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Region V, Division of Compliance

September 10, 1962

R. F. Fish, Radiation Specialist
Region V, Division of Compliance

ORIGINAL SIGNED BY
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U. S. GEOLOGICAL SURVEY, QUALITY OF WATER BRANCH, DENVER,
COLORADO; LICENSE NUMBER 5-1399-3 - ASSIST INSPECTION

CO:V:HEB

This is my report of the inspection of the subject licensee's activities performed at the Project Charlot Site at Cape Thompson, Alaska. The activities to be inspected were authorized by Conditions 280 and 14 of license No. 5-1399-3 and the inspection was required by Region IV, Division of Compliance (memo Woolsey to Book dated August 8, 1962). During the visit to the site in Alaska Donald L. Tucker, Camp Manager for Homes and Harver, and Ray Blastervold, Mechanic, were interviewed. Neither of the two authorized users, W. A. Baatan or V. J. Janser, were present during the visit. On September 7, 1962, Richard A. Johnson, SAN Shipment Security Coordinator, was interviewed. Johnson had been present during the entire experiment.

The inspection included a visit to two of the "study plots" and the burial site. Radiation surveys were made at three locations using a GM type survey meter - Anton CD V-700 Survey Meter, Model 6, 0-50 mr/hr. No radiation above background was detected at the burial site. The survey at one of the study plots (#63ABJ-112, Annex A) indicated that one small area had radiation levels 2-4 times background at a distance of about 2 inches above the surface. The survey at the other plot (#63ABJ-116, Annex A) disclosed one small piece of mud with levels of 1.2 mr/hr (open window) and 0.2 mr/hr (closed window) at a distance of about 1 inch. This piece of mud was buried by Tucker, in my presence, so that no radiation could be detected at the ground level.

The burial site was located in the Ogotoruk valley about 3/4 of a mile from the camp site. The burial site was 200-400 yards from the Ogotoruk Creek and about 100 feet from Snow Bank Creek which flows into Ogotoruk. According to Tucker and Blastervold the method of burial consisted of covering the contaminated soil with 6 feet of mud. Blastervold used a large tractor to cover the contaminated waste soil. I noted that, if the radioactivity were located in the center and bottom of the mud pile, the activity was covered by more than 6 feet in all directions.

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A diagram showing the study plots and the burial site is included as Annex A. The diagram was provided by Johnson. Information on the "type of material used at each plot" was provided Johnson by the licensed users, Beaton and Janzer. Positions 1, 2 and 3 on Annex A represent the locations where water samples were taken. Position 3 is at the inlet for the water supply for the Chariot Site Camp. Position 4 is the location of a mud sample. The results of counting these four sample on the Alpha-Beta-Gamma Proportional Counter (Model PC-3A, Serial No. 502) showed no activity above background.

Johnson stated that with the exception of the plot in the stream all study plots had a wooden retainer around the perimeter. He further stated that all the top soil inside the wooden barriers and for a distance outside the barriers was shoveled into 55 gallon drums and transported by trailer to the burial site. According to Johnson the drums were emptied onto the ground, the drums and trailer washed, and the waste covered with about 8 feet of mud. The latter was accomplished with a tractor. Johnson said that a survey was made at each site, following removal of the soil, to assure that all the activity had been removed. He also stated that both Beaton and Janzer wore film badges.

Attachment:
Annex A

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OCT 11 1962

IN COMPLIANCE

