

J-1

Fax

37-00148-06

03002941

To: Michelle Beardsley **From:** Larry Martino

Fax: 610-337-5383 **Pages:** 15

Phone: **Date:** 7/30/2004

Re: Reference number 135383 **CC:**

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

Dear Michelle,

Here is the closeout from Jefferson Center at DVC, between Jefferson and Drexel.

Thanks,
Larry Martino

135383

NMSS/RONI MATERIALS-002

Date 7/30/04

Surveyor Larry Martino dpm

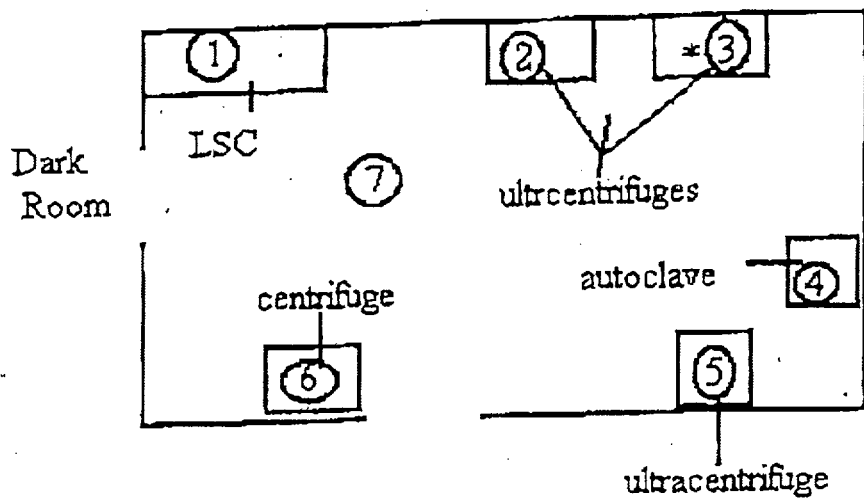
LSC - MDA = $2.57 E^{-5} \mu Ci$

Level 18 98841 cal Date 2/5/04

BKGD .03 mR/hr

Dr. Block

118 DVC



* Indicates area of isotope use

Indicates wipe test areas

wipes

1-7 <math> < 200 \text{ dpm} / 100 \text{ cm}^2 </math>

ALL AREAS monitored

<math> < 0.03 \text{ mR/hr} </math>

Date 7/30/04

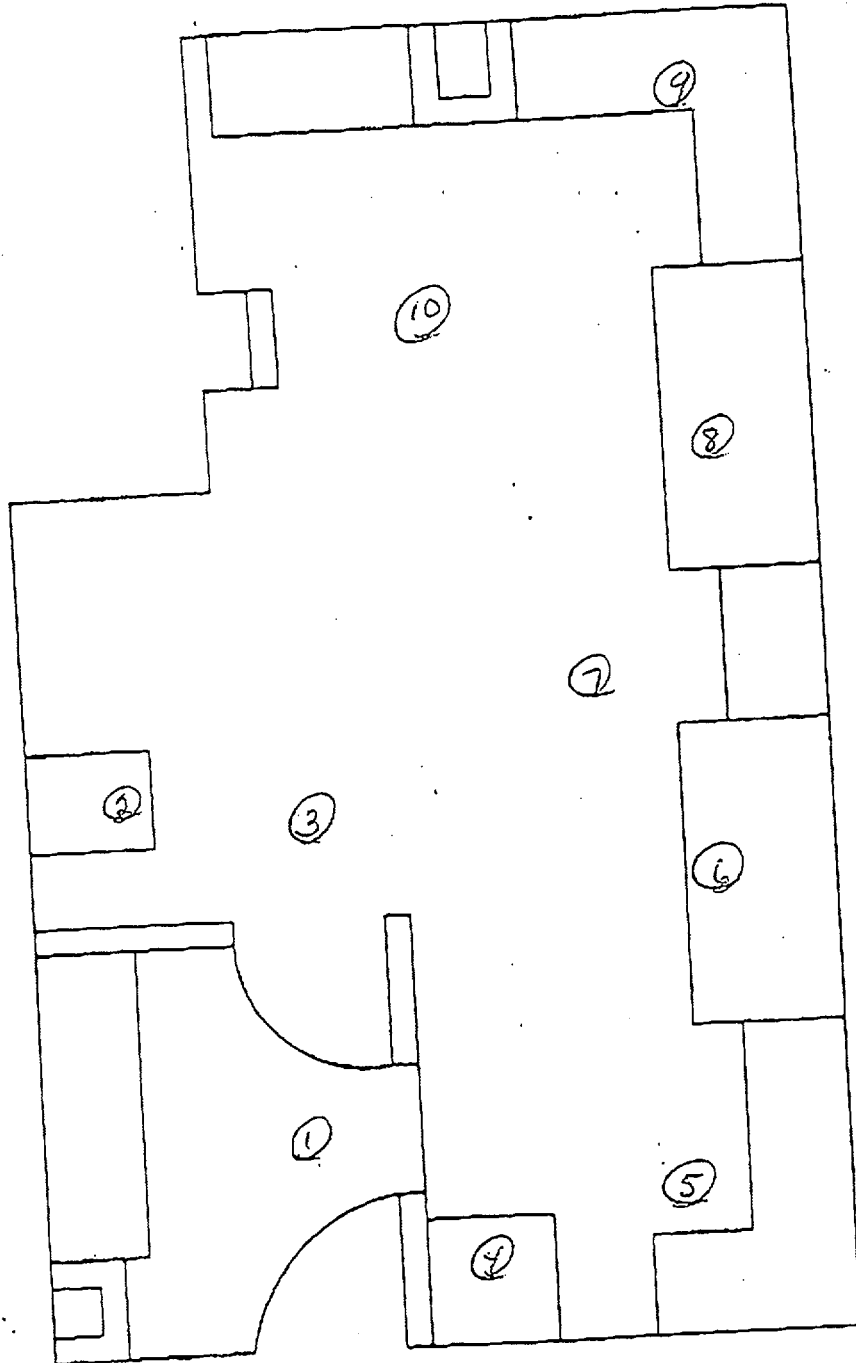
Surveyor Larry martino d/m

LSC MDA = $2.57 E^{-5} \mu\text{Ci}$

Lud 18 98841 Cal Date 2/5/04

BKGD 0.03 mR/hr

b11



ALL WIRES
 $< 200 \text{ dpm} / 100 \text{ cm}^2$
 ALL MONITORINGS
 $< 0.03 \text{ mR/hr}$

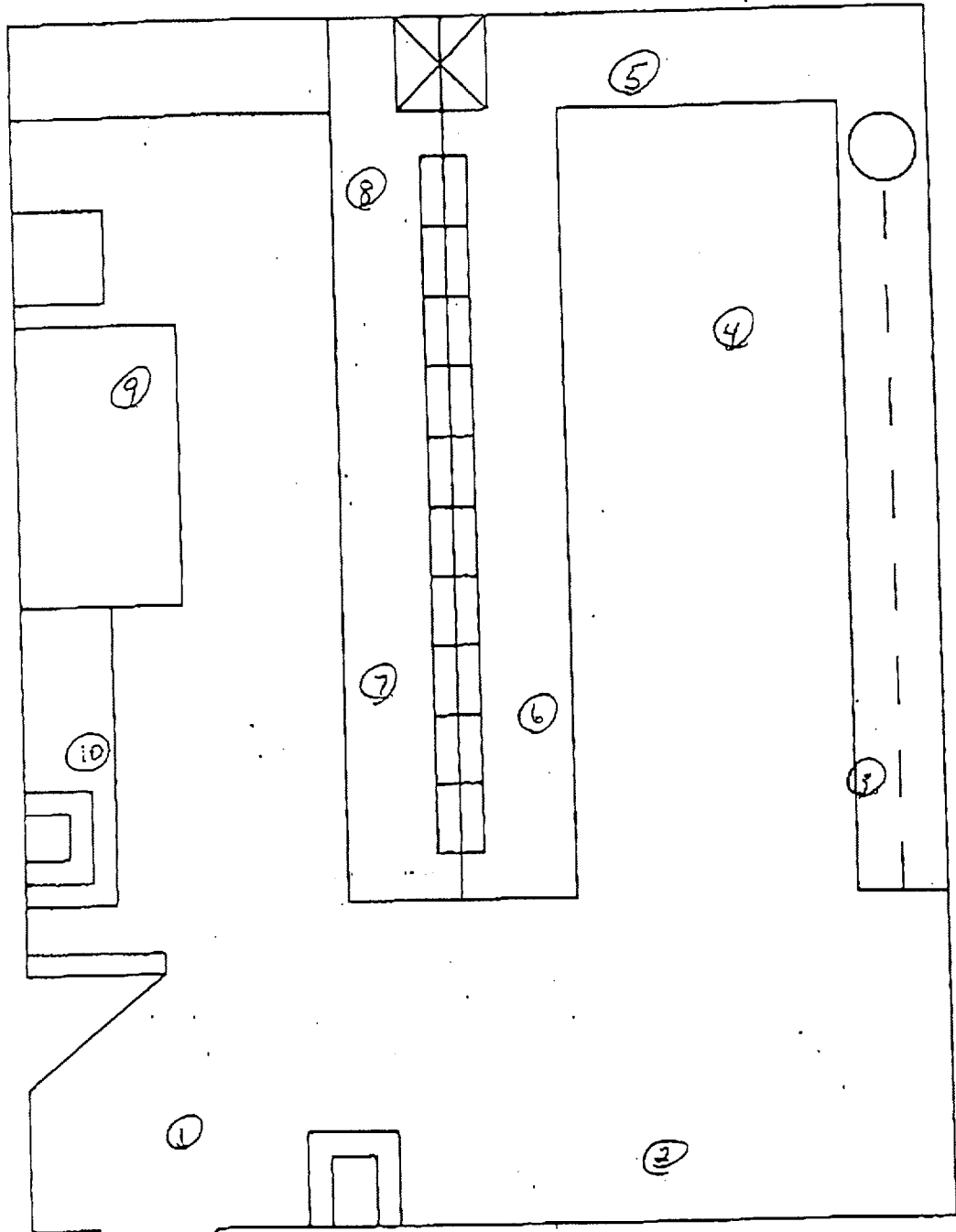
- ① Floor
- ② REF/Freezer
- ③ Floor
- ④ Incubators
- ⑤ Counter/Floor
- ⑥ Hood
- ⑦ Floor
- ⑧ Counter/PC table
- ⑨ Counter
- ⑩ Floor

see print out
wires 8-17

Date 7/30/04
Surveyor Larry Martin
LSC MDA = $2.51E^{-5}$ uCi
Lud 18 98841 cal Date 2/5/04
BKGD 0.0301 R/hr

ALL wipes
 < 200 dpm/100cm²
ALL monitoring
 < 0.03 mR/hr

121



- 1 Floor
- 2 Ref/Freezer
- 3 counter
- 4 Floor
- 5 counter/Equip
- 6 counter/Equip

- 7 counter
- 8 PC/counter
- 9 Equip
- 10 sink area

see print out
18-27

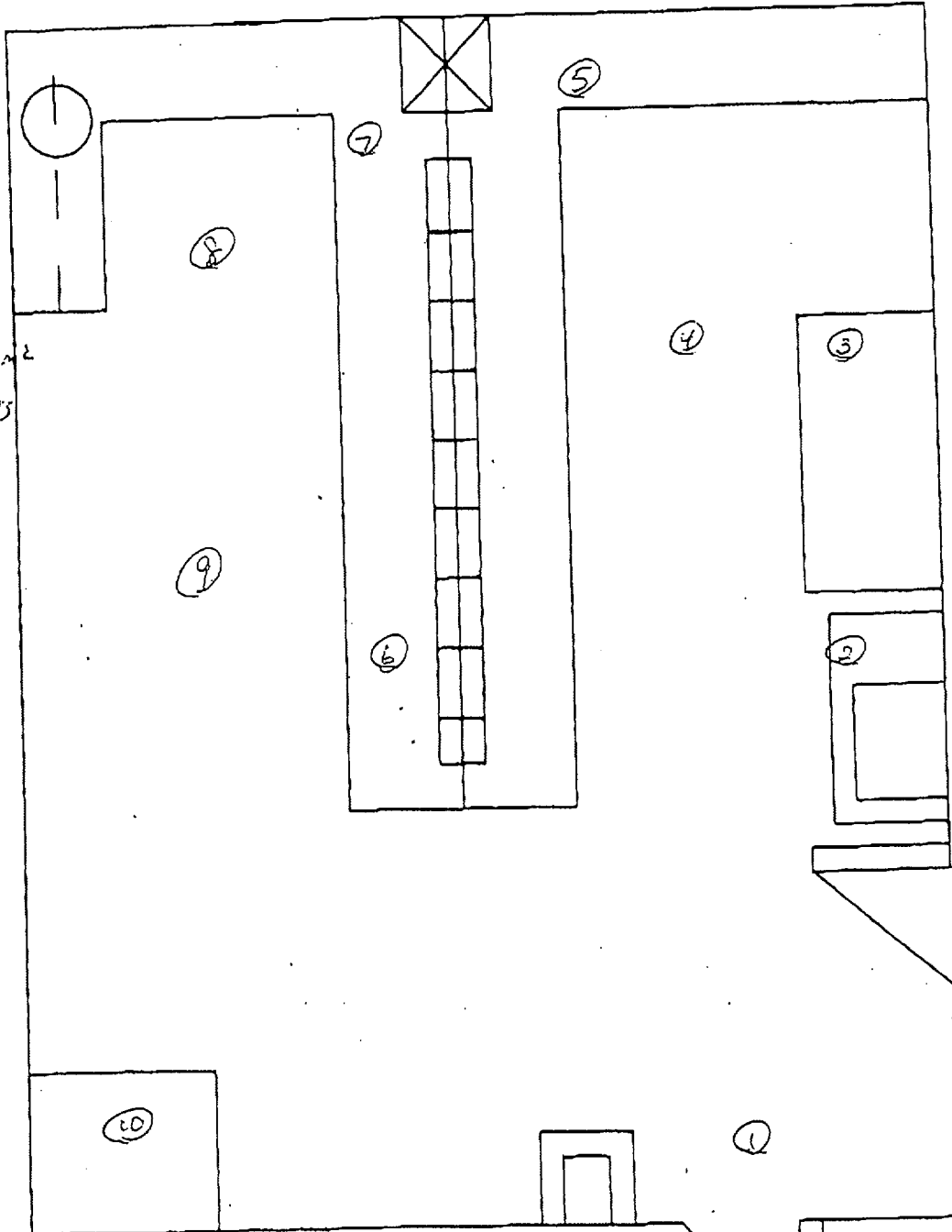
Date 7/30/04

Surveyor Larry Martino TM

LSC $MDR = 2.51E^{-5} \mu Ci$

LUD is 98541 cal date 2/5/04

3660 0.03 mR/hr



LL wipes
.200 dpm/100cm²
LL monitoring
0.03 mR/hr

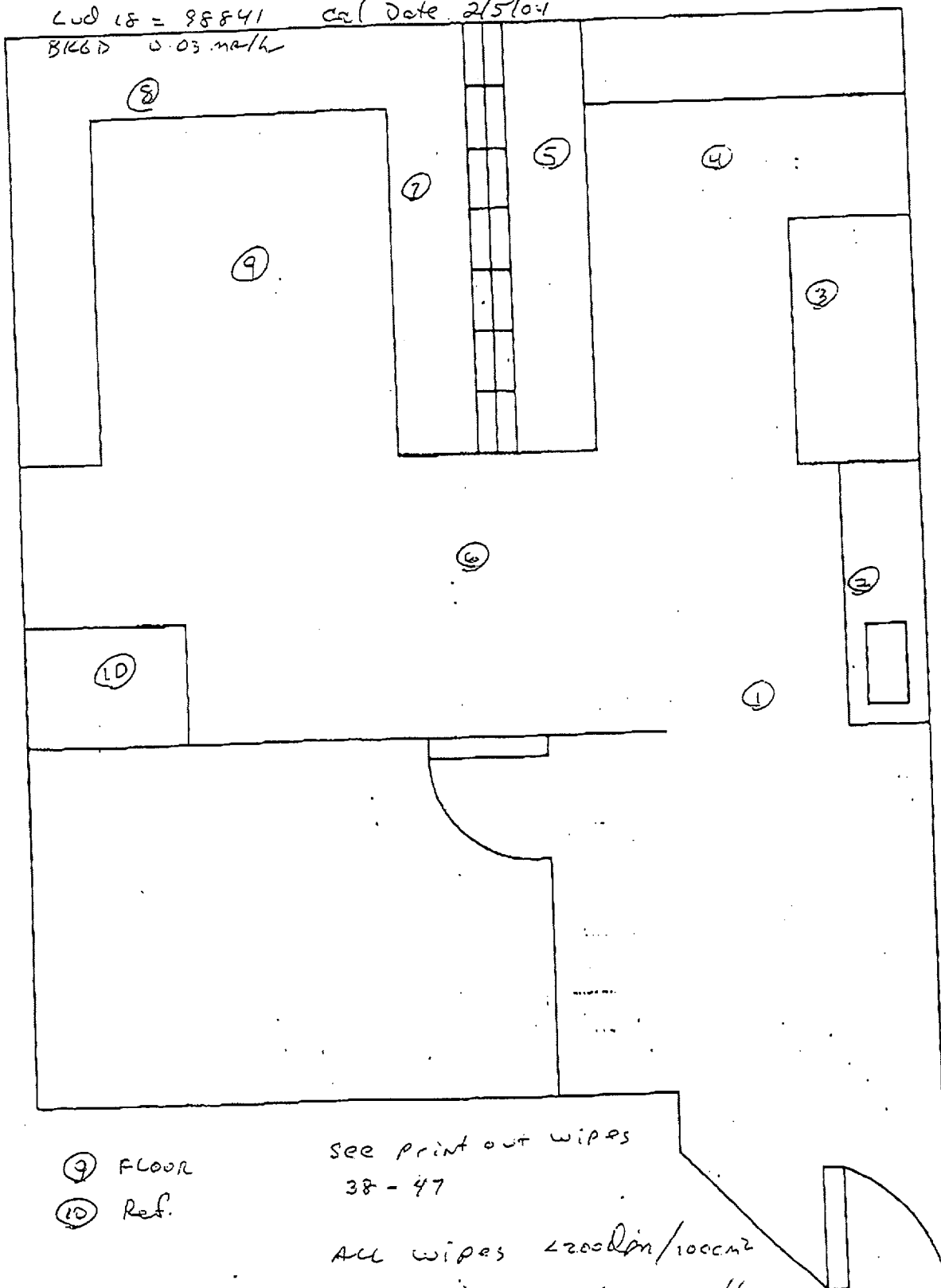
122

-) Floor
-) Sink
-) Hood
-) Floor
-) counter

- ⑥ counter/Equip
- ⑦ counter
- ⑧ Floor
- ⑨ Floor
- ⑩ Hood

See print out
wipes #8-37

Date 7/30/04
Surveyor Larry Martino Jr
LSC MDA = 2.5LE-5 ma'
LUD 18 = 98841 cal Date 2/5/04
BKGD 0.03 mcr/h



125

- 1) FLOOR
- 2) SINK
- 3) HOOD.
- 4) FLOOR
- 5) counter
- 6) FLOOR
- 7) counter
- 8) counter

- 9) FLOOR
- 10) Ref.

see print out wipes
38 - 47
ALL wipes < 200 dpm/100cm²
ALL monitorings < 0.03 mcr/h

126

126A

Date 7/30/04
Surveyor Larry Martino
LSC - MDA = $2.51E^{-5}$ mCi
Luclif 98841 cal Date 2/5/04
BKGD 0.03 mcp/hr

WIPES
0.04 dpm/100cm²
w monitoring
< 0.03 mcp/hr

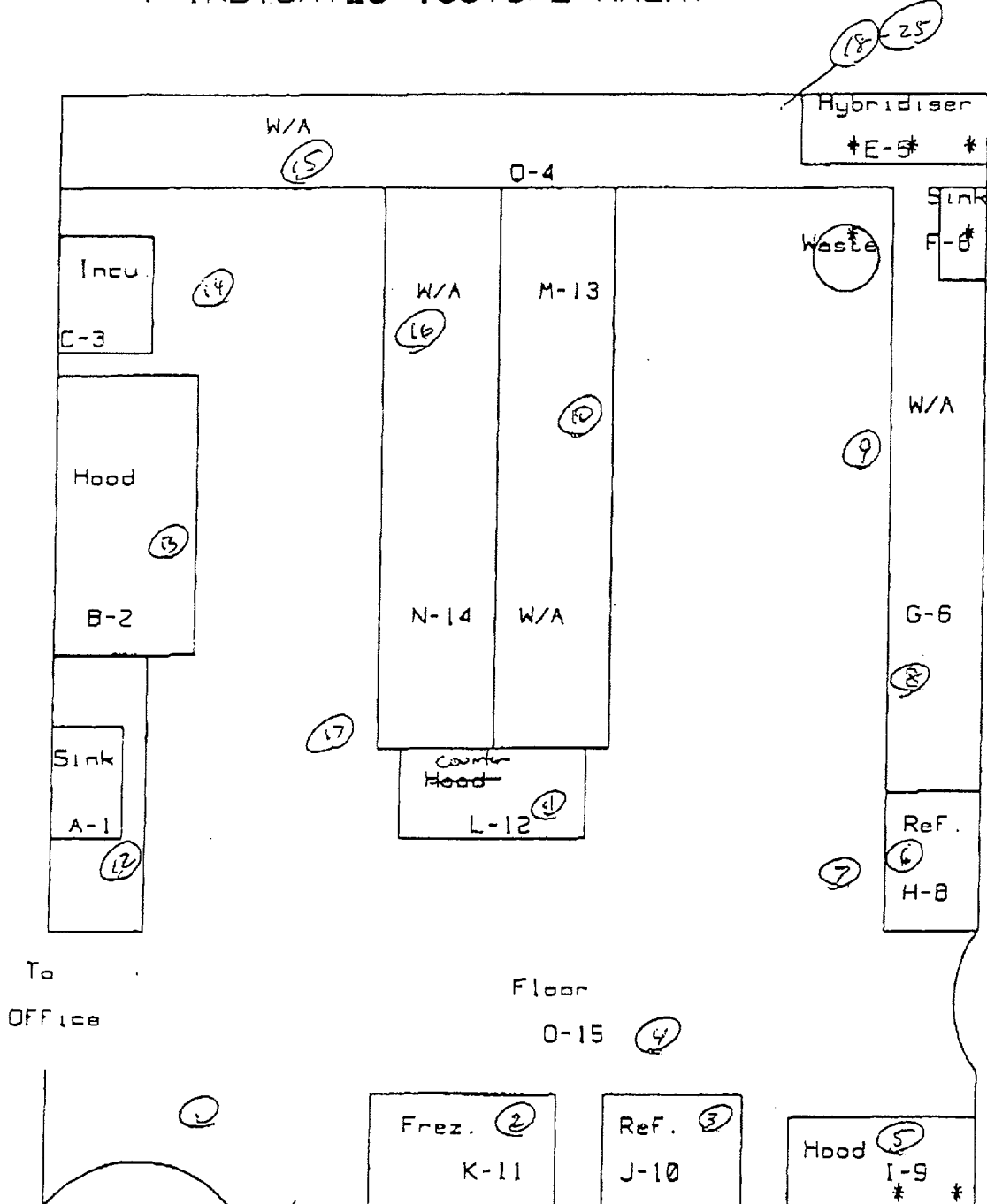
- ① Floor
- ② Sink
- ③ Ref/Freezer
- ④ Counter/Equip
- ⑤ Counter/Equip
- ⑥ Counter/Equip
- ⑦ Counter/Equip
- ⑧ Counter
- ⑨ Floor
- ⑩ Floor

See Print out WIPES
48-57

127

Date 7/30/04
 Surveyor Larry Martino Wm
 LSC MDA 2.5×10^{-5} mci
 Lid 18 98841 cal Date 2/5/04
 BKGD 0.03 mR/hr
 127 D.V.C.

() INDICATES ISOTOPE AREA



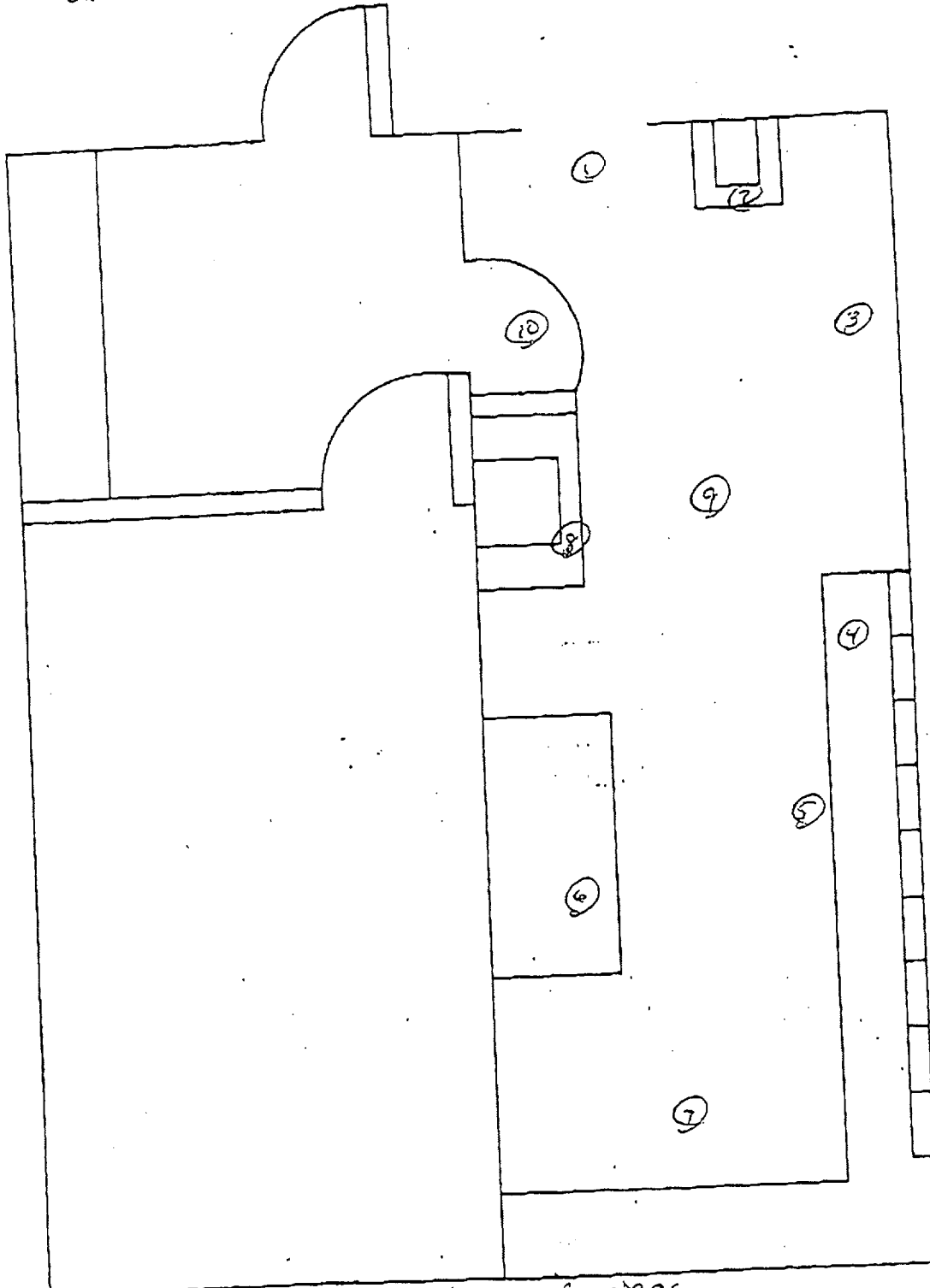
FLOOR
 Freez
 Ref
 Rad Hood
 Rad Ref
 Floor
 Counter
 Sink

- 7/30/04
 (1) Hood Counter
 (2) Sink
 (3) Hood
 (4) Floor
 (5) Counter
 (6) Counter
 (7) Floor

- (18) Shielding
 (19) Waste bins
 (20) pipettes
 (21) Sink
 (22) water bath
 (23) counter
 (24) work area

see print out of wipes
 58-82
 All wipes < 200 dpm/100cm²
 All monitoring < 0.03 mR/hr

Date 7/30/04
Surveyor Larry Martindale
LSC MDA 22.51 E-5 mi
Lud 18 98841 cal date 2/5/04
Back Ground 0.03 mcl/hr



129

127A

128

- Floor (4)
- Ref (7)
- Table (8)
- counter (9)
- FLOOR (10)

see printout of wipes
83-92
ALL wipes < 200 d.p.n./100 cm²
ALL monitorings < 0.03 mcl/hr

PROTOCOL : 4 WIPE TEST

DATE : 2004/07/30

TIME : 12:16

ID : P04AS282

Wallac 1400 DSA ver 3.0 S/N4091214

Counting mode : CPM

Isotope(s) : H3,S35,P32

H3 = 5- 350,12.43 y

S35 = 5- 750,87.40 d

P32 = 5-1010,14.30 d

Protocol name : WIPE TEST

Counting time : 60

Repeats : 1

Cycles : 1

Replicates : 1

2 sigma % : 0.01

Minimum cpm : 0.00 Checking time: 10

Output to Printer :

POS,CTIME,CPM1,CPM2,CPM3

Additions to Printer : Listing

Spectrum : Beta

Unknown samples:

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 1 | 61 | 12.3 | 21.6 | 24.7 |
| 2 | 60 | 5.2 | 15.6 | 21.9 |
| 3 | 60 | 23.0 | 31.3 | 36.6 |
| 4 | 61 | 16.4 | 25.6 | 30.8 |
| 5 | 61 | 17.4 | 24.6 | 31.8 |
| 6 | 60 | 16.7 | 25.0 | 31.3 |
| 7 | 60 | 12.5 | 18.8 | 22.8 |
| 8 | 60 | 19.8 | 35.5 | 37.5 |
| 9 | 60 | 13.5 | 20.8 | 25.0 |
| 10 | 61 | 17.4 | 25.6 | 28.7 |
| 11 | 60 | 14.6 | 27.1 | 30.2 |
| 12 | 60 | 14.6 | 28.2 | 35.5 |
| 13 | 61 | 9.2 | 19.5 | 24.6 |
| 14 | 60 | 32.3 | 42.8 | 48.0 |
| 15 | 60 | 7.3 | 19.6 | 29.2 |
| 16 | 60 | 10.4 | 21.9 | 26.1 |
| 17 | 60 | 14.6 | 21.9 | 24.0 |
| 18 | 61 | 11.3 | 21.5 | 24.6 |

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 19 | 60 | 17.7 | 25.0 | 34.4 |
| 20 | 60 | 21.9 | 30.3 | 35.5 |
| 21 | 60 | 14.6 | 27.1 | 35.5 |
| 22 | 60 | 15.6 | 30.2 | 33.3 |
| 23 | 60 | 15.6 | 21.9 | 25.0 |
| 24 | 60 | 19.8 | 23.0 | 26.1 |
| 25 | 60 | 24.0 | 36.5 | 44.9 |
| 26 | 60 | 37.6 | 52.6 | 66.8 |
| 27 | 60 | 23.0 | 39.7 | 43.6 |
| 28 | 61 | 20.5 | 32.6 | 35.8 |
| 29 | 60 | 13.6 | 26.1 | 30.2 |

| | | | | |
|----|----|------|------|------|
| 32 | 60 | 17.7 | 29.2 | 33.4 |
| 33 | 60 | 10.8 | 21.8 | 24.0 |
| 34 | 60 | 9.4 | 22.9 | 27.1 |
| 35 | 60 | 20.8 | 30.2 | 36.5 |
| 36 | 60 | 11.5 | 24.0 | 30.2 |

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 37 | 61 | 22.6 | 36.9 | 39.0 |
| 38 | 60 | 12.5 | 21.9 | 30.3 |
| 39 | 61 | 20.5 | 28.7 | 35.9 |
| 40 | 60 | 10.4 | 15.6 | 19.8 |
| 41 | 60 | 18.8 | 30.3 | 37.6 |
| 42 | 61 | 19.5 | 26.7 | 35.9 |
| 43 | 60 | 15.7 | 21.8 | 27.1 |
| 44 | 60 | 12.5 | 23.9 | 30.2 |
| 45 | 60 | 11.5 | 20.8 | 27.1 |
| 46 | 60 | 15.6 | 27.1 | 33.4 |
| 47 | 60 | 15.6 | 26.1 | 31.3 |
| 48 | 60 | 8.3 | 18.8 | 19.8 |
| 49 | 60 | 18.8 | 29.2 | 33.4 |
| 50 | 61 | 16.4 | 24.6 | 29.7 |
| 51 | 60 | 15.6 | 22.9 | 33.3 |
| 52 | 60 | 15.6 | 22.9 | 22.9 |
| 53 | 60 | 11.5 | 21.8 | 30.2 |
| 54 | 61 | 14.3 | 26.6 | 33.8 |

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 55 | 60 | 21.8 | 33.3 | 35.5 |
| 56 | 60 | 17.7 | 25.0 | 29.2 |
| 57 | 61 | 17.4 | 27.7 | 33.9 |
| 58 | 60 | 12.5 | 25.0 | 32.3 |

| | | | | |
|----|----|------|------|------|
| 61 | 60 | 10.4 | 20.8 | 21.8 |
| 62 | 60 | 42.8 | 72.0 | 73.0 |
| 63 | 60 | 34.4 | 56.4 | 57.4 |
| 64 | 60 | 15.6 | 24.0 | 30.3 |
| 65 | 60 | 14.6 | 25.0 | 30.3 |
| 66 | 60 | 16.7 | 27.1 | 30.3 |
| 67 | 60 | 19.8 | 30.3 | 35.5 |
| 68 | 61 | 7.2 | 18.4 | 26.6 |
| 69 | 60 | 18.8 | 36.6 | 43.8 |
| 70 | 60 | 15.6 | 24.0 | 31.3 |
| 71 | 60 | 13.6 | 21.3 | 28.2 |
| 72 | 60 | 21.9 | 35.5 | 41.7 |

| Pos | CTime | H5_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 73 | 61 | 15.4 | 24.6 | 32.8 |
| 74 | 60 | 11.5 | 26.1 | 31.3 |
| 75 | 60 | 23.0 | 35.5 | 38.6 |
| 76 | 60 | 10.4 | 17.7 | 24.0 |
| 77 | 60 | 6.3 | 18.8 | 19.8 |
| 78 | 61 | 10.2 | 14.3 | 18.4 |
| 79 | 60 | 13.5 | 22.9 | 26.6 |
| 80 | 60 | 10.4 | 26.1 | 32.3 |
| 81 | 60 | 18.8 | 26.1 | 33.4 |
| 82 | 60 | 14.6 | 25.0 | 28.1 |
| 83 | 60 | 13.5 | 22.9 | 27.1 |
| 84 | 60 | 14.6 | 26.0 | 32.3 |
| 85 | 60 | 16.7 | 27.1 | 37.5 |
| 86 | 60 | 16.7 | 27.1 | 34.4 |
| 87 | 60 | 16.7 | 27.1 | 31.3 |
| 88 | 61 | 14.3 | 23.6 | 27.7 |
| 89 | 60 | 18.8 | 24.0 | 27.1 |

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|--------|---------|---------|
| 91 | 60 | 15.7 | 25.0 | 29.2 |
| 92 | 60 | 14.6 | 25.0 | 27.1 |

| Pos | CTime | H3_CPM | S35_CPM | P32_CPM |
|-----|-------|----------|----------|----------|
| 109 | 60 | 121677.1 | 121835.0 | 121842.4 |
| 110 | 60 | 24580.0 | 100719.6 | 100727.0 |
| 111 | 60 | 14.6 | 27.1 | 33.3 |

Total count rate:

| | |
|-----|--------------|
| H3 | 147764.4 CPM |
| S35 | 225052.4 CPM |
| P32 | 225551.4 CPM |