

BOOK26R

Notes:

Blank pages: inside front cover sheet opposite page 1, 11, 22, 25, 27, 29, 90, 92, 94, 96, 98, 100, 108-300, inside back cover sheets.

- page 11 has sheet stapled to it that has been cut off down right side
- page 13 has sheet stapled to it
- pages 16, 19(big), 21, 22, and 31 has one sheet taped to each page.

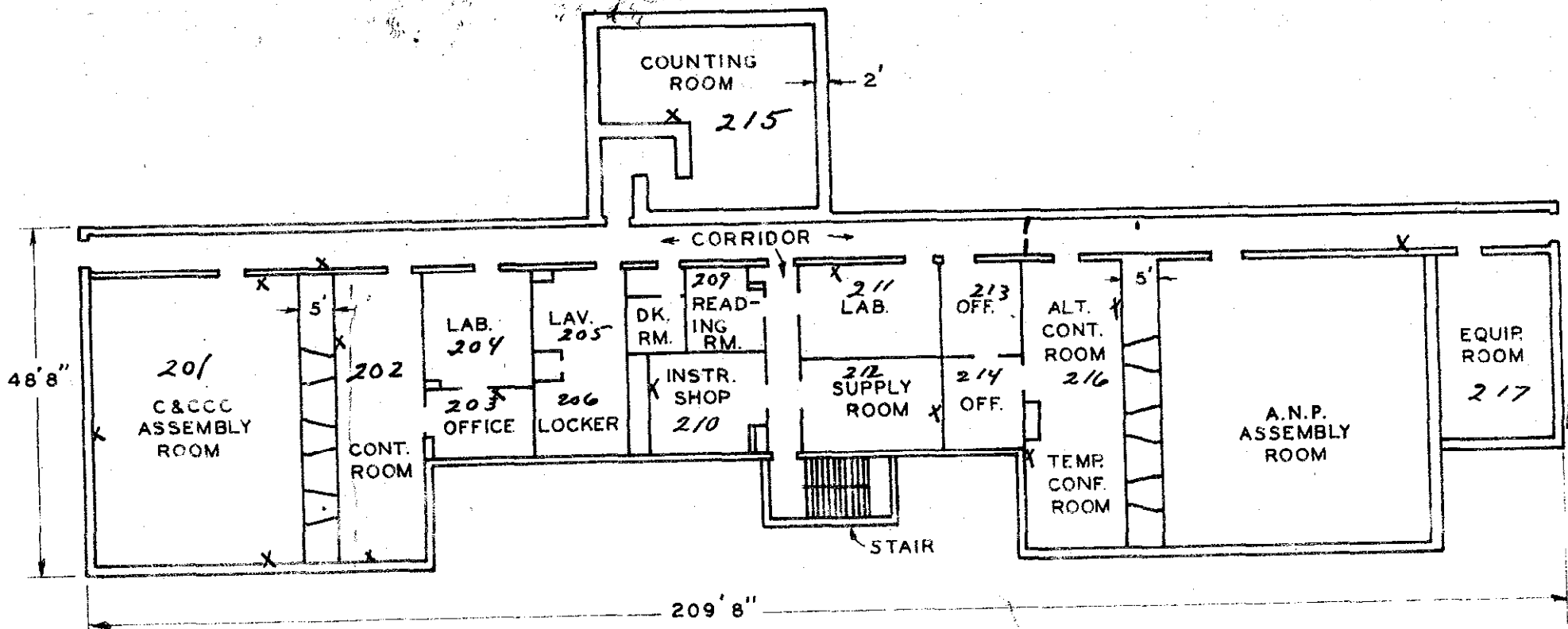
Scanned by:

Sheila Finch

RSICC /Oak Ridge National Lab.

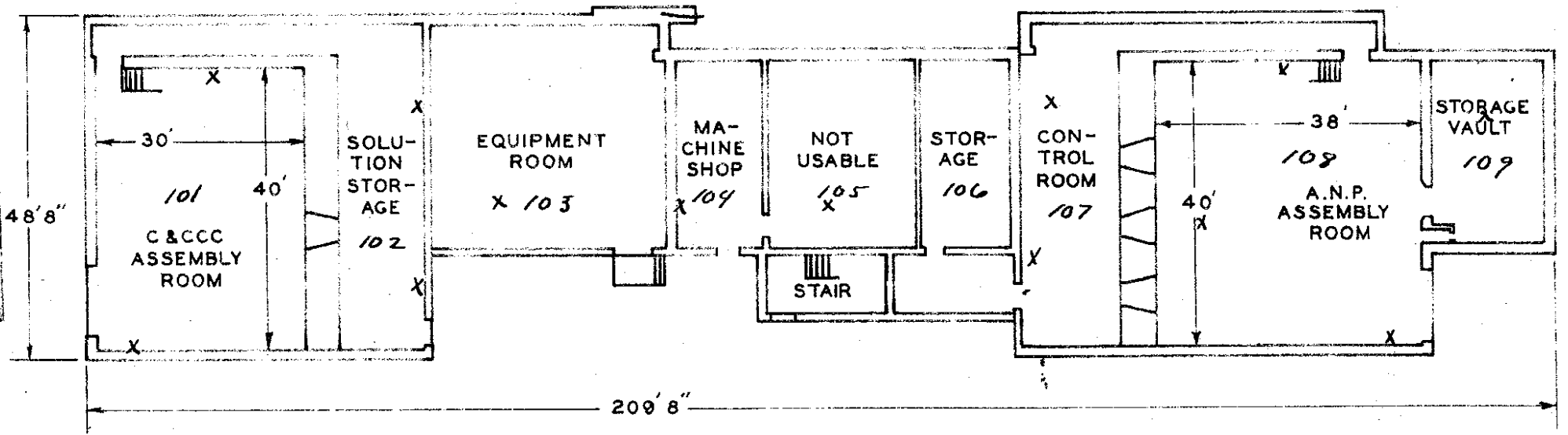
August 4, 1999

TOWER



SECOND FLOOR BUILDING 9213

X CASSETTE LOCATIONS



GROUND FLOOR BUILDING 9213

X CASSETTE LOCATIONS

[X] GUARD HOUSE

140
470
570

Feb 13, 1951

Finished K-25 shipping container Experiments
Water reflector sampled # 9200001

Experiments for K-25 include 2-4 ft cylinders
tangential in water. 15 min some substituted
for 2-C - reason - counts too low for good
response.

Feb 14 1951

Cl₂ cyl loaded & on way back to K-25
by 10:30 AM - Superstructure replaced,
re-rigged, table centered and control rod
set by 4⁰⁰ PM -

West tanks has new demineralized
water ready for slug Exp.

Feb 15, 1951

Ran 1st slug exp. Found foreign
particles in solenoid feed valves.

Feb 16, 1951 ^{1st} Rough draft of solid Cl₂ report.

Strainers installed in pump lines
to prevent occurrence of valve damage.
Intercom installation (speaker on control panel) finished

Feb 17, 1951

Experiment # 472-476 Reed installed with
renovated ion chamber - BF₃ filled.
Drain board put up in 204 -

Feed valves in line approx. OK.
Placing of speaker on control panel seems improved.

2-18-51
 2-19-51
 2-20-51

Experiments.

3-19-51 Mon

Experimental work halted while alterations made for final minimum mass det'n - plastic box to hold bottom rows of natural reflectors - central rod moved to upper position - check calculation of $\frac{1}{x}$ using unit cell method.

3-20-51

Portable elevator for fixing windows in 216 arrived at 9³⁰ AM no help personnel present. Finished plastic spacer for covers.

3-26-51

Shut down to fix water windows between 201-202 windows arrived - frames + glass taken off + sealed with new frames + rubber added.

3-27-51

Between 12⁰⁰ and 1⁰⁰ PM while Cronin + Palmer were checking operation of Reed Electrode - with and without paraffin - using the 15c (as bought) source on the source rod - and running it up and down - the source fell off. Thinking that it had just come unscrewed - Cronin into tank to replace it. On picking up the source - it was noted that the end of the source had come off and the Po powder inside was spilling out. The source was laid on the East wall of the tank and Cronin came out - An attempt to check hands with Pogy - off scale > 50,000 shoes were contaminated. Shoes were left in Pm - one midweight working in Pm at this time was asked to leave - later checking showed 1500 - 2000 counts one hand.

3-27-51

Rm 201 was secured and Cronin attempted to decontaminate. Wore wrist $> 30,000$. hand counts after 3 hrs of washing with conc HCl (to the point of skin irritation) was tolerance on all except index fingers and thumb of R hand. > 2000

Air samples taken of Rm 201 - 202
Urinalysis - Blood test on personnel -
getting tests - 6:15 PM

3-31-51 (Written after checking with rest of operating group)

Time schedule on Tues. 3-27-51

12:00 Source ^{#171} in normal operating position

12:20 Source in use - testing response of R, with and without paraffin jacket - Cronin + Rohrer. - Millwright Woods working on South Water window in Rm 201

12:25-12:30 noticed no change in level of R, when source was operated remotely. Checked instrument and no instrument trouble as checked source.

12:35:12:25 Cronin in Rm 201 - reported to Rohrer (over intercom) that source was disengaged from rod.

Cronin climbed into tank - requested Rohrer to bring a pair of tongs.

Rohrer brought tongs from lab Rm 204 + handed tongs to Cronin

Cronin picked up source in tongs noted male thread broken off.

Cronin asked Rohrer to move away from tank and after Rohrer did - placed source on east ledge of tank

12:30 As Cronin was climbing out of tank
Williams came into Rm 201 - he was warned away
from source -

Williams & Rohrer left 201 - Cronin
walked to Poppy to check hands - called for
Rohrer over intercom.

Rohrer came into Rm 201 - tried to adjust
hand counter without success - it was in a
state of continuous discharge.

At this time Rohrer went back to 202 for
a survey ^{Zueto} meter - while he was gone
The millwright ^{Woods} was asked to leave the room -
before he had left - another millwright - Whitehead -
had entered entered the room - both left
together.

12:40 Rohrer returned with the survey meter
and checked Cronin's hands - off scale Zueto
Then Cronin's shoes were checked at doorway,
and left in Rm 201.

Rohrer opened doors for Cronin on way
to Rm 204 so that contamination would not
spread. Paper on floor -

Cronin remained in Rm 204 attempting
to decontaminate Rohrer assisting - hand
washes soap faucets etc. to prevent
further spread of contamination.

12:45 Williams locked Rm 201 and put key
in pocket -

Haase ^{HP} ~~was~~ was at lunch when
returned checked Cronin & Rohrer's clothes

with portable poppy - Cronin's contaminated
& Rohrer's clean -

Contents of clothing checked
new clothes for Cronin
old contain clothes placed on paper in 204

Haase & Williams
1:00 PM entered Rm 201 approx 1⁰⁰ and
started air sampler - sampler placed
at top edge of North side of tank (in middle)

Haase & Williams did not wear Respirators
or other protective clothing while in room

Duration of stay not over 3 min -
Haase changed shoes on leaving - Williams's
shoes not contaminated.

1:05 PM Rm 201 re-locked.

Williams went to East Control Room
(experiment in progress) & notified Callahan
of spill.

Nose wipe of Cronin - off scale on survey meter -
nose wipe of millwrights and other personnel
personnel negative -

Cronin's hair - approx 20,000 c/p.m.

Rohrer and Williams checked exhaust
air louvers and made a quick survey
of roof - negative results.

2 PM Mr. Sturges arrived - he suggested
conc. ACl - acid procured from 7-12 by
Williams & Rohrer.

3 PM Callihan went into Rm 201
wore protective clothing including
a dust respirator & canvas shoe cover -

Williams outside door of 201 to hand
things as needed to Callihan -

Power in Rm 202 on inter com.

Callihan took smears and read
surface counts in Rm 201 -

Callihan's trips

1. - surveyed reactor tank outside
& windows.
2. carried air sampler to balcony
put on rubber shoe covers.
3. Air sampler back to floor level
4. Cut off ^{power} panel in Rm 201

2 PM About this time Williams turned off
power to lights & fans in Rm 201 - (10)

Millwright Woods hands were
contaminated, - 25000 D/min

Whitehead Vandepool = clean

Fry 5000/D/min

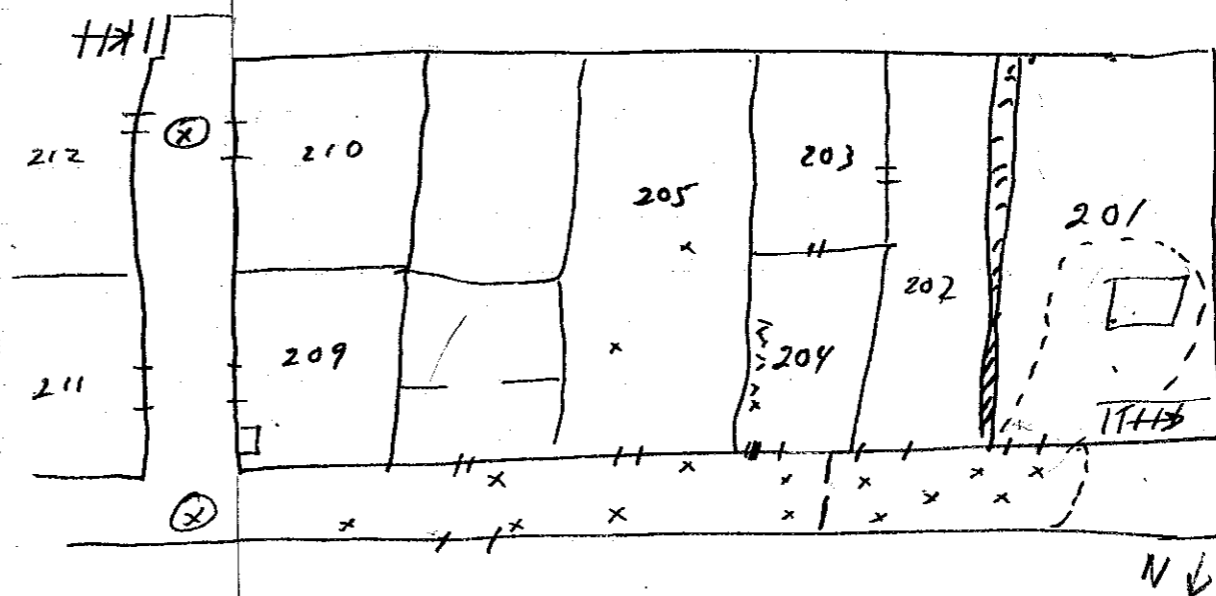
taken to Rm 204 to decont.

About 3 PM Whitehead was re-checked
and found to be contaminated

Possible millwright's contamination
from a contaminated Ee Drill in Rm 103

4⁰⁰ PM Following to dispensary
Woods - Fry - Whitehead Vandepool
Haase + Cronin - for blood sample
urine specimens

At end of day - all people involved
requested to give urine sample &
go to dispensary for blood counts



215
x spots marks contamination located today

Air Samples - Tues 3/27

Time	Location	Rate	D/M ³ /min	Remarks
1 ⁰⁰ PM	Rm 201 NE end of tanks		2383	1-4 (3 hr sample)
1 ³⁰ PM	Rm 202 near control panel		0.2	3 hr sample
	Hall in middle of Bldg		4.4 C/M	2 hr

Wednesday

3-28

Air samples

Time	Location	D/M/m ³	19. hr sample
3:27 PM to 11 AM 3-28	201 ^{NE corner}	1012	

3-28-51

Wednesday

8⁰⁰ AM

Rohrer was the first to enter the Bldg. He found that a Sylvania Survey meter which had been left sitting just outside the door of Room 204 which when turned on - showed a reading at the spot the meter was left overnight.

8³⁰

The operating group - Callihan Rohrer William Fox Haase & Cronin met in Room 210 to discuss the problem.

It was decided to leave Room 101 isolated until the remainder of the contaminated areas were cleaned.

The West lab - Room 204 was to be isolated temporarily until the hall-way and other rooms were surveyed, cleaned and re-surveyed.

9⁰⁰ AM

All survey meters were carried to Room 210 (Instrument shop) and checked for response and calibration. Also meters were checked for possible contamination.

Rohrer surveyed a portion of the locker room (Room 205) and found one spot which wiped clean.

9³⁰

Then starting at the corridor junction he surveyed the hallway (west) to the swinging gates in front of Room 202.

The contaminated areas (none over a foot square) were marked as located.

~~Wed~~ Wednesday (cont)

9³⁰ While Rohrer was surveying the corridor - Cronin and Haase were surveying past the swinging gates to the door of Rm 201.

11³⁰ Williams surveyed Rm 209 (lunch room) and found it clean.

lunch

12⁰⁰ after lunch Williams and Rohrer cleaned spots previously ~~to~~ located in the hall way.

Haase checked Rm's 215-207-208 and reported no contaminated areas.

1³⁰ Rohrer, Williams, and Cronin checked Rms 202 and 203, using the Sylvania Survey Meter and the portable Poppy.

Rm 203 was clean but scattered spots were found in Rm 202. These spots were wiped up as soon as located.

3⁰⁰ Williams and Rohrer surveyed Rm 205, finding more spots, and clearing them as located.

Note: Air sample head in Rm 201 was changed by Haase at 1⁰⁰ pm. at this time he wore complete protective clothing.

There is evidence to show that some of this contamination is spreading - either air borne or by persons carrying it.

Samples taken or started on

Starting Time	Stopped	Location	D/m/m ³	total
3-27-51				
13:00	14:40	Rm 201 NE corner of table	2383	100 "
15:10	09:30 ^{3/28}	Rm 202 by desk	0.2	1100 m
15:00	1100 ^{3/28}	Rm 201 NE corner of table	1012	

Samples taken or started on

Starting time	Stopped	Location	D/m/m ³	total
3-28-51				
10:00	14:00	Rm 204	55.6	240
11:00	10:10 ^{3/29}	Rm 201	778	1380
15:15	09:20 ^{3/29}	Main Hall	231	1085

Samples taken or started

Starting Time	Stopped	Location	D/m/m ³	total
3-29-51				
10:00	15:00	Hall in front of door to Rm 201	14.4	150
15:30	09:20 ^{3/30}	outside Rm 201 hallway	9.9	1070
10:00	15:30 (^{3/30})	sample #11 Rm 201 (not counted - not taken 201 end of Rm until 4/4)	663	1770

3-29

Thursday

- 8⁰⁰ Robert checked Rm 210 and found no contamination
- 9⁰⁰ Rm 107 was checked and no sign of contamination found.
Also a smear sample of the air-intake duct was taken in Rm 107 - no counts
- 9³⁰ Health Physics supervisors on request came over and re-checked - starting from the front entrance checking corridors only.
More spots were located which were cleaned by Williams and Fox

12³⁰ Fox started cleaning Rm 204 - all possible contaminated items were discarded (into covered G.I. can) and the stainless steel bench was thoroughly scrubbed.

The door to Rm 201 was sealed with tape by Haase - some evidence of particles sifting under the door.

Williams cleaned up spots in hallway

Note. The most effective method for cleaning was to remove the wax or grease with trichloroethylene - then if contamination persisted - remove top layer of vinylite using acetone - cyclohexanone - or file.

Samples taken or started

3-30-51

Starting time	Stopped	Location	D/M/M ³	total time
	1130	Rm 205	2.8	120
0930	1530	Rm 203	67.8	120
1330	1330	Rm 210	6.3	120
1130	1530	Hallway between Rm 210-212	4.4	120
0945	1145	Rm 204	24.0	120
1600	0930 (3/31)	Hallway near swimming fountain	6.8	1050
	0930 (3/31)	Rm 209	1.8	1050
1600		Rm 202 inlet to South Window	2.91	1050

Samples taken or started

Starting time	Stopped	Location	D/M/M ³	total time
	1600	Hallway near Rm 217	14.4	150
0930	1130	Rm 202 near control panel	281	120
1130	1330	Rm 210	111	120
1130	1600	Hallway in front of Rm 201	20.0	270
1640	10:20 (4/1)	N. end Rm 202	207	1090
1610	10:20 (4/1)	So. end Rm 202	305	1090

3-30

Friday

8-12 Fox and Williams surveyed hallway and cleared up previously located spots.

12th Wipe tests (filter paper - on air intake ducts in Rm 207-204-203 - (by Cronin) showed no activity.

No Health Physics surveyors were available at this time but were promised for Saturday.

Williams and Fox continued cleaning the hallway up to doorway of Rm 201.

Air samples were taken overnight in Rm 209 -

during the day in hall by drinking fountain - at the head of the stairs - Rm 204-202-203-210

There was still evidence of spread of contamination although degree was much less than previously.

Mr. Stimpner - Emerson - Wiedahl came over to discuss means of cleaning up Rm 201.

3-31

Saturday

The Health Physics surveyor requested came over and started another survey - more contamination was found and it was spread out - indicating either tracking or air borne - This was noted in hallway especially.

Rm 203 showed two contaminated spots not previously located -

From results of air samples - Rm 202 was sealed off and samples (two samples) were started to be taken off Sunday.

Sunday

9⁰⁰ Cronin + Asase dived to dispensary for blood specimens

9³⁰ } Dr. Callihan came into Bldg and
11³⁰ } changed filter heads on air samplers.

Samples taken or started

4-1-51

Start	Stop	Location	D/M/M ³	total Time
2205	0850 (4/2)	Rm 107	14.3	645
0855			4.8	640
1055	2145	Rm 205	3.6	635
1115 AM	2150	Rm 209	2.0	655
2145	0840 (4/2)	Rm 212		

4-2-51

1145	1620	Hall in middle of Bldg.	14	275
1130	1550	downstairs hallway	7.0	260
1630	0825 (4/3)	N end Rm 202	383	965
1620	0825	So. end Rm 202	276	965
0855	1130	Rm 104 (skip)	1.43	155
0845	1145	Rm 211	27.9	180

April 2

Monday

Survey of halls + rooms by H. P. surveyor located many small areas - 500-1000 D/M just past Rm 204 - Possibly tracking.

230

Rm 202 Sealed off - results of air samples over weekend showed 200-300 D/M³/min airborne contamination. Gratings in Rm 202 sealed off from Rm 202 - doors to 203 and Hallway also sealed off - with tape.

4/3

Tuesday

Morning + PM spent preparing to enter Rm 201 - A large vacuum cleaner ^{500 cfm/min} was used to change air + Rm 202 - air then sampled.

4¹⁵ PM Dr. Callihan entered Rm 201 from Hall door - using full ^{impermeable} rubber suit + Chemox mask and head covering + shoe covering. DVP Williams in Rm 202 with Fox - both wearing respirators for dust - Dr. C. opened 102 and led in Emerson of HP - (with similar clothes.)

The two men - covered known contaminated spots - and placed known contaminated materials in previously prepared plastic sacks.

The suits and masks were hosed off on leaving the Bldg (thru 102) and then the men stripped to the skin and left the contam. clothing there.

Men uncontaminated except for small area around the edge of the masks.

Area opposite door of Rm 201 surveyed immediately after Callihan entered - less than 300 D/min.

Hosing done 20 ft so. of Sidewalk and about 15 E of SE corner of hold tanks -

note Men wrapped in blankets after removing clothing while in Room 201 - The edge of tanks was wrapped or covered with tape - The spacing template - "picture frame" (for bottom row of slugs) approx 100 normal slugs were placed and removed from tanks. Odd items ~~all~~ also removed - boots - special tongs - odd pieces of plastic.

4-4-51

Wednesday-

Survey of Rm 201 Fox-Callihan, Williams
at 20 on scale

No.	Instrument	x1	x10
1	Neutron		
2	Juno	5000 μ m	30,000 μ m
3	Zenta	1500 μ m	15,000 μ m

Surface	Instrument No.	Scale	Scale Reading
			0
Top Slug Box	2	1	0
slugs open box (Normal)	2	1	0
ladder	2	1	0
control panel	3	1	0
small slug boxes	2	1	off scale
1st step & ladder	3	2	" "
2nd " "	3	2	0
" " "	2	2	off scale
3rd " " "	2	2	off scale
top step	3	2	off scale } spots
Insid ^w Wall tank	2	2	1/4
" " "	3	1	0
E wall	2	1	0
"	2	1	off scale
"	2	2	0
Piece of Control Rod plastic	3	2	off scale
Control Rod	3	2	3/4 scale
outside E Wall tank	2	2	0
flom tank	2	1	3/4 scale
all tank inside	2	1	0
Control Rod guide	3	2	0
th Window Frame	3	2	0
ss	3	2	0

Wednesday

Sidewalk surveyed flat surface outside Rm 102 door is contaminated - Spot check on inclined walkway is no results

Blankets used to wrap men were checked as clean this AM.

Rm 103 spot checked - no contam. found
Rm 104 " " " " "

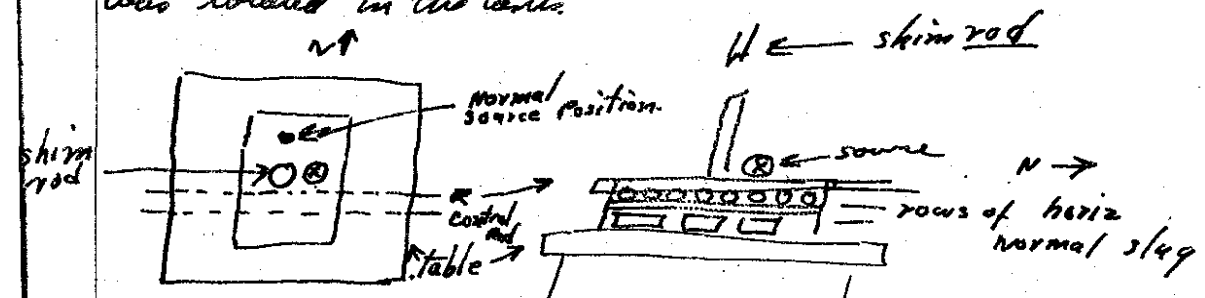
Air sample taken in Rm 209 for approx 2 hrs.

Callihan, Emerson while in Rm 201 - found the tape on edge of tanks hot. - re-taped - Found surveyed room in vicinity of tanks - appears to be scattered particles - ie - either off scale on meter or no reading.

Found several pieces of plastic not extremely hot. Removed all items from edge of tanks - Packaged Reed and DC-2 (ion chamber & pre-amplifier on platform at west well). The paraffin case around the Reed was not very hot.

From tanks removed all vertical slugs from above those lying on horizontal apps.

The smear remains - a smear of brown powder was located in the tank



The smear was about 2" long by 1/4" wide and up to 1mm deep.

4/4 (cont)

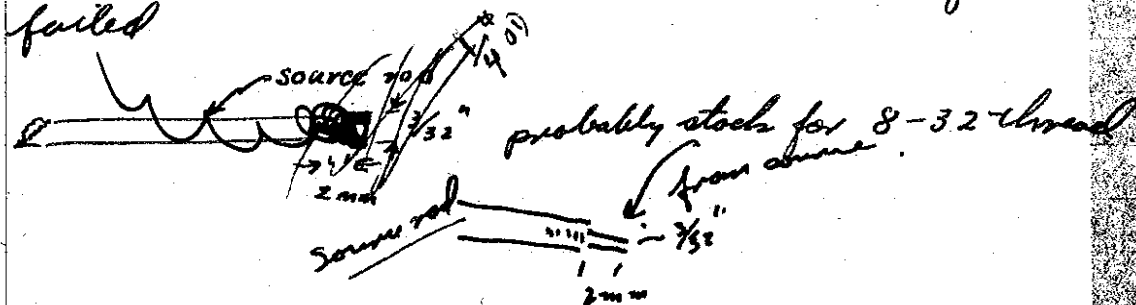
Most of the vertical slugs were somewhat hot (hot = off scale on juve) as were the horizontal ones below.

All slugs, including some enriched ones were removed from table east of frame.

About half - on the east side - of the horizontal slugs removed.

The hottest slugs were individually wrapped in paper towels.

Removed entire source rod after attempt to take out threads (all that remained of source) failed



Packaged box containing source capsule, glove and wipe (not taken 3/27/51) from ledge of tank. Placed, with template, south wall center - 102 -

This may give some flux ($n - \gamma$'s) on side wall.

Air sample filter taken on 3/29 removed -

Another sample taken during 3 hr operations 4/4 -

Another run for 1 hr after operation on 4/4 - turned off but not removed.

"Neutron" flux center of 42" table - reading off scale - on U-235 chamber.

Reading was half scale with counter on tank bottom between table and wall.

Brown paper put on E bottom of tank, E, S, & W of table

When instruments used in Run 201 ~~source~~ were checked 4-5-51 all were turned off.

4-3-51

Start	Stop	Location	D/m/m ³	total time
1745	0855 (4/4)	So. end Rm 202	224	910
1745	0855 (4/4)	N end Rm 202	601	910
1330	1745	So end Rm 202	1153	255
0830	1325	So end Rm 202	317	295
0825	1320	N End Rm 202	402	295

4-4-51

1345	1700	Rm 201	3863	195
1630	1800	Rm 203	9.2	300
1120	1620	Rm 204	4.4	300
0920	1120	Rm 209	20.0	120
0920	1120	Rm 209	7.2	120
1630	1800	Hall in front of Rm 215	15.7	90
1630	1045 (4/5)	Hall near Rm 210	3.6	
1700	1800	Rm 201	5000	

left in Rm 201
until 4-10
sampler turned off.

4-5-51

start	stop	Location	d/m/m 3
1600	0915 (4/6)	Hall 204	5.1
1300	1600	Rm 203	9.2
1445	1600	MG Room ^{outside} Bldg.	0.73
1045	1430	Rm 205	2.9
7600	0900 (4/6)	Rm 103	4.0

4-6-51

1115	1315	Rm 210	0.0
0915	1100	Rm 204	3.1
1110	1315	Downstairs Hall	0.13
1320	1530	Rm 106	5.5
1325	1525	Rm 212	2.2
0900	1105	Rm 104	0.45
1535	0935	Rm 209	0.14
1530	1000 (4/7)	Rm 107	1.9

Thursday

4-5-51

Checked Zent's + juno used yesterday and found they were turned off.

Roped off gross contaminated area S. of Bldg + inside fence.

Removed all reports and data from Rm 202 Morfill wore respirator + gloves.

Crown checked reports for contamination. Atd 7-05 notebooks only contaminated items

Blotter carpet laid in Rm 202 - and Rm 202 sealed off. Entrance to corridor.

Hallway in front of Rm 202 found clean - draft of air into room from hall.

Confusion arose over air sampling data, so venting operations in Rm 202 were suspended, pending clarification of data.

Blotter laid over Staircase steel bench in Rm 204. Crown.

Secret document + notebook transferred to Rm 214 and Rm 203 - Crown

Survey started on door knobs telephones etc. by House

Poppy moved from drinking fountain to hallway.

Fox found contaminated spots in hallway these were covered with Polylon tape by Crown

4-5-51

notebooks brought up to date using Callihan's report of activities in Rm 201 on Wednesday (Friday)

Supplies preparatory to decontamination obtained from 7-12

Outside on grass close to Rm 202 survey showed contamination - limits noted.

note → Clothes used in Rm 201 had $> 33,000$ $\frac{2}{M}$ instrument held $1\frac{1}{2}$ " away - $> 33,000$ wipe and clothes still $> 33,000$

note → When Morfitt left Rm 202 - his feet & gloves were checked and found clean to A.C. popping.

Brief investigation made of availability of fans (for exhausting air of Rm 202)
 Available fans are in - 9201-1 and 9201-2
 left hand side of entry door - see Jimmy Little or MacNamara Bldg 9739
 condition sig & voltage unknown - will need to be mounted in frame if used.

Suggested to leave Rm 202 sealed until ready to exhaust Rm 201 - then remove plywood barrier from window. instead of using external fan.

4-6-51

Friday

Wrote letter & had it typed - Cronin Morfit
 Fox & Cronin to meeting at 8-10

Health Physics moved equipment in
 for decontamination - Strauss - Widdell
 Reed & Emerson -

HP - Scurbled rubber suits inside & out

Dick Powers out possibly 'flu.

4-7-51

Saturday

Finished clearing - calibrating & re-organizing
survey instruments for use in 201
for Palver Crossin.

Health Physics summary clearing needs
and impermeable silt in yard

Cleaned up Lab. Rm 204 and put down
blotting paper.

Health Physics Group used Rm 204 to
decontaminate hands & left a mess -
papers etc.... Re-cleaned Rm 204 - Crossin

4-9-51
~~4-9~~Monday

Decision to use cloth coveralls and discard them after one use - for Rm 201.

CW. S filter (M-11) used with Army Assault masks while in Rm 101-201-102. Plastic hood over mask + covered head + neck. Gloves - boots etc were taped to coveralls so that dust particles would not sift down inside.

After working in Room - William Morfeld Calhoun - suits were slightly contaminated as was the outside of all clothing -

Thorough checks of persons after discarding the contaminated clothing - showed no evidence of personal contamination.

Control Pod tube removed + taped - must be replaced -

Air sample started in Rm 102 approx. 5⁰⁰ PM

4-7-51

31

<u>Start</u>	<u>Stop</u>	<u>Location</u>	<u>D/M/M³</u>
000	1300	Rm 103	0.0
9945	1315	Hallway near Rm 209	4.6
1300	1545	Rm 204	2.6
545	0900 (4/9)	Hall outside of Rm 201	4.3

4-9-51

1100	1615	Rm 204	3.2
1300	1735	Rm 201	6800
1100	1345	Down stairs Hall	0.0
1400	1600	Rm 106	1.4
0800	1100	Rm 206	4.9
1730	1200 (4-10)	Rm 102	150
1725	0900 (4-10)	Hall 212	2.3
1725	0900 (4-10)	Hall 217	6.4

4-10-51

1200	1440	Rm 201	4000
1445	1530	Rm 201 102	74.3
1445	1530		
1720	1530		145
0900	0800 (4-11)	Rm 202 South	710
0812	0912 (4-11)	Hall 204	1332
0900	0800 (4-11)	Rm 202 N	13.3
0812	0912 (4-11)	Rm 201	0.0
0812	0912 (4-11)	Hall 210	3.6
1315	1550	Rm 202 N	
1550	0920 (4-12)	Rm 202 N	0.7
1300	1530	Roof 201	125

4-10-

Tuesday

~~Callahan~~ Callahan - + Fox re-entered Rm 201 approx 12^{PM} and worked until 3³⁰PM - removing superstructure from tank - Plastic table removed from tank and wrapped.

The inside of the tank was surveyed - about 1/2 scale on 1st scale on Juno (α's)

A visible brown smear inside the east side wall of tank from top down about two feet.

Floor Rm 101 under east side wall hot.

Floor Rm 102 spot checks relatively clean - Outside lane of blotting paper.

3⁰⁰ / 10²
3³⁰ PM 4⁰⁰ PM

Both exhaust fans started with louvers open + door to 102 open - approx 17,000 cfm exhausting Rm 201-101-102

The supply fan + heaters were not turned on.

Door to 102 closed about 6^{PM}

Air sample taken in Rm 201 during operations -

1/2 hr sample taken just before fans turned on -

Filter was set up - but not turned on - after fans were on - sampler to be turned on from outside after fans were off.

note for items taken to 4-10 Serial Dnd see Page (41)

4-11-

Wednesday

8⁰⁰ AM

Fans turned off by Robert. air samples started in Rm 201 " " " outside Rm 210

~~Full door~~ Plywood covering on Rm 202 South Water window taken off + air allowed to channel thru it into Rm 201

12⁰⁰

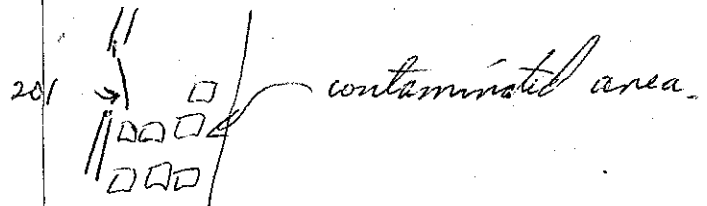
In afternoon - return air duct opened closed Rm 202 and hall door opened.

Hallway surveyed and contaminated areas marked.

Hallway declared clean down to swinging gates - floor was then scrubbed + wiped by Janitor

The exhaust fans were left running overnight to continue moving air out of Reactor + Control Rooms.

The floor in front of door to Rm 201 was still contaminated ranging from 200-5000^{cpm}



Fox in Rooms 201 + 102 is cleaning metal sink - became contaminated - waist of trousers and top of shoes where not covered by overalls.

Air samples taken overnight in Rm 202 Rm 301, and on roof of 201 near exhaust stacks.

Air Samples

	Start	End	Room	D/M/M ²
(4-11)	1550	1010 (4-12)	201	1.5
(4-12)	1010	1600	Rm 201	= 0.3
	0930	1530	Roof Rm 201	= 0.0
	1330	1650	Rm 202 Center	1.2
	0920	1330	Rm 202 North	1.5
4-12			Rm 201	0.27
			" 202	0.39

April 12 Thursday

Gronin cleaned up contaminated spots in hallway & laboratory (Rm 204) to a surface count less than 100 d/m as checked with the mobile poppy.

Janitor wiped hallway and 1/2 of Rm 204 (furniture moved to other half of room). Plan is to put down at least two coats of wax before using hallway.

Gas outlets in Rm 204 delivered about 1 liter of water and no gas.

All contaminated paper etc... removed from Rm 204 & placed in appropriate containers.

Fox and Williams worked in Rm 102 and 201 - Surveying room and packaging contaminated items.

Balcony surveyed - North East and West side.

All surfaces checked showed a high count.

The lead bricks on West side balcony & floor were contaminated.

Williams carried all sacked up material from Rm 201 to Rm 102.

Fox used Bon Ami and water on two slugs (both had high wipe test) and on the natural U. slug down to less than 500 d/m surface and the enriched slug down to 500 d/m wipe which compared with the wipe obtained from a "clean" enriched slug.

4-12

Items carried down to Rm 102
all plastic pieces in (and spent) long (36")
1" thick x 2 7/8 wide strips

Two pairs of overshoes + all contaminated
papers used around tanks

Made Plastic cover for large Chainomatic
balance (Williams)
Fox placed Plastic sheet over Silt Balance
partially covered it.

One contaminated spot found on one
set of weights only (analytical)

April 13

Friday

12³⁰ PM

S-1 Heating and ventilating system
turned on - serves: Rm 104-107-~~108~~ 203-204
209-205 - 211-213-214 and 216 Colhan

Filter Queen vacuum cleaner taken from
vault and used to clean off lead bricks -
most of the contamination removed (by Fox)
after using most of the afternoon -
found that no filter in cleaner. (Williams)

Slugs (enriched cut pieces) were placed
in Vault - (Rm 105) only clean slugs
stored.

2 enriched slug boxes emptied (one cut slugs
were in) and ^{one other} to be used to put in contaminated
items to be thrown away - included ~~one~~ space
for ~~one~~ box slugs.

All enriched slugs in one box.

Tool + equipment ^{cabinet} was spot checked and found clean
doors were closed to keep clean.

Plastic on West side table was surveyed
and anything over 500 D/M - thrown away.

Williams - surveyed Hanford slug boxes +
separated into clean + dirty. ⁵⁰⁰ D/M = dirty.

Note: for material sent to X-10 Burial
Ground see P. 41-42

Air Samples for 4-13-51

Rm	D/M/M ³
201	1.2
201	0.26
107(S)	0.0
108 SE corner	0.0
108 N.W corner	1.4
202	0.24
202	0.53

April 14

Saturday

9³⁰ AM

The roof exhaust fan turned off in Rm 201 - Wall exhaust fan still running.

Stored in 105 at present - in cubicles in Vault are:

102 - 2" alloy slugs
44 - 4" " "

And 194 natural U. slugs ORNL type. The number of slugs was marked on each box for the alloy slugs.

Using Al spacers taken from Rm 201 all contaminated, it was possible by anodizing in a Citric acid - H₂SO₄ solution to remove - or cover until the spacers would barely register on a Poppy - Less than 100%/m.

Callihan, Fox Williams & Palmer continued sorting material into - funds to be thrown away - material worth cleaning, and clean uncontaminated pieces.

Air Samples taken 4-14 - (4-15)

Date	Rm	$\mu\text{m}/\text{m}^3$
4-14	203	0.0
	201	97.0
	215	0.58
	214	0.0
	201	11.1
	205	0.0
	217	1.4
	216	0.71
	209	0.0
	201	1.7
	201	8.2
	215	0.78
	4-15-51	201
210		0.93
209		0.57

4-15-51

2-3
PMDr. Callihan stopped air samplers in
Rm 215 (two)

Sample started in Rms 209-210

Ended air sample Rm 201 started another
Both blowers started in Rm 201 ~~door~~
louvers open.Found 3 amps fuse control circuit roof
box for 201 blower - fuse replaced

April 11 - 1951

Items taken to X-10 Burial Ground # 4

- 1 - Barrel of cleaning solution
- 1 - Barrel containing
 - 6 ea - coveralls cotton
 - 12 pr. gloves rubber
 - 2 Boxes (approx) of used Kleenex
 - 100 ft (approx) white Blotting paper.
 - 1 ea Sun Tan shirt } Crain's clothing
 - 1 ea Sun Tan Pants } worn on Mar. 27
 - 2 ea Caps - white

4 - H. I. cans (cans returned to 9213)
containing the following:

- 1 - Suit - Rubberized size 46
- 5 - pr - Waders rubberized
- 5 ea Caps rubberized
- 5 ea Jackets rubberized
- 20 yd (approx) of vinyl Plastic
- 5 boxes (approx) Kleenex
- 6 pr O brushes, Rubber
- 6 pr Rubbers
- 150 ft approx Blotting Paper.

Friday - April 13, 1951

- 2 ea Sun Tan pants
- 2 ea Sun Tan shirts
- 1 ea Jacket Field
- 4 ea Laboratory coats
- 5 ea respirators
- 10 ea Coat Hangers
- 2 ea 2x4" 12' long wood.
- 3 ea Coca Cola bottles
- 1 pr canvas gloves
- 10 pr gloves, Rubber
- 3 pr gloves, leather
- 2 ea brushes scrubbing
- 200 ft (approx) Blotting paper
(over)

- 10 Boxes (approx) Kleenex used
- 5 Rolls (approx) tape (scotch type 2" wide)
- 10 lbs (approx) Plastic paper ropes

April 16 Monday

Both single rail banisters were found to be contaminated in excess of 25000 cpm both probe and wipe tests

Banisters removed and cleaned with Bon Ami and water solution. (H95C)

Clothing contaminated up to 5000 cpm was OK'd by Song of Health Physics to be acceptable for laundering.

Continued wearing of laboratory smocks over coveralls, the coveralls can then be worn for several days.

Three aluminum spacers having highly contaminated surfaces were cleaned in an anodizing bath -

These spacers when checked after cleaning were completely free of contamination (Cromin) Saturday April 17

It was then decided to try a slug - two Hanford slugs were tried - one slug was cleaned the other - no wipe but over 5000 surface - after further anodizing the slug was cleaned.

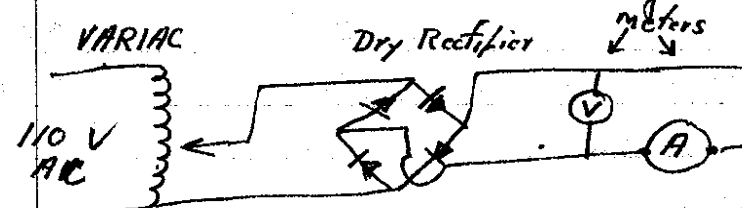
Air Samples 4-16-51

Date started	Start	End	Run	$\mu\text{M}/\text{M}^3$
4-16	0930	1500	201 (blowson)	3.2
	0915	1510	211	0.6
	0915	1500	212	0.56
	1600	0830 (4-17)	202	0.65
	1600	0830 (4-17)	202	1.0
	1500	1545 (4-17)	201	5.4

April 17 - Tuesday

material was purchased for a larger scale anodizing bath to be used in Pm102

The circuit was simple:



The whole assembly was mounted on a board and sacked in vinylite plastic.

Trash was allowed to accumulate while all uranium slugs were accounted for. To prevent some uranium being accidentally thrown

Air Samples 4-17

Date	Start	End	Rm	D/M/M ³
4-17	0855	1545	201 (Hall)	1.3
4-17	15:45	0900 (4/18)	201	4.3
4-17	1600	0900 (4/18)	102	11.6
4-17	0925	1600	102	0.0
4-17	15:45	0830 4-18	215	0.44

Date	Start	End	Rm	D/M/M ³
4-18	1530	0945 (4/19)	201	13.0
4-18	0900	1530 (4/18)	201	21.1
4-18	0900	1530 (4/18)	102	5.1
4-18	0915	1515 (4/18)	212	0.0
4-18	1520	0945 (4/19)	102	11.3
4-18	1520	0940 (4/19)	204	3.1

April 18 Wednesday

Anodizing bath tried in Rm 102 slugs were about 50% cleaner but not as clean as previously on 1st small bath

Shoe covers for use in Rm 215 continued as started on date of accident - traffic into Rm 215 limited to permanent personnel on essential business.

Floors and walls to be given extra coat of wax in case of further contamination - Mr. Paine Janitorial supervisor agreed (William Hoase)

Hallway on West side of building spot checked and found no contamination.

Rm 204 clean of contamination

Blanketing paper laid down on bench - hood & work area immediately in front of bench.

Fox & Williams continued to try to clean slugs using Bon Ami and scrub brushes.

Pohrer contaminated his safety shoes - shoes were covered with tape & placed in Pohrer's locker in Rm 205

Spot checks on stairway located hot spots & covered - Hoase.

Start	End	Air Samples 4/19/51	Location	D/M/M ³
1530 (4/19)	1530 (4/20)		Rm 201	5.9
1530 (4/19)	0830 (4/20)		Rm 102	3820
0940 (4/19)	1530 (4/19)		Rm 202	2.8
4-19	1020 min (overnite)		Rm 102	252.7
4-19	1020 (overnite)		Rm 203	2.7
4-19	975 (overnite)		Rm 201	271.1

April 19 Thursday

Decided to set 500 μ m wipe as tolerance value on normal slugs - (Fox-Williams)

Six very hot slugs given to Cronin to clean

In morning all personnel reported to dispensary for blood counts.

Coca Cola bottles in building were surveyed and no contaminated bottles found - Precautions taken to keep bottles clean -

Re-survey of materials moved onto driveway outside 101 -

Benches - steps - table etc - - -

Survey of drive way shows spot contamination from 0 - 30000 μ m

Entire area roped off + Warning signs posted.

Air Samples

4-20	435 min (daytime)	between 207-208	3.4 D/m/m ³
4-20	390 min (daytime)	Rm 201	228.3
4-20	345 min (daytime)	Rm 102	2743
4-20	1500 0835 (4-21)	Rm 109	7.6
4-20	1530 0900 (4-21)	Rm 102	62.5
4-20	1530 0900 (4/21)	Rm 201	72.5

April 20 Friday

Side walk surveyed by Haase
small spots on walk to Rm 102 from 1000 to
10000 D/m

Contaminated spots covered with
adhesive covering.

all clothing used surveyed and
those less than 5000 D/m sent to Laundry.

	Start	Stop	Run	D/M/M ³
4-21	0845	1530	108	0.0
"	0900	1545	201	375.6
"	0900	1545	102	750.4

April 21 Saturday

Survey of door knobs - push bars
telephone & interior desk tops -
Door knob of 103 found contaminated
& cleaned.

Plotting paper to entrance to
Rm 201 contaminated.

Survey and taping of all
shoe-covers boots & anties.

Water samples taken in
neutralizing pit = 18.6 D/M/cc on 75cc sample
no radiation found on weir.

Smear test taken on drain epib
across road from bldg - 500-1000 D/M
on inside of culvert

Water sample taken in brook
opposite septin tank area. .001 counts/min/ml.

Cleaned slugs were boxed (10 per box)
and removed to vault for storage.

Air Samples				
	Start	Stop	Location	D/m/μg
4-23	08:55	1545	outside Rm 202	3.1
4-23	08:45	1555	Rm 201	381.3
4-23	08:45	1550	Rm 102	371.9
4-23	1545	0915 (4-23)	Rm 201	189.3
4-23	1545	0915 (4-24)	Rm 104	2.8
4-23	1545	0915 (4/24)	Rm 102	152.0

April 23 - Monday

All six slugs brought up from 102 are now clean (by anodizing) ~~but~~ last three cleaned in 45 min.

Fox & Williams using HNO_3 sol'n cleaned 101 slugs today.

HNO_3 appears to clean Po. from slugs readily.

Clothing checked prior to shipping to laundry - no contaminated clothes found.

Sol'n most effective in 1:1 dilution - but quickly becomes contaminated and unusable.

April 24
Air Samples

Start	Stop	Location	D/M/m ³
0915	1520	by neutralizing pit	2.0
0915	1530	Rm 201	5979.4
0915	1525	Rm 102	4577.5
1530	0900 (4/25)	Rm 103	3.9
1530	0905 (4/25)	Rm 201	1275.6
1530	0910 (4/25)	Rm 102	846.9

April 24 Tuesday
Mr. Kruei and Mueller from Hanford
visiting - looked at some data - were shown
around building and parts of X-10 and Y-12
Suggestion made that turpentine had been
used to clean linte-

Some canned slugs not responding too
well to nitric acid cleaning - with
further treatment in electrolytic bath
3N H₂SO₄ 0.5N HF slugs as anode and
with large area copper cathode - slugs
were cleaned.

No attempt has been made as yet
to clean other surfaces in Room.

Air Samples

	Start	End	Location	D/M/M ³
4-25	1530	1415 (4/26)	106	58.8
4-25	1550	1450 (4/26)	201	1092.1
4-25	1550	1455 (4/26)	102	206.5
4-25	0905	1530	Hall between 105-106	9.9
	0900	1535	102	908.8
	0909	1540	201	637.5

April 25 Wednesday

Decontamination continuing - about 130 canned slugs remaining -

After talking to Hanford visitors - it appears that these slugs would probably have to be rejected anyway because of pits and dents, so if necessary to remove part of can surface - The normal slugs can be put back into cycle thru 9212 here.

Instrument picked up all instruments for calibration.

Replacement one of each type were left at building - the alpha survey instrument was not in operating condition.

Start	Stop	Air Samples	Rm	D/M/M ³
14:15 (4/26)	0830 (4/27)	4-27	104	8.9
1430 (4/26)	0830 (4/27)		102	129.4
1635 (4/26)	0815 (4/27)		201	479.8

April 26 Thursday

Since slugs in some cores are gamma hot PR Bell suggested model 400 Poppy for alpha survey work - one obtained from X-10 which seems to work all night - practical limit probably 500 c/m although 100 counts are well above background.

Went crew to dispensary for weekly blood samples.

Robert & Crain working on high voltage supply for scintillation counter also cleaning poppy probes for use in Rm 102-201

Survey instruments were returned at 1³⁰ PM from shop - were calibrated by Robert before use.

Last slugs cleaned and put away today.

Air samples 4-27			D/M/M ³
Start	Stop		
0835 (4/27)	1525 (4/27)	Hall of 215	6.6
0840 (4/27)	1540 (4/27)	Rm 201	338.0
0840 (4/27)	1545 (4/27)	Rm 102	19.1
1525 (4/27)	0825 4/28	Rm 106	0.45
1535 (4/27)	0910 4/28	Rm 102	1.45
1530 (4/27)	0915 4/28	Rm 201	41.1

4-27

Friday

Survey of all door knobs, pull and push bars, banisters, water fountains, telephones given swab tests today and yesterday by Haare (H.P.) 500 gm found on banisters leading from downstairs hall to 208 - this material will not wipe - all other items found to be clean - this survey did not cover # 202-201-101-102.

The Photo-Multiplier Alarm Circuit was found to have only a few contaminated spots on it. It was brought out of Rm 201 and taken to Rm 210 after surveying it & cleaning.

The pieces of broken source were placed in a plastic sack and brought out. PB-171

Most all day taken up in housekeeping vacuum cleaning Rm 102 - changing floor paper - packaging trash (paper sacks etc...)

Fox tried decontaminating plastic - only moderately successful.

Air Samples - 4-28			
From	To	Rm	D/M/M ³
0845	1545	202	0.29
0920	1530	201	110.0
0915	1535	102	≈ 3.0

April 28 - Saturday

The Plastic bag holding the broken source - PB-171 was locked in file cabinet in Rm 202

Hall survey from water fountain to door of Rm 205 - 3 spots found and covered. 15000 d/m - 25000 d/m Home -

Samples taken from surface of demineralized water storage tanks - by Fox

1/10 vol of sample taken made 3N with HCl - and plated so Po could deposit on Ag foils.

Ag Foils previously cleaned with HNO₃ sol'n + washed with clean demineralized water

Blanks run under same conditions.

Survey in 103 - 104 - no counts found.

Fox did some more cleaning on plastic - some were cleaned up - continued Friday's work - Horsheping continued moving small odds + ends.

2 PM Meeting of crew Saturday afternoon decided to go ahead + move heavy pieces out of 201 - Grating etc - ...
Sims sandblaster was coming Monday
Some lead bricks brought down stairs by Wilhois + plated on previously cleaned floor space.

Air Samples 4-30

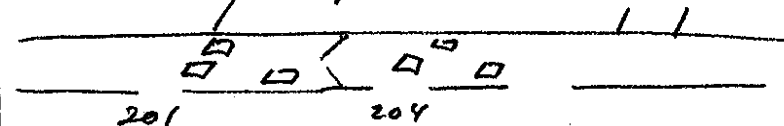
Room	Total Time	D/m/m ³
201	1020	0.2
102	1025	1.9
202	1025	0.2

Monday April 30

Williams, Fox & Robert in Rm 201
removing lead bricks - grating sections
and control panel in Rm 201 disconnected
loose wires covered.

Counter & ion chamber tube
moved from under tank.

Hall surveyed from fountain to
Rm 201 door - spots covered with
masking tape.



Bannisters from catwalks carried outside
Enriched slugs carried down to Rm 101
and placed next air conditioning unit
near 5 ft wall.

Philosophy - to move everything out of Rm 201
only bring back items as needed -
so no idle contaminated pieces in Rm.

all upstairs pipes
~~to be~~ disconnected from tank - still
need to disconnect pipes on bottom.

Air Samples 5-1

Room	Total Time	D/m/m ³
202	310	0.0
201	370	0.2
102	390	18.0
102	1050	1.3
201	1060	1.2
202	1040	0.4

~~Monday~~ May 1 Tuesday

Part of Sand blasting equipment including 30 sacks (100 lb) of sand arrived and were stored until air compressor arrived and protective clothing received.

Air Samples 5-2-51

Room	Total Time	D/m/m ³
102	390	1.1
202	390	4.6
201	375	0.5
201	1065	1.2
102	1065	0.9
202	1065	0.6

May 2 Wednesday

Sand blasting equipment finally connected up and started at 3³⁰ pm

Equipment set up outside south gate of building.

Sand blaster used 300# sand at 50 lb air in approx 10 min - about 12 sq ft cleaned -

Air Samples 5-3-51

Room	Total Time	D/m/m ³
204	350	0.6
102	355	0.9
201	360	0.0
204	1065	0.4
102	1065	0.6

May 3 ~~Wednesday~~ Thursday

Morning - Cronin filled out forms for safety dept concerning accident for Mr. P. C. Zember - no mention made in report of restricted items - Polonium - critical mass etc.

In afternoon sandblasted one grating and parts of others - clean off paint rapidly - used 100# air pressure and as little sand as possible - Indications are however - that it would be wiser to wait until Tank is moved out to continue sandblasting each grating takes at least 100 lbs of sand.

Air Samples 5-4-51

Room	Total Time	D/m/m ³
201-Hall	400	0.2
102	375	0.3
201	380	0.4
201-Hall	1025	0.1
201	1025	0.4
102	1025	1.7

May 4 (Friday)

Decontamination continuing
nothing major - everything ready
for riggers to move tanks.

Air Samples 5-5-51

Room	Total Time	D/m/m ³
102	455	0.7
201	455	2.1
MIDDLE HALL	455	0.6

May 5 Saturday

Riggers from 7-12 removed reactor tank and super-structure from Rm 201. It was necessary to remove one large beam and several smaller ones.

Riggers were given gloves - lab smocks + overalls - all were so heavily contaminated that they were thrown away.

Equipment used - crane in building, heavy duty truck and a mobile crane outside building.

The heavy armorplate glass was moved before moving tanks.

One side of tanks - side most contaminated was cut out with a torch cut out outside of restricted area - piece approx 6' x 48" cut out.

Air Samples 5-7-51

201	390 m	15.7
102	390	0.1
212	405	0.7

May 7 Monday

Reactor tanks completely sandblasted except for side it is lying on - use of a regular face mask, with hood ~~and~~ is not sufficient. Sand particles work under hood and where rubber mask fits face cause considerable abrasion - Cronin who did sandblasting looks like a bad case of sun-burn.

The sand-blasting has cleaned all tank surfaces to below detection by a Z-ent. which is less than 200 μ min.

Painter put 1st coat of Prim coat on tanks.

Cronin's hands + face contaminated evidently from working in tanks - however this washed off easily with Dutch cleaner + water.

No one else contaminated although one suit of coveralls was discarded as too contaminated to salvage.

Survey of all flooring + items found 201 under way spots range from 9% to 14,000 μ m of sandblast removes this count - 500 μ m set as liveable standard on flooring - if covered by spray paint

Air Samples 5-8-51

210	400m	0.4
201	375	0.8
102	395	0.4

May 8 Tuesday

Sandblasting grating Crown + Morfit
as it is moved outside by
Polver + Fox.

Necessary to stop and fix sand blaster
valve in bad shape.

A regular air mask helmet
was obtained which covers the entire
head and shoulders, and does not
press against the face. This
has expedited blasting.

Most every piece of
flooring has been fouled
to have contamination
spots painted with
Red paint - for blasting

Riggers, Millwrights,
Painters, Labourers, Gen. Eng.
all equipped with rubber,
gloves and eye wear.
A resp. app. persons
checked at beginning of
shift - spot checked
during day and all
checked at close of shift

Air Samples 5-9-57

101	420 m REMOVE Floor	1.6
201	420 m " "	1.0
202	420 No work	1.4

May 9 Wednesday

Finished sandblasting last of grating floor and assorted pieces of equipment. all pieces have at least 1st coat of paint -

only unfinished is one side of reactor tank (lying on one side). enough sand is available to finish this - tank has 2 coats of Prof coat on bottom & 3 sides

Superstructure clean and ready for painting.

Roadway contaminated, but in places that can be reached with hose, the contamination is easily washed off.

Several workers shoes found to be contaminated due to walking on sand used for plastering - Drafting paper attached to shoes or scuffed with rough pavement.

Air Samples 5-10-51

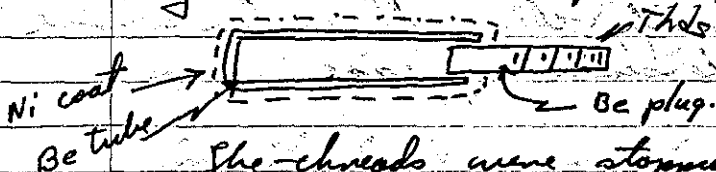
5-10-51

		P/m
101	380 REMOVE FLOOR	104.3
201	380 " "	1.9
204	400 NO WORK	0.7

May 10 Thursday

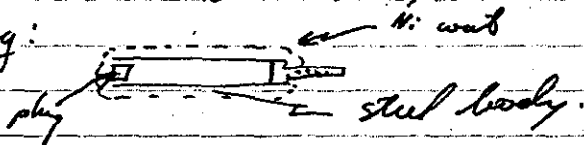
Mr. Richmond from Mound Laboratories (Monsanto) who is directly responsible for source manufacture visited here. After some discussion the following points were brought out.

PB 171 the broken source was made by - drilling out a rod of Beryllium making a threaded rod which was a press fit - then filling the Beryllium tube with Po-Be mix - inserting the plug, the assembly then placed in a flask and nickel deposited (ca 15 mils) on the source by thermal decomposition of nickel carbonyl.



The threads were stopped off before depositing the Ni so structurally the source was weak depending to a large extent upon the press fit to hold it together. Final step in assembly was heating to 600°C to volatilize and disperse the Po.

The other sources in the building are also nickel coated, but the stock was threaded, and not the plug:



Mr. Richmond suggested that in future we specify: 1. tolerances 2. try to design source so that a complete covering of Ni may be used - use magnetic method of holding, or spring clip - Minimum effective diameter .200 inches Maximum length $2\frac{5}{8}$ " (flasks at Mound not large enough to take bigger)

Suggested designs for sources:
 square ends, source made
 from Ni tube, with ends
 thicker than body.



← for spring clip attachment.

If we specify they will enclose source
 in suitable secondary case.

Gratings were being painted +
 last sand blasted.

Air Samples 5-11-51

101	385 m	0.6
205-206	400 m	CLEANING HALL 3.2

May 11 Friday

Work continuing in Rm 201-201
 Floor of 101 quite contaminated
 using Vassel to remove wax, after
 two scrubblings with soap and water
 failed to lower contamination
 significantly. Part of grating near
 door of 201 - painted and steps
 spot cleaned -

~~beginning to replace grating floor.~~

Decided to cut off corner posts on
 plastic table (used in reactor tanks)
 posts to be cut off and table faced off
 plain then posts bolted back on
 so can be removable if necessary.

Small plastic source holders fabricated
 Shim rod spacers complete -
 source rods threaded and frame
 for holding slugs made.

Steps and top of beams guides
 have been painted - top of air-
 conditioning duct - ledge around
 wall - all painted.

Air Samples 5-12-51

		D/m/hrs
215	230m GEN. AREA	0.0
101	400m " "	1.8

May 12 Saturday

Painters spraying final coat of paint on gratings - surveying floor of 101-

Millwrights Whitehead + Vander pool working on plastic table -

Room 204 cleaned up - bench + hood scrubbed room checked for contamination

May 14 - Monday

Riggers replaced tanks + part of
grating floor in Rm 201

Fox + Rabner checking surfaces + floor

Colored jointers scrubbed vinylite
floor with Varsol

May 15 Tuesday

Riggers finished replacing grating
on main floor + balcony Rm 201

Millwrights working on water tanks
Painters still painting exposed surfaces
ladders - balcony steps

Janitors were over vinylite floor
again with Varsol Rm 101-102

May 16 Wednesday

Continued cleaning of equipment
& re-assembly -
Millwrights on tanks, Electrician on
controls & painters covering areas where
paint removed in de-contamination

May 17 Thurs.

Controls reconnected by Electrician's and all checked for operation.

Millwrights on tank - about two days work left - installing plastic table unistand ladders, glue gasket on cut out side - guide for source tube + control rod.

Sand blasting equipment taken away. Roadway washed off with water hose - tarpaulin's air hose etc stretched out on roadway and also rinsed off.

Painters almost done in reactor Room except for some touching up of scuffed areas.

May 18, Friday

Plastic table cleaned + ready to install. All pipes except for $\frac{1}{2}$ " sight glass line re-connected.

Source assembled except for doghouse and guide tube.

In tank - laying down aluminum sheet under plastic table. Then polyloc tape around this.

May 19 Saturday

Water windows flushed with tap water

Hold tanks emptied and rinsed with tap water -

Valves - pump - controls tested on tanks - seem to be in operating condition.

fostered removable side to tanks to help gashed cement set over Sunday.

May 21 Monday

Made adjustments to controls + limit switches - filled tank with water and flushed out hold tanks with top water -

Water windows being cleaned ready for filling

May 22 Tues.

Rinsed out tanks with demineralized water + started filling hold tanks.

Last water window being leaded. should be in place today or tomorrow.

May 25th

Wooden steps & platforms arrived
from shops & were placed around tanks

✓ Haagen H. P. I resp. on
vacation for ① week - Jim
Muir to have belly for
① week

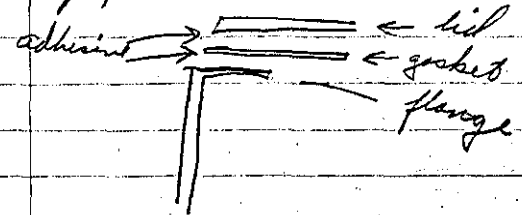
May 16th Saturday
1st critical Cyp since March 20th

May 29th Tuesday - aluminum box
4:20PM brought over from shop + immersed
in water - box has 1/32 Tyygon gasket
sealing - using self tapping screws.

revised
and tanks

on
- Jim
for

5/30 - D.M. Callihan opened box at 8⁴⁵ AM
contained 25cc H₂O
Dried out - cleaned top & flange -
Applied 3M Weatherstrips adhesive



Re-top lid sub
Re-immersed 11:10 AM / per D Callihan

May 31 -
 Opened box - 475 cc water
 measured inside - D.H. & J.W.M.

June 1, 51

June 2, 51

Holiday

June 3, 51

Holiday

June 4, 51

June 5, 51

Haare returns from Vacating
 Survey nets set to check for
 Monthly survey.

June 6, 51

Air Samplers tested with
dry test meter #4 + #11
#3 sent to H. P. Dept.

Air samples taken in
both Reactor rooms.

Survey of #215 - 106-103
No cont. found.

June 7, 51

5 "G.I." cans of contaminated
material disposed of this
a.m. at B. B. #4 X-10
Consisted of Alum. Rods from
tank, 10 pr. gloves, 5 pr. Rubbers,
20 Bx. of Red Cleaner, 2 rolls
of used tape, 100 lbs. soap
metal, 50 lbs waste soap.

Survey of Main hall, - no
cont. found.

July 10, 51

Continuous survey of rooms
walls, doors set & no cont.
to be found.

A 50 ml sample of waste
water from neutralize pit
shows 56.3 c/m or 2,500 d/m
per liter - pit is to
be worked on by contractor
for A. E. C. - plan is to
flush pit with fire hose
to reduce count.