

Certified Reference Material

Certificate of Traceability

U.S. Department of Energy Radiological and Environmental Sciences Laboratory

1955 Fremont Avenue, MS 2112

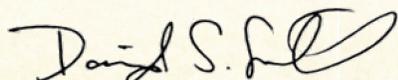
Idaho Falls, Idaho 83415

(208) 526-8031

CRM ID: MAPEP 13-XaW28

This Certified Reference Material (CRM) contains a known quantity of analyte(s) in a stable and homogeneous matrix. This material is intended for the verification of the accuracy and precision of analytical measurements. The reference value listed for each analyte is mathematically derived from a certified value traceable to a national or international standard. The traceability of the CRM is maintained through an unbroken chain of comparisons, all having stated uncertainties, calculated according to ISO and NIST Guidelines.

This CRM was prepared and the reference value(s) were verified by the Radiological and Environmental Sciences Laboratory (RESL). RESL maintains direct traceability to the United States National Institute of Standards and Technology (NIST) through successful participation in the NIST/RESL Radiological Traceability Program. RESL is accredited to ISO 17043 (2377.02) as a Performance Testing Provider, ISO 17025 (2377.01) as a Chemical Testing Laboratory, and ISO G34 (2377.03) as a Reference Material Producer by The American Association for Laboratory Accreditation.



David S. Sill
Senior Technical Manager - Chemistry



ISO/IEC GUIDE 34:2009



REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 2377.03

USDOE-RESL CRM ATTACHMENT

CRM ID: MAPEP 13-XaW28

Matrix: Water

Reference Date: 2/1/2013

Radionuclide	Reference Value*
I-129	1.64 +/- 0.03 E2 pCi/L

*Uncertainties are reported with a coverage factor of k=1.

Special Instructions for the Proper Use of the CRM

This CRM water was prepared from natural groundwater and preserved with 150 mg/L NaOH and 150 mg/L $\text{Na}_2\text{S}_2\text{O}_3 \times 5 \text{H}_2\text{O}$. The sample contains 10 mg/L of Iodide carrier. This CRM must be shaken prior to subdividing for analysis. Minimum sample size for use depends on the accuracy and precision of the analytical method used.

Storage and Handling of CRM

This CRM should be maintained in its original packaging until use. This CRM should be stored and used at normal laboratory operating temperatures. This CRM is stable under normal laboratory conditions until the date listed in the Expiration Date. If the validity of the CRM becomes questionable or technical assistance is needed please contact RESL.

Verification of Certified Reference Activity

The analyte in this CRM have been verified by high resolution gamma spectrometry against an independent source(s) which are traceable to the National Institute of Standards and Technology.

Hazards

The below link takes you to the MSDS for this material. Please select I-129 Analyte Water.
<http://www.inl.gov/resl/mapep/describe.html>

Preparation Date: 2/1/2013

Certificate Issue Date: 2/5/2014

Expiration Date: 2/1/2020

END OF CERTIFICATE