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General Atomics Selective Gas Extraction Method for Mo-99 Recovery From LEU Targets

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ABSTRACT

General Atomics significantly advanced our Selective Gas Extraction (SGE) technology for Mo-99 recovery from LEU targets during our NNSA cooperative agreement project. Mo-99 recovery via SGE was shown to be rapid and efficient. The process was successfully scaled from single target pellet processing to batch sizes equivalent to 3000 six-day Curies of Mo-99. Equipment for conducting SGE in hot cells was designed, including traps for capture of fission gases released during processing. This poster will provide an update showing that SGE technology reached Technology Readiness Level 6 during the cooperative agreement project.