

September 26, 1957
MDT-1045-57

402548

R

To: N. E. Garden
From: M. D. Thaxter

The reports below are for your information and files.

1. Record of phone call to:

C. L. Dunham
Div. Biol. & Med.
AEC, Wash. D.C.
Sterling 3-8000 (per advice of Shute and Barton)
at 1718 9/24/57

"24 hour air sample at UCRL Berkeley ending approximately 0730 Sept 24 exhibit beta-gamma emitters in excess of 6 fold background after both 1 hour and 9 hours decay. Decrease in counting rate between these determinations very little. Confirmed by sample from our Livermore lab 45 miles to the east. Based on these data we tentatively conclude unnatural radioactive pollutant. Will confirm Thursday 26th. Refer our letter NEG-266-56 dated Feb. 26, 1956 for technique."

(Above notification made in accordance with addressee's request "to wire or phone any air sampling or ground level data exceeding 5 times background." Also notified: Dan Wilkes (U.C. Public Relations Office at 1730; E. Nielsen at 1920; both 9/24/57.

2. Report of phone call at 1357 9/26/57 to:

C. L. Dunham
Div. Biol. & Med.
AEC, Wash. 25, D.C. (Sterling 3-8000)

"Confirming phone of 1718 PDT 9/24/57, Berkeley 24 hr air sample ending 0730 exhibits beta-gamma activity slightly in excess of 5 times instrument background after decay of 48 hours. Substantiated by our Livermore lab sample."

These reports were made by the writer, U.C. Radiation Laboratory, Health Chemistry Group.

MDT/cg

cc: Wade Patterson, H. Physics
Dan Wilkes, U.C. Pub. Relations
AEC-SFOO, Attn: R. W. Hughey

✓MDT

BEST COPY AVAILABLE

AIR SAMPLING FOR RADIOACTIVITY

BLDG. 70 ROOM 183A SITE Air Ditch

RATE 4 CFM Reset 1737

TIME DATE

~~300%~~ ^{0.01} ON 0738 9/23-57

2752 ^{0.01} OFF 0735 9/24-57

ALPHA COUNT
TIME DATE C/M

BACKGROUND /

SAMPLE 0822 9/24 '1737 U- 146 ²⁵
0824 9/24 '1737 F- 136 ¹⁶¹⁵
_{9/24/57}

BETA-GAMMA COUNT
TIME DATE C/M

BACKGROUND 23

SAMPLE 0830 9/24 '1737 U- 183 ¹⁵²
0835 9/24 '1737 F- 132 ¹⁷⁰
_{avg 165}
_{9/24/57}

RL-429

Lucas data
sample on Fri AM 9/20
off Tues 9/24

1st count (15') 2nd count (9 plus decay)
301 185
672 165

phone number 50
9/24

Don Hill

CL 4-3491

Wayward/11/11/57

KE 3-5957

AIR SAMPLING FOR RADIOACTIVITY

BLDG. 70 ROOM 183A SITE Air Ditch

RATE 4 CFM Reset 1737

TIME DATE
ON 0738 9-23-57
OFF 0735 9-24-57

ALPHA COUNT
TIME DATE C/M

BACKGROUND 14-1

SAMPLE 1608 9/24 '1737 U- 25

BETA-GAMMA COUNT
TIME DATE C/M

BACKGROUND AM 23

SAMPLE 1614 9/24 '1737 U- 165

RL-429

Ⓢ

U-147-144

123
291
132
2/252

F-135-137

Std-3855-3872

Ⓢ 3864

Plg-1-0-0-2-0-1

450 V. Johnson

Ⓢ
Ⓢ

U-189-177

183
4266
132
4264

F-150-114

Std-3341-3475

Ⓢ 3408

Plg-25-21-22-27-21-23

23
139
12
19
18

Ⓢ
Ⓢ

1st cut - 18

2 - - 25

3 - - 33

4 - - 23

4/99
24
25

Ⓢ
Ⓢ

1st cut - 152

2 - - 172

3 - - 170

4/49.4
165

2

U-4-2-2-4-4-7
F-4-0-3-6-3-0-3

B₀

U-147-131-133-124-129-123
F-97-73-70-90-80-92

131
61787
18
07
1502
48
22
12
14

2

U-1-4-2-1-1-1
F-1-1-1-1-0-0-0-0-2

B₀

U-113-125-107-118-117-122
F-91-71-84-82-71-89

118
61707
10
47
1488
45
09
12

AIR SAMPLING FOR RADIOACTIVITY

BLDG. 70 ROOM 183A SITE Air Intake
RATE 4 CFM H C rate 1737

TIME DATE
ON 0738 9-23-57
OFF 0733 9-24-57

ALPHA COUNT

TIME DATE C/M
BACKGROUND /
SAMPLE 0910 9/25 '1737 U- 9
0927 9/25 '1737 F- 7

BETA-GAMMA COUNT

TIME DATE C/M
BACKGROUND 24
SAMPLE 0921 9/25 '1737 U- 131
0909 9/25 '1737 F- 91

AIR SAMPLING FOR RADIOACTIVITY

BLDG. 70 ROOM 183A SITE Air Outside
 RATE 4 CFM HC set 1737

TIME DATE
 ON 0738 9-23-57
 OFF 0735 9-24-57

ALPHA COUNT

TIME DATE C/M

BACKGROUND 1

SAMPLE 0902 9/26 '1737 U- 4
0914 9/26 '1737 F- 3

BETA-GAMMA COUNT

TIME DATE C/M

BACKGROUND 24

SAMPLE 0912 9/26 '1737 U- 131
0901 9/26 '1737 F- 84

RL-429

(weirder air sample (outside):
9/20 - 24/57
~~48 hr~~ β-γ (9/26/57):
54

6α
356β-γ

1565α
563

AIR SAMPLING FOR RADIOACTIVITY

BLDG. 70 ROOM 183A SITE Air Outside
 RATE 4 CFM HC set 1737

TIME DATE
 ON 0738 - 9-23-57
 OFF 0735 9-24-57

ALPHA COUNT

TIME DATE C/M

BACKGROUND <1

SAMPLE 0921 9/27 '1737 U- 2
0932 9/27 '1737 F- 1

BETA-GAMMA COUNT

TIME DATE C/M

BACKGROUND 22

SAMPLE 0931 9/27 '1737 U- 118
0920 9/27 '1737 F- 81

RL-429

U-11-8-7-5-9-13
F-7-1-8-7-6-10

29
6153
45
17
6139
36
3

34
0

U-107-154-135-120-137-130
F-99-79-84-93-96-92

131
61783
18
18
61563
54

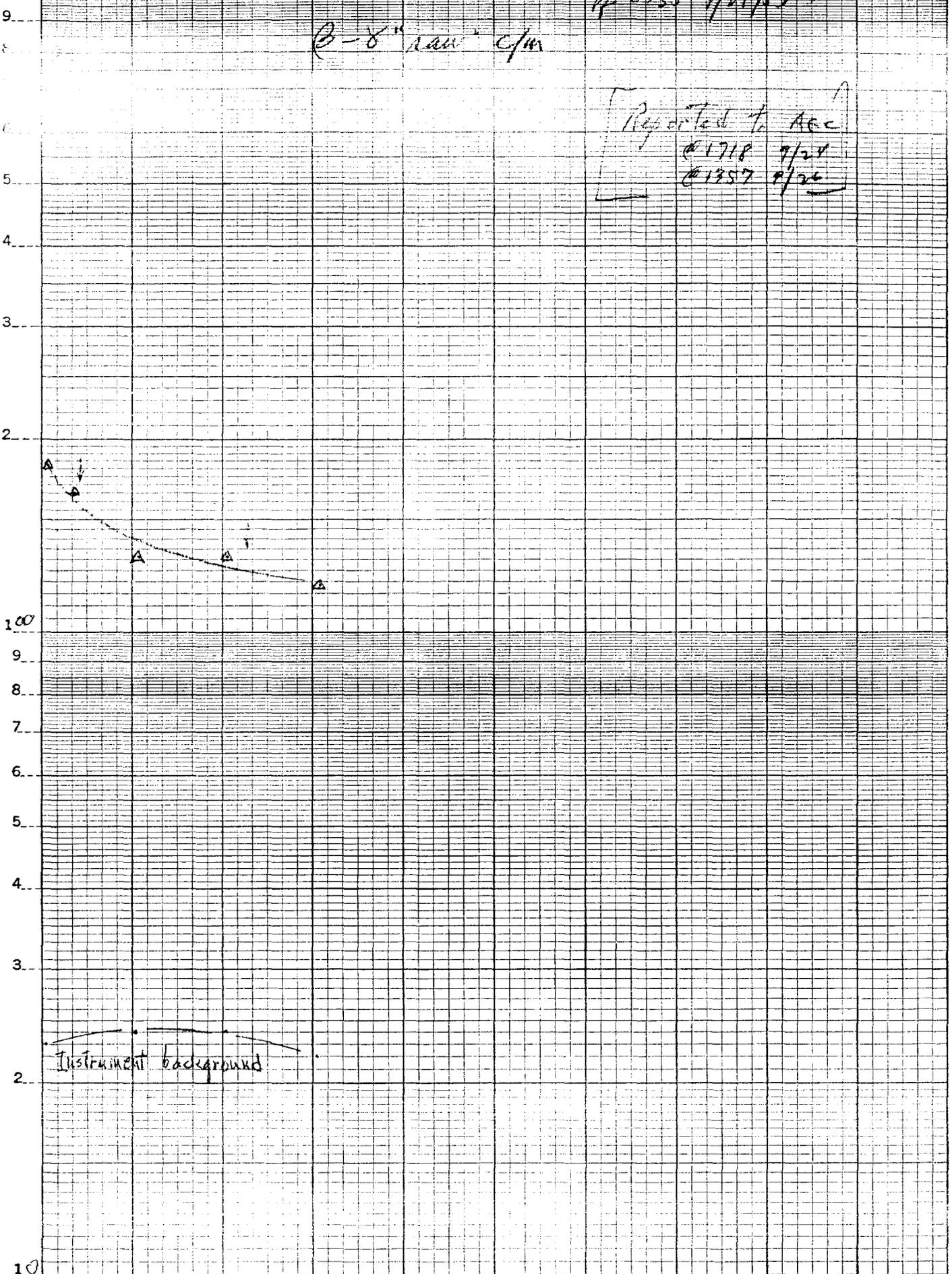
Outdoor air sample HC 1737 on 0735 9/23/57 Pan. 183A, Bldg.

10.00

9/23/57 9/24/57

8-8" rad. c/m

Reported to AEC
 @1718 9/24
 @1957 9/26



KEUFFEL & ESSER CO., N. Y. NO. 389-60
 Semi-Logarithmic, 2 Cycles X 60 divisions.
 MADE IN U. S. A.

Instrument background

9/24 9/25 9/26 9/27