

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

TRICHLOR SHIPMENTS	1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
TYPE 107 **														
COLOR APHA	(5	9	7	6	7	(5	(5	6	(5	(5	7	7	8	6
SPECIFIC GRAVITY 20/20 °C	1.460	1.460	1.460	1.460	1.461	1.424	1.460	1.460	1.460	1.460	1.460	1.460	1.460	1.457
DISTILLATION RANGE °C														
LOW	86.0	86.2	86.2	86.1	86.3	86.0	86.1	86.4	86.0	86.2	86.2	86.2	86.2	86.2
HIGH	87.7	87.7	87.9	87.8	87.5	88.0	87.9	88.0	87.8	87.9	88.0	87.8	87.9	87.9
WATER CONTENT CLOUD POINT °C	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10
NON-VOLATILE %	.0013	.0014	.0007	.0016	.0012	.0020	.0014	.0017	.0010	.0018	.0015	.0013	.0011	.0014
ACID ACCEPTANCE % AS NaOH	0.14	0.15	0.20	0.19	0.20	0.21	0.15	0.14	0.16	0.15	0.16	0.14	0.15	0.15
pH	-	7.2	7.2	7.2	7.4	7.4	7.3	7.2	7.8	7.6	7.4	8.0	7.5	7.4
Acidity/Alkalinity	-	.0002	.0002	.0002	.0003	.0003	.0002	.0001	.0003	.0003	.0002	.0002	.0001	.0002
TYPE E.110														
COLOR APHA	(5*	11	-	7	5	5	-	7	(5	5	6	-	8	6
SPECIFIC GRAVITY 20/20 °C	1.460*	-	-	-	-	-	-	-	-	-	-	-	-	-
DISTILLATION RANGE °C														
LOW	86.3*	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGH	87.7*	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER CONTENT CLOUD POINT °C	(-10*	(-10	-	(-10	(-10	(-10	-	(-10	(-10	(-10	(-10	-	(-10	(-10
NON-VOLATILE %	.0012*	-	-	-	-	-	-	-	-	-	-	-	-	-
ACID ACCEPTANCE % AS NaOH	0.23*	0.41	-	0.40	-	-	-	-	-	-	-	-	0.18	0.33
TYPE 113														
COLOR APHA	(5*	8	6	(5	(5	(5	(5	5	5	(5	6	7	8	(5
SPECIFIC GRAVITY 20/20 °C	1.466*	1.466	-	-	-	-	1.467	-	-	1.466	-	-	-	1.466
DISTILLATION RANGE °C														
LOW	86.7*	86.6	-	-	-	-	86.7	87.0	-	86.8	-	-	-	86.8
HIGH	87.2*	87.2	-	-	-	-	87.3	87.4	-	87.8	-	-	-	87.4
WATER CONTENT CLOUD POINT °C	(-10*	(-10	(-10	(-10	(-10	-16	-14	-16	(-10	(-10	(-10	-15	(-10	(-10
NON-VOLATILE %	(.0001*	.0002	.0001	.0002	.0001	(.0001	.0002	(.0001	.0002	.0001	.0002	.0001	(.0001	.0001
CONFIDENTIAL: Subject to Protective Order of 14th Judicial District Court No. 91-1145														

SL 013038

*4 Months Avg.
** Effective May, Type 122

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

[illegible]

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

SL 013039

* 4 Months Avg.

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

PERCHLOR SHIPMENTS	1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
TYPE 207														
COLOR APHA	6*	-	10	10*	12	9	-	8	-	9	8	9	10	9
SPECIFIC GRAVITY 20/20 °C	1.623*	-	-	-	-	-	-	-	-	-	-	1.624	-	1.624
DISTILLATION RANGE °C														
LOW	120.5*	-	-	-	-	-	-	-	-	-	-	120.8	-	120.8
HIGH	121.5*	-	-	-	-	-	-	-	-	-	-	121.7	-	121.7
WATER CONTENT CLOUD POINT °C	(0*	-	(0	(0	(0	(0	-	-4	-	(0	-4	-8	(0	(0
NON-VOLATILE GM-100 ML	.0004*	-	-	-	-	-	-	-	-	-	-	(.0010	-	(.0010
PH	8.3*	-	8.2	8.2	8.4	8.2	-	8.5	-	8.5	8.5	8.6	8.5	8.4
ACID ACCEPTANCE % AS NaOH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH	1.4*	-	-	-	-	-	-	-	-	-	-	-	-	-
FLASK MG/30 CM ²	(1*	-	-	-	-	-	-	-	-	-	-	-	-	-
SOXHLET MG/30 CM ²	2*	-	-	-	-	-	-	-	-	-	-	-	-	-
CONDENSER MG/30 CM ²	4*	-	-	-	-	-	-	-	-	-	-	-	-	-
CHLORIDES PPM	0.06*	-	-	-	-	-	-	-	-	-	-	0.12	-	0.12
TYPE 208														
COLOR APHA	7	10	9	10	10	8	8	8	5	9	9	8	8	9
SPECIFIC GRAVITY 20/20 °C	1.624	1.626	1.624	1.624	1.624	1.624	1.624	1.624	1.624	1.624	1.624	1.624	1.624	1.624
DISTILLATION RANGE °C														
LOW	120.6	120.5	120.6	120.4	120.4	120.8	120.8	121.1	121.0	120.8	120.9	120.5	120.9	120.7
HIGH	121.6	121.5	121.6	121.6	121.7	121.7	121.4	121.8	121.7	121.7	121.6	121.5	121.7	121.6
WATER CONTENT CLOUD POINT °C	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(-10	(-10	(-10	(0
NON-VOLATILE GM/100 ML	.0003	(.001	-	-	(.001	.001	.002	(.001	(.001	.001	(.001	(.001	(.001	(.001
PH	6.8	6.5	6.5	6.5	6.6	6.5	6.8	6.9	7.1	6.9	6.8	6.9	7.0	6.8
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH	3	2	3	2	2	2	2	2	1	2	1	2	2	2
FLASK MG/30 CM ²	1	1	1	2	(1	1	1	1	(1	1	(1	1	(1	1
SOXHLET MG/30 CM ²	7	7	7	8	6	7	6	6	5	6	6	7	6	6
CONDENSER MG/30 CM ²	7	7	8	9	6	5	8	6	4	4	7	8	6	7
CHLORIDES PPM	0.08	(0.06	0.12	-	0.06	-	(0.06	0.06	0.06	0.06	0.06	0.18	0.08	0.07
CONFIDENTIAL:														
Subject to Protective Order														
of 14th Judicial District Court														

SL 013040

* 3 Months Avg.

No. 91-1145

PITTSBURGH PLATE GLASS COMPANY
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA
 LABORATORY PRODUCT REPORT

CONFIDENTIAL:
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

PERCHLOR SHIPMENTS	1966 Avg.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 Avg.
TYPE 203														
COLOR APHA	8*	-	10	8	10	7	11	9	7	8	7	8	7	8
SPECIFIC GRAVITY 20/20 °C	1.625*	-	-	-	-	-	-	-	-	-	-	-	-	-
DISTILLATION RANGE °C														
LOW	120.6*	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGH	121.3*	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER CONTENT CLOUD POINT °C	(0*	-	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0
NON-VOLATILE GM-100 ML	(.0010*	-	-	-	-	-	-	-	-	-	-	-	-	-
PH	8.5*	-	8.4	8.5	8.6	8.6	8.7	8.6	8.6	8.7	8.4	8.6	8.6	8.6
ACID ACCEPTANCE % AS NAOH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COPPER CORROSION														
ACIDITY ML OF 0.01 N NAOH	2*	-	-	-	-	-	-	-	-	-	-	-	-	-
FLASK MG/30 CM ²	2*	-	-	-	-	-	-	-	-	-	-	-	-	-
SOXHLET MG/30 CM ²	8*	-	-	-	-	-	-	-	-	-	-	-	-	-
CONDENSER MG/30 CM ²	8*	-	-	-	-	-	-	-	-	-	-	-	-	-
CHLORIDES PPM	0.18*	-	-	-	-	-	-	-	-	-	-	-	-	-
TYPE 209														
COLOR APHA	8**	10	11	8	10	-	-	-	-	-	9	-	-	10
SPECIFIC GRAVITY 20/20 °C	1.625**	-	-	-	-	-	-	-	-	-	-	-	-	-
DISTILLATION RANGE °C														
LOW	120**	-	-	-	-	-	-	-	-	-	-	-	-	-
HIGH	122**	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER CONTENT CLOUD POINT °C	(0**	(0	(0	(0	(0	-	-	-	-	-	(0	-	-	(0
NON-VOLATILE GM-100 ML	.004**	-	-	-	-	-	-	-	-	-	-	-	-	-
PH	6.8**	6.4	7.0	6.9	7.1	-	-	-	-	-	6.9	-	-	6.9
ACID ACCEPTANCE % AS NAOH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COPPER CORROSION														
ACIDITY ML OF 0.01 N NAOH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FLASK MG/30 CM ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOXHLET MG/30 CM ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONDENSER MG/30 CM ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHLORIDES PPM	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SL 013041

* 3 Months Avg.

PITTSBURGH PLATE GLASS COMPANY
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA
 LABORATORY OPERATIONS REPORT

HEAVIES STILL BOTTOMS		1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
TRICHLOROETHYLENE	%	(0.01	(0.01	0	(0.01	0.04	0	(0.01	0.04	(0.01	0	(0.01	(0.01	(0.01	(0.01
1,1,2 TRICHLOROETHANE	%	(0.01	0	0	(0.01	0.08	0	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
PERCHLOROETHYLENE	%	14.64	17.89	15.89	19.54	35.07	18.10	18.76	25.02	19.95	23.39	21.00	16.67	32.91	22.02
U-TETRACHLOROETHANE	%	3.45	3.35	3.95	3.33	2.88	3.38	3.17	2.75	3.40	3.11	3.04	2.86	2.57	3.15
S-TETRACHLOROETHANE	%	30.59	29.19	31.18	36.93	27.69	39.49	36.14	35.62	36.49	36.36	36.80	40.76	36.82	35.29
PENTACHLOROETHANE	%	34.94	29.86	30.61	29.93	22.39	27.42	30.00	26.02	29.93	29.41	30.70	33.12	21.76	28.43
HEXACHLOROETHANE	%	3.81	4.33	4.34	3.30	2.21	1.73	1.80	1.63	1.62	1.43	1.60	1.52	1.72	2.27
HEAVY UNKNOWN	%	2.48	3.32	0	1.93	2.00	1.38	1.80	1.47	1.40	1.24	1.13	0.97	1.25	1.49
FECL ₂	PPM	68	130	64	127	679	-	-	-	72	-	126	-	222	203
NON-VOLATILE	%	0.72	1.43	1.54	2.53	1.30	-	-	-	0.41	-	0.52	-	0.56	1.18
HEAVIES STILL REFLUX (PER STILL FEED)															
TRICHLOROETHYLENE	%	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2 TRICHLOROETHANE	%	3.43	-	-	-	-	-	-	-	-	-	-	-	-	-
PERCHLOROETHYLENE	%	96.42	-	-	-	-	-	-	-	-	-	-	-	-	-
U-TETRACHLOROETHANE	%	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-
S-TETRACHLOROETHANE	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DRIED UNSTAB. PERCHLOR															
TRICHLOROETHYLENE	%	(0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
1,1,2 TRICHLOROETHANE	%	(0.01	(0.01	(0.01	0.03	0.01	0.02	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
PERCHLOROETHYLENE	%	99.92	99.90	99.93	99.92	99.92	99.95	99.92	99.94	99.94	99.94	99.94	99.98	99.90	99.93
U-TETRACHLOROETHANE	%	0.04	0.06	0.04	0.04	0.03	0.01	0.04	0.04	0.03	0.02	(0.01	(0.01	0.07	0.03
H ₂ O	PPM	28	(-5	(-5	(-5	-	-	-	-	-	-	-	-	-	(-5
PH		6.9	6.5	6.6	6.4	6.8	6.6	6.7	6.7	8.2	6.8	6.7	6.8	6.7	6.8
NAI TEST - OXIDES	PPM	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	N g.	Neg.
CONFIDENTIAL															
Subject to Protective Order															
of 14th Judicial District Court															
No. 92-1145															

SL 013042

[illegible]

PITTSBURGH PLATE GLASS COMPANY

LAKE CHARLES, LOUISIANA

LAKE CHARLES, LOUISIANA

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1146

*Converted to Type 122

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

[illegible]

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

DRIED UNSTAB. TRICHLOR		1966 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG
CARBON TETRACHLORIDE	%	(0.01	(0.01	0	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0.01	0	0	0	(0.01
TRICHLOROETHYLENE	%	99.98	99.98	99.99	99.98	99.98	99.99	99.98	99.96	99.97	99.98	99.98	99.98	99.98	99.98
1,1,2 TRICHLOROETHANE	%	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0.01	(0.01	(0.01	0	0.02	(0.01
PERCHLOROETHYLENE	%	(0.01	(0.01	0	0	(0.01	(0.01	(0.01	0	0	0	(0.01	0	(0.01	(0.01
H ₂ O	PPM	(50	(50	(50	(50	-	-	-	-	-	-	-	-	-	(50
PH		6.8	6.6	6.7	6.4	6.8	6.7	6.8	6.6	6.8	6.9	6.9	6.9	6.9	6.8
NAI TEST - OXIDES	PPM	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.	Neg.

CONFIDENTIAL:
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1146

SL 013046

CONFIDENTIAL
 Subject to Protective Order
 14th Judicial District
 No. 91-1145

PITTSBURGH PLATE GLASS COMPANY

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

SL 013047

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT	1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
PERCHLOR (STAB.) PRODUCTION T/D	78.5	57.2	67.9	67.7	83.7	98.7	99.8	89.4	95.7	105.1	51.5	78.1	69.1	80.3
SHIPMENTS T/D	81.7	55.8	45.0	62.9	106.9	33.1	109.7	142.8	43.6	55.9	144.6	36.1	112.6	79.1
INVENTORY TONS	1823.8	2099.0	1740.4	1889.0	1190.8	3219.3	2920.1	1262.4	2875.5	4349.6	1461.9	2793.0	1376.4	2181.4
TRICHLOR (STAB.) PRODUCTION T/D	71.4	58.2	65.3	70.0	93.2	111.1	104.0	107.7	111.7	120.6	59.5	84.5	82.2	89.0
SHIPMENTS T/D	81.2	52.5	104.2	64.1	101.9	54.7	133.2	93.0	53.1	97.4	130.3	70.3	73.8	85.7
INVENTORY TONS	2047.7	2657.0	1567.6	1753.3	1493.6	3286.8	2409.9	2866.8	4684.9	5382.1	3188.6	3628.0	3887.8	3067.2
UNSTAB. PERCHLOR PRODUCTION T/D	79.4	61.2	70.1	70.7	80.5	99.0	104.4	86.3	98.1	104.3	54.1	77.8	70.2	81.4
EDC T/T	0.766	0.864	0.859	0.853	0.761	0.716	0.701	0.689	0.652	0.687	0.653	0.672	0.744	0.738
CL ₂ T/T	0.480	0.523	0.499	0.568	0.504	0.443	0.454	0.461	0.433	0.444	0.415	0.472	0.496	0.476
TRI-ETH.BOT. T/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NH ₃ LBS./T	15.3	19.1	13.5	23.7	19.5	7.7	11.0	17.5	12.1	5.5	8.6	5.0	10.8	12.8
UNSTAB. TRICHLOR PRODUCTION T/D	70.8	61.8	67.4	71.9	92.0	111.6	107.5	106.7	111.8	122.0	60.9	90.5	88.2	91.0
EDC T/T	0.972	1.080	1.084	1.056	0.961	0.904	0.885	0.870	0.823	0.870	0.824	0.851	0.939	0.929
CL ₂ T/T	0.304	0.327	0.315	0.351	0.318	0.280	0.286	0.291	0.273	0.281	0.262	0.299	0.313	0.300
TRI-ETH.BOT T/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NH ₃ LBS./T	10.7	18.9	16.0	15.6	11.4	4.5	7.1	7.3	19.0	4.3	1.5	1.3	7.8	9.6
UNSTAB. PRODUCT O ₂ T/T	0.289	0.340	0.316	0.307	0.273	0.275	0.274	0.274	0.262	0.257	0.254	0.264	0.263	0.280
N ₂ T/T	0.325	0.464	0.436	0.436	0.463	0.322	0.250	0.255	0.278	0.201	0.665	0.252	0.342	0.364
CATALYST LBS./T	2.70	2.75	1.10	7.97	3.82	3.25	1.89	3.52	2.70	3.06	1.42	6.41	2.14	3.34
400# STM.(ACTUAL) LBS./T	1122	4406	3800	3698	3198	2104	2084	2460	1652	2227	2229	2673	3592	2844
KWH/T	63.1	130.5	104.2	108.2	93.7	59.7	60.8	64.0	67.2	63.5	76.2	76.2	66.8	80.9
MC HVY. STILL BOTTOMS T/T	0.022	0.001	0.008	0.000	0.030	-	0.017	-	-	-	-	-	-	-
UNSTAB. PRODUCT CL [*] YIELD %	78.9	73.1	75.1	71.7	78.6	88.2	87.4	85.3	89.4	87.3	91.1	86.8	80.9	82.9
C YIELD %	77.5	68.5	69.0	69.5	76.0	83.2	83.6	83.0	86.3	83.6	86.5	85.7	78.4	79.4
MAN HOURS/T STAB. PRODUCT														
PRODUCTION	0.608	0.715	0.672	0.735	0.539	0.419	0.412	0.458	0.423	0.390	0.713	0.499	0.562	0.542
MAINTENANCE	0.617	0.792	0.713	0.942	0.659	0.432	0.359	0.563	0.648	0.434	0.856	0.570	0.568	0.628
SALARIED	0.241	0.273	0.265	0.254	0.197	0.172	0.176	0.170	0.183	0.104	0.315	0.202	0.208	0.210
TOTAL	1.466	1.780	1.650	1.931	1.365	1.023	0.947	1.191	1.254	0.924	1.884	1.271	1.338	1.380
CONTRACT MAN HRS. INCLUDED	0.034	0.0	0.059	0.0	0.033	0.114	0.053	0.0	0.0	0.0	0.038	0.012	0.057	0.030
MAN HOURS/T SHIPPED														
BULK	0.068	0.094	0.068	0.066	0.038	0.090	0.050	0.032	0.081	0.064	0.039	0.077	0.046	0.062
DRUM	1.069	0.818	0.554	0.992	0.852	0.895	1.108	1.164	0.855	0.538	0.782	0.602	0.429	0.799
SALARIED	0.026	0.031	0.023	0.026	0.019	0.027	0.015	0.010	0.028	0.018	0.012	0.027	0.012	0.021

*Began including 63 B&C power

PITTSBURGH PLASTIC GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
CARBON - TONS														
TOTAL CARBON IN FEED	971.3	911.6	911.7	1042.9	1124.8	1295.1	1248.3	1195.1	1243.4	1342.6	680.1	973.2	1039.9	1084.0
CARBON IN UNSTAB. PRODUCT	740.1	624.7	629.1	724.7	854.4	1077.1	1043.5	992.0	1073.6	1122.4	588.2	834.4	815.0	864.9
PROCESS LOSS BY DIFFERENCE	231.2	286.9	282.6	318.2	270.4	218.0	204.8	203.1	169.8	220.2	91.9	138.8	224.9	219.1
ACCOUNTABLE PROCESS LOSSES														
BLOWDOWN	14.2	14.6	17.9	17.8	19.9	10.4	7.8	7.3	22.3	17.8	9.8	14.8	20.1	15.0
REACTOR	200.7	252.3	244.7	280.4	230.5	187.6	177.0	175.8	127.5	182.4	62.0	104.0	184.8	184.1
MISCELLANEOUS	16.3	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
SUB TOTAL	231.2	286.9	282.6	318.2	270.4	218.0	204.8	203.1	169.8	220.2	91.8	138.8	224.9	219.1
UNACCOUNTABLE PROCESS LOSSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CARBON LOADING LOSS	10.2	37.0	30.5	-18.5	-1.4	-20.2	49.2	4.9	23.9	5.0	15.7	44.0	40.0	16.7
TOTAL CARBON LOSSES	241.4	323.9	313.1	299.7	269.0	197.8	254.0	208.0	193.7	215.1	107.5	182.8	264.9	235.8
CHLORINE - TONS														
TOTAL CHLORINE IN FEED	4727.0	4336.2	4271.2	5132.2	5473.4	6154.2	6056.2	5817.5	6043.6	6457.9	3254.2	4834.0	5036.8	5238.9
CHLORINE IN UNSTAB. PRODUCT	3806.6	3172.4	3205.8	3678.6	4300.9	5426.9	5291.3	4965.1	5404.8	5640.0	2963.7	4194.6	4074.9	4359.9
PROCESS LOSS BY DIFFERENCE	920.4	1163.8	1065.4	1453.6	1172.5	727.3	764.9	852.4	638.8	817.9	290.5	639.4	961.9	879.0
ACCOUNTABLE PROCESS LOSSES														
BLOWDOWN	78.8	81.2	93.8	99.8	110.4	57.7	43.3	40.6	123.7	98.8	54.4	82.5	111.8	83.2
REACTOR	762.1	982.6	871.6	1253.8	962.1	569.6	621.6	711.8	415.1	619.1	136.1	456.9	750.1	695.9
MISCELLANEOUS	79.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SUB TOTAL	920.4	1163.8	1065.4	1453.6	1172.5	727.3	764.9	852.4	638.8	817.9	290.5	639.4	961.9	879.0
UNACCOUNTABLE PROCESS LOSSES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHLORINE LOADING LOSS	50.9	187.3	164.3	-101.4	-1.9	-120.0	252.4	14.8	127.3	-34.0	84.1	202.1	188.2	80.3
TOTAL CHLORINE LOSS	971.3	1351.1	1229.7	1352.2	1170.6	607.3	1017.3	867.2	766.1	783.9	374.6	841.5	1150.1	959.3

SL 013048

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PITTSBURGH PLATE GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PERCHLORETHYLENE-TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REACTOR NO. 1		1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
ON STREAM TIME	HRS.	8434*	710	672	612	695	742	720	744	744	720	213	588	744	7904*
DISCH. PRESS.	PSIG	12.8	10.5	10.7	10.0	12.2	13.0	13.1	12.1	13.1	12.8	13.0	8.7	5.7	11.2
TEMP. OF VAPORIZER LIQUOR		283	248	223	272	294	294	293	286	286	274	278	261	251	272
DOWTHERM OUT		481	514	535	511	512	514	477	484	464	468	457	424	530	491
HIGHEST TUBE		824	818	817	810	819	813	835	812	-	-	-	-	-	818
LOWEST TUBE		790	783	764	770	782	782	796	782	-	-	-	-	-	780
SEC. COND. DISCH		64	88	69	59	35	16	23	28	21	22	47	18	20	37
CATALYST CHARGED	LBS.	34703*	2400	1614	16830	2120	2120	2600	3000	2500	2120	0	13240	2100	50644*
CATALYST FROM CENTRIFIX	LBS.	34660*	2620	1062	14110	2120	2120	2600	3000	2500	2120	0	13240	2100	47592*
FLOW GPM EDC		5.2	5.2	6.0	4.3	5.0	5.0	5.3	5.3	5.3	4.8	5.2	4.4	3.9	5.0
SCFH CL ₂		6666	5412	5898	6221	5942	6224	6773	6155	6715	7116	6660	7179	5693	6332
AIR		1197	1535	1545	1543	1527	1526	1541	1531	1532	1511	1533	1543	1543	1534
O ₂		11142	9928	9130	9311	11218	11331	11519	9984	10998	11375	10919	9628	8040	10282
VENT ANALYSIS CO ₂	%	37.8	37.1	17.3	29.2	53.0	50.3	50.5	40.9	47.0	41.0	27.6	48.8	33.9	39.7
HCL	%	13.2	14.6	11.1	34.3	3.9	2.0	4.1	5.6	3.0	1.4	5.0	7.4	3.8	7.9
PER-TRI RATIO		1.23	1.49	1.08	1.31	1.35	1.06	0.96	1.09	0.93	1.01	1.21	0.73	1.03	1.10
PER 1 TRI IN CRUDE	%	85.23	85.03	79.12	79.11	83.42	78.25	82.41	82.37	81.80	82.00	82.26	76.95	79.21	80.99
REACTOR NO. 2															
ON STREAM TIME	HRS.	8483*	708	672	636	690	739	720	637	744	720	398	627	744	8035*
DISCH. PRESS.	PSIG.	12.6	9.5	11.1	9.4	12.2	12.6	12.5	11.6	12.9	12.8	12.7	12.0	4.7	11.2
TEMP. OF VAPORIZER LIQUOR		267	-	-	279	292	286	288	294	293	287	291	269	251	283
DOWTHERM OUT		472	530	549	558	512	468	437	434	432	440	455	457	591	489
HIGHEST TUBE		824	817	818	818	822	821	-	821	-	-	-	-	-	820
LOWEST TUBE		784	735	749	758	788	787	-	784	-	-	-	-	-	767
SEC. COND. DISCH.		60	63	71	61	44	33	34	43	25	26	28	25	27	40
CATALYST CHARGED	LBS.	31840*	2750	1614	11293	2120	1590	2600	9574	2500	2750	1060	2290	2100	42241*
CATALYST FROM CENTRIFIX	LBS.	27675*	2620	1062	12690	2120	1590	2600	9574	2500	2750	1060	2290	2100	42956*
FLOW GPM EDC		4.9	5.3	6.2	4.7	5.1	5.4	5.5	5.8	5.3	4.8	4.9	5.0	4.2	5.2
SCFH CL ₂		6818	5204	5767	5805	6600	6411	6713	6252	6833	7116	6617	7098	4851	6272
AIR		1836	1510	1508	1509	1494	1504	1502	1499	1502	1511	1500	1506	1526	1506
O ₂		10266	9132	9069	8618	11220	14342	10311	7430	11299	11375	11512	10991	7559	10238
VENT ANALYSIS CO ₂	%	31.9	16.3	12.8	11.4	32.6	23.8	18.8	31.1	57.0	54.4	59.1	55.7	33.5	33.9
HCL	%	8.7	7.3	12.4	28.4	4.6	2.6	4.5	3.4	3.0	2.1	2.7	5.3	8.0	7.0
PER-TRI RATIO		1.32	1.37	1.23	1.27	1.16	0.96	1.02	1.18	0.94	0.99	1.00	1.03	1.11	1.11
PER 1 TRI IN CRUDE	%	84.39	78.36	78.32	75.39	81.93	79.26	76.88	81.03	81.63	81.38	82.32	79.68	82.65	79.90

* Totals

SL 013049

PITTSBURGH PLATE GLASS COMPANY

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE - TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

SL 013050

REACTOR NO. 3		1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
ON STREAM TIME	HRS.	8333*	707	666	664	621	744	720	744	744	623	399	600	744	7976*
DISCH. PRESS.	PSIG.	12.3	10.1	12.2	5.6	6.6	13.1	13.0	11.6	13.1	12.3	13.0	11.5	5.4	10.6
TEMP. OF VAPORIZER LIQUOR		277	270	273	240	256	279	277	271	273	272	275	267	245	267
DOWTHERM OUT		476	518	499	621	599	466	483	461	452	451	467	489	586	508
HIGHEST TUBE		823	815	814	815	806	819	-	817	-	-	-	-	-	814
LOWEST TUBE		781	786	779	787	753	779	-	745	-	-	-	-	-	772
SEC. COND. DISCH.		61	58	60	72	79	73	80	78	76	53	23	21	22	58
CATALYST CHARGED	LBS.	25820*	2550	1076	2785	12330	1590	2100	3000	1500	11690	1190	2560	2100	44471*
CATALYST FROM CENTRIFIX	LBS.	26900*	2620	1063	3460	12330	1590	2100	3000	1500	11690	1190	2560	2100	45203*
FLOW GPM EDC		5.2	5.2	6.5	5.4	4.9	5.8	5.9	6.0	5.7	4.9	5.2	4.8	4.1	5.4
SCFH CL ₂		7008	5857	6377	5547	5419	6786	6709	6128	6216	7081	6653	7071	5367	6268
AIR		1023	1478	1446	1473	1457	1452	1443	1401	1442	1449	1445	1475	1499	1455
O ₂		10650	9661	10626	7468	7423	11554	11903	9955	10377	11400	12171	11234	7952	10144
VENT ANALYSIS CO ₂	%	24.2	39.6	39.3	21.2	27.2	53.9	53.2	35.6	19.3	53.3	45.5	41.8	33.9	38.7
HCL	%	9.3	14.1	7.9	17.8	19.7	4.4	2.3	1.5	2.9	5.5	2.6	9.8	8.3	8.1
PER-TRI RATIO		1.33	1.08	1.38	0.93	1.57	1.01	1.09	1.12	1.15	0.94	1.22	1.19	1.09	1.15
PER 4 TRI IN CRUDE	%	81.74	83.35	84.13	79.19	74.38	81.03	83.14	81.27	82.15	85.72	86.08	86.53	85.49	82.71
REACTOR NO. 4															
ON STREAM TIME	HRS.	8295*	731	657	744	693	684	720	744	719	720	399	498	593	7902*
DISCH PRESS.	PSIG.	12.0	10.0	11.1	8.6	5.3	10.8	12.1	12.7	12.3	13.0	12.3	10.3	5.2	12.0
TEMP. OF VAPORIZER LIQUOR		279	275	275	249	249	275	279	277	273	270	275	261	247	267
DOWTHERM OUT		469	509	520	596	687	430	443	468	465	442	414	438	579	499
HIGHEST TUBE		823	813	815	816	811	820	-	813	-	-	-	-	-	815
LOWEST TUBE		783	782	777	781	788	788	-	779	-	-	-	-	-	783
SEC. COND. DISCH.		66	64	76	67	40	24	24	27	27	25	27	28	28	38
CATALYST CHARGED	LBS.	43078*	10500	1076	3140	1060	13830	2100	3000	2500	2120	1766	1760	2100	44952*
CATALYST FROM CENTRIFIX	LBS.	43570*	10480	1063	3460	1060	13830	2100	3000	2500	2120	1766	1760	2100	45239*
FLOW GPM EDC		4.9	5.0	6.0	5.4	5.4	4.8	5.5	6.0	5.4	4.9	4.8	4.7	3.8	5.1
SCFH CL ₂		6653	5587	6089	6605	6173	6145	6591	6265	6305	7374	7033	6629	5087	6324
AIR		1235	1540	1538	1560	1552	1591	1561	1396	1587	1558	1530	-	-	1541
O ₂		10527	10083	10161	9229	5629	10890	11606	11664	11286	11764	10763	11049	7711	10066
VENT ANALYSIS CO ₂	%	31.3	46.3	42.5	25.8	21.4	53.4	59.1	49.7	58.9	59.7	37.2	47.9	30.9	44.4
HCL	%	11.2	7.9	16.2	19.0	29.0	12.6	5.5	2.8	3.2	5.9	4.3	14.8	4.7	10.5
PER-TRI RATIO		1.33	1.60	1.28	1.45	1.13	0.76	1.02	1.12	0.87	1.04	0.79	0.88	0.95	1.07
PER 4 TRI IN CRUDE	%	85.35	86.97	85.73	84.01	77.13	83.26	84.93	88.92	87.81	87.21	87.31	84.89	84.56	85.23

*Totals

PITTSBURGH I GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

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CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

*TOTALS

PITTSBURGH PLANT GLASS COMPANY

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REFRIGERATED BRINE		1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
TEMP. °F	WARM (OUT)	47	47	61	41	25	6	8	11	11	9	12	11	15	21
	COLD (IN)	38	39	50	37	18	5	4	6	4	4	6	7	10	16
DRYING STILL															
TEMP. °F	BOTTOM	210	200	205	210	206	203	204	202	199	198	199	198	198	202
	TOP	161	158	148	160	164	171	170	165	165	168	169	165	160	164
BOTTOM PRESSURE	PSIG	1.11	1.16	0.92	1.08	1.32	1.40	1.27	1.16	1.33	1.26	1.27	1.34	1.39	1.24
PER-TRI STILL															
FEED	GPM	19.9	19.3	18.7	21.9	25.6	27.2	24.2	23.0	24.1	24.6	23.9	22.6	20.4	23.0
REFLUX	GPM	34.1	39.4	34.1	33.5	34.7	26.4	24.2	34.4	37.5	40.2	34.4	32.5	32.6	33.7
BOTTOM TEMP.	°F	288	291	288	292	290	285	283	290	292	292	286	280	281	288
OVERHEAD TEMP.	°F	192	194	192	189	191	186	185	187	185	185	184	180	180	187
HEAVIES STILL															
FEED	GPM	9.3	8.7	8.1	9.5	12.1	12.4	11.4	11.6	11.4	11.8	10.9	10.2	10.3	10.7
REFLUX	GPM	87.3	97.1	98.2	103.0	107.7	107.7	109.2	109.0	117.7	129.9	115.9	97.4	67.2	105.0
BOTTOM TEMP.	°F	344	343	345	334	328	341	341	338	339	336	338	339	318	337
OVERHEAD TEMP.	°F	263	248	253	252	258	258	257	236	255	256	255	233	236	250
PER STILL															
FEED	GPM	9.54	9.32	8.41	9.72	11.50	11.81	10.66	10.39	10.57	10.97	10.88	9.36	8.51	10.18
REFLUX	GPM	17.93	18.40	18.39	13.80	21.74	18.16	20.76	16.13	22.23	22.90	23.45	18.38	15.41	19.98
RECYCLE	GPM	0.144	0.258	0.196	0.227	0.186	0.103	0.035	0.064	0.061	0.041	0.035	0.027	0.181	0.118
TO WASH COLUMN	GPM	9.04	8.27	8.11	8.91	9.26	11.08	10.25	9.56	10.27	10.46	9.95	9.05	8.18	9.45
BOTTOM TEMP.	°F	281	264	270	277	282	281	283	258	282	282	283	261	266	274
OVERHEAD TEMP.	°F	246	233	239	240	229	242	244	220	239	232	231	222	226	233
TRI-STILL															
FEED	GPM	8.65	8.58	8.25	9.72	10.88	11.90	10.89	11.26	11.97	12.65	12.56	11.57	9.95	10.85
REFLUX	GPM	64.58	60.08	60.22	54.82	52.74	56.08	63.62	56.03	60.97	64.05	57.73	63.25	64.10	59.47
BOTTOMS	GPM	8.96	8.13	7.72	9.84	11.61	12.96	10.13	9.32	9.66	10.34	10.14	8.95	7.18	9.67
RECYCLE	GPM	1.304	1.625	1.732	1.305	0.009	1.977	1.150	1.060	2.141	2.325	2.324	2.088	2.506	1.687
BOTTOM TEMP.	°F	236	234	236	232	234	230	231	229	229	231	230	227	230	231
OVERHEAD TEMP.	°F	144	145	145	152	143	139	139	139	139	138	141	136	135	141

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Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PITTSBURGH F. GLASS COMPANY
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

TRI TOPPING STILL		1966 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1967 AVG.
BOTTOM TEMP.	°F	199	195	195	194	200	195	194	192	189	188	189	187	188	192
OVERHEAD TEMP.	°F	195	194	198	194	198	193	191	192	190	189	189	186	186	192
NEUTRALIZATION															
PERCHLOR															
NH ₃	PSIG	11.5	9.8	10.2	13.0	13.0	10.7	10.0	9.0	8.2	8.3	9.3	6.7	6.0	9.5
FLOW TO STG.	GPM	8.62	5.97	6.13	6.74	7.39	8.70	8.67	7.73	8.82	8.82	8.36	7.19	6.91	7.62
TRICHLOR															
NH ₃	PSIG	8.0	10.9	11.4	13.1	12.3	11.7	10.6	11.6	7.4	4.1	0.8	1.6	3.2	8.2
FLOW TO STG.	GPM	8.21	6.95	5.26	6.55	3.72	7.70	7.55	7.90	7.76	8.49	7.42	6.44	5.87	6.80

SL 013053

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 No. 91-1145

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of 14th Judicial District Court
No. 91-1145