# Radiation Lab Summary Report

**Room:** 15 **Building:** 1300 Taft Court **Surveyor:** Torres

**Authorization:** Dr. Gary Matyas (677) **Inspection Date:** 23 Jul 08

**Department:** Membrane Biochemistry **Meter Model:** L3

**Frequency:** 30 days **Meter Serial Number:** 11872

**Radionuclides:** H-3 and Cr-51 **Calibration Date Due:** 5 Jan 09

## Survey Checks

| | Yes | No | NA |
|---|---|---|---|
| RAM Secure? | ✓ | | |
| Room Posted? | ✓ | | |
| Work Area Posted? | ✓ | | |
| Equipment Posted? | ✓ | | |
| User Surveys Performed? | | | ✓ |

Date Of Last User Survey: NA

User Inventory Log: N

Isotope / Activity Used: /

Max Daily Use: A

Lab Survey Meter:

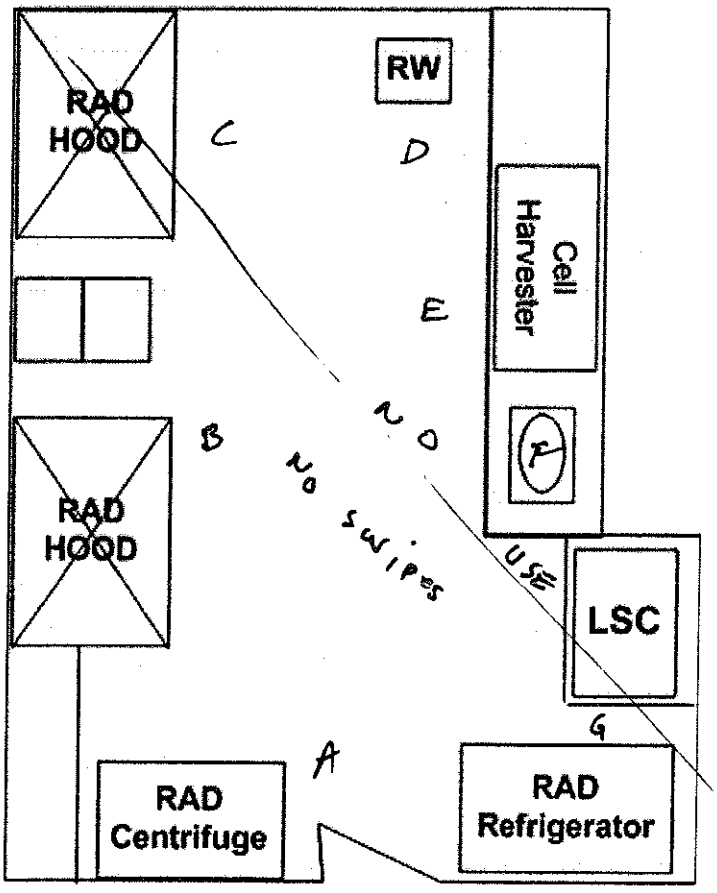
Meter Model: L3

Serial Number: 11872

Calibration Due Date: 5 Jan 09

## Meter Readings

| | | |
|---|---|---|
| BKG | 100 | cpm ~~mR/hr~~ |
| A | 40 | cpm mR/hr |
| B | 80 | cpm mR/hr |
| C | 40 | cpm mR/hr |
| D | 40 | cpm mR/hr |
| E | 40 | cpm mR/hr |
| F | 60 | cpm mR/hr |
| G | 60 | cpm ~~mR/hr~~ |




TC-15

**Laboratory Analysis**

Technician

Auto-gamma

Date

Swipe Numbers

LSC

Record any samples > 200dpm of removable contamination. If 2000 dpm, resurvey within 5 working days

| Swipe | Isotope | Efficiency | MDA (dpm) | DPM | Swipe | Isotope | Efficiency | MDA (dpm) | DPM |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

Comments

Surveyor Comments

# Radiation Lab Summary Report

**Room:** 20 **Building:** Taft Court, WRAIR

**Authorization:** 677 / Dr. Gary Matyas

**Department:** Retrovirology

**Frequency:** 7 days

**Radionuclides:** Ba-133, C-14, Cr-51, H-3, I-125, I-129, P-32 and S-35

**HPO Surveyor:** Torres

**Inspection Date:** 23 JuL 08

**Meter Model:** L3

**Meter Serial Number:** 11872

**Calibration Due Date:** 5 Jan 09

## Initial Checks

| | Yes | No | NA |
|---|---|---|---|
| RAM Secure? | ✓ | | |
| Room Posted? | ✓ | | |
| Work Area Posted? | ✓ | | |
| Equipment Posted? | ✓ | | |
| User Surveys Performed? | ✓ | | |

Date Of Last User Survey: 22 JuL 08

**User Inventory Log:** .3 mCi Cr-51

Isotope / Activity Used:

Max Daily Use: N/A

**Lab Survey Meter:**

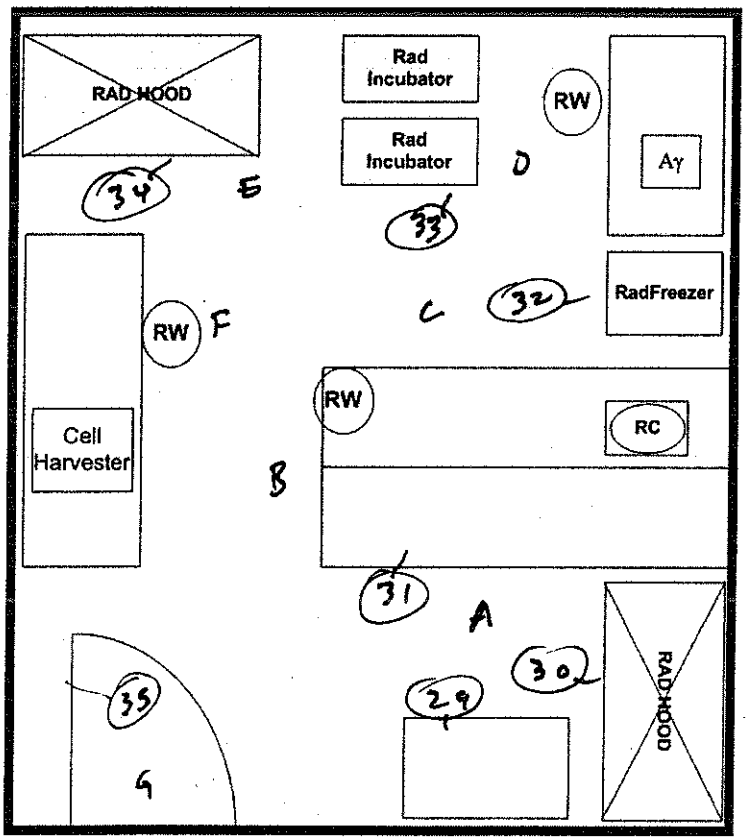
Meter Model: L3

Meter Serial Number: 11872

Calibration Due Date: 5 Jan 09

## Meter Readings

| | | |
|---|---|---|
| BKG | 100 | cpm ~~mR/hr~~ |
| A | 40 | cpm mR/hr |
| B | 40 | cpm mR/hr |
| C | 80 | cpm mR/hr |
| D | 40 | cpm mR/hr |
| E | 40 | cpm mR/hr |
| F | 40 | cpm mR/hr |
| G | 40 | cpm ~~mR/hr~~ |




T-2_20

Laboratory Analysis

Date: 23 JuL 08

Swipe Numbers: 29-35

Technician: Torres

Auto-gamma LSC: 2-8

Record any samples > 200dpm of removable contamination. If 2000 dpm, resurvey within 5 working days

| Swipe | Isotope | Efficiency | MDA (dpm) | DPM | Comments |
|---|---|---|---|---|---|
| | | | | | |

**Completed**

All swipes < 200 dpm

Surveyor Comments

Assay Definition-

Assay Description:
Routine survey, 2 minute counts

Assay Type: DPM (Dual)
Report Name: Contamination survey
Output Data Path: C:\Packard\Tricarb\Results\routine\routine surveys, 2 minute counts\20080723_1757
Raw Results Path: C:\Packard\Tricarb\Results\routine\routine surveys, 2 minute counts\20080723_1757\20080723_1757.results
Assay File Name: C:\Packard\TriCarb\Assays\routine surveys, 2 minute counts.lsa

Count Conditions-

Nuclide: 3H-14C+P32
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Sets:
Low Energy: 3H
Mid Energy: 14C
Count Time (min): 2.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: On - 1st Vial
Low CPM Threshold: Off
2 Sigma % Terminator: Off

| Regions | LL | UL | Bkg Subtract |
|---|---|---|---|
| A | 0.0 | 18.6 | 1st Vial |
| B | 18.6 | 156.0 | 1st Vial |
| C | 156.0 | 2000.0 | 1st Vial |

Count Corrections-

Static Controller: On Luminescence Correction: On
Colored Samples: On Heterogeneity Monitor: n/a
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

| Regions | Half Life | Units | Reference Date | Reference Time |
|---|---|---|---|---|
| A | | | | |
| B | | | | |
| C | | | | |

Cycle 1 Results

| S# | Count Time | CPMA | CPMB | CPMC | DPM1 | DPM2 | SIS | tSIE | MESSAGES |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00 | 4 | 7 | 4 | 0 | 0 | 45.34 | 420.71 | B |
| 2 | 2.00 | 0 | 1 | 0 | 0 | 1 | 0.00 | 425.28 | |
| 3 | 2.00 | 0 | 1 | 0 | 0 | 1 | 0.00 | 414.26 | |
| 4 | 2.00 | 0 | 0 | 0 | 0 | 0 | 0.00 | 423.93 | |
| 5 | 2.00 | 0 | 0 | 0 | 1 | 0 | 0.00 | 419.01 | |
| 6 | 2.00 | 0 | 1 | 0 | 0 | 1 | 123.59 | 409.28 | |
| 7 | 2.00 | 1 | 0 | 1 | 3 | 0 | 142.31 | 417.46 | |
| 8 | 2.00 | 0 | 0 | 1 | 0 | 0 | 0.00 | 420.16 | |
| 9 | 2.00 | 0 | 0 | 0 | 1 | 0 | 0.00 | 416.71 | |

MCHL-HP May 21, 2007

MEMORANDUM FOR: Dr. Richard Gordon, Department of Biochemistry
Radioactive Material Authorization Number 703

SUBJECT: Radiological Safety Certification for Equipment

1. The following equipment has been inspected, tested and certified by the Health Physics Office to be free of any hazards associated with removable radioactive contamination. Any previous radiological safety restrictions are hereby removed from the equipment.

| | |
|---|---|
| Equipment: | LSC Racks |
| Model No.: | N/A |
| Serial No.: | N/A |
| MMCN: | N/A |
| Location: | Building 503, Room 2N42 |

2. If you have any questions regarding this survey, you may contact the undersigned at 356-0058/0047.

VANESSA COX
Health Physicist
Health Physics Office

# Radiation Equipment Survey Report

**Room:** Break room
**Building:** 1300 Taft Court
**Authorization:**
**Department:** Common Areas
**Radionuclides:** H-3, Cr-51
**HPO Surveyor:** Torres
**Inspection Date:** 16 Jun 08
**Meter Model:** L3
**Meter Serial Number:** 11872
**Calibration Due Date:** 5 Jan 09

## Equipment Information

**Nomenclature:**
**Manufacturer:**
**Model Number:**
**Serial Number:**
**MMCN:**

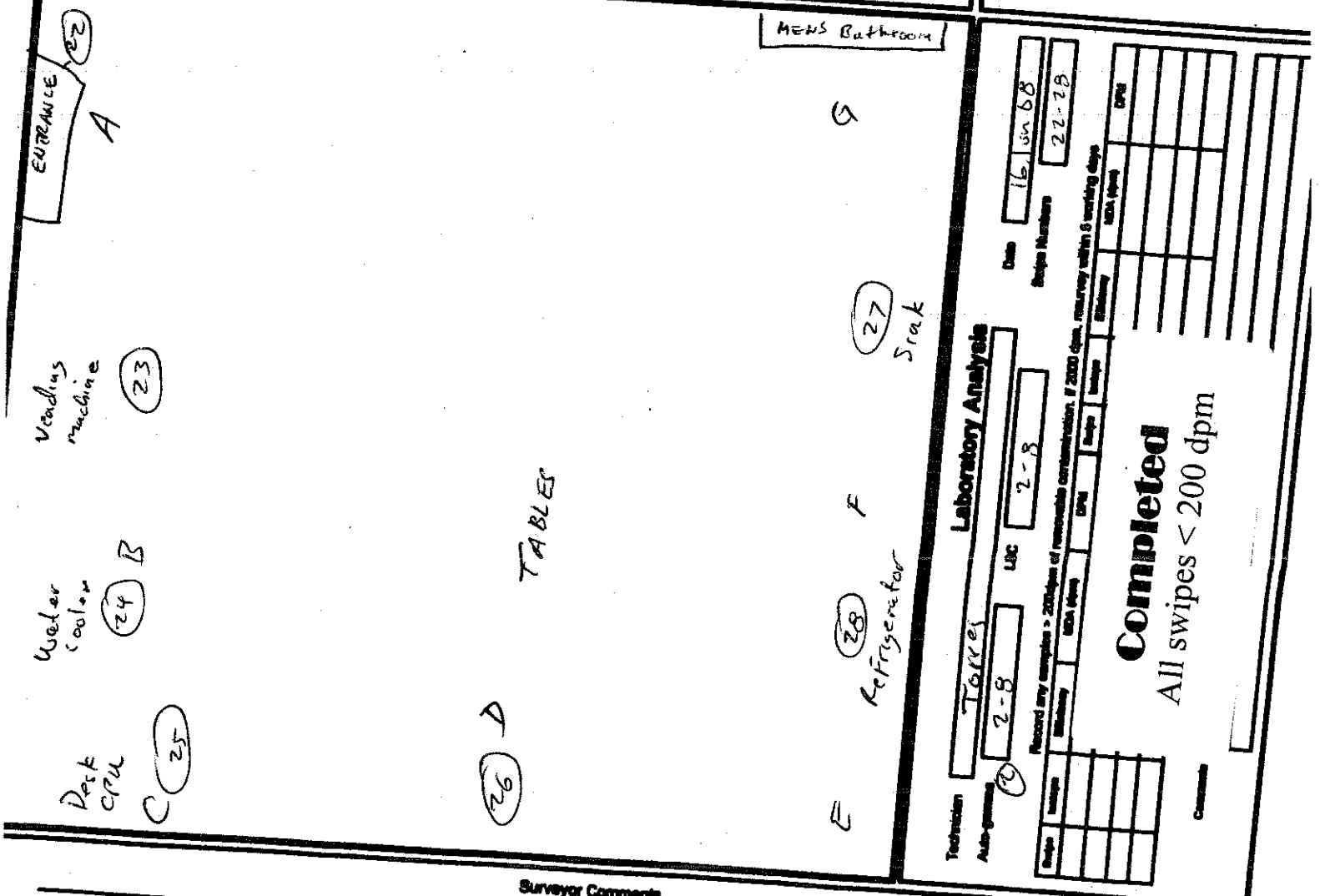
## Reason for Survey

*Mark a X for appropriate reason.*

**On/off-Site Repair:**
**Turn-in/ Transfer:**
**Administrative Hold:**
**Non RAM use only:**
**Other:** Quarterly
90 days

## Meter Readings

| | | |
|---|---|---|
| BKG | 100 | cpm mR/hr |
| A | 80 | cpm mR/hr |
| B | 80 | cpm mR/hr |
| C | 85 | cpm mR/hr |
| D | 80 | cpm mR/hr |
| E | 60 | cpm mR/hr |
| F | 80 | cpm mR/hr |
| G | 80 | cpm mR/hr |




**Surveyor Comments**

COUNTING

1480, RiaCalc WIZ, program 3.6, serial #4800540

ASSAY 16-Jun-2008 18:34:22

Protocol id 2 ROUTINE3
Time limit 120
Count limit 99999999
Dual isotopes 15-1024 + 1k-2k
Protocol date 09-Feb-2006 10:59:54
Run id. 77

| | | | | 15-1024 | | | 1k-2k | | |
|---|---|---|---|---|---|---|---|---|---|
| POS | RACK | BATCH | TIME | COUNTS | CPM | ERROR % | COUNTS | CPM | ERROR % |
| 1 | 1 | 1 | 120 | 309 | 5.2 | 89.41 | 60 | 4.1 | 102.29 |
| 2 | 1 | 2 | 120 | 265 | -7.4 | 79.43 | 46 | -2.9 | 129.93 |
| 3 | 1 | 3 | 120 | 260 | -16.6 | 64.54 | 56 | 2.1 | 195.84 |
| 4 | 1 | 4 | 120 | 272 | -7.3 | 116.30 | 51 | -0.4 | 979.16 |
| 5 | 1 | 5 | 120 | 302 | 15.8 | 131.75 | 39 | -6.4 | 54.89 |
| 6 | 1 | 6 | 120 | 261 | -20.2 | 67.07 | 62 | 5.1 | 83.56 |
| 7 | 1 | 7 | 120 | 279 | -1.7 | 213.09 | 48 | -1.9 | 201.03 |
| 8 | 1 | 8 | 120 | 313 | 11.2 | 75.81 | 54 | 1.1 | 364.63 |
| 9 | 1 | 9 | 120 | 312 | 22.9 | 78.81 | 36 | -7.9 | 43.03 |
| 10 | 1 | 10 | 120 | 295 | 4.9 | 254.00 | 50 | -0.9 | 431.64 |
| 11 | 2 | 11 | 120 | 288 | -2.0 | 4747.04 | 55 | 1.6 | 252.64 |
| 12 | 2 | 12 | 120 | 269 | -6.7 | 97.11 | 48 | -1.9 | 201.04 |
| 13 | 2 | 13 | 120 | 290 | -1.6 | 772.71 | 56 | 2.1 | 194.89 |
| 14 | 2 | 14 | 120 | 276 | -4.6 | 157.62 | 50 | -0.9 | 431.64 |
| 15 | 2 | 15 | 120 | 292 | -1.3 | 425.67 | 57 | 2.6 | 157.83 |
| 16 | 2 | 16 | 120 | 287 | 4.3 | 3051.25 | 45 | -3.4 | 109.42 |
| 17 | 2 | 17 | 120 | 296 | 1.4 | 224.04 | 56 | 2.1 | 193.95 |
| 18 | 2 | 18 | 120 | 275 | -3.7 | 144.62 | 48 | -1.9 | 199.90 |
| 19 | 2 | 19 | 120 | 292 | -3.3 | 425.68 | 60 | 4.1 | 102.29 |
| 20 | 2 | 20 | 120 | 290 | 3.1 | 779.33 | 49 | -1.4 | 275.17 |
| 21 | 3 | 21 | 120 | 283 | 3.6 | 400.43 | 43 | -4.4 | 83.01 |
| 22 | 3 | 22 | 120 | 267 | -14.5 | 87.41 | 58 | 3.1 | 133.36 |
| 23 | 3 | 23 | 120 | 283 | -3.8 | 400.45 | 54 | 1.1 | 371.57 |
| 24 | 3 | 24 | 120 | 275 | -7.1 | 144.63 | 53 | 0.6 | 663.32 |
| 25 | 3 | 25 | 120 | 278 | 1.1 | 190.63 | 43 | -4.4 | 83.01 |
| 26 | 3 | 26 | 120 | 267 | -15.8 | 87.41 | 60 | 4.1 | 102.29 |
| 27 | 3 | 27 | 120 | 262 | -10.9 | 69.86 | 49 | -1.4 | 275.15 |
| 28 | 3 | 28 | 120 | 283 | -2.4 | 400.45 | 52 | 0.1 | 4405.79 |
| 29 | 3 | 29 | 120 | 278 | -4.3 | 190.65 | 51 | -0.4 | 1005.59 |
| 30 | 3 | 30 | 120 | 258 | -8.2 | 59.99 | 42 | -4.9 | 73.66 |
| 31 | 4 | 31 | 120 | 248 | -16.6 | 44.15 | 47 | -2.4 | 157.78 |
| 32 | 4 | 32 | 120 | 294 | -0.3 | 293.32 | 57 | 2.6 | 158.44 |
| 33 | 4 | 33 | 120 | 268 | -3.2 | 92.01 | 42 | -4.9 | 73.84 |
| 34 | 4 | 34 | 120 | 275 | -11.8 | 144.62 | 60 | 4.1 | 102.29 |
| 35 | 4 | 35 | 120 | 269 | -12.8 | 97.11 | 57 | 2.6 | 157.83 |
| 36 | 4 | 36 | 120 | 275 | -5.1 | 144.87 | 50 | -0.9 | 426.59 |
| 37 | 4 | 37 | 120 | 267 | 0.3 | 87.41 | 36 | -7.9 | 43.09 |
| 38 | 4 | 38 | 120 | 266 | -8.2 | 83.24 | 48 | -1.9 | 199.91 |
| 39 | 4 | 39 | 120 | 271 | -5.1 | 109.13 | 47 | -2.4 | 157.78 |
| 40 | 4 | 40 | 120 | 256 | -19.3 | 56.02 | 57 | 2.6 | 158.45 |
| 41 | 5 | 41 | 120 | 251 | -17.8 | 47.98 | 51 | -0.4 | 979.09 |
| 42 | 5 | 42 | 120 | 282 | 0.4 | 328.54 | 47 | -2.4 | 157.78 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 43 | 5 | 43 | 120 | 305 | 9.2 | 109.48 | 51 | -0.4 | 979.21 |
| 44 | 5 | 44 | 120 | 300 | 2.0 | 152.58 | 58 | 3.1 | 133.78 |
| 45 | 5 | 45 | 120 | 292 | 5.4 | 425.72 | 47 | -2.4 | 157.78 |
| 46 | 5 | 46 | 120 | 273 | -10.8 | 124.45 | 57 | 2.6 | 157.83 |
| 47 | 5 | 47 | 120 | 285 | -1.4 | 709.63 | 52 | 0.1 | 3947.33 |
| 48 | 5 | 48 | 120 | 304 | 3.3 | 115.99 | 59 | 3.6 | 115.67 |
| 49 | 5 | 49 | 120 | 256 | -11.9 | 56.02 | 46 | -2.9 | 128.95 |
| 50 | 5 | 50 | 120 | 289 | -9.5 | 1317.60 | 67 | 7.6 | 57.94 |
| 51 | 6 | 51 | 120 | 281 | 2.0 | 278.41 | 44 | -3.9 | 94.52 |
| 52 | 6 | 52 | 120 | 306 | 15.1 | 103.67 | 43 | -4.4 | 82.80 |

END OF ASSAY

END OF COUNTING

Assay Definition-

Assay Description:
Routine survey, 2 minute counts

Assay Type: DPM (Dual)
Report Name: Contamination survey
Output Data Path: C:\Packard\Tricarb\Results\routine\routine surveys, 2 minute counts\20080617_0811
Raw Results Path: C:\Packard\Tricarb\Results\routine\routine surveys, 2 minute counts\20080617_0811\20080617_0811.results
Assay File Name: C:\Packard\TriCarb\Assays\routine surveys, 2 minute counts.lsa

Count Conditions-

Nuclide: 3H-14C+P32
Quench Indicator: tSIE/AEC
External Std Terminator (sec): 0.5 2s%
Pre-Count Delay (min): 0.00
Quench Sets:
Low Energy: 3H
Mid Energy: 14C
Count Time (min): 2.00
Count Mode: Normal
Assay Count Cycles: 1 Repeat Sample Count: 1
#Vials/Sample: 1 Calculate % Reference: Off

Background Subtract: On - 1st Vial
Low CPM Threshold: Off
2 Sigma % Terminator: Off

| Regions | LL | UL | Bkg Subtract |
|---|---|---|---|
| A | 0.0 | 18.6 | 1st Vial |
| B | 18.6 | 156.0 | 1st Vial |
| C | 156.0 | 2000.0 | 1st Vial |

Count Corrections-

Static Controller: On Luminescence Correction: On
Colored Samples: On Heterogeneity Monitor: n/a
Coincidence Time (nsec): 18 Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

| Regions | Half Life | Units | Reference Date | Reference Time |
|---|---|---|---|---|
| A | | | | |
| B | | | | |
| C | | | | |

Cycle 1 Results

| S# | Count Time | CPMA | CPMB | CPMC | DPM1 | DPM2 | SIS | tSIE | MESSAGES |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.00 | 4 | 6 | 6 | 0 | 0 | 54.12 | 409.47 | B |
| 2 | 2.00 | 0 | 2 | 0 | 0 | 2 | 169.15 | 409.06 | |
| 3 | 2.00 | 1 | 0 | 5 | 2 | 0 | 0.00 | 408.04 | |
| 4 | 2.00 | 0 | 2 | 0 | 0 | 3 | 57.74 | 407.03 | |
| 5 | 2.00 | 0 | 3 | 0 | 0 | 4 | 239.59 | 407.76 | |
| 6 | 2.00 | 0 | 0 | 1 | 0 | 0 | 0.00 | 412.13 | |
| 7 | 2.00 | 3 | 0 | 0 | 8 | 0 | 30.71 | 409.06 | |
| 8 | 2.00 | 1 | 2 | 0 | 1 | 2 | 65.27 | 409.73 | |
| 9 | 2.00 | 0 | 0 | 0 | 0 | 0 | 0.00 | 412.40 | |