

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below; and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

## Licensee

1. Name **Sinclair Research Laboratories, Inc.  
Engine Laboratories**  
2. Address **400 East Sibley Boulevard  
Harvey, Illinois**  
Attn: **R. L. Pontious**  
3. License number  
**12-1733-1**  
4. Expiration date  
**January 31, 1959**  
5. Reference No.

6. Byproduct material  
(element and mass number)

7. Chemical and/or physical form  
**Service irradiation of alloying  
elements in cutting tool tip  
components**

8. Maximum amount of radioactivity  
which licensee may possess at  
any one time

**200 millicuries**

## 9. Authorized use

**To measure wear of cutting tool tips as a function of cutting oil composition and  
cutting conditions.**

## CONDITIONS

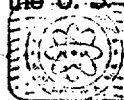
10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

11. Byproduct material is to be used by, or under the supervision of, the individual named above.

12. Except as hereinafter provided the licensee shall comply with provisions of the Atomic Energy Commission's proposed standards for protection against radiation as published in the Federal Register, July 16, 1955 (10-CFR-20), until such time as said proposed regulations or revisions thereof become effective regulations of the Commission.

*Void Superseded by  
License No. 12-14023*

For the U. S. Atomic Energy Commission



*Faul C. Hebersold*

Date **January 5, 1957**

by

**Director, Isotopes Extension  
Division of Civilian Application  
Oak Ridge, Tennessee**

*422*

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSE

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Licensee		3. License number
1. Name	<b>Sinclair Research Laboratories, Inc. Engine Laboratories</b>	<del>12-1735-1</del> <b>12-140-3</b>
2. Address	<b>400 East Sibley Boulevard Harvey, Illinois</b>	4. Expiration date
	<b>Attn: R. L. Pontious</b>	<b>January 31, 1959</b>
6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioactivity which licensee may possess at any one time
	<b>Service irradiation of alloying elements in cutting tool tip components</b>	<b>200 millicuries</b>

## 9. Authorized use

**To measure wear of cutting tool tips as a function of cutting oil composition and cutting conditions.**

## CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
11. Byproduct material is to be used by, or under the supervision of, the individual named above.
12. Except as hereinafter provided the licensee shall comply with provisions of the Atomic Energy Commission's proposed standards for protection against radiation as published in the Federal Register, July 16, 1955 (10-CFR-20), until such time as said proposed regulations or revisions thereof become effective regulations of the Commission.

*encl #1, 3/18/57, K7H*

For the U. S. Atomic Energy Commission

Date **January 5, 1957**

by \_\_\_\_\_

Director, Isotopes Extension  
Division of Civilian Application  
Oak Ridge, Tennessee

U. S. ATOMIC ENERGY COMMISSION  
BYPRODUCT MATERIAL LICENSE*Just Certified  
Filed*

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below, and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

## Licensee

1. Name **Sinclair Research Laboratories, Inc.  
Engine Laboratories**2. Address **400 East Sibley Boulevard  
Harvey, Illinois**Attn: **R.L. Pontious**

3. License number

**12-140-3**

4. Expiration date

**January 31, 1959**

5. Reference No.

6. Byproduct material  
(element and mass number)

7. Chemical and/or physical form

**Service irradiation of alloying  
elements in cutting tool tip  
components**8. Maximum amount of radioactivity  
which licensee may possess at  
any one time**200 millicuries**

9. Authorized use

**To measure wear of cutting tool tips as a function of cutting oil composition and  
cutting conditions.**

## CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

11. Byproduct material is to be used by, or under the supervision of, the individual named above.

12. Except as hereinafter provided the licensee shall comply with provisions of the Atomic Energy Commission's proposed standards for protection against radiation as published in the Federal Register, July 16, 1955 (10-CFR-20), until such time as said proposed regulations or revisions thereof become effective regulations of the Commission.

For the U. S. Atomic Energy Commission

*Supervised by  
12-140-4*  
**Paul Hebersold**Date **January 10, 1957**

by

**Director, Isotopes Extension  
Division of Civilian Application  
Oak Ridge, Tennessee**

## BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number 12-140-3

AMENDMENT NO. 1

Sinclair Research Laboratories, Inc.  
Engine Laboratories  
400 East Sibley Boulevard  
Harvey, Illinois

Attn: R. L. Pontious

In accordance with application dated March 12, 1957, License No. 12-140-3 is amended to add:

6. Byproduct material  
(element and mass number)

Iron 59 and other isotopes  
resulting from service  
irradiation

7. Chemical and/or  
physical form

Piston rings

8. Maximum amount of radio-  
activity which licensee  
may possess at any one time

200 millicuries

9. Authorized use

Wear studies.

Date March 20, 1957

For the U. S. Atomic Energy Commission

12-140-4  
Supervised by  
*Paul C. Hehrhold*

by  
Director, Isotopes Extension  
Division of Civilian Application  
Oak Ridge, Tennessee