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HEALTH DIVISION

REPORT FOR THE MONTH

ENDING APRIL 30, 1950

OAK RIDGE NATIONAL LABORATORY

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OAK RIDGE NATIONAL LABORATORY

OPERATED BY

CARBIDE AND CARBON CHEMICALS DIVISION

UNION CARBIDE AND CARBON CORPORATION



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HEALTH DIVISION

REPORT FOR THE MONTH ENDING APRIL 30, 1950

J. S. Felton, M. D.

Date Issued

DEC 13 1950

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

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DISTRIBUTION OF EFFORT FOR THE MONTH OF APRIL 1950

	<u>Monthly</u>	<u>Weekly</u>	<u>Hourly</u>
<u>Personnel</u>			
Physicians	2	0	0
Industrial Hygiene Engineer	1	0	0
Industrial Designer	1	0	0
Nurses	1	5	0
Medical Technicians	0	3	0
X-ray Technician	0	1	0
Office Personnel	0	7	0
Custodial Personnel	0	0	2
	<u>5</u>	<u>16</u>	<u>2</u>
Number of technical personnel added: 0			
Number of technical personnel terminated: 0			

ALLOCATION OF TIME

<u>Physicians</u>			
Administrative	1/3	0	0
Physical Examination	2/3	0	0
Dispensary Service	1	0	0
<u>Industrial Designer</u>			
	1	0	0
<u>Industrial Hygiene Engineer</u>			
	1	0	0
<u>Nurses</u>			
Supervision	1/2	0	0
Dispensary Shift Nursing	1/2	5	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	7	0
<u>Custodial Personnel</u>			
	0	0	2
	<u>5</u>	<u>16</u>	<u>2</u>

STATISTICAL SUMMARY

Severity Rate	3.2 days lost per absence
Disability Rate	14.2 days lost per 1000 days scheduled
Frequency Rate	4.4 absences per 1000 days scheduled

Number of Patients

Employee	1172
Non-employee	123
Total	1295

Number of Visits

Employee	2725
Non-employee	
J. A. Jones Const. Co.	63
A. E. C.	10
Austin Co.	5
Other	120
Total	198
Total all visits	2923
Number of Procedures	4011
Number of Employees at the Laboratory	2201
Percent of Employees Visiting Dispensary	53.2
Number of Visits per Employee	1.2
Number of Illness Absences per Employee	0.1

Ratio of Occupational to Non-occupational Procedures	1 : 0.7
Ratio of Non-occupational to Occupational Injuries, first visit .	1 : 1.5
Ratio of Non-occupational to Occupational Injuries, all visits ..	1 : 2.6
Ratio of Occupational to Non-occupational Illnesses, first visit.	*
Ratio of Occupational to Non-occupational Illnesses, all visits .	*
Ratio of Occupational to Non-occupational Absences	1 : 64.3
Ratio of Occupational to Non-occupational Days Lost	1 : 154.7

*Ratios are not given since there were no occupational illnesses during the month of April 1950.

PROCEDURES ACCOMPLISHED FOR THE MONTH OF APRIL 1950

	<u>No. of Procedures</u>
Non-occupational injury	93
" " , revisit	107
Non-occupational illness	704
" " , revisit	259
Occupational injury or exposure, chemical	10
" " " , " , revisit	32
Occupational injury or exposure, chemical, a.o.q.*	0
" " " , " , " , revisit	0
Occupational injury or exposure, n.o.c.**	128
" " " , " , revisit	343
Occupational injury or exposure, n.o.c.**, a.o.q.*	1
" " " , " , " , revisit	0
Occupational injury or exposure, radiation	0
" " " , " , revisit	0
Occupational injury or exposure, radiation, a.o.q.*	1
" " " , " , " , revisit	0
Occupational illness, n.o.c.**	0
" " , " , revisit	0
Absence due to illness or injury, non-occupational	193
Absence due to illness or injury, occupational	3
Physical examination, industrial hygiene	46
Physical examination, pre-placement	47
Physical examination, rehire	12
Physical examination, periodic health	42
Physical examination, job transfer	1
Physical examination, food handler	2
Physical examination, other	7
Physical examination, termination	42
Audiogram	174
Blood donation	3
Clinical laboratory procedure †	517
Electrocardiogram	118
Field clinical laboratory procedure	0

*a.o.q. - alleged or questionable

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

† see next page

	<u>No. of Procedures</u>
Occupational vision section procedures:	
Spectacles issued, plano	88
Spectacles ordered, prescription	41
Spectacles issued, prescription	33
Orthorater examination	142
Orthorater examination, field	0
Partial replacement	13
Adjustment or repair	10
Advisory service	7
Total	334
X-ray examination:	
X-ray examination, non-occupational condition	5
X-ray examination, occupational condition	272
Total	277
Special study interview	0
Psychodiagnostic test	4
Consultation, non-occupational condition	144
Consultation, occupational condition	9
Consultation, without patient, non-occupational	41
Consultation, without patient, occupational	1
Home visit	0
Pre-marital serodiagnostic test	0
Immunization	273
Diagnostic procedure for an outside physician	42
GRAND TOTAL	4011

† 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:

Agglutination	1
Bacteriological Smear	5
Basal Metabolism	1
Blood Cholesterol	1
Blood Glucose	42
Blood Urea Nitrogen	1
Complete Blood Count	332
Feces - Bacteriological	9
Feces - Parasitological	13
Hematocrit	1
Kahn - Titer	5
Kahn	148
Malarial Parasites	2
Red Blood Count and Hemaglobin	9
Rh Factor	55
Sedimentation Rate	19
Typing - Blood	55
Urinalysis	444
Vital Capacity	22
White Blood Count and Differential	69
Miscellaneous	1
Total	1235

DISPOSITION FOLLOWING DISPENSARY VISITS

Return to regular work	3296
Return to modified or part-time work	371
Remain off work	217
Granted leave	0
Died in plant	0
Rejected	2
Accepted conditionally	0
Accepted	52
Sent to hospital or physicians office	73
AGGREGATE	4011

PERSONNEL ATTENDING PATIENTS

First Aid Attendant	0
First Aid Attendant and Nurse	0
First Aid Attendant, Nurse and Doctor	3
Nurse	1722
Nurse and Doctor	192
Doctor	626
Doctor and First Aid Attendant	0
Technician	1429
Psychologist	39
AGGREGATE	4011

TIME LOST DUE TO ILLNESS ABSENCE

	<u>No. of Absences</u>	<u>No. of Days Lost</u>
Less than 1 day	16	0
1 day	87	87
2 days	26	52
3 days	12	36
4 days	11	44
5 days	16	80
6 days	7	42
7 days	3	21
8 days	2	16
9 days	1	9
10 days	2	20
11 days	3	33
13 days	3	39
14 days	1	14
15 days	4	60
30 days	1	30
40 days	1	40
	<u>196</u>	<u>623</u>

NUMBER OF PROCEDURES BY GENERAL DIAGNOSIS GROUPS

	<u>Number of Procedures</u>	
Illnesses:		
Allergy	29	
Blood abnormality	12	
Cardio-vascular disease	16	
Dental disorder	14	
Dermatitis	62	
Endocrine disorder	47	
Eye and ear disorder	62	
Gastro-intestinal disease	126	
Genito-urinary disease	6	
Hernia	21	
Infections and parasitic disease	82	
Menstrual disease	36	
Nervous and mental state, neurologic disorder	66	
New growth	21	
Orthopedic disorder	90	
Pain and headache	76	
Respiratory disease	479	
Tuberculosis	0	
Miscellaneous	63	
Aggregate		1308
Injuries		
Injuries	712	
Injuries, potential	0	
Aggregate		712
Operative procedure		37
Total		2057
Special services not involving diagnosis		195
GRAND TOTAL		4011

ABSENCE AND TIME LOST BY GENERAL DIAGNOSIS GROUPS

	<u>No. of Absences</u>	<u>Days Lost</u>
Illnesses:		
Allergy	5	9
Blood abnormality	0	0
Cardio-vascular disease	0	0
Dental disorder	0	0
Dermatitis	2	2
Endocrine disorder	0	0
Eye and ear disorder	1	3
Gastro-intestinal disease	35	78
Genito-urinary disease	6	46
Hernia	0	0
Infections and parasitic disease	6	24
Menstrual disease	14	16
Nervous and mental state, neurologic disorder	6	6
New growth	0	0
Orthopedic disorder	5	6
Pain and headache	6	5
Respiratory disease	91	303
Tuberculosis	0	0
Miscellaneous	4	14
Injuries:		
Injuries, non-occupational	4	17
Injuries, occupational	0	0
Operative procedures	11	94
Total	196	623

NUMBER OF VISITS BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>No. of Visits</u>	<u>No. of Employees</u>	<u>Average</u>
TOTAL	2725	2201	1.2
<u>SEX</u>			
Female	437	401	1.1
Male	2288	1800	1.3
<u>OCCUPATION</u>			
Life scientist	20	50	0.4
Physical scientist	395	350	1.1
Engineer	203	204	1.0
Technical assistant	262	202	1.3
Administrative and managerial personnel	176	149	1.2
Clerical personnel	269	337	0.8
Laborer	160	96	1.7
Maintenance personnel	125	100	1.3
Protective personnel	251	154	1.6
Craftsman	677	436	1.6
Chemical operator	101	58	1.7
Equipment operator	86	65	1.3
<u>RACE</u>			
Colored	199	134	1.5
White	2526	2067	1.2
<u>MARITAL STATUS</u>			
Married	2193	1760	1.2
Single	465	390	1.2
Divorced	36	26	1.4
Widowed	31	25	1.2
<u>HEALTH STATUS*</u>			
H-1	606	538	1.1
H-2	1759	1428	1.2
H-3	360	235	1.5

*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.

	<u>No. of</u> <u>Visits</u>	<u>No. of</u> <u>Employees</u>	<u>Average</u>
<u>DIVISION</u>			
Operations	114	79	1.4
Physics	79	72	1.1
Chemistry	291	213	1.4
Reactor Technology	137	114	1.2
Biology	77	107	0.7
Metallurgy	61	57	1.1
Training Program	4	11	0.4
Graduate Training Program	0	0	
Health Physics	126	113	1.1
Engineering and Maintenance	1124	788	1.4
Industrial Relations	268	180	1.5
Health	12	22	0.5
General Office	81	136	0.6
Security	177	150	1.2
Directors	58	58	1.0
Wage Standards	2	3	0.7
Mathematics Panel	9	16	0.6
Chemical Technology	105	82	1.3
<u>AGE GROUP</u>			
18 to 19 years	1	1	1.0
20 to 29 years	985	765	1.3
30 to 39 years	1010	854	1.2
40 to 49 years	510	408	1.3
50 to 59 years	180	152	1.2
60 to 65 years	39	21	1.9
<u>SHIFT</u>			
Straight days	2171	1899	1.1
Rotating shifts	500	273	1.8
Straight shift	54	29	1.9
<u>PAYROLL</u>			
Hourly	1378	895	1.5
Weekly	618	563	1.1
Monthly	729	743	1.0

TIME LOST BY PERSONAL, OCCUPATIONAL AND GROUP CHARACTERISTICS

	<u>Days Lost</u>	<u>Scheduled Days</u>	<u>Percent Time Lost</u>
TOTAL	621*	44020	1.4
<u>SEX</u>			
Female	259	8020	3.2
Male	362	36000	1.0
<u>OCCUPATION</u>			
Life scientist	6	1000	0.6
Physical scientist	110	7000	1.6
Engineer	30	4000	0.7
Technical assistant	75	4040	1.9
Administrative and managerial personnel	26	2980	0.9
Clerical personnel	154	6740	2.3
Laborer	75	1920	3.9
Maintenance personnel	6	2000	0.3
Protective personnel	34	3080	1.1
Craftsman	83	8720	1.0
Chemical operator	10	1160	0.9
Equipment operator	12	1300	0.9
<u>RACE</u>			
Colored	68	2680	2.5
White	553	41340	1.3
<u>MARITAL STATUS</u>			
Married	423	35200	1.2
Single	167	7800	2.1
Divorced	9	520	4.4
Widowed	22	500	1.7
<u>HEALTH STATUS**</u>			
H-1	88	10760	0.8
H-2	455	28560	1.6
H-3	78	4700	1.7

* Two days could not be classified due to insufficient personal data.

** 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.

	<u>Days</u> <u>Lost</u>	<u>Scheduled</u> <u>Days</u>	<u>Percent</u> <u>Time Lost</u>
<u>DIVISION</u>			
Operations	17	1580	1.1
Physics	6	1440	0.4
Chemistry	81	4260	1.9
Reactor Technology	29	2280	1.3
Biology	6	2140	0.3
Metallurgy	19	1140	1.7
Training Program	1	220	0.5
Graduate Training Program	0	0	
Health Physics	52	2260	2.3
Engineering and Maintenance	174	15760	1.1
Industrial Relations	72	3600	2.0
Health	9	440	2.0
General Offices	27	2720	1.0
Security	90	3000	3.0
Directors	18	1160	1.6
Wage Standards	0	60	0.0
Mathematics Panel	3	320	0.9
Chemical Technology	17	1640	1.0
<u>AGE GROUP</u>			
18 to 19 years	0	20	1.5
20 to 29 years	230	15300	1.3
30 to 39 years	218	17080	1.6
40 to 49 years	134	8160	1.3
50 to 59 years	38	3040	0.2
60 to 65 years	1	420	
<u>SHIFT</u>			
Straight days	491	37980	1.3
Rotating shifts	90	5460	1.6
Straight shift	40	580	6.9
<u>PAYROLL</u>			
Hourly	225	17900	1.3
Weekly	258	11260	2.3
Monthly	138	14860	0.9

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>
<u>TOTAL</u>	180	2201	8.2
<u>SEX</u>			
Female	86	401	21.4
Male	94	1800	5.2
<u>OCCUPATION</u>			
Life scientist	2	50	4.0
Physical scientist	35	350	10.0
Engineer	11	204	5.4
Technical assistant	30	202	14.9
Administrative and managerial personnel	4	149	2.7
Clerical personnel	54	337	16.0
Laborer	7	96	7.3
Maintenance personnel	1	100	1.0
Protective personnel	11	154	7.1
Craftsman	20	436	4.6
Chemical operator	2	58	3.4
Equipment operator	3	65	4.6
<u>RACE</u>			
Colored	6	134	8.4
White	174	2067	4.5
<u>MARITAL STATUS</u>			
Married	115	1760	6.5
Single	55	390	14.1
Divorced	6	26	23.1
Widowed	4	25	16.0
<u>HEALTH STATUS*</u>			
H-1	30	538	5.6
H-2	124	1428	9.7
H-3	26	235	11.1

*H-1 Physically qualified for any position.

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

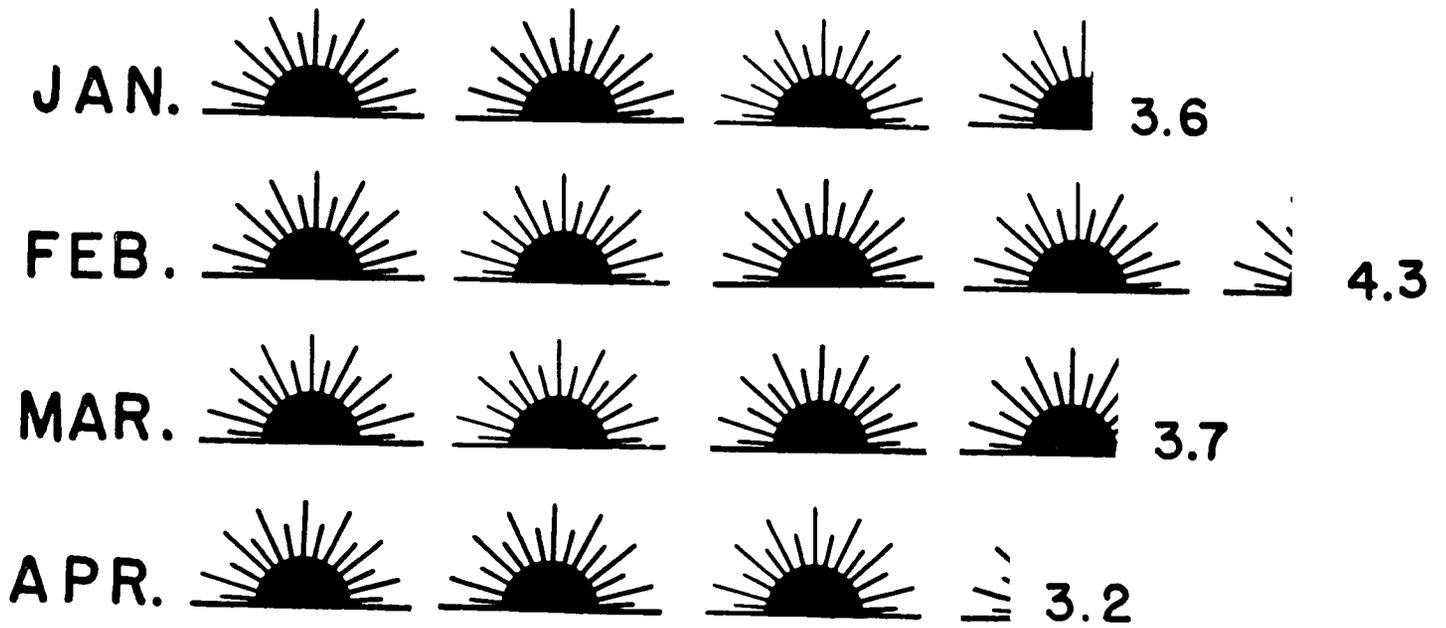
H-3 Physically qualified for special employment only, with restrictions.

	<u>Absentees</u>	<u>No. of Employees</u>	<u>Percent Employees</u>
<u>DIVISION</u>			
Operations	6	79	7.6
Physics	4	72	5.6
Chemistry	32	213	15.0
Reactor Technology	9	114	7.9
Biology	2	107	1.9
Metallurgy	6	57	10.5
Training Program	1	11	9.1
Graduate Training Program	0	0	
Health Physics	20	113	17.7
Engineering and Maintenance	43	788	5.5
Industrial Relations	13	180	7.2
Health	2	22	9.1
General Office	8	136	5.9
Security	19	150	12.7
Director	8	58	13.8
Wage Standards	0	3	0.0
Mathematics Panel	2	16	12.5
Chemical Technology	5	82	6.1
<u>AGE GROUP</u>			
18 to 19 years	0	1	0.0
20 to 29 years	82	765	10.7
30 to 39 years	62	854	7.3
40 to 49 years	26	408	6.4
50 to 59 years	9	152	5.9
60 to 65 years	1	21	4.8
<u>SHIFT</u>			
Straight days	151	1899	8.0
Rotating shifts	28	273	10.3
Straight shift	1	29	3.4
<u>PAYROLL</u>			
Hourly	43	895	4.8
Weekly	98	563	17.4
Monthly	39	743	5.2

SEVERITY RATE

Days Lost Per Absence

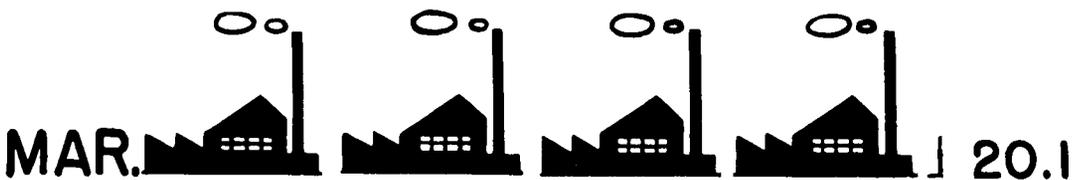
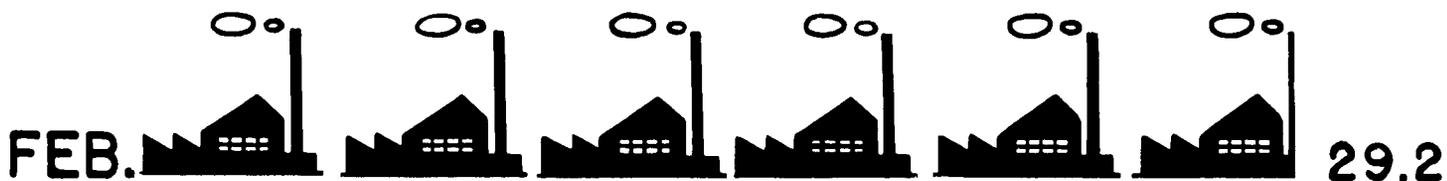
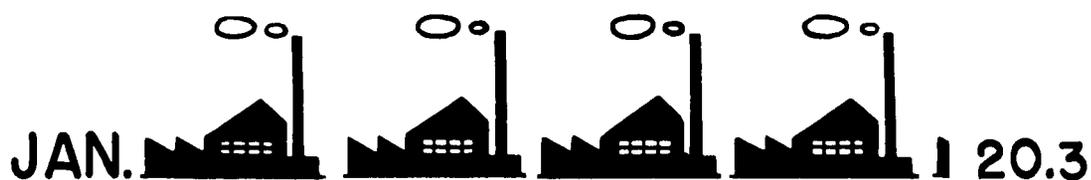
EACH SYMBOL REPRESENTS 1 DAY



DISABILITY RATE

Days Lost Per 1,000 Days Scheduled

EACH SYMBOL REPRESENTS 5%



FREQUENCY RATE

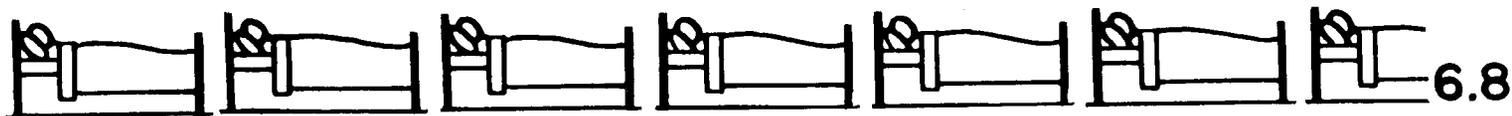
Illness Absences Per 1,000 Days Scheduled

EACH SYMBOL REPRESENTS 1 DAY

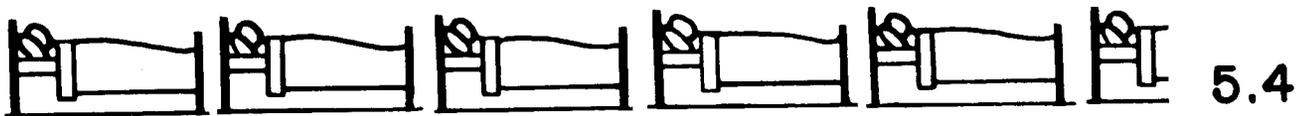
JAN.



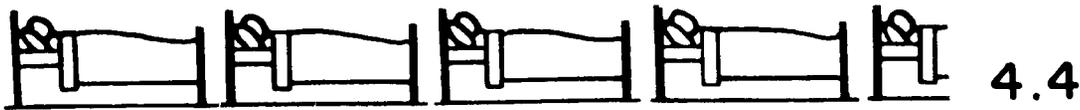
FEB.



MAR.



APR.



PERCENT OF EMPLOYEES VISITING DISPENSARY

EACH SYMBOL REPRESENTS 10 %

