

IN REPLY REFER TO:
IEB:NB (LIC 42-143-2)

Oak Ridge, Tennessee
April 19, 1956

Mr. Harold H. Hammen
Research and Development Department
American Oil Company (Texas)
Texas City, Texas

Subject: LICENSE NO. 42-143-2

Dear Mr. Hammen:

Enclosed is License No. 42-143-2 issued against your recent request for byproduct material.

This license supersedes License No. 42-143-1 dated March 26, 1956. License 42-143-1 is no longer valid and the copies of this license should be destroyed or, preferably, returned to this office.

Very truly yours,

for: Lester R. Rogers
Chief, Byproduct Licensing Branch
Isotopes Extension
Division of Civilian Application

Encls.:

1. Form AEC-374
2. Application forms w/instructions & regulations

OFFICE ▶	Isotopes	Isotopes				
SURNAME ▶	Bassin:bp					
DATE ▶	4-19-56	4-19-56				

U. S. ATOMIC ENERGY COMMISSION
PRODUCT MATERIAL LICENSE

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 **American Oil Company (Texas)
Research & Development Department**
2. Address **Texas City, Texas**
Attn: Harold H. Hammen

3. License number

42-143-2

4. Expiration date

March 31, 1958

5. Reference No.

42-143-1

6. Byproduct material
(element and mass number)Carbon 14
Krypton 85

7. Chemical and/or physical form

Any
Gas8. Maximum amount of radioactivity
which licensee may possess at
any one time20 millicuries
1000 millicuries

9. Authorized use

14: Laboratory tracer studies on engine deposit formation and organic chemical reactions.
Tracer in pilot plant catalytic reforming unit. 42-143-3
85: Determination of leakage of valve sealing gas into process stream of commercial
catalytic reforming unit.

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above; and the materials are to be used by, or under the supervision of, the individual named above.

1. THIS LICENSE SUPERSEDES LICENSE NO. 42-143-1 DATED MARCH 26, 1956.

2. Byproduct material not to be used in products for commercial distribution.

3. 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. Notwithstanding, section 20.24(f) of said standards, labeling shall not be required for laboratory containers such as beakers, flasks and test tubes, used transiently in laboratory procedures during presence of the user.

Amendment # 1 5-17-56 - include
Kr 85 - Actn. of gas flow and mixing in
petroleum refining units
MB

Amendment # 2 10-28-56 MB
Amendment # 3 2/13/57 RTH
Amendment # 4 1-30-58 JWS

For the U. S. Atomic Energy Commission

JMC 4/18/56

Date April 19, 1956

by

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

P./MB