

H.Q.S. 4354-29-5-1.

VOL-1

SECRET

H.P.S. 100
H.M. 4-2-1
H.Q. 29-5-1

DEPARTMENT OF NATIONAL DEFENCE—OTTAWA, CANADA

CROSS REFERENCE

SUBJECT

DEAD

DEAD

CHEMICAL WARFARE REPORTS—

C.W.L. DEVELOPMENT SECTION REPORTS.

DEAD

P.A.
OR B.F.

INITIALS

REFERRED TO

FOR REMARKS

INITIALS

DATE

2111547

10/4/47

T.H.

FEB 6 1947

FEB 6 1947

(If purpose for which referred cannot be expressed in one line, add minute to file and
under name in right margin.)SECRET
H.Q.S.

NOTICE

1. Files should be retained no longer than absolutely necessary. If a file is frequently needed at short intervals, it is better to B.F. it for two or three days than keep it out of Central Registry indefinitely. This ensures it being completed and kept in order, and also gives other officers opportunity to use same.
2. Central Registry should be notified whenever a file is passed direct to another branch.
3. All outgoing letters should bear the official file number.

PASS THIS FILE IN ENVELOPE

000001

405. 4354-29-5-1

Confidential

QUOTE NO. CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 14 Aug. 1944

D.C.W. & S..
Army Building,
Cartier Square.

Atten: Major D.J. Devar

We are enclosing for your information Copies
No. 3 & 4 of the following:

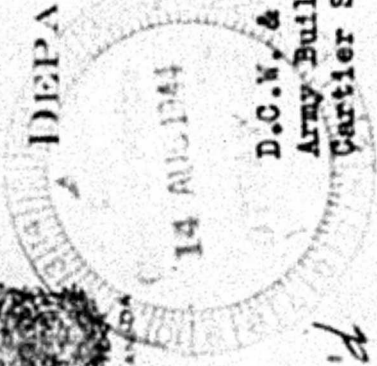
Development Section Test Report No. 47

Examination of Masks L3 Small manufactured in
Moulds J1, J1X, J4, J4X, J29, J29X, J38 and J38X.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

(Glen Gay) Major
for Superintendent of Research.

Encl. 2



Ack'd
15/8/44

HQS. 4354-2

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

Ottawa, 22 July 1944.

Development Section Report No. 99
Cold Weather Trials of Canadian Arctic Eyepiece

It is requested that the following corrections be made on your copy of Development Section Report No. 99 "Cold Chamber Tests on Canadian Arctic Eyepieces, British Anti-Frost Eyepiece Covers and CWL No. 1 Cheek Baffle in Light Type Respirator.

Page 2, para. 2, lines 1 and 2. For "Cellulose acetate" read "Cellulose nitrate (celluloid)".

Photograph No. 2, Component B. Delete "Mark IV".

Photograph No. 3, Components A and B. For "Cellulose acetate" read "Cellulose nitrate (Celluloid)".

Glen Gay
(Glen Gay) Major,
for Supt. of Research.

GG/es

CONFIDENTIALMEMORANDUM

TO: D.S.D. (W)

H.Q.S. 4354-29- 5-1 (DOMS) (L.1239)

DATE: 26 Jul 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
please find Copy No. 29 of the following report(s)

C. W. Laboratories Development Section Report No.
101 and Amendment to Development Section Report
No. 99.

J. Stewart
for D.C.W. & S.



54354-29-5-1

QUOTE NO. CML-S-15-2-5

SECRET

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

24 Jul 44

OTTAWA, CANADA.



D.O.W. & S.,
New Army Building,
Cartier Square,
Ottawa.

Attention: Major D.J. Dewar.

We are enclosing for your information Copies
of the following:

- Copy 1 & 3. Physiological Test Rept. No. 164. Toxicity Test of Methiodide.
- Copy 1 & 3. Physiological Test Rept. No. 165. Ditto
- Copies 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 and 29. Development Section Rept. No. 101. Impregnation of velan-treated battle dress serge ...

act
26/44

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

MDM/HAT
Encl.

Y. M. Hill
(Miss) M.D. Morton,
for Superintendent of Research.



Document divulgué en vertu de la Loi sur l'accès à l'information
CONFIDENTIAL

MEMORANDUM

TO: D.S.D. (W)

H.Q.S. 4354-29-5-1 (DOWES) (L.1179)

DATE: 21 Jul 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
please find Copy No. 29 of the following report(s)

C.W. Laboratories Development Section Report No. 99.

W. L. L.
for D.C.W. & S.



CONFIDENTIAL

MEMORANDUM

TO: D.S.D. (W)

H.Q.S. 4354-29-5-1 (DCWAS) (L.1119)

DATE: 17 Jul 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
please find Copy No. 29 of the following report(s)

Chemical Warfare Laboratories
Development Section Report No. 100

W.H. Capt
for D.C.W. & S.

JUL 18 1944

RECEIVED

000007

L 1057

Supt. of Research **FILE COPY** S. 4354-29-5-1(D.C.W.&S)

C.W.L.

10 Jul 44

Impregnation of Cotton Clothing
C.W.L. Dev. Sec. Report No. 95

Herewith copy of C.W. Letter No 2636 for your
information and retention

W.M. Benson
(W.M. Benson) Capt.

For D.C.W.& S.



WMB/AV

P.A.

C O P Y

TC HQ.8.4354-29-5-

236371

quote No. 55/4150/9 (SD 11)
55/4003/1 (SD 11)

CANADIAN MILITARY HEADQUARTERS

2, Cockspur Street

Trafalgar Square)

London, S.W.1

28 Jun 44

The Secretary
Department of National Defence
Ottawa Canada

Attn DCW & S

Impregnation of Cotton Clothing Using
Impregnite E

1. The following comments on CWL Ottawa Report No.95, on the m/n subject, have been received from the Chief Superintendent, Porton:

"It is pointed out that the statement in para (a) of the Summary, to the effect that "The British aqueous process is unsatisfactory etc", is not altogether accurate, as in the trials reported, the following differences from the present British method were used:

- (i) In place of ordinary Impregnite and ball-milling to obtain the concentrated dispersion, micronised impregnite was used and dispersed by stirring.
- (ii) In place of Lissapol C, Orvus wetting agent (sodium lauryl sulphate) was used, the amount being much reduced to prevent excessive foaming during the impregnation process.
- (iii) Double the amount of the concentrated dispersion was used, compared to that used in the British method."

2. May these comments be brought to the attention of those interested, please.

Sgd: A.J. Skey Maj.
for (K. Stuart) Lieutenant General
Chief of Staff

CANADIAN MILITARY HEADQUARTERS

/akp
CW 2636

000009

HQS-29-5-1

15-2-5



10 July

44

D.C.W. & S.,
Army Building,
Cartier Square.

Attn: Major D.J. Devar

3 & 4

Development Section Note No. 62

Visit of Capt. Rose to Development Labs., Cambridge, Mass.

*Ack'd
11 7/44 W.H.H.*

*Glen Bay, Major
per E.S.*
XXXXXXXXXXXX

15-2-5

10 July, 1944

3 & 4

Development Section Note No. 62

Visit of Capt. Rose to Development Labs., Cambridge, Mass.

Colonel Bishop:

I guess Mr. Brown's note
is self-explanatory. Perhaps before
Brigadier Morrison's return on the 29th
you can have something done on this.



25-1-45

72

S 4334 - 29-5-1

RESTRICTED

QUOTE NO. CML-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA.

22 Nov 44

D.C.W. & S.,
New Army Building
Ottawa, Ont

Attention: Major D.J. Devar

We are enclosing for your information Copies
No. 1,2,6,7 of the following:

Development Section Note No. 71

Leakage of the Valve Outlet Assembly L3 and its causes.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

E/V
Encl. 4

for Superintendent of Research,

B. Lang

(B. Lang)

pd. 24354-29-5-1

24-11-44

AC



CANADA

ack. 6.27 to C. W. H.
copy comments
for JPL 23/64



QUOTE NO. CWL-S-4-5-1-3

54354-29-5-1

DEPARTMENT OF NATIONAL DEFENCE
ARMY

Chemical Warfare Laboratories
OTTAWA, CANADA.

22 November 44

D.C.W. & S.,
New Army Building,
Cartier Square
Ottawa, Ontario.

Attention: Major D.J. Dewar

Leakage Valve Outlet Assembly L3
Development Section Note No. 71

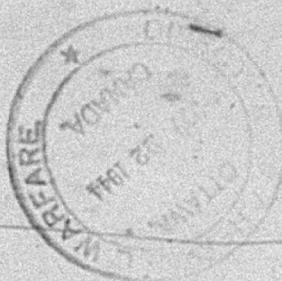
Enclosed are copies 1 and 2 of the above Note
for your retention and copies 6 and 7 for forwarding to
CMEHQ.

We would appreciate having CMEHQ's comments
on this Note.

GG/ev

Encls - 4

Glen Gay
(Glen Gay) Major
for Superintendent of Research.



pa 24354-29-5-1
22-11-44

ac

54354 - 29-5-1

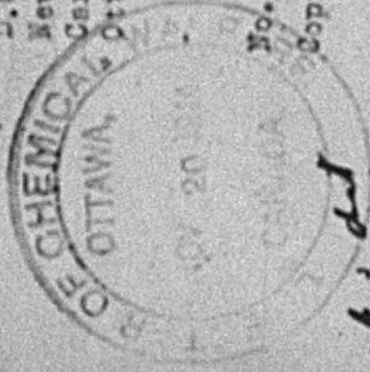
NOTE NO. CML-15-2-5

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 16 Nov 44.

D.C.W. & S.,
New Army Bldg.,
Cartier Square,
Ottawa.



Attn: Major D.J. Dewar

We are enclosing for your information Copies
of the following:

Copies 5, 6, 7-10, 13-14, 29.

Development Section Report No. 102. Canadian Development,
Initiation of Production, and Warner Trials of Valve
Outlet Assembly L3 with Speech Transmitter L1.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

B. Lang
(Miss) B. Lang,
for Superintendent of Research,

HL/MB
Encl. 1

966.

54354-29-5-1

QUOTE NO. OWL-15-2-5

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA,

14 Nov 44

D.C.W.&S.,
New Army Building
Cartier Square
Ottawa, Ont

Attn: Major D.J. Dewar

We are enclosing for your information Copies
No. 1 & 2 of the following:

Development Section Report No. 102

Canadian Development, Initiation of Production, and
Wearer Trials of Valve Outlet Assembly L3 with Speech
Transmitter L1.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

EV
Encl.

B. Lang
(Miss) B. Lang
for Superintendent of Research.

DDD(W)

4374
~~203~~-29-5-1 (DCW & S)

21 Oct 44.



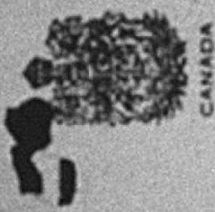
CWL Report

Forwarded herewith please find copy No 29
and Correction to CML Development Section Report No 99.

DDD/MT
Enc.

[Signature]
(D.J. Dewar), Major,
for DCW & S.

54364-29-5



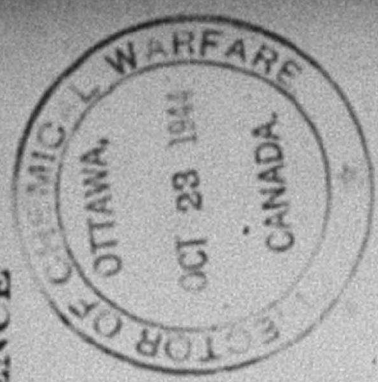
QUOTE NO. CML-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA,

17 Oct 44

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa, Ont.



We are enclosing for your information Copies
of the following:

- No. 1-2, 5-6, 7-10, 13-14, 29.

Correction to be made on your copy of Development
Section Report No. 99. "Cold Chamber Tests on
Canadian Arctic Eyepieces, British Anti-frost ...

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

Encl.

for (Miss) B. Lang
Mukie
for Superintendent of Research,

act pd.
gfb 12/44

54354-29-5-1

QUOTE NO. CWL-S-7-5



DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 16 Oct 44
National Research Building.



D.C.W. & S.,
New Army Bldg.,
Cartier Sq.,
Ottawa.

Attention: Major Dewar

Development Section Report No. 99

Reference Porton 1502 (U-10272) received under cover of
C.W. 2908 on the m/n file.

1. The assembly used in testing the British Frostcover was
identical with that as given in Addendum III to Technical
Notes No. 45 and it is regretted that the order of assembly
as given in Photo No. 4 of the m/n report is incorrect.

2. It is requested that this information be passed on to
C.M.H.Q. and to interested parties.

*Major Gay later advised
that a formal amendment to
Report would be issued.
No action*

GG:LM

Glen Gay
(Glen Gay) Major,
for Superintendent of Research.

H.Q.S. 4354-29-5-1 VOL.3

SECRET

M.F.A. 199C
2014-8-41 (2014)
H.Q. 201-2-05

DEPARTMENT OF NATIONAL DEFENCE—OTTAWA, CANADA

CROSS REFERENCE

SUBJECT

CHEMICAL WARFARE REPORTS

C.W.L. DEVELOPMENT SECTION REPORTS.

SECRET
H.Q.S. 4354-29-5-1 VOL. 3

DEAD

CENTRAL REGISTRY	DATE	P. OR D.	INITIALS	FOR REMARKS	INITIALS	DATE
NOV 1 - 1946	1 Nov H6	HA	XL. W.C.S.	Pat Requisition C.R. NOV 1 1946		
7-55-1947	4/2/H7	HA	E.L.M.D.A.I	Pat Requisition C.R. FEB 1 1947		

NOTICE

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2. Central Registry should be notified whenever a file is passed direct to another branch.
3. All outgoing letters should bear the official file number.
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PASS THIS FILE IN ENVELOPE

000019

P.A.

HQ 4354-29-5-1
(SWR) 743-3-63

RESTRICTED

XXXXXX
Defence Research

31 March 47

D.W.D. (2)

Chemical Warfare Laboratory Report
Churchill Trial

Reference HQB 415-15 dated 7 February

1947.

2. Attached is C.W. Labs Development
Section note #103 copy #1 covering "Testing of
light type respirators under Arctic conditions", the
test being conducted at Churchill during January
and February, 1947.

(Glen Gay) Major
for Director General of Defence Research

Encl:
GC/ra

000020

SECRET

MEMORANDUM

TO: DSD (W)

H.Q.S. 4354-29-5-1 {DCW&S
{L.577}

DATE: 25 May 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
please find Copy No. 29 of the following report(s)

C. W. Laboratories Development Section Report No. 97.

[Signature]
for D.C.W. & S.



MEMORANDUM

TO: D.G.M.S.

DEPARTMENT OF NATIONAL DEFENCE

HQS 4354-29-5-1 (DOWAS)

OTTAWA 7 NOV 46

C.W. Lab Note

Returned herewith as requested by telephone conversation copy of "Pilot Plant Note No. 1" Preparation of a Trench Mouth Medicinal, dated 21 Sep 46.

2. For information and circulation, please.
3. May receipt be acknowledged please by signing and returning duplicate copy of this letter.

J. A. K.
(R.A. Kleehn) Major
for Director of Chemical Warfare & Smoke.

AK/ra
Encl.

19

RESTRICTED

MEMORANDUM

DEPARTMENT OF NATIONAL DEFENCE

TO: DSD(W)

HQS. 4354-29-5-1 (N548) (DOWAS)

OTTAWA ONT 15 July, 1946

#####

CW Labs Development Section Notes

Herewith please find copy No. 38
of Development Section Note #95, dated 6 May, 1946,
Project No. K6A, K1A, L2.

For your information and retention.



J. *CK*
(R.A. Kleehn) Major,
for Director of Chemical Warfare & Smoke,

DRS/
Encl.

9
9

RESTRICTED

HQS. 4314-29-5-1
(W527) (DS-AS)



OTTAWA ONT 15 July 6

Officer Commanding,
Chemical Warfare Service,
EDGEMOND ARSENAL Rd.

CF Labs Development Section Notes

Herewith please find copies No. 14-18
of Development Section Note 195, dated 6 May, 1946,
Project No. K6A, K1A, L2.

2. For your information and retention.

act
(B.S. Kleehn) Major,
for Director of Chemical Warfare & Smoke,

DS/
encl.

RESTRICTED

Class PA

MEMORANDUM

TO: DSD(W)

RECEIVED
LUD
46

DEPARTMENT OF NATIONAL DEFENCE

HQS. 4354-29-5-1 (W548) (DCW&S)

OTTAWA ONT 15 July, 1946

CW Labs Development Section Notes

I

Herewith please find copy No. 38
of Development Section Note #95, dated 6 May, 1946,
Project No. K6A, K1A, L2.

2.

For your information and retention.

DERS/
Encl.

fr. C. Karch/cap.

(R.A. Kleebl) Major,
for Director of Chemical Warfare & Smoke,

*80
101346*

*Report submitted to DND (WDS)
under: WDS-55-53 by B. B. B. WDS*

RESTRICTED

MEMORANDUM

TO: D.I.R.D.
D.G.M.S. *for*

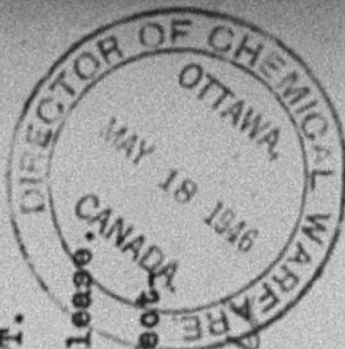
DEPARTMENT OF NATIONAL DEFENCE

H.Q.S. 4354-29-5-1 (DOWAS) (N-370)

OTTAWA 7 May 46

DDT Concentrates

1. Forwarded herewith copy of Interim Report on Dispersible Powders and Pastes containing DDT.
2. For your information and circulation, please.
3. On completion please return to this Directorate.



*for R. A. Klaehn Major,
for D.C.W. & S.*

TO: D.I.R.S.
D.C.M.S.

MEMORANDUM

RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE

D.C.S. 4354-29-5-1 (DMS) (H-370)

OTTAWA

7 May 46

INT Concentrates

1. Forwarded herewith copy of Interim Report on Dispersible Powders and Pastes containing 337.
2. For your information and circulation of CHEM. L. WARFARE.
3. On completion please return to the DIRECTOR OTTAWA MAY 8 1946 CANADA.

ax.

(R. A. Kline) Major,
for D.C.M.S. & S.

X/46

54304-29-57
SECRET

QUOTE NO. CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 23 May 44
National Research Council Building.

D. G. M. & S.,
New Army Building,
Cartier Square,
Ottawa.

Attention: Major D.J. Dewar.

We are enclosing for your information Copies
of the following:

Copies: 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 and 29.

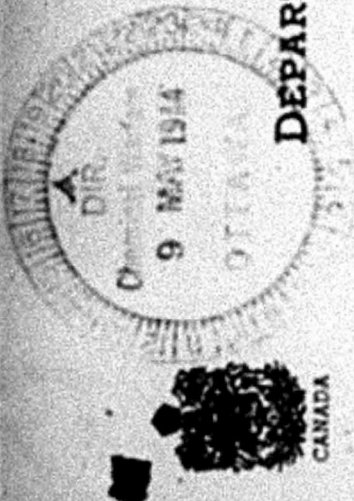
Development Section Report No. 97. Manufacture of ingredient
CWL #1 for use in anti-gas ointment CWL #1.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/HAT
Encl.

B. Lang

(Miss) B. Lang,
for Superintendent of Research.



Hq. 4384-29-5.1

IN REPLY PLEASE QUOTE

No. CML-3-CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 9 May, 1944

SECRET

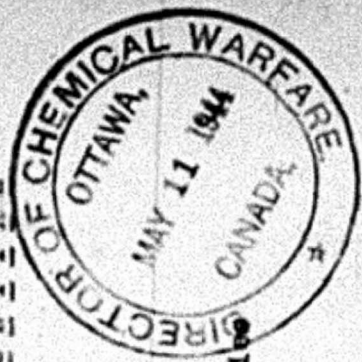
D.C.W. & S.,
Army Building,
Cartier Square.

CONFIDENTIAL

Atten: Major D.J. Dewar

I am enclosing for your information Copies
No. 1,2,5 of the following report(s):

Development Section Note No. 57 dated 8 May, 1944
Determination of Inter-ocular Distance in Masks produced from
Canadian and British Moulds with particular reference to Masks L3



May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

B. Lang.

(Mrs.) D. Bate,
for Superintendent of Research.

(217)

D.S.D. (W)

CONFIDENTIAL

S. 4354-29-5-1 (DCMS)
(L.355)

8 May 44

Canadian Chemical Warfare Reports

Forwarded herewith for your
retention please find copy No. 29 of
C. W. Laboratories Development Section
Report No. 98.

WLL/JH
enc.

WLL
(W L Lane) Capt
for D.C.W. & S.



RESTRICTED

D.S.D. (W)

S. 4354-29-5-1 (DCWS)
(L.352)

8 May 44

Canadian Chemical Warfare Reports

Forwarded herewith for your
retention please find copy No. 17 of
Chemical Warfare Laboratories Development
Section Note No. 56.



WLL/JH
enc

WLL
(W L Lane) Capt
for D.C.W. & S.

HQS 4354-29-5-1.

CONFIDENTIAL

CANADA

QUOTE NO. CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY

8 MAY 1944

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA.

National Research Council Building.

6 May 44

D.C.W & S.,
New Army Building,
Cartier Square,
Ottawa, Ont.

Attention: Major D.J. Dewar

We are forwarding (enclosed)
the following documents:

Copies No. 1 & 3. - Physiological Test Report No. 140.
Toxicity of triethyl phosphate.

Copies No. 3 & 4. - Development Section Test No. 36.
Examination of Masks # 5 manufactured
by B.F. Goodrich Co., from moulds ...

Copies No. 1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 17.
Development Section Note No. 56.
Comments on Porton 2440/1(U.3143) and
2445(U.3805) with ref. to Durability ...

Copies No. 1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 29.
Development Section Report No. 98.
Preparation of Methylchlorarsine.

May receipt be acknowledged, please,
by signing and returning the duplicate copy of this
letter.

B. Lang.

(Miss) B. Lang.
for Superintendent of Research.

/v

1-166-A
(1000)
1375

205

000032

MEMORANDUM

CONFIDENTIAL
SECRET

TO: D.S.D. (W)

H.Q.S. 4354-29-5-1 (DOWNS)
(L.129)

DATE 24 Apr 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
~~distribution~~ please find Copy No. 29
of the following report(s)

C.W. Laboratories Development Section Note
No. 53.

sls
for D.C.W. & S.



24th April, 1944.

Flt./Lt. F. F. Lowe,
Canadian Liaison Officer,
Edgewood Arsenal,
Maryland,
U.S.A.



Development Section Note No. 53

Forwarded herewith for distribution to the appropriate Divisions of the U. S. Chemical Warfare Service please find copies No. 15 to 19 of C.W. Laboratories Development Section Note No. 53.

This note was written in response to this Directorate's request for comments on the Report of the U. S. Chemical Warfare Board on Project Nos. 4 to 10.

DND/JH
encs.

[Signature]
(D J Dewar) Major
for Director of Chemical Warfare & Smoke

MEMORANDUM

SECRET

TO: D.S.D. (W)

H.Q.S. 4354-29-5-1 (DCW & S)

DATE 13 Apr 44

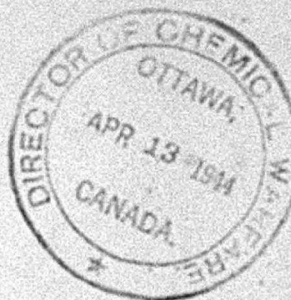
Canadian Chemical Warfare Reports

Forwarded herewith for your retention
~~distribution~~ please find Copy No. 17
of the following report(s)

C. W. Laboratories Development Section Note
No. 48.

DJD/JH
enc.

for D.C.W. & S.



PG
S-4354-29-5-1
13



54354-29-5-1
IN REPLY PLEASE QUOTE
No. CWL-S- 15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 12 Apr 1944

SECRET



D.C.W. & S.,
New Army Building,
Cartier Square
Ottawa

I am enclosing for your information Copies
No. of the following report(s):

- 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 17.

Development Section Note. No. 43

Comments on Porton 2445 (U.2809) A dated
4 Mar. 1944, covering examination of combined A/G ...
Cape/Groundsheet.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

ack
sent
1347

MDM/V
Encls.

Washington

(Mrs.) D. Bate,
for Superintendent of Research.

PQ
54354-29-5-1
LB



CANADA

54354-29-5-1

IN REPLY PLEASE QUOTE

No. CWL-3-15-2-5

DEPARTMENT OF NATIONAL DEFENCE ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 1 Apr. 1944

SECRET

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa.



Attention: Major D.J. Dewar.

I am enclosing for your information Copies
of the following report(s):

Copies: 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 and 29.

Development Section Report No. 96. Dry cold trials conducted
on Canadian and American respirators and components.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

M.D. Bates

(Mrs.) D. Bates,
for Superintendent of Research.

BL/HAT



54354-24-5-1
IN REPLY PLEASE QUOTE
No. CWL-8-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

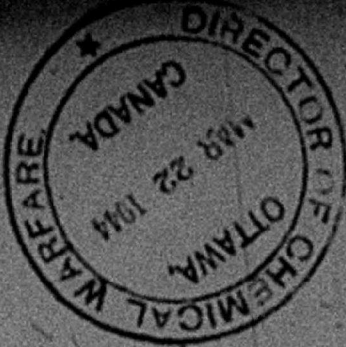
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 21 Mar. 1944

SECRET

D.C.V. & S.,
New Army Building,
Cartier Square,
Ottawa.



Attention: Major D.J. Devar.

I am enclosing for your information Copies
of the following report(s):

No.

Copies: 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 and 29.

Development Section Note No. 45. Valve outlet assembly L3
with speech transmitter L1.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

DB/HAT

(Mrs.) D. Bate,
for Superintendent of Research.

D. Bate

sub j. 22/1/44

MEMORANDUMSECRET

TO: DSD (W)

H.Q.S. 4354-29-5-1 (DOW & S)

DATE 22 Mar 44

Canadian Chemical Warfare Reports

Forwarded herewith for your retention
~~distribution~~ please find Copy No. 29
of the following report(s)

C.W. Laboratories Development Section
Note No. 45.

[Signature]
for D.C.W. & S.



K

MEMORANDUM

SECRET

TO: DSD (W)

DEPARTMENT OF NATIONAL DEFENCE

H.Q.S. 4354-29-5-1 (DCW & S)

DATE: 6 Mar 44

Canadian Chemical Warfare Reports

Forwarded herewith, for your information
and retention, please find copy No. 29 of the
following report(s)

C.W. Laboratories Development Section Note No. 40.



DLA
for D.C.W. & S.

P.A. 5.4354-29-5-1

8-E-44

DC

[Handwritten signature]

54864-29-5-1

IN REPLY PLEASE QUOTE

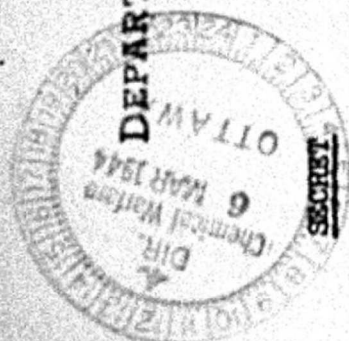
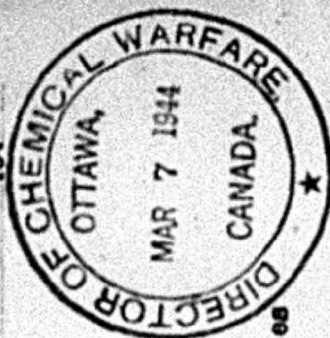
No. CWL-8-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 4 Mar.

1944



SECRET

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa.

Attention: Major D. J. Devar.

I am enclosing for your information Copies
of the following report(s):

No.

Copies: 1, 2, 5, 6, 7, 8, 9, 10, 13, 14 and 29.

Development Section Note No. 40. To determine (a) if air of
a high humidity in the air cell of the Arctic Eyepiece

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

DB/HAT

(Mrs.) D. Bate,
for Superintendent of Research.

D. Bate - P.A. 5.4354-29-5

8-3-44

ac

MEMORANDUM

SECRET

TO: DSD (W)

H.Q.S. 4354-29-5-1 (DCW & S)

H.Q.S. 4354-29-5-4 (DCW & S)

DATE: 3 Mar 44

Canadian Chemical Warfare Reports

Forwarded herewith, for your
distribution, please find copy No. 29
of the following report(s)

CW Laboratories Development Section Report
No. 95.

CW Laboratories Physiological Section Report
No. 35.

for D.C.W. & S.



Pa. 4354-29-5-1
7-3-44. Ac

54354-29-5-1

IN REPLY PLEASE QUOTE

No. CML-3-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

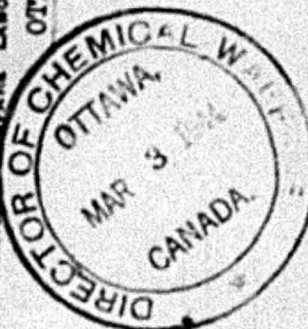
OTTAWA, Ontario,

2 MAR

1944

SECRET

D.C.V.A.S.,
New Army Building,
Cartier Square,
Ottawa, Ontario.



I am enclosing for your information Copies
of the following report(s):

1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 29.

Development Section Report No. 95. Impregnation of Cotton
Clothing using Impregnite E.

Physiological Section Report No. 35. Studies on the Immunological
Behaviour of H.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

DE/V
ENCLS.

W. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

fa 84354-29-5-1

7-3-44

(Copy)

Register No.

54354-29-5-1

Minute Sheet No.

S.D.11., Canadian M.H.Q.

Y.21212

Speech Diaphragm Material

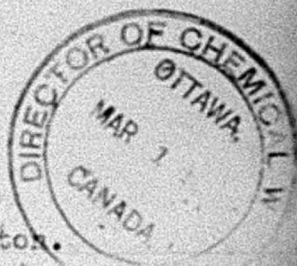
The C.W.L. Ottawa, Development Section Note No. 38 on the above subject has been noted and we will forward any comment Porton may have to make when received. In the meantime you may be interested in the following summary of the Position here:-

Durafil. Some difficulty has been experienced in the production of this material. Excessive creasing has occurred due to inadequate packing and the use of too narrow interleaving paper, but some occurs during the processing of the material after oiling. To eliminate the last effect the final stage of the processing (festooning in a humid room for 6 days) was left out.

Oiled Glass. Small samples of glass fabric oiled with the same resin as used on the Durafil material had been examined at Porton and found to have excellent characteristics, from the point of view of stability, resistance to boiling, tensile strength and speech transmission. A trial order for 300 yards has been placed. No processing or ageing is necessary after oiling. It has not yet been established that the material can be handled satisfactorily. Ample quantities of glass fabric are available. The cost is the same as that for Durafil.

Oiled Cottons. As a second line of research, it was agreed that further work should be carried out on oiled cotton, such a material would have the advantage that it could be manufactured in those Dominions where Glass fabric or Durafil would be unobtainable.

*original with C.D.2158
copy to C.W.L.
1/44
JFD*



C.D.R.1. (Savoy Hill House)
Temple Bar 4411/Ext.40.
RTG/PB
14.2.44.

Sgd. R. T. Goston.

PA-2354-29-5-1

2-3-44

ac

0354-29-5-1

Chemical Warfare Laboratories

28 Jan. 1944.

D.C.W. & S.,
New Army Building,
Cartier Square.

Reference Development Section Note 36A.

Interchangeability of Respirator Facepieces and Containers

The following extract is taken from B.C.S.O. letter 2221 dated 21 Jan. 1944.

"With reference to the standardization of the screw thread for the light type container, I have now heard from Porton that they have examined the U.S. drawings which I sent them and that the dimensions and tolerances for the container and container mount are such that these items are completely interchangeable with British equivalents. The data on variation in U.K. production within specified limits are being obtained and will be forwarded. Will you let Delcellier know this."

(sgd) R. Kingan
British Chemical Warfare Representative.

It is requested that this note be attached to Development Section Note No. 36A.

Ellen Gay
(Ellen Gay) Major,
for Superintendent of Research.

GG/es
cc C.W. Library



PA 84334-29-5-1

1-2-44



DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 22 Dec

194 3

SECRET

D.C.W.&S.,
New Army Building,
Cartier Square,
Ottawa, Ont.

No. I am enclosing for your information Copies
of the following report(s):

Copies 1, 2, 5, 6, 7, 8, 9, 10, 13, 14,

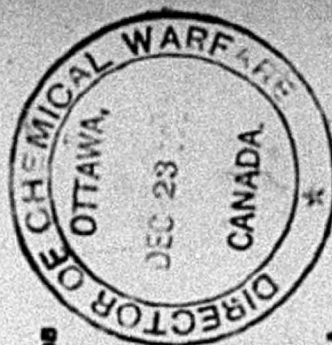
Development Section Note No. 35.
Construction of Equipment for use with KOX in the
Rebreather Systems developed by Professor Munro,
Queen's University (DC&S Project No. E-2).

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

DE/V
Encls.

(Mrs.) D. Bate,
for Superintendent of Research.

D. Bate



IN REPLY PLEASE QUOTE

No. CML-S- 15-2-5

54354-24-5-1

Pa
54354-24-5-1
2/3



QUOTE No. CWL-S-4-1-2

DEPARTMENT OF NATIONAL DEFENCE ARMY

Chemical Warfare Laboratories

OTTAWA, CANADA.

9 December, 1943.

D.C.W. & S.,
New Army Building,
Cartier Square.

Enclosed ~~XX~~ questionnaire card(s) which should have been
are

attached to the body of Development Section Report No. 94 as Appendix I.

It would be appreciated if you would attach ~~this~~ card(s) to
these

the ~~copy~~ in your possession.
copies

Glen Gay
(Glen Gay) Major
for Superintendent of

GG/es

Distribution

Copies	1 - 2	D.C.W. & S.
	3 - 4	F.E.S.
	5 - 6	S.D.11, C.M.H.Q. England
	7 - 10	Ministry of Supply (CCDD) England
	11 - 12	B.C.S.O.
	13 - 17	U.S. C.W.S.
	18 - 22	N.D.R.C.
	23 - 24	Research Lab., U.S.N
	25 - 26	C.W.L. Library
	27	Subject File
	28	Section Report File
	29 - 35	Spares



Field Trial
Date

NAME NAME Unit

Facepiece Worn Service..... Light..... Stiff..... Arctic.....

Total Hours Worn.....

Work performed during wear.....

Adjustment Easy..... Difficult..... Very Difficult.....

Fit Comfortable..... Some discomfort..... Uncomfortable.....

Cause of discomfort

Comfort after exercising Comfortable..... Some discomfort..... Uncomfortable.....

Cause of discomfort

Comfort after long wear Comfortable..... Some discomfort..... Uncomfortable.....

Cause of discomfort

Secure feeling on face at rest Good..... Fair..... Insecure.....

Secure feeling on face during exercise Good..... Fair..... Insecure.....

Eyepiece dimming No dim..... Some dim..... Badly dimmed.....

Was Anti-dim used Yes..... No.....

Did Eyepiece clear in wear Yes..... No..... In how many minutes.....

Remarks on comfort compared with your own respirator

SECRET

DSD (W)

DMT (Att'n, Capt. Stevens)

S. 4354-29-5-1 (DCH & S)

8 Dec 43

Wearer Trials - Canadian Light Respirator

Please see at preceding folio a copy of C.W. Laboratories Development Section Report No. 94 giving results of the Wearer Trials, on Canadian Light Respirators of various types, which were carried out at Petawawa 18 to 21 Oct 43.

DVD/JH



(D J Power) Major
for C.C.W. & S.

1-562-49647
F3

MEMORANDUM

SECRET

TO: DSD (W) - 10 Dec 43
LST (Att'n. Capt. Stevens)

RECEIVED
DEC 11 1943

DEPARTMENT OF NATIONAL DEFENCE

H.Q. S. 4354-29-5-1 (DOW & S)

DATE 8 Dec 43

RECEIVED
DEC 9 1943
D.S.D.(W)

Wearer Trials - Canadian Light Respirator

Please see at preceding folio a copy of C.W. Laboratories Development Section Report No. 94 giving results of the Wearer Trials, on Canadian Light Respirators of various types, which were carried out at Petawawa 18 to 21 Oct 43.

DJD/JH

[Signature]
(D.J. Dewar) Major
for O.C.W. & S.

54324-29-5-1

IN REPLY PLEASE QUOTE

No. CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 3 Dec 1943

SECRET

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa.

I am enclosing for your information Copies
of the following report(s):

Development Section Report No. 94

"Yearer Trials on Canadian Light Respirators...."

Copies 1-2 For D.C.W. & S.

" 5-6 " S.D.11, C.M.H.Q. England

" 7-10 " (C.C.D.D) England

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

DE/V
Encls.

54324-29-5-1
67



DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 26 Nov 1943

SECRET

R.C.M. & S. Building,
Cartier Square,
Ottawa.

For transmission to C.M.H.Q.,

Lt.-Col. Sawyer



I am enclosing for your information Copies
No. 5 - 6 of the following report(s):
Development Section Note No. 32.
Reply to Porton's comments on the "Arctic" ...
No. 5 - 6 Development Section Note No. 33.
Comparative wearing trials on the use of U.S. ...
No. 5 - 6 C.W.L. Monthly Progress Notes, October, 1943.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

MDM/V
Encls.

B. Lang
for (Mrs.) D. Bate,
for Superintendent of Research.

PSA.
24354-295-1
27

54354-29-5-1

IN REPLY PLEASE QUOTE

No. CWL-S-15-2-5



CANADA

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 25 Nov 1943

SECRET

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa.

For transmission to Ministry of Supply
(C.C.D.D.) England.

I am enclosing for your information Copies
No. 7 - 10 of the following report(s):

Development Section Test Report No. 31.
Comparison of Elastic Webbing using Neoprene thread
with Elastic Webbing using rubber thread.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

B. Lang

per (Mrs.) D. Bate,
for Superintendent of Research.

MM/V

Encls

10354-295-1

27



DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 24 Nov 1943
National Research Council Building.

SECRET

D.C.W & S.,
New Army Building,
Cartier Square,
Ottawa.

I am enclosing for your information Copies
No. 1 - 2 of the following report(s):

Development Section Test Report No. 31.
Comparison of Elastic Webbing using Neoprene thread ...
Physiological Note No. 32.
Notes on a Meeting of N.D.P.C. 9:4:1 (Toxicity) Committee...

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

B. Lang

for (Mrs.) D. Bate,
for Superintendent of Research.

MDM/V
Encls.

IN REPLY PLEASE QUOTE

N. CML-S-15-2-5



CANADA

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 24 Nov 1943
National Research Council Building.

SECRET

D.C.W & S.,
New Army Building,
Cartier Square,
Ottawa.

I am enclosing for your information Copies
No. 1 - 2 of the following report(s):

- Development Section Test Report No. 31.
Comparison of Elastic Webbing using Neoprene thread ...
- Physiological Note No. 32.
Notes on a Meeting of N.D.P.C. 9:4:1 (Toxicity) Committee...

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

MDM/V
Encls.

for (Mrs.) D. Bate,
for Superintendent of Research.

IN REPLY PLEASE QUOTE

No. CWL-8- 15-2-5

54354-29-5-1

IN REPLY PLEASE QUOTE

No. CWL-S-15-2-5



DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, Ontario, 24 Nov 1943
National Research Council Building,

SECRET

D.C.W & S.,
New Army Building,
Cartier Square,
Ottawa.

For transmission to S.D. 11. CMHQ. (England)

No. 5 - 6 of the following report(s):
I am enclosing for your information Copies

Development Section Test Report No. 31.
Comparison of Elastic Webbing using Neoprene thread
with Elastic Webbing using Rubber thread.

May receipt of this report be acknowledged
please by signing and returning the lower portion of this
letter.

B. Lang

for (Mrs.) D. Bate,
for Superintendent of Research.

MDM/V
Encls.

54354-29-5-1

C
P
Y

Development Section Report No. 93

Copy No. 1 of 35.

22 October 1943

SECRET

CHEMICAL WARFARE LABORATORIES, OTTAWA

Manufacture of Thickened Fuel

by

G. Green (1)

SUMMARY

Two hundred gallons of FRAS
fuel for use in flame throwers has
been manufactured and a satisfactory
product obtained.

(1) Lieut., C.W.L.

Refer. placed on DCW 29-17-7

3¹²/₄₃ S.W. Wharton Capt. R.C.E.

THIS REPORT HAS BEEN REMOVED FROM FILE BY CAPT. WHARTON - 3 Dec 43

000057

H.Q. 8 H354-29.5-1

QUOTE NO. CWL-S-7-10



DEPARTMENT OF NATIONAL DEFENCE
ARMY

Chemical Warfare Laboratories

OTTAWA, CANADA, 20 Sept. 43.
National Research Building.

D.C.W. & S.,
New Army Building,
Cartier Square.

U.S. Respirator Bag

Reference 138-3 ARMS dated 2 Sept. 43 covering
m/n item and your minute of 8 Sept. 43.

2. We are enclosing copies of Development Section
Test Report. May receipt of these reports be acknowledged
please by signing and returning duplicate copy of this
letter.

Glen Gay

(Glen Gay) Major,
for Superintendent of Research.

GG/es
Enc.

ack 21/9/43
GG





IN REPLY PLEASE QUOTE

No. CWL-8-15-3-3-3

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

54354-29-55-1



D.C.M. & S.,
New Army Building,
Cartier Square.

Ottawa, 4 Sept. 1943
National Research Building.

I am enclosing for your information copies 3 and 4
of the following report

Test
Development Section/Report No. 26

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

Glen Gay
(Glen Gay) Major
for Superintendent of Research.

H.Q.S. 4304. 29-5-1

IN REPLY PLEASE QUOTE

No. CML-S-15-3-3-3

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

Ottawa, 30 Aug. 1943
National Research Building.

D.C.M. & S.,
New Army Building,
Cartier Square.

Attention: Capt. W.M. Benson

I am enclosing for your information copies 3 and 4
of the following report

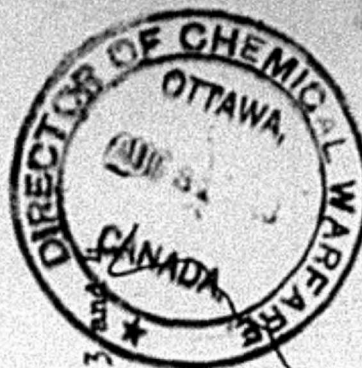
Development Section Test Report No. 25

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

ack 30/8/43

[Signature]

(Glen Gay) *[Signature]*
for Superintendent of Research.





DEPARTMENT OF NATIONAL DEFENCE

CARNEY
Chemical Warfare Laboratories

SECRET

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa, Ont.

August 2nd, 1943.
National Research Council Building,
Ottawa, Ont.



I am enclosing for your information copies 1 and 2
of the following report:

Development Section Note No. 22 - Report on Visit of Major Glen
Gay to U.K. April 23 - June 9, 1943.

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

Encl.
DB:CL

BEST AVAILABLE COPY

SECRET

TELEGRAM HQS. 4354-30-1 (DCW & S)

Cipher Office

Please despatch the following message in cipher:

From DEFENSOR OTTAWA CANADA

To: CAVALITRY LONDON ENGLAND

No. CHEMAR 2075

2 AUG 43

Ottawa, Ont.

FOLLOWING CW LETTERS RECEIVED DURING 27 - 29 JUL
1230, 1232, 1234 TO 1238 INCL., 1240 TO 1246 INCL.,
1248 TO 1253 INCL, 1255 TO 1265 INCL, 1267 TO 1292 INCL (WITH
TWO 1279's), 1295 TO 1300 (TWO EACH OF 1297, 98 and 99),
TWO OF 1301, 1309 TO 1319 INCL, 1321 TO 1326 INCL, 1328 TO
1340 INCL, 1364 - 5, 1382 TO 1391 INCL, 1394 TO 1408 INCL, 1414(.)
ALSO THREE UNNUMBERED LETTERS, ONE FOR DR RABINOWITCH, ONE
CONTAINING DUPLICATE COPIES FILED AT TRS PORTON, AND REPORT
ON EXERCISE "SMOKY" (.) CW 1315 HAD NO ENCLOSEURES (.)

DEFENSOR

MASTER-GENERAL OF THE ORDNANCE.

TIME OF ORIGIN.....HRS



/PL



F.M. 58
44 (7837)
70-24-1719



IN REPLY PLEASE QUOTE

No. CWL-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

Chemical Warfare Laboratories

54354-29-5-1

August 2nd, 1946.
National Research Council Building,
Ottawa, Ont.

SECRET

Director of Chemical Warfare,
New Army Building,
Cartier Square,
Ottawa, Ont.

Attention: Major D.J. Dwyer.

I am enclosing for your information copies 5 to 11
of the following report: for transmission to Lt. Col. S.
Development Section Note No. 22 - Report on Visit of Major J. H. Gay
to U.K. April 28 - June 9, 1943.

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.



D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

Encl.

forwarded
54354-30-1-1
58/43
JH

ack
JH
9/43
3

54354-2-4-5-OL



IN REPLY PLEASE QUOTE

No. OML-8-15-2-5

DEPARTMENT OF NATIONAL DEFENCE



WARFARE LABORATORIES

SECRET

Ottawa, Ont., 31 July 1943

D.C.M. & S.

54354-24-5-1

Attention: Major D.J. Devar.

I am enclosing for your information copies 7 to 10 of the following report

Development Section Report No.92. Progress in Development of Felt Facepiece, Light Type. (For transmission to Ministry of Supply, C.C.D.D., England.)

May receipt of this report be acknowledged please by signing and returning the lower portion of this letter.



D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

*ack
DJA
28/8/43*

*forwarded
54354-30-1-1
31/8/43*

*Encl. 4.
54354-245-1
EF*



IN REPLY PLEASE QUOTE
No. CML-8-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY

Chemical Warfare Laboratories
Ottawa, Ont., 30 July 1943

SECRET

D.O.M. & S.

Attention: Major D.J. Devar.

I am enclosing for your information copies 5 & 6
of the following report:

Development Section Report No. 92. Progress in
Development of Felt Facepiece, Light Type.
(for transmission to S.D.11, C.M.H.Q. Eng.)

May receipt of this report be acknowledged
please by signing and returning the lower part
of this letter.

ack
28/43
forwarded
54354-30-1-1
39/43

MR
Encl. 2

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research





IN REPLY PLEASE QUOTE

No. CML-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

Chemical Warfare
ARMY
CHEMICAL AND BACTERIOLOGICAL
LABORATORIES

SECRET

July 30

1943

54354-29-5-1

D.C.M. & S.
New Army Building,
Cartier Square,
Ottawa, Ont.

I am enclosing for your information copies 1 & 2
of the following report

Progress in development of felt facepiece, light type
Development Section Report No. 92

*ack
DJA
8/43
2*

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

Enc. 2
DB/HT

IN REPLY PLEASE QUOTE

No. CML-8-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

CANADA
21 JUL 1943
OTTAWA
SECRET

ARMY
CHEMICAL WARFARE LABORATORIES

July 21st, 1943,
National Research Council Building,
Ottawa, Ont.

Director of Chemical Warfare & Smokes,
New Army Building,
Cartier Square,
Ottawa, Ont.

I am enclosing for your information copies 1 & 2
of the following report:-

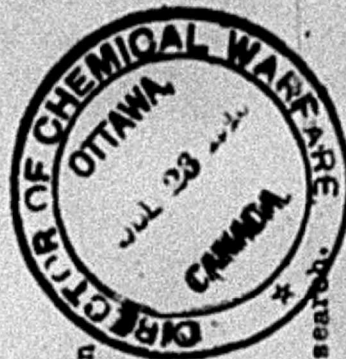
Development Section Test Report #22. Examination of flame
proofed Fabrics submitted by Berkeley Products, Canada,
Ltd., St. Catharines, Ont.

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.

Encl.
CL



*Acknowledged
22-7-43*



IN REPLY PLEASE QUOTE

No. CWL-15-2-5

S 4357 - 29 - 5 - 1
DEPARTMENT OF NATIONAL DEFENCE

ARMY

SECRET Chemical Warfare Laboratories

Ottawa, July 8, 1946
National Research Building.

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa, Ont.

I am enclosing for your information copies 1-2
of the following reports:

Development Section Reports Nos. 90 and 91

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.

ack 9/23

EdB

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.





CANADA

H.Q. S. 4354-22, 6-1

IN REPLY PLEASE QUOTE

No. CNL-S-15-3-3-3

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

SECRET

Ottawa, June 16th, 1943
National Research Building.

D.C.W. & S.,
New Post Office Bldg.,
Ottawa, Ont.

I am enclosing for your information copies 3 and 4
of the following report

Development Section Test Report No. 20

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

Glen Gay
(Glen Gay) *for*
for Superintendent of Research.



ack. 16 ⁶/₄₃

for

19
24354-29-5-1
EF



CANADA

DEPARTMENT OF NATIONAL DEFENCE

SECRET

CHEMICAL WARFARE LABORATORIES

QUOTE NO.

D.C.M. & S.,
New Post Office Bldg.,
Ottawa, Ont.

OTTAWA, CANADA, April 14, 1943.

I am enclosing for your information copies 3 and 4
of the following report

Development Section Note No. 14

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

A.R.
54354-29-5-1
S.H.

Glen Gay
(Glen Gay) *Gay*

for Superintendent of Research.



11 May 43

SECRET

Dr. M.J. Marshall,
Chemistry Department,
University of British Columbia,
Vancouver, B.C.

Dear Dr. Marshall:

At the request of Dr. R.L. McIntosh
we are enclosing for your information and retention a
copy (# 27) of Development Section Report No. 89, a
Chemical Warfare Laboratories Interim Report entitled
"Impermeable Anti-Gas Fabrics Coated with Modified
Alkyd Resins".

Would you kindly acknowledge
receipt by signing and returning the attached copy
of this letter.

Yours sincerely,

[Signature]
(D.J. Bawar) Major,
for Director of Chemical Warfare & Smoke.

DJD:FL



P.H

54354-29-5-1

S.H.

IN REPLY PLEASE QUOTE

OWL-9-15-3-3-3

54354-29-5-1



DEPARTMENT OF NATIONAL DEFENCE

ARMY
CHEMICAL WARFARE LABORATORIES

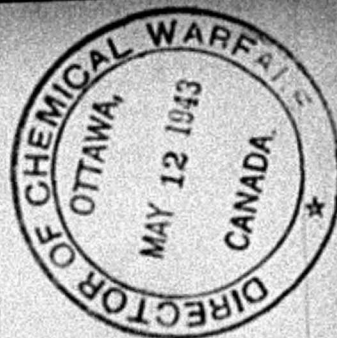
Ottawa, May 11th, 1943
National Research Building.

D.C.W.,
New Post Office Bldg.,
Ottawa, Ont.

I am enclosing for your information copies 3 & 4
of the following report

Development Section Report No. 11

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.



Glen Gay
(Glen Gay) *Major*
for Superintendent of Research.



IN REPLY PLEASE QUOTE

CWL-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

54354-29-5-1

29 APR 1943

SECRET

1943

Ottawa, 29 Apr.



D.C.W. & S,
New Post Office Bldg.,
OTTAWA.

Attention: Major D. J. Dewar

I am enclosing for your information copies 17-21
of the following report:

Development Section Report No. 89 - Impermeable Anti-Gas Fabrics
Coated with Modified Alkyd Resins
(for transmission to Col. Sawyer)

W 4/23

May receipt of this report be acknowledged
please by signing and returning the lower portion
of this letter.

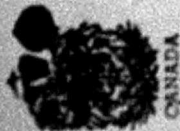
forwarded to CNDP

forwarded 30 4/23

P.A. 54354-29-5-1

D. Bate

(Mrs.) D. Bate,
for Superintendent of Research.



IN REPLY PLEASE QUOTE

No. CML-15-2-6

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

5435X - 29-5-1

SECRET

Ottawa, April 24, 1943
National Research Building.

D.C.W. & S.,
New Post Office Bldg.,
Ottawa, Ont.

I am enclosing for your information copies 3 & 4
of the following report

Development Section Report No. 19



May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

Glen Gay
(Glen Gay) *RGH*

for Superintendent of Research.

ack 21 7/43

*P.N. 54354-29.51
L.B.*



CANADA

DEPARTMENT OF NATIONAL DEFENCE

SECRET

CHEMICAL WARFARE LABORATORIES

54354-29-5-1

QUOTE NO. CML-15-2-11

OTTAWA, CANADA. April 23, 1943.

D.O. W. & S.
New Post Office Bldg.,
Ottawa, Ont.

I am enclosing for your information copies 3 and 4
of the following reports

Development Section Report No 16

Development Section Report No. 17

ack 23/4/43

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

Glen Gay
(Glen Gay) *Major*

for Superintendent of Research,

*P.m. 1.4254-29-5-1
L.B.*



IN REPLY PLEASE QUOTE

No. CML-15-2-4

54354-29-5-1

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

Ottawa, April 23, 1943

National Research Building.

D.C.W. & S.,
New Post Office Bldg.,
Ottawa, Ont.

I am enclosing for your information copies 1 and 2
of the following report

Development Section Note No. 18

May receipt of this report be acknowledged
please by signing and returning the lower portion of
this letter.

Glen Gay

(Glen Gay) Major
for Superintendent of Research.



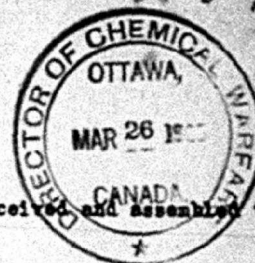
*ack 4/43
24 JJA*

*P.A.
54354-29-5-1
- H.B.*

SECRET

54354 - 11-12-2
JUL 1943
21-5-1
CHEMICAL WARFARE LABORATORIES

Weekly Progress Report of C. W. Laboratories
for week of March 18th to March 24th, 1943



1. Non-fogging eyepieces.

A few plastic non-fogging eyepieces have been received and assembled to service respirators for wearer trials.

2. Felt Mask.

Rubber for felt mask moulds has been prepared and shipped to the manufacturer. Studies on methods of crimping eyepieces have been initiated.

3. Ointment Development.

Comparisons of S461 ointment with ointment A/G no. 2 have been completed. S461 is slightly less effective than no. 2 but the difference is probably not of practical importance. S461 is considerably less irritant than no. 2. A report is in preparation. Syntheses of additional compounds in the thiazoline group of decontaminants is proceeding.

4. Immunology of Vesicants.

A study of the reaction of mustard with protein and amino acids is being continued and further evidence of the immunological properties of these compounds has been received from McGill.

5. Toxicity.

Further preliminary tests with material fractionated from preparations of fluorinated cyanides have been made. Recent fractions tested have not been as toxic as those worked with earlier.

6. Filter Research.

Wool resin filter pads have been made using a zinc hardened rosin recommended by the U.S. C.W.S. These are undergoing complete test. As yet they have showed no advantage over Beckacite pads.

The decomposition of S salts to produce toxic clouds is still under investigation. So far the results are discouraging.

7. Mustard Research.

A new design of extraction column is under investigation for the purification of Levinstein ES.

8. Cyanogen Chloride.

Man trials on cyanogen chloride protection are continuing. With a contain

equilibrated at high humidity, protection is poor. Work is being carried out to determine the effect of humidity on the protection afforded by the container to other gases. In this connection high humidity reduced the service life of the container to carbon tetrachloride.

The value of added adsorbent to improve the protection against cyanogen chloride is being determined. The aminated Xerogels when fresh adsorb considerable cyanogen chloride but their stability is poor. Charcoal treated with various amines has so far been unsatisfactory. Work has commenced on the effect of impregnating charcoal with catalytic amounts of chromium.

9. Charcoal.

The study of acetone saturation value of charcoal indicates that there is a relationship between acetone saturation value and moisture saturation value.

10. Z Research.

Nothing new to report.

11. Carbonyle.

Work temporarily discontinued.

12. Tests on production items.

Masks	10	reports
Gloves	3	"
Valves	5	"
Tubes	4	"
Harness Pads	2	"
Impregnite	2	"

E.E. Massey

(E.E. Massey) Major,
for Superintendent of Research.

KEM:CL

H.Q. 14354-29-5-1
26/2 Dd

DEAD

VOLUME

3

FOLLOWS

9/5/46

NO FURTHER CORRESPONDENCE TO BE PLACED ON THIS FILE

(H)

D.I.R.D.

Attn: Lt. Ceruth

S.4354-29-5-1 (DCW&S)

30th January, 1946.

Forwarded herewith as requested copy
of C.W.L. Development Section Report No.111.

For return at your convenience.

V. CK

(R.A. Klaehn) Major,
for Director of Chemical Warfare & Smoke.



AK/SD



QUOTED NO. CML-15-2-5

94354-29-5-
RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 25 October, 1945,
National Research Council Building.

D.C.W. & S.,
New Army Bldg.

Attention: Major D.J. Devar

We are enclosing for your information Copies
No. 1 - 2 of the following:

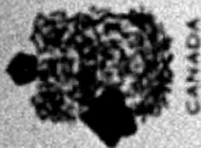
Dev. Section Note No. 89. Report on Visit of Capt.
A.K. Ames and Lieut. J.O. Kelly to
Edgewood Arsenal, 16 Sept. to
24 Sept. 1945.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

MR
Encl.

B. Lang
(Miss) B. Lang,
for Superintendent of Research.





QUOTE NO.

CWL-15-2-5

RESTRICTED

54354-29-5-1

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 17 Oct 45.
National Research Council Bldg.



D.O.W. & S.

We are enclosing for your information Copies
No. of the following:
Copies 1,2,5,6,7,8,9,10,13,14

Development Section Report No. 110 - Manufacture of DDT
" " 112 - Fabric Processing Pilot Plant
Report No. 4

Copies 1 & 2 of: Development Section Test Report No. 58 -
Examination of two samples of flame-proofed duck

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

ack. and 2/4/5

MB
Encl.

B. Lang
(Miss) B. Lang,
for Superintendent of Research.

*DA 22-10-45
B. Lang*

HQS 4354-29-5-1

QUOTE NO. CWL-15-2-5

RESTRICTED



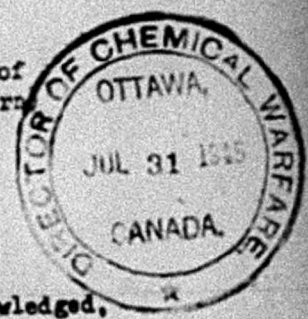
DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 30 Jul 45.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.

We are enclosing for your information Copies
No. 1-2 of the following:

Development Section Note No. 89. Examination of
Plugs sealing Mk. 2 (new British pattern)



*File
31/7/45*

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

161P

BL/MB
Encl.

B. Lang
(Miss) B. Lang
for Superintendent of Research.

Superintendent of Research,
Chemical Warfare Laboratories,
National Research Council Bldg.,
Ottawa, Ontario.

File: CWL-15-2-5
Date: 30 Jul 45.

I hereby acknowledge receipt of Copies
No. 1 - 2 of the following:

Development Section Note No. 89. Examination of Plugs
Sealing Mk. 2 (new British pattern)

161P

Date

Signed

MEMORANDUM

CONFIDENTIAL

TO: DSD(W)

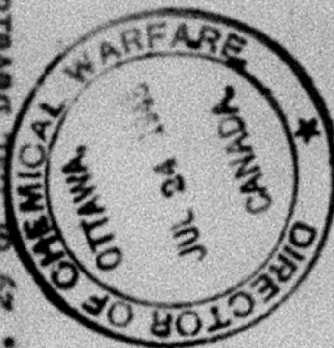
DEPARTMENT OF NATIONAL DEFENCE

H.Q.S. 4354-29-5-1(MD712) (DOWNS)

DATE: 24 Jul 45

CML Development Section Report

Forwarded herewith for your retention please
find Copy No. 29 of CML Development Section Report #109.



(D.J. Dewar) Major
for Directorate of Chemical Warfare & Smoke

DJD/am
Attach.



QUOTE NO. CWL-15-2-5

54354-29-5-1

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 23 Jul 45.
National Research Council Bldg.

D.C.M. & S.,
New Army Bldg.,
Ottawa.

Attn: Major D.J. Dewar

We are enclosing for your information Copies
of the following:

Copies 1,2,5,6,7,8,9,10,13,14, 29

Development Section Report No. 109. Preparation
of diphosgene by the light-activated chlori-
nation of methyl formate

Copies 1,2,5,6,7,8,9,10,13,14

Physiological Section Report No. 51. H-glycyl
complex as a therapeutic agent in the treatment ...

May receipt of the enclosure be acknowledged.
please, by signing and returning the lower portion of this
letter.

BL/1B
Encl.

B. Lang
(Miss) E. Lang,

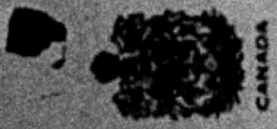
for Superintendent of Research.

47

[Handwritten signature]

HQS. 4354-29-5-1

QUOTE No. CWL-15-2-5



DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 16 JUL 45
National Research Council Bldg.



D.C.W. & S.,
New Army Bldg.,
O t t a w a.

We are enclosing for your information Copies
No. 1 & 2 of the following:

Development Section Note No. 33. Visit of Major Glen Gay
to U.S. C.W.S. Bushnell, Florida 23 June
to 1 July 1945 to conduct Field Trial No. 61

Development Section Note No. 37. Examination of flame proofed
ducks

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

EL/RS
Encl.

B. Lang
(Miss) B. Lang,
for Superintendent of Research.

46

John D. H.
17/5/45

DSD(W)

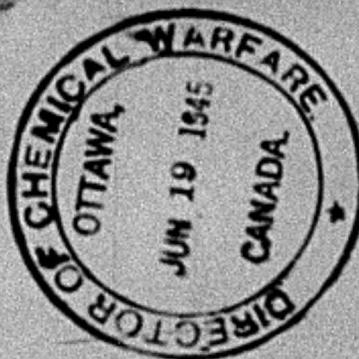
S.4354-29-5-1(DCW A S)
Confidential M-1456
19 Jun 5

CWL Development Section Report

1. Forwarded herewith for your retention please find copy No. 29 of CWL Development Section Report No. 108.

DJD:rl

DJD
(D.J. Dewar) Major
for Director of Chemical Warfare and Smoke.



DSD (W)

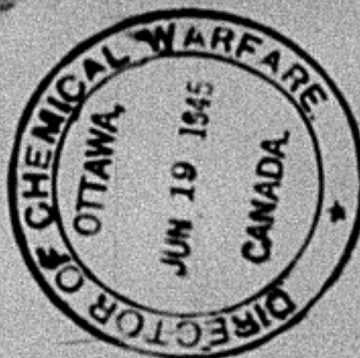
S.4354-29-5-1(DCW & S)
Confidential M-1456
19 Jun 5

CWL Development Section Report

1. Forwarded herewith for your retention please find copy No. 29 of CWL Development Section Report No. 108.

DJD:rl

DJB
(D.J. Dewar) Major
for Director of Chemical Warfare and Smoke.



DSD(W)

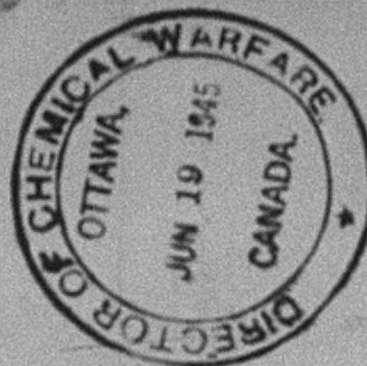
S.4354-29-5-1(DCW & S)
Confidential M-1456
19 Jun 5

CWL Development Section Report

1. Forwarded herewith for your retention please find copy No. 29 of CWL Development Section Report No. 108.

DJD
(D.J. Dewar) Major
for Director of Chemical Warfare and Smoke.

DJD:rl



54354-29-5-1

QUOTE NO. OWL-15-2-5

RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 14 Jun 45.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.,
O t t a w a.



We are enclosing for your information Copies
No. of the following:

Copies 1 & 2 of Development Section Note No. 86. Examination of

Copies 1 & 3 of Physiological Test Report No. 204. Patch test of

Copies 1,2,5,6,7,8,9,10,13,14,15,16,17,18,19,29

synthetic resin hospital sheeting
Development Section Report No. 107. Outdoor trials
of Canadian Arctic eyepieces and British Covers ...

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/NB

Encl.

B. Lang
(Miss) B. Lang,

for Superintendent of Research.

54354-28-5-1

XXXXXX
XXXXXX

~~SECRET~~
~~CONFIDENTIAL~~
~~RESTRICTED~~

MEMORANDUM

DSD (W)

DEPARTMENT OF NATIONAL DEFENCE

(DCW & S)

HQS 4354-28-5-1

14 JUN 45

TO:

DATE

Reports

Forwarded herewith please find enclosed
copy of the 291 Development Section
Report No. 107

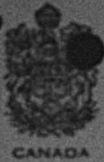


D. J. Dewar
(D. J. Dewar), Major,
for DCW & S.

DJD/MT
Enc.

41

54354 - 29 - 5 - 1



QUOTE No. D.O.L. (CWL) 1/45
CWL-8-19-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY

Chemical Warfare Laboratories

OTTAWA, CANADA.

12 Jun 45



D.C.W.A.S.,
New Army Building,
Cartier Square,
Ottawa, Ontario.

Attention: Major D.J. Dewar

Development Section Note No. 86

1. It would be appreciated if the enclosed letter D.O.L. (CWL) 1/45 dated 12 Jun 45 together with Development Section Note No. 86 could be forwarded to C.M.H.Q. for transmission to Mr. Peacock at Porton.

forwarded
54354-30-61
13/45
GG/ev

Glen Gay
(Glen Gay) Major
for Superintendent of Research.



MEMORANDUM

SECRET

TO: DSD(W)

Department of National Defence

H.Q.S. 4354-29-5-7 (DCWAS) (M-1393)
H.Q.S. 4354-29-5-1 (DCWAS)
Ottawa, 12 June, 1945.

CWL Reports

Forwarded herewith for your retention, please find
copy 29 of

CWL Development Section Note 85
CWL Quarterly Progress Summary.



DJD/100

(D. J. Dewar) Major,
for DCWAS.

39

Supt. of Research,
CW Labs

Att'n: Major G. Gay

S. 4354-29-5-1 (DCW & S)
H. S. 4354-23-3-1 (DCW & S)
4 May 45

Development Section Report No. 106
Irritancy of Impregnated Clothing

Reference your CWL-S-5-6-3, 5-6-0, 24 Apr 45:

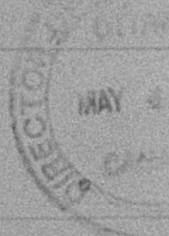
1. The recommendations of the marginally noted report have been discussed with DSD(W) and it was agreed that reports on the wearing of impregnated clothing during the period around D-day should be requested from both the United Kingdom and United States.
2. With regard to your recommendation for field trials in Canada, however, it was the feeling of both DCW & S and DSD(W) that little information of importance to Canada at this time would be obtained by such trials. It was therefore considered that this country should not initiate such trials unless the United Kingdom or the United States requested such information.

(D.J. Dewar) Major
for Director of Chemical Warfare & Smoke

DSD/MT

cc to DSD(W)

PA 4354-29-5-1
4-5-45



54354-29-5-1

QUOTE NO. CML-S-15-2-5

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA

24 Apr 45

D.C.W.&S.,
New Army Building
Cartier Square
Ottawa, Ont.

Attn: Major D.J. Dewar

We are enclosing for your information Copies
No. 1 & 2 of the following:

Development Section Report No. 105.

A Digest of Reports on Irritancy of Chemically
Impregnated Anti-Gas Permeable Clothing.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

/v
Encl. 2

for Superintendent of Research.

B. Lang
(Miss) B. Lang

90-4854-29-5-1 36
4-5-45 DM

MEMORANDUM

SECRET
CONFIDENTIAL
SECRET

DEPARTMENT OF NATIONAL DEFENCE

TO: DSD(W)

HQS 4354-29 -5-1

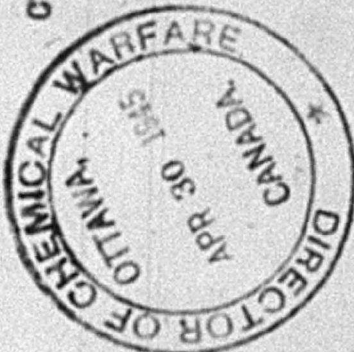
(DCW & S)
(M 1021)

DATE 30 Apr 45

Reports

Forwarded herewith please find one
copy of the following reports:-

CW Laboratories Development Section Report
No.106 (Copy No.29).



DJD/MT
Enc.

D.J. Dewar
(D.J. Dewar), Major,
for DCW & S.
100-4354-29-5-1
30-4-45

MEMORANDUM

~~SECRET~~
CONFIDENTIAL
~~NO FORN DISSEM~~

DEPARTMENT OF NATIONAL DEFENCE

TO: Chief Supt., Suffield cc. 4354-29-5-1
Supt. of Research,
CW Labs, cc.37

(DCW & S)
(M 1023)

DATE 30 Apr 45

Reports

Forwarded herewith please find one
copy of the following reports:-

CW Medical Division Report No 27,
CW Medical Division Informal Monthly
Progress Report for March 1945,



DJD/NT
Enc.

(D.J. Dewar), Major,
for DCW & S.

D.J. Dewar

34
4354-29-5-1
30-4-45

54350-29-5-1

QUOTE NO. CWL-15-2-5

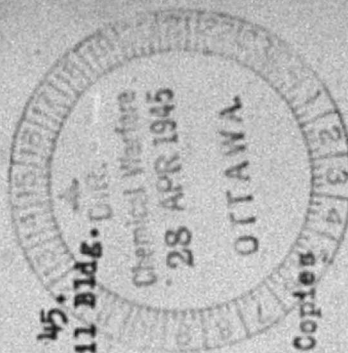
CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 28 Apr 45.
National Research Council Bldg.



D.C.W. & S.,
New Army Bldg.,
Ottawa, Ont.

We are enclosing for your information Copies
No. of the following:

Copies 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 19, 29.

Development Section Report No. 106. A digest of reports on
irritancy of chemically impregnated anti-gas
permeable clothing.

Copies 1 & 3 of:

Physiological Test Report No. 202. Patch tests of hospital
sheeting.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/MB

Encl.

for (Miss) B. Lang,
for Superintendent of Research,

D. Hillier PA-4354-29-5-1
30-4-45

33

54354-29-5-1

QUOTE NO. CWL-15-2-5

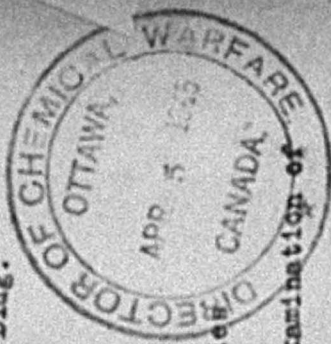
RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 4 Apr 45.
National Research Council Bldg.

D.C.W & S.,
New Army Bldg.,
Ottawa, Ont.



We are enclosing for your information Copies
of the following:

- No. Copies 1 - 3. Development Section Test Report No. 53. Examination of
Striped AV Battledress.
- " 1 - 2 . Development Section Note No. 82. Report of visit of Major Glen Gay
to Fort Preble Maine from 19 to 23 March, 1945, to observe
wearing trials with U.S.A. Protective clothing (OC2
impregnated, M1 process) under wet/cold conditions.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/MB
Encl.

B. Lang
(Miss) B. Lang,
for Superintendent of Research.

PA 1354-24-5-1
5-4-45
31

ack
BFB
5/4/45

SECRET FALSE DOCKET

FALSE DOCKET

M.F.B. 387J
40M-11-41 (2045)
H.Q. 301-1-81

H.Q.S. 4354-29-5-1

No. 1

DEPARTMENT OF NATIONAL DEFENCE - CANADA

CROSS REFERENCE

*C. H. Reports - C. H. S. Development
Section Report*

OK

CENTRAL
REGISTRY

DATE

F.A.
OR
R.F.

INITIALS

REFERRED TO

FOR REMARKS

INITIALS

DATE

(If purpose for which referred cannot be expressed on one line, add minute to file
and under leave "With Minute.")

Request C.R.C. 23/2/45

DSO(W) with H.Q.S. 4354-29-1 R.C. 8/8 26 2/45

D.M.O.P. with R.D.F. 8-83-3 3 7/45

MAR 13 1945

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with DSO(W)

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RESTRICTED

HQS 4354-29-5-1 (DOMS)
(M 547)

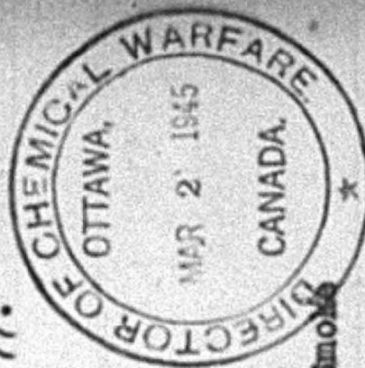
OTTAWA, Canada, 1 Mar

5.

Canadian Liaison Officer,
Edgewood Arsenal,
MARYLAND,
U.S.A.

Manufacture of DDT
Reduction in Acid Content

Attached hereto for your information and re-
tention please find copies Nos 8 to 10 inclusive of Chemical
Warfare Laboratories Development Section Note No 77.



(K.C. Siddall) Capt
for Director of Chemical Warfare & Smoke

KCS/MT
Attach

Pa. 4354-29-5-1

3-3-45

27

50354-29-5-1

NOTES NO. CML-15-205

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 22 Feb 45.
National Research Council Bldg.

D.C.N. & S.,
New Army Bldg.,
Ottawa, Ont.

We are enclosing for your information Copies
No. 32, 33, 34 of the following:

Development Section Report No. 105. Examination of Anti-Gas
Equipment Returned from Ordnance Depots and Units in Canada.

Copy 32 for D.C.A.F.
" 33 " D.C.N.
" 34 " D.C.N. & S.

May receipt of this enclosure be acknowledged.
Please, by signing and returning the lower portion of this
letter.

B. Long
(Miss) B. Long,
for Superintendent of Research

1190 BL/MB
Encl.

54354-29-5-1

NOTE NO. CM-15-3-5

SECRET

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 22 Feb 45.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.,
Ottawa, Ont.

Attn: Major D.J. Dewar

We are enclosing for your information Copies
of the following:
Copies 1,2,5,6,7,8,9,10,13,14

Development Section Report No. 105. Examination of anti-gas
equipment returned from ordnance depots and units in Canada.
Research Section Report No. 49. Carbon monoxide content of combustion
products of various compounds in an enclosed space.

Copies 1 & 3 of Physiological Test Report No. 194. Patch tests on
treated fabrics (rotproof) for irritancy and sensitization.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

B. Lang 20-1354-29-5-1
(Miss) E. Lang,
for Superintendent of Research

EL/MB

Encl.

Dis

105. Down #1

2. 105. 4 Circulate

9-10. 105. Spec. for He-20-1-1-H G 4 11/10/45

13-14. 105. 11/10/45

H.Q.S 4354-29-5-1

CWL-15-2-5

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 13 Feb 45.
National Research Council Bldg.

D.C.W. & S..
New Army Bldg..
Ottawa, Ont.

Attn: Major D.J. Dewar

We are enclosing for your information copies
of the following:

Copies 1, 2, 7, 8, 9, 10, 13, 14

Development Section Note No. 79. Experimental Impregnation of
Cotton Garments with CC-2 using the aqueous process.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

RL/MB
ENCL.

B. Lang.

(Miss) B. Lang,
for Superintendent of Research.



64354-29-5-1

QUOTE NO. CML-15-2-5

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 20 Dec 44.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.,
Cartier Square,
Ottawa.

Attn: Major D.J. Dwyer

We are enclosing for your information Copies
No. 1 & 2 of the following:

Development Section Test Report No. 50. Examination
of Double Texture Fabric N.S. Specification C.236.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

HL/MB
Encl.

for (Miss) B. Lang,
for Superintendent of Research,

for Dhillon
64354-29-5-1
1-1-45
ac

DSB(4)

CONFIDENTIAL

S. 4354-29-5-1 (DCW & S)(L.22223)

18 Nov 44.

Chemical Warfare Report

Forwarded herewith for your information
and retention please find one copy of CWL Development Section
Report No 102.

DJD/MT
Attach



(D J Dewar) Major
for DCW & S

pa. 84354-29-5-1

1-1-45

ac

SECRET

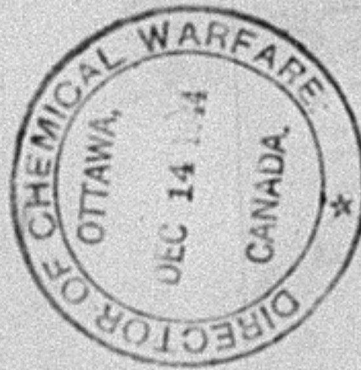
DSD(W)

S. 4354-29-5-1 (DCW & S)(L 2460)

14 Dec 44.

CW Laboratories Report

Forwarded herewith for your information and re-
tention please find one copy No 30 of Chemical Warfare Laboratories
Development Section Report No 104.



/MT
Attach

DJ
(D J Dewar) Major
for DCW & S

pa 24354-29-5-1
19-12-44 *1000*

54354-29-5-1



CANADA

NOTE NO. CWL-15-2-5

SECRET

DEPARTMENT OF NATIONAL DEFENCE

ARMY

CHEMICAL WARFARE LABORATORIES



OTTAWA, CANADA, 11 Dec 44.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.,
Cartier Square,
Ottawa.

Attn: Major D.J. Dewar

We are enclosing for your information Copies
No. ~~RECEIVED~~ of the following:

Copies 1,2,5-10,13,14,30

Development Section Report No. 104. The preparation of
T-1708 from 2 methyl-5-dimethylamino phenol.

Copies 1 & 3. Physiological Test Report No. 137. Toxicity of
Methiodide.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/MB
Encl.

B. Lang. Pa. 24354-29-5-1
(Miss) B. Lang, 19-12-44 ac
for Superintendent of Research, 17

495. 4354-29-5-1.

NOTE No. CHL-15-2-5

DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 11 Dec. 44

D.C.W. & S.,
New Army Building,
Cartier Square,
Ottawa.

Attention: Major D.J. Dewar.

We are enclosing for your information Copies

No. 1 - 2 of the following:

Development Section Note No. 74. Visit of Major Glen Gey
to Montreal on 5th and 6th december 1944 to attend a
Meeting of the Canadian Packaging Committee...

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

BL/HAT
Encl.

1029

B. Lang
(Miss) B. Lang,
for Superintendent of Research,

pa 24354-29-5-1
13-12-44 DC



Ack. 12/12/44
M.L.L.

54354-29-5-1



QUOTE NO. CWL-S-15-2-5

RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA. 30 Nov 44.

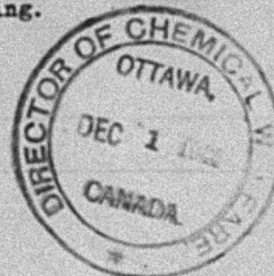
National Research Council Building.

D.C.W. & S.,
New Army Bldg.,
Cartier Square,
O t t a w a.

Attn: Major D.J. Dewar

We are forwarding (~~series~~)
the following documents:

CWL Development Section Report 103 (18.11.44) copy 33.
Flameproofed clothing.



May receipt be acknowledged, please,
by signing and returning the duplicate copy of this
letter.

HL/MB

B. Lang
(Miss) B. Lang,
for Superintendent of Research.

Nat. Def. A-148-A
1000M-3-42 (9028)
H.Q. 1772-26-376

1002

15
pa. 54354-29-5-1
4-12-44
OC

000111

15629-5-1

Supt. of Research
C.W. Laboratories

S. 4354-23-3-4 (PCMAS)

Attn: Major Glenn Gay

30 Nov 44

Flareproofed Clothing

Reference C.W.L. Development Section Report

No. 103:-

2. The a/m report has been submitted to General Staff who in turn have advised D.C.W. & S. that there has been no change in the situation insofar as any Army requirement for the m/n is concerned, i.e. there is still no requirement.

3. A copy of Report No. 103 is being forwarded to Chiefs of Staff Sub-Committee for their information and submission to the Naval Board.

(D.L. Fenton) Captain
for D.C.W. & S.

DLP/EB

14

54354-29-5-1

QUOTE NO. CML-9-15-2-5



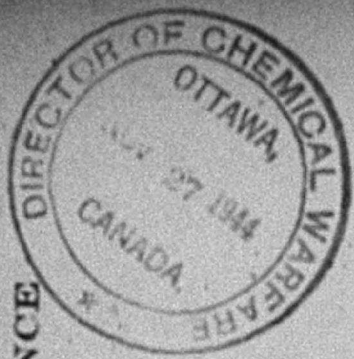
DEPARTMENT OF NATIONAL DEFENCE
ARMY
CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA.

24 November 44

D.C.W. & S.,
New Army Building
Cartier Square
Ottawa, Ont

Attn: Major D.J. Dewar



We are enclosing for your information Copies
No. 1 and 2 of the following:

Development Section Note No. 73

Visit of S/L Neil to Chemical Warfare Service,
Edgewood Arsenal, Md., to observe pilot plant manufacture
of D.D.T. 23rd Oct to 28th Oct. 1944.

ack
J.D.
25/11/44

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

1/4
Encl. 2

B. Lang (Miss) B. Lang
for Superintendent of Research,
13

B. Lang Pa 24354-29-5-1

29-11-44

MEMORANDUM

XXXXXX
CONFIDENTIAL
RESTRICTED

DEPARTMENT OF NATIONAL DEFENCE

TO: DSD(W)

HQS 4354-29-5-1

(DCW & S)
(L.2301)

DATE 24 Nov 44.

Reports

Forwarded herewith please find one
copy of the following reports:

Copy No 29 of CWL Development Section Report
No. 103.



D. J. Dewar

(D.J. Dewar), Major,
for DCW & S.

Pa. 24354-29-5-1 AC
29-11-44

DJD/AT
Enc.

54354-29-5-1

QUOTE NO. CML-15-2-5

CONFIDENTIAL

DEPARTMENT OF NATIONAL DEFENCE
ARMY

CHEMICAL WARFARE LABORATORIES

OTTAWA, CANADA, 24 Nov 44.
National Research Council Bldg.

D.C.W. & S.,
New Army Bldg.,
Cartier Square,
Ottawa.

Attn: Major D.J. Dever

We are enclosing for your information Copies
of the following:

Copies 1,2,5,6,7,8,9,10,13,14, and (29) of Development Section Rept. 103.

Development Section Report No. 103. Flameproofed Clothing:
Performance of Overalls, Combination, Proofed in Accordance
with Provisional Specification O.A. (G) 571.

Proofing Section Report No. 13. Use of X-Rays for the Study
of Gas Sorption and for the Detection of Internal Assembly
Faults in Respirator Containers.

May receipt of the enclosure be acknowledged,
please, by signing and returning the lower portion of this
letter.

EL/MB
Encl. 31

for Superintendent of Research.

(Miss) B. Lang,

29-11-44

B. Lang PA 54354-29-5-1

ac



ack. forwarded
D.J.D. 24/11/44

PA.