

REPOSITORY PNL  
 COLLECTION I-131 Atmosphere  
 BOX No. TC Nelson  
 FOLDER N/A

712558

November 1, 1963

F. Swanberg, Jr.  
 Manager  
 Internal Dosimetry

MONTHLY REPORT - OCTOBER, 1963

1. The ~~DELETED~~ children, ~~DELETED~~ 3-1/2 and ~~DELETED~~ 8, of the Twin Bridges area were given thyroid examinations on October 19, 1963. The measurement indicated the presence of 73 pc in ~~DELETED~~ thyroid and less than 30 pc in ~~DELETED~~ thyroid.
2. The inventory reports in chronological order for analysis type within payroll number, prepared by DPO of each bioassay analysis processed by them since May 1958, were received. Distribution of these reports awaits adjustments of errata and preparation of the reports physically into usable form.
3. A letter describing the RPO personnel dosimetry data processing systems was drafted. When issued, this letter will mark the completion of the committee effort on this topic.
4. Assistance was given to EE&SO both as ~~DELETED~~ and as ~~DELETED~~ in an uptake study with I131. This uptake study was performed in the injection mode of entry on two volunteers who had previously participated in an inhalation experiment. ~~DELETED~~ served as a control in the present study.
5. A trip was made to Ringold to solicit releases for the publication of the Ringold paper in the open literature. Most of the people were not at home. An attempt will be made to contact these people by mail.
6. Development of the mobile thyroid monitor continued. To supplement the single channel analyzer started with a 256 channel analyzer was borrowed from RDC. This latter equipment permits more efficient conduct of experiments aimed at determining minimum acceptable shielding for the thyroid monitor. A single 3 x 3 NaI crystal with 5/16 inch Pb shielding located along one lobe of the thyroid with subject shielded by 2-inch lead wall about head and shoulders gave a good peak in a 10-minute count with about 0.5 nc I131 in thyroid. A lesser but usable count was obtained outside of the 2-inch lead walls. Apparatus is being prepared to examine both lobes of the thyroid with either two 3 x 3" NaI crystals or three 2 x 2" NaI crystals.

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7. A suggestion pertaining to use of pallets on casters for movement and storage of sampling equipment was evaluated. An award of \$20 was recommended.

Activities for November

1. Obtain releases from Ringold residents for open literature production of Ringold paper.
2. Continue development of mobile thyroid monitor.
3. Distribute the 1958-1963 bioassay inventory reports.
4. Issue letter describing conclusion of feasibility study on automated organ dose determination from internal emitters.

  
Senior Engineer  
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IC Nelson:bk

cc: ICN-File  
Letterbook

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