63,000			-21,587
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	17,040	LOCAL DIST.		REGION 6	17,040	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
SUBTOTAL:	17,040			SUBTOTAL:	36,000			-18,960
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	45,000	LOCAL DIST.		REGION 6	45,000	LOCAL DIST.		
TOTAL:	256,027			TOTAL:	468,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	92,430	PIPELINE		REGION 7	64,447	LOCAL DIST.		
OK,KAN,MO	64,447	LOCAL DIST.		REGION 8	244,355	PIPELINE		
ROCKY MT	1,546	PIPELINE						
SUBTOTAL:	158,422			SUBTOTAL:	308,802			-150,379
REG -H/C CO NONATT								
MIN,WIS,DK	14,616	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	86,000	LOCAL DIST.		REGION 7	86,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	15,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	10,740			SUBTOTAL:	15,000			-4,260
MID -CO NON ATTAIN								
ROCKY MT	2,210	PIPELINE						
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	10,000	LOCAL DIST.		REGION 7	10,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,978	PIPELINE		REGION 7	37,298	LOCAL DIST.		
MIN,WIS,DK	7,800	PIPELINE						
OK,KAN,MO	37,298	LOCAL DIST.						
ROCKY MT	7,000	PIPELINE						
SUBTOTAL:	70,076			SUBTOTAL:	37,298			32,778
PRM -H/C CO NONATT								
MIN,WIS,DK	114	PIPELINE						
ROCKY MT	904	PIPELINE						
SUBTOTAL:	1,018							1,018
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	15,000	LOCAL DIST.		REGION 7	15,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	7,730	5000 BBL BARGE	1.55	
				ETHANOL				
				REGION 5	4,900	RAIL 10M gal/500		

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	8,884	PIPELINE		REGION 7	31,585	LOCAL DIST.		
OK,KAN,MO	31,585	LOCAL DIST.		REGION 8	47,415	PIPELINE		
SUBTOTAL:	40,469			SUBTOTAL:	79,000			-38,531
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	21,587	PIPELINE		REGION 7	125,000	LOCAL DIST.		
OK,KAN,MO	125,000	LOCAL DIST.						
SUBTOTAL:	146,587			SUBTOTAL:	125,000			21,587
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	18,960	PIPELINE		REGION 7	50,179	LOCAL DIST.		
OK,KAN,MO	50,179	LOCAL DIST.		REGION 8	821	PIPELINE		
SUBTOTAL:	69,139			SUBTOTAL:	51,000			18,139
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
OK,KAN,MO	46,000	LOCAL DIST.		REGION 7	46,000	LOCAL DIST.		
TOTAL:	670,279			TOTAL:	785,731			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	11,160	5000 BBL BARGE	2.23	REGION 8	467,652	LOCAL DIST.		
ILL,IND,KY	47,600	PIPELINE						
LOW ATLAN	101,760	35 DWT TANKER AF	0.36					
OK,KAN,MO	244,355	PIPELINE						
PAD III	467,652	LOCAL DIST.						
ROCKY MT	28,830	PIPELINE						
SOUTH PAD5	16,150	PIPELINE						
TRSHP 8-2	284,108	PIPELINE						
SUBTOTAL:	1,201,615			SUBTOTAL:	467,652			733,963
REG -CO-REFORMUL				REG -CO-REFORMUL				
PAD III	6,000	LOCAL DIST.		REGION 8	6,000	LOCAL DIST.		
SOUTH PAD5	16,873	PIPELINE						
SUBTOTAL:	22,873			SUBTOTAL:	6,000			16,873
REG -H/C CO NONATT				REG -H/C CO NONATT				
PAD III	4,630	LOCAL DIST.		REGION 8	4,630	LOCAL DIST.		
ROCKY MT	16,419	PIPELINE						
SOUTH PAD5	6,709	PIPELINE						
SUBTOTAL:	27,759			SUBTOTAL:	4,630			23,129
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	20,760	5000 BBL BARGE	4.15	REGION 8	228,000	LOCAL DIST.		
LOW ATLAN	92,800	35 DWT TANKER AF	0.33					
NEW ENGLND	80,752	35 DWT TANKER AF	0.29					
PAD III	228,000	LOCAL DIST.						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	220,915	PIPELINE						
SUBTOTAL:	655,577			SUBTOTAL:	228,000			427,577
REG -H/C REFORMUL								
ILL,IND,KY	1,280	5000 BBL BARGE	0.26					
TRSHP 8-2	6,218	PIPELINE						
SUBTOTAL:	7,498							7,498
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	2,040	5000 BBL BARGE	0.41	REGION 8	70,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	31,080	35 DWT TANKER AF	0.11					
OK,KAN,MO	15,000	PIPELINE						
PAD III	70,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	67,870	PIPELINE						
SUBTOTAL:	200,920			SUBTOTAL:	70,000			130,920
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	240	5000 BBL BARGE	0.05	REGION 8	1,000	LOCAL DIST.		
NEW ENGLND	15,000	35 DWT TANKER AF	0.05					
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	18,685			SUBTOTAL:	1,000			17,685
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	3,680	5000 BBL BARGE	0.74	REGION 8	34,000	LOCAL DIST.		
LOW ATLAN	28,900	35 DWT TANKER AF	0.10					
NEW ENGLND	31,000	35 DWT TANKER AF	0.11					
PAD III	34,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	63,575	PIPELINE						
SUBTOTAL:	162,105			SUBTOTAL:	34,000			128,105
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,520	5000 BBL BARGE	0.50	REGION 8	111,648	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	54,180	35 DWT TANKER AF	0.19					
PAD III	111,648	LOCAL DIST.						
ROCKY MT	6,510	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	91,882	PIPELINE						
SUBTOTAL:	280,790			SUBTOTAL:	111,648			169,142
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	3,800	PIPELINE						
TRSHP 8-2	122,019	PIPELINE						
SUBTOTAL:	126,819			SUBTOTAL:	1,000			125,819
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	4,560	5000 BBL BARGE	0.91	REGION 8	50,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	50,310	35 DWT TANKER AF	0.18					
PAD III	50,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	161,479	PIPELINE						
SUBTOTAL:	285,049			SUBTOTAL:	50,000			235,049

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL								
ILL,IND,KY	280	5000 BBL BARGE	0.06					
NEW ENGLND	80,261	35 DWT TANKER AF	0.29					
TRSHP 8-2	1,760	PIPELINE						
SUBTOTAL:	82,301							82,301
				MTBE				
				MERC MTBE	64,914	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,070	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	10,200	5000 BBL BARGE	2.04	REGION 8	224,000	LOCAL DIST.		
LOW ATLAN	44,000	35 DWT TANKER AF	0.16					
NEW ENGLND	44,976	35 DWT TANKER AF	0.16					
OK,KAN,MO	47,415	PIPELINE						
PAD III	224,000	LOCAL DIST.						
ROCKY MT	13,324	PIPELINE						
SOUTH PAD5	11,400	PIPELINE						
TRSHP 8-2	302,004	PIPELINE						
SUBTOTAL:	697,319			SUBTOTAL:	224,000			473,319
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	16,820	5000 BBL BARGE	3.36	REGION 8	239,000	LOCAL DIST.		
LOW ATLAN	29,820	35 DWT TANKER AF	0.11					
PAD III	239,000	LOCAL DIST.						
ROCKY MT	8,370	PIPELINE						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	198,397	PIPELINE						
SUBTOTAL:	504,757			SUBTOTAL:	239,000			265,757
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	3,900	5000 BBL BARGE	0.78	REGION 8	120,000	LOCAL DIST.		
LOW ATLAN	7,250	35 DWT TANKER AF	0.03					
OK,KAN,MO	821	PIPELINE						
PAD III	120,000	LOCAL DIST.						
ROCKY MT	2,807	PIPELINE						
SOUTH PAD5	5,700	PIPELINE						
TRSHP 8-2	83,235	PIPELINE						
SUBTOTAL:	223,712			SUBTOTAL:	120,000			103,712
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	6,600	5000 BBL BARGE	1.32	REGION 8	198,000	LOCAL DIST.		
LOW ATLAN	10,695	35 DWT TANKER AF	0.04					
PAD III	198,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	239,896	PIPELINE						
SUBTOTAL:	461,721			SUBTOTAL:	198,000			263,721
TOTAL:	4,968,199			TOTAL:	1,824,914			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	5,695	PIPELINE		REGION 7	1,546	PIPELINE		
ROCKY MT	82,598	LOCAL DIST.		REGION 8	28,830	PIPELINE		
				REGION 9	82,598	LOCAL DIST.		
SUBTOTAL:	88,293			SUBTOTAL:	112,973			-24,681
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	789	PIPELINE		REGION 8	16,419	PIPELINE		
ROCKY MT	6,731	LOCAL DIST.		REGION 9	6,731	LOCAL DIST.		
SUBTOTAL:	7,519			SUBTOTAL:	23,150			-15,631
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	6,116	PIPELINE		REGION 9	12,000	LOCAL DIST.		
PACIFIC NW	2,343	PIPELINE						
ROCKY MT	12,000	LOCAL DIST.						
SUBTOTAL:	20,459			SUBTOTAL:	12,000			8,459
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	20,269	PIPELINE		REGION 9	8,334	LOCAL DIST.		
PACIFIC NW	8,675	PIPELINE						
ROCKY MT	8,334	LOCAL DIST.						
SUBTOTAL:	37,277			SUBTOTAL:	8,334			28,943
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	5,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	5,420	LOCAL DIST.		
SUBTOTAL:	5,755			SUBTOTAL:	17,000			-11,245
				MID -CO NON ATTAIN				
				REGION 7	2,210	PIPELINE		
				REGION 8	2,790	PIPELINE		
				SUBTOTAL:	5,000			-5,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	1,000	LOCAL DIST.		REGION 9	1,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 7	7,000	PIPELINE		
ROCKY MT	5,817	LOCAL DIST.		REGION 8	6,510	PIPELINE		
				REGION 9	5,817	LOCAL DIST.		
SUBTOTAL:	6,822			SUBTOTAL:	19,327			-12,505
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	335	PIPELINE		REGION 8	2,790	PIPELINE		-2,455

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO-REFORMUL								
PACIFIC NW	1,340	PIPELINE						
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
ROCKY MT	1,143	LOCAL DIST.		REGION 7	904	PIPELINE		
				REGION 9	1,143	LOCAL DIST.		
SUBTOTAL:	1,143			SUBTOTAL:	2,046			-904
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	7,000	PIPELINE		REGION 9	2,000	LOCAL DIST.		
PACIFIC NW	2,010	PIPELINE						
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	11,010			SUBTOTAL:	2,000			9,010
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ROCKY MT	1,852	LOCAL DIST.		REGION 9	1,852	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,528	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	2,900	PIPELINE		REGION 8	13,324	PIPELINE		
PACIFIC NW	11,722	PIPELINE		REGION 9	35,676	LOCAL DIST.		
ROCKY MT	35,676	LOCAL DIST.						
SUBTOTAL:	50,298			SUBTOTAL:	49,000			1,298
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	3,350	PIPELINE		REGION 8	8,370	PIPELINE		
ROCKY MT	40,630	LOCAL DIST.		REGION 9	40,630	LOCAL DIST.		
SUBTOTAL:	43,980			SUBTOTAL:	49,000			-5,020
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	1,675	PIPELINE		REGION 8	2,807	PIPELINE		
ROCKY MT	31,193	LOCAL DIST.		REGION 9	31,193	LOCAL DIST.		
SUBTOTAL:	32,868			SUBTOTAL:	34,000			-1,132
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,680	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	24,420	LOCAL DIST.		REGION 9	24,420	LOCAL DIST.		
SUBTOTAL:	27,100			SUBTOTAL:	30,000			-2,900
TOTAL:	339,720			TOTAL:	375,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	29,913	LOCAL DIST.		REGION 9	5,695	PIPELINE		
				FAR EAST	1,682	35 DWT TANKER FF	0.01	
				MIDDLE EST	38,511	35 DWT TANKER FF	0.14	
				REGION 10	29,913	LOCAL DIST.		
SUBTOTAL:	29,913			SUBTOTAL:	75,800			-45,887
				REG -CO-REFORMUL				
				REGION 11	1,703	35 DWT TANKER AF	0.01	
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	7,545	LOCAL DIST.		REGION 9	789	PIPELINE		
				REGION 10	7,545	LOCAL DIST.		
SUBTOTAL:	7,545			SUBTOTAL:	8,334			-789
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	52,657	LOCAL DIST.		REGION 9	2,343	PIPELINE		
				REGION 10	52,657	LOCAL DIST.		
SUBTOTAL:	52,657			SUBTOTAL:	55,000			-2,343
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	27,715	LOCAL DIST.		REGION 9	8,675	PIPELINE		
				REGION 10	27,715	LOCAL DIST.		
SUBTOTAL:	27,715			SUBTOTAL:	36,389			-8,675
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	3,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	3,665	LOCAL DIST.		
SUBTOTAL:	3,665			SUBTOTAL:	4,000			-335
MID -CO-REFORMUL				MID -CO-REFORMUL				
PACIFIC NW	1,672	LOCAL DIST.		REGION 11	328	35 DWT TANKER AF	0.00	
				REGION 10	1,672	LOCAL DIST.		
SUBTOTAL:	1,672			SUBTOTAL:	2,000			-328
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	2,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	2,330	LOCAL DIST.		
SUBTOTAL:	2,330			SUBTOTAL:	3,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	12,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	12,995	LOCAL DIST.		
SUBTOTAL:	12,995			SUBTOTAL:	14,000			-1,005
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	665	LOCAL DIST.		
SUBTOTAL:	665			SUBTOTAL:	1,000			-335

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PACIFIC NW	5,660	LOCAL DIST.		REGION 9	1,340	PIPELINE		
				REGION 10	5,660	LOCAL DIST.		
SUBTOTAL:	5,660			SUBTOTAL:	7,000			-1,340
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	7,990	LOCAL DIST.		REGION 9	2,010	PIPELINE		
				REGION 10	7,990	LOCAL DIST.		
SUBTOTAL:	7,990			SUBTOTAL:	10,000			-2,010
				MTBE				
				CANADA W.	6,977	35 DWT TANKER FF	0.02	
				ETHANOL				
				REGION 5	3,774	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	47,278	LOCAL DIST.		REGION 9	11,722	PIPELINE		
				REGION 10	47,278	LOCAL DIST.		
SUBTOTAL:	47,278			SUBTOTAL:	59,000			-11,722
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	41,650	LOCAL DIST.		REGION 9	3,350	PIPELINE		
				REGION 10	41,650	LOCAL DIST.		
SUBTOTAL:	41,650			SUBTOTAL:	45,000			-3,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	19,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	19,325	LOCAL DIST.		
SUBTOTAL:	19,325			SUBTOTAL:	21,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	30,320	LOCAL DIST.		REGION 9	2,680	PIPELINE		
				REGION 10	30,320	LOCAL DIST.		
SUBTOTAL:	30,320			SUBTOTAL:	33,000			-2,680
TOTAL:	291,380			TOTAL:	386,977			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	5,000	LOCAL DIST.		REGION 11	5,000	LOCAL DIST.		
SOUTH PAD5	2,634	35 DWT TANKER AF	0.01					
SUBTOTAL:	7,634			SUBTOTAL:	5,000			2,634
REG -CO NON ATTAIN								
PACIFIC	983	35 DWT TANKER AF	0.00					
REG -CO-REFORMUL								
PACIFIC NW	1,703	35 DWT TANKER AF	0.01					
REG -H/C CO NONATT								
SOUTH PAD5	691	35 DWT TANKER AF	0.00					
REG -REFORMULATED				REG -REFORMULATED				
CNTRL PAD5	55,910	LOCAL DIST.		REGION 11	55,910	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	154,734	LOCAL DIST.		REGION 11	154,734	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
PACIFIC NW	328	35 DWT TANKER AF	0.00					
SUBTOTAL:	9,328			SUBTOTAL:	9,000			328
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	11,000	LOCAL DIST.		REGION 11	11,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	66,637	LOCAL DIST.		REGION 11	66,637	LOCAL DIST.		
				MTBE				
				CANADA W.	13,719	35 DWT TANKER FF	0.05	
				MERC MTBE	2,793	35 DWT TANKER AF	0.01	
				SUBTOTAL:	16,512			-16,512
				ETHANOL				
				REGION 5	5,206	RAIL 10M gal/500		

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CNTRL PAD5	93,000	LOCAL DIST.		REGION 11	93,000	LOCAL DIST.		
PACIFIC	5,955	35 DWT TANKER AF	0.02					
SUBTOTAL:	98,955			SUBTOTAL:	93,000			5,955
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	57,000	LOCAL DIST.		REGION 11	57,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	24,000	LOCAL DIST.		REGION 11	24,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	14,000	LOCAL DIST.		REGION 11	14,000	LOCAL DIST.		
TOTAL:	503,575			TOTAL:	513,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	16,116	LOCAL DIST.		REGION 8	16,150	PIPELINE		
				REGION 11	2,634	35 DWT TANKER AF	0.01	
				REGION 12	16,116	LOCAL DIST.		
SUBTOTAL:	16,116			SUBTOTAL:	34,900			-18,784
				REG -CO-REFORMUL				
				REGION 8	16,873	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	11,504	LOCAL DIST.		REGION 8	6,709	PIPELINE		
				REGION 11	691	35 DWT TANKER AF	0.00	
				REGION 12	11,504	LOCAL DIST.		
SUBTOTAL:	11,504			SUBTOTAL:	18,904			-7,400
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	37,070	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	37,070	LOCAL DIST.		
SUBTOTAL:	37,070			SUBTOTAL:	49,420			-12,350
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	304,462	LOCAL DIST.		REGION 12	304,462	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	950	PIPELINE		
				MIDDLE EST	1,050	35 DWT TANKER FF	0.00	
				SUBTOTAL:	2,000			-2,000
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	18,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	18,050	LOCAL DIST.		
SUBTOTAL:	18,050			SUBTOTAL:	19,000			-950
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	14,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	14,050	LOCAL DIST.		
SUBTOTAL:	14,050			SUBTOTAL:	15,000			-950
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	3,150	LOCAL DIST.		REGION 8	2,850	PIPELINE		
				REGION 12	3,150	LOCAL DIST.		
SUBTOTAL:	3,150			SUBTOTAL:	6,000			-2,850
				PRM -CO-REFORMUL				
				REGION 8	3,800	PIPELINE		

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	2,436	LOCAL DIST.		REGION 8	1,118	PIPELINE		
				REGION 12	2,436	LOCAL DIST.		
SUBTOTAL:	2,436			SUBTOTAL:	3,554			-1,118
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	106,887	LOCAL DIST.		REGION 12	106,887	LOCAL DIST.		
				MTBE				
				MERC MTBE	27,973	35 DWT TANKER AF	0.10	
				ETHANOL				
				REGION 5	12,327	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	154,600	LOCAL DIST.		REGION 8	11,400	PIPELINE		
				REGION 12	154,600	LOCAL DIST.		
SUBTOTAL:	154,600			SUBTOTAL:	166,000			-11,400
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	100,650	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	100,650	LOCAL DIST.		
SUBTOTAL:	100,650			SUBTOTAL:	113,000			-12,350
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	42,300	LOCAL DIST.		REGION 8	5,700	PIPELINE		
				REGION 12	42,300	LOCAL DIST.		
SUBTOTAL:	42,300			SUBTOTAL:	48,000			-5,700
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	22,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	22,050	LOCAL DIST.		
SUBTOTAL:	22,050			SUBTOTAL:	23,000			-950
TOTAL:	834,325			TOTAL:	974,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	22,000	LOCAL DIST.		REGION 13	22,000	LOCAL DIST.		
				REG -CO NON ATTAIN				
				REGION 11	983	35 DWT TANKER AF	0.00	
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	1,714	LOCAL DIST.		REGION 13	1,714	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	2,000	LOCAL DIST.		REGION 13	2,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	9,000	LOCAL DIST.		REGION 13	9,000	LOCAL DIST.		
				MTBE				
				CANADA W.	303	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	59,883	LOCAL DIST.		REGION 11	5,955	35 DWT TANKER AF	0.02	
				FAR EAST	174	35 DWT TANKER FF	0.00	
				MIDDLE EST	5,988	35 DWT TANKER FF	0.02	
				REGION 13	59,883	LOCAL DIST.		
SUBTOTAL:	59,883			SUBTOTAL:	72,000			-12,117
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	12,000	LOCAL DIST.		REGION 13	12,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	6,000	LOCAL DIST.		REGION 13	6,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	18,402	LOCAL DIST.		FAR EAST	36	35 DWT TANKER FF	0.00	
				MIDDLE EST	10,562	35 DWT TANKER FF	0.04	
				REGION 13	18,402	LOCAL DIST.		
SUBTOTAL:	18,402			SUBTOTAL:	29,000			-10,598
TOTAL:	130,999			TOTAL:	155,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	62,790	PIPELINE		REGION 8	284,108	PIPELINE		
LOW ATLAN	221,318	LOCAL DIST.						
SUBTOTAL:	284,108			SUBTOTAL:	284,108			
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	23,715	PIPELINE		REGION 8	220,915	PIPELINE		
LOW ATLAN	197,200	LOCAL DIST.						
SUBTOTAL:	220,915			SUBTOTAL:	220,915			
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	6,218	PIPELINE		
LOW ATLAN	939	LOCAL DIST.						
SUBTOTAL:	6,218			SUBTOTAL:	6,218			0
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	67,870	PIPELINE		
LOW ATLAN	52,920	LOCAL DIST.						
SUBTOTAL:	67,870			SUBTOTAL:	67,870			
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	7,475	PIPELINE		REGION 8	63,575	PIPELINE		
LOW ATLAN	56,100	LOCAL DIST.						
SUBTOTAL:	63,575			SUBTOTAL:	63,575			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	91,882	PIPELINE		
LOW ATLAN	73,942	LOCAL DIST.						
SUBTOTAL:	91,882			SUBTOTAL:	91,882			
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	119,000	PIPELINE		REGION 8	122,019	PIPELINE		
LOW ATLAN	3,019	LOCAL DIST.						
SUBTOTAL:	122,019			SUBTOTAL:	122,019			
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	66,413	PIPELINE		REGION 8	161,479	PIPELINE		
ILL,IND,KY	16,377	PIPELINE						
LOW ATLAN	78,690	LOCAL DIST.						
SUBTOTAL:	161,479			SUBTOTAL:	161,479			
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	1,760	PIPELINE		REGION 8	1,760	PIPELINE		

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	140,543	PIPELINE		REGION 8	302,004	PIPELINE		
ILL,IND,KY	8,970	PIPELINE						
LOW ATLAN	152,491	LOCAL DIST.						
SUBTOTAL:	302,004			SUBTOTAL:	302,004			
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	23,920	PIPELINE		REGION 8	198,397	PIPELINE		
LOW ATLAN	174,477	LOCAL DIST.						
SUBTOTAL:	198,397			SUBTOTAL:	198,397			
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	36,000	PIPELINE		REGION 8	83,235	PIPELINE		
ILL,IND,KY	4,485	PIPELINE						
LOW ATLAN	42,750	LOCAL DIST.						
SUBTOTAL:	83,235			SUBTOTAL:	83,235			
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	150,241	PIPELINE		REGION 8	239,896	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	77,695	LOCAL DIST.						
SUBTOTAL:	239,896			SUBTOTAL:	239,896			
TOTAL:	1,844,854			TOTAL:	1,844,854			

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MERCHANT MTBE

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MTBE								
REGION 2	36,161	35 DWT TANKER AF	0.13					
REGION 5	51,717	PIPELINE						
REGION 7	7,730	5000 BBL BARGE	1.55					
REGION 8	64,914	LOCAL DIST.						
CNTRL PAD5	2,793	35 DWT TANKER AF	0.01					
MIN,WIS,DK	2,688	RAIL 10M gal/500						
NEW ENGLND	19,262	35 DWT TANKER AF	0.07					
SOUTH PAD5	27,973	35 DWT TANKER AF	0.10					
SUBTOTAL:	213,238							213,238
TOTAL:	213,238							

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CANADA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	64,835	35 DWT TANKER FF	0.23					
KERO/JET								
APPALACH 1	5,000	5000 BBL BARGE	1.00					
NEW ENGLND	701	35 DWT TANKER FF	0.00					
SUBTOTAL:	5,701							5,701
DIESEL- ON HWY								
NEW ENGLND	41,365	35 DWT TANKER FF	0.15					
DIESEL- OFF HWY								
NEW ENGLND	10,939	35 DWT TANKER FF	0.04					
TOTAL:	122,841							

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
OTH DIESEL/NO2 OIL								
NEW ENGLND	125,552	35 DWT TANKER FF	0.45					
TOTAL:	125,552							

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	333	35 DWT TANKER FF	0.00					
KERO/JET								
NEW ENGLND	12	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	43	35 DWT TANKER FF	0.00					
TOTAL:	388							

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MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	26,514	35 DWT TANKER FF	0.09					
KERO/JET								
NEW ENGLND	310	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	1,405	35 DWT TANKER FF	0.01					
TOTAL:	28,229							

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MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD								
PACIFIC NW	38,511	35 DWT TANKER FF	0.14					
REG -H/C REFORMUL								
NEW ENGLND	20,602	35 DWT TANKER FF	0.07					
MID -STANDARD UNLD								
SOUTH PAD5	1,050	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	5,988	35 DWT TANKER FF	0.02					
OTH DIESEL/NO2 OIL								
PACIFIC	10,562	35 DWT TANKER FF	0.04					
TOTAL:	76,714							

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FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD								
PACIFIC NW	1,682	35 DWT TANKER FF	0.01					
KERO/JET								
PACIFIC	174	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	36	35 DWT TANKER FF	0.00					
TOTAL:	1,891							

FOUNDATION CASE I — 2010

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -H/C REFORMUL				
				NW EUROPE	125,997	35 DWT TANKER FF	0.45	
				FAR EAST	1,135	35 DWT TANKER FF	0.00	
				MEDITER	87,781	35 DWT TANKER FF	0.31	
				SUBTOTAL:	214,913			-214,913
				MID -CO-REFORMUL				
				MIDDLE EST	17,000	35 DWT TANKER FF	0.06	
				MID -REFORMULATED				
				MIDDLE EST	36,000	35 DWT TANKER FF	0.13	
				PRM -H/C REFORMUL				
				CANADA REF	84,817	35 DWT TANKER FF	0.30	
				NW EUROPE	7,638	35 DWT TANKER FF	0.03	
				SUBTOTAL:	92,455			-92,455
				MTBE				
				MERC MTBE	33,452	35 DWT TANKER AF	0.12	
				ETHANOL				
				REGION 5	5,180	RAIL 10M gal/500		
				KERO/JET				
				CANADA REF	18,692	35 DWT TANKER FF	0.07	
				NW EUROPE	33,425	35 DWT TANKER FF	0.12	
				MEDITER	13,983	35 DWT TANKER FF	0.05	
				CARIB/S.A.	5,900	35 DWT TANKER FF	0.02	
				SUBTOTAL:	72,000			-72,000
				DIESEL- ON HWY				
				CANADA REF	76,000	35 DWT TANKER FF	0.27	
				DIESEL- OFF HWY				
				CANADA REF	15,000	35 DWT TANKER FF	0.05	
				OTH DIESEL/NO2 OIL				
				NW EUROPE	58,298	35 DWT TANKER FF	0.21	
				MEDITER	4,572	35 DWT TANKER FF	0.02	
				CARIB/S.A.	56,129	35 DWT TANKER FF	0.20	
				SUBTOTAL:	119,000			-119,000
				TOTAL:	681,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	89,790	PIPELINE		REGION 2	181,601	LOCAL DIST.		
CENT ATLAN	181,601	LOCAL DIST.		TRSHP 8-2	119,399	PIPELINE		
SUBTOTAL:	271,391			SUBTOTAL:	301,000			-29,609
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	138,524	LOCAL DIST.		REGION 2	138,524	LOCAL DIST.		
				MEDITER	66,490	35 DWT TANKER FF	0.24	
				CARIB/S.A.	18,151	35 DWT TANKER FF	0.06	
SUBTOTAL:	138,524			SUBTOTAL:	223,166			-84,642
MID -CO-REFORMUL				MID -CO-REFORMUL				
APPALACH 1	1,000	PIPELINE		REGION 2	54,000	LOCAL DIST.		
CENT ATLAN	54,000	LOCAL DIST.						
SUBTOTAL:	55,000			SUBTOTAL:	54,000			1,000
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	28,000	PIPELINE		REGION 2	77,000	LOCAL DIST.		
CENT ATLAN	77,000	LOCAL DIST.						
SUBTOTAL:	105,000			SUBTOTAL:	77,000			28,000
PRM -STANDARD UNLD								
APPALACH 1	1,954	PIPELINE						
				PRM -CO-REFORMUL				
				TRSHP 8-2	139,000	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	54,000	PIPELINE		REGION 2	45,098	LOCAL DIST.		
CENT ATLAN	45,098	LOCAL DIST.		TRSHP 8-2	113,902	PIPELINE		
SUBTOTAL:	99,098			SUBTOTAL:	159,000			-59,902
				MTBE				
				MERC MTBE	38,380	35 DWT TANKER AF	0.14	
				ETHANOL				
				REGION 5	17,834	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	16,813	PIPELINE		REGION 2	140,733	LOCAL DIST.		
CENT ATLAN	140,733	LOCAL DIST.		TRSHP 8-2	190,267	PIPELINE		
SUBTOTAL:	157,547			SUBTOTAL:	331,000			-173,453
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	45,461	PIPELINE		REGION 2	179,415	LOCAL DIST.		
CENT ATLAN	179,415	LOCAL DIST.		TRSHP 8-2	15,585	PIPELINE		
SUBTOTAL:	224,876			SUBTOTAL:	195,000			29,876

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	8,862	PIPELINE		TRSHP 8-2	47,000	PIPELINE		-38,138
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	52,000	PIPELINE		CARIB/S.A.	163,829	35 DWT TANKER FF	0.59	
				TRSHP 8-2	43,171	PIPELINE		
SUBTOTAL:	52,000			SUBTOTAL:	207,000			-155,000
TOTAL:	1,114,253			TOTAL:	1,789,380			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	59,360	35 DWT TANKER AF	0.21	
				TRSHP 8-2	317,296	LOCAL DIST.		
				SUBTOTAL:	376,656			-376,656
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	25,888	LOCAL DIST.		REGION 3	25,888	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 8	54,080	35 DWT TANKER AF	0.19	
				TRSHP 8-2	283,920	LOCAL DIST.		
				SUBTOTAL:	338,000			-338,000
				REG -H/C REFORMUL				
				CARIB/S.A.	2,882	35 DWT TANKER FF	0.01	
MID -STANDARD UNLD				MID -STANDARD UNLD				
LOW ATLAN	289	LOCAL DIST.		REGION 3	289	LOCAL DIST.		
				REGION 8	17,945	35 DWT TANKER AF	0.06	
				TRSHP 8-2	78,766	LOCAL DIST.		
SUBTOTAL:	289			SUBTOTAL:	97,000			-96,711
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	8,000	LOCAL DIST.		REGION 3	8,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	16,830	35 DWT TANKER AF	0.06	
				TRSHP 8-2	82,170	LOCAL DIST.		
				SUBTOTAL:	99,000			-99,000
				PRM -STANDARD UNLD				
				REGION 8	31,390	35 DWT TANKER AF	0.11	
				TRSHP 8-2	117,054	LOCAL DIST.		
				SUBTOTAL:	148,444			-148,444
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	6,325	LOCAL DIST.		REGION 3	6,325	LOCAL DIST.		
				TRSHP 8-2	4,675	LOCAL DIST.		
SUBTOTAL:	6,325			SUBTOTAL:	11,000			-4,675
				PRM -REFORMULATED				
				REGION 8	29,250	35 DWT TANKER AF	0.10	
				TRSHP 8-2	120,750	LOCAL DIST.		
				SUBTOTAL:	150,000			-150,000
				ETHANOL				
				REGION 5	1,130	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,890	LOCAL DIST.		REGION 3	3,890	LOCAL DIST.		
				REGION 8	69,300	35 DWT TANKER AF	0.25	
				TRSHP 8-2	241,810	LOCAL DIST.		
SUBTOTAL:	3,890			SUBTOTAL:	315,000			-311,110
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	9,649	LOCAL DIST.		REGION 3	9,649	LOCAL DIST.		
				REGION 8	41,440	35 DWT TANKER AF	0.15	
				TRSHP 8-2	244,911	LOCAL DIST.		
SUBTOTAL:	9,649			SUBTOTAL:	296,000			-286,351
DIESEL- OFF HWY				DIESEL- OFF HWY				
LOW ATLAN	5,111	LOCAL DIST.		REGION 3	5,111	LOCAL DIST.		
				REGION 8	9,860	35 DWT TANKER AF	0.04	
				TRSHP 8-2	53,029	LOCAL DIST.		
SUBTOTAL:	5,111			SUBTOTAL:	68,000			-62,889
				OTH DIESEL/NO2 OIL				
				REGION 8	12,875	35 DWT TANKER AF	0.05	
				CARIB/S.A.	90,125	35 DWT TANKER FF	0.32	
				SUBTOTAL:	103,000			-103,000
TOTAL:	59,153			TOTAL:	2,040,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	27,000	LOCAL DIST.		REGION 4	27,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 2	89,790	PIPELINE		
				REGION 5	15,000	5000 BBL BARGE	3.00	
				REGION 5	15,210	PIPELINE		
				SUBTOTAL:	120,000			-120,000
				REG -H/C REFORMUL				
				CANADA REF	2,778	5000 BBL BARGE	0.56	
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -CO-REFORMUL				
				REGION 2	1,000	PIPELINE		
				MID -REFORMULATED				
				REGION 2	28,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	7,046	LOCAL DIST.		REGION 2	1,954	PIPELINE		
				REGION 4	7,046	LOCAL DIST.		
SUBTOTAL:	7,046			SUBTOTAL:	9,000			-1,954
				PRM -REFORMULATED				
				REGION 2	54,000	PIPELINE		
				PRM -H/C REFORMUL				
				CANADA REF	1,852	5000 BBL BARGE	0.37	
				ETHANOL				
				REGION 5	370	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	10,187	LOCAL DIST.		REGION 2	16,813	PIPELINE		
				REGION 4	10,187	LOCAL DIST.		
SUBTOTAL:	10,187			SUBTOTAL:	27,000			-16,813
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	11,539	LOCAL DIST.		REGION 2	45,461	PIPELINE		
				REGION 4	11,539	LOCAL DIST.		
SUBTOTAL:	11,539			SUBTOTAL:	57,000			-45,461

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	6,138	LOCAL DIST.		REGION 2	8,862	PIPELINE		
				REGION 4	6,138	LOCAL DIST.		
				CANADA REF	5,000	5000 BBL BARGE	1.00	
SUBTOTAL:	6,138			SUBTOTAL:	20,000			-13,862
				OTH DIESEL/NO2 OIL				
				REGION 2	52,000	PIPELINE		
TOTAL:	67,910			TOTAL:	406,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	281,160	LOCAL DIST.		REGION 5	281,160	LOCAL DIST.		
				REGION 8	13,000	5000 BBL BARGE	2.60	
				REGION 8	44,800	PIPELINE		
				TRSHP 8-2	59,800	PIPELINE		
SUBTOTAL:	281,160			SUBTOTAL:	398,760			-117,600
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	596,115	LOCAL DIST.		
APPALACH 1	15,210	PIPELINE		REGION 8	24,160	5000 BBL BARGE	4.83	
ILL,IND,KY	596,115	LOCAL DIST.		TRSHP 8-2	20,725	PIPELINE		
SUBTOTAL:	626,326			SUBTOTAL:	641,000			-14,674
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	27,503	LOCAL DIST.		REGION 5	27,503	LOCAL DIST.		
				REGION 8	1,480	5000 BBL BARGE	0.30	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	27,503			SUBTOTAL:	34,262			-6,759
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	33,290	LOCAL DIST.		REGION 5	33,290	LOCAL DIST.		
				REGION 8	2,360	5000 BBL BARGE	0.47	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	33,290			SUBTOTAL:	59,000			-25,710
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	96,740	LOCAL DIST.		REGION 5	96,740	LOCAL DIST.		
				REGION 8	4,280	5000 BBL BARGE	0.86	
				TRSHP 8-2	5,980	PIPELINE		
SUBTOTAL:	96,740			SUBTOTAL:	107,000			-10,260
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	19,943	LOCAL DIST.		REGION 5	19,943	LOCAL DIST.		
				REGION 7	21,797	PIPELINE		
				REGION 8	2,960	5000 BBL BARGE	0.59	
				REGION 8	11,200	PIPELINE		
				CANADA REF	20,000	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	19,943			SUBTOTAL:	93,840			-73,897
				PRM -CO-REFORMUL				
				TRSHP 8-2	2,990	PIPELINE		

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	103,930	LOCAL DIST.		REGION 5	103,930	LOCAL DIST.		
				REGION 8	5,320	5000 BBL BARGE	1.06	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	103,930			SUBTOTAL:	141,000			-37,070
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	4,319	LOCAL DIST.		REGION 5	4,319	LOCAL DIST.		
				REGION 8	320	5000 BBL BARGE	0.06	
SUBTOTAL:	4,319			SUBTOTAL:	4,639			-320
				MTBE				
				MERC MTBE	58,227	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	370	RAIL 10M gal/500		REGION 5	13,509	RAIL 10M gal/500		
CNTRL PADS	4,363	RAIL 10M gal/500						
CENT ATLAN	17,834	RAIL 10M gal/500						
ILL,IND,KY	13,509	RAIL 10M gal/500						
LOW ATLAN	1,130	RAIL 10M gal/500						
MIN,WIS,DK	4,242	RAIL 10M gal/500						
NEW ENGLND	5,180	RAIL 10M gal/500						
OK,KAN,MO	5,700	RAIL 10M gal/500						
PAD III	3,200	RAIL 10M gal/500						
PACIFIC NW	1,939	RAIL 10M gal/500						
ROCKY MT	3,084	RAIL 10M gal/500						
SOUTH PADS	8,825	RAIL 10M gal/500						
SUBTOTAL:	69,376			SUBTOTAL:	13,509			55,867
KERO/JET				KERO/JET				
ILL,IND,KY	239,020	LOCAL DIST.		REGION 5	239,020	LOCAL DIST.		
				REGION 8	16,020	5000 BBL BARGE	3.20	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	239,020			SUBTOTAL:	267,000			-27,980
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	352,716	LOCAL DIST.		REGION 5	352,716	LOCAL DIST.		
				REGION 8	23,374	5000 BBL BARGE	4.67	
				TRSHP 8-2	26,910	PIPELINE		
SUBTOTAL:	352,716			SUBTOTAL:	403,000			-50,284
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	95,670	LOCAL DIST.		REGION 5	95,670	LOCAL DIST.		
				REGION 8	5,350	5000 BBL BARGE	1.07	
				TRSHP 8-2	5,980	PIPELINE		
SUBTOTAL:	95,670			SUBTOTAL:	107,000			-11,330

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	138,140	LOCAL DIST.		REGION 5	138,140	LOCAL DIST.		
				REGION 8	7,900	5000 BBL BARGE	1.58	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	138,140			SUBTOTAL:	158,000			-19,860
TOTAL:	2,093,359			TOTAL:	2,496,227			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	125,939	LOCAL DIST.		REGION 6	125,939	LOCAL DIST.		
				REGION 7	83,112	PIPELINE		
SUBTOTAL:	125,939			SUBTOTAL:	209,051			-83,112
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	3,867	LOCAL DIST.		REGION 6	3,867	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
				REGION 9	9,953	PIPELINE		
SUBTOTAL:	3,867			SUBTOTAL:	30,558			-26,691
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	6,392	LOCAL DIST.		REGION 6	6,392	LOCAL DIST.		
				REGION 9	506	PIPELINE		
SUBTOTAL:	6,392			SUBTOTAL:	6,898			-506
				REG -H/C REFORMUL				
				REGION 9	38,938	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	6,260	LOCAL DIST.		REGION 6	6,260	LOCAL DIST.		
				REGION 7	4,740	PIPELINE		
SUBTOTAL:	6,260			SUBTOTAL:	11,000			-4,740
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	3,000	LOCAL DIST.		REGION 6	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	14,299	LOCAL DIST.		REGION 6	14,299	LOCAL DIST.		
				REGION 7	11,850	PIPELINE		
SUBTOTAL:	14,299			SUBTOTAL:	26,149			-11,850
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
MIN,WIS,DK	4,000	LOCAL DIST.		REGION 6	4,000	LOCAL DIST.		
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	3,397	LOCAL DIST.		REGION 6	3,397	LOCAL DIST.		
				REGION 9	4,603	PIPELINE		
SUBTOTAL:	3,397			SUBTOTAL:	8,000			-4,603
				MTBE				
				MERC MTBE	5,164	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	4,242	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	22,410	LOCAL DIST.		REGION 6	22,410	LOCAL DIST.		
				REGION 7	16,590	PIPELINE		
SUBTOTAL:	22,410			SUBTOTAL:	39,000			-16,590
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	61,930	LOCAL DIST.		REGION 6	61,930	LOCAL DIST.		
				REGION 7	27,070	PIPELINE		
SUBTOTAL:	61,930			SUBTOTAL:	89,000			-27,070
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	30,040	LOCAL DIST.		REGION 6	30,040	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
SUBTOTAL:	30,040			SUBTOTAL:	49,000			-18,960
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	27,670	LOCAL DIST.		REGION 6	27,670	LOCAL DIST.		
				REGION 7	21,330	PIPELINE		
SUBTOTAL:	27,670			SUBTOTAL:	49,000			-21,330
TOTAL:	311,205			TOTAL:	575,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	83,112	PIPELINE		REGION 7	85,725	LOCAL DIST.		
OK,KAN,MO	85,725	LOCAL DIST.		REGION 8	273,276	PIPELINE		
SUBTOTAL:	168,837			SUBTOTAL:	359,002			-190,165
REG -H/C CO NONATT								
MIN,WIS,DK	16,737	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	99,000	LOCAL DIST.		REGION 7	99,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	18,000	PIPELINE		-13,260
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	12,000	LOCAL DIST.		REGION 7	12,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	21,797	PIPELINE		REGION 7	43,298	LOCAL DIST.		
MIN,WIS,DK	11,850	PIPELINE						
OK,KAN,MO	43,298	LOCAL DIST.						
SUBTOTAL:	76,945			SUBTOTAL:	43,298			33,647
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	18,000	LOCAL DIST.		REGION 7	18,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	9,506	5000 BBL BARGE	1.90	
				ETHANOL				
				REGION 5	5,700	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	16,590	PIPELINE		REGION 7	74,685	LOCAL DIST.		
OK,KAN,MO	74,685	LOCAL DIST.		REGION 8	50,315	PIPELINE		
SUBTOTAL:	91,275			SUBTOTAL:	125,000			-33,725
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	27,070	PIPELINE		REGION 7	121,338	LOCAL DIST.		
OK,KAN,MO	121,338	LOCAL DIST.		REGION 8	52,662	PIPELINE		
SUBTOTAL:	148,407			SUBTOTAL:	174,000			-25,593

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	18,960	PIPELINE		REGION 7	44,714	LOCAL DIST.		
OK,KAN,MO	44,714	LOCAL DIST.		REGION 8	26,286	PIPELINE		
SUBTOTAL:	63,674			SUBTOTAL:	71,000			-7,326
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	21,330	PIPELINE		REGION 8	60,000	PIPELINE		-38,670
TOTAL:	720,946			TOTAL:	994,506			

PAD DISTRICT III

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	13,000	5000 BBL BARGE	2.60	REGION 8	543,252	LOCAL DIST.		
ILL,IND,KY	44,800	PIPELINE						
LOW ATLAN	59,360	35 DWT TANKER AF	0.21					
OK,KAN,MO	273,276	PIPELINE						
PAD III	543,252	LOCAL DIST.						
ROCKY MT	26,040	PIPELINE						
SOUTH PAD5	15,200	PIPELINE						
TRSHP 8-2	377,096	PIPELINE						
SUBTOTAL:	1,352,024			SUBTOTAL:	543,252			808,772
REG -CO NON ATTAIN				REG -CO NON ATTAIN				
PAD III	6,000	LOCAL DIST.		REGION 8	6,000	LOCAL DIST.		
ROCKY MT	12,344	PIPELINE						
SUBTOTAL:	18,344			SUBTOTAL:	6,000			12,344
REG -CO-REFORMUL				REG -CO-REFORMUL				
PAD III	7,000	LOCAL DIST.		REGION 8	7,000	LOCAL DIST.		
SOUTH PAD5	8,550	PIPELINE						
SUBTOTAL:	15,550			SUBTOTAL:	7,000			8,550
REG -H/C CO NONATT								
SOUTH PAD5	5,591	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	24,160	5000 BBL BARGE	4.83	REGION 8	266,000	LOCAL DIST.		
LOW ATLAN	54,080	35 DWT TANKER AF	0.19					
PAD III	266,000	LOCAL DIST.						
SOUTH PAD5	11,400	PIPELINE						
TRSHP 8-2	424,044	PIPELINE						
SUBTOTAL:	779,684			SUBTOTAL:	266,000			513,684
REG -H/C REFORMUL								
ILL,IND,KY	1,480	5000 BBL BARGE	0.30					
TRSHP 8-2	5,279	PIPELINE						
SUBTOTAL:	6,759							6,759
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	2,360	5000 BBL BARGE	0.47	REGION 8	82,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	17,945	35 DWT TANKER AF	0.06					
OK,KAN,MO	18,000	PIPELINE						
PAD III	82,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	93,716	PIPELINE						
SUBTOTAL:	228,951			SUBTOTAL:	82,000			146,951

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	475	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	3,250			SUBTOTAL:	1,000			2,250
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	4,280	5000 BBL BARGE	0.86	REGION 8	40,000	LOCAL DIST.		
LOW ATLAN	16,830	35 DWT TANKER AF	0.06					
PAD III	40,000	LOCAL DIST.						
TRSHP 8-2	88,150	PIPELINE						
SUBTOTAL:	149,260			SUBTOTAL:	40,000			109,260
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,960	5000 BBL BARGE	0.59	REGION 8	130,548	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	31,390	35 DWT TANKER AF	0.11					
PAD III	130,548	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	134,994	PIPELINE						
SUBTOTAL:	319,522			SUBTOTAL:	130,548			188,974
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	146,665	PIPELINE						
SUBTOTAL:	150,515			SUBTOTAL:	1,000			149,515
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	5,320	5000 BBL BARGE	1.06	REGION 8	58,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	29,250	35 DWT TANKER AF	0.10					
PAD III	58,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	249,602	PIPELINE						
SUBTOTAL:	360,872			SUBTOTAL:	58,000			302,872

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL								
ILL,IND,KY	320	5000 BBL BARGE	0.06					
				MTBE				
				MERC MTBE	89,721	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,200	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	16,020	5000 BBL BARGE	3.20	REGION 8	353,000	LOCAL DIST.		
LOW ATLAN	69,300	35 DWT TANKER AF	0.25					
OK,KAN,MO	50,315	PIPELINE						
PAD III	353,000	LOCAL DIST.						
ROCKY MT	16,740	PIPELINE						
SOUTH PAD5	14,250	PIPELINE						
TRSHP 8-2	444,036	PIPELINE						
SUBTOTAL:	963,662			SUBTOTAL:	353,000			610,662
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	23,374	5000 BBL BARGE	4.67	REGION 8	335,000	LOCAL DIST.		
LOW ATLAN	41,440	35 DWT TANKER AF	0.15					
OK,KAN,MO	52,662	PIPELINE						
PAD III	335,000	LOCAL DIST.						
ROCKY MT	7,638	PIPELINE						
SOUTH PAD5	14,250	PIPELINE						
TRSHP 8-2	287,405	PIPELINE						
SUBTOTAL:	761,770			SUBTOTAL:	335,000			426,770
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	5,350	5000 BBL BARGE	1.07	REGION 8	164,000	LOCAL DIST.		
LOW ATLAN	9,860	35 DWT TANKER AF	0.04					
OK,KAN,MO	26,286	PIPELINE						
PAD III	164,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	6,650	PIPELINE						
TRSHP 8-2	106,009	PIPELINE						
SUBTOTAL:	323,734			SUBTOTAL:	164,000			159,734
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	7,900	5000 BBL BARGE	1.58	REGION 8	258,000	LOCAL DIST.		
LOW ATLAN	12,875	35 DWT TANKER AF	0.05					
OK,KAN,MO	60,000	PIPELINE						
PAD III	258,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	55,131	PIPELINE						
SUBTOTAL:	400,436			SUBTOTAL:	258,000			142,436
TOTAL:	5,848,942			TOTAL:	2,339,722			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	5,025	PIPELINE		REGION 8	26,040	PIPELINE		
ROCKY MT	106,833	LOCAL DIST.		REGION 9	106,833	LOCAL DIST.		
SUBTOTAL:	111,858			SUBTOTAL:	132,873			-21,015
				REG -CO NON ATTAIN				
				REGION 8	12,344	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	9,953	PIPELINE		REGION 9	14,497	LOCAL DIST.		
PACIFIC NW	789	PIPELINE						
ROCKY MT	14,497	LOCAL DIST.						
SUBTOTAL:	25,239			SUBTOTAL:	14,497			10,742
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	506	PIPELINE		REGION 9	14,000	LOCAL DIST.		
PACIFIC NW	2,373	PIPELINE						
ROCKY MT	14,000	LOCAL DIST.						
SUBTOTAL:	16,879			SUBTOTAL:	14,000			2,879
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	38,938	PIPELINE		REGION 9	9,260	LOCAL DIST.		
PACIFIC NW	7,886	PIPELINE						
ROCKY MT	9,260	LOCAL DIST.						
SUBTOTAL:	56,084			SUBTOTAL:	9,260			46,824
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	13,420	LOCAL DIST.		REGION 9	13,420	LOCAL DIST.		
SUBTOTAL:	13,755			SUBTOTAL:	19,000			-5,245
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
ROCKY MT	3,210	LOCAL DIST.		REGION 8	2,790	PIPELINE		
				REGION 9	3,210	LOCAL DIST.		
SUBTOTAL:	3,210			SUBTOTAL:	6,000			-2,790
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	2,000	LOCAL DIST.		REGION 9	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	16,747	LOCAL DIST.		REGION 9	16,747	LOCAL DIST.		
SUBTOTAL:	17,752			SUBTOTAL:	22,327			-4,575

ROCKY MOUNTAIN

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE NUMBER	PRODUCT/SOURCE	B/D	MODE NUMBER	
			PRM -CO NON ATTAIN			
			REGION 8	2,790	PIPELINE	
PRM -CO-REFORMUL						
PACIFIC NW	1,340	PIPELINE				
PRM -H/C CO NONATT			PRM -H/C CO NONATT			
ROCKY MT	2,972	LOCAL DIST.	REGION 9	2,972	LOCAL DIST.	
PRM -REFORMULATED			PRM -REFORMULATED			
MIN,WIS,DK	4,603	PIPELINE	REGION 9	3,000	LOCAL DIST.	
PACIFIC NW	2,010	PIPELINE				
ROCKY MT	3,000	LOCAL DIST.				
SUBTOTAL:	9,613		SUBTOTAL:	3,000		6,613
PRM -H/C REFORMUL			PRM -H/C REFORMUL			
ROCKY MT	1,852	LOCAL DIST.	REGION 9	1,852	LOCAL DIST.	
			ETHANOL			
			REGION 5	3,084	RAIL 10M gal/500	
KERO/JET			KERO/JET			
PACIFIC NW	13,190	PIPELINE	REGION 8	16,740	PIPELINE	
ROCKY MT	59,260	LOCAL DIST.	REGION 9	59,260	LOCAL DIST.	
SUBTOTAL:	72,450		SUBTOTAL:	76,000		-3,550
DIESEL- ON HWY			DIESEL- ON HWY			
PACIFIC NW	7,370	PIPELINE	REGION 8	7,638	PIPELINE	
ROCKY MT	60,362	LOCAL DIST.	REGION 9	60,362	LOCAL DIST.	
SUBTOTAL:	67,732		SUBTOTAL:	68,000		-268
DIESEL- OFF HWY			DIESEL- OFF HWY			
PACIFIC NW	2,468	PIPELINE	REGION 8	5,580	PIPELINE	
ROCKY MT	41,420	LOCAL DIST.	REGION 9	41,420	LOCAL DIST.	
SUBTOTAL:	43,888		SUBTOTAL:	47,000		-3,112
OTH DIESEL/NO2 OIL			OTH DIESEL/NO2 OIL			
PACIFIC NW	4,690	PIPELINE	REGION 8	5,580	PIPELINE	
ROCKY MT	33,420	LOCAL DIST.	REGION 9	33,420	LOCAL DIST.	
SUBTOTAL:	38,110		SUBTOTAL:	39,000		-890
TOTAL:	487,405		TOTAL:	478,000		

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	86,775	LOCAL DIST.		REGION 9	5,025	PIPELINE		
				REGION 10	86,775	LOCAL DIST.		
SUBTOTAL:	86,775			SUBTOTAL:	91,800			-5,025
				REG -CO NON ATTAIN				
				REGION 11	8,148	35 DWT TANKER AF	0.03	
				REG -CO-REFORMUL				
				REGION 11	24,356	35 DWT TANKER AF	0.09	
				REG -H/C CO NONATT				
				REGION 9	789	PIPELINE		
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	61,627	LOCAL DIST.		REGION 9	2,373	PIPELINE		
				REGION 10	61,627	LOCAL DIST.		
SUBTOTAL:	61,627			SUBTOTAL:	64,000			-2,373
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	13,083	LOCAL DIST.		REGION 9	7,886	PIPELINE		
				REGION 10	13,083	LOCAL DIST.		
SUBTOTAL:	13,083			SUBTOTAL:	20,969			-7,886
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	4,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	4,665	LOCAL DIST.		
SUBTOTAL:	4,665			SUBTOTAL:	5,000			-335
				MID -CO-REFORMUL				
				REGION 11	2,000	35 DWT TANKER AF	0.01	
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	2,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	2,330	LOCAL DIST.		
SUBTOTAL:	2,330			SUBTOTAL:	3,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	12,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	12,995	LOCAL DIST.		
SUBTOTAL:	12,995			SUBTOTAL:	14,000			-1,005
				PRM -CO NON ATTAIN				
				REGION 11	2,000	35 DWT TANKER AF	0.01	

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PACIFIC NW	1,802	LOCAL DIST.		REGION 9	1,340	PIPELINE		
				REGION 11	5,858	35 DWT TANKER AF	0.02	
				REGION 10	1,802	LOCAL DIST.		
SUBTOTAL:	1,802			SUBTOTAL:	9,000			-7,198
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	9,990	LOCAL DIST.		REGION 9	2,010	PIPELINE		
				REGION 10	9,990	LOCAL DIST.		
SUBTOTAL:	9,990			SUBTOTAL:	12,000			-2,010
				MTBE				
				CANADA W.	7,330	35 DWT TANKER FF	0.03	
				ETHANOL				
				REGION 5	1,939	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	8,945	35 DWT TANKER AF	0.03	REGION 9	13,190	PIPELINE		
PACIFIC NW	79,810	LOCAL DIST.		REGION 10	79,810	LOCAL DIST.		
SUBTOTAL:	88,755			SUBTOTAL:	93,000			-4,245
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	55,630	LOCAL DIST.		REGION 9	7,370	PIPELINE		
				REGION 10	55,630	LOCAL DIST.		
SUBTOTAL:	55,630			SUBTOTAL:	63,000			-7,370
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	26,532	LOCAL DIST.		REGION 9	2,468	PIPELINE		
				REGION 10	26,532	LOCAL DIST.		
SUBTOTAL:	26,532			SUBTOTAL:	29,000			-2,468
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	6,499	LOCAL DIST.		REGION 9	4,690	PIPELINE		
				REGION 11	23,495	35 DWT TANKER AF	0.08	
				MIDDLE EST	4,316	35 DWT TANKER FF	0.02	
				REGION 10	6,499	LOCAL DIST.		
SUBTOTAL:	6,499			SUBTOTAL:	39,000			-32,501
TOTAL:	370,683			TOTAL:	490,331			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	5,000	LOCAL DIST.		REGION 11	5,000	LOCAL DIST.		
REG -CO NON ATTAIN								
PACIFIC	1,942	35 DWT TANKER AF	0.01					
PACIFIC NW	8,148	35 DWT TANKER AF	0.03					
SUBTOTAL:	10,090							10,090
REG -CO-REFORMUL				REG -CO-REFORMUL				
CNTRL PAD5	10,620	LOCAL DIST.		REGION 11	10,620	LOCAL DIST.		
PACIFIC NW	24,356	35 DWT TANKER AF	0.09					
SUBTOTAL:	34,976			SUBTOTAL:	10,620			24,356
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	226,976	LOCAL DIST.		REGION 11	226,976	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	10,000	LOCAL DIST.		REGION 11	10,000	LOCAL DIST.		
PACIFIC NW	2,000	35 DWT TANKER AF	0.01					
SUBTOTAL:	12,000			SUBTOTAL:	10,000			2,000
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	14,000	LOCAL DIST.		REGION 11	14,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -CO NON ATTAIN								
PACIFIC NW	2,000	35 DWT TANKER AF	0.01					
PRM -CO-REFORMUL								
PACIFIC NW	5,858	35 DWT TANKER AF	0.02					
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	77,299	LOCAL DIST.		REGION 11	77,299	LOCAL DIST.		
				MTBE				
				MIDDLE EST	15,072	35 DWT TANKER FF	0.05	
				CANADA W.	13,670	35 DWT TANKER FF	0.05	
				SUBTOTAL:	28,742			-28,742
				ETHANOL				
				REGION 5	4,363	RAIL 10M gal/500		

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CNTRL PAD5	133,474	LOCAL DIST.		REGION 11	133,474	LOCAL DIST.		
				REGION 10	8,945	35 DWT TANKER AF	0.03	
				CARIB/S.A.	3,581	35 DWT TANKER FF	0.01	
SUBTOTAL:	133,474			SUBTOTAL:	146,000			-12,526
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	81,000	LOCAL DIST.		REGION 11	81,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	32,000	LOCAL DIST.		REGION 11	32,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	17,000	LOCAL DIST.		REGION 11	17,000	LOCAL DIST.		
PACIFIC NW	23,495	35 DWT TANKER AF	0.08					
SUBTOTAL:	40,495			SUBTOTAL:	17,000			23,495
TOTAL:	676,168			TOTAL:	654,001			

SOUTHERN PAD V

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	23,700	LOCAL DIST.		REGION 8	15,200	PIPELINE		
				REGION 12	23,700	LOCAL DIST.		
SUBTOTAL:	23,700			SUBTOTAL:	38,900			-15,200
REG -CO-REFORMUL				REG -CO-REFORMUL				
SOUTH PAD5	30,645	LOCAL DIST.		REGION 8	8,550	PIPELINE		
				REGION 12	30,645	LOCAL DIST.		
SUBTOTAL:	30,645			SUBTOTAL:	39,195			-8,550
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	17,094	LOCAL DIST.		REGION 8	5,591	PIPELINE		
				REGION 12	17,094	LOCAL DIST.		
SUBTOTAL:	17,094			SUBTOTAL:	22,685			-5,591
				REG -REFORMULATED				
				REGION 8	11,400	PIPELINE		
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	373,199	LOCAL DIST.		REGION 12	373,199	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
SOUTH PAD5	2,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	2,050	LOCAL DIST.		
SUBTOTAL:	2,050			SUBTOTAL:	3,000			-950
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	21,525	LOCAL DIST.		REGION 8	475	PIPELINE		
				REGION 12	21,525	LOCAL DIST.		
SUBTOTAL:	21,525			SUBTOTAL:	22,000			-475
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	17,000	LOCAL DIST.		REGION 12	17,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	4,150	LOCAL DIST.		REGION 8	2,850	PIPELINE		
				REGION 12	4,150	LOCAL DIST.		
SUBTOTAL:	4,150			SUBTOTAL:	7,000			-2,850
				PRM -CO-REFORMUL				
				REGION 8	2,850	PIPELINE		

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	3,324	LOCAL DIST.		REGION 8	1,118	PIPELINE		
				REGION 12	3,324	LOCAL DIST.		
SUBTOTAL:	3,324			SUBTOTAL:	4,443			-1,118
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	125,501	LOCAL DIST.		REGION 12	125,501	LOCAL DIST.		
				MTBE				
				MIDDLE EST	22,452	35 DWT TANKER FF	0.08	
				CARIB/S.A.	18,000	35 DWT TANKER FF	0.06	
				MERC MTBE	6,651	35 DWT TANKER AF	0.02	
				SUBTOTAL:	47,103			-47,103
				ETHANOL				
				REGION 5	8,825	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	210,379	LOCAL DIST.		REGION 8	14,250	PIPELINE		
				REGION 12	210,379	LOCAL DIST.		
				CARIB/S.A.	37,371	35 DWT TANKER FF	0.13	
SUBTOTAL:	210,379			SUBTOTAL:	262,000			-51,621
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	139,750	LOCAL DIST.		REGION 8	14,250	PIPELINE		
				REGION 12	139,750	LOCAL DIST.		
SUBTOTAL:	139,750			SUBTOTAL:	154,000			-14,250
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	59,350	LOCAL DIST.		REGION 8	6,650	PIPELINE		
				REGION 12	59,350	LOCAL DIST.		
SUBTOTAL:	59,350			SUBTOTAL:	66,000			-6,650
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	31,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	31,050	LOCAL DIST.		
SUBTOTAL:	31,050			SUBTOTAL:	32,000			-950
TOTAL:	1,059,717			TOTAL:	1,240,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	24,000	LOCAL DIST.		REGION 13	24,000	LOCAL DIST.		
				REG -CO NON ATTAIN				
				REGION 11	1,942	35 DWT TANKER AF	0.01	
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	1,748	LOCAL DIST.		REGION 13	1,748	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	11,000	LOCAL DIST.		REGION 13	11,000	LOCAL DIST.		
				MTBE				
				MIDDLE EST	310	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	71,250	LOCAL DIST.		FAR EAST	422	35 DWT TANKER FF	0.00	
				MIDDLE EST	9,733	35 DWT TANKER FF	0.03	
				REGION 13	71,250	LOCAL DIST.		
				CARIB/S.A.	31,594	35 DWT TANKER FF	0.11	
SUBTOTAL:	71,250			SUBTOTAL:	113,000			-41,750
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	16,000	LOCAL DIST.		REGION 13	16,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	8,000	LOCAL DIST.		REGION 13	8,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	15,000	LOCAL DIST.		FAR EAST	332	35 DWT TANKER FF	0.00	
				MIDDLE EST	19,668	35 DWT TANKER FF	0.07	
				REGION 13	15,000	LOCAL DIST.		
SUBTOTAL:	15,000			SUBTOTAL:	35,000			-20,000
TOTAL:	149,999			TOTAL:	214,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	59,800	PIPELINE		REGION 8	377,096	PIPELINE		
LOW ATLAN	317,296	LOCAL DIST.						
SUBTOTAL:	377,096			SUBTOTAL:	377,096			-0
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	119,399	PIPELINE		REGION 8	424,044	PIPELINE		
ILL,IND,KY	20,725	PIPELINE						
LOW ATLAN	283,920	LOCAL DIST.						
SUBTOTAL:	424,044			SUBTOTAL:	424,044			
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	5,279	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	93,716	PIPELINE		
LOW ATLAN	78,766	LOCAL DIST.						
SUBTOTAL:	93,716			SUBTOTAL:	93,716			-0
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	5,980	PIPELINE		REGION 8	88,150	PIPELINE		
LOW ATLAN	82,170	LOCAL DIST.						
SUBTOTAL:	88,150			SUBTOTAL:	88,150			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	134,994	PIPELINE		
LOW ATLAN	117,054	LOCAL DIST.						
SUBTOTAL:	134,994			SUBTOTAL:	134,994			-0
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	139,000	PIPELINE		REGION 8	146,665	PIPELINE		
ILL,IND,KY	2,990	PIPELINE						
LOW ATLAN	4,675	LOCAL DIST.						
SUBTOTAL:	146,665			SUBTOTAL:	146,665			
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	113,902	PIPELINE		REGION 8	249,602	PIPELINE		
ILL,IND,KY	14,950	PIPELINE						
LOW ATLAN	120,750	LOCAL DIST.						
SUBTOTAL:	249,602			SUBTOTAL:	249,602			-0
KERO/JET				KERO/JET				
CENT ATLAN	190,267	PIPELINE		REGION 8	444,036	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	241,810	LOCAL DIST.						
SUBTOTAL:	444,036			SUBTOTAL:	444,036			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	15,585	PIPELINE		REGION 8	287,405	PIPELINE		
ILL,IND,KY	26,910	PIPELINE						
LOW ATLAN	244,911	LOCAL DIST.						
SUBTOTAL:	287,405			SUBTOTAL:	287,405			
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	47,000	PIPELINE		REGION 8	106,009	PIPELINE		
ILL,IND,KY	5,980	PIPELINE						
LOW ATLAN	53,029	LOCAL DIST.						
SUBTOTAL:	106,009			SUBTOTAL:	106,009			
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	43,171	PIPELINE		REGION 8	55,131	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
SUBTOTAL:	55,131			SUBTOTAL:	55,131			
TOTAL:	2,413,622			TOTAL:	2,413,622			

MERCHANT MTBE

PRODUCT/DESTINATION	SUPPLY B/D	SUPPLY MODE	SUPPLY NUMBER	DEMAND PRODUCT/SOURCE	DEMAND B/D	DEMAND MODE	DEMAND NUMBER	NET
MTBE								
REGION 2	38,380	35 DWT TANKER AF	0.14					
REGION 5	58,227	PIPELINE						
REGION 7	9,506	5000 BBL BARGE	1.90					
REGION 8	89,721	LOCAL DIST.						
MIN,WIS,DK	5,164	RAIL 10M gal/500						
NEW ENGLND	33,452	35 DWT TANKER AF	0.12					
SOUTH PAD5	6,651	35 DWT TANKER AF	0.02					
SUBTOTAL:	241,101							241,101
TOTAL:	241,101							

CANADA

PRODUCT/DESTINATION	SUPPLY B/D	SUPPLY MODE	SUPPLY NUMBER	DEMAND PRODUCT/SOURCE	DEMAND B/D	DEMAND MODE	DEMAND NUMBER	NET
REG -H/C REFORMUL								
APPALACH 1	2,778	5000 BBL BARGE	0.56					
PRM -STANDARD UNLD								
ILL,IND,KY	20,000	PIPELINE						
PRM -H/C REFORMUL								
APPALACH 1	1,852	5000 BBL BARGE	0.37					
NEW ENGLND	84,817	35 DWT TANKER FF	0.30					
SUBTOTAL:	86,669							86,669
KERO/JET								
NEW ENGLND	18,692	35 DWT TANKER FF	0.07					
DIESEL- ON HWY								
NEW ENGLND	76,000	35 DWT TANKER FF	0.27					
DIESEL- OFF HWY								
APPALACH 1	5,000	5000 BBL BARGE	1.00					
NEW ENGLND	15,000	35 DWT TANKER FF	0.05					
SUBTOTAL:	20,000							20,000
TOTAL:	224,139							

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CARIBBEAN/VENEZUELA

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
CENT ATLAN	18,151	35 DWT TANKER FF	0.06					
LOW ATLAN	2,882	35 DWT TANKER FF	0.01					
SUBTOTAL:	21,033							21,033
MTBE								
SOUTH PAD5	18,000	35 DWT TANKER FF	0.06					
KERO/JET								
CNTRL PAD5	3,581	35 DWT TANKER FF	0.01					
NEW ENGLND	5,900	35 DWT TANKER FF	0.02					
PACIFIC	31,594	35 DWT TANKER FF	0.11					
SOUTH PAD5	37,371	35 DWT TANKER FF	0.13					
SUBTOTAL:	78,447							78,447
OTH DIESEL/NO2 OIL								
CENT ATLAN	163,829	35 DWT TANKER FF	0.59					
LOW ATLAN	90,125	35 DWT TANKER FF	0.32					
NEW ENGLND	56,129	35 DWT TANKER FF	0.20					
SUBTOTAL:	310,083							310,083
TOTAL:	427,563							

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NORTHWEST EUROPE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
NEW ENGLND	125,997	35 DWT TANKER FF	0.45					
PRM -H/C REFORMUL								
NEW ENGLND	7,638	35 DWT TANKER FF	0.03					
KERO/JET								
NEW ENGLND	33,425	35 DWT TANKER FF	0.12					
OTH DIESEL/NO2 OIL								
NEW ENGLND	58,298	35 DWT TANKER FF	0.21					
TOTAL:	225,359							

MEDITERRANEAN

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
CENT ATLAN	66,490	35 DWT TANKER FF	0.24					
NEW ENGLND	87,781	35 DWT TANKER FF	0.31					
SUBTOTAL:	154,271							154,271
KERO/JET								
NEW ENGLND	13,983	35 DWT TANKER FF	0.05					
OTH DIESEL/NO2 OIL								
NEW ENGLND	4,572	35 DWT TANKER FF	0.02					
TOTAL:	172,826							

MIDDLE EAST

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO-REFORMUL								
NEW ENGLND	17,000	35 DWT TANKER FF	0.06					
MID -REFORMULATED								
NEW ENGLND	36,000	35 DWT TANKER FF	0.13					
MTBE								
CNTRL PAD5	15,072	35 DWT TANKER FF	0.05					
PACIFIC	310	35 DWT TANKER FF	0.00					
SOUTH PAD5	22,452	35 DWT TANKER FF	0.08					
SUBTOTAL:	37,833							37,833
KERO/JET								
PACIFIC	9,733	35 DWT TANKER FF	0.03					
OTH DIESEL/NO2 OIL								
PACIFIC	19,668	35 DWT TANKER FF	0.07					
PACIFIC NW	4,316	35 DWT TANKER FF	0.02					
SUBTOTAL:	23,984							23,984
TOTAL:	124,551							

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	1,135	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	422	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	332	35 DWT TANKER FF	0.00					
TOTAL:	1,889							

FOUNDATION CASE II — 2010

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				REG -REFORMULATED				
				REGION 8	142,378	35 DWT TANKER AF	0.51	
				REG -H/C REFORMUL				
				CANADA REF	64,835	35 DWT TANKER FF	0.23	
				NW EUROPE	296	35 DWT TANKER FF	0.00	
				MEDITER	862	35 DWT TANKER FF	0.00	
				SUBTOTAL:	65,994			-65,994
				MID -CO-REFORMUL				
				REGION 8	15,000	35 DWT TANKER AF	0.05	
				MID -REFORMULATED				
				REGION 8	33,000	35 DWT TANKER AF	0.12	
				PRM -H/C REFORMUL				
				REGION 8	82,877	35 DWT TANKER AF	0.30	
				MTBE				
				MERC MTBE	13,016	35 DWT TANKER AF	0.05	
				ETHANOL				
				REGION 5	4,736	RAIL 10M gal/500		
				KERO/JET				
				REGION 2	33,807	35 DWT TANKER AF	0.12	
				REGION 8	8,474	35 DWT TANKER AF	0.03	
				CANADA REF	5,701	35 DWT TANKER FF	0.02	
				NW EUROPE	8	35 DWT TANKER FF	0.00	
				MEDITER	10	35 DWT TANKER FF	0.00	
				SUBTOTAL:	48,000			-48,000
				DIESEL- ON HWY				
				REGION 2	20,635	35 DWT TANKER AF	0.07	
				CANADA REF	41,365	35 DWT TANKER FF	0.15	
				SUBTOTAL:	62,000			-62,000
				DIESEL- OFF HWY				
				REGION 2	12,000	35 DWT TANKER AF	0.04	
				OTH DIESEL/NO2 OIL				
				REGION 2	68,915	35 DWT TANKER AF	0.25	
				REGION 2	15,000	5000 BBL BARGE	3.00	
				CANADA REF	10,939	35 DWT TANKER FF	0.04	
				NW EUROPE	84	35 DWT TANKER FF	0.00	
				MEDITER	46	35 DWT TANKER FF	0.00	
				CARIB/S.A.	1,016	35 DWT TANKER FF	0.00	
				SUBTOTAL:	96,000			-96,000
				TOTAL:	575,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CENT ATLAN	1,000	LOCAL DIST.		REGION 2	1,000	LOCAL DIST.		
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	6,981	PIPELINE		REGION 2	247,317	LOCAL DIST.		
CENT ATLAN	247,317	LOCAL DIST.		TRSHP 8-2	22,683	PIPELINE		
SUBTOTAL:	254,298			SUBTOTAL:	270,000			-15,702
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	198,164	LOCAL DIST.		REGION 2	198,164	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	49,000	LOCAL DIST.		REGION 2	49,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	25,000	PIPELINE		REGION 2	68,000	LOCAL DIST.		
CENT ATLAN	68,000	LOCAL DIST.						
SUBTOTAL:	93,000			SUBTOTAL:	68,000			25,000
PRM -STANDARD UNLD								
APPALACH 1	3,673	PIPELINE						
				PRM -CO-REFORMUL				
				TRSHP 8-2	124,000	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	48,000	PIPELINE		REGION 2	67,489	LOCAL DIST.		
CENT ATLAN	67,489	LOCAL DIST.		TRSHP 8-2	74,511	PIPELINE		
SUBTOTAL:	115,489			SUBTOTAL:	142,000			-26,511
				MTBE				
				MERC MTBE	35,990	35 DWT TANKER AF	0.13	
				ETHANOL				
				REGION 5	15,836	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	8,948	PIPELINE		REGION 2	30,248	LOCAL DIST.		
CENT ATLAN	30,248	LOCAL DIST.		TRSHP 8-2	191,752	PIPELINE		
NEW ENGLND	33,807	35 DWT TANKER AF	0.12					
SUBTOTAL:	73,003			SUBTOTAL:	222,000			-148,997

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	37,164	PIPELINE		REGION 2	76,348	LOCAL DIST.		
CENT ATLAN	76,348	LOCAL DIST.		TRSHP 8-2	80,652	PIPELINE		
NEW ENGLND	20,635	35 DWT TANKER AF	0.07					
SUBTOTAL:	134,147			SUBTOTAL:	157,000			-22,853
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	16,000	PIPELINE		TRSHP 8-2	39,000	PIPELINE		
NEW ENGLND	12,000	35 DWT TANKER AF	0.04					
SUBTOTAL:	28,000			SUBTOTAL:	39,000			-11,000
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	36,813	PIPELINE		TRSHP 8-2	169,000	PIPELINE		
NEW ENGLND	68,915	35 DWT TANKER AF	0.25					
NEW ENGLND	15,000	5000 BBL BARGE	3.00					
SUBTOTAL:	120,728			SUBTOTAL:	169,000			-48,272
TOTAL:	1,070,501			TOTAL:	1,490,990			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	52,640	35 DWT TANKER AF	0.19	
				TRSHP 8-2	282,338	LOCAL DIST.		
				SUBTOTAL:	334,978			-334,978
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	23,985	LOCAL DIST.		REGION 3	23,985	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 8	48,480	35 DWT TANKER AF	0.17	
				TRSHP 8-2	254,520	LOCAL DIST.		
				SUBTOTAL:	303,000			-303,000
				REG -H/C REFORMUL				
				TRSHP 8-2	1,865	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	16,280	35 DWT TANKER AF	0.06	
				TRSHP 8-2	71,720	LOCAL DIST.		
				SUBTOTAL:	88,000			-88,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	7,000	LOCAL DIST.		REGION 3	7,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	14,960	35 DWT TANKER AF	0.05	
				TRSHP 8-2	73,040	LOCAL DIST.		
				SUBTOTAL:	88,000			-88,000
				PRM -STANDARD UNLD				
				REGION 8	27,950	35 DWT TANKER AF	0.10	
				TRSHP 8-2	104,172	LOCAL DIST.		
				SUBTOTAL:	132,122			-132,122
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	5,981	LOCAL DIST.		REGION 3	5,981	LOCAL DIST.		
				TRSHP 8-2	4,019	LOCAL DIST.		
SUBTOTAL:	5,981			SUBTOTAL:	10,000			-4,019
				PRM -REFORMULATED				
				REGION 8	26,130	35 DWT TANKER AF	0.09	
				TRSHP 8-2	107,870	LOCAL DIST.		
				SUBTOTAL:	134,000			-134,000
				ETHANOL				
				REGION 5	1,049	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,509	LOCAL DIST.		REGION 3	3,509	LOCAL DIST.		
				REGION 8	46,420	35 DWT TANKER AF	0.17	
				TRSHP 8-2	161,071	LOCAL DIST.		
SUBTOTAL:	3,509			SUBTOTAL:	211,000			-207,491
				DIESEL- ON HWY				
				REGION 8	33,600	35 DWT TANKER AF	0.12	
				TRSHP 8-2	206,400	LOCAL DIST.		
				SUBTOTAL:	240,000			-240,000
				DIESEL- OFF HWY				
				REGION 8	7,975	35 DWT TANKER AF	0.03	
				TRSHP 8-2	47,025	LOCAL DIST.		
				SUBTOTAL:	55,000			-55,000
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
LOW ATLAN	13,312	LOCAL DIST.		REGION 3	13,312	LOCAL DIST.		
				REGION 8	10,375	35 DWT TANKER AF	0.04	
				TRSHP 8-2	59,313	LOCAL DIST.		
SUBTOTAL:	13,312			SUBTOTAL:	83,000			-69,688
TOTAL:	53,788			TOTAL:	1,713,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	23,000	LOCAL DIST.		REGION 4	23,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 2	6,981	PIPELINE		
				REGION 5	15,000	5000 BBL BARGE	3.00	
				REGION 5	86,019	PIPELINE		
				SUBTOTAL:	108,000			-108,000
REG -H/C REFORMUL				REG -H/C REFORMUL				
APPALACH 1	1,090	LOCAL DIST.		REGION 4	1,090	LOCAL DIST.		
				REGION 5	1,688	5000 BBL BARGE	0.34	
SUBTOTAL:	1,090			SUBTOTAL:	2,778			-1,688
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 2	25,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	4,327	LOCAL DIST.		REGION 2	3,673	PIPELINE		
				REGION 4	4,327	LOCAL DIST.		
SUBTOTAL:	4,327			SUBTOTAL:	8,000			-3,673
				PRM -REFORMULATED				
				REGION 2	48,000	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
APPALACH 1	1,852	LOCAL DIST.		REGION 4	1,852	LOCAL DIST.		
				ETHANOL				
				REGION 5	370	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	9,052	LOCAL DIST.		REGION 2	8,948	PIPELINE		
				REGION 4	9,052	LOCAL DIST.		
SUBTOTAL:	9,052			SUBTOTAL:	18,000			-8,948
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	9,836	LOCAL DIST.		REGION 2	37,164	PIPELINE		
				REGION 4	9,836	LOCAL DIST.		
SUBTOTAL:	9,836			SUBTOTAL:	47,000			-37,164

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REF DIST APPALACHIAN 1

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				DIESEL- OFF HWY				
				REGION 2	16,000	PIPELINE		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	5,187	LOCAL DIST.		REGION 2	36,813	PIPELINE		
				REGION 4	5,187	LOCAL DIST.		
SUBTOTAL:	5,187			SUBTOTAL:	42,000			-36,813
TOTAL:	60,344			TOTAL:	346,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	234,980	LOCAL DIST.		REGION 5	234,980	LOCAL DIST.		
				REGION 8	11,640	5000 BBL BARGE	2.33	
				REGION 8	47,600	PIPELINE		
				TRSHP 8-2	62,790	PIPELINE		
SUBTOTAL:	234,980			SUBTOTAL:	357,010			-122,030
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	528,220	LOCAL DIST.		
APPALACH 1	86,019	PIPELINE		REGION 8	21,560	5000 BBL BARGE	4.31	
ILL,IND,KY	528,220	LOCAL DIST.		TRSHP 8-2	22,220	PIPELINE		
SUBTOTAL:	629,239			SUBTOTAL:	572,000			57,239
REG -H/C REFORMUL				REG -H/C REFORMUL				
APPALACH 1	1,688	5000 BBL BARGE	0.34	REGION 5	23,959	LOCAL DIST.		
ILL,IND,KY	23,959	LOCAL DIST.		REGION 8	1,320	5000 BBL BARGE	0.26	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	25,647			SUBTOTAL:	30,558			-4,911
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	25,610	LOCAL DIST.		REGION 5	25,610	LOCAL DIST.		
				REGION 8	2,040	5000 BBL BARGE	0.41	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	25,610			SUBTOTAL:	51,000			-25,390
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	5,225	LOCAL DIST.		REGION 5	5,225	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	5,225			SUBTOTAL:	7,000			-1,775
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	84,685	LOCAL DIST.		REGION 5	84,685	LOCAL DIST.		
				REGION 8	3,840	5000 BBL BARGE	0.77	
				TRSHP 8-2	7,475	PIPELINE		
SUBTOTAL:	84,685			SUBTOTAL:	96,000			-11,315
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	28,387	LOCAL DIST.		REGION 5	28,387	LOCAL DIST.		
				REGION 7	24,484	PIPELINE		
				REGION 8	2,680	5000 BBL BARGE	0.54	
				REGION 8	11,200	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	28,387			SUBTOTAL:	84,690			-56,304
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	91,053	LOCAL DIST.		REGION 5	91,053	LOCAL DIST.		
				REGION 8	4,760	5000 BBL BARGE	0.95	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	13,387	PIPELINE		
SUBTOTAL:	91,053			SUBTOTAL:	126,000			-34,947

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	4,442	LOCAL DIST.		REGION 5	4,442	LOCAL DIST.		
				REGION 8	280	5000 BBL BARGE	0.06	
				TRSHP 8-2	1,760	PIPELINE		
SUBTOTAL:	4,442			SUBTOTAL:	6,482			-2,040
				MTBE				
				MERC MTBE	55,649	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	370	RAIL 10M gal/500		REGION 5	12,260	RAIL 10M gal/500		
CNTRL PADS	5,425	RAIL 10M gal/500						
CENT ATLAN	15,836	RAIL 10M gal/500						
ILL,IND,KY	12,260	RAIL 10M gal/500						
LOW ATLAN	1,049	RAIL 10M gal/500						
MIN,WIS,DK	4,042	RAIL 10M gal/500						
NEW ENGLND	4,736	RAIL 10M gal/500						
OK,KAN,MO	5,100	RAIL 10M gal/500						
PAD III	3,170	RAIL 10M gal/500						
PACIFIC NW	4,049	RAIL 10M gal/500						
ROCKY MT	2,682	RAIL 10M gal/500						
SOUTH PADS	10,655	RAIL 10M gal/500						
SUBTOTAL:	69,374			SUBTOTAL:	12,260			57,114
KERO/JET				KERO/JET				
ILL,IND,KY	159,290	LOCAL DIST.		REGION 5	159,290	LOCAL DIST.		
				REGION 8	10,740	5000 BBL BARGE	2.15	
				TRSHP 8-2	8,970	PIPELINE		
SUBTOTAL:	159,290			SUBTOTAL:	179,000			-19,710
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	283,740	LOCAL DIST.		REGION 5	283,740	LOCAL DIST.		
				REGION 8	16,350	5000 BBL BARGE	3.27	
				TRSHP 8-2	26,910	PIPELINE		
SUBTOTAL:	283,740			SUBTOTAL:	327,000			-43,260
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	78,165	LOCAL DIST.		REGION 5	78,165	LOCAL DIST.		
				REGION 8	4,350	5000 BBL BARGE	0.87	
				TRSHP 8-2	4,485	PIPELINE		
SUBTOTAL:	78,165			SUBTOTAL:	87,000			-8,835
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	109,640	LOCAL DIST.		REGION 5	109,640	LOCAL DIST.		
				REGION 8	6,400	5000 BBL BARGE	1.28	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	109,640			SUBTOTAL:	128,000			-18,360
TOTAL:	1,829,477			TOTAL:	2,119,649			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	96,091	LOCAL DIST.		REGION 6	96,091	LOCAL DIST.		
				REGION 7	90,060	PIPELINE		
SUBTOTAL:	96,091			SUBTOTAL:	186,151			-90,060
REG -H/C CO NONATT				REG -H/C CO NONATT				
MIN,WIS,DK	10,117	LOCAL DIST.		REGION 6	10,117	LOCAL DIST.		
				REGION 7	16,737	PIPELINE		
SUBTOTAL:	10,117			SUBTOTAL:	26,854			-16,737
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	13,958	LOCAL DIST.		REGION 6	13,958	LOCAL DIST.		
				REGION 9	8,531	PIPELINE		
SUBTOTAL:	13,958			SUBTOTAL:	22,490			-8,531
				REG -H/C REFORMUL				
				REGION 9	20,757	PIPELINE		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	5,260	LOCAL DIST.		REGION 6	5,260	LOCAL DIST.		
				REGION 7	4,740	PIPELINE		
SUBTOTAL:	5,260			SUBTOTAL:	10,000			-4,740
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
MIN,WIS,DK	2,000	LOCAL DIST.		REGION 6	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
MIN,WIS,DK	3,000	LOCAL DIST.		REGION 6	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
MIN,WIS,DK	14,479	LOCAL DIST.		REGION 6	14,479	LOCAL DIST.		
				REGION 7	8,770	PIPELINE		
SUBTOTAL:	14,479			SUBTOTAL:	23,249			-8,770
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
MIN,WIS,DK	2,686	LOCAL DIST.		REGION 6	2,686	LOCAL DIST.		
				REGION 7	1,018	PIPELINE		
SUBTOTAL:	2,686			SUBTOTAL:	3,704			-1,018
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	968	LOCAL DIST.		REGION 6	968	LOCAL DIST.		
				REGION 9	6,032	PIPELINE		
SUBTOTAL:	968			SUBTOTAL:	7,000			-6,032
				MTBE				
				MERC MTBE	2,753	RAIL 10M gal/500		

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	4,042	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	14,150	LOCAL DIST.		REGION 6	14,150	LOCAL DIST.		
				REGION 7	11,850	PIPELINE		
SUBTOTAL:	14,150			SUBTOTAL:	26,000			-11,850
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	49,316	LOCAL DIST.		REGION 6	49,316	LOCAL DIST.		
				REGION 7	21,684	PIPELINE		
SUBTOTAL:	49,316			SUBTOTAL:	71,000			-21,684
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	40,000	LOCAL DIST.		REGION 6	40,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	21,040	LOCAL DIST.		REGION 6	21,040	LOCAL DIST.		
				REGION 7	18,960	PIPELINE		
SUBTOTAL:	21,040			SUBTOTAL:	40,000			-18,960
TOTAL:	273,065			TOTAL:	489,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	90,060	PIPELINE		REGION 7	32,215	LOCAL DIST.		
OK,KAN,MO	32,215	LOCAL DIST.		REGION 8	288,386	PIPELINE		
ROCKY MT	21,018	PIPELINE						
SUBTOTAL:	143,294			SUBTOTAL:	320,602			-177,308
REG -H/C CO NONATT								
MIN,WIS,DK	16,737	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	89,000	LOCAL DIST.		REGION 7	89,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	16,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	10,740			SUBTOTAL:	16,000			-5,260
MID -CO NON ATTAIN								
ROCKY MT	2,210	PIPELINE						
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	10,000	LOCAL DIST.		REGION 7	10,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	24,484	PIPELINE		REGION 7	39,298	LOCAL DIST.		
MIN,WIS,DK	8,770	PIPELINE						
OK,KAN,MO	39,298	LOCAL DIST.						
ROCKY MT	7,000	PIPELINE						
SUBTOTAL:	79,552			SUBTOTAL:	39,298			40,254
PRM -H/C CO NONATT								
MIN,WIS,DK	1,018	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	16,000	LOCAL DIST.		REGION 7	16,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	8,199	5000 BBL BARGE	1.64	
				ETHANOL				
				REGION 5	5,100	RAIL 10M gal/500		

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OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	11,850	PIPELINE		REGION 7	19,820	LOCAL DIST.		
OK,KAN,MO	19,820	LOCAL DIST.		REGION 8	64,180	PIPELINE		
ROCKY MT	3,014	PIPELINE						
SUBTOTAL:	34,684			SUBTOTAL:	84,000			-49,316
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	21,684	PIPELINE		REGION 7	119,868	LOCAL DIST.		
OK,KAN,MO	119,868	LOCAL DIST.		REGION 8	20,132	PIPELINE		
SUBTOTAL:	141,552			SUBTOTAL:	140,000			1,552
DIESEL- OFF HWY				DIESEL- OFF HWY				
OK,KAN,MO	58,000	LOCAL DIST.		REGION 7	58,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	18,960	PIPELINE		REGION 7	49,000	LOCAL DIST.		
OK,KAN,MO	49,000	LOCAL DIST.						
SUBTOTAL:	67,960			SUBTOTAL:	49,000			18,960
TOTAL:	670,747			TOTAL:	835,199			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	11,640	5000 BBL BARGE	2.33	REGION 8	488,652	LOCAL DIST.		
ILL,IND,KY	47,600	PIPELINE						
LOW ATLAN	52,640	35 DWT TANKER AF	0.19					
OK,KAN,MO	288,386	PIPELINE						
PAD III	488,652	LOCAL DIST.						
ROCKY MT	27,900	PIPELINE						
SOUTH PAD5	15,200	PIPELINE						
TRSHP 8-2	345,128	PIPELINE						
SUBTOTAL:	1,277,147			SUBTOTAL:	488,652			788,494
REG -CO NON ATTAIN								
ROCKY MT	11,426	PIPELINE						
REG -CO-REFORMUL				REG -CO-REFORMUL				
PAD III	6,000	LOCAL DIST.		REGION 8	6,000	LOCAL DIST.		
SOUTH PAD5	16,873	PIPELINE						
SUBTOTAL:	22,873			SUBTOTAL:	6,000			16,873
REG -H/C CO NONATT				REG -H/C CO NONATT				
PAD III	4,630	LOCAL DIST.		REGION 8	4,630	LOCAL DIST.		
ROCKY MT	2,524	PIPELINE						
SOUTH PAD5	6,709	PIPELINE						
SUBTOTAL:	13,863			SUBTOTAL:	4,630			9,233
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	21,560	5000 BBL BARGE	4.31	REGION 8	237,000	LOCAL DIST.		
LOW ATLAN	48,480	35 DWT TANKER AF	0.17					
NEW ENGLND	142,378	35 DWT TANKER AF	0.51					
PAD III	237,000	LOCAL DIST.						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	299,423	PIPELINE						
SUBTOTAL:	761,191			SUBTOTAL:	237,000			524,191
REG -H/C REFORMUL								
ILL,IND,KY	1,320	5000 BBL BARGE	0.26					
TRSHP 8-2	7,144	PIPELINE						
SUBTOTAL:	8,464							8,464
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	2,040	5000 BBL BARGE	0.41	REGION 8	72,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	16,280	35 DWT TANKER AF	0.06					
OK,KAN,MO	16,000	PIPELINE						
PAD III	72,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	86,670	PIPELINE						
SUBTOTAL:	207,920			SUBTOTAL:	72,000			135,920

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	280	5000 BBL BARGE	0.06	REGION 8	1,000	LOCAL DIST.		
NEW ENGLND	15,000	35 DWT TANKER AF	0.05					
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	18,725			SUBTOTAL:	1,000			17,725
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	3,840	5000 BBL BARGE	0.77	REGION 8	36,000	LOCAL DIST.		
LOW ATLAN	14,960	35 DWT TANKER AF	0.05					
NEW ENGLND	33,000	35 DWT TANKER AF	0.12					
PAD III	36,000	LOCAL DIST.						
TRSHP 8-2	80,515	PIPELINE						
SUBTOTAL:	168,315			SUBTOTAL:	36,000			132,315
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,680	5000 BBL BARGE	0.54	REGION 8	115,548	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	27,950	35 DWT TANKER AF	0.10					
PAD III	115,548	LOCAL DIST.						
ROCKY MT	6,510	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	122,112	PIPELINE						
SUBTOTAL:	288,850			SUBTOTAL:	115,548			173,302
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	3,800	PIPELINE						
TRSHP 8-2	128,019	PIPELINE						
SUBTOTAL:	132,819			SUBTOTAL:	1,000			131,819
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	4,760	5000 BBL BARGE	0.95	REGION 8	52,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	26,130	35 DWT TANKER AF	0.09					
PAD III	52,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	195,768	PIPELINE						
SUBTOTAL:	297,358			SUBTOTAL:	52,000			245,358
PRM -H/C REFORMUL								
ILL,IND,KY	280	5000 BBL BARGE	0.06					
NEW ENGLND	82,877	35 DWT TANKER AF	0.30					
TRSHP 8-2	1,760	PIPELINE						
SUBTOTAL:	84,916							84,916
				MTBE				
				MERC MTBE	82,077	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,170	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	10,740	5000 BBL BARGE	2.15	REGION 8	237,000	LOCAL DIST.		
LOW ATLAN	46,420	35 DWT TANKER AF	0.17					
NEW ENGLND	8,474	35 DWT TANKER AF	0.03					
OK,KAN,MO	64,180	PIPELINE						
PAD III	237,000	LOCAL DIST.						
ROCKY MT	13,950	PIPELINE						
SOUTH PAD5	11,400	PIPELINE						
TRSHP 8-2	361,793	PIPELINE						
SUBTOTAL:	753,958			SUBTOTAL:	237,000			516,958
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	16,350	5000 BBL BARGE	3.27	REGION 8	271,000	LOCAL DIST.		
LOW ATLAN	33,600	35 DWT TANKER AF	0.12					
OK,KAN,MO	20,132	PIPELINE						
PAD III	271,000	LOCAL DIST.						
ROCKY MT	8,370	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	313,962	PIPELINE						
SUBTOTAL:	676,714			SUBTOTAL:	271,000			405,714
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	4,350	5000 BBL BARGE	0.87	REGION 8	133,000	LOCAL DIST.		
LOW ATLAN	7,975	35 DWT TANKER AF	0.03					
PAD III	133,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	6,650	PIPELINE						
TRSHP 8-2	90,510	PIPELINE						
SUBTOTAL:	248,065			SUBTOTAL:	133,000			115,065

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PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	6,400	5000 BBL BARGE	1.28	REGION 8	210,000	LOCAL DIST.		
LOW ATLAN	10,375	35 DWT TANKER AF	0.04					
PAD III	210,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	240,273	PIPELINE						
SUBTOTAL:	473,578			SUBTOTAL:	210,000			263,578
TOTAL:	5,454,879			TOTAL:	1,952,077			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	10,857	PIPELINE		REGION 7	21,018	PIPELINE		
ROCKY MT	71,055	LOCAL DIST.		REGION 8	27,900	PIPELINE		
				REGION 9	71,055	LOCAL DIST.		
SUBTOTAL:	81,912			SUBTOTAL:	119,973			-38,062
				REG -CO NON ATTAIN				
				REGION 8	11,426	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	789	PIPELINE		REGION 8	2,524	PIPELINE		
ROCKY MT	10,972	LOCAL DIST.		REGION 9	10,972	LOCAL DIST.		
SUBTOTAL:	11,760			SUBTOTAL:	13,495			-1,735
REG -REFORMULATED				REG -REFORMULATED				
MIN,WIS,DK	8,531	PIPELINE		REGION 9	12,000	LOCAL DIST.		
PACIFIC NW	2,343	PIPELINE						
ROCKY MT	12,000	LOCAL DIST.						
SUBTOTAL:	22,874			SUBTOTAL:	12,000			10,874
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	20,757	PIPELINE		REGION 9	7,408	LOCAL DIST.		
PACIFIC NW	8,675	PIPELINE						
ROCKY MT	7,408	LOCAL DIST.						
SUBTOTAL:	36,840			SUBTOTAL:	7,408			29,432
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	335	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	5,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	5,420	LOCAL DIST.		
SUBTOTAL:	5,755			SUBTOTAL:	17,000			-11,245
				MID -CO NON ATTAIN				
				REGION 7	2,210	PIPELINE		
				REGION 8	2,790	PIPELINE		
				SUBTOTAL:	5,000			-5,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	2,000	LOCAL DIST.		REGION 9	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 7	7,000	PIPELINE		
ROCKY MT	5,817	LOCAL DIST.		REGION 8	6,510	PIPELINE		
				REGION 9	5,817	LOCAL DIST.		
SUBTOTAL:	6,822			SUBTOTAL:	19,327			-12,505

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	335	PIPELINE		REGION 8	2,790	PIPELINE		-2,455
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
ROCKY MT	2,046	LOCAL DIST.		REGION 9	2,046	LOCAL DIST.		
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	6,032	PIPELINE		REGION 9	3,000	LOCAL DIST.		
ROCKY MT	3,000	LOCAL DIST.						
SUBTOTAL:	9,032			SUBTOTAL:	3,000			6,032
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
PACIFIC NW	1,577	PIPELINE		REGION 9	1,852	LOCAL DIST.		
ROCKY MT	1,852	LOCAL DIST.						
SUBTOTAL:	3,429			SUBTOTAL:	1,852			1,577
				ETHANOL				
				REGION 5	2,682	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	7,035	PIPELINE		REGION 7	3,014	PIPELINE		
ROCKY MT	34,036	LOCAL DIST.		REGION 8	13,950	PIPELINE		
				REGION 9	34,036	LOCAL DIST.		
SUBTOTAL:	41,071			SUBTOTAL:	51,000			-9,929
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	3,685	PIPELINE		REGION 8	8,370	PIPELINE		
ROCKY MT	46,630	LOCAL DIST.		REGION 9	46,630	LOCAL DIST.		
SUBTOTAL:	50,315			SUBTOTAL:	55,000			-4,685
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	1,675	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	32,420	LOCAL DIST.		REGION 9	32,420	LOCAL DIST.		
SUBTOTAL:	34,095			SUBTOTAL:	38,000			-3,905
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	2,345	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	26,420	LOCAL DIST.		REGION 9	26,420	LOCAL DIST.		
SUBTOTAL:	28,765			SUBTOTAL:	32,000			-3,235
TOTAL:	339,720			TOTAL:	398,000			

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	71,043	LOCAL DIST.		REGION 9	10,857	PIPELINE		
				REGION 10	71,043	LOCAL DIST.		
SUBTOTAL:	71,043			SUBTOTAL:	81,900			-10,857
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	6,619	LOCAL DIST.		REGION 9	789	PIPELINE		
				REGION 10	6,619	LOCAL DIST.		
SUBTOTAL:	6,619			SUBTOTAL:	7,408			-789
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	54,657	LOCAL DIST.		REGION 9	2,343	PIPELINE		
				REGION 10	54,657	LOCAL DIST.		
SUBTOTAL:	54,657			SUBTOTAL:	57,000			-2,343
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	30,217	LOCAL DIST.		REGION 9	8,675	PIPELINE		
				REGION 10	30,217	LOCAL DIST.		
SUBTOTAL:	30,217			SUBTOTAL:	38,892			-8,675
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	3,665	LOCAL DIST.		REGION 9	335	PIPELINE		
				REGION 10	3,665	LOCAL DIST.		
SUBTOTAL:	3,665			SUBTOTAL:	4,000			-335
MID -CO-REFORMUL				MID -CO-REFORMUL				
PACIFIC NW	2,000	LOCAL DIST.		REGION 10	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	2,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	2,330	LOCAL DIST.		
SUBTOTAL:	2,330			SUBTOTAL:	3,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	11,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	11,995	LOCAL DIST.		
SUBTOTAL:	11,995			SUBTOTAL:	13,000			-1,005
				PRM -CO NON ATTAIN				
				REGION 9	335	PIPELINE		
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PACIFIC NW	6,297	LOCAL DIST.		REGION 10	6,297	LOCAL DIST.		
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
PACIFIC NW	1,542	LOCAL DIST.		REGION 10	1,542	LOCAL DIST.		
SOUTH PADS	2,436	35 DWT TANKER AF	0.01					
SUBTOTAL:	3,978			SUBTOTAL:	1,542			2,436

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	10,000	LOCAL DIST.		REGION 10	10,000	LOCAL DIST.		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	6,005	35 DWT TANKER AF	0.02	REGION 9	1,577	PIPELINE		4,428
				MTBE				
				CANADA W.	7,492	35 DWT TANKER FF	0.03	
				ETHANOL				
				REGION 5	4,049	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	55,965	LOCAL DIST.		REGION 9	7,035	PIPELINE		
				REGION 10	55,965	LOCAL DIST.		
SUBTOTAL:	55,965			SUBTOTAL:	63,000			-7,035
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	47,315	LOCAL DIST.		REGION 9	3,685	PIPELINE		
				REGION 10	47,315	LOCAL DIST.		
SUBTOTAL:	47,315			SUBTOTAL:	51,000			-3,685
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	21,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	21,325	LOCAL DIST.		
SUBTOTAL:	21,325			SUBTOTAL:	23,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	29,655	LOCAL DIST.		REGION 9	2,345	PIPELINE		
				REGION 10	29,655	LOCAL DIST.		
SUBTOTAL:	29,655			SUBTOTAL:	32,000			-2,345
TOTAL:	363,067			TOTAL:	407,492			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	5,000	LOCAL DIST.		REGION 11	5,000	LOCAL DIST.		
SOUTH PAD5	3,151	35 DWT TANKER AF	0.01					
SUBTOTAL:	8,151			SUBTOTAL:	5,000			3,151
REG -CO NON ATTAIN								
PACIFIC	2,160	35 DWT TANKER AF	0.01					
REG -H/C CO NONATT								
SOUTH PAD5	2,808	35 DWT TANKER AF	0.01					
REG -REFORMULATED				REG -REFORMULATED				
CNTRL PAD5	55,764	LOCAL DIST.		REGION 11	55,764	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	163,088	LOCAL DIST.		REGION 11	163,088	LOCAL DIST.		
SOUTH PAD5	19,297	35 DWT TANKER AF	0.07					
SUBTOTAL:	182,385			SUBTOTAL:	163,088			19,297
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	9,000	LOCAL DIST.		REGION 11	9,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	12,000	LOCAL DIST.		REGION 11	12,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	69,303	LOCAL DIST.		REGION 11	69,303	LOCAL DIST.		
				MTBE				
				CANADA W.	13,382	35 DWT TANKER FF	0.05	
				MERC MTBE	4,039	35 DWT TANKER AF	0.01	
				SUBTOTAL:	17,420			-17,420
				ETHANOL				
				REGION 5	5,425	RAIL 10M gal/500		
KERO/JET				KERO/JET				
CNTRL PAD5	98,000	LOCAL DIST.		REGION 11	98,000	LOCAL DIST.		
PACIFIC	13,475	35 DWT TANKER AF	0.05					
SUBTOTAL:	111,475			SUBTOTAL:	98,000			13,475

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CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	64,000	LOCAL DIST.		REGION 11	64,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	26,000	LOCAL DIST.		REGION 11	26,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	15,000	LOCAL DIST.		REGION 11	15,000	LOCAL DIST.		
PACIFIC	7,130	35 DWT TANKER AF	0.03					
SUBTOTAL:	22,130			SUBTOTAL:	15,000			7,130
TOTAL:	566,176			TOTAL:	541,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	13,549	LOCAL DIST.		REGION 8	15,200	PIPELINE		
				REGION 11	3,151	35 DWT TANKER AF	0.01	
				REGION 12	13,549	LOCAL DIST.		
SUBTOTAL:	13,549			SUBTOTAL:	31,900			-18,351
				REG -CO-REFORMUL				
				REGION 8	16,873	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	11,277	LOCAL DIST.		REGION 8	6,709	PIPELINE		
				REGION 11	2,808	35 DWT TANKER AF	0.01	
				REGION 12	11,277	LOCAL DIST.		
SUBTOTAL:	11,277			SUBTOTAL:	20,794			-9,517
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	36,120	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	36,120	LOCAL DIST.		
SUBTOTAL:	36,120			SUBTOTAL:	48,470			-12,350
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	301,047	LOCAL DIST.		REGION 11	19,297	35 DWT TANKER AF	0.07	
				REGION 12	301,047	LOCAL DIST.		
SUBTOTAL:	301,047			SUBTOTAL:	320,344			-19,297
MID -STANDARD UNLD				MID -STANDARD UNLD				
SOUTH PAD5	580	LOCAL DIST.		REGION 8	950	PIPELINE		
				FAR EAST	1,056	35 DWT TANKER FF	0.00	
				MIDDLE EST	414	35 DWT TANKER FF	0.00	
				REGION 12	580	LOCAL DIST.		
SUBTOTAL:	580			SUBTOTAL:	3,000			-2,420
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	18,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	18,050	LOCAL DIST.		
SUBTOTAL:	18,050			SUBTOTAL:	19,000			-950
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	15,000	LOCAL DIST.		REGION 12	15,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	4,150	LOCAL DIST.		REGION 8	2,850	PIPELINE		
				REGION 12	4,150	LOCAL DIST.		
SUBTOTAL:	4,150			SUBTOTAL:	7,000			-2,850

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -CO-REFORMUL				
				REGION 8	3,800	PIPELINE		
				PRM -H/C CO NONATT				
				REGION 8	1,118	PIPELINE		
				REGION 10	2,436	35 DWT TANKER AF	0.01	
				SUBTOTAL:	3,554			-3,554
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	104,435	LOCAL DIST.		REGION 10	6,005	35 DWT TANKER AF	0.02	
				REGION 12	104,435	LOCAL DIST.		
SUBTOTAL:	104,435			SUBTOTAL:	110,441			-6,005
				MTBE				
				MERC MTBE	34,268	35 DWT TANKER AF	0.12	
				ETHANOL				
				REGION 5	10,655	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC	5,771	35 DWT TANKER AF	0.02	REGION 8	11,400	PIPELINE		
SOUTH PAD5	164,600	LOCAL DIST.		REGION 12	164,600	LOCAL DIST.		
SUBTOTAL:	170,371			SUBTOTAL:	176,000			-5,629
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	112,700	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 12	112,700	LOCAL DIST.		
SUBTOTAL:	112,700			SUBTOTAL:	126,000			-13,300
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	46,350	LOCAL DIST.		REGION 8	6,650	PIPELINE		
				REGION 12	46,350	LOCAL DIST.		
SUBTOTAL:	46,350			SUBTOTAL:	53,000			-6,650
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	25,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	25,050	LOCAL DIST.		
SUBTOTAL:	25,050			SUBTOTAL:	26,000			-950
TOTAL:	859,680			TOTAL:	1,029,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	21,000	LOCAL DIST.		REGION 13	21,000	LOCAL DIST.		
				REG -CO NON ATTAIN				
				REGION 11	2,160	35 DWT TANKER AF	0.01	
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	714	LOCAL DIST.		REGION 13	714	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	3,000	LOCAL DIST.		REGION 13	3,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	10,000	LOCAL DIST.		REGION 13	10,000	LOCAL DIST.		
				MTBE				
				CANADA W.	126	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	56,250	LOCAL DIST.		REGION 11	13,475	35 DWT TANKER AF	0.05	
				FAR EAST	410	35 DWT TANKER FF	0.00	
				MIDDLE EST	94	35 DWT TANKER FF	0.00	
				REGION 13	56,250	LOCAL DIST.		
				REGION 12	5,771	35 DWT TANKER AF	0.02	
SUBTOTAL:	56,250			SUBTOTAL:	76,000			-19,751
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	14,000	LOCAL DIST.		REGION 13	14,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	6,000	LOCAL DIST.		REGION 13	6,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	20,036	LOCAL DIST.		REGION 11	7,130	35 DWT TANKER AF	0.03	
				FAR EAST	424	35 DWT TANKER FF	0.00	
				MIDDLE EST	410	35 DWT TANKER FF	0.00	
				REGION 13	20,036	LOCAL DIST.		
SUBTOTAL:	20,036			SUBTOTAL:	28,000			-7,964
TOTAL:	130,999			TOTAL:	161,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	62,790	PIPELINE		REGION 8	345,128	PIPELINE		
LOW ATLAN	282,338	LOCAL DIST.						
SUBTOTAL:	345,128			SUBTOTAL:	345,128			
REG -REFORMULATED				REG -REFORMULATED				
CENT ATLAN	22,683	PIPELINE		REGION 8	299,423	PIPELINE		
ILL,IND,KY	22,220	PIPELINE						
LOW ATLAN	254,520	LOCAL DIST.						
SUBTOTAL:	299,423			SUBTOTAL:	299,423			
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	7,144	PIPELINE		
LOW ATLAN	1,865	LOCAL DIST.						
SUBTOTAL:	7,144			SUBTOTAL:	7,144			0
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	86,670	PIPELINE		
LOW ATLAN	71,720	LOCAL DIST.						
SUBTOTAL:	86,670			SUBTOTAL:	86,670			
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	7,475	PIPELINE		REGION 8	80,515	PIPELINE		
LOW ATLAN	73,040	LOCAL DIST.						
SUBTOTAL:	80,515			SUBTOTAL:	80,515			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	122,112	PIPELINE		
LOW ATLAN	104,172	LOCAL DIST.						
SUBTOTAL:	122,112			SUBTOTAL:	122,112			0
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	124,000	PIPELINE		REGION 8	128,019	PIPELINE		
LOW ATLAN	4,019	LOCAL DIST.						
SUBTOTAL:	128,019			SUBTOTAL:	128,019			
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	74,511	PIPELINE		REGION 8	195,768	PIPELINE		
ILL,IND,KY	13,387	PIPELINE						
LOW ATLAN	107,870	LOCAL DIST.						
SUBTOTAL:	195,768			SUBTOTAL:	195,768			
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	1,760	PIPELINE		REGION 8	1,760	PIPELINE		

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	191,752	PIPELINE		REGION 8	361,793	PIPELINE		
ILL,IND,KY	8,970	PIPELINE						
LOW ATLAN	161,071	LOCAL DIST.						
SUBTOTAL:	361,793			SUBTOTAL:	361,793			
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	80,652	PIPELINE		REGION 8	313,962	PIPELINE		
ILL,IND,KY	26,910	PIPELINE						
LOW ATLAN	206,400	LOCAL DIST.						
SUBTOTAL:	313,962			SUBTOTAL:	313,962			
DIESEL- OFF HWY				DIESEL- OFF HWY				
CENT ATLAN	39,000	PIPELINE		REGION 8	90,510	PIPELINE		
ILL,IND,KY	4,485	PIPELINE						
LOW ATLAN	47,025	LOCAL DIST.						
SUBTOTAL:	90,510			SUBTOTAL:	90,510			
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	169,000	PIPELINE		REGION 8	240,273	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	59,313	LOCAL DIST.						
SUBTOTAL:	240,273			SUBTOTAL:	240,273			0
TOTAL:	2,274,572			TOTAL:	2,274,572			

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MERCHANT MTBE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 2	35,990	35 DWT TANKER AF	0.13					
REGION 5	55,649	PIPELINE						
REGION 7	8,199	5000 BBL BARGE	1.64					
REGION 8	82,077	LOCAL DIST.						
CNTRL PAD5	4,039	35 DWT TANKER AF	0.01					
MIN,WIS,DK	2,753	RAIL 10M gal/500						
NEW ENGLND	13,016	35 DWT TANKER AF	0.05					
SOUTH PAD5	34,268	35 DWT TANKER AF	0.12					
SUBTOTAL:	235,990							235,990
TOTAL:	235,990							

FOUNDATION CASE F2 (2010) 16. 1. 1

CANADA

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -H/C REFORMUL								
NEW ENGLND	64,835	35 DWT TANKER FF	0.23					
KERO/JET								
NEW ENGLND	5,701	35 DWT TANKER FF	0.02					
DIESEL- ON HWY								
NEW ENGLND	41,365	35 DWT TANKER FF	0.15					
OTH DIESEL/NO2 OIL								
NEW ENGLND	10,939	35 DWT TANKER FF	0.04					
TOTAL:	122,841							

FOUNDATION CASE F2 (2010) 21. 1. 1

CARIBBEAN/VENEZUELA

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
OTH DIESEL/NO2 OIL							
NEW ENGLND	1,016	35 DWT TANKER FF	0.00				
TOTAL:	1,016						

FOUNDATION CASE F2 (2010) 17. 1. 1

NORTHWEST EUROPE

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
REG -H/C REFORMUL							
NEW ENGLND	296	35 DWT TANKER FF	0.00				
KERO/JET							
NEW ENGLND	8	35 DWT TANKER FF	0.00				
OTH DIESEL/NO2 OIL							
NEW ENGLND	84	35 DWT TANKER FF	0.00				
TOTAL:	388						

FOUNDATION CASE F2 (2010) 18. 1. 1

MEDITERRANEAN

SUPPLY				DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER
REG -H/C REFORMUL							
NEW ENGLND	862	35 DWT TANKER FF	0.00				
KERO/JET							
NEW ENGLND	10	35 DWT TANKER FF	0.00				
OTH DIESEL/NO2 OIL							
NEW ENGLND	46	35 DWT TANKER FF	0.00				
TOTAL:	918						

FOUNDATION CASE F2 (2010) 19. 1. 1

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MID -STANDARD UNLD								
SOUTH PAD5	414	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	94	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	410	35 DWT TANKER FF	0.00					
TOTAL:	918							

FOUNDATION CASE F2 (2010) 20. 1. 1

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MID -STANDARD UNLD								
SOUTH PAD5	1,056	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	410	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	424	35 DWT TANKER FF	0.00					
TOTAL:	1,891							

FOUNDATION CASE F2 (2010) 20. 1. 1

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MID -STANDARD UNLD								
SOUTH PAD5	1,056	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	410	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	424	35 DWT TANKER FF	0.00					
TOTAL:	1,891							

FOUNDATION CASE III — 2010

U.S. and Foreign Supply/Demand Balances By Product

NEW ENGLAND

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE / NUMBER	PRODUCT/SOURCE	B/D	MODE / NUMBER	
REG -REFORMULATED						
			REGION 8	132,000	35 DWT TANKER AF 0.47	
REG -H/C REFORMUL						
			REGION 8	50,179	35 DWT TANKER AF 0.18	
			CANADA REF	518	35 DWT TANKER FF 0.00	
			NW EUROPE	296	35 DWT TANKER FF 0.00	
			MEDITER	862	35 DWT TANKER FF 0.00	
			SUBTOTAL:	51,856		-51,856
MID -CO-REFORMUL						
			REGION 8	13,000	35 DWT TANKER AF 0.05	
MID -REFORMULATED						
			REGION 8	29,000	35 DWT TANKER AF 0.10	
PRM -H/C REFORMUL						
			REGION 8	75,278	35 DWT TANKER AF 0.27	
MTBE						
			MERC MTBE	6,771	35 DWT TANKER AF 0.02	
ETHANOL						
			REGION 5	6,095	RAIL 10M gal/500	
KERO/JET						
			REGION 8	41,937	35 DWT TANKER AF 0.15	
			CANADA REF	46	35 DWT TANKER FF 0.00	
			NW EUROPE	8	35 DWT TANKER FF 0.00	
			MEDITER	10	35 DWT TANKER FF 0.00	
			SUBTOTAL:	42,000		-42,000
DIESEL- ON HWY						
			REGION 2	53,669	35 DWT TANKER AF 0.19	
			CANADA REF	331	35 DWT TANKER FF 0.00	
			SUBTOTAL:	54,000		-54,000
DIESEL- OFF HWY						
			REGION 2	11,000	5000 BBL BARGE 2.20	

NEW ENGLAND

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
				OTH DIESEL/NO2 OIL				
				REGION 2	77,767	35 DWT TANKER AF	0.28	
				REGION 2	4,000	5000 BBL BARGE	0.80	
				CANADA REF	87	35 DWT TANKER FF	0.00	
				NW EUROPE	84	35 DWT TANKER FF	0.00	
				MEDITER	46	35 DWT TANKER FF	0.00	
				CARIB/S.A.	1,016	35 DWT TANKER FF	0.00	
				SUBTOTAL:	83,000			-83,000
				TOTAL:	504,000			

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	12,943	PIPELINE		REGION 2	238,000	LOCAL DIST.		
CENT ATLAN	238,000	LOCAL DIST.						
SUBTOTAL:	250,943			SUBTOTAL:	238,000			12,943
REG -H/C REFORMUL				REG -H/C REFORMUL				
CENT ATLAN	175,014	LOCAL DIST.		REGION 2	175,014	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CENT ATLAN	43,000	LOCAL DIST.		REGION 2	43,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
APPALACH 1	22,000	PIPELINE		REGION 2	60,000	LOCAL DIST.		
CENT ATLAN	60,000	LOCAL DIST.						
SUBTOTAL:	82,000			SUBTOTAL:	60,000			22,000
PRM -STANDARD UNLD								
APPALACH 1	1,840	PIPELINE						
				PRM -CO-REFORMUL				
				TRSHP 8-2	43,966	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
APPALACH 1	43,000	PIPELINE		TRSHP 8-2	125,000	PIPELINE		-82,000
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CENT ATLAN	60,222	LOCAL DIST.		REGION 2	60,222	LOCAL DIST.		
				MTBE				
				MERC MTBE	24,918	35 DWT TANKER AF	0.09	
				ETHANOL				
				REGION 5	18,799	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	6,948	PIPELINE		REGION 2	60,701	LOCAL DIST.		
CENT ATLAN	60,701	LOCAL DIST.		TRSHP 8-2	132,299	PIPELINE		
SUBTOTAL:	67,650			SUBTOTAL:	193,000			-125,350
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	22,438	LOCAL DIST.		REGION 2	22,438	LOCAL DIST.		
NEW ENGLND	53,669	35 DWT TANKER AF	0.19	TRSHP 8-2	114,562	PIPELINE		
SUBTOTAL:	76,107			SUBTOTAL:	137,000			-60,893

CENTRAL ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
DIESEL- OFF HWY				DIESEL- OFF HWY				
APPALACH 1	14,000	PIPELINE		REGION 2	33,000	LOCAL DIST.		
CENT ATLAN	33,000	LOCAL DIST.						
NEW ENGLND	11,000	5000 BBL BARGE	2.20					
SUBTOTAL:	58,000			SUBTOTAL:	33,000			25,000
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	10,859	PIPELINE		REGION 2	29,931	LOCAL DIST.		
CENT ATLAN	29,931	LOCAL DIST.		TRSHP 8-2	116,069	PIPELINE		
NEW ENGLND	77,767	35 DWT TANKER AF	0.28					
NEW ENGLND	4,000	5000 BBL BARGE	0.80					
SUBTOTAL:	122,557			SUBTOTAL:	146,000			-23,443
TOTAL:	980,332			TOTAL:	1,297,919			

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				REG -STANDARD UNLD				
				REGION 8	46,720	35 DWT TANKER AF	0.17	
				TRSHP 8-2	250,358	LOCAL DIST.		
				SUBTOTAL:	297,078			-297,078
REG -CO-REFORMUL				REG -CO-REFORMUL				
LOW ATLAN	15,162	LOCAL DIST.		REGION 3	15,162	LOCAL DIST.		
REG -REFORMULATED				REG -REFORMULATED				
LOW ATLAN	3,403	LOCAL DIST.		REGION 3	3,403	LOCAL DIST.		
				REGION 8	42,560	35 DWT TANKER AF	0.15	
				TRSHP 8-2	220,037	LOCAL DIST.		
SUBTOTAL:	3,403			SUBTOTAL:	266,000			-262,597
				REG -H/C REFORMUL				
				TRSHP 8-2	6,332	LOCAL DIST.		
				MID -STANDARD UNLD				
				REGION 8	14,440	35 DWT TANKER AF	0.05	
				TRSHP 8-2	61,560	LOCAL DIST.		
				SUBTOTAL:	76,000			-76,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
LOW ATLAN	7,000	LOCAL DIST.		REGION 3	7,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 8	13,260	35 DWT TANKER AF	0.05	
				TRSHP 8-2	64,740	LOCAL DIST.		
				SUBTOTAL:	78,000			-78,000
				PRM -STANDARD UNLD				
				REGION 8	25,080	35 DWT TANKER AF	0.09	
				TRSHP 8-2	91,042	LOCAL DIST.		
				SUBTOTAL:	116,122			-116,122
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
LOW ATLAN	9,000	LOCAL DIST.		REGION 3	9,000	LOCAL DIST.		
				PRM -REFORMULATED				
				REGION 8	23,010	35 DWT TANKER AF	0.08	
				TRSHP 8-2	94,990	LOCAL DIST.		
				SUBTOTAL:	118,000			-118,000
				ETHANOL				
				REGION 5	1,306	RAIL 10M gal/500		

LOWER ATLANTIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
LOW ATLAN	3,293	LOCAL DIST.		REGION 3	3,293	LOCAL DIST.		
				REGION 8	40,480	35 DWT TANKER AF	0.14	
				TRSHP 8-2	140,227	LOCAL DIST.		
SUBTOTAL:	3,293			SUBTOTAL:	184,000			-180,707
DIESEL- ON HWY				DIESEL- ON HWY				
LOW ATLAN	8,169	LOCAL DIST.		REGION 3	8,169	LOCAL DIST.		
				REGION 8	29,120	35 DWT TANKER AF	0.10	
				TRSHP 8-2	170,711	LOCAL DIST.		
SUBTOTAL:	8,169			SUBTOTAL:	208,000			-199,831
				DIESEL- OFF HWY				
				REGION 8	6,960	35 DWT TANKER AF	0.02	
				TRSHP 8-2	41,040	LOCAL DIST.		
				SUBTOTAL:	48,000			-48,000
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
LOW ATLAN	4,327	LOCAL DIST.		REGION 3	4,327	LOCAL DIST.		
				REGION 8	9,000	35 DWT TANKER AF	0.03	
				TRSHP 8-2	58,673	LOCAL DIST.		
SUBTOTAL:	4,327			SUBTOTAL:	72,000			-67,673
TOTAL:	50,354			TOTAL:	1,502,000			

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
APPALACH 1	21,000	LOCAL DIST.		REGION 4	21,000	LOCAL DIST.		
				REG -REFORMULATED				
				REGION 2	12,943	PIPELINE		
				REGION 5	15,000	5000 BBL BARGE	3.00	
				REGION 5	66,057	PIPELINE		
				SUBTOTAL:	94,000			-94,000
REG -H/C REFORMUL				REG -H/C REFORMUL				
APPALACH 1	2,778	LOCAL DIST.		REGION 4	2,778	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
APPALACH 1	6,000	LOCAL DIST.		REGION 4	6,000	LOCAL DIST.		
				MID -REFORMULATED				
				REGION 2	22,000	PIPELINE		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
APPALACH 1	5,160	LOCAL DIST.		REGION 2	1,840	PIPELINE		
				REGION 4	5,160	LOCAL DIST.		
SUBTOTAL:	5,160			SUBTOTAL:	7,000			-1,840
				PRM -REFORMULATED				
				REGION 2	43,000	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
APPALACH 1	926	LOCAL DIST.		REGION 4	926	LOCAL DIST.		
				ETHANOL				
				REGION 5	296	RAIL 10M gal/500		
KERO/JET				KERO/JET				
APPALACH 1	9,052	LOCAL DIST.		REGION 2	6,948	PIPELINE		
				REGION 4	9,052	LOCAL DIST.		
SUBTOTAL:	9,052			SUBTOTAL:	16,000			-6,948
				DIESEL- ON HWY				
				REGION 5	40,000	PIPELINE		
				DIESEL- OFF HWY				
				REGION 2	14,000	PIPELINE		

REF DIST APPALACHIAN 1

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	15,429	LOCAL DIST.		REGION 2	10,859	PIPELINE		
				REGION 4	15,429	LOCAL DIST.		
				REGION 5	10,712	PIPELINE		
SUBTOTAL:	15,429			SUBTOTAL:	37,000			-21,571
TOTAL:	60,344			TOTAL:	304,000			

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	193,018	LOCAL DIST.		REGION 5	193,018	LOCAL DIST.		
				REGION 8	10,200	5000 BBL BARGE	2.04	
				REGION 8	47,600	PIPELINE		
				TRSHP 8-2	62,790	PIPELINE		
SUBTOTAL:	193,018			SUBTOTAL:	313,608			-120,590
REG -REFORMULATED				REG -REFORMULATED				
APPALACH 1	15,000	5000 BBL BARGE	3.00	REGION 5	463,740	LOCAL DIST.		
APPALACH 1	66,057	PIPELINE		REGION 8	19,040	5000 BBL BARGE	3.81	
ILL,IND,KY	463,740	LOCAL DIST.		TRSHP 8-2	22,220	PIPELINE		
SUBTOTAL:	544,797			SUBTOTAL:	505,000			39,797
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	20,415	LOCAL DIST.		REGION 5	20,415	LOCAL DIST.		
				REGION 8	1,160	5000 BBL BARGE	0.23	
				TRSHP 8-2	5,279	PIPELINE		
SUBTOTAL:	20,415			SUBTOTAL:	26,854			-6,439
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	20,810	LOCAL DIST.		REGION 5	20,810	LOCAL DIST.		
				REGION 8	1,840	5000 BBL BARGE	0.37	
				REGION 8	8,400	PIPELINE		
				TRSHP 8-2	14,950	PIPELINE		
SUBTOTAL:	20,810			SUBTOTAL:	46,000			-25,190
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	4,265	LOCAL DIST.		REGION 5	4,265	LOCAL DIST.		
				REGION 8	240	5000 BBL BARGE	0.05	
				TRSHP 8-2	1,495	PIPELINE		
SUBTOTAL:	4,265			SUBTOTAL:	6,000			-1,735
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	73,165	LOCAL DIST.		REGION 5	73,165	LOCAL DIST.		
				REGION 8	3,360	5000 BBL BARGE	0.67	
				TRSHP 8-2	7,475	PIPELINE		
SUBTOTAL:	73,165			SUBTOTAL:	84,000			-10,835
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	27,816	LOCAL DIST.		REGION 5	27,816	LOCAL DIST.		
				REGION 7	14,876	PIPELINE		
				REGION 8	2,360	5000 BBL BARGE	0.47	
				REGION 8	11,200	PIPELINE		
				TRSHP 8-2	17,940	PIPELINE		
SUBTOTAL:	27,816			SUBTOTAL:	74,192			-46,376
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	73,623	LOCAL DIST.		REGION 5	73,623	LOCAL DIST.		
				REGION 8	4,200	5000 BBL BARGE	0.84	
				REGION 8	16,800	PIPELINE		
				TRSHP 8-2	16,377	PIPELINE		
SUBTOTAL:	73,623			SUBTOTAL:	111,000			-37,377

INDIANA-ILLINOIS-KENTUCKY

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	3,556	LOCAL DIST.		REGION 5	3,556	LOCAL DIST.		
				REGION 8	240	5000 BBL BARGE	0.05	
				TRSHP 8-2	1,760	PIPELINE		
SUBTOTAL:	3,556			SUBTOTAL:	5,556			-2,000
				MTBE				
				MERC MTBE	42,226	PIPELINE		
ETHANOL				ETHANOL				
APPALACH 1	296	RAIL 10M gal/500		REGION 5	10,790	RAIL 10M gal/500		
CNTRL PAD5	4,768	RAIL 10M gal/500						
CENT ATLAN	18,799	RAIL 10M gal/500						
ILL,IND,KY	10,790	RAIL 10M gal/500						
LOW ATLAN	1,306	RAIL 10M gal/500						
MIN,WIS,DK	3,546	RAIL 10M gal/500						
NEW ENGLND	6,095	RAIL 10M gal/500						
OK,KAN,MO	4,500	RAIL 10M gal/500						
PAD III	3,240	RAIL 10M gal/500						
PACIFIC NW	1,735	RAIL 10M gal/500						
ROCKY MT	3,132	RAIL 10M gal/500						
SOUTH PAD5	11,170	RAIL 10M gal/500						
SUBTOTAL:	69,377			SUBTOTAL:	10,790			58,587
KERO/JET				KERO/JET				
ILL,IND,KY	136,730	LOCAL DIST.		REGION 5	136,730	LOCAL DIST.		
				REGION 8	9,300	5000 BBL BARGE	1.86	
				TRSHP 8-2	8,970	PIPELINE		
SUBTOTAL:	136,730			SUBTOTAL:	155,000			-18,270
DIESEL- ON HWY				DIESEL- ON HWY				
APPALACH 1	40,000	PIPELINE		REGION 5	244,385	LOCAL DIST.		
ILL,IND,KY	244,385	LOCAL DIST.		REGION 8	14,200	5000 BBL BARGE	2.84	
				TRSHP 8-2	25,415	PIPELINE		
SUBTOTAL:	284,385			SUBTOTAL:	284,000			385
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	66,765	LOCAL DIST.		REGION 5	66,765	LOCAL DIST.		
				REGION 8	3,750	5000 BBL BARGE	0.75	
				TRSHP 8-2	4,485	PIPELINE		
SUBTOTAL:	66,765			SUBTOTAL:	75,000			-8,235
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
APPALACH 1	10,712	PIPELINE		REGION 5	93,490	LOCAL DIST.		
ILL,IND,KY	93,490	LOCAL DIST.		REGION 8	5,550	5000 BBL BARGE	1.11	
				TRSHP 8-2	11,960	PIPELINE		
SUBTOTAL:	104,202			SUBTOTAL:	111,000			-6,798
TOTAL:	1,622,925			TOTAL:	1,850,226			

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY			DEMAND			NET
PRODUCT/DESTINATION	B/D	MODE NUMBER	PRODUCT/SOURCE	B/D	MODE NUMBER	
REG -STANDARD UNLD			REG -STANDARD UNLD			
MIN,WIS,DK	72,921	LOCAL DIST.	REGION 6	72,921	LOCAL DIST.	
			REGION 7	92,430	PIPELINE	
SUBTOTAL:	72,921		SUBTOTAL:	165,351		-92,430
REG -H/C CO NONATT			REG -H/C CO NONATT			
MIN,WIS,DK	17,702	LOCAL DIST.	REGION 6	17,702	LOCAL DIST.	
			REGION 7	6,374	PIPELINE	
SUBTOTAL:	17,702		SUBTOTAL:	24,076		-6,374
REG -REFORMULATED			REG -REFORMULATED			
MIN,WIS,DK	14,927	LOCAL DIST.	REGION 6	14,927	LOCAL DIST.	
			REG -H/C REFORMUL			
			REGION 9	21,254	PIPELINE	
MID -STANDARD UNLD			MID -STANDARD UNLD			
MIN,WIS,DK	3,260	LOCAL DIST.	REGION 6	3,260	LOCAL DIST.	
			REGION 7	4,740	PIPELINE	
SUBTOTAL:	3,260		SUBTOTAL:	8,000		-4,740
MID -CO NON ATTAIN			MID -CO NON ATTAIN			
MIN,WIS,DK	2,000	LOCAL DIST.	REGION 6	2,000	LOCAL DIST.	
MID -REFORMULATED			MID -REFORMULATED			
MIN,WIS,DK	3,000	LOCAL DIST.	REGION 6	3,000	LOCAL DIST.	
PRM -STANDARD UNLD			PRM -STANDARD UNLD			
MIN,WIS,DK	16,007	LOCAL DIST.	REGION 6	16,007	LOCAL DIST.	
			REGION 7	4,242	PIPELINE	
SUBTOTAL:	16,007		SUBTOTAL:	20,249		-4,242
			PRM -H/C CO NONATT			
			REGION 7	2,778	PIPELINE	
			PRM -REFORMULATED			
			REGION 9	66	PIPELINE	
			PRM -H/C REFORMUL			
			REGION 9	6,122	PIPELINE	
			MTBE			
			MERC MTBE	3,631	RAIL 10M gal/500	

MINNESOTA-WISCONSIN-N&S DAKOTA

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				ETHANOL				
				REGION 5	3,546	RAIL 10M gal/500		
KERO/JET				KERO/JET				
MIN,WIS,DK	12,295	LOCAL DIST.		REGION 6	12,295	LOCAL DIST.		
				REGION 7	10,705	PIPELINE		
SUBTOTAL:	12,295			SUBTOTAL:	23,000			-10,705
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	45,128	LOCAL DIST.		REGION 6	45,128	LOCAL DIST.		
				REGION 7	16,872	PIPELINE		
SUBTOTAL:	45,128			SUBTOTAL:	62,000			-16,872
DIESEL- OFF HWY				DIESEL- OFF HWY				
MIN,WIS,DK	35,000	LOCAL DIST.		REGION 6	35,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	16,117	LOCAL DIST.		REGION 6	16,117	LOCAL DIST.		
				REGION 7	17,883	PIPELINE		
SUBTOTAL:	16,117			SUBTOTAL:	34,000			-17,883
TOTAL:	238,357			TOTAL:	429,000			

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
MIN,WIS,DK	92,430	PIPELINE		REGION 7	27,614	LOCAL DIST.		
OK,KAN,MO	27,614	LOCAL DIST.		REGION 8	253,837	PIPELINE		
ROCKY MT	1,231	PIPELINE						
SUBTOTAL:	121,275			SUBTOTAL:	281,451			-160,176
REG -H/C CO NONATT								
MIN,WIS,DK	6,374	PIPELINE						
REG -REFORMULATED				REG -REFORMULATED				
OK,KAN,MO	79,000	LOCAL DIST.		REGION 7	79,000	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
MIN,WIS,DK	4,740	PIPELINE		REGION 8	15,000	PIPELINE		
ROCKY MT	6,000	PIPELINE						
SUBTOTAL:	10,740			SUBTOTAL:	15,000			-4,260
MID -CO NON ATTAIN								
ROCKY MT	2,210	PIPELINE						
MID -REFORMULATED				MID -REFORMULATED				
OK,KAN,MO	9,000	LOCAL DIST.		REGION 7	9,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	14,876	PIPELINE		REGION 7	34,049	LOCAL DIST.		
MIN,WIS,DK	4,242	PIPELINE						
OK,KAN,MO	34,049	LOCAL DIST.						
ROCKY MT	4,970	PIPELINE						
SUBTOTAL:	58,138			SUBTOTAL:	34,049			24,089
PRM -H/C CO NONATT								
MIN,WIS,DK	2,778	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
OK,KAN,MO	14,000	LOCAL DIST.		REGION 7	14,000	LOCAL DIST.		
				MTBE				
				MERC MTBE	6,677	5000 BBL BARGE	1.34	
				ETHANOL				
				REGION 5	4,500	RAIL 10M gal/500		

OKLAHOMA-KANSAS-MISSOURI

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
MIN,WIS,DK	10,705	PIPELINE		REGION 7	17,398	LOCAL DIST.		
OK,KAN,MO	17,398	LOCAL DIST.		REGION 8	55,602	PIPELINE		
SUBTOTAL:	28,103			SUBTOTAL:	73,000			-44,897
DIESEL- ON HWY				DIESEL- ON HWY				
MIN,WIS,DK	16,872	PIPELINE		REGION 7	122,000	LOCAL DIST.		
OK,KAN,MO	122,000	LOCAL DIST.						
SUBTOTAL:	138,872			SUBTOTAL:	122,000			16,872
DIESEL- OFF HWY				DIESEL- OFF HWY				
OK,KAN,MO	50,000	LOCAL DIST.		REGION 7	50,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
MIN,WIS,DK	17,883	PIPELINE		REGION 7	13,234	LOCAL DIST.		
OK,KAN,MO	13,234	LOCAL DIST.		REGION 8	28,766	PIPELINE		
SUBTOTAL:	31,116			SUBTOTAL:	42,000			-10,884
TOTAL:	551,607			TOTAL:	730,677			

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	10,200	5000 BBL BARGE	2.04	REGION 8	429,852	LOCAL DIST.		
ILL,IND,KY	47,600	PIPELINE						
LOW ATLAN	46,720	35 DWT TANKER AF	0.17					
OK,KAN,MO	253,837	PIPELINE						
PAD III	429,852	LOCAL DIST.						
ROCKY MT	27,900	PIPELINE						
SOUTH PAD5	15,200	PIPELINE						
TRSHP 8-2	313,148	PIPELINE						
SUBTOTAL:	1,144,457			SUBTOTAL:	429,852			714,605
REG -CO-REFORMUL								
SOUTH PAD5	17,991	PIPELINE						
REG -H/C CO NONATT				REG -H/C CO NONATT				
PAD III	4,630	LOCAL DIST.		REGION 8	4,630	LOCAL DIST.		
ROCKY MT	16,419	PIPELINE						
SOUTH PAD5	5,591	PIPELINE						
SUBTOTAL:	26,640			SUBTOTAL:	4,630			22,010
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	19,040	5000 BBL BARGE	3.81	REGION 8	208,000	LOCAL DIST.		
LOW ATLAN	42,560	35 DWT TANKER AF	0.15					
NEW ENGLND	132,000	35 DWT TANKER AF	0.47					
PAD III	208,000	LOCAL DIST.						
SOUTH PAD5	12,350	PIPELINE						
TRSHP 8-2	242,257	PIPELINE						
SUBTOTAL:	656,207			SUBTOTAL:	208,000			448,207
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	1,160	5000 BBL BARGE	0.23	REGION 8	4,630	LOCAL DIST.		
NEW ENGLND	50,179	35 DWT TANKER AF	0.18					
PAD III	4,630	LOCAL DIST.						
TRSHP 8-2	11,611	PIPELINE						
SUBTOTAL:	67,580			SUBTOTAL:	4,630			62,950
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	1,840	5000 BBL BARGE	0.37	REGION 8	64,000	LOCAL DIST.		
ILL,IND,KY	8,400	PIPELINE						
LOW ATLAN	14,440	35 DWT TANKER AF	0.05					
OK,KAN,MO	15,000	PIPELINE						
PAD III	64,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	76,510	PIPELINE						
SUBTOTAL:	186,720			SUBTOTAL:	64,000			122,720
MID -CO NON ATTAIN								
ROCKY MT	2,790	PIPELINE						

PAD DISTRICT III

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	240	5000 BBL BARGE	0.05	REGION 8	1,000	LOCAL DIST.		
NEW ENGLND	13,000	35 DWT TANKER AF	0.05					
PAD III	1,000	LOCAL DIST.						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	1,495	PIPELINE						
SUBTOTAL:	16,685			SUBTOTAL:	1,000			15,685
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	3,360	5000 BBL BARGE	0.67	REGION 8	32,000	LOCAL DIST.		
LOW ATLAN	13,260	35 DWT TANKER AF	0.05					
NEW ENGLND	29,000	35 DWT TANKER AF	0.10					
PAD III	32,000	LOCAL DIST.						
TRSHP 8-2	72,215	PIPELINE						
SUBTOTAL:	149,835			SUBTOTAL:	32,000			117,835
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	2,360	5000 BBL BARGE	0.47	REGION 8	101,648	LOCAL DIST.		
ILL,IND,KY	11,200	PIPELINE						
LOW ATLAN	25,080	35 DWT TANKER AF	0.09					
PAD III	101,648	LOCAL DIST.						
ROCKY MT	6,510	PIPELINE						
SOUTH PAD5	2,850	PIPELINE						
TRSHP 8-2	108,982	PIPELINE						
SUBTOTAL:	258,630			SUBTOTAL:	101,648			156,982
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
ROCKY MT	2,790	PIPELINE						
SUBTOTAL:	3,790			SUBTOTAL:	1,000			2,790
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
PAD III	1,000	LOCAL DIST.		REGION 8	1,000	LOCAL DIST.		
SOUTH PAD5	3,800	PIPELINE						
TRSHP 8-2	43,966	PIPELINE						
SUBTOTAL:	48,766			SUBTOTAL:	1,000			47,766
PRM -H/C CO NONATT								
SOUTH PAD5	1,118	PIPELINE						
PRM -REFORMULATED				PRM -REFORMULATED				
ILL,IND,KY	4,200	5000 BBL BARGE	0.84	REGION 8	46,000	LOCAL DIST.		
ILL,IND,KY	16,800	PIPELINE						
LOW ATLAN	23,010	35 DWT TANKER AF	0.08					
PAD III	46,000	LOCAL DIST.						
SOUTH PAD5	1,900	PIPELINE						
TRSHP 8-2	236,367	PIPELINE						
SUBTOTAL:	328,277			SUBTOTAL:	46,000			282,277

PAD DISTRICT III

SUPPLY PRODUCT/DESTINATION	B/D	MODE	NUMBER	DEMAND PRODUCT/SOURCE	B/D	MODE	NUMBER	NET
PRM -H/C REFORMUL								
ILL,IND,KY	240	5000 BBL BARGE	0.05					
NEW ENGLND	75,278	35 DWT TANKER AF	0.27					
TRSHP 8-2	1,760	PIPELINE						
SUBTOTAL:	77,278							77,278
				MTBE				
				MERC MTBE	55,688	LOCAL DIST.		
				ETHANOL				
				REGION 5	3,240	RAIL 10M gal/500		
KERO/JET				KERO/JET				
ILL,IND,KY	9,300	5000 BBL BARGE	1.86	REGION 8	205,000	LOCAL DIST.		
LOW ATLAN	40,480	35 DWT TANKER AF	0.14					
NEW ENGLND	41,937	35 DWT TANKER AF	0.15					
OK,KAN,MO	55,602	PIPELINE						
PAD III	205,000	LOCAL DIST.						
ROCKY MT	13,950	PIPELINE						
SOUTH PAD5	11,400	PIPELINE						
TRSHP 8-2	281,495	PIPELINE						
SUBTOTAL:	659,164			SUBTOTAL:	205,000			454,164
DIESEL- ON HWY				DIESEL- ON HWY				
ILL,IND,KY	14,200	5000 BBL BARGE	2.84	REGION 8	235,000	LOCAL DIST.		
LOW ATLAN	29,120	35 DWT TANKER AF	0.10					
PAD III	235,000	LOCAL DIST.						
ROCKY MT	5,901	PIPELINE						
SOUTH PAD5	13,300	PIPELINE						
TRSHP 8-2	310,689	PIPELINE						
SUBTOTAL:	608,209			SUBTOTAL:	235,000			373,209
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	3,750	5000 BBL BARGE	0.75	REGION 8	115,000	LOCAL DIST.		
LOW ATLAN	6,960	35 DWT TANKER AF	0.02					
PAD III	115,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	6,650	PIPELINE						
TRSHP 8-2	45,525	PIPELINE						
SUBTOTAL:	183,465			SUBTOTAL:	115,000			68,465
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
ILL,IND,KY	5,550	5000 BBL BARGE	1.11	REGION 8	182,000	LOCAL DIST.		
LOW ATLAN	9,000	35 DWT TANKER AF	0.03					
OK,KAN,MO	28,766	PIPELINE						
PAD III	182,000	LOCAL DIST.						
ROCKY MT	5,580	PIPELINE						
SOUTH PAD5	950	PIPELINE						
TRSHP 8-2	186,702	PIPELINE						
SUBTOTAL:	418,548			SUBTOTAL:	182,000			236,548
TOTAL:	4,856,149			TOTAL:	1,689,688			

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	11,390	PIPELINE		REGION 7	1,231	PIPELINE		
ROCKY MT	75,942	LOCAL DIST.		REGION 8	27,900	PIPELINE		
				REGION 9	75,942	LOCAL DIST.		
SUBTOTAL:	87,332			SUBTOTAL:	105,073			-17,741
REG -CO-REFORMUL								
PACIFIC NW	7,370	PIPELINE						
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	789	PIPELINE		REGION 8	16,419	PIPELINE		
ROCKY MT	3,953	LOCAL DIST.		REGION 9	3,953	LOCAL DIST.		
SUBTOTAL:	4,741			SUBTOTAL:	20,372			-15,631
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	10,050	PIPELINE		REGION 9	11,000	LOCAL DIST.		
ROCKY MT	11,000	LOCAL DIST.						
SUBTOTAL:	21,050			SUBTOTAL:	11,000			10,050
REG -H/C REFORMUL				REG -H/C REFORMUL				
MIN,WIS,DK	21,254	PIPELINE		REGION 9	7,408	LOCAL DIST.		
ROCKY MT	7,408	LOCAL DIST.						
SUBTOTAL:	28,662			SUBTOTAL:	7,408			21,254
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	670	PIPELINE		REGION 7	6,000	PIPELINE		
ROCKY MT	2,420	LOCAL DIST.		REGION 8	5,580	PIPELINE		
				REGION 9	2,420	LOCAL DIST.		
SUBTOTAL:	3,090			SUBTOTAL:	14,000			-10,910
				MID -CO NON ATTAIN				
				REGION 7	2,210	PIPELINE		
				REGION 8	2,790	PIPELINE		
				SUBTOTAL:	5,000			-5,000
MID -CO-REFORMUL				MID -CO-REFORMUL				
ROCKY MT	1,000	LOCAL DIST.		REGION 9	1,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	670	PIPELINE		REGION 9	2,000	LOCAL DIST.		
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,670			SUBTOTAL:	2,000			670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	1,005	PIPELINE		REGION 7	4,970	PIPELINE		
ROCKY MT	5,846	LOCAL DIST.		REGION 8	6,510	PIPELINE		
				REGION 9	5,846	LOCAL DIST.		
SUBTOTAL:	6,851			SUBTOTAL:	17,327			-10,475

ROCKY MOUNTAIN

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -CO NON ATTAIN				PRM -CO NON ATTAIN				
PACIFIC NW	335	PIPELINE		REGION 8	2,790	PIPELINE		-2,455
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
ROCKY MT	2,046	LOCAL DIST.		REGION 9	2,046	LOCAL DIST.		
PRM -REFORMULATED				PRM -REFORMULATED				
MIN,WIS,DK	66	PIPELINE		REGION 9	2,000	LOCAL DIST.		
PACIFIC NW	609	PIPELINE						
ROCKY MT	2,000	LOCAL DIST.						
SUBTOTAL:	2,674			SUBTOTAL:	2,000			674
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
MIN,WIS,DK	6,122	PIPELINE		REGION 9	1,852	LOCAL DIST.		
PACIFIC NW	1,577	PIPELINE						
ROCKY MT	1,852	LOCAL DIST.						
SUBTOTAL:	9,552			SUBTOTAL:	1,852			7,700
				ETHANOL				
				REGION 5	3,132	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	14,070	PIPELINE		REGION 8	13,950	PIPELINE		
ROCKY MT	30,050	LOCAL DIST.		REGION 9	30,050	LOCAL DIST.		
SUBTOTAL:	44,120			SUBTOTAL:	44,000			120
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	4,921	PIPELINE		REGION 8	5,901	PIPELINE		
ROCKY MT	42,099	LOCAL DIST.		REGION 9	42,099	LOCAL DIST.		
SUBTOTAL:	47,021			SUBTOTAL:	48,000			-979
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	1,675	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	27,420	LOCAL DIST.		REGION 9	27,420	LOCAL DIST.		
SUBTOTAL:	29,095			SUBTOTAL:	33,000			-3,905
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	4,690	PIPELINE		REGION 8	5,580	PIPELINE		
ROCKY MT	22,420	LOCAL DIST.		REGION 9	22,420	LOCAL DIST.		
SUBTOTAL:	27,110			SUBTOTAL:	28,000			-890
TOTAL:	324,720			TOTAL:	348,000			

PACIFIC NORTHWEST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC NW	57,828	LOCAL DIST.		REGION 9	11,390	PIPELINE		
				FAR EAST	1,682	35 DWT TANKER FF	0.01	
				REGION 10	57,828	LOCAL DIST.		
SUBTOTAL:	57,829			SUBTOTAL:	70,900			-13,072
				REG -CO-REFORMUL				
				REGION 9	7,370	PIPELINE		
				REGION 11	23,205	35 DWT TANKER AF	0.08	
				SUBTOTAL:	30,575			-30,575
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC NW	6,619	LOCAL DIST.		REGION 9	789	PIPELINE		
				REGION 10	6,619	LOCAL DIST.		
SUBTOTAL:	6,619			SUBTOTAL:	7,408			-789
REG -REFORMULATED				REG -REFORMULATED				
PACIFIC NW	40,950	LOCAL DIST.		REGION 9	10,050	PIPELINE		
				REGION 10	40,950	LOCAL DIST.		
SUBTOTAL:	40,950			SUBTOTAL:	51,000			-10,050
REG -H/C REFORMUL				REG -H/C REFORMUL				
PACIFIC NW	5,949	LOCAL DIST.		REGION 10	5,949	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC NW	3,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	3,330	LOCAL DIST.		
SUBTOTAL:	3,330			SUBTOTAL:	4,000			-670
MID -CO-REFORMUL				MID -CO-REFORMUL				
PACIFIC NW	2,000	LOCAL DIST.		REGION 10	2,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
PACIFIC NW	1,330	LOCAL DIST.		REGION 9	670	PIPELINE		
				REGION 10	1,330	LOCAL DIST.		
SUBTOTAL:	1,330			SUBTOTAL:	2,000			-670
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC NW	10,995	LOCAL DIST.		REGION 9	1,005	PIPELINE		
				REGION 10	10,995	LOCAL DIST.		
SUBTOTAL:	10,995			SUBTOTAL:	12,000			-1,005
				PRM -CO NON ATTAIN				
				REGION 9	335	PIPELINE		
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
PACIFIC NW	616	LOCAL DIST.		REGION 10	616	LOCAL DIST.		
SOUTH PAD5	479	35 DWT TANKER AF	0.00					
SUBTOTAL:	1,095			SUBTOTAL:	616			479

PACIFIC NORTHWEST

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
PRM -REFORMULATED				PRM -REFORMULATED				
PACIFIC NW	8,391	LOCAL DIST.		REGION 9	609	PIPELINE		
				REGION 10	8,391	LOCAL DIST.		
SUBTOTAL:	8,391			SUBTOTAL:	9,000			-609
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
PACIFIC NW	4,905	LOCAL DIST.		REGION 9	1,577	PIPELINE		
				REGION 10	4,905	LOCAL DIST.		
SUBTOTAL:	4,905			SUBTOTAL:	6,482			-1,577
				MTBE				
				CANADA W.	4,634	35 DWT TANKER FF	0.02	
				ETHANOL				
				REGION 5	1,735	RAIL 10M gal/500		
KERO/JET				KERO/JET				
PACIFIC NW	39,930	LOCAL DIST.		REGION 9	14,070	PIPELINE		
				REGION 10	39,930	LOCAL DIST.		
SUBTOTAL:	39,930			SUBTOTAL:	54,000			-14,070
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC NW	40,079	LOCAL DIST.		REGION 9	4,921	PIPELINE		
				REGION 10	40,079	LOCAL DIST.		
SUBTOTAL:	40,079			SUBTOTAL:	45,000			-4,921
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC NW	18,325	LOCAL DIST.		REGION 9	1,675	PIPELINE		
				REGION 10	18,325	LOCAL DIST.		
SUBTOTAL:	18,325			SUBTOTAL:	20,000			-1,675
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC NW	22,310	LOCAL DIST.		REGION 9	4,690	PIPELINE		
				REGION 10	22,310	LOCAL DIST.		
SUBTOTAL:	22,310			SUBTOTAL:	27,000			-4,690
TOTAL:	264,037			TOTAL:	354,635			

CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
CNTRL PAD5	4,000	LOCAL DIST.		REGION 11	4,000	LOCAL DIST.		
SOUTH PAD5	878	35 DWT TANKER AF	0.00					
SUBTOTAL:	4,878			SUBTOTAL:	4,000			878
REG -CO-REFORMUL								
PACIFIC NW	23,205	35 DWT TANKER AF	0.08					
REG -H/C CO NONATT								
SOUTH PAD5	1,099	35 DWT TANKER AF	0.00					
REG -REFORMULATED				REG -REFORMULATED				
CNTRL PAD5	37,719	LOCAL DIST.		REGION 11	37,719	LOCAL DIST.		
REG -H/C REFORMUL				REG -H/C REFORMUL				
CNTRL PAD5	154,451	LOCAL DIST.		REGION 11	154,451	LOCAL DIST.		
SOUTH PAD5	1,772	35 DWT TANKER AF	0.01					
SUBTOTAL:	156,223			SUBTOTAL:	154,451			1,772
MID -STANDARD UNLD				MID -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
CNTRL PAD5	8,000	LOCAL DIST.		REGION 11	8,000	LOCAL DIST.		
MID -REFORMULATED				MID -REFORMULATED				
CNTRL PAD5	10,000	LOCAL DIST.		REGION 11	10,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
CNTRL PAD5	1,000	LOCAL DIST.		REGION 11	1,000	LOCAL DIST.		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
CNTRL PAD5	60,418	LOCAL DIST.		REGION 11	60,418	LOCAL DIST.		
				MTBE				
				CANADA W.	15,914	35 DWT TANKER FF	0.06	
				MERC MTBE	730	35 DWT TANKER AF	0.00	
				SUBTOTAL:	16,645			-16,645
				ETHANOL				
				REGION 5	4,768	RAIL 10M gal/500		

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CENTRAL PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CNTRL PAD5	85,000	LOCAL DIST.		REGION 11	85,000	LOCAL DIST.		
PACIFIC	11,435	35 DWT TANKER AF	0.04					
SUBTOTAL:	96,435			SUBTOTAL:	85,000			11,435
DIESEL- ON HWY				DIESEL- ON HWY				
CNTRL PAD5	55,000	LOCAL DIST.		REGION 11	55,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
CNTRL PAD5	23,000	LOCAL DIST.		REGION 11	23,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CNTRL PAD5	13,000	LOCAL DIST.		REGION 11	13,000	LOCAL DIST.		
TOTAL:	490,977			TOTAL:	474,000			

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
SOUTH PAD5	12,657	LOCAL DIST.		REGION 8	15,200	PIPELINE		
				REGION 11	878	35 DWT TANKER AF	0.00	
				REGION 13	2,165	35 DWT TANKER AF	0.01	
				REGION 12	12,657	LOCAL DIST.		
SUBTOTAL:	12,657			SUBTOTAL:	30,900			-18,243
				REG -CO-REFORMUL				
				REGION 8	17,991	PIPELINE		
REG -H/C CO NONATT				REG -H/C CO NONATT				
SOUTH PAD5	10,323	LOCAL DIST.		REGION 8	5,591	PIPELINE		
				REGION 11	1,099	35 DWT TANKER AF	0.00	
				REGION 12	10,323	LOCAL DIST.		
SUBTOTAL:	10,323			SUBTOTAL:	17,014			-6,690
REG -REFORMULATED				REG -REFORMULATED				
SOUTH PAD5	39,120	LOCAL DIST.		REGION 8	12,350	PIPELINE		
				REGION 12	39,120	LOCAL DIST.		
SUBTOTAL:	39,120			SUBTOTAL:	51,470			-12,350
REG -H/C REFORMUL				REG -H/C REFORMUL				
SOUTH PAD5	269,471	LOCAL DIST.		REGION 11	1,772	35 DWT TANKER AF	0.01	
				REGION 12	269,471	LOCAL DIST.		
SUBTOTAL:	269,471			SUBTOTAL:	271,242			-1,772
MID -STANDARD UNLD				MID -STANDARD UNLD				
SOUTH PAD5	202	LOCAL DIST.		REGION 8	950	PIPELINE		
				MIDDLE EST	848	35 DWT TANKER FF	0.00	
				REGION 12	202	LOCAL DIST.		
SUBTOTAL:	202			SUBTOTAL:	2,000			-1,798
MID -CO NON ATTAIN				MID -CO NON ATTAIN				
SOUTH PAD5	1,000	LOCAL DIST.		REGION 12	1,000	LOCAL DIST.		
MID -CO-REFORMUL				MID -CO-REFORMUL				
SOUTH PAD5	16,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	16,050	LOCAL DIST.		
SUBTOTAL:	16,050			SUBTOTAL:	17,000			-950
MID -REFORMULATED				MID -REFORMULATED				
SOUTH PAD5	14,000	LOCAL DIST.		REGION 12	14,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
SOUTH PAD5	3,150	LOCAL DIST.		REGION 8	2,850	PIPELINE		
				REGION 12	3,150	LOCAL DIST.		
SUBTOTAL:	3,150			SUBTOTAL:	6,000			-2,850

SOUTHERN PAD V

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
				PRM -CO-REFORMUL				
				REGION 8	3,800	PIPELINE		
PRM -H/C CO NONATT				PRM -H/C CO NONATT				
SOUTH PAD5	1,956	LOCAL DIST.		REGION 8	1,118	PIPELINE		
				REGION 10	479	35 DWT TANKER AF	0.00	
				REGION 12	1,956	LOCAL DIST.		
SUBTOTAL:	1,956			SUBTOTAL:	3,554			-1,598
				PRM -REFORMULATED				
				REGION 8	1,900	PIPELINE		
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
SOUTH PAD5	97,113	LOCAL DIST.		REGION 12	97,113	LOCAL DIST.		
				MTBE				
				MERC MTBE	24,846	35 DWT TANKER AF	0.09	
				ETHANOL				
				REGION 5	11,170	RAIL 10M gal/500		
KERO/JET				KERO/JET				
SOUTH PAD5	140,600	LOCAL DIST.		REGION 8	11,400	PIPELINE		
				REGION 12	140,600	LOCAL DIST.		
SUBTOTAL:	140,600			SUBTOTAL:	152,000			-11,400
DIESEL- ON HWY				DIESEL- ON HWY				
SOUTH PAD5	95,700	LOCAL DIST.		REGION 8	13,300	PIPELINE		
				REGION 12	95,700	LOCAL DIST.		
SUBTOTAL:	95,700			SUBTOTAL:	109,000			-13,300
DIESEL- OFF HWY				DIESEL- OFF HWY				
SOUTH PAD5	39,350	LOCAL DIST.		REGION 8	6,650	PIPELINE		
				REGION 12	39,350	LOCAL DIST.		
SUBTOTAL:	39,350			SUBTOTAL:	46,000			-6,650
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
SOUTH PAD5	21,050	LOCAL DIST.		REGION 8	950	PIPELINE		
				REGION 12	21,050	LOCAL DIST.		
SUBTOTAL:	21,050			SUBTOTAL:	22,000			-950
TOTAL:	761,743			TOTAL:	900,000			

PACIFIC

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
PACIFIC	19,000	LOCAL DIST.		REGION 13	19,000	LOCAL DIST.		
SOUTH PAD5	2,165	35 DWT TANKER AF	0.01					
SUBTOTAL:	21,165			SUBTOTAL:	19,000			2,165
REG -H/C CO NONATT				REG -H/C CO NONATT				
PACIFIC	2,549	LOCAL DIST.		REGION 13	2,549	LOCAL DIST.		
MID -STANDARD UNLD				MID -STANDARD UNLD				
PACIFIC	2,000	LOCAL DIST.		REGION 13	2,000	LOCAL DIST.		
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
PACIFIC	9,000	LOCAL DIST.		REGION 13	9,000	LOCAL DIST.		
				MTBE				
				CANADA W.	451	35 DWT TANKER FF	0.00	
KERO/JET				KERO/JET				
PACIFIC	54,347	LOCAL DIST.		REGION 11	11,435	35 DWT TANKER AF	0.04	
				FAR EAST	174	35 DWT TANKER FF	0.00	
				MIDDLE EST	45	35 DWT TANKER FF	0.00	
				REGION 13	54,347	LOCAL DIST.		
SUBTOTAL:	54,347			SUBTOTAL:	66,000			-11,653
DIESEL- ON HWY				DIESEL- ON HWY				
PACIFIC	12,000	LOCAL DIST.		REGION 13	12,000	LOCAL DIST.		
DIESEL- OFF HWY				DIESEL- OFF HWY				
PACIFIC	5,000	LOCAL DIST.		REGION 13	5,000	LOCAL DIST.		
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
PACIFIC	24,938	LOCAL DIST.		FAR EAST	36	35 DWT TANKER FF	0.00	
				MIDDLE EST	26	35 DWT TANKER FF	0.00	
				REGION 13	24,938	LOCAL DIST.		
SUBTOTAL:	24,938			SUBTOTAL:	25,000			-62
TOTAL:	130,999			TOTAL:	141,000			

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
REG -STANDARD UNLD				REG -STANDARD UNLD				
ILL,IND,KY	62,790	PIPELINE		REGION 8	313,148	PIPELINE		
LOW ATLAN	250,358	LOCAL DIST.						
SUBTOTAL:	313,148			SUBTOTAL:	313,148			0
REG -REFORMULATED				REG -REFORMULATED				
ILL,IND,KY	22,220	PIPELINE		REGION 8	242,257	PIPELINE		
LOW ATLAN	220,037	LOCAL DIST.						
SUBTOTAL:	242,257			SUBTOTAL:	242,257			
REG -H/C REFORMUL				REG -H/C REFORMUL				
ILL,IND,KY	5,279	PIPELINE		REGION 8	11,611	PIPELINE		
LOW ATLAN	6,332	LOCAL DIST.						
SUBTOTAL:	11,611			SUBTOTAL:	11,611			
MID -STANDARD UNLD				MID -STANDARD UNLD				
ILL,IND,KY	14,950	PIPELINE		REGION 8	76,510	PIPELINE		
LOW ATLAN	61,560	LOCAL DIST.						
SUBTOTAL:	76,510			SUBTOTAL:	76,510			
MID -CO-REFORMUL				MID -CO-REFORMUL				
ILL,IND,KY	1,495	PIPELINE		REGION 8	1,495	PIPELINE		
MID -REFORMULATED				MID -REFORMULATED				
ILL,IND,KY	7,475	PIPELINE		REGION 8	72,215	PIPELINE		
LOW ATLAN	64,740	LOCAL DIST.						
SUBTOTAL:	72,215			SUBTOTAL:	72,215			
PRM -STANDARD UNLD				PRM -STANDARD UNLD				
ILL,IND,KY	17,940	PIPELINE		REGION 8	108,982	PIPELINE		
LOW ATLAN	91,042	LOCAL DIST.						
SUBTOTAL:	108,982			SUBTOTAL:	108,982			-0
PRM -CO-REFORMUL				PRM -CO-REFORMUL				
CENT ATLAN	43,966	PIPELINE		REGION 8	43,966	PIPELINE		
PRM -REFORMULATED				PRM -REFORMULATED				
CENT ATLAN	125,000	PIPELINE		REGION 8	236,367	PIPELINE		
ILL,IND,KY	16,377	PIPELINE						
LOW ATLAN	94,990	LOCAL DIST.						
SUBTOTAL:	236,367			SUBTOTAL:	236,367			
PRM -H/C REFORMUL				PRM -H/C REFORMUL				
ILL,IND,KY	1,760	PIPELINE		REGION 8	1,760	PIPELINE		

TRANSHIPMENT (PAD III - LA - CA)

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
KERO/JET				KERO/JET				
CENT ATLAN	132,299	PIPELINE		REGION 8	281,495	PIPELINE		
ILL,IND,KY	8,970	PIPELINE						
LOW ATLAN	140,227	LOCAL DIST.						
SUBTOTAL:	281,495			SUBTOTAL:	281,495			
DIESEL- ON HWY				DIESEL- ON HWY				
CENT ATLAN	114,562	PIPELINE		REGION 8	310,689	PIPELINE		
ILL,IND,KY	25,415	PIPELINE						
LOW ATLAN	170,711	LOCAL DIST.						
SUBTOTAL:	310,689			SUBTOTAL:	310,689			0
DIESEL- OFF HWY				DIESEL- OFF HWY				
ILL,IND,KY	4,485	PIPELINE		REGION 8	45,525	PIPELINE		
LOW ATLAN	41,040	LOCAL DIST.						
SUBTOTAL:	45,525			SUBTOTAL:	45,525			
OTH DIESEL/NO2 OIL				OTH DIESEL/NO2 OIL				
CENT ATLAN	116,069	PIPELINE		REGION 8	186,702	PIPELINE		
ILL,IND,KY	11,960	PIPELINE						
LOW ATLAN	58,673	LOCAL DIST.						
SUBTOTAL:	186,702			SUBTOTAL:	186,702			
TOTAL:	1,932,720			TOTAL:	1,932,720			

MERCHANT MTBE

SUPPLY				DEMAND				NET
PRODUCT/DESTINATION	B/D	MODE	NUMBER	PRODUCT/SOURCE	B/D	MODE	NUMBER	
MTBE								
REGION 2	24,918	35 DWT TANKER AF	0.09					
REGION 5	42,226	PIPELINE						
REGION 7	6,677	5000 BBL BARGE	1.34					
REGION 8	55,688	LOCAL DIST.						
CNTRL PAD5	730	35 DWT TANKER AF	0.00					
MIN,WIS,DK	3,631	RAIL 10M gal/500						
NEW ENGLND	6,771	35 DWT TANKER AF	0.02					
SOUTH PAD5	24,846	35 DWT TANKER AF	0.09					
SUBTOTAL:	165,487							165,487
TOTAL:	165,487							

CANADA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	518	35 DWT TANKER FF	0.00					
KERO/JET								
NEW ENGLND	46	35 DWT TANKER FF	0.00					
DIESEL- ON HWY								
NEW ENGLND	331	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	87	35 DWT TANKER FF	0.00					
TOTAL:	982							

NORTHWEST EUROPE

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	296	35 DWT TANKER FF	0.00					
KERO/JET								
NEW ENGLND	8	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	84	35 DWT TANKER FF	0.00					
TOTAL:	388							

MEDITERRANEAN

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -H/C REFORMUL								
NEW ENGLND	862	35 DWT TANKER FF	0.00					
KERO/JET								
NEW ENGLND	10	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
NEW ENGLND	46	35 DWT TANKER FF	0.00					
TOTAL:	918							

MIDDLE EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
MID -STANDARD UNLD								
SOUTH PAD5	848	35 DWT TANKER FF	0.00					
KERO/JET								
PACIFIC	45	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	26	35 DWT TANKER FF	0.00					
TOTAL:	918							

FAR EAST

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
REG -STANDARD UNLD								
PACIFIC NW	1,682	35 DWT TANKER FF	0.01					
KERO/JET								
PACIFIC	174	35 DWT TANKER FF	0.00					
OTH DIESEL/NO2 OIL								
PACIFIC	36	35 DWT TANKER FF	0.00					
TOTAL:	1,891							

CARIBBEAN/VENEZUELA

PRODUCT/DESTINATION	SUPPLY B/D	MODE	NUMBER	PRODUCT/SOURCE	DEMAND B/D	MODE	NUMBER	NET
OTH DIESEL/NO2 OIL								
NEW ENGLND	1,016	35 DWT TANKER FF	0.00					
TOTAL:	1,016							

Appendix L, Section IX-2

Rationale for Small Changes in Variables

During the course of the Refining Study effort there were a number of areas where either changes in opinion concerning technique occurred or oversights in the analyses were detected. Because the Study results were thought to be robust it was deemed that rerunning of the total logistics analytical package was unnecessary. In order to test this hypothesis, a series of sensitivity analyses were carried out for the year 2000 using Foundation Case I assumptions. The results of these sensitivity analyses support the robust hypothesis. The attached material shows the results of the sensitivity effort. The impacts are believed to be similar for other Foundation Case situations.

The first attachment is a plot (bar graph) of the results for all of the significant deviations from the original analyses which form the underpinning for the Refining Study report sections that address logistics, U.S. refinery output, and imports. Each of the sensitivity cases is plotted as a stand-alone change from the original Foundation Case I year 2000 results.

- The 1989 bar shows U.S. refinery output and product imports developed from 1989 Energy Information Administration (EIA) data. This information is discussed in Chapter Three.

- The bar labeled FC-I is the original output for year 2000 Foundation Case I. This information is also discussed in Chapter Three.

- The ETH(A) bar shows the results from a case that includes the effects of using EIA reported ethanol data as denatured alcohol (95 percent ethanol) instead of as neat alcohol (100 percent ethanol). The fact that the EIA data report denatured ethanol volumes came to light late in the Study. As indicated by the dashed line extension this change had very little impact on the results.

- The STEP(B) bar shows the results when more flexibility was permitted for the cost-volume relationships in Canada, Latin America, and the Middle East. This change was driven by the concern that the large cost-volume step representation used for foreign supply would limit the availability of lower cost product for export to the United States. As in the ethanol analysis there is very little change in the 2000 results.

- The EXP(C) bar shows the results when U.S. 1989 product exports are more correctly represented in the U.S. refinery cost-volume relationships. This adjustment resulted in an increase in U.S. refinery output and essentially no change in product imports.

- The FCST(D) bar shows the results when two errors in representation of primary foreign cost increases are corrected. First, it was discovered that there was an arithmetic error in conversion of one of the cost increase factors from dollars per barrel to cents per gallon. Second, the cost of producing low sulfur heavy fuel oil from high sulfur heavy fuel oil had been misrepresented. The effect of making these cost adjustments was to increase the average imported product cost by 0.4 cents per gallon. These adjustments caused projected U.S. refinery output to increase and product imports to decrease.

- The bar indicated as ALL(ABCD) shows the impact of combining all these effects in one case. Indications are that product imports would be lower than indicated in FC-1 while U.S. refinery output would be lower.

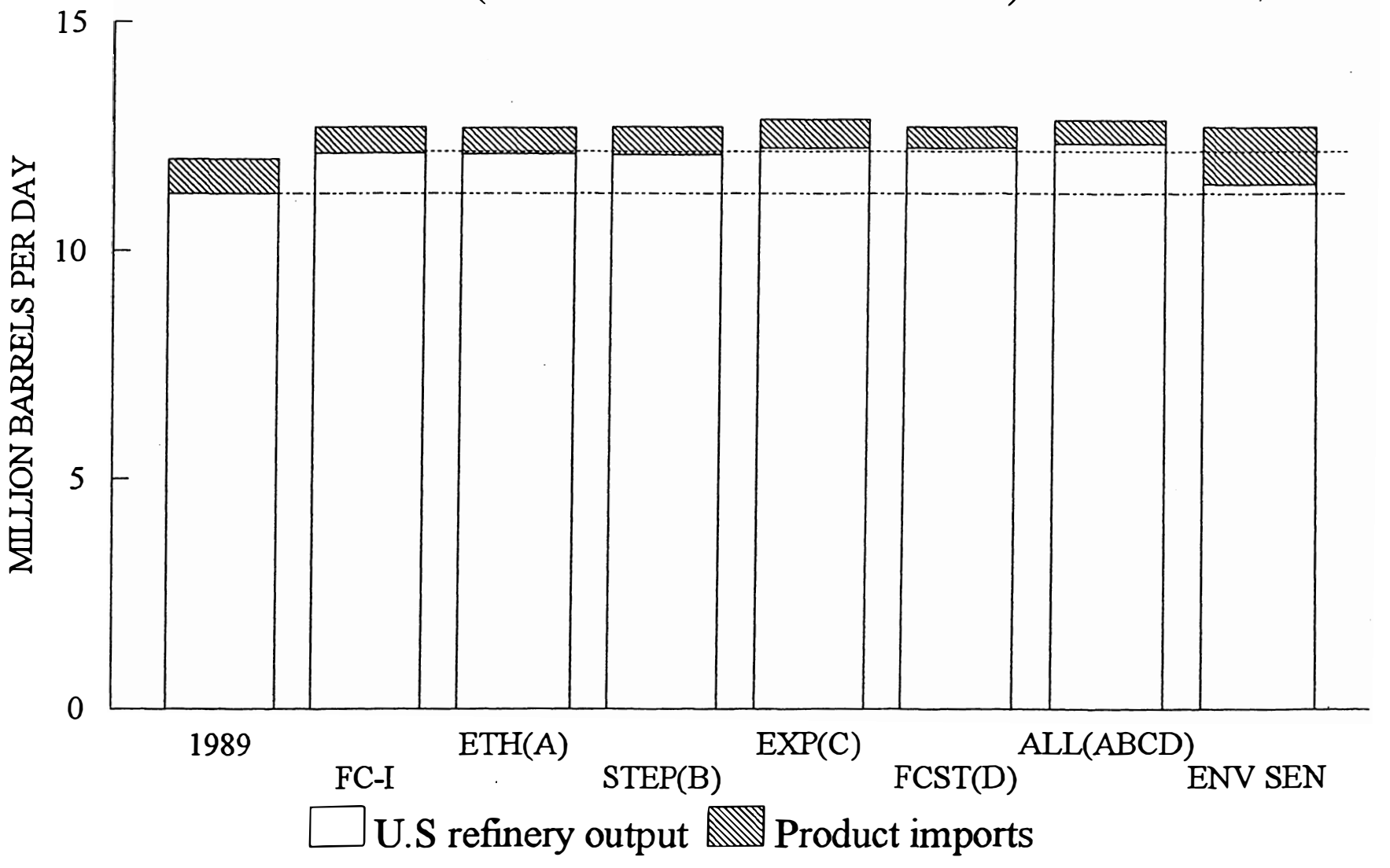
- The last bar (ENV SEN) shows the results of the environmental sensitivity case reported on in Chapter Three. It contains the largest projected impact which supports the report contention that this is a severe test. As indicated in the report, U.S. refinery output is still 89 percent of U.S. supply which compares with 94 percent in 1989 and 94 percent under Foundation Case I conditions.

- Finally, the horizontal line extending from the 1989 bar shows that in all the sensitivity cases projected 2000 U.S. refinery output is greater than it was in 1989 when using Foundation Case I demand assumptions.

The supporting summary information is shown on a sequential effect basis (A, A+B, A+B+C, A+B+C+D).

SENSITIVITY CASE ANALYSES

(FOUNDATION CASE I - 2000)



2000 REGIONAL REFINERY PRODUCT OUTPUT/PRODUCT IMPORT AND DOMESTIC TANKER USE

	1989 Calibration Cases, Thousand Barrels/Day[1]				2000 Sensitivity Cases, Thousand Barrels/Day[1]					
	Refining Product Output		Product Imports		Refining Model Output			Product Imports		
Region	Model	EIA*	Model	EIA*	I	I (A)	I (B)	I	I (A)	I (B)
1	-	-	507	276	-	-	-	457	471	479
2	1016	1031	81	307	1112[2]	1112[2]	1112[2]	-	-	-
3	49	69	118	80	57	57	57	-	-	16
4	75	76	5	8	65	65	63	7	5	5
5	1675	1694	20	7	1921	1920	1899	20	20	20
6	269	227	5	7	297	291	291	-	-	-
7	637	607	-	-	688	688	688	-	-	-
8	5169	5125	-	42	5610	5607	5607	-	-	-
9	360	401	3	3	355	355	355	3	-	-
10	351	342	13	9	358	358	358	20	20	19
11	555	556	-	4	581	581	581	-	-	-
12	933	917	16	6	921	921	921	27	24	24
13	137	150	8	8	150[3]	150[3]	150[3]	38	38	38
Total	11226	11245	776	757	12115	12105	12082	572	578	601

*Estimated after correcting for exports, inventory change, distillate #4 in distillate and non-modeled imports.

	Product Imports to U.S.		Product Imports		
	Model	EIA	I	I (A)	I (B)
14	121	117	123	123	123
15	489	434	150	149	205
16	49	79	-	-	-
17	60	75	173[2]	173[2]	166
18	55	50	79	82	82
19	2	2	47	51	25
Total	776	757	572	578	601

Domestic Tankers	Model	Availability	Tanker Usage		
(Clean ex Chemicals)	27	38	35	34	34

(1) Total of modeled products--gasoline plus jet fuel plus distillates. Data exclude terminal blended MTBE and ethanol purchases.
(2) Maximum (ex grassroots capacity) as limited by model input. (3) Minimum as limited by model input.

2000 REGIONAL REFINERY PRODUCT OUTPUT/PRODUCT IMPORT AND DOMESTIC TANKER USE

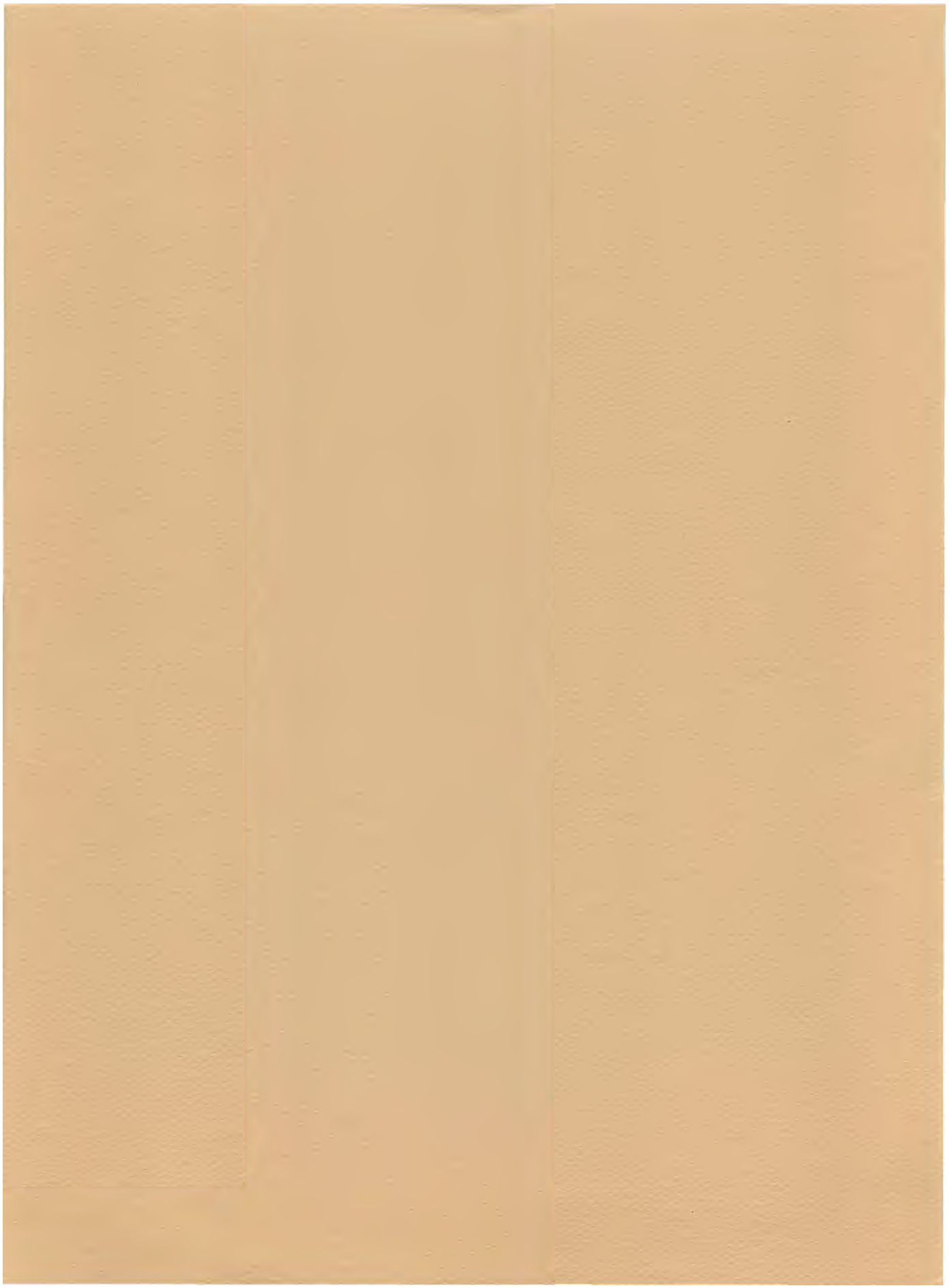
	1989 Calibration Cases, Thousand Barrels/Day[1]				2000 Sensitivity Cases, Thousand Barrels/Day[1]					
	Refining Product Output		Product Imports		Refining Model Output			Product Imports		
Region	Model	EIA*	Model	EIA*	I	I (C)	I (D)	I	I (C)	I (D)
1	-	-	507	276	-	-	-	457	502	470
2	1016	1031	81	307	1112[2]	1112[2]	1111	-	-	-
3	49	69	118	80	57	59	59	-	11	-
4	75	76	5	8	65	65	65	7	7	5
5	1675	1694	20	7	1921	1939	1939	20	20	2
6	269	227	5	7	297	297	298	-	-	-
7	637	607	-	-	688	688	688	-	-	-
8	5169	5125	-	42	5610	5646	5712	-	-	-
9	360	401	3	3	355	355	355	3	3	-
10	351	342	13	9	358	358	358	20	22	6
11	555	556	-	4	581	602	617	-	-	-
12	933	917	16	6	921	940	975	27	33	4
13	137	150	8	8	150[3]	150[3]	150[3]	38	38	34
Total	11226	11245	776	757	12115	12211	12327	572	636	521

*Estimated after correcting for exports, inventory change, distillate #4 in distillate and non-modeled imports.

	Product Imports to U.S.		Product Imports		
	Model	EIA	I	I (C)	I (D)
14	121	117	123	123	62
15	489	434	150	205	205
16	49	79	-	-	-
17	60	75	173[2]	173[2]	173[2]
18	55	50	79	82	73
19	2	2	47	53	8
Total	776	757	572	636	521

Domestic Tankers	Model	Availability	Tanker Usage		
(Clean ex Chemicals)	27	38	35	32	35

(1) Total of modeled products--gasoline plus jet fuel plus distillates. Data exclude terminal blended MTBE and ethanol purchases.
(2) Maximum (ex grassroots capacity) as limited by model input. (3) Minimum as limited by model input.

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