Name: [redacted] (Fisher Body)

Material: Urine and Blood

Submitted: 7-3-50 by Dr. Ryder

Required: Lead Analysis

URINE

Analysis Number	-	50A-7921
Volume	-	42 ml.
Specific Gravity	-	1.030
Mg. Pb/Liter	-	0.11

BLOOD

Analysis Number	-	50A-7922
Weight	-	9.71 Grams
Mg. Pb/100 Grams	-	0.10 (Spectrographic)
Mg. Pb/100 Grams	-	0.09 (Dithizone)

Samples Collected: 7-1-50
Samples Received: 7-3-50
Samples Reported: 7-10-50

REQUEST FOR STUDIES AT KETTERING LABORATORY

Name [redacted] Color W Sex M Age 21 S (M) W D

Address 912 Plum St.

Request by H W Ryder 19 Garfield Place Hospital #

Date 7-1-50

History 16 mos. grinder at Fisher Body, Norwood. No previous lead exposure. Works in hood with hood & air line mask. "Feels rough", but weakness, pain in muscles on exertion. Anorexia, constipation & disturbed sleep -

Physical

Lead line with gingivitis

Laboratory Hb 11gm rbc 4.37 wbc 10.65

SR 14 mm/hr.

P 81% L 15 M 4

Stippled 23/50 fields

Impression Occupational lead exposure, hazardous.

Lead poisoning

Treatment Removal from exposure

Studies Desired Blood & urine Pb. Change Fisher Body

H W Ryder

Robert A. Kehoe, M. D.
College of Medicine Eden Avenue
Cincinnati 19, Ohio

July 10, 1950

Fisher Body Division,
General Motors Corporation,
Norwood, Ohio.

Attention: Dr. R. D. Maddox

Analysis of Blood and Urine for Lead

[redacted] - at the request
of Dr. Henry W. Ryder $ 10.00

July 13, 1950

Dr. Robert D. Maddox
Fisher Body Co.
4726 Smith Rd.
Cincinnati, Ohio

Re: [redacted]

Dear Dr. Maddox:

I examined the above man at your request on June 30th. The complaint was that he "feels rough". The illness was of soreness of a week's duration that came particularly in any group of muscles after he used them. For two weeks he had had anorexia and constipation and had noted nausea, particularly after physical exertion. There had been no abdominal pains. He had been wakeful at night, but had not dreamed.

For the last sixteen months he has been a grinder at the Fisher Body Co. working in the booth, wearing a good with supplied air. He has averaged forty hours a w week, and lost no time for illness. There had been no previous lead exposure.

The past, family, marital, habits and systems histories are essentially non-contributory except as mentioned.

On physical examination he is a tall pale man who does not appear acutely ill. He is co-operative, oriented and aware. The weight of 160 pounds is about 15 pounds under the ideal for the height of six feet one and a half inches. The blood pressure in the right arm and in the recumbent position is 134 systolic and 70 diastolic. The pulse is 70 and the respirations are 10 per minute, and the temperature is 98.8°. The positive findings are limited to the gums, which are markedly retracted and show infection at the teeth margins. There is a distinct dark line at the margins of most of the infected gums, particularly on the labial and lingual margins along the lower incisors. Fluoroscopy of the chest and examination of the abdomen, rectum and extremities show no abnormalities. The reflexes are essentially normal except for mildly hyperactive knee and ankle jerks.

Laboratory studies showed a leukocyte count of 10,650 and an erythrocyte count of 4,370,000 per cubic millimeter of blood. The hemoglobin was 11.0 grams percent and the differential count showed 81% polymorphonuclears, 15% lymphocytes, and 4% monocytes. The sedimentation rate was 14 millimeters per hour. There were 23 stippled cells per 50 fields, which is about 2,000 per million erythrocytes. Examinations of urine and blood for lead were done at the Kettering laboratory. Forty-two cubic centimeters of urine with a specific gravity of 1.030 contained 0.11 milligrams of lead per liter. The blood specimen contained 0.10 milligrams per 100 grams by the spectrographic method and 0.09 milligrams per 100 grams by

the dithizone method. Examination of the blood for lead by your laboratory was reported to me as follows:

		Mg./100 grams
October	1949	0.06
November		0.07
January	1950	0.07
February		0.07
March		0.07
April		0.08
May		0.08

It is my feeling that the patient was suffering from acute lead poisoning and anemia at the time of the initial visit. He was advised to have no lead exposure but that work would not harm him as long as he did not feel too badly to work. He was given 0.195 gram tablets of Feosol and told to take one after meals, and also given 0.1 gram tablets of papaverine to take as often as one every four hours if abdominal pain if it should occur.

I would like to see him soon to check on his response to treatment.

Thank you for referring him to me for study.

Sincerely yours,

Henry W. Ryder, M. D.

HWR:SR