

PLAINTIFF'S EXHIBIT

TEX-50

M-580-18 STANDARD EXPENSES 18
POTTER SOUND PLANT
YEAR 1973

WA-TEX 009248

WA-TEX009247

ESTIMATED OPERATING EXPENSE UNITS

PERMANENT PLANT

YEAR 1973

UNITS EXPRESSED IN DOLLARS PER BARREL

	Total Condensing Expense	Vacuum Piping Still	FOCL	Purchase-Station	Cril	Amputation	HTU	Shipping
ESTIMATED DIVISION -- Barrels								
CAPACITY -- Barrels								
Direct Variable Charges								
Fuel @ \$1.40	23850000	25850000	81890000	30350000	23410000	9140000	9030000	21850000
Direct Fuel								
Fuel in Steam Power & Water								
Fuel in Auxiliaries								
Total Fuel								
Miscellaneous -- Fuel Only (1)								
Purchased Power								
Purchased Water								
Purchased Utilities in Auxiliaries								
Chemicals								
Acid								
Hydrogen Catalyst								
Other Catalyst								
Chemicals -- Auxiliaries								
Other Chemicals								
Total Chemicals								
Royalties (Running Royalties)								
TOTAL DIRECT VARIABLE CHARGES								
SEMI-VARIABLE CHARGES								
Operators -- (ex TEL)								
Test and Inspection -- Labor								
Maintenance -- Labor								
Test and Inspection -- Contract Work								
Maintenance -- Contract Work								
Test and Inspection -- Material								
Maintenance -- Material								
Employee Benefits								
Indirect Plant -- Labor								
Indirect Plant -- Other								
\$ P & W Charges Other Than Fuel & Purch. Util.								
Auxiliaries -- Other Than Fuel, Chemicals & Purch. Util.								
Miscellaneous -- Other								
Rentals and Royalties								
TOTAL SEMI-VARIABLE CHARGES								
TOTAL VARIABLE & SEMI-VARIABLE CHARGES								

Notes

STANDARD EXPENSES

UNIT

PLANT

YEAR

1973

Plant Sumo

	Total Funds Remaining	Vacation Pledge	Decontaminated	More On Recovery	BSW	FOG
ESTIMATED DIVISOR — Barrels	21585000	22505000				8187000
CAPACITY — Barrels						
Direct Variable Charges						
Fuel @ \$1.00						
Direct Fuel	1056	1262200				133300
Fuel in Steam	0211	448800				166100
Fuel in Auxiliaries						
Total Fuel	0777	171000				299400
Miscellaneous — Fuel Only (1)	1011	2254600				2354600
Purchased Power	0127	1167100				53800
Purchased Water	007	169000				55700
Purchased Utilities in Auxiliaries						
Chemicals						
Acid	0111	252400				
Hydrocarbon Catalyst	0011	23400				
Other Catalyst	018	401800				305500
Chemicals — Auxiliaries						
Other Chemicals	003	71500				9400
Total Chemicals	0033	747100				314900
Royalties (Running Royalties)						
TOTAL DIRECT VARIABLE CHARGES	1118	2656000				467900
SEMI-VARIABLE CHARGES						
Operators — (ex T&I)	0400424	902200				0250255103000
Test and Inspection — Labor	0090095	192700				011012799100
Maintenance — Labor	0235033	512600				0180170116500
Test and Inspection — Contract Work	0025	562800				023922200
Maintenance — Contract Work	0115	336000				011186000
Test and Inspection — Material	009	197600				01195000
Maintenance — Material	016	332200				010818200
Employee Benefits	0055	1234090				039317161
Indirect Plant — Labor	00570584	1293900				00410435222522
Indirect Plant — Other	0028	1233900				0210162712
SP & W. Charges Other Than Fuel & Purch. Util.	030	676200				029239600
Auxiliaries — Other Than Fuel, Chemicals & Purch. Util.						
Miscellaneous — Other	0115	7334800				04113331800
Rentals and Royalties						
TOTAL SEMI-VARIABLE CHARGES	2144302	24331390				2142181751000
TOTAL SEMI-VARIABLE & VARIABLE CHARGES	4112	29953400				4264123005

Notes (1)

Gross Labor Cost Increase

008 420 171684

001 HR 30634

2449 620

006 275 45668

WA-TEX 009250

WA-TEX009249

STANDARD EXPENSES

UNIT

PLANT Puerto RicoYEAR 1973

	Polymerization	CEC	Amortization	H-TU	RAFS
ESTIMATED DIVISOR - Barrels	303500	3341000	914000	9208000	12585000
CAPACITY - Barrels					
Direct Variable Charges					
Fuel @ \$1.00					
Direct Fuel	11.2	225300	-0-	1025	122300
Fuel in Steam	192	12100	081	001	5800003
Fuel in Auxiliaries					
Total Fuel	192	225300	081	026	122300
Miscellaneous - Fuel Only (1)					
Purchased Power	070	14300	006	005	494000003
Purchased Water	073	22300	019	002	11500
Purchased Utilities in Auxiliaries					
Chemicals					
Acid					
Hydrogen Catalyst					
Other Catalyst	120	60000		003	23400
Chemicals - Auxiliaries					
Other Chemicals	054	16000	007	002	2900
Total Chemicals	174	67000	008	003	26300
Royalties (Running Royalties)					
TOTAL DIRECT VARIABLE CHARGES	509	332800	009	036	12585000
SEMI-VARIABLE CHARGES					
Operators - (ex T&I)	261	2767	087	005	741000
Test and Inspection - Labor					
Maintenance - Labor	134	1420	010	003	29400
Test and Inspection - Contract Work					
Maintenance - Contract Work	131	39800	006	001	11000
Test and Inspection - Material					
Maintenance - Material	064	27400	006	003	33000
Employee Benefits	292	11000	007	003	284000005
Indirect Plant - Labor	306	37100	008	003	112100
Indirect Plant - Other	150	56900	005	002	15700
SP & W - Charges Other Than Fuel & Purch. Util.	276	17400	007	001	84000
Auxiliaries - Other Than Fuel, Chemicals & Purch. Util.					
Miscellaneous - Other					
Rentals and Royalties					
TOTAL SEMI-VARIABLE CHARGES	1619	561337	054	006	5871505
TOTAL SEMI-VARIABLE & VARIABLE CHARGES	2128	894137	063	042	9180055

Notes (1)

6% Labor Cost Increase 042,210 13762 005,23 15960 04,974 1274 002,102 16206 002,468 37536

WA-TEX 009252

TEXACO

Anacortes, WA 98221, February 1, 1973.

FORM R-1211-E
ESTIMATED OPERATING EXPENSES
YEAR 1973

REFINING DEPT. HOUSTON OFFICE	
FEB 7 1973	
VICE PRES	
CH. MGR	
GEN. MGR.	
ASST. GEN. MGR. - M	
ASST. GEN. MGR. - O	
CH. CENT & IAI	
MGR. CR REQMTS	
1 CR. IDPM	
MGR. EMP. REL.	
MGR. A&WC	
MGR. MAINT	
MGR. PROCLSS	
CR. PRODUCTION	

AIR MAIL

PERSONAL AND CONFIDENTIAL

MEMORANDUM

Mr. J. W. Poulter
Houston, TX 77052

We are submitting herewith Estimated Crude Refining Expenses, Form R-1211-E, Exhibits 1, 2, 3, and 4.

The activities shown on the attached statements are in agreement with those shown in the Annual Budget Request, Form R-1259 as submitted, plus Form G-1018, Accounting Budget. No new equipment is to start up and none of the present equipment is to be shut down during the year. Equipment constructed under Estimates 3600 and 3910, due to start up late in the fourth quarter of 1973, are not considered in this report, likewise, the 6% increase in wages is excluded.

The following is a breakdown of expenses included under Miscellaneous Expenses:

FCCU - Credit for Steam	(\$1,080,200)	
Sub-Total Direct Plant		(\$1,080,200)
Charge Steam Dept. for Above Item	1,080,200	
Purchased Power	310,800	
Purchased Water	172,800	
Total S.P.&W.		1,563,800
Vacation Pay	249,600	
A & S Benefits	48,700	
Telephone	12,100	
Telegraph	2,300	
Contributions and Donations	100	
Membership and Subscriptions	200	
Postage	3,400	
Travel and Personal	21,600	
All Other Expenses	7,300	
Sales Dept. (Elect. Sign & Services)	(2,000)	
Marine Dept. (Services)	(7,600)	
Rentals	11,400	
Sub-Total Indirect		347,100
Grand Total Miscellaneous Expense		830,700

Included in Material Operating is an estimate of \$12,200 for Printing and Stationery and excluded from Material Operating is an estimate of \$2,500 for Hydrogen which has been included with Chemicals.

WA-TEX 009253

WA-TEX009252

Mr. J. W. Poulter

- 2 -

February 1, 1973

Labor costs are based on the following manpower:

	<u>No. Men</u>	<u>Cost</u>
Calendar Personnel	7	0
Construction & Outside Charges	42	480,000
Plant Expenses R-1259	311	3,566,600
Total Labor	360	4,046,600
Less: Vacation Pay		249,600
A & S Benefits		48,700
Construction & Outside Charges		480,000
Labor Distributed on R-1211-E		3,268,300

The following is a breakdown of the component costs used in pricing out steam produced from C.O. and waste heat boilers:

M Lbs. Steam	2,413,000
BTU's/Lbs.	1,318
MM BTU's	3,180,300
Total Steam Cost Basis Unit Cost Previous Report	339,655
Credit for Steam	1,080,200

Component Costs:

Labor	229,000
Material	61,600
Contract Work	3,200
Fuel Bbls.	254,600
Fuel Cost	745,400
Transfer of Steam	(17,300)
Transfer from Power	35,600
Transfer from Water	22,700
	1,080,200

W. W. Clarke

W. W. CLARKE

WWC-CHS

JWP(2)

HLB(Stat. Refg.)

WA-TEX 009254

WA-TEX009253

**PLANT LABOR AND CONTRACT WORK
ESTIMATED OPERATING EXPENSES - YEAR 1973
BUDGET SOUND PLANT**

Line No.	Activities Barrels	Oper. Ex. Employees	LABOR			CONTRACT WORK		
			I & T \$ Amt.	I & T \$ Amt.	Maint. \$ Amt.	TOTAL \$ Amt.	TOTAL \$ Amt.	TOTAL \$ Amt.
1. VPS	22,585,000	14.0	158,400	40,900	88,200	118,300	4,500	122,800
2. Decarbonizer	-	(1)	-	-	46,000	-	-	46,000
3. FCCU	8,189,000	18.0	203,000	99,100	126,500	322,200	86,000	408,200
4. Poly (BBLs. Polym)(4)	303,500	7.0	79,200	-	40,600	119,800	39,800	39,800
5. Catalytic Reform.	3,341,000	7.0	79,200	23,500	47,100	55,000	10,000	65,000
6. Alky (Bbls. Alkylate)	914,000	7.0	79,200	-	40,700	119,900	41,900	41,900
7. Hydrotreating	9,203,000	7.0	79,200	29,200	43,700	67,300	10,000	77,300
8. Shipping Bulk	21,473,000	(2)	-	-	47,700	-	-	47,700
9. RP&S	-	20.0	212,400	-	92,100	304,500	143,800	143,800
10. BS&W	-	0.5	5,800	-	-	5,800	-	5,800
11. Waste Oil Recovery	-	0.5	5,800	-	-	5,800	-	5,800
12. Total Direct	22,174,000	81.0	902,200	192,700	572,600	1,667,500	336,000	898,800
13. S P & W	-	13.0	155,100	-	151,800	306,900	3,000	3,000
14. Indirect Plant	-	(3)17.0	199,500	-	1,094,400	1,293,900	165,300	165,300
15. GRAND TOTAL	-	111.0	1,256,800	192,700	1,818,800	3,268,300	512,300	1,067,100

- (1) Operated by VPS Personnel
 (2) Included in RP&S Dock Forces
 (3) Includes 16 from Laboratory and 1 from Effluent Treating
 (4) Olefins are being Alkylated Rather than Polymerized.

WVC-CHS
 JWP(2)
 HLR(Stat. Refg.)

MATERIAL, MISCELLANEOUS EXPENSE AND FUEL CONSUMED
ESTIMATED OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT

R-1211-E
EXHIBIT II

Line No.	MATERIAL			Misc. Expense	FUEL CONSUMED		
	I & T \$ Amt.	Maint. \$ Amt.	TOTAL \$ Amt.		Total Gas Std Bbls.	Liquid Std Bbls	Total Fuel \$ Amt.
1. VPS	42,200 /	61,700 /	103,900		529,800 /	119,000 /	1,848,600
2. Decarbonizer		24,300 /	24,300		22,500 /		61,200
3. FCCU	95,000 /	81,800 /	176,800		30,000 /	103,300 /	434,900
4. Poly (Bals Polymer)		20,800 /	20,800	(1,080,200) /			
5. Catalytic Reform	27,400 /	20,800 /	48,200		191,600 /	33,700 /	636,600
6. Alky (Bals Alkylate)		24,200 /	24,200				
7. Hydrotreating	33,000 /	28,400 /	61,400		232,300 /		632,100
8. Shipping Bulk		29,100 /	29,100				
9. RP&S		78,300 /	78,300				
10. B&W		1,400 /	1,400				
11. Waste Oil Recovery		1,400 /	1,400				
12. Total Direct	197,600	372,200	569,800	(1,080,200)	1,006,200	256,000	3,613,400
13. SP&W		89,400	89,400	1,563,800	61,000	193,200	826,800
14. Indirect Plant		233,300	233,300	3,347,100 /	3,200		9,500 /
15. GRAND TOTAL	197,600	694,900	892,500	830,700	1,070,400	449,200	4,449,700

	Std Bbls.	\$/Bbl.	# Amt.
Gas Produced	656,900	2.65	1,740,800
Liquid Fuel	449,200	3.42	1,536,300
Purchased Gas	413,500	2.84	1,172,600
TOTAL	1,519,600	2.9282	4,449,700

WA-TEX 009256

WUC-CHS

JWP(2)

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT

FORM R-1211-E
EXHIBIT III
SHEET 1 OF 2

Line No.		VPS		FCCU		POLY		ALKYLATION	
		Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.
1.	Acid, Alky Sulfuric Tons								
2.	B.E. Silicone SE-96 Lbs.	1,400	1,200					9,925	252,400 /
Catalyst:									
3.	HDS-3 Hydrotreater Lbs.								
4.	American Cyanamid FCCU Tons			504	305,500				
5.	OPR #1 Poly Lbs.					110,000	36,300		
6.	UOP R11 Platinum Lbs.								
7.	Caustic Soda Lbs.			254,900	9,400	254,900	9,400	135,600	5,100 /
8.	Monoethanolamine Lbs.					44,400	6,700		
9.	Nalco 537-D Gals.	8,750	21,800						
10.	Sodium Chloride Lbs.					10,200	100	243,600	2,900 /
11.	Hydrogen Cu. Ft.								
12.	Carbon Disulfide Lbs.								
13.	Propylene Dichloride Gals.								
14.	DC Anti Foam B Lbs.					240	200		
TOTAL			23,000 /		314,900 /		52,700 /		260,400 /

NWC-CJS

JWP(2)

WA-TEX 009257

WA-TEX009256

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT

FORM R-1211-E
EXHIBIT III
SHEET 20F2

Line No.		HYDROTREATING		R P & S		CAT. REFORMING		TOTAL \$ Amt.
		Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.	
1.	Acid, Alky Sulfuric Tons							252,400✓
2.	G. E. Silicone SE-96 Lbs.							1,200
Catalyst:								
3.	HDS-3 Hydrotreater Lbs.	21,700	23,400					23,400✓
4.	American Cyanamid FCCU Tons							305,500✓
5.	UEP #1 Poly Lbs.							36,300✓
6.	UEP #11 Platinum Lbs.					180,000	60,000	60,000✓
7.	Caustic Soda Lbs.					134,600	5,000	28,900
8.	Monoethanolamine Lbs.							6,700
9.	Naleo 537-D Gals.							21,800
10.	Sodium Chloride Lbs.			346,200	4,200			7,200
11.	Hydrogen Cu. Ft.					200,000	2,500	2,500
12.	Carbon Disulfide Lbs.	8,800	2,900					2,900
13.	Propylene Dichloride Gals.					71	100	100
14.	DC Anti Foam B Lbs.							200
TOTAL			26,300✓		4,200✓		67,600✓	749,100✓

WVC-CHS

JWB(2)

WA-TEX 009258

WA-TEX009257

STREAM, POWER AND WATER EXPENSES
ESTIMATED OPERATING EXPENSES YEAR 1973
BUDET SOUND PLANT

FORM R-1211-E
EXHIBIT IV
SHEET 1 OF 2

Line No.		FUEL		Purchased Power	Purchased Water	Other Costs	Total SP&W	TOTAL PLANT
		Barrels	Amount					
1.	VPS	54,800✓	169,500	24,500✓	32,600✓	79,100✓	305,700	2,691,500
2.	Decarbonization	28,200✓	87,100	31,400✓	5,700✓	40,700✓	164,900	296,400
3.	FCCU	166,100✓	513,200	53,800✓	55,700✓	239,600✓	862,300	1,545,500
4.	Polymerization	58,200✓	179,700	21,400✓	22,300✓	83,900✓	307,300	540,400
5.	Catalytic Reforming	12,100✓	37,300	14,300✓	13,500✓	17,400✓	82,500	1,049,700
6.	Alkylation	74,200✓	229,400	5,000✓	17,300✓	107,100✓	358,800	1,805,200
7.	Hydrotreating	5,800✓	17,900	49,400✓	17,500✓	8,400✓	93,200	1,042,400
8.	Shipping Bulk	4,800✓	14,900	13,100✓	500✓	7,000✓	35,500	112,300
9.	RP&S	52,900✓	163,500	46,000✓	22,800✓	76,300✓	288,100	818,900
10.	BS&W	4,800✓	14,900	2,800✓	800✓	7,000✓	25,500	32,700
11.	Waste Oil Recovery	6,700✓	20,700	0	800✓	9,700✓	31,200	38,400
12.	TOTAL	468,600	1,448,100	261,700	169,000	676,200	2,555,000	8,973,400
13.	SP&W	40,200	124,100	49,100	3,800	57,900	(2,789,900)	
14.	Indirect Plant						234,900	
15.	GRAND TOTAL	508,800	1,572,200	310,800	172,800	734,100	--	11,257,400

WMC-CHS

JWP(2)
HLB(Stat. Refg.)

WA-TEX 009259

WA-TEX009258

STEAM, POWER AND WATER EXPENSES
ESTIMATED OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT

FORM R-1211-E
EXHIBIT IV
SHEET 2 OF 2

DISTRIBUTION

Fuel - Barrels
Fuel - Cost
Purchased - Power
Purchased - Water
Other Costs

TOTAL COST

Avg. Steam Cost/M Lbs.
Avg. Power Cost/KW
Avg. Water Cost/M GVLs.

Purchased Utility Rates

*Last Increment of Power/KW
Last Increment of Water/M Gals.

SP&W Fuel Summary

Total SP&W Fuel from Exhibit II
Plus FCOU Waste Heat Fuel Credit

TOTAL SP&W FUEL TO DISTRIBUTE

STEAM	POWER	WATER	TOTAL
505,300		3,500	508,800
1,561,800		10,400	1,572,200
39,300	205,600	65,900	310,800
45,100		127,700	172,800
660,100	3,400	79,600	734,100
2,306,300	209,000	274,600	2,789,900

.345161
.005076
.128128

2.58200
\$.045260

Barrels 254,200
Barrels 254,600
Barrels 508,800

* PSP has a power contract based on a peak demand of 8000 KW. No additional payment is required unless demand exceeds 8000 KW, and if demand exceeds 8000 KW the monthly charge will be increased by \$2.582 per KW in excess of 8000 KW.

WMC-CHS

JMP(2)

HLB(Stat. Refg.)

Anacortes, WA 98221, February 1, 1973

FORM R-1211-E
ESTIMATED OPERATING EXPENSES
YEAR 1973

AIR MAIL

PERSONAL AND CONFIDENTIAL

MEMORANDUM

→ Mr. J. W. Boulter
Houston, TX 77052

We are submitting herewith Estimated Crude Refining Expenses, Form R-1211-E, Exhibits 1, 2, 3, and 4.

The activities shown on the attached statements are in agreement with those shown in the Annual Budget Request, Form R-1259 as submitted, plus Form G-1018, Accounting Budget. No new equipment is to start up and none of the present equipment is to be shut down during the year. Equipment constructed under Estimates 3608 and 3910, due to start up late in the fourth quarter of 1973, are not considered in this report, likewise, the 6% increase in wages is excluded.

The following is a breakdown of expenses included under Miscellaneous Expenses:

FCU - Credit for Steam	(\$1,080,200)	
Sub-Total Direct Plant		(\$1,080,200)
Charge Steam Dept. for Above Item	1,080,200	
Purchased Power	310,800	
Purchased Water	172,800	
Total S.P.&W.		1,563,800
Vacation Pay	249,600	
A & S Benefits	48,700	
Telephone	12,100	
Telegraph	2,300	
Contributions and Donations	100	
Membership and Subscriptions	200	
Postage	3,400	
Travel and Personal	21,600	
All Other Expenses	7,300	
Sales Dept. (Elect. Sign & Services)	(2,000)	
Marine Dept. (Services)	(7,600)	
Rentals	11,400	
Sub-Total Indirect		387,400
Grand Total Miscellaneous Expense		830,700

Included in Material Operating is an estimate of \$12,200 for Printing and Stationery and excluded from Material Operating is an estimate of \$2,500 for Hydrogen which has been included with Chemicals.

February 1, 1973

Labor costs are based on the following manpower:

	No.	Men	Cost
Calendar Personnel	7		0
Construction & Outside Charges	12		480,000
Plant Expenses R-1259	311		3,566,600
Total Labor	360		4,046,600
Less: Vacation Pay			249,600
A & S Benefits			48,700
Construction & Outside Charges			480,000
Labor Distributed on R-1211-E			3,268,300

The following is a breakdown of the component costs used in pricing out steam produced from C.O. and waste heat boilers:

M Lbs. Steam	413,000
BTU's/Lbs.	1,313
MM BTU's	180,300
Total Steam Cost Basis Unit Cost Previous Report	1,080,200
Credit for Steam	

Component Costs:

Labor	229,000
Material	61,600
Contract Work	3,200
Fuel Bbls.	254,600
Fuel Cost	745,400
Transfer of Steam	17,300
Transfer from Power	35,600
Transfer from Water	22,300

WVO-QHS

JWP(2)

HBB(Stat. Refg.)

W. W. CLARKE

Signed: W. W. CLARKE

ESTIMATED OPERATING EXPENSES YEAR 1973

FORM R-1211-E

CONTRACT WORK

	Maint.	\$ Amt.	TOTAL	\$ Amt.
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1,300	4,500	122,800
37,200	86,000	408,200
4,000	39,800	39,800
3,000	10,000	65,000
10,000	41,900	41,900
143,800	77,300	143,800
336,000	898,800	898,800
3,000	3,000	3,000
165,300	165,300	165,300
512,300	1,067,100	1,067,100

WA-TEX 009262

WA-TEX009261

**MATERIAL, MISCELLANEOUS EXPENSE AND FUEL CONSUMED
ESTIMATED OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT**

R-1211-E
EXHIBIT II

Line No.	I & T \$ Amt.	MATERIAL		Misc. Expense	FUEL CONSUMED		
		\$ Amt.	TOTAL \$ Amt.		Total Gas Std Bbls.	Liquid Std Bbls	Total Fuel \$ Amt.
1. VPS	42,200	61,700	103,900		529,800	149,000	1,848,600
2. Dewarhonorizer		24,300	24,300		22,500		61,200
3. FCCU	95,000	51,800	176,800	(1,080,200)	30,000	103,300	434,900
4. Poly (Bbls Polymer)		20,800	20,800				
5. Catalytic Reform	27,400	20,800	48,200		191,600	33,700	636,600
6. Alky (Bbls Alkylate)		24,200	24,200				
7. Hydrotreating	33,000	28,400	61,400		232,300		632,100
8. Shipping Bulk		29,100	29,100				
9. RP&S		78,300	78,300				
10. BS&W		1,400	1,400				
11. Waste Oil Recovery		1,400	1,400				
12. Total Direct	197,600	372,200	569,800	(1,080,200)	1,006,200	256,000	3,613,400
13. SP&W		89,400	89,400	1,563,800	61,000	193,200	826,800
14. Indirect Plant		233,300	233,300	3,247,100	3,200		9,500
15. GRAND TOTAL	197,600	694,900	892,500	830,700	1,070,400	449,200	4,449,700
					Std Bbls.	\$/Bbl.	# Amt.
					656,900	2.65	1,740,800
					449,200	3.42	1,536,300
					413,500	2.84	1,172,600
					1,519,600	2.9282	4,449,700
					TOTAL		

Gas Produced
Liquid Fuel
Purchased Gas

WAC-CRS

JWP(2)

WA-TEX 009263

WA-TEX009262

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1973
PUCKET SOUND PLANT

FORM R-1234-B
EXHIBIT III
SHEET 1 OF 2

Line No.		VPS		FCCU		POLY		ALKYLATION	
		Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.
1.	Acid, Alky Sulfuric Tons	1,400	1,200					9,925	252,400
2.	B/E. Silicone SE-96 Lbs.								
Catalyst:									
3.	HDS-3 Hydrotreater lbs.								
4.	American Cyanamid FCCU Tons			504	305,500				
5.	UOP #1 Poly lbs.					110,000	36,300		
6.	UOP #11 Platinum Lbs.								
7.	Caustic Soda Lbs.			254,900	9,400	254,900	9,400	135,600	5,100
8.	Monethanolamine Lbs.					44,400	6,700		
9.	Nalco 537-D Gals.	8,750	21,800						
10.	Sodium Chloride Lbs.					10,200	100	243,600	2,900
11.	Hydrogen Cu. Ft.								
12.	Carbon Disulfide Lbs.								
13.	Propylene Dichloride Gals.								
14.	DC Anti Foam B Lbs.					240	200		
TOTAL			23,000		314,900		52,700		260,400

WWC-CJS

JWP(2)

WA-TEX 009264

WA-TEX009263

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT

FORM R-1211-E
EXHIBIT III
SHEET 2072

Line No.		HYDROTREATING		R P & S		CAT. REFORMING		TOTAL \$ Amt.
		Quantity	\$ Amt.	Quantity	\$ Amt.	Quantity	\$ Amt.	
1.	Acid, Alky Sulfuric Tons							252,400
2.	G. E. Silicone SE-96 Lbs.							1,200
Catalyst:								
3.	HDS-3 Hydrotreater Lbs.	21,700	23,400					23,400
4.	American Cyanamid FCCU Tons							305,500
5.	UOP #1 Poly Lbs.					180,000	60,000	36,300
6.	UOP R11 Platinum Lbs.					134,600	5,000	60,000
7.	Caustic Soda Lbs.							28,900
8.	Monochloroamine Lbs.							6,700
9.	Nalco 537-D Gals.			346,200	4,200			21,800
10.	Sodium Chloride Lbs.					200,000	2,500	7,200
11.	Hydrogen Cu. Ft.	8,800	2,900					2,500
12.	Carbon Disulfide Lbs.					71	100	2,900
13.	Propylene Dichloride Gals.							100
14.	DC Anti Foam B Lbs.							200
TOTAL			26,300		4,200		67,600	749,100

WVC-CHS

JUP(2)

WA-TEX 009265

WA-TEX009264

STEAM, POWER AND WATER EXPENSES
ESTIMATED OPERATING EXPENSES YEAR 1973
FUGET SOUND PLANT

FORM R-1211-E
EXHIBIT IV
SHEET 1 OF 2

Line No.	Description	FUEL		Purchased Power	Purchased Water	Other Costs	Total SP&W	TOTAL PLANT
		Barrels	Amount					
1.	VPS	54,800	169,500	24,500	32,600	79,100	305,700	2,691,500
2.	Decarbonization	28,200	87,100	31,400	5,700	40,700	164,900	296,400
3.	FGSU	166,100	513,200	53,800	55,700	239,600	862,300	1,545,500
4.	Polymerization	58,200	179,700	21,400	22,300	83,900	307,300	540,400
5.	Catalytic Reforming	12,100	37,300	14,300	13,500	17,400	82,500	1,049,400
6.	Alkylation	74,200	229,400	49,400	17,300	107,100	358,800	805,200
7.	Hydrotreating	5,800	17,900	13,100	17,500	8,400	93,200	1,042,400
8.	Shipping Bulk	4,800	14,900	46,000	500	7,000	35,500	112,300
9.	RPS	52,900	163,500	2,800	23,300	76,300	288,100	818,900
10.	BS&W	4,800	14,900	0	800	7,000	25,500	32,700
11.	Waste Oil Recovery	6,700	20,700	0	800	9,700	31,200	38,400
12.	TOTAL	468,600	1,448,100	261,700	169,000	676,200	2,555,000	8,973,400
13.	SP&W	40,200	124,100	49,100	3,800	57,900	(2,789,900)	
14.	Indirect Plant	508,800	1,572,200	310,800	172,800	734,100	234,900	2,284,000
15.	GRAND TOTAL						--	11,257,400

NWC-CHS

IMP(2)
IMP(Stat. Refg.)

**STEAM, POWER AND WATER EXPENSES
ESTIMATED OPERATING EXPENSES - YEAR 1973
PUGET SOUND PLANT**

FORM R-1211-B
EXHIBIT IV
SHEET 2 OF 2

DISTRIBUTION	STEAM	POWER	WATER	TOTAL
Fuel - Barrels	505,300		3,500	508,800
Fuel - Cost	1,561,800		10,400	1,572,200
Purchased - Power	39,300	205,600	65,900	310,800
Purchased - Water	45,100		127,700	172,800
Other Costs	660,100	3,400	70,600	734,100
TOTAL COST	2,306,300	209,000	274,600	2,789,900

Avg. Steam Cost/M lbs.
Avg. Power Cost/KW
Avg. Water Cost/M Gals.

.345161

.005076

.128128

Purchased Utility Rates

*Last Increment of Power/KW
Last Increment of Water/M Gals.

2.58200

\$.045260

SP&W Fuel Summary
Total SP&W Fuel from Exhibit II
plus P&W Waste Heat Fuel Credit

TOTAL SP&W FUEL TO DISTRIBUTE

Barrels	254,200
Barrels	254,600
Barrels	508,800

* PSP has a power contract based on a peak demand of 8000 KW. No additional payment is required unless demand exceeds 8000 KW, and if demand exceeds 8000 KW the monthly charge will be increased by \$2.182 per KW in excess of 8000 KW.

WHS-GHS
JMR(2)

HLB(Stat. Refg.)

WA-TEX 009267

WA-TEX009266