

1200 State Road Princeton, New Jersey 08540 Telephone (609) 924-7310

Mr. John Glen
U. S. Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, PA 19406

August 31, 1979

Dear Mr. Glen:

While engaging in mineral exploration for the United States Bureau of Mines, we lost, down hole, one californium-252 source, serial #MRC-Cf-108. The source activity at time of loss was calculated to be approximately 8.8 mCi. The loss occurred on July 31, 1979, in hole number CRC-17 belonging to Chevron Resources Company.

It is suspected, due to the slight angulation of the hole, that the source was cross threaded on the spacer which attached the source to our sonde. In the process of logging, the source broke from the spacer and fell down the hole.

Special equipment is being designed to allow our operators to visually inspect the source attachment in future operations. New procedures are also being developed to assure that an incident such as this will not occur in the future.

Presently, Joe Sena has been contracted to recover the source. He has had experience in recovery operations such as this and has successfully recovered other sources in similar situations. His address follows: Sena Geophysical Instruments, P. O. Box 355, Mead, Colorado 80542, telephone: (303) 535-4531.

Since the source was lost, the following steps were completed.

(1) Gross gamma logs were run and the source pin pointed at a depth of 666 ft; (2) the borehole was mapped with caliper and drift survey logs; (3) the borehole was visually inspected by using a borehole television camera.

Approximately 10 days from today, the recovery operation will begin. Special fishing tools will be selected by Joe Sena for the source recovery. He understands that any tool he selects has the restriction that it will not damage the source upon recovery.

cont'd...299 341

Mr. Glen, P. 2 8/31/79

George Schneider is, and has been, in charge of the source recovery operation. He is our contract officer from the Bureau of Mines. His address follows: United States Department of the Interior, Bureau of Mines, Building 20, Denver Federal Center, Denver, CO 80225 telephone: (303) 234-2088.

A complete report will follow upon completion of the source recovery.

Respectfully yours,

PRINCETON GAMMA-TECH, INC.

Joseph H. Dudek, Jr. Radiation Safety Officer

JHD: lah cc:L. Goldman