

PLAINTIFF'S EXHIBIT

TEX-34

No.

NAME

M-580-8

STANDARD EXPENSES - 10
PUGET SOUND PLANT
YEAR - 1962

WA-TEX 008812

WA-TEX008812

TEXACO

Anacortes, Washington, March 13, 1962

*looks OK
as compared
to budget and
to accounting.*

FORM R-1211-E
ESTIMATED OPERATING EXPENSES
PUGET SOUND PLANT
YEAR 1962

PERSONAL

MEMORANDUM

Mr. H. S. Walz (2)

Houston, Texas

Gen. Mgr.	REFINING	Supr. C&S
	HOUSTON OFFICE	☒
Asst. G M	AR 16 1962	Supr. E R
Coord Cr.	Asst to G M	Supv. E C
		Supv P&P

We are submitting herewith Estimated Crude Refining Operating Expenses, Form R-1211-E, Schedules 1, 2, 3, 4 and 6.

The activities shown on the attached statement are in agreement with the Annual Budget, Form R-1259. No new equipment is to start up and none of the present equipment is to be shutdown during the year. The total expenses of \$6,960,819 also are in agreement with the Annual Budget.

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

FCOU - Credit for Steam	(723,388)	
Subtotal Direct Plant		(723,388)
Charge Steam Dept. for above item	723,388	
Purchased Power	432,000	
Purchased Water	114,400	
Total SP&W		1,269,788
Vacation Pay	104,632	
A&S Benefits	29,700	
Telephone	13,344	
Telegraph	3,500	
Contributions & Donations	650	
Memberships & Subscriptions	500	
Postage	1,200	
Traveling & Personal	13,000	
All Other Expense	10,850	
Marine Dept. - Rentals & Services	{ 11,400	
Sales Dept. - Electric Sign	{ 600	
Rentals	30,180	
Sub-Total Indirect		195,556
Grand Total Miscellaneous Expense		741,956

*Desalter
expense charge*

Included in Material Operating is an estimate of \$6,058 for Printing & Stationery.

WA-TEX 008815

WA-TEX008815

Mr. H. S. Walz

- 2 -

3-13-62

Labor costs are based on the following manpower:

	<u>No. Men</u>	<u>Cost</u>
Calendar Personnel	2	0
Construction & Outside Charges	5	33,900
Plant Expense - Form R-1259	285	2,037,660
Total Labor	292	2,071,560
Less: Vacation Pay		104,632
A&S Benefits		29,700
Construction and Outside		33,900
Labor Distributed on Form R-1211-E as Labor		1,903,328

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

	<u>FCU</u>
M Lbs. Steam	2,351,000
BTU's/Lb.	1322.8
MM BTU's	3,110,010
Total Steam Cost basis Unit Cost previous report	23260
Credit for Steam	723,388
Component Costs:	
Labor	111,546
Material	21,123
Contract Work	0
Fuel - Bbls.	259,012
Fuel - Cost	540,298
Transfers of Steam	(17,940)
Transfers from Power	39,570
Transfers from Water	28,791
Total	723,388

Fuel @ 102 259,012
Other Misc. \$183,090

G. V. Carroll
G. V. CARROLL

WWC-JPE

HSW(2)

MC (Bookkeeping)

Attachments

WA-TEX 008816

WA-TEX008816

PLANT LABOR
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

R-1211-E
Exhibit 1
Sheet 1 of 2

() Indicates Red Figures

Line No.	Activities	Number Operators	LABOR			Other Operating			T&I Repairs		
			Barrels	Man Hours	Amount	Man Hours	Amount	Man Hours	Amount	Man Hours	Amount
1	VPS	14.0	15,563,000	12636	\$42,715	1600	\$ 5,100	3860	\$ 11,350	920	\$ 2,900
2	Decarbonizer	(1)	-	12636	42,715	800	2,500	2250	6,610	480	1,500
3	F.C.O.U.	22.0	6,375,000	42360	139,620	6030	19,000	9150	26,900	4920	15,500
4	Poly (Bbls. Polymer)	7.0	441,171	12636	42,715	640	2,000	4980	14,640	60	200
5	Catalytic Reforming	7.0	4,297,890	12636	42,715	2730	8,600	4500	13,230	1110	3,500
6	Alkylation (Bbls. Alkylate)	7.0	611,587	12636	42,715	380	1,200	2900	8,520	130	400
7	Hydrotreating	7.0	7,586,000	12636	42,715	4760	15,000	2410	7,080	1600	5,000
8	Shipping - Bulk	(2)	14,113,169	5200	16,865			6430	18,900		
9	RP&S	25.0		47920	155,420			12530	36,830		
10	BS&W	.5		1040	3,370						
11	Waste Oil Recovery	.5		1040	3,370						
12	Total Direct	90.0	44,113,169	173376	574,935	16940	53,400	49010	144,060	9220	29,000
13	S.P. & W.	13.0		27040	89,340			14620	42,980		
14	Indirect Plant	15.0(3)		29840	98,720			178115	684,333		
15	Grand Total	118.0		230256	\$762,995	16940	\$53,400	241745	\$871,373	9220	\$ 29,000

- (1) Operated by VPS Personnel
 (2) Included in RP&S & Deck Forces
 (3) Includes 14 from Laboratory and 1 from Effluent Treating
 (4) See Exhibit 5 for proration of Indirect Labor

GVG-JPE

ESW(2)

MG (Bookkeeping)

WA-TEX 008817

WA-TEX008817

PLANT LABOR
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

() Indicates Red Figures

Line No.		L A B O R				Total Labor	
		Routine Repairs		Expense Estimate		Man Hours	Amount
		Man Hours	Amount	Man Hours	Amount		
1	VPS	5780	\$ 18,210	1080	\$ 3,400	25876	\$ 83,675
2	Decarbonizer	3910	12,320			20976	65,645
3	F.C.C.U.	19880	34,280			73340	235,300
4	Poly (Ebls. Polymer)	3400	10,710			21716	70,265
5	Catalytic Reforming	1530	4,820			22506	72,865
6	Alkylation (Ebls. Alkylate)	1530	4,820			17576	57,655
7	Hydrotreating	1360	4,280			22766	74,073
8	Shipping Bulk	1530	4,820			13160	40,585
9	RP&S & Boilers	7990	25,190			68440	217,440
10	ES&M					1040	3,370
11	Waste Oil Recovery					1040	3,370
12	Total Direct	37910	119,450	1080	3,400	287536	924,245
13	S.P. & W.	11220	35,350			52880	167,670
14	Indirect Plant	9900	28,360			216955	811,413 1/4
15	Grand Total	58130	\$183,160	1080	\$ 3,400	557371	\$1903,328

R-1211-Z
Exhibit 2

CONTRACT WORK, MATERIAL & MISCELLANEOUS EXPENSES
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

() Indicates Red Figures

Line No.	Contract Work				Material				Miscel. Expense			
	Operating		Repairs		Operating		Repairs					
	Totl	Other	Totl	Other	Totl	Other	Estimate					
1	VPS	15500	\$ 1250	\$ 1700	\$ 200	\$ 18650	\$ 4000	\$ 12070	\$ 2200	\$ 11140	\$ 35000	\$ 64410
2	Decarbonizer	7700	1250	800	120	9870	2000	9360	1100	8660	21000	42120
3	F.O.C.U.	121000	2500	46000	200	169700	16000	34200	126000	31880	18000	226080
4	Poly (bbls Polymer)		1250		200	1450	1000	10130	1500	9350	500	22480
5	Catalytic Ref'g	11300	1250	1600	200	14350	6200	10490	24800	9690	500	51680
6	Alkylation (Bbl.Alk)	2700	1250	300	200	4450	600	8200	1100	7570	500	17970
7	Hydrotreating	11400	1250	1500	200	14350	6800	10610	44000	9800	500	71710
8	Shipping Bulk				100	100		6140		5670	2000	13810
9	RPS				100	100		31910		29440	500	61850
10	BSW							480		450		930
11	Waste Oil Rec.							480		450		930
12	Total Direct	169600	10000	51900	1520	233020	36600	134070	200700	124100	78500	573970
13	SP&W		38000		4000	42000		24660		22770	1000	48430
14	Indirect Plant							101165		93430	500	195095
15	GRAND TOTAL	\$169600	\$48000	\$51900	\$5520	\$275020	\$36600	\$259895	\$200700	\$240300	\$80000	\$817495
												\$ 741956

QVC-JPE

BSW (2)

MC (Bookkeeping)

WA-TEX 008819

WA-TEX008819

R-1211-E
Exhibit 3

CHEMICALS AND FUEL CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

() Indicates Red Figures

Line No.		Chemicals		Other Chemicals Amount	Total Chemicals Amount	Gas (2) Std. Bbls	Fuel Consumed		Line No.
		Tons	Amount				Liquid Std. Bbls.	Total Fuel Amount	
1	VPS			\$ 7810	\$ 7810	161,176	165,105	\$680,685	1
2	Decarbonizer					15,875	0	36,195	2
3	F.C.C.U.					49,395	50,605	208,619(3)	3
4	Poly (Bbls Polymer)	1007.5	\$350,000	4650	354650				4
5	Catalytic Reforming	100.0	51,200	16203	67493				5
6	Alkylation (Bbls Alky)	10.0	70,000	4370	74370	131,697	134,910	556,193	6
7	Hydrotreating	5,800	\$115,200	3735	118935				7
8	Shipping - Bulk				5000	154,644		352,588	8
9	RP&S								9
10	BSW				3532				10
11	Waste Oil Recovery								11
12	Total Direct	5,800	115,200	1119.9	476,200	512,787	350,620	1834,280	12
13	SP&W				40300	177,960	182,297	751,566	13
14	Indirect Plant					2,400		5,474	14
15	GRAND TOTAL	5,800	\$115,200	1119.9	\$476,200	693,147	532,917	\$2591,320	15

- (1) See Exhibit 6 for Detail
(2) Gas Consumed, 628,627 bbls. plant production, 64,520 purchased
(3) Total Fuel at PSCU used at CO Boiler for Steam Production

QVC-JPE

BSW (2)

NO (Bookkeeping)

WA-TEX 008820

WA-TEX008820

DETAILED PLANT DISTRIBUTION OF
STEAM, POWER AND WATER
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Operation	MM BTU	S T E A M				Total Amount
			Fuel Consumed Barrels	Purchased Power Amount	Purchased Water Amount	Other Cost Amount	
1	VPS	457,176	65,096	\$ 5,932	\$ 5,710	\$ 35,006	\$ 182,346
2	Decarbonizer	232,802	33,148	2,970	2,907	17,826	92,853
3	F.C.C.U.	1,445,470	205,817	18,439	18,052	110,680	576,528
4	Polymerization	484,610	69,002	6,182	6,052	37,107	193,287
5	Catalytic Reforming	107,546	15,313	1,372	1,343	8,235	42,895
6	Alkylation	626,166	89,158	7,987	7,820	47,946	249,747
7	Hydrotreating	45,322	6,453	578	566	3,470	18,076
8	Shipping Bulk	39,990	5,694	510	499	3,062	15,949
9	RP&S	441,180	62,818	5,628	5,510	33,781	175,964
10	BS&W	39,990	5,694	510	499	3,062	15,949
11	Waste Oil Recovery	55,470	7,899	707	694	4,247	22,127
12	TOTAL	3,975,722	566,092	50,715	49,652	304,422	1,585,721
13	SP&W						
14	Indirect Plant	311,578	44,365	3,975	3,891	23,817	124,233
15	GRAND TOTAL	4,287,300	610,457	\$54,690	\$53,543	\$328,239	\$1,709,954

GVC-JPE

BSW (a)

MO (Bookkeeping)

WA-TEX 008821

DETAILED PLANT DISTRIBUTION OF
STEAM, POWER AND WATER
ESTIMATED CRUDE REFINING OPERATING EXPENSES - 1962
PUGET SOUND PLANT

R-1211-E
Exhibit 4
Sheet 2 of 3

Line No.	Operation	P O W E R		
		Purchased Power K.W.H.	Other Cost Amount	Total Amount
1	VPS	2,403,595	\$ 20,455	\$ 20,634
2	Decarbonizer	3,036,120	25,838	26,065
3	F.O.C.U.	5,212,007	44,355	44,744
4	Polymerization	2,099,983	17,871	18,028
5	Catalytic Reforming	1,401,675	11,929	12,034
6	Alkylation	490,839	4,177	4,214
7	Hydrotreating	4,786,949	40,738	41,095
8	Shipping Bulk	1,270,110	10,809	10,904
9	RP&S	4,483,337	38,154	38,489
10	BS&W	273,251	2,326	2,346
11	Waste Oil Recovery	25,457,866	216,652	218,553
12	TOTAL		1,901	
13	SP&W	8,020,417	68,255	68,854
14	Indirect Plant		599	
15	GRAND TOTAL	33,478,283	\$284,907	\$287,407

WA-TEX 008822

WA-TEX008822

DETAILED PLANT DISTRIBUTION OF
STEAM, POWER AND WATER
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Operation	M Gals.	Purchased Power Amount	Fuel Consumed Bbls	Other Cost Amount	Total Amount	Total SP&W Amount	Total Plant Amount
1	VPS	174,470	\$14,794	1,420	\$8,694	\$38,539	\$241,519	\$1,096,749
2	Decarbonizer	30,178	3,346	240	1,582	7,904	126,822	280,652
3	F.O.G.U.	289,361	36,484	3,665	22,194	96,645	717,917	1,188,878
4	Polymerization	180,661	8,999	993	5,881	24,577	235,892	397,490
5	Catalytic Reforming	70,275	8,455	554	3,749	19,447	74,376	843,834
6	Alkylation	90,369	11,051	710	4,840	25,287	279,248	478,258
7	Hydrotreating	92,919	8,959	749	4,738	22,226	81,397	599,120
8	Shipping Bulk	3,000	94	26	126	296	27,149	81,644
9	RP&S	13,000	410	114	548	1,292	215,745	498,667
10	BS&W	4,500	142	39	190	446	18,741	23,041
11	Waste Oil Recovery	4,500	142	39	190	446	22,573	26,873
12	TOTAL	893,233	74,358	8,549	52,732	237,105	2,041,379	5,515,206
13	SP&W						(2,237,454)	
14	Indirect Plant	30,127	949	263	1,269	2,988	196,075	1,445,613
15	GRAND TOTAL	923,360	\$75,307	8,812	\$54,001	\$240,093	-	\$6,960,819

R-1211-E
Exhibit 6
Sheet 1 of 2

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Chemical	V.P.S		F.C.C.U.		POLY		ALKYLATION		HYDROTREATING		RP&S	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1	Anti-Foam DG #200	1000	\$2810										
2	Acid, Alky Sulfuric							11600000	\$115200				
3	Catalyst												
4	UOP-R5 Platf. Fresh									4700	\$5000		
5	Aero HD82 - Hydrotreater												
6	FCU Davison Hi Alumina			2015000	\$350000								
7	UOP #1 Poly			150000	4130	200000	\$51200						
8	Gaustic Soda					150000		75000	2070				
9	Hydrogen			3000	520	40000	12000						
10	Litharge, Spec #29												
11	Monothanolamine					5000		101000	1465				
12	Nalco 536-D	*2000	5000					1000	200				
13	Sodium Chloride												
14	Sodium Fluoride											244000	\$3532
15	TOTAL	7810		\$354650		\$67403		\$118935		\$5000			
*	Gallons												

GVG-JPE

HSW (2)

NO (Bookkeeping)

WA-TEX 008824

WA-TEX008824

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Chemical	CAT. REFORMING		TOTAL	
		Quantity	Amount	Quantity	Amount
1	Anti. Foam DG #200			1000	\$ 2,810
2	Acid, Alky Sulfuric			1160000	115,200
3	Catalyst				
4	UOP#5 Platf. Fresh	20,000	\$70,000	20000	70,000
5	Aero HDS2- Hydrotreater			4700	5,000
6	FCI Davison High Alumina			2015000	350,000
7	UOP#1 - Poly			200000	51,200
8	Caustic Soda	75,000	2,070	450000	12,400
9	Hydrogen	200,000 SCF	2,300	200000	2,300
10	Litharge, Spec. #29			3000	520
11	Monothanolamine			40000	12,000
12	Maleo 536-D			* 2000	5,000
13	Sodium Chloride			350000	5,070
14	Sodium Fluoride			1000	200
15	TOTAL		\$74,370		\$631,700

1962 MAR 13 PM 5 08
MEMO ACCR VIA LOSA 86 MAR 13

H. S. WALZ

HOUSTON

RETEL 13TH AIR MAILING R-1211-E MARCH 15TH

G. V. CARROLL

REFINING HOUSTON OFFICE	
MAR 14 1962	
GEN. MGR.	
ASST. GEN. MGR.	
CO-ORD. CR. REQ.	
ENGR. ASST. & ST.	
ENGR. EMP. REL.	
Supv. Proc. & Prod.	
Supv. Adm. & Serv.	
ASST. TO GEN.	
Supv. Exp. Cont.	

WA-TEX 008827

WA-TEX008827

HOUS ACOR VIA LOSA 105 MARCH 14

H S WALZ

HOUSTON

RETEL 13TH AIRMAILING R-1211-E TODAY.

G V CARROLL

1962 MAR 15 AM 7 37

REFINING HOUSTON OFFICE	
MAR 15 1962	
GEN. MGR.	
ASST. GEN. MGR.	
CO-ORD. CH. REQ.	
SUPVR. COST & ST.	
SUPVR. EMP. REL.	
Supvr. Proc. & Prod.	
Supvr. Adm. & Serv.	
ASST. FO O.R.	
Supvr. Exp. Cont.	

WA-TEX 008828

WA-TEX008828

TELEGRAM

(DO NOT USE WIRES FOR BUSINESS THAT CAN WAIT FOR THE MAIL)

REFINING HOUSTON OFFICE		
GEN. MGR.		
ASST. MGR.		
CO-ORD. CR. REQ.		
SUPVR.-COST & ST.		
SUPVR.-EMP. REL.		
Secy. - Inv. & Prod.		
Slpy. Adm. S. V.		
Supvr. - Exp. Cont.		

PLEASE SEND TO EACH

Houston 1, Texas, March 13, 1962

G. V. Carroll Puget Sound, Washington

E. E. Aine Wilmington, California

May we have your 1962 R-1211-E.

H. S. WALZ

APPROVED _____

EHF-LWE

10:25 AM

WA-TEX 008829

WA-TEX008829

T E X A C O

Anacortes, Washington, March 13, 1962

FORM R-1211-E
ESTIMATED OPERATING EXPENSES
PUGET SOUND PLANT
YEAR 1962

PERSONAL

M E M O R A N D U M

Mr. H. S. Walz (2)

Houston, Texas

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Telegraph	3,500	
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Memberships & Subscriptions	500	
Postage	1,200	
Traveling & Personal	13,000	
All Other Expense	10,850	
Marine Dept. - Rentals & Services	(11,400)	
Sales Dept. - Electric Sign	(600)	
Rentals	30,180	
Sub-Total Indirect		195,556
Grand Total Miscellaneous Expense		741,956

Included in Material Operating is an estimate of \$6,058 for Printing & Stationery.

WA-TEX 008830

WA-TEX008830

Mr. H. S. Walz

- 2 -

3-13-62

Labor costs are based on the following manpower:

	<u>No. Men</u>	<u>Cost</u>
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Less: Vacation Pay		104,632
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BTU's/Lb.	1322.8
MM BTU's	3,110,010
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Contract Work	0
Fuel - Bbls.	259,012
Fuel - Cost	540,298
Transfers of Steam	(17,940)
Transfers from Power	39,570
Transfers from Water	28,791
Total	723,388

Signed: G. V. CARROLL

G. V. CARROLL

WWC-JPE

HSW(2)

MC (Bookkeeping)

Attachments

WA-TEX 008831

WA-TEX008831

PLANT LABOR
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUERT SOUND PLANT

() Indicates Red Figures

Line No.	Activities	Number Operators	LABOR		Operators Ex T&I	T&I Operating		Other Operating		T&I Repairs	
			Barrels	Man Hours		Man Hours	Amount	Man Hours	Amount	Man Hours	Amount
1	VPS	14.0	15,563,000	12636	\$42,715	1600	\$ 5,100	3860	\$ 11,350	920	\$ 2,900
2	Decarbonizer	(1)	-	12636	42,715	800	2,500	2250	6,610	480	1,500
3	F.C.O.U.	22.0	6,375,000	42360	139,620	6030	19,000	9150	26,900	4920	15,500
4	Poly (Bbls. Polymer)	7.0	441,171	12636	42,715	640	2,000	4980	14,640	60	200
5	Catalytic Reforming	7.0	4,297,800	12636	42,715	2730	8,600	4500	13,230	1110	3,500
6	Alkylation (Bbls. Alkylate)	7.0	611,587	12636	42,715	380	1,200	2900	8,520	130	400
7	Hydrotreating	(2)	7,586,000	12636	42,715	4760	15,000	2410	7,080	1600	5,000
8	Shipping - Bulk	25.0	14,113,169	5200	16,865			6430	18,900		
9	RP&S			47920	155,420			12530	36,830		
10	BS&W	.5		1040	3,370						
11	Waste Oil Recovery	.5		1040	3,370						
12	Total Direct	90.0	14,113,169	173376	574,935	16940	53,400	49010	144,060	9220	29,000
13	S.P. & W.	13.0		27040	89,340			14620	42,980		
14	Indirect Plant	15.0(3)		29840	98,720			178115	684,333		
15	Grand Total	118.0		230256	\$762,995	16940	\$53,400	241745	\$871,373	9220	\$ 29,000

- (1) Operated by VPS Personnel
(2) Included in RP&S & Deck Forces
(3) Includes 14 from Laboratory and 1 from Effluent Treating
(4) See Exhibit 5 for preration of Indirect Labor

AVC-JPE

HSW(2)

MC (Bookkeeping)

PLANT LABOR
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

() Indicates Red Figures

Line No.		L A B O R				Total Labor	
		Routine Repairs		Expense Estimate		Man Hours	Amount
		Man Hours	Amount	Man Hours	Amount		
1	VPS	5780	\$ 18,210	1080	\$ 3,400	25876	\$ 83,675
2	Decarbonizer	3210	12,320			20076	65,645
3	F.C.C.U.	10880	34,280			73340	235,300
4	Poly (Ebls. Polymer)	3400	10,710			21716	70,265
5	Catalytic Reforming	1530	4,820			22506	72,865
6	Alkylation (Ebls. Alkylate)	1530	4,820			17576	57,655
7	Hydrotreating	1360	4,280			22766	74,075
8	Shipping Bulk	1530	4,820			13160	40,585
9	RP&S & Docks	7990	25,190			68440	217,440
10	BS&W					1040	3,370
11	Waste Oil Recovery					1040	3,370
12	Total Direct	37910	119,450	1080	3,400	287536	924,245
13	S.P. & W.	11220	35,350			52880	167,670
14	Indirect Plant	9000	28,360			216955	811,413(4
15	Grand Total	58130	\$183,160	1080	\$ 3,400	557371	\$1903,328

CONTRACT WORK, MATERIAL & MISCELLANEOUS EXPENSES
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

() Indicates Red Figures

Line No.	Contract Work					Material				
	Operating		Repairs		Total Contract	Operating		Repairs		Total Misco. Expense
	T&I	Other	T&I	Other		T&I	Other	T&I	Other	
1 VPS	15500	\$ 1250	\$ 1700	\$ 200	\$ 18650	\$ 4000	\$ 12070	\$ 2200	\$ 11140	\$ 35000
2 Decarbonizer	7700	1250	800	120	9870	2000	9360	1100	8660	21000
3 F.O.C.V.	121000	2500	46000	200	169700	15000	34200	126000	31880	18000
4 Poly (Ethylene Polymer)	1250	1250	200	200	1450	1000	10130	1500	9350	500
5 Catalytic Ref'g	11300	1250	1600	200	14350	6200	10490	24800	9690	500
6 Alkylation (Eth. Alk)	2700	1250	300	200	4450	600	8200	1100	7570	500
7 Hydrotreating	11400	1250	1500	200	14350	6800	10610	44000	9800	500
8 Shipping Bulk			100	100	100		6140		5670	2000
9 RP&S			100	100	100		31910		29440	500
10 B&W							480		450	930
11 Waste Oil Rec.							480		450	930
12 Total Direct	169600	10000	51900	1520	233020	36600	134070	200700	124100	78500
13 SP&W							24660		22770	1000
14 Indirect Plant		38000		4000	42000		101165		93430	500
15 GRAND TOTAL	\$169600	\$48000	\$51900	\$5520	\$275020	\$36600	\$259895	\$200700	\$240300	\$80000
										\$817495
										\$ 741956

GVC-JPE

BSW (2)

MC (Bookkeeping)

WA-TEX 008834

WA-TEX008834

R-1211-E
Exhibit 3CHEMICALS AND FUEL CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT
() Indicates Red Figures

Line No.		Chemicals			Other Chemicals Amount	Total Chemicals Amount	Gas (2) Std. Bbls	Liquid Std. Bbls.	Total Fuel Amount	Line No.
		Acid		Catalyst						
		Tons	Amount	Tons						
1	VPS				\$ 7810	\$ 7810	161,176	165,105	\$680,685	1
2	Decarbonizer						15,875	0	36,195	2
3	F.O.C.U.						49,395	50,605	208,619(3)	3
4	Poly (Bbls Polymer)			1007.5	\$350,000	4650				4
5	Catalytic Reforming			100.0	51,200	16203				5
6	Alkylation (Bbls Alky)			10.0	70,000	4370	131,697	134,910	556,193	6
7	Hydrotreating	5,800	\$115,200			3735	154,644		352,588	7
8	Shipping - Bulk			2.4	5,000					8
9	RP&S					3532				9
10	BS&W									10
11	Waste Oil Recovery									11
12	Total Direct	5,800	115,200	1119.9	476,200	40300	512,787	350,620	1834,280	12
13	SP&W						177,960	182,297	751,566	13
14	Indirect Plant						2,400		5,474	14
15	GRAND TOTAL	5,800	\$115,200	1119.9	\$476,200	\$40300	693,147	532,917	\$2591,320	15

- (1) See Exhibit 6 for Detail
(2) Gas Consumed, 628,627 bbls. plant production, 64,520 purchased
(3) Total Fuel at FCCU used at CO Boiler for Steam Production

GWS-JPE

HSW (2)

MG (Bookkeeping)

WA-TEX 008835

WA-TEX008835

DETAILED PLANT DISTRIBUTION OF
 STEAM, POWER AND WATER
 ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
 PUGET SOUND PLANT

R-1211-E
 Exhibit 4
 Sheet 1 of 3

Line No.	Operation	MM BTU	Fuel Consumed		S T E A M		Other Cost Amount	Total Amount
			Barrels	Amount	Purchased Power Amount	Purchased Water Amount		
1	VPS	457,176	65,096	\$ 135,798	\$ 5,832	\$ 5,710	\$ 35,006	\$ 182,346
2	Decarbonizer	232,802	33,148	69,150	2,970	2,907	17,826	92,853
3	F.C.C.U.	1,445,470	205,817	429,357	18,439	18,052	110,680	576,528
4	Polymerization	484,610	69,002	143,946	6,182	6,052	37,107	193,287
5	Catalytic Reforming	107,546	15,313	31,945	1,372	1,343	8,235	42,895
6	Alkylation	626,166	89,158	185,994	7,987	7,820	47,946	249,747
7	Hydrotreating	45,322	6,453	13,462	578	566	3,470	18,076
8	Shipping Bulk	39,990	5,694	11,878	510	499	3,062	15,949
9	RP&S	441,180	62,818	131,045	5,628	5,510	33,781	175,964
10	BS&W	39,990	5,694	11,878	510	499	3,062	15,949
11	Waste Oil Recovery	55,470	7,899	16,479	707	694	4,247	22,127
12	TOTAL	3,975,722	566,092	1,180,932	50,715	49,652	304,422	1,585,721
13	SP&W							
14	Indirect Plant	311,578	44,365	92,550	3,975	3,891	23,817	124,233
15	GRAND TOTAL	4,287,300	610,457	\$1,273,482	\$54,690	\$53,543	\$328,239	\$1,709,954

GVG-JPE

HSW(2)

MO (Bookkeeping)

WA-TEX 008836

WA-TEX008836

DETAILED PLANT DISTRIBUTION OF
STEAM, POWER AND WATER
ESTIMATED CRUDE REFINING OPERATING EXPENSES - 1962
PUGET SOUND PLANT

R-1211-E
Exhibit 4
Sheet 2 of 3

Line No.	Operation	P O W E R			Total Amount
		Purchased Power	Other Cost		
		K.W.H.	Amount	Amount	
1	VPS	2,403,595	\$ 20,455	\$ 179	\$ 20,634
2	Decarbonizer	3,036,120	25,838	227	26,065
3	F.C.C.U.	5,212,007	44,355	389	44,744
4	Polymerization	2,099,983	17,871	157	18,028
5	Catalytic Reforming	1,401,675	11,929	105	12,034
6	Alkylation	490,839	4,177	37	4,214
7	Hydrotreating	4,786,949	40,738	357	41,095
8	Shipping Bulk	1,270,110	10,809	95	10,904
9	RP&S	4,483,337	38,154	335	38,489
10	BS&W	273,251	2,326	20	2,346
11	Waste Oil Recovery				
12	TOTAL	25,457,866	216,652	1,901	218,553
13	SP&W	8,020,417	68,255	599	68,854
14	Indirect Plant				
15	GRAND TOTAL	33,478,283	\$284,907	\$2,500	\$287,407

WA-TEX 008837

WA-TEX008837

DETAILED PLANT DISTRIBUTION OF
STEAM, POWER AND WATER
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Operation	M Gals.	Amount	Purchased Power Amount	Fuel Consumed Bbls	Fuel Consumed Amount	Other Cost Amount	Total SP&W Amount	Total Plant Amount
1	VPS	174,470	\$12,089	\$14,794	1,420	\$ 2,962	\$ 8,694	\$ 241,519	\$1,096,749
2	Decarbonizer	30,178	2,475	3,346	240	501	1,582	126,822	280,652
3	F.C.U.	289,361	30,322	36,484	3,665	7,645	22,194	717,917	1,188,878
4	Polymerization	120,661	7,715	8,909	993	2,072	5,881	235,892	397,490
5	Catalytic Reforming	70,275	6,088	8,455	554	1,155	3,749	74,376	843,834
6	Alkylation	90,369	7,916	11,051	710	1,480	4,840	279,248	478,258
7	Hydrotreating	92,919	6,965	8,959	749	1,564	4,738	81,397	599,120
8	Shipping Bulk	3,000	94	22	26	54	126	27,149	81,644
9	RP&S	13,000	410	96	114	238	548	215,745	498,667
10	BS&W	4,500	142	33	39	81	190	18,741	23,041
11	Waste Oil Recovery	4,500	142	33	39	81	190	22,573	26,873
12	TOTAL	893,233	74,358	92,182	8,549	17,833	52,732	2,041,379	5,515,206
13	SP&W							(2,237,454)	
14	Indirect Plant	30,127	949	221	263	549	1,269	196,075	1,445,613
15	GRAND TOTAL	923,360	\$75,307	\$92,403	8,812	\$18,382	\$54,001	\$240,093	\$6,960,819

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Chemical	V.P.S		F.C.G.U.		POLY		ALKYLATION		HYDROTREATING		RP&S	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1	Anti-Foam DC #200	1000	\$2810										
2	Acid, Alky Sulfuric							11600000	\$115200				
3	Catalyst												
4	UOP-R5 Platf. Fresh									4700	\$5000		
5	Aero HDS2 - Hydrotreater												
6	FGCU Davison Hl Alumina			2015000	\$350000								
7	UOP #1 Poly			150000	4130	200000	\$51200						
8	Claustic Soda					150000	4130	75000	2070				
9	Hydrogen			3000	520								
10	Litharge, Spec #29					40000	12000						
11	Monoethanolamine												
12	Nalco 536-D	*2000	5000			5000	73	101000	1465				
13	Sodium Chloride							1000	200				
14	Sodium Fluoride												
15	TOTAL	7810		\$354650		\$67403		\$118935		\$5000		\$3532	
*	Gallons												

GVC-JPE

HSW (2)

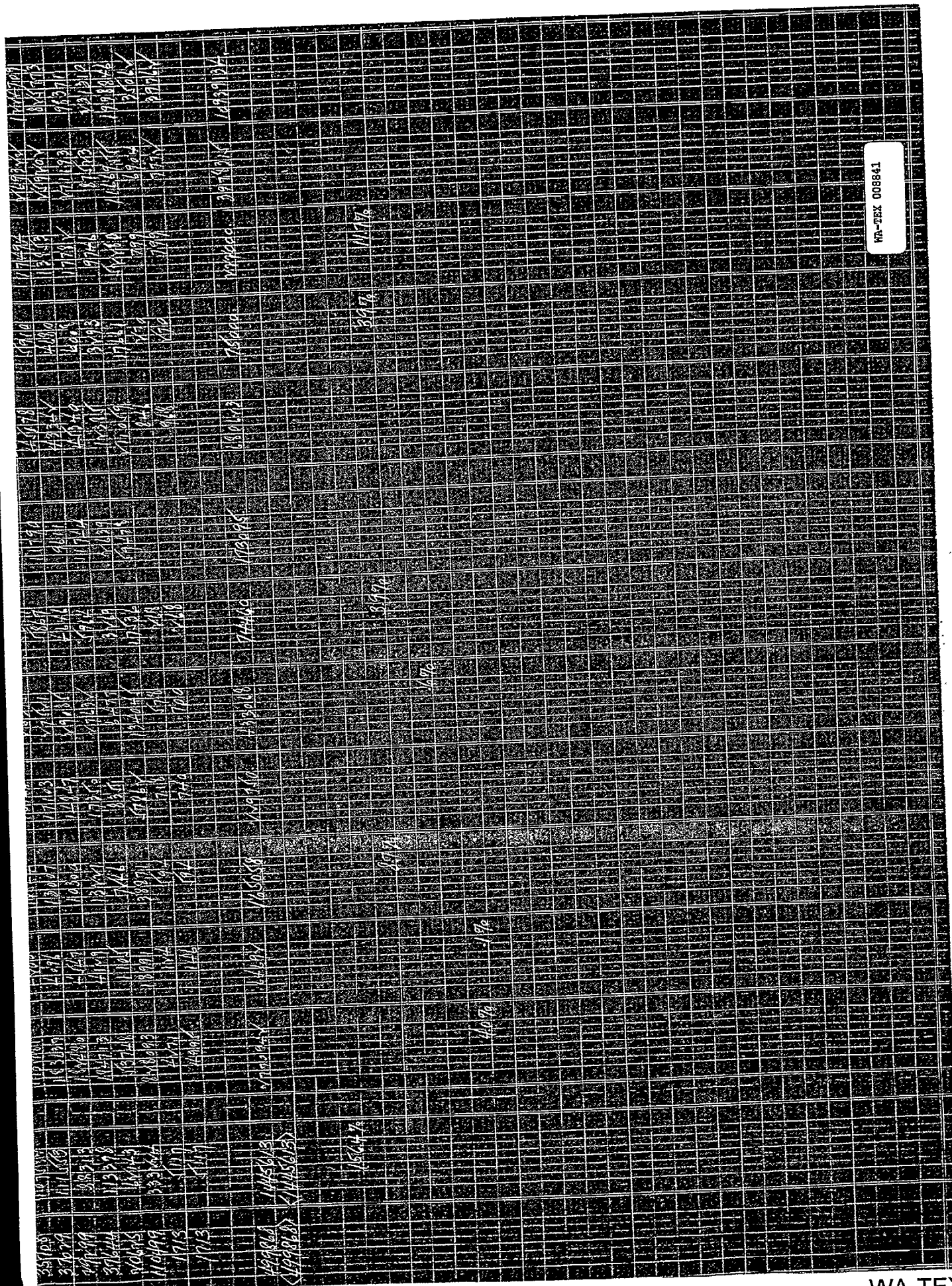
MC (Bookkeeping)

WA-TEX 008839

WA-TEX008839

DETAILED DISTRIBUTION OF CHEMICALS CONSUMED
ESTIMATED CRUDE REFINING OPERATING EXPENSES - YEAR 1962
PUGET SOUND PLANT

Line No.	Chemical	CAT. REFORMING		T O T A L	
		Quantity	Amount	Quantity	Amount
1	Anti. Foam DC #200			1000	\$ 2,810
2	Acid, Alky Sulfuric			11600000	115,200
3	Catalyst				
4	UOPR5 Platf. Fresh	20,000	\$70,000	20000	70,000
5	Aero HDS2- Hydrotreater			4700	5,000
6	FCO Davison High Alumina			2015000	350,000
7	UOP #1 - Poly			200000	51,200
8	Caustic Soda	75,000	2,070	450000	12,400
9	Hydrogen	200,000 SCF	2,300	200000	2,300
10	Litharge, Spec. #29			3000	520
11	Monoethanolamine			40000	12,000
12	Naleo 536-D			*	2000
13	Sodium Chloride			350000	5,000
14	Sodium Fluoride			1000	5,070
15	TOTAL		\$74,370		\$631,700



WA-TEX 008841