



KERR-MCGEE CHEMICAL CORPORATION

KERR-MCGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

July 30, 1976

F. D. LYONS

VICE PRESIDENT
CHEMICAL MANUFACTURING

Mr. James G. Keppler
Regional Director, Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler: License No. STA-503

This refers to your letter of July 26, 1976, and confirms that:

1. We stopped all decontamination operations at the West Chicago facility as of July 20, 1976.
2. We have procured the services of the Eberline Instrument Corporation, which will provide detailed health physics plans and procedures for decontamination of the West Chicago facility.
3. The plan and procedures for health physics coverage will be made available for review by your office prior to any additional decontamination operation at the West Chicago facility.

We expect to receive Eberline's health physics plans and procedures by the end of August. We will supply them to you for review as soon as possible thereafter.

Very truly yours,

F. D. Lyons
Vice President
Chemical Manufacturing

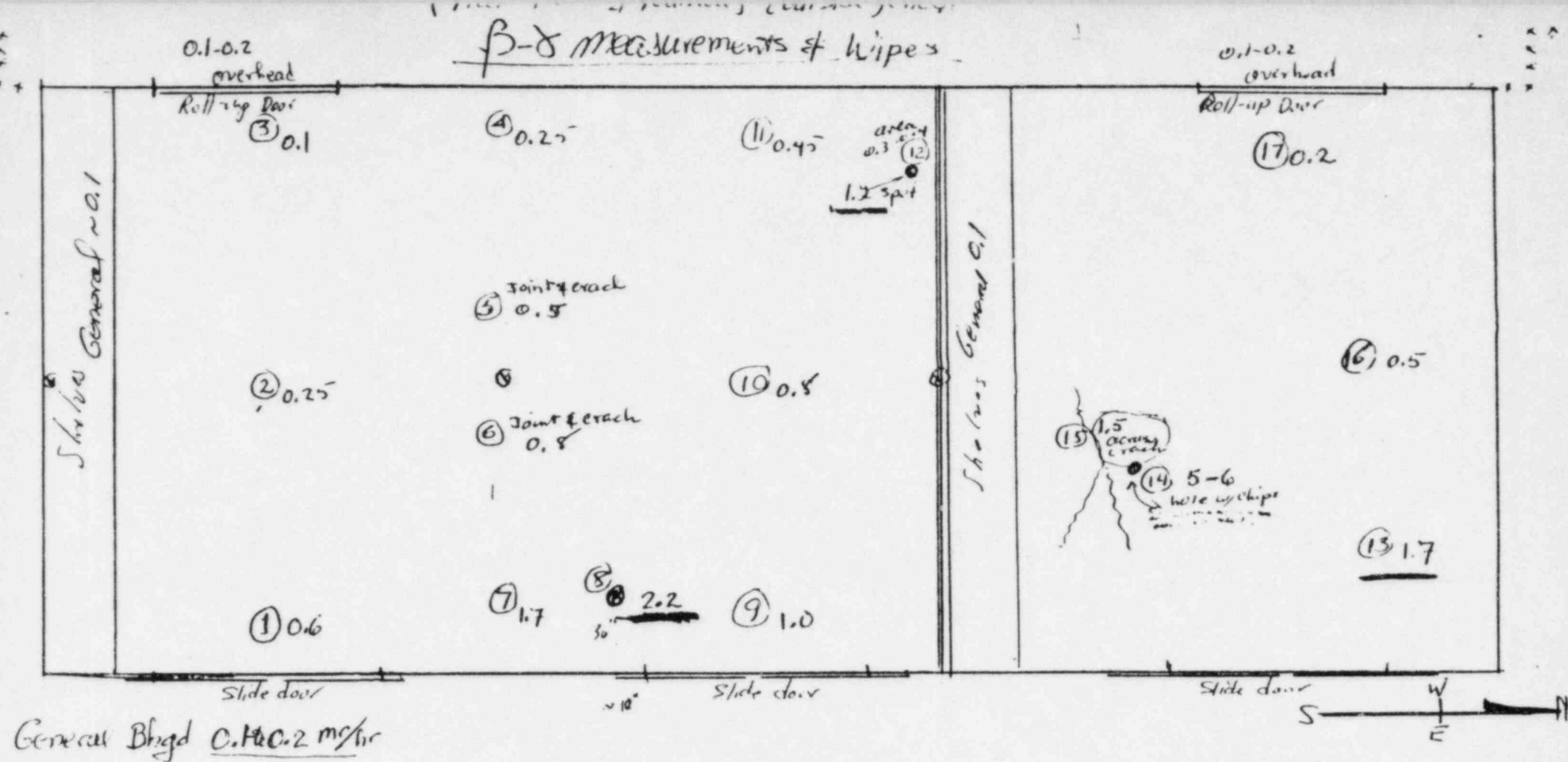
cc: Dr. Joyce Lashof
Director, Department of Public Health
State of Illinois

R. P. Maclean, West Chicago
R. J. Vreeland, Oklahoma City

8507090060 850408
PDR FOIA
RAPKIN85-30 PDR

AUG 4 1976

EXHIBIT 1



Kerr-McGee Plant, West Chicago

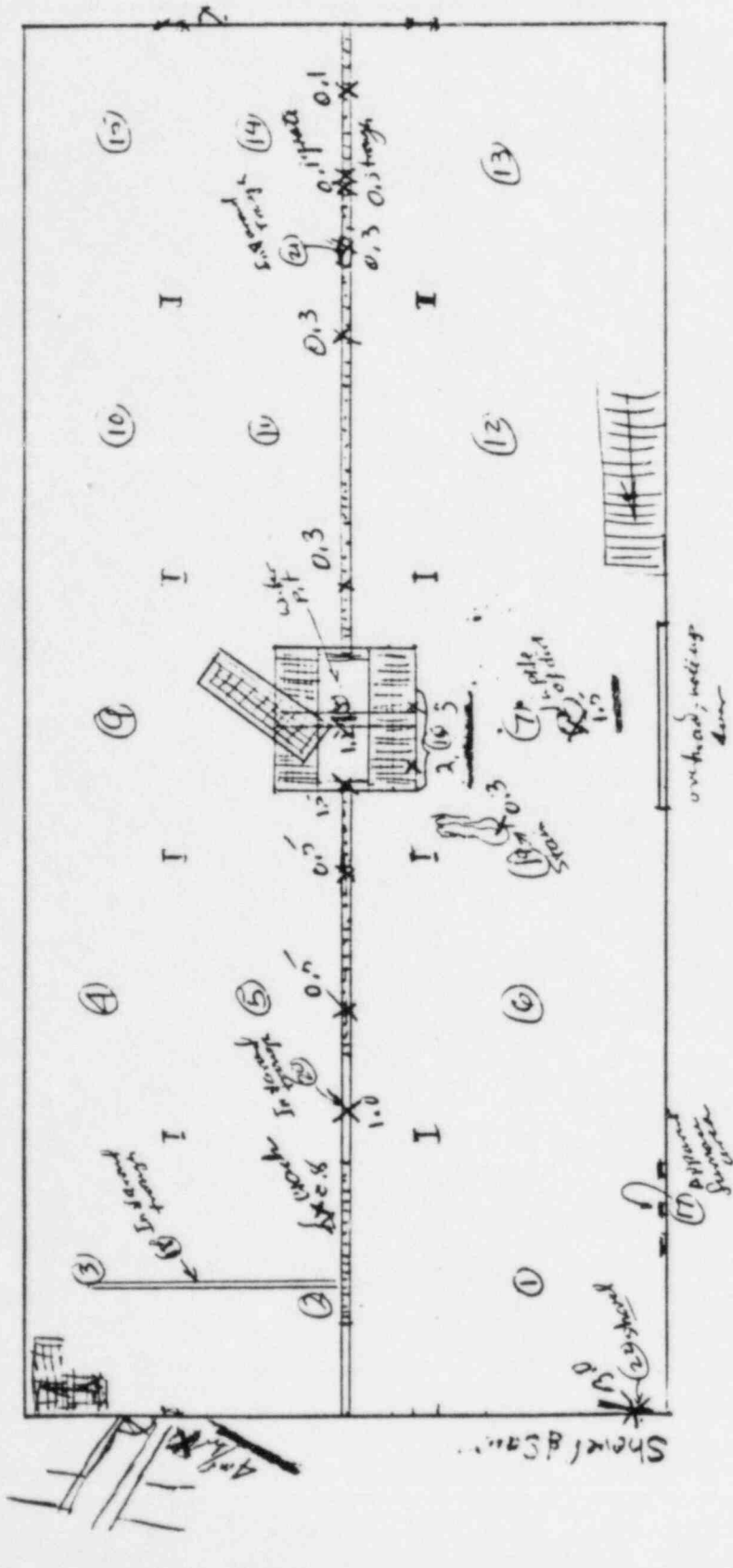
Building No. 11 (3lv Garage)

β - γ comparative ~~readings~~ (contact w/ floor in m/hr) direct reading
100cm² wipes taken @ ①, ③, ④, ⑦, ⑧, ⑩, ⑫, ⑬, ⑭, ⑮ & ⑰

7/16/75 ~1400 hrs
 β - γ end window probe
NRC # CS-1808; Mkt # CS-1804

P. H. B. C.

Kew. McGee, Rare Earth Plant, West Chicago, Bldg 21, First floor, Surface of floor, + trap doors & gromets
S.X. Plant



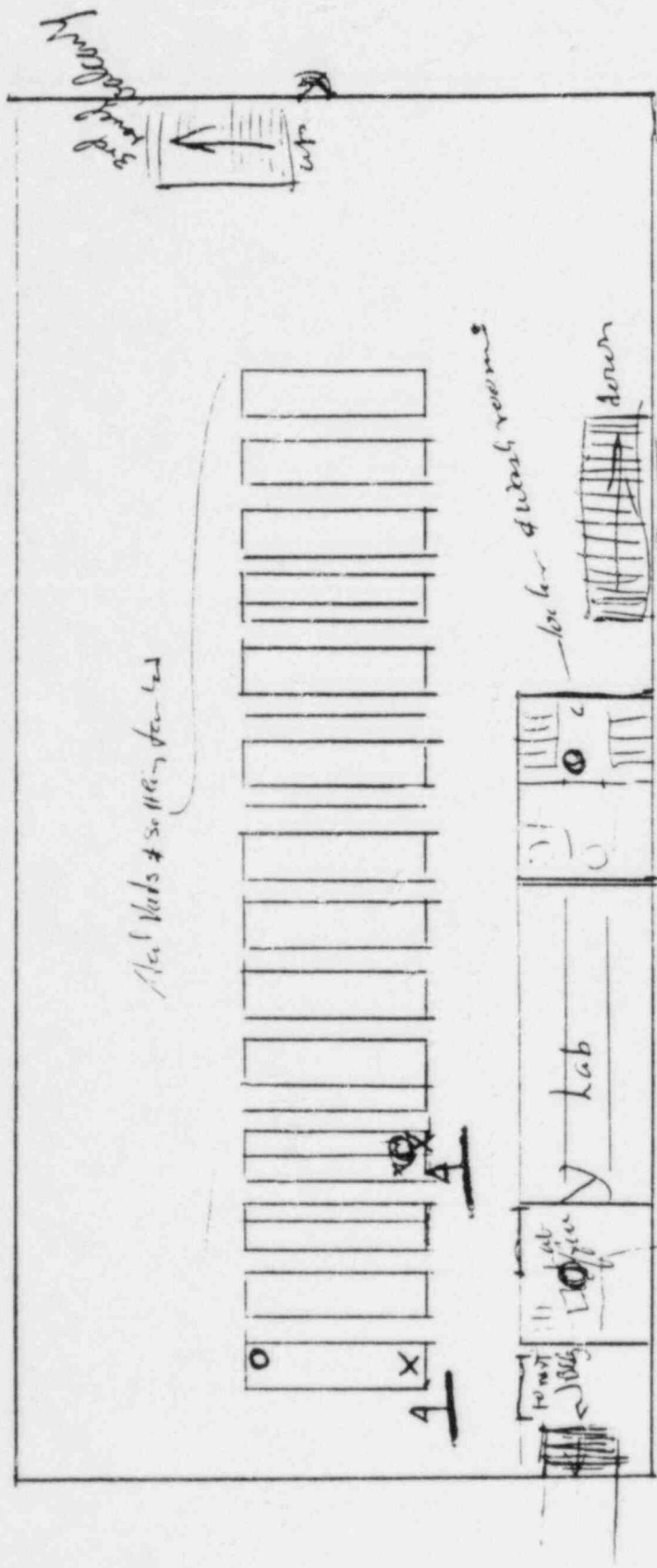
① - Location of 22, 100 cm² wipe station @ ~ 100 m on 7/16/76

$X = \beta \cdot X$, end window, contact survey mms.

1897

7/16/76
@ ~ 1130

3



on floor in locker room (21-c)

on floor in hot office (21-13)

on both inside bottom of ~~box~~ ^{tinies} No 1 ~~box~~ (21-D) & No 4 (21-A)

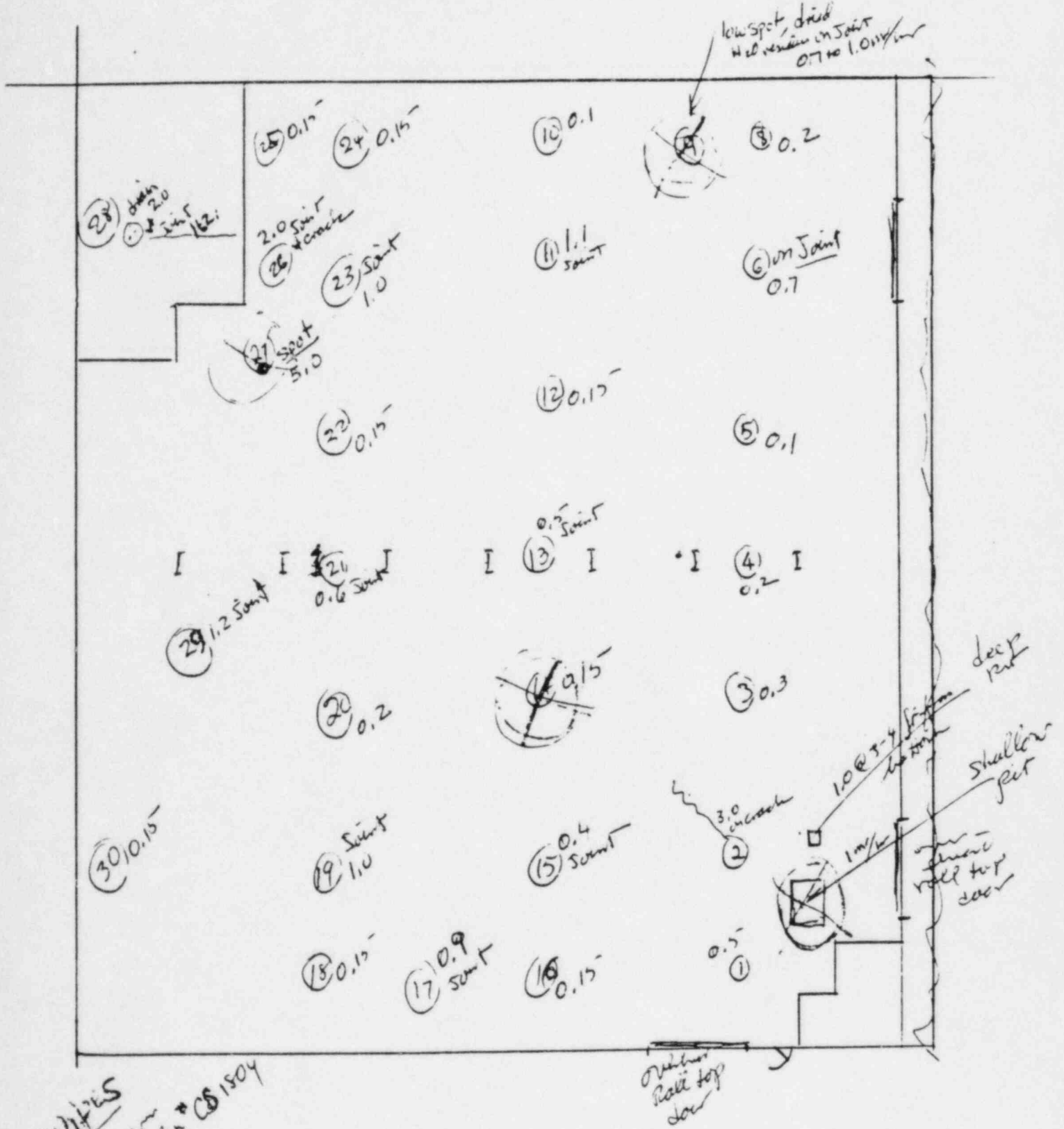
X - β -X readings in Vets No 184, ^{from N. line} end window prove NRC α 's 100% meter #1805

General areas 0.1 to 0.5 m/h; on top of grade over support beams - 0.5 m/h

(3rd level) generally general areas 0.05 to 0.1 m²/hr

1'-14 Billy #12
West Chicago

7/16/76 ~ 1536



Waters
B-X Meter
Read under + CS 1504
in m/hr
Meter + CS 1508

Mr. Paricalais Samples & Wicks

K-11
7/2/76
1435-1515
Boat 2 m from
bottom of lake

Wahrscheinl. tip,
40 min. Samgla fress

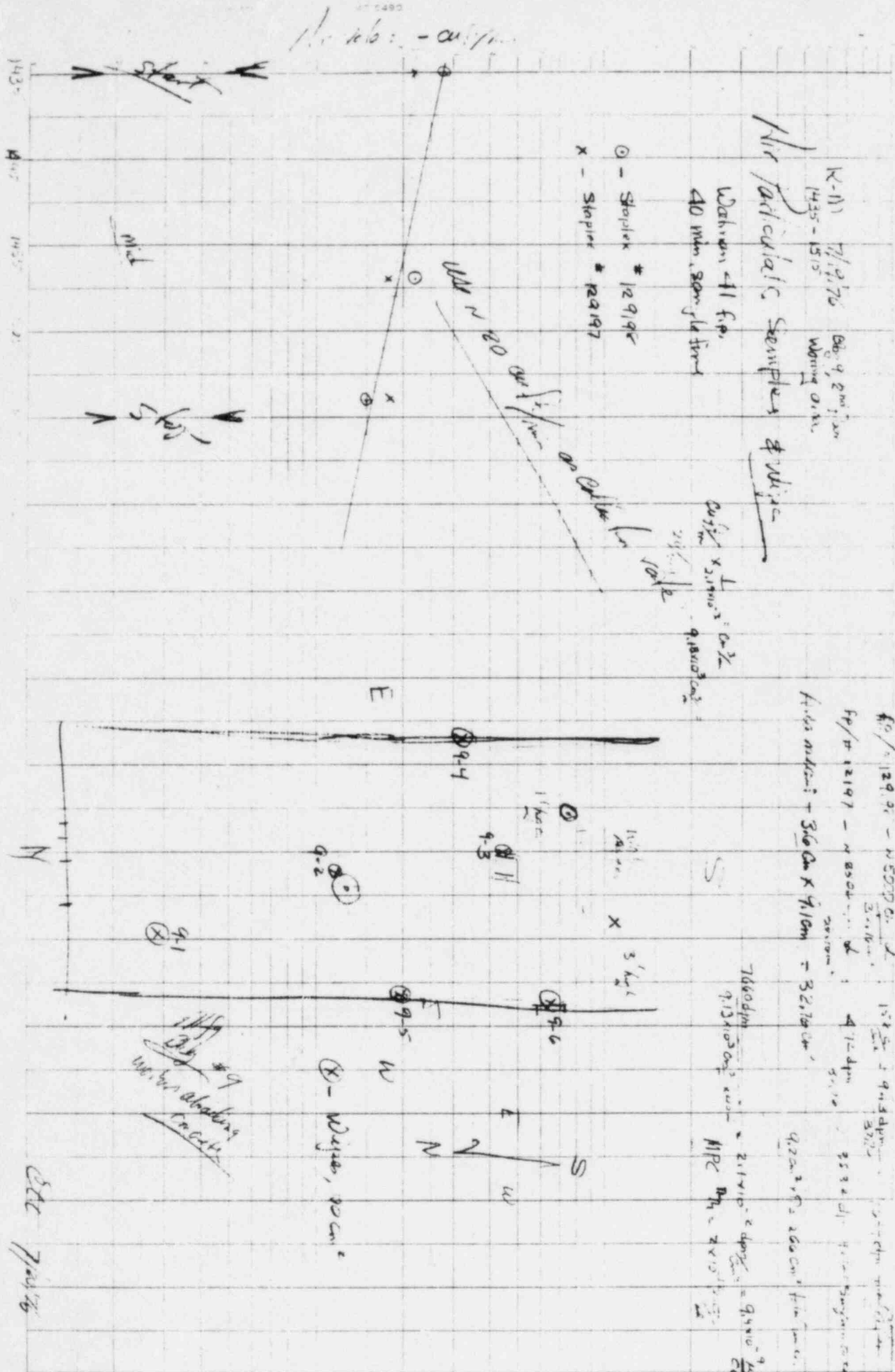
① - Staples 129/98
X - Staples 129/97

$\frac{2.1 \times 10^{-2} \text{ cm}^2}{\text{cm}^2} \times 9.18 \times 10^3 \text{ cm}^2 = 1.93 \times 10^2 \text{ cm}^2$

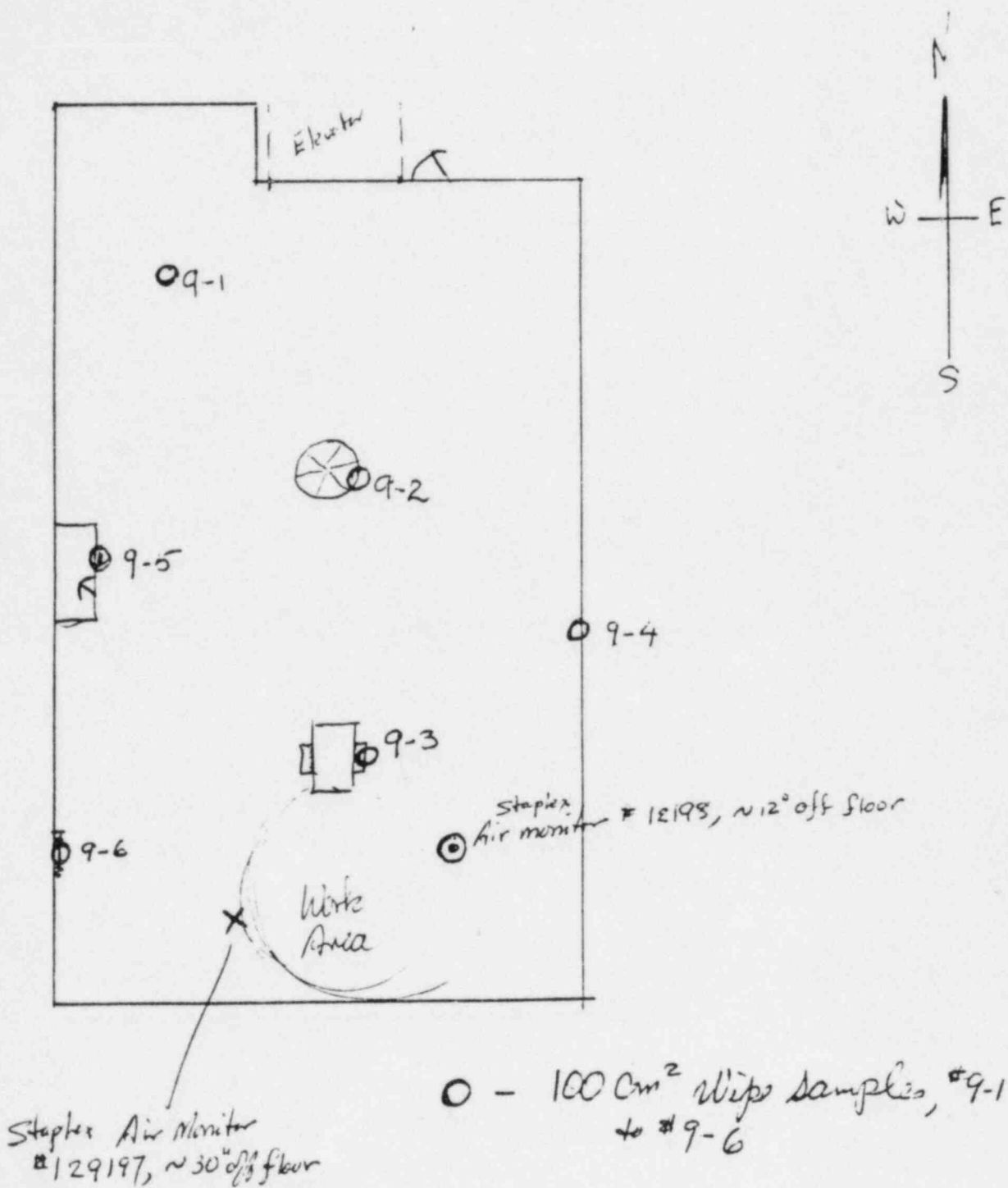
$$\text{Fe}_2\text{O}_3 \text{ addition} + 3.6 \text{ cm} \times 4.1 \text{ cm} = 32.74 \text{ cm}$$

$\frac{60}{\pi} \times 129.8 - 2570$ C. d.
3.11
 15.8 ± 9.3 dpm
372
FP# 219 - 2850 ...
41.2 dpm
3.10
253 d/l.

$\frac{7660 \text{ g}}{9.13 \times 10^3 \text{ g}^{-1} \cdot \text{mol}^{-1}} = 2.1 \times 10^{-2} \text{ mol}$

$$4.2 \times 10^{-2} \text{ m}^2 \text{ s}^{-1} = 266 \text{ cm}^2 \text{ friction loss.}$$


K-17; R.E. plant, W. Chicago Main Plant
 Bldg 9, 2nd floor during working period
 of cleanup 7/19/76 1415-1630



4c.m.2

REMARKS: WEST SIDE # 129197

045-38 (8.72)

AIR SAMPLE DATA

1. DATE 7-20-76	5. TIME ON	6. TIME OFF	7. RUN TIME 40 MIN.	SUSPECTED ACTIVITY 11. NAT. TH	14. PROTECTION WORKN	15. FIRST COUNT FACTOR	$\frac{\beta\gamma}{\alpha} = 3.15$
2. ROOM	8. FLOW RATE $\frac{m^3}{hr} \div 60$	$\left\{ = .56 \frac{m^3}{min.} \right.$		12. ALPHA RCG/40	SUPPLIED AIR	16. FINAL COUNT	α
3. BLDG.	20 cfm $\div 35.4$			RCG/40 133	ASSAULT MASKS	RCG/168	$\geq 1 \times$
4. OPERATION CODE	9. SAMPLER TYPE	10. VOLUME 22.4 m ³		13. BETA-GAMMA RCG/40	RESPIRATORS	RCG/40	$\geq 10\%$
					NONE	(whichever used)	< 10%

REMARKS: EAST SIDE # 129198

DATE AND TIME OF COUNT	GROSS COUNT				BKGD		NET		d/m/yr	PER CENT RCG (used)	TYPE OF ACTIVITY	DECAY TIME	INITIALS
	RECORDERS	SCALERS	TOTAL COUNTS	COUNT TIME (MINUTES)	COUNTS PER MINUTE	COUNTS PER MINUTE	COUNTS PER MINUTE	COUNTER YIELD SELF ABSORPTION					
7/20(1242)	—	5624	2	2812	7	2805	.30	13	12061	538	X		
7/20(1242)	—	21545	2	10772	228	10544	.28	—	37958	1694	BR		

① *Wier./ANL* - 2, β -5, *meas. on* 7/26/76 1415-1500

	<u>d/m α</u>	<u>d/m β8</u>
9-1	223.6	331.2
9-2	77.4	198
9-3	47.3	61.2
9-4	180.3	424.8
9-5	55.9	93.6
9-6	98.9	302.4

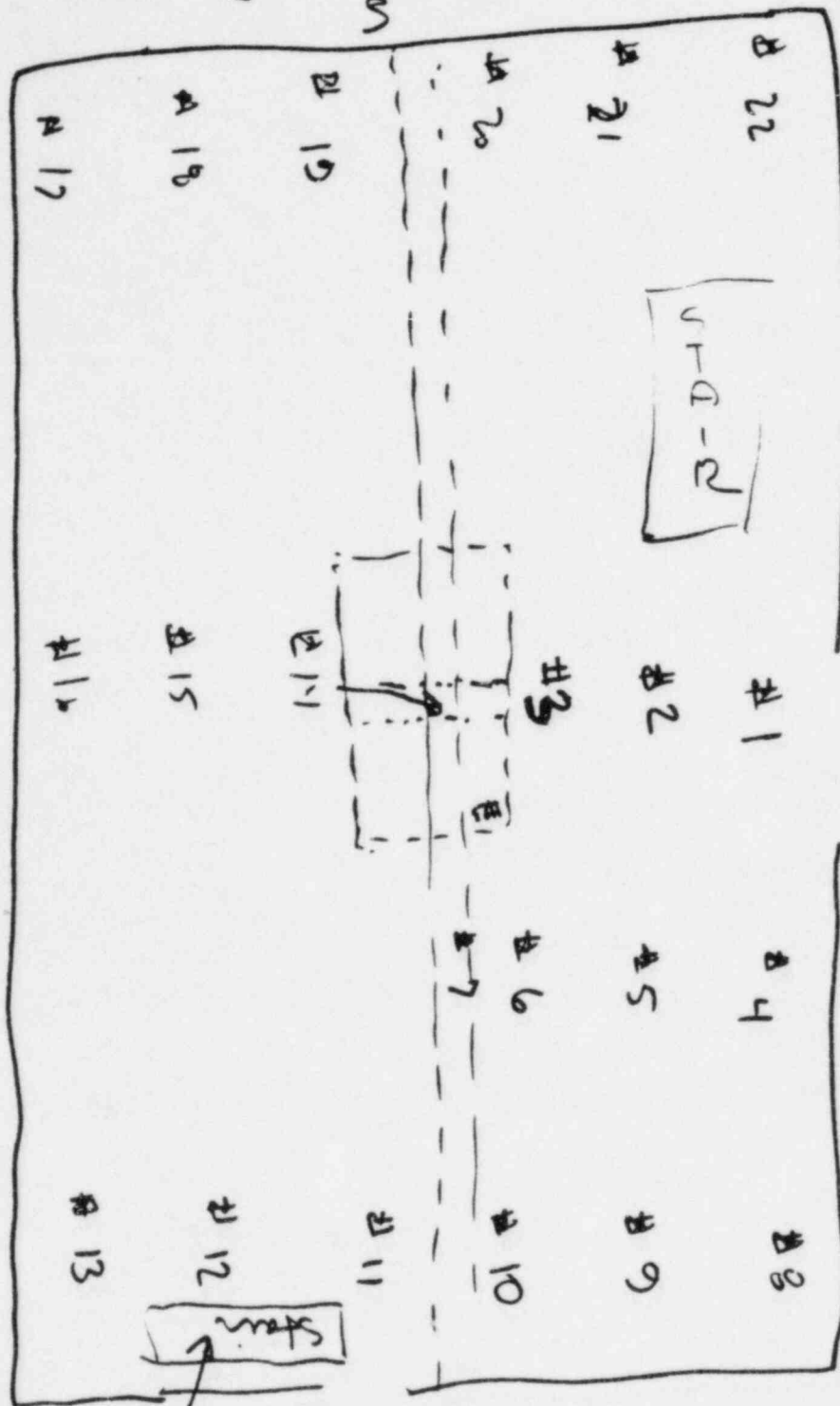
21-1	8.6	54.6
21-2	120.4	259.2
21-3	NCD	75.6
21-4	64.4	NCD
21-5	101.2	158.4
21-6	77.4	172.8
21-7	202.1	392.4
21-8	825.6	1285.2
21-9	184.9	273.6
21-10	73.1	72.0
21-11	68.8	154.8
21-12	34.4	144.0
21-13	30.1	154.8
21-14	55.9	75.6
21-15	43.0	30.0
21-16	550.4	961.2
21-17	34.4	57.6
21-18	137.6	309.6
21-19	619.2	633.6
21-20	81.7	118.8
21-21	38.7	219.6

② New/ML- 7/20/76 1415-1530 km

	d/m L	d/m Px
21-22	107.5	169.2
21-A	1436.2	2736.0
21-B	172	234
21-C	167.7	93.6
21-D	2868	5907.6
11-1	43	104.4
11-3	38.7	108
11-4	17.2	21.6
11-7	86	104.4
11-8	4.3	118.8
11-10	90.3	248.4
11-12	262.3	392.4
11-13	68.8	116
11-14	81.7	129.6
11-15	180.6	262.8
11-17	103.2	154.8
12-Pie	245.1	597.6
12-9	369.8	609
12-14	94.6	169.2
12-27	339.7	439.2

Bldg 21 (1st Floor) Alpha-PAC 3G

- #1 500 cpm
- #2 650
- #3 2000
- #4 300
- #5 900
- #6 2500
- #7 3500
- #8 250
- #9 750
- #10 800
- #11 2500
- #12 1000
- #13 700
- #14 4500
- #15 1000
- #16 2000
- #17 300
- #18 300
- #19 2000
- #20 800
- #21 400
- #22 500
- #23 7500



34 2/5 #2
Stair 3500 cpm

For vertical
surfaces &
misc equip
pipes etc.
250-400 cpm

#23 ledge for grate

#14 on beam across pit in center of floor