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DUPONT

August 5, 1996

TO: WILLIAM J. VOGLER
CR&D
HASKELL LAB H-1, ROOM 353
NEWARK, DE

FROM: Y. L. POWER, M.D.
WASHINGTON WORKS

C-8 STUDY

Please find attached charts of data developed from reviewing medical records on 51 employees with the highest measured levels of C-8 in their blood. It would be logical to expect that any disease attributable to C-8 should be found in employees with the highest levels of C-8.

In my opinion, very little evidence of disease due to C-8 was found. We did find several employees with frequent elevations of blood tests (SGOT - 7, Alkaline Phosphatase - 10, LDH - 7) but no evidence of liver disease. Perhaps C-8 was the cause of these elevations, but no controlled studies were done. We also found 2 cases of kidney disease and one case of thrombocytopenia/leukopenia that could not be attributable to some other cause. The significance of these is unclear to me.

Please let me know how we should proceed with this study.

8/8/96

Bill,
Please review - I have
asked Judy W to do the same.
Therafter we need to decide how to proceed.
We may want to share the report with the
Stroot personnel medical surveillance in May
Bill V.

YLP:mah
Attachments
Doc. 023412

EID107066

000006

C-8 SUMMARY OF LAB RESULTS

LIVER ENZYMES

Level of C-8 (ppm)	10+	5-10	4-5	3-4	Total
SGOT					
Slight Elevation					
Occasional	3	1	4	2	10
Frequent	2	3	1	1	7
Significant Elevation	0	0	0	1	1
	5	4	5	4	
Alkaline Phosphatase					
Slight Elevation					
Occasional	1	2	5	4	12
Frequent	0	5	3	2	10
Significant Elevation	0	0	0	0	0
	1	7	8	6	
LDH					
Slight Elevation					
Occasional	1	7	5	1	14
Frequent	0	2	3	2	7
Significant Elevation	0	0	0	0	0
	1	9	8	3	
Bilirubin					
Slight Elevation					
Occasional	0	0	1	1	2
Frequent	0	0	0	0	0
Significant Elevation	0	0	0	1	1
	0	0	1	2	
Employees in Study	9	15	16	11	51 /200

Notes:

Slight Elevation: Less than 1X normal lab results.
Occasional: 1-3 abnormal tests
Frequent: 4+ " "

Significant: Test results greater than 1X normal.

YLPower:mah
8/2/96
Doc. 023402 (Chart #1)

EID107067

RL001484

C-8 SUMMARY OF LAB RESULTS

BLOOD

Level of C-8 (ppm)	10+	5-10	4-5	3-4	Total
Increased WBC					
Occasional (1-3)	2	2	4	1	9
Frequent (4+)	0	2	1	1	4
Decreased WBC					
Occasional	0	0	0	2	2
Frequent	0	0	0	2	2
Anemia - Mild (10-13 g Hgb)					
Occasional	0	1	2	2	5
Frequent	0	0	1	0	1
Thrombocytopenia	0	0	0	1	1

YLPower:mah
8/2/96
Doc. 023403 (Chart #2)

EID107068

C-8 SUMMARY OF LAB RESULTS

KIDNEY

Level of C-8 (ppm)	10+	5-10	4-5	3-4	Total
BUN					
Slight Elevation					
Occasional	1	5	1	5	12
Frequent	0	0	3	1	4
Significant Elevation	0	0	0	0	0
URINALYSIS					
-Hematuria					
Occasional	1	2	1	3	7
Frequent	1	1	0	0	2
-Pyuria					
Occasional	0	1	3	2	6
Frequent	0	0	1	0	1
-Albumin					
Occasional	0	4	4	4	12
Frequent	0	2	0	0	2
-Casts	1	0	0	1	2

YLPower:mah
8/2/96
Doc. 023404 (Chart #3)

RI 001486

EID107069

SUMMARY OF POSSIBLE DISEASE
AND/OR SIGNIFICANTLY ELEVATED LABORATORY RESULTS (MORE THAN 1X NORMAL)

LIVER

C-8 Level (ppm)	No. of Employees
10+	0
5-10	0
4-5	0
3-4	2[a]

a = (1) Significant elevation bilirubin (2-3 mg/DL) on most results. Liver enzyme test normal. No diagnosis established. Most likely Gilbert's Disease. No clinical significance.

(2) Significant elevation SGOT (more than 1X normal) on 2 occasions. No diagnosis established.

BLOOD

C-8 Level (ppm)	No. of Employees
10+	0
5-10	0
4-5	0
3-4	1[a]

a = Diagnosed thrombocytopenia and leukopenia evaluated by hemotologist. No etiology found.

(cont.)

SUMMARY OF POSSIBLE DISEASE
AND/OR SIGNIFICANTLY ELEVATED LABORATORY RESULTS (MORE THAN 1X NORMAL)

(cont.)

KIDNEY

C-8 Level (ppm)	No. of Employees
10+	1[a]
5-10	2[b]
4-5	0
3-4	1[c]

a = Definite evidence of kidney disease (casts & hematuria). No diagnosis established.

b = (1) Chronic albuminuria. Established diagnosis of diabetes. No established diagnosis of diabetic nephropathy but most likely cause.

(2) Chronic albuminuria. History of high blood sugars. No established diagnosis of diabetes. Diabetic nephropathy most likely cause.

c = Evidence of kidney disease - casts. No diagnosis established.

YLPower:mah
8/2/96
Doc. 023405 (Chart #4)

EID107071

RI.00148R