Allen, William

From: Michael.Conroy@dot.gov
Sent: Thursday, May 21, 2015 11:27 AM
To: Allen, William
Subject: FW: report of results for pyrophoricity testing
Attachments: Pyro test 2.doc

A couple answers for you –
Typo on test report and shipping only coated.

From: THOMAS Jay (AREVA) [mailto:jay.thomas@areva.com]
Sent: Thursday, May 21, 2015 11:25 AM
To: Conroy, Michael (PHMSA)
Subject: RE: report of results for pyrophoricity testing

As you thought… a typo. Please find attached the corrected report.

Jay

From: THOMAS Jay (AREVA) [mailto:jay.thomas@areva.com]
Sent: Thursday, May 21, 2015 11:10 AM
To: Conroy, Michael (PHMSA)
Subject: RE: report of results for pyrophoricity testing

Good morning. Argonne plans to ship only coated powder, I agree with you that this is most likely a typo. I will contact Argonne to confirm.

Jay

From: Michael.Conroy@dot.gov [mailto:Michael.Conroy@dot.gov]
Sent: Thursday, May 21, 2015 11:02 AM
To: THOMAS Jay (BE/LO)
Subject: RE: report of results for pyrophoricity testing

The test2 document you sent says:
"Client Sample ID: 91%U-nat/7% Mo **coated** with 2% ZnN microspheres batch 004-040-0868-00478"

But then says:
"A sample of **uncoated** U/Mo microspheres was tested according to the UN 33.3.1.4 test N.2 standard"

I'm confused. Is this a typo?

Test1 says uncoated in both sentences. Are you planning to ship both coated and uncoated?

From: THOMAS Jay (AREVA) [mailto:jay.thomas@areva.com]
Sent: Monday, May 18, 2015 7:31 AM

To: Conroy, Michael (PHMSA)
Subject: FW: report of results for pyrophoricity testing

Good morning,

I hope you enjoyed the weekend. In support of today's conference call, I am forwarding the results of two tests recently performed by Argonne. Uncoated and coated UMo powders (natural uranium) were tested, with both passing as non-pyrophoric. The first shipment of UMo powder will include natural uranium UMo. The second shipment (which requires the requested amendment to the TN-BGC certificate) will include UMo made up of 19.7% enriched uranium.

We are looking forward to our conversation today.

Thank you,
Jay

From: Yacout, Abdellatif M. [mailto:yacout@anl.gov]
Sent: Sunday, May 17, 2015 10:04 PM
To: THOMAS Jay (BE/LO)
Cc: Pfingston, Manjula Rani
Subject: FW: report of results for pyrophoricity testing

Jay,
Attached are the results of both coated and non-coated U-7Mo powder (NU) pyrophorocity tests. The results show no ignition in both cases.
You can forward results of both tests to DOR and NRC.
Talk to you tomorrow morning.
Best,
Latif

From: <Bennett>, "Megan E." <megan.bennett@anl.gov>
Date: Friday, May 15, 2015 at 3:54 PM
To: "Mohamed, Walid M.F" <wmohamed@anl.gov>, NE <yacout@anl.gov>
Cc: "Grandy, Christopher" <cgrandy@anl.gov>, "Woodford, John B." <woodford@anl.gov>, "Graczyk, Donald G." <graczyk@anl.gov>, "Lopykinski, Susan J." <lopykinski@anl.gov>, "Edmonson, Carolyn D." <cedmonson@anl.gov>
Subject: report of results for pyrophoricity testing

All,

Attached is the report of today's pyrophoricity test. The coated material did not ignite.

Megan

Pyro test 2.doc

Megan E. Bennett
Assistant Analytical Chemist
Analytical Chemistry Laboratory
Nuclear Engineering Division
Argonne National Laboratory
9700 S. Cass Avenue
Argonne, IL 60439

Office: (630) 252-6260
Cell: (585) 259-1756

Date Received: 05/13/2015
Date Reported:05/15/2015
Sample Material: 91% U-nat/ 7% Mo-nat/ 2%ZrN
Submitted By: Walid Mohamed

ANALYTICAL CHEMISTRY LABORATORY
Argonne National Laboratory
Argonne, IL 60439

REPORT OF ANALYTICAL RESULTS

Analysis: pyrophoricity
Reporting Units: yes/ no
Uncertainty: N/A

Analysts: Megan Bennett

NOTE: Unused sample material will be returned to the Client. When making future inquiries regarding this report, please reference the ACL sample number(s). Publication of the analytical results provided in this report should include appropriate acknowledgment for the analysts. For further information about the results reported here, please call Megan Bennett at extension 2-6260.

Client Sample ID: 91%U-nat/7% Mo coated with 2% ZnN microspheres batch 004-040-0868-00478

ACL Job No. 15-0105

RESULT: NO IGNITION

A sample of coated U/Mo microspheres was tested according to the UN 33.3.1.4 test N.2 standard. In this procedure 1-2 mL of the solid material is dropped from a meter. If after 5 minutes the solid does not ignite then the test is carried out 5 additional times. If during any of these tests the material ignites the test is over and the material declared pyrophoric. During this particular set of experiments no ignition happened; therefore the material is not pyrophoric based on the above mentioned standard.

Reference(s): ACL Logbook 2530, pp. 64.

Copies To: D. Graczyk,
W. Mohamed,
A. Yacout
ACL File