



1PH1 PART II - NEUTRON ACTIVATION ANALYSIS FOR MIT NSE



Authorized Experimenters: M. Ames, Licensed Operators

Part I/II Ref: 25-25-2217

Authorized Sample Acceptance: M. Ames, T Bork

Campus Authorization: NRL-C-13 (exp. 11/30/19)

Authorized: *[Signature]* 9/24/19

RRPO: N/A

Sample(s) will be shipped via FedEx: No

Comments: Contamination is expected on the rabbit. This operation will be 1PH1→NW13 manual transfer. All required operational tests must be completed prior to the transfer. Alarm set will be 10 mR/h above background. Greater than 72 hours of decay time is required. **Please record time in and out of the reactor to the second.**

Sample Materials:	10 mg Fly Ash, 207 mg of toenail in poly vial						Maximum Activity Allowed: 20 mCi per Rabbit	
Principal Nuclides:	Al-28	Si-31	Mn-56	Na-24	K-42	V-52 and Trace	TOTAL Activity:	Expected Unshielded Gamma Dose at 10 cm:
Initial Activity:	2.5 mCi	2.5 mCi	246.7 uCi	180.6 uCi	70.6 uCi	72.8 uCi	5,607.1 uCi	285.7 mR/hr
Decayed Activity:	0.0 uCi	0.0 uCi	0.0 uCi	6.5 uCi	1.3 uCi	0.9 uCi	8.6 uCi	1.3 mR/hr

Rabbit ID: 25-25-2217

Irradiation Time at ≥ 5.5 MWt	Date In	Time In	Thermal Power In	Date Out	Time Out	Thermal Power Out	Total Irradiation Time
12 hours	09/25/19	02:00:00	6.668 MW	9/25/19	13:59:33 13:58:33	5.664 MW	11h, 59 min, 33 sec

Radiation Monitor Interlock Operational: System Verified Operational (Name, Date, Time): A. Kingsbury, 10/2/19, 14:09

Decay Time Required	Alarm Set:	Time of Transfer
72.0 hours	15	14:10

Charges to:	Facility Fee:	Handling Fee:	Shipping Fee:	Special Equipment:	Rad Waste Disp. Fee:	NAA Labor Fee:	TOTAL Charges: