

SL 012812

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT		1968 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1969 AVG.
62A DRY HCL															
HCL SOLD	T/D	29.0	20.4	50.7	50.2	51.0	42.9	27.8	42.2	44.0	48.8	52.5	48.8	49.3	44.9
CHLORINE TO 62A	T/D	30.5	22.3	49.7	52.9	50.1	41.5	27.3	42.2	44.0	48.8	52.5	48.8	49.3	44.1
HYDROGEN TO 62A	MCF/D	345.1	244.6	567.2	605.5	587.0	482.0	309.3	472.7	500.5	549.0	589.0	524.2	530.8	496.8
CL ₂ EFFICIENCY	%	93.6	95.0	99.0	99.0	99.0	99.0	99.0	99.0	97.2	97.2	97.2	97.2	97.2	97.9
CL ₂ YIELD	%	93.5	95.0	99.0	99.0	99.0	99.0	99.0	99.0	97.2	97.2	97.2	97.2	97.2	97.9
HYDROGEN EFFICIENCY	%	89.6	97.0	-	-	-	-	-	-	-	-	-	-	-	97.0
HYDROGEN YIELD	%	89.2	-	-	-	-	-	-	-	-	-	-	-	-	-
EXCESS H ₂	%	3.8	-	4.1	4.8	7.0	6.2	3.6	2.5	3.9	2.7	2.5	-	-	4.1
TONS CL ₂ /TON HCL SOLD		1.048	1.091	0.989	1.053	0.982	0.968	0.982	1.000	1.000	1.000	1.000	1.000	1.000	1.005
MCF H ₂ /TON HCL SOLD		11.9	11.0	11.2	12.1	11.5	11.2	11.1	11.2	11.4	11.2	11.2	10.7	10.8	11.2
KWH/TON		155.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
WELL WATER M GAL/TON		16.9	20.2	9.8	9.6	9.2	8.5	8.5	4.7	5.1	4.5	4.0	4.2	4.4	7.7
H ₂ SO ₄ LBS/TON		24.4	19.1	12.0	15.3	15.7	13.6	13.6	11.1	10.9	6.5	7.4	5.6	9.7	11.7
MAN HOURS/TON HCL															
PRODUCTION		0.500	0.411	0.199	0.202	0.185	0.242	0.355	0.230	0.226	0.219	0.200	0.205	0.196	0.239
MAINTENANCE		0.539	0.275	0.025	0.061	0.095	0.176	0.144	0.028	0.052	0.161	0.064	0.076	0.072	0.102
SALARIED		1.87	0.237	0.096	0.092	0.066	0.076	0.121	0.081	0.074	0.069	0.068	0.062	0.066	0.092
TOTAL		1.226	0.923	0.320	0.355	0.346	0.494	0.620	0.339	0.352	0.449	0.332	0.343	0.334	0.433
CONTRACT MAINT. INCLUDED IN ABOVE		0.117	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000
SL 012813															

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

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL

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

GENERAL DEPARTMENT	1968 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1969 AVG.
PRESSURE														
LINE PSIG	32	18	19	19	18	18	18	17	19	19	19	18	18	18
COMP. DISCH. PSIG	46	39	41	41	40	41	41	48	45	37	37	37	38	40
COMP. SUCTION "H ₂ O	-24	-32	-35	-37	-35	-32	-25	-25	-29	-35	-36	-35	-34	-33
TEMPERATURE °F														
No. 1 BURNER														
GAS FROM PRIMARY	111**	64	61	61	73	78	87	92	91	88	74	66	62	897**
GAS FROM SECONDARY	43 **	29	36	37	37	42	40	49	56	48	23	19	22	390**
No. 2 BURNER														
GAS FROM PRIMARY	92 **	91	97	92	101	104	102	102	101	100	104	99	95	1188**
GAS FROM SECONDARY	43 **	34	35	36	40	43	43	53	59	53	33	25	24	478**
COMPRESSOR DISCHARGE	282**	269	279	279	283	290	288	306	301	295	285	273	282	3430**
CELL LIQUOR LBS/TON HCL														
	41.2	0.0	32.6	0.0	0.0	2.9	12.2	15.6	0.0	0.0	65.1	47.4	0.0	14.7
WELL WATER TO HCL GPM														
	330	268	351	341	318	257	223	258	242	248	259	285	243	274
OPERATING TIME														
No. 1 BURNER														
	*4580	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 2 BURNER														
	5846	437	672	744	719	655	498	744	744	672	718	634	744	7981
COMPRESSOR No. 5														
	6713	533	672	744	719	661	607	744	706	689	745	720	744	8284
Compressor No. 3														
	4309	473	463	353	719	744	720	744	735	475	734	659	730	7549
Compressor No. 4														
	5147	369	576	744	719	744	720	744	744	664	548	720	744	8036
No. 5 Burner														
	-	184	672	744	710	596	369	744	744	689	724	633	744	7553*
No. 2 Absorber														
	3796	561	588	715	719	693	677	726	744	475	682	712	707	7999
No. 3 Absorber														
	1242	515	521	462	695	738	711	742	740	493	715	719	689	7740
No. 4 Absorber														
	-	-	-	-	717	643	708	742	744	491	701	720	697	6213*
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*Totals

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANACONFIDENTIAL
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of 14th Judicial District Court
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HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT	1968 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1969 AVG.
62B WET HCL														
WET HCL PRODUCED T/D	4.6	58.1	55.5	65.3	68.6	83.6	56.7	43.5	44.0	23.5	23.6	43.2	41.8	50.6
CHLORINE TO 62B T/D	-	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
HYDROGEN TO 62B MCF/D	-	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
HCL FROM TCE RX T/D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HCL TO MC RX T/D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HCL TO 62A (DRY HCL) T/D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HCL TO EC T/D	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
HCL SOLD AS MURIATIC T/D	0.15	-	-	-	27.0	35.9	31.4	25.0	32.8	26.5	36.5	50.3	37.4	33.6
CHLORINE EFFICIENCY %	87.2	-	-	-	-	-	-	-	-	-	-	-	-	-
CHLORINE YIELD %	85.2	-	-	-	-	-	-	-	-	-	-	-	-	-
HYDROGEN EFFICIENCY %	77.3	-	-	-	-	-	-	-	-	-	-	-	-	-
HYDROGEN YIELD %	76.0	-	-	-	-	-	-	-	-	-	-	-	-	-
EXCESS H ₂ %	12.1	-	-	-	-	-	-	-	-	-	-	-	-	-
CL ₂ TONS/TON WET HCL PROD	1.180	-	-	-	-	-	-	-	-	-	-	-	-	-
H ₂ MCF/Ton	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-
N ₂ TONS/TON	0.058	0.042	0.064	0.049	0.049	0.043	0.059	0.093	0.099	0.505	0.420	0.280	0.234	0.161
STEAM (ACTUAL) M LBS/TON	3958	3351	2411	2482	2072	1918	3256	3415	3270	3785	4362	2150	2271	2895
WELL WATER M GALS/TON	10.9	8.3	9.7	7.4	7.3	5.8	8.8	11.1	11.0	9.4	20.5	11.6	11.6	10.2
H ₂ SO ₄ LBS/TON	13.1	3.1	2.5	2.5	1.2	1.5	2.3	2.4	4.2	6.9	8.2	1.3	9.3	3.8
KWH/TON	325.1	40.9	42.9	32.0	31.4	24.7	42.2	48.7	45.6	122.8	91.2	52.2	2.1	48.1
OPERATING TIME														
NO 3 BURNER	*0	0	0	0	0	0	0	0	0	0	0	0	0	0 *
NO 4 BURNER	*324	0	0	0	0	0	0	0	0	0	0	0	0	0 *
NO 5 BURNER	*46	-	-	-	-	-	-	-	-	-	-	-	-	- *
NO 1 STRIPPER	*1601	602	557	684	546	743	719	744	744	482	638	0	28	6487*
NO 2 STRIPPER	*5571	596	390	162	719	734	720	563	724	480	284	720	699	6791*
NO 1 COMPRESSOR	*6323	610	603	630	707	744	404	433	742	178	437	576	378	6442*
NO 2 COMPRESSOR	*7250	610	143	636	719	744	720	744	744	516	505	720	744	7545*
NO 3 COMPRESSOR	*1742	0	0	353	0	0	0	0	0	0	0	0	0	353 *

Totals

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1993

GENERAL DEPARTMENT	1968 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1968 AVG
62B WET. HCL REFRIGERATION UNIT														
PRESSURE PSIG														
SUCTION	-25.2	-24.4	-24.7	-23.5	-24.1	-23.8	-24.1	-24.0	-23.9	-24.0	-24.2	-24.9	-24.9	-24.2
DISCHARGE	6.0	7.1	6.0	4.4	9.1	9.1	8.7	8.9	10.9	7.5	7.1	5.6	6.7	7.6
SEAL	21.6	22.0	22.1	22.0	21.9	21.6	21.6	21.7	21.7	21.4	20.9	21.6	21.9	21.7
TEMPERATURES °F														
BRINE IN	26	18	22	23	21	24	28	37	44	39	12	12	14	25
BRINE OUT	12	17	20	21	19	22	26	36	45	39	11	7	10	23
AMPS	139	137	135	128	141	141	135	138	142	136	134	133	147	137
NO. 1 STRIPPER														
FLOWS														
STRONG ACID FEED GPM	40.3	40.9	34.9	43.9	24.1	29.4	39.5	32.7	35.1	26.7	38.6	0	50.3	33.0
STEAM LBS/HR	5294	6128	4566	7051	3573	4932	5765	5082	4339	2529	4279	0	196	4037
TEMPERATURES °F														
TOP	234	220	220	218	225	224	231	232	232	237	229	0	236	225
BOTTOM	261	-	-	-	-	-	-	-	-	-	-	-	-	-
TERTIARY	26	26	33	29	33	36	37	47	52	53	25	0	11	32
NO. 2 STRIPPER														
FLOWS														
STRONG ACID FEED GPM	41.1	39.4	33.7	37.3	31.1	29.6	36.6	32.7	35.0	28.1	32.0	48.7	45.4	35.8
STEAM LBS/HR	3983	3324	1935	822	3338	2807	3220	2819	2644	1799	709	4510	4597	2710
TEMPERATURES °F														
TOP	239	238	234	237	238	235	237	235	236	238	239	239	239	237
BOTTOM	268	-	-	-	-	-	-	-	-	-	-	-	-	-
TERTIARY	24	25	33	28	31	34	36	45	53	50	26	14	16	33
MAN HOURS/TON HCL														
PRODUCTION	0.635	0.239	0.232	0.095	0.178	0.154	0.271	0.287	0.276	0.551	0.588	0.299	0.312	0.290
MAINTENANCE	1.337	0.308	0.353	0.187	0.135	0.127	0.244	0.205	0.187	0.853	1.264	0.320	0.216	0.367
SALARIED	0.218	0.083	0.088	0.035	0.049	0.039	0.059	0.078	0.074	0.143	0.151	0.070	0.078	0.079
TOTAL	2.190	0.630	0.673	0.317	0.362	0.320	0.574	0.570	0.537	1.547	2.003	0.689	0.606	0.736
CONTRACT MAINT. INCLUDED IN ABOVE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

Subject to Protective Order
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No. 91-1145

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