

A-229-3
ev. 10/69)

TABLE 2 - AVERAGES (5 SAMPLES)
MERCURY IN AIR AT MERCURY CELL
(Hg in mg/M³)

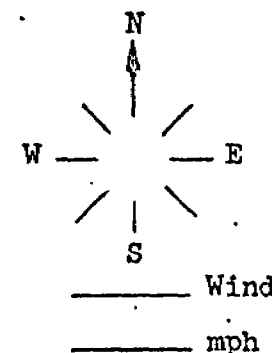
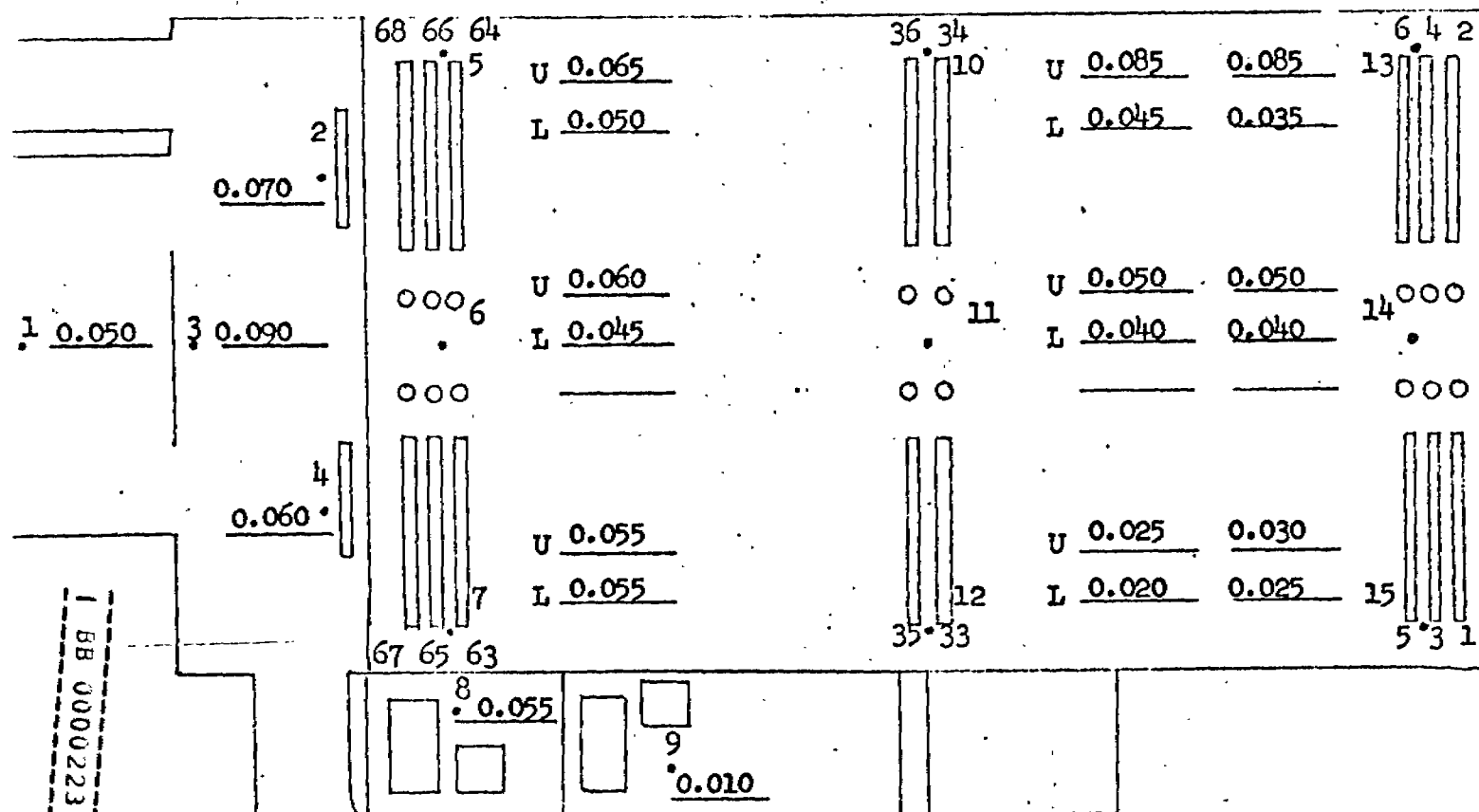
Date: 2-9-70/4-26

Laboratory 0.010
Lunch Room 0.030
No. of People --
Rest Room 0.020
Locker Room 0.010

Control Room 0.010
Office 0.010
Motor Control 0.020
Area Maintenance 0.010
13.8 KV Sw. Gr. < 0.010

H₂ Stack Area < 0.010
Open Cells _____

16 < 0.010



Approved: _____

Distribution

A. T. Raetzsch
D. L. Duncan
J. M. Davis
E. J. Tullier (2)
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C. A. Burns
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Laboratory File

Readings taken with J-W/Lemaire Mercury Vapor Detector, MV-1

U - Cell Floor
L - Ground Floor

LD-1121B/4

TABLE 3
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Brine Treatment - Liquefaction	Brine Treatment Operator	1-26-71 (A.M.)	Chlorine	1/2 ppm		Monitaire Sampler
	Liquefaction Operator	1-26-71 (A.M.)	Chlorine	< 1/2 ppm		" "
	Brine Treatment Operator	1-26-71 (A.M.)	Ammonia	1 ppm		" "
	Liquefaction Operator	1-26-71 (A.M.)	Ammonia	4 ppm		" "

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TABLE 4
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Caustic Plant	Evaporator Operator	2-4-71 (Mid-day)	Chlorine	< 1/2 ppm		Monitaire Sampler
	Area Janitor	2-4-71 (Mid-day)	Chlorine	< 1/2 ppm		" "
Caustic Byrd Platform		2-4-71 (Mid-day)	NaOH Mist	None Detected		Water Scrubber

1 BB 0000225 1

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TABLE 4
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Caustic Plant	Evaporator Operator	2-4-71 (Mid-day)	Chlorine	< 1/2 ppm		Monitaire Sampler
	Area Janitor	2-4-71 (Mid-day)	Chlorine	< 1/2 ppm		" "
Caustic Byrd Platform		2-4-71 (Mid-day)	NaOH Mist	None Detected		Water Scrubber

1 BB 0000225 1

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TABLE 5
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Diaphragm C 11 Circuits	Tender, Circuits 1,2	2-2-71 (P.M.)	Chlorine	1 ppm	Circuits 5, 6, 7, 8 under back-pressure due to maintenance	Monitaire Sampler
	Tender, Circuits 5, 6	2-2-71 (P.M.)	Chlorine	3/4 ppm	<u>2-2-71</u>	" "
	Tender, Circuits 7, 8	2-2-71 (P.M.)	Chlorine	1 ppm		" "
	Tender, Circuits 1,2	5-11-71 (P.M.)	Chlorine	1 ppm		" "
	Tender, Circuits 5,6	5-11-71 (P.M.)	Chlorine	1/2 ppm		" "
	Tender, Circuits 7, 8	5-11-71 (P.M.)	Chlorine	1/2 ppm		" "

1 BB 0000226 1

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TABLE 6
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Diaphragm Cell Repair and Manufacturing	Lead Pot Area	2-4-71 (A.M.)	Lead	< 0.05 mg/M ³		MSA Universal pump w/Pb Kit
	Solder Wiring Area	2-4-71 (A.M.)	Lead	< 0.05 mg/M ³		"
	Lead Pot Area	3-15-71 (A.M.)	Lead	< 0.05 mg/M ³		"
	Solder Wiping Area	3-15-71 (A.M.)	Lead	< 0.05 mg/M ³		"
	Diaphragm Depositor	3-12-71 (A.M.)	Particulates	1.8 mg/M ³	Sampled for 2 hours. Asbestos was "fluffed" prior to slurry addition approximately once per hour.	Monitair Sampler

1 BB 0000227 1

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TABLE 7
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Sodium Chlorat	Lead Operator	1-28-71 (A.M.)	Chlorine/ Chlorine Dioxide	1/2 ppm		Monitaire Sampler
	Maintenance Man	1-28-71	Chlorine/ Chlorine Dioxide	< 1/2 ppm		" "
	Operator	1-28-71	Chlorine/ Chlorine Dioxide	< 1/2 ppm	Spent some time at anhydrous NaOH	" "
	Lead Operator	1-28-71 (A.M.)	Hydrogen Chloride	< 2 ppm		" "
	Maintenance Man	1-28-71 (A.M.)	Hydrogen Chloride	< 2 ppm		" "
	Operator	1-28-71 (A.M.)	Hydrogen Chloride	< 2 ppm	Spent some time at anhydrous NaOH	" "

1 BB 0000228 1

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TABLE 8
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Powerhouses	"A" Watch Engineer	2-22-71 (P.M.)	Chlorine	< 1/2 ppm	Both men stayed in Powerhouses all day.	Monitaire Sampler
	"B" Watch Engineer	2-22-71 (P.M.)	Chlorine	< 1/2 ppm		" "

1 BB 0000229 1

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TABLE 9
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Silica Pigments (See note for locations of sampling.)	C	2-5-71 (A.M.)	Particulates	12.1 mg/M ³	Loading product.	Electrostatic precipitation.
	D	2-5-71 (A.M.)	Particulates	10.0 mg/M ³	Loading product.	"
	E	2-5-71 (A.M.)	Particulates	13.7 mg/M ³	Loading and bagging.	"
	F	2-5-71 (A.M.)	Particulates	11.9 mg/M ³	Loading and bagging.	"
					East wind at 4 mph during above sampling.	

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SILICA PIGMENTS AREA
PARTICULATE AIR SAMPLING LOCATIONS

- A Downstairs in Frit Reactor area of Furnace Building
- B Upstairs, over the south end of the furnace in Furnace Building
- C North-East corner of the Pigments Shipping Building where Trucks and Boxcars are loaded
- D Center of Pigments Shipping Building, under North-South conveyors
- E On the Bagging Platform between Baggers in Pigments Shipping Building
- F Center of Lower Roadway leading out the west door of Pigments Shipping Building, adjacent to Bagging Area and Hopper Car Loading

TABLE 10
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Organics (See map for sample points)	1	2-3-71 (P.M.)	Ethylene	None detected.	10 mph east wind.	Unico Gas Detection Tubes
	2	2-3-71	Ethylene	None detected.		
	3	2-3-71	Ethylene	None detected.		
	4	2-3-71	Ethylene	None detected.		
	5	2-3-71	Ethylene	None detected.		
	6	2-3-71	Ethylene	None detected.		
	7	2-3-71	Ethylene	None detected.		
	8	2-3-71	Ethylene	None detected.		
	1	2-3-71 (P.M.)	Phosgene	None detected.		Unico Gas Detection Tubes
	2	2-3-71	Phosgene	None detected.		
	3	2-3-71	Phosgene	None detected.		
	5	2-3-71	Phosgene	None detected.		
	6	2-3-71	Phosgene	None detected.		
	7	2-3-71	Phosgene	None detected.		
	8	2-3-71	Phosgene	None detected.		

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TABLE 10 - (Cont'd.)
OCCUPATIONAL ENVIRONMENT AIR MONITORING

<u>Area</u>	<u>Monitored Personnel</u>	<u>Date-Time</u>	<u>Contaminant</u>	<u>Concentration</u>	<u>Conditions</u>	<u>Method</u>
Organics	3	2-3-7 (P.M.)	Vinyl Chloride	None detected.	10 mph east wind.	Unico Gas Detection Tubes
	4		Vinyl Chloride	None detected.		
	1	2-3-71 (P.M.)	Per and Tri	None detected.		
	2		Per and Tri	None detected.		
	5		Per and Tri	< 10 ppm		
	6		Per and Tri	None detected.		
	7		Per and Tri	None detected.		
	8		Per and Tri	None detected.		
	1	2-3-71 (P.M.)	Methyl Chloroform	None detected.		
	2		Methyl Chloroform	None detected.		
	3		Methyl Chloroform	None detected.		
	5		Methyl Chloroform	None detected.		
	6		Methyl Chloroform	None detected.		
	7		Methyl Chloroform	None detected.		

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Organics Area

Sampling

Points

