

UNCLASSIFIED



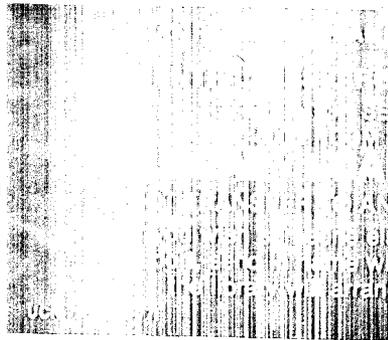
ORNL 1015

fw

3 4456 0360871 8

HEALTH DIVISION
REPORT FOR THE MONTH ENDING
FEBRUARY 28, 1951

J. S. Felton



OAK RIDGE NATIONAL LABORATORY
OPERATED BY
CARBIDE AND CARBON CHEMICALS COMPANY
A DIVISION OF UNION CARBIDE AND CARBON CORPORATION



POST OFFICE BOX P
OAK RIDGE, TENNESSEE

UNCLASSIFIED

UNCLASSIFIED

Report Number ORNL-1015
Copy 4 of 34.
Series A
This document consists of
21 pages

Contract No. W-7405 eng 26

HEALTH DIVISION

REPORT FOR THE MONTH ENDING FEBRUARY 28, 1951

J. S. Felton, M. D.

Date Issued

OCT 1 1951

OAK RIDGE NATIONAL LABORATORY
operated by
CARBIDE AND CARBON CHEMICALS COMPANY
A Division of Union Carbide and Carbon Corporation
Post Office Box P
Oak Ridge, Tennessee

UNCLASSIFIED



3 4456 0360871 8

UNCLASSIFIED

INTERNAL DISTRIBUTION

1. G. T. Felbeck (C & CCC, N.Y., N.Y.)
2. Physics Library
- 3-4. Training School Library
5. Health Physics Library
- 6-7. Biology Library
- 8-11. Central Files
12. D. W. Cardwell
- 13-14. J. S. Felton, M.D.
15. J. H. Frye
16. H. E. Seagren
17. A. H. Hollaender
18. A. S. Householder
19. C. E. Larson
20. K. Z. Morgan
21. J. A. Swartout
22. A. M. Weinberg

EXTERNAL DISTRIBUTION

23. A. G. Kammer, M.D., Medical Director, C&CCC, South Charleston, W. Va.
24. Robert J. Hasterlik, M. D., Medical Director, Argonne National Laboratory
25. Charles L. Dunham, Jr., M.D., Asst. Chief, Medical Branch, Division of
Biology and Medicine, AEC, Washington.
26. T. L. Shipman, M.D., Medical Director, Los Alamos
27. Merril Eisenbud, Director, Health and Safety Division, New York Directed
Operations
28. W. D. Norwood, M.D., Medical Director, Hanford Engineer Works
29. Lee E. Farr, M.D., Medical Director, Brookhaven
- 30-34. Technical Information Division

UNCLASSIFIED

UNCLASSIFIED

DISTRIBUTION OF EFFORT FOR THE MONTH OF FEBRUARY 1951

	<u>Monthly</u>	<u>Weekly</u>	<u>Hourly</u>
<u>Personnel</u>			
Physicians	3	0	0
Industrial Designer	1	0	0
Nurses	1	6	0
Medical Technicians	0	3	0
X-ray Technician	0	1	0
Office Personnel	0	8	0
Custodial Personnel	0	0	3
	<u>5</u>	<u>18</u>	<u>3</u>

Number of technical personnel added: 1
Number of technical personnel terminated: 1

ALLOCATION OF TIME

<u>Physicians</u>			
Administrative	1/3	0	0
Physical Examination	2/3	0	0
Dispensary Service	1 2/3	0	0
Health Education	1/3	0	0
<u>Industrial Designer</u>			
	1	0	0
<u>Nurses</u>			
Supervision	1/2	0	0
Dispensary Shift Nursing	1/2	6	0
<u>Medical Technicians</u>			
General Laboratory	0	1	0
Blood Studies	0	1 1/2	0
Urinalysis	0	1/2	0
<u>X-ray Technician</u>			
	0	1	0
<u>Office Personnel</u>			
	0	8	0
<u>Custodial Personnel</u>			
	0	0	3
	<u>5</u>	<u>18</u>	<u>3</u>

UNCLASSIFIED

STATISTICAL SUMMARY

Severity Rate 3.6 days lost per illness absence
Disability Rate 17.2 days lost per 1000 days scheduled
Frequency Rate 4.8 illness absences per 1000 days scheduled

Number of Patients

Employee 1632
Non-employee 119
Total 1751

Number of Visits

Employee 3738
Non-employee
A.E.C. 4
American Cyanamide 5
Bechtel 13
du Pont (Idaho) 1
du Pont (Savannah) 68
Foster-Wheeler Corporation 6
J. A. Jones Const. Co. 6
Other 88
Total 191
Total all visits 3929

Number of Procedures 5266

Number of Employees at the Laboratory 2844
Percent of Employees Visiting Dispensary 57.4
Number of Visits per Employee 1.3
Percent Visitors Visiting Dispensary 86.9
Number of Visits per Visitor 1.4
Number of Illness Absences per Employee 0.1

Ratio of Occupational to Non-occupational Procedures 1 : 0.5
Ratio of Non-occupational to Occupational Injuries, first visit 1 : 2.7
Ratio of Non-occupational to Occupational Injuries, all visits 1 : 4.6
Ratio of Occupational to Non-occupational Illnesses, first visit *
Ratio of Occupational to Non-occupational Illnesses, all visits 1 : 4.10
Ratio of Occupational to Non-occupational Absences 1 : 4.8
Ratio of Occupational to Non-occupational Days Lost 1 : 88

*Ratio is not given since there were no occupational illnesses, first visits, during the month of February.

PROCEDURES ACCOMPLISHED FOR THE MONTH OF FEBRUARY 1951

	<u>No. of Procedures</u>
Non-occupational injury	61
" " " " , revisit	75
Non-occupational illness	867
" " " " , revisit	363
Occupational injury or exposure, chemical	6
" " " " " " , revisit	19
Occupational injury or exposure, chemical, a.o.q.*	1
" " " " " " , revisit	0
Occupational injury or exposure, n.o.c.**	158
" " " " " " , revisit	444
Occupational injury or exposure, n.o.c.**, a.o.q.*	0
" " " " " " , revisit	0
Occupational injury or exposure, radiation	0
" " " " " " , revisit	0
Occupational injury or exposure, radiation, a.o.q.*	0
" " " " " " , revisit	0
Occupational illness, n.o.c.**	0
" " " " " " , revisit	3
Absence due to illness or injury, non-occupational	288
" " " " " " , occupational	6
Physical examination, industrial hygiene	711
Physical examination, pre-placement	72
Physical examination, rehire	2
Physical examination, periodic health	80
Physical examination, food handler	15
Physical examination, other	10
Physical examination, termination	38
Physical examination, job transfer	4
Audiogram	174
Blood donation	5
Clinical laboratory procedure [†]	614
Electrocardiogram	120
Field clinical laboratory procedure	0

* a.o.q. - alleged or questionable

** n.o.c. - not otherwise classified

† see next page

ORNL-1015
February 28, 1951

No. of
Procedures

Occupational vision section procedures:		
Spectacles issued, plano	42	
Spectacles ordered, prescription	45	
Spectacles issued, prescription	38	
Orthorater examination	144	
Orthorater examination, field	1	
Partial replacement	29	
Adjustment or repair	23	
Advisory service	11	
Total		333
X-ray examination:		
X-ray examination, non-occupational condition	15	
X-ray examination, occupational condition	180	
Total		195
Special study interview		0
Psychodiagnostic test		0
Consultation, non-occupational condition		151
Consultation, occupational condition		8
Consultation without patient, non-occupational		71
Consultation without patient, occupational		3
Home visit		0
Pre-marital serodiagnostic test		1
Immunization		347
Diagnostic procedure for an outside physician		21
GRAND TOTAL		5266

† The figure on page 5 represents the number of clinical laboratory visits. More than one laboratory procedure may be performed in one visit. The following is a breakdown of the procedures performed:

Bacteriological Culture	1
Basal Metabolism	3
Blood Glucose	4
Blood N.P.N.	1
Complete Blood Count	396
Feces - Bacteriological	19
Feces - Parasitological	21
Kahn - Presumptive	116
Kahn - Standard	2
Kahn - Titer	2
Phenosulfonphthalein	1
Red Blood Count and Hemoglobin	15
Rh Factor	212
Sedimentation Rate	7
Typing - Blood	212
Urinalysis	434
Vital Capacity	6
White Blood Count and Differential	9
Miscellaneous	1
Total	1462

ORNL-1015
February 28, 1951

DISPOSITION FOLLOWING DISPENSARY VISITS

Return to regular work	4629
Return to modified or part-time work	351
Remain off work	200
Granted leave	0
Died in plant	0
Rejected	0
Accepted conditionally	1
Accepted	73
Sent to hospital or physicians office	12
AGGREGATE	5266

ATTENDANT

First aid attendant	15
First aid attendant and nurse	0
First aid attendant, nurse and doctor	0
Nurse	2425
Nurse and doctor	287
Doctor	570
Doctor and first aid attendant	3
Technician	1966
Psychologist	0
AGGREGATE	5266

ORNL-1015
February 28, 1951

TIME LOST DUE TO ILLNESS ABSENCE

	<u>No. of Absences</u>	<u>No. of Days Lost</u>
Less than 1 day	18	0
1 day	130	130
2 days	45	90
3 days	17	51
4 days	20	80
5 days	22	110
6 days	8	48
7 days	11	77
8 days	4	32
9 days	2	18
10 days	4	40
11 days	2	22
12 days	2	24
14 days	1	14
15 days	1	15
20 days	2	40
25 days	1	25
30 days	1	30
34 days	1	34
44 days	1	44
54 days	1	54
	294	978

NUMBER OF DIAGNOSES FOR ALL VISITS

No. of Diagnoses

INJURIES

Non-occupational:

Superficial injuries (abrasions, blisters, insect bites, scratches)	37
Lacerations	46
Contusions	9
Strains and sprains	28
Foreign bodies (in eye)	3
Burns (thermal, chemical and radiant)	19
Fractures	2
Amputations	5
Head injury	4
Miscellaneous	2
Total non-occupational injuries	155

Occupational:

Superficial injuries (abrasions, blisters, insect bites, scratches)	170
Lacerations	188
Contusions	83
Strains and sprains	58
Foreign bodies (in eye)	9
Burns (thermal, chemical and radiant)	104
Fractures	19
Amputations	1
Head injury	9
Poisoning by	
Corrosive aromatics, acids and caustic alkalis	1
Mercury and its compounds	4
Other gases and vapors	2
Miscellaneous	6
Total occupational injuries	664

TOTAL INJURIES

819

ORNL-1015
February 28, 1951

ILLNESSES

No. of Diagnoses

Non-occupational:

Respiratory	761
Digestive	214
Circulatory	82
Diseases of blood and blood forming organs	5
Genito-urinary	58
Bones and joints	131
Diseases of skin	93
Dermatitis	12
Diseases of eye	122
Diseases of ear	39
Allergic	34
Endocrine and Metabolic	47
Infectious Diseases	64
Psychoneurotic disorders	87
Common benign tumors	27
Systems and ill-defined illnesses	25
Total non-occupational illnesses	1801

Occupational:

Dermatitis due to	
Plants	1
Solvents	1
Other chemicals	1
Total	3
Total occupational illnesses	3

TOTAL ILLNESSES 1804

No abnormal findings	21
Persons receiving prophylactic inoculations and vaccinations	11
Follow-up examination after operation, injury or disease, other than tuberculosis	11
Normal pregnancy	6
Other personnel without complaint or sickness	1
Medical and surgical aftercare	30
Immunizations	362
Impairment due to congenital malformation	1
Impairment due to other and unspecified accidents and poisonings, except war	2
Impairment due to war injuries	1
Loss due to accident by cutting and piercing instrument	1
Congenital malformations	9
Operations as cause of absence	13
Total	469
Special services not involving diagnosis	2384
GRAND TOTAL	<u>5476</u>

ABSENCES AND TIME LOST BY GENERAL DIAGNOSIS GROUPS

	<u>No. of Absences</u>	<u>Days Lost</u>
<u>Illnesses</u>		
Respiratory	159	502
Digestive	51	115
Circulatory	5	28
Genito-urinary	21	58
Bones and joints	8	72
Diseases of the skin	5	8
Diseases of eye	1	30
Diseases of ear	1	1
Allergic	2	5
Metabolic	1	14
Infectious diseases	4	30
Psychoneurotic disorders	2	5
Symptoms and ill-defined conditions	10	18
<u>Injuries</u>		
Lacerations	2	14
Contusions	4	10
Strains and sprains	4	24
Fractures	4	2
Head injury	1	0
Miscellaneous	1	1
Operations as cause of absences	8	41
	294	978

ORNL-1015
February 28, 1951

NUMBER OF VISITS BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>No. of Visits</u>	<u>No. of Employees</u>	<u>Average</u>
TOTAL	3738	2844	1.3
<u>SEX</u>			
Female	595	457	1.3
Male	3143	2387	1.3
<u>OCCUPATION</u>			
Life scientist	10	54	0.2
Physical scientist	660	507	1.3
Engineer	313	313	1.0
Technical assistant	395	269	1.5
Administrative and managerial personnel	203	151	1.3
Clerical	439	397	1.1
Laborer	317	176	1.8
Maintenance	143	108	1.3
Protective	173	166	1.0
Craftsman	880	574	1.5
Chemical operator	105	57	1.8
Equipment operator	100	72	1.4
<u>RACE</u>			
Colored	276	171	1.6
White	3462	2673	1.3
<u>MARITAL STATUS</u>			
Married	3077	2317	1.3
Single	578	463	1.2
Widowed	43	27	1.6
Divorced	40	37	
<u>HEALTH STATUS*</u>			
H-1	822	579	1.4
H-2	2539	1986	1.3
H-3	377	279	1.4

*H-1 Physically qualified for any position.

H-2 Physically qualified for any position, but has minor defects.

H-3 Physically qualified for special employment only, with restrictions.

ORNL-1015
February 28, 1951

	<u>No. of Visits</u>	<u>No. of Employees</u>	<u>Average</u>
<u>DIVISION</u>			
Operations	136	94	1.4
Physics	94	103	0.9
Chemistry	108	98	1.1
Reactor Technology	58	93	0.6
Biology	61	105	0.6
Metallurgy	73	82	0.9
Technical Training Program	13	17	0.8
School of Reactor Technology	15	19	0.8
Health Physics	174	114	1.5
Engineering and Maintenance	1490	1021	1.5
Industrial Relations	210	134	1.6
Health	9	26	0.3
General Office	175	143	1.2
Security	159	156	1.0
Directors	139	133	1.0
Analytical Chemistry, X-10	233	115	2.0
Mathematics Panel	11	17	0.6
Chemical Technology	308	130	2.4
Analytical Chemistry, Y-12	63	32	2.0
Chemical Research	75	41	1.8
Electromagnetic Research	35	55	0.6
Isotope, Research and Production	62	84	0.7
ANP	37	32	1.2
<u>AGE GROUP</u>			
18 to 19 years	29	17	1.7
20 to 29 years	1545	1098	1.4
30 to 39 years	1314	1059	1.2
40 to 49 years	615	486	1.3
50 to 59 years	222	168	1.3
60 to 65 years	13	16	0.8
<u>SHIFT</u>			
Straight days	3181	2517	1.3
Rotating shifts	509	292	1.7
Straight shift	48	35	1.4
<u>PAYROLL</u>			
Hourly	1723	1140	1.5
Weekly	919	701	1.3
Monthly	1096	1003	1.1

ORNL-1015
February 28, 1951

TIME LOST BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>Days Lost</u>	<u>Scheduled Days</u>	<u>Percent Time Lost</u>
<u>TOTAL</u>	978	56880	1.7
<u>SEX</u>			
Male	780	47740	1.6
Female	198	9140	2.2
<u>OCCUPATION</u>			
Life scientist	0	1080	0.0
Physical scientist	197	10140	1.9
Engineer	97	6260	1.5
Technical assistant	94	5380	1.7
Administrative and managerial personnel	73	3020	2.4
Clerical personnel	183	7940	2.3
Laborer	67	3520	1.9
Maintenance personnel	23	2160	1.1
Protective personnel	41	3320	1.2
Craftsman	189	11480	1.6
Chemical operator	2	1140	0.2
Equipment operator	12	1440	0.8
<u>RACE</u>			
Colored	64	3420	1.9
White	914	53460	1.7
<u>MARITAL STATUS</u>			
Married	815	46340	1.8
Single	145	9260	1.6
Widowed	1	540	0.2
Divorced	17	740	2.3
<u>HEALTH STATUS*</u>			
H-1	171	11580	1.5
H-2	628	39720	1.6
H-3	179	5580	3.2

* H-1 Physically qualified for any position.
 H-2 Physically qualified for any position, but has minor defects.
 H-3 Physically qualified for special employment only, with restrictions.

ORNL-1015

February 28, 1951

	<u>Days Lost</u>	<u>Scheduled Days</u>	<u>Percent Time Lost</u>
<u>DIVISION</u>			
Operations	24	1880	1.3
Physics	22	2060	1.1
Chemistry	8	1960	0.4
Reactor Technology	16	1860	0.9
Biology	48	2100	2.3
Metallurgy	7	1640	0.4
Technical Training Program	1	340	0.3
School of Reactor Technology	0	380	0.0
Health Physics	18	2280	0.8
Engineering and Maintenance	383	20420	1.9
Industrial Relations	30	2680	1.1
Health	0	520	0.0
General Office	26	2860	0.9
Security	95	3120	3.0
Directors	30	2660	1.1
Analytical Chemistry, X-10	31	2300	1.3
Mathematics Panel	2	340	0.6
Chemical Technology	35	2600	1.3
Analytical Chemistry, Y-12	17	640	2.7
Chemical Research	8	820	1.0
Electromagnetic Research	84	1100	7.6
Isotope, Research and Production	77	1680	4.6
ANP	16	640	2.5
<u>AGE GROUP</u>			
18 to 19 years	2	340	0.6
20 to 29 years	376	21960	1.7
30 to 39 years	309	21180	1.5
40 to 49 years	160	9720	1.6
50 to 59 years	131	3360	3.9
60 to 65 years	0	320	0.0
<u>SHIFT</u>			
Straight days	915	50340	1.8
Rotating shifts	46	5840	0.8
Straight shift	17	700	2.4
<u>PAYROLL</u>			
Hourly	320	22800	1.4
Weekly	274	14020	2.0
Monthly	384	20060	1.9

EMPLOYEES WITH ONE OR MORE ILLNESS ABSENCE BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Absentees</u>
TOTAL	270	2844	9.5
<u>SEX</u>			
Male	185	2387	7.8
Female	85	457	18.6
<u>OCCUPATION</u>			
Life scientist	0	54	0.0
Physical scientist	56	507	11.0
Engineer	38	313	12.1
Technical assistant	32	269	11.9
Administrative and managerial personnel	12	151	7.9
Clerical personnel	61	397	15.4
Laborer	18	176	10.2
Maintenance personnel	8	108	7.4
Protective personnel	11	166	6.6
Craftsman	30	574	5.2
Chemical operator	2	57	3.5
Equipment operator	2	72	2.8
<u>RACE</u>			
Colored	18	171	10.5
White	252	2673	9.4
<u>MARITAL STATUS</u>			
Married	200	2317	8.6
Single	62	463	13.4
Widowed	1	27	3.7
Divorced	7	37	18.9
<u>HEALTH STATUS*</u>			
H-1	53	579	9.2
H-2	183	1986	9.2
H-3	34	279	12.2

* H-1 Physically qualified for any position.

H-2 Physically qualified for any position, but has minor defects.

H-3 Physically qualified for special employment only, with restrictions.

ORNL-1015
February 28, 1951

	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Absentees</u>
<u>DIVISION</u>			
Operations	7	94	7.4
Physics	11	103	10.7
Chemistry	4	98	4.1
Reactor Technology	7	93	7.5
Biology	10	105	9.5
Metallurgy	6	82	7.3
Technical Training Program	1	17	5.9
School of Reactor Technology	0	19	0.0
Health Physics	11	114	9.6
Engineering and Maintenance	80	1021	7.8
Industrial Relations	8	134	6.0
Health	0	26	0.0
General Office	8	143	5.6
Security	25	156	16.0
Directors	17	133	12.8
Analytical Chemistry, X-10	18	115	15.7
Mathematics Panel	2	17	11.8
Chemical Technology	13	130	10.0
Analytical Chemistry, Y-12	6	32	18.8
Chemical Research	5	41	12.2
Electromagnetic Research	10	55	18.2
Isotope, Research and Production	17	84	20.2
ANP	4	32	12.5
<u>AGE GROUP</u>			
18 to 19 years	2	17	11.8
20 to 29 years	128	1098	11.7
30 to 39 years	82	1059	7.7
40 to 49 years	41	486	8.4
50 to 59 years	17	168	10.1
60 to 65 years	0	16	0.0
<u>SHIFT</u>			
Straight days	252	2517	10.0
Rotating shifts	14	292	4.8
Straight shift	4	35	11.4
<u>PAYROLL</u>			
Hourly	64	1140	5.6
Weekly	106	701	15.1
Monthly	100	1003	10.0

ORNL-1015
February 28, 1951

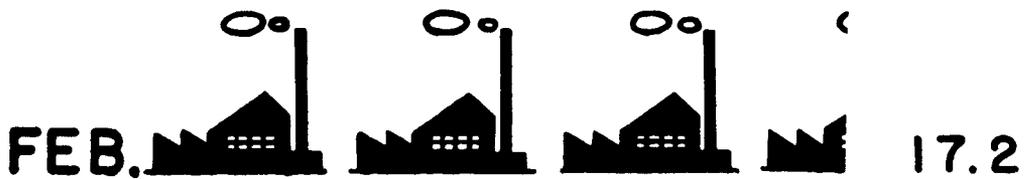
SEVERITY RATE Days Lost Per Absence

Dwg. No. 11528
Unclassified

EACH SYMBOL REPRESENTS 1 DAY

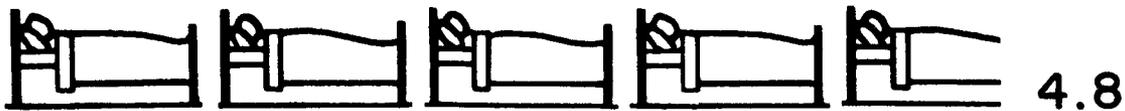


DISABILITY RATE
Days Lost Per 1,000 Days Scheduled
EACH SYMBOL REPRESENTS 5 %



FREQUENCY RATE
Illness Absences Per 1,000 Days Scheduled
EACH SYMBOL REPRESENTS 1 DAY

FEB.



PERCENT OF EMPLOYEES VISITING DISPENSARY

EACH SYMBOL REPRESENTS 10%

