



1251 Grover Rd, St. Louis, MO 63125
(314) 221-4860
www.reliabletestinservicesndt.com

Date: May 6, 2024

To: Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission

From: Gage S. Volmert

Re: 10 CFR 34.101 30 Day Unintentional Disconnect/Misconnect Report

Jones & Lockheart Fabrications May 1st, 2024 approx. 11:00AM. Source was cranked out for the first of two exposures for the day.

Upon attempting to crank the source back to the shielded position after the exposure time has lapsed, it was noticed that there was no resistance on the crank. Immediately noticing this issue, I began to survey the area determining the source was not moving from the collimator using the triangulation method. Once this determination was made a phone call was made to a radiographer assistant, who was offsite, to pick up RTS's source retrieval/maintenance kit as well as more surveying equipment. Radiation borders were then backed up approx. 30' from their original position with two radiographer assistants standing watch.

After a safe working distance was established, I had begun to manually override the locking system on the rear plate of the camera allowing me to disconnect both the guide tube and crank. From here I was able to open the window of the front plate to allow for the source to be put back in once retrieved. A platform was then set up for the source to be slid through the guide tube and onto to then be put back into the camera. When attempting this, the guide tube moved dropping the source into the gravel. Binoculars were then used to locate the source from a safe distance. Once found I ran up to grab and return the source to the camera with an extended grabber. Surveys were then performed to ensure the source was indeed in the fully shielded position, as well as no contamination was detected.

All equipment used to perform the radiographic operations was immediately tagged, and removed from service, to be sent to QSA Global for a full examination. Any findings will result in appropriate repairs/corrective actions to prevent a repeat of the events. At the time of this writing, QSA's exam has not been completed.

In conclusion, the root cause of the described incident is inconclusive due to not having the results from the equipment involved. Once a final analysis is made, the root cause will be determined, and corrective actions determined/will be put into place.

Equipment involved in incident:

QSA Delta 880 S/N: D7274
90Ci Ir-192 QSA Model: A424-9 S/N: 92933M
QSA Crank Model: SAN882 S/N: 18147
Two QSA Guide tube extensions
Six HVL lead tear drop collimator

Safety equipment involved:

NDS ND-2000 S/N: 67204 & 98839
NDS RA-500 S/N: 108185 & 99632
Arow-TECH, Inc Pocket Dosimeter Model W138
S/N: NB 282412 & PC 309104
2nd Quarter Landauer Luxel+ Film Badge's

Gage S. Volmert

RT / MT / PT / VT Level II
RSO/Mechanical Coordinator
Reliable Testing Services, LLC
1251 Grover Rd, St. Louis, MO 63125
O: (314)-221-4860 C: (636)-208-9336
reliabletestingservicesndt.com