



**Department of Energy**  
 Office of Civilian Radioactive Waste Management  
 Office of Repository Development  
 1551 Hillshire Drive  
 Las Vegas, NV 89134-6321

QA: N/A  
 Project No. WM-00011

**MAY 04 2006**

**OVERNIGHT MAIL**

**ATTN: Document Control Desk**  
 Director, Division of High-Level Waste  
 Repository Safety  
 U.S. Nuclear Regulatory Commission  
 11555 Rockville Pike  
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**REQUEST FOR PETROGRAPHIC THIN SECTION SAMPLES**

Our team of scientists from Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, the University of Texas at El Paso, the University of Tennessee, and the University of Southern California, is currently studying fracture flow, seepage, and radionuclide transport at the Nopal I natural analogue site in Chihuahua, Mexico. Previous studies conducted by the U.S. Nuclear Regulatory Commission and the Center for Nuclear Waste Regulatory Analyses (CNWRA), including descriptions of the distribution and nature of uranium mineralization at Nopal I, have been helpful in our studies to date. We would like to build upon this earlier work by studying some of the samples that have been previously collected and analyzed by CNWRA. In particular, we would like to obtain the following five petrographic thin sections, which contain uranium-bearing mineral phases, for our ion probe studies:

- NOPI-ECP-32
- NOPI-ECP-1-TS1
- NOPI-ECP-1-TS5
- NOPI-ECP-30-TS3
- NOPI-271-TS9

Any descriptive information relating to these samples would also be greatly appreciated.

There are no new regulatory commitments in the body of this letter. Please direct any questions concerning this letter to April V. Gil at (702) 794-5578 or e-mail [april\\_gil@ymp.gov](mailto:april_gil@ymp.gov), or contact Eric T. Smistad at (702) 794-5073 or e-mail [eric\\_smistad@ymp.gov](mailto:eric_smistad@ymp.gov).

Mark H. Williams, Director  
 Office of License Application and Strategy

OLA&S:AVG-0892

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