INVESTIGATION REPORT

RADIOLOGICAL UNIT

1. NAME OF FIRM	2. REGISTRATION NO.	3. DATE OF REGISTRATION
General Telephone & Electronics	[illegible]	
4. ADDRESS: Keyport NJ		
5. REPORT PREPARED BY: [illegible]	6. REVIEWED BY: [illegible]	7. DATE REPORT PREPARED: 6/30/73

On 6/19/73 I visited the above facility to perform a routine radiological survey of its facility performed by Johnson Dec. on 1/22/73.

The firm has moved to new operations in Hackettstown. Uranium is present only to provide the power. All radiation producing equipment has been removed & either transferred to Hackettstown or disposed of.

In the clean room (where the 3 Kevex radiation machines were, with a shielding and hood now standing) background was found 42 counts per min over and on the 0 counts per min. on a poly bag in the main facility.

Action - Attach letter & inventory letter may be sent if above unexpected sample level was OK.

B-162

Lab: [illegible] Survey: [illegible]

Firm: Clinical Trials of Alabama Install #: 225 ☐ Sealed; ☑ Unsealed

# of Samples: 1 ☐ Q tip; ☐ Filter; ☑ Other, [illegible] Nuclides: [illegible] Survey Date: [illegible] Radiophysicist: [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
1	Total Vial - [illegible]					N.C. [illegible]
	Measured Coffee House Spec					[illegible]
	Ref AS on TIME					
	1.0 ml inject ~5.1 ml -					DTL 5% REPORT
	NT X Cone 5 Mo [illegible]					
	Then TC - 1.0 ml - positive at finish: [illegible]					
	in TC Vial #1002					in TC Pos: of TC 454 [illegible]
						Spec Act by TIME
[illegible]	179	1.0	179	19 ± 13.41	5.92 ± [illegible]	/ml = 0.02 ± 0.06 /ml of [illegible]
[illegible]	227	1.0	222	12 ± 20.75	4.65 ± [illegible]	/ml = 0.01 ± 0.06 /ml of [illegible]
			+TC 454	[illegible]		(1.0 ml alig) TC Vial #1072
454 Hg 195	1	233	1.0	233.30	3.50 ± 10.05	11.14 ± 19.[illegible] pCi/ml activity = 4,460 ± 7,9.30
454 195	1	307	10	304.90	3.90 ± 7.52	2.34 ± 4.75 pCi/ml Total act = 935 ± 1910 pCi/ml
	Hence by TC - [illegible]					[illegible] applied in calc (1.2 ml)

Count for [illegible] vs [illegible] Std, Instrument [illegible] Detector [illegible]

Voltage 1000; FLS Gain [illegible] Date Counted 7/13/93 Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net) [illegible]

[illegible] 7/16/93

SIGNATURE (UNIT REVIEW) SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

LR [illegible] 6 [illegible] Lab. Page 3114

Firm [illegible] Install # [illegible] ☐ Sealed; ☐ Unsea

# of Samples [illegible] ☐ Q tip; ☐ Filter; ☐ Other Nuclides [illegible] Survey Date [illegible] Radiophysicist [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
1	12	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	14	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	13	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Count for [illegible] vs [illegible] Std. Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]

[illegible] SIGNATURE (UNIT REVIEW)

[illegible] SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

Radiological Health Unit

LR 164 6-1-

Lab. Page 3/14

Firm [illegible] Install [illegible] ☐ Sealed; ☐ Unsealed

# of Samples [illegible] ☐ Q tip; ☐ Filter; ☐ Other Nuclides [illegible] Survey Date _____ Radiophysicist [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Count for [illegible] vs [illegible] I, Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]

[illegible] 7/12

SIGNATURE (UNIT REVIEW) SIGNATURE (SECTION REVIEW)

H-375 (6-70)

# of Samples 42 ☐ Q tip; ☒ Filter ☐ Other Nuclides [illegible] Survey D[illegible] Radiophysicist [illegible] ☐ Sealed; ☒ Unsealed

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
41	1	5	[illegible]	-0.84 ± [illegible]	-1.13 ± [illegible]	
42	2	5	[illegible]	-0.64 ± [illegible]	-0.50 ± [illegible]	
						Alpha [illegible]
						Alpha TOTAL Activity = +3.8 pCi ± 8.11
		1.0 mm				Total 6.26
Std	174	1.0	174	-14.00 ± 5.78	+6.57 ± 8.11	Sr-Bi Lucite
Std	208	1.0	208	-2.00 ± 6.40	-0.72 ± 1.27	

Count for α vs 90Sr Std. Instrument 1337 Detector [illegible]

Voltage 1100 Gain 1514 Date Counted [illegible] Radioc[illegible]

Background 1.04 CPM; Factor 0.99701 pCi/cpm (net)

α = 2.6572

[illegible]
SIGNATURE (UNIT REVIEW)

[illegible]
SIGN[illegible]

IH-375 (6-70)

SURVEY RESULTS
Radiological Health Unit

LR 169 6 Lab. Page [illegible]

Firm [illegible] Install # [illegible] ☐ Sealed; ☐ Unsealed

# of Samples 10 ☐ Q tip; ☐ Filter; ☐ Other Nuclides [illegible] Survey Date [illegible] Radiophysicist [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
6	[illegible]		[illegible]	[illegible]	[illegible]	
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

Count for [illegible] vs [illegible] Std, Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]
SIGNATURE, UNIT REVIEW

[illegible]
SIGNATURE, SECTION REVIEW

LR [illegible]

Firm [illegible] Install # [illegible] [ ] Sealed; [ ] Unsea

# of Samples [illegible] [ ] Q tip; [ ] Filter; [ ] Other Nuclides [illegible] Survey Date [illegible] Radiophysicist [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
24	183	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	174	[illegible]	[illegible]	[illegible]	[illegible]	
26	183	[illegible]	[illegible]	[illegible]	[illegible]	Alpha [illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	171	[illegible]	[illegible]	[illegible]	[illegible]	
29	205	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	192	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	178	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	205	[illegible]	[illegible]	[illegible]	[illegible]	
34	191	[illegible]	[illegible]	[illegible]	[illegible]	
35	176	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	211	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	187	[illegible]	[illegible]	[illegible]	[illegible]	
38	171	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	186	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	110	[illegible]	[illegible]	[illegible]	[illegible]	

Count for [illegible] vs [illegible] Std, Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]

SIGNATURE (UNIT REVIEW)

[illegible]

SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

Firm [illegible] Install # [illegible] ☐ Sealed; ☐ Unseal

# of Samples [illegible] ☐ Q tip; ☐ Filter; ☐ Other Nuclides [illegible] Survey Date [illegible] Radiophysicist [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS
[illegible]	181	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	136	[illegible]	[illegible]	[illegible]	[illegible]	
					[illegible]	[illegible]
					=	[illegible] ± [illegible]
					Highest Total Actu.	B-337
					= 19[illegible] pCi ± 30.50	

Count for [illegible] vs [illegible] Std, Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background 1756 CPM; Factor [illegible] pCi/cpm (net)

[illegible]

[illegible]
SIGNATURE (UNIT REVIEW)

[illegible]
SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

LR [illegible] Install # [illegible] ☐ Sealed; ☒ Unsealed

Firm [illegible] Survey Date [illegible] Radiophysicist [illegible]

# of Samples [illegible] ☐ Q-tip; ☒ Filter; ☐ Other Nuclides [illegible]

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	[illegible]	REMARKS [illegible]
1	783	40	[illegible]	-2.10	-1.44	[illegible]	[illegible]
2	856	40	[illegible]	-1.38	-1.41	[illegible]	[illegible]
3	[illegible]	40	[illegible]	1.73	-2.42	[illegible]	[illegible]
4	824	40	[illegible]	[illegible]	-1.47	[illegible]	[illegible]
5	893	40	[illegible]	+1.65	-1.03	[illegible]	[illegible]
6	754	40	[illegible]	-2.05	-1.52	[illegible]	[illegible]
7	867	40	[illegible]	[illegible]	-1.29	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	846	40	[illegible]	-1.63	-1.07	[illegible]	[illegible]
11	833	40	[illegible]	-1.85	[illegible]	[illegible]	[illegible]
12	852	40	[illegible]	-2.13	-1.56	[illegible]	[illegible]
13	895	40	[illegible]	1.20	-2.44	-2.34 ± 2.09	[illegible]
14	847	40	[illegible]	-1.58	-2.42	-2.92 ± 2.07	[illegible]
15	[illegible]	40	[illegible]	33.55	-4.61	[illegible]	[illegible]
16	829	40	[illegible]	[illegible]	-2.09	-2.24 ± 2.10	[illegible]
17	815	40	[illegible]	-1.30	-1.94	[illegible]	[illegible]
18	825	40	[illegible]	1.05	-1.45	[illegible]	[illegible]
19	[illegible]	40	[illegible]	1.32	-1.96	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Count for [illegible] vs [illegible] Std. Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net) [illegible]

[illegible]

SIGNATURE (UNIT REVIEW) [illegible]

SIGNATURE (SECTION REVIEW) [illegible]

IH-375 (6-70)

Lit. _____ Install # 1 ☐ Sealed; ☐ Unsealed

Firm [illegible]

# of Samples [illegible] ☐ Q tip; ☐ Filter; ☐ Other Nuclides _____ Survey Date _____ Radiophysicist _____

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	REMARKS	
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	40	20.65	-1.00	-1.14	2.14 ± 3.66	-6.51 ± 19.66
25	[illegible]	40	19.35	-2.30	-2.64	-1.34 ± 2.63	-13.82 ± 19.35
26	[illegible]	40	18.55	-1.45	-1.91	3.96 ± 2.92	-11.92 ± 27.93
27	823	40	20.05	-1.00	-1.66	-2.66 ± 2.04	-5.28 ± 19.52
28	820	40	20.93	-1.35	-2.02	-2.72 ± 2.16	-5.52 ± 19.81
29	814	40	20.35	-1.33	-1.74	-3.67 ± 2.13	-9.92 ± 19.53
30	816	40	20.50	-1.18	-2.13	-2.31 ± 2.08	-8.35 ± 19.35
31	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
32	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
33	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
34	811	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
35	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
38	[illegible]	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Count for [illegible] vs [illegible] Std. Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]

[illegible]

SIGNATURE (UNIT REVIEW)

[illegible]

SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

Lab. Page _____

LR _____ 6 _____

Firm _____ Install # _____ ☐ Sealed; ☐ Unseal

# of Samples _____ ☐ Q tip; ☐ Filter; ☐ Other Nuclides _____ Survey Date _____ Radiophysicist _____

SAMPLE #	GROSS COUNTS	T (MIN)	CPM GROSS	CPM NET	ACTIVITY (pCi)	[illegible]	REMARKS [illegible]
1	1152	40	[illegible]	3.27	[illegible]	[illegible]	[illegible]
2	1149	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	1257	40	[illegible]	6.65	-1.35	[illegible]	[illegible]
4	1197	40	[illegible]	3.40	+6.10	3.50 ± 2.33	[illegible]
5	1115	40	[illegible]	2.35	-0.19	2.26 ± 2.31	[illegible]
6	1160	40	[illegible]	3.47	+6.30	3.77 ± 2.34	[illegible]
7	1148	40	[illegible]	6.69	[illegible]	[illegible]	[illegible]
8	1230	40	[illegible]	[illegible]	+2.19	[illegible]	[illegible]
9	1120	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	1129	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	1169	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	1162	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	1243	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	1241	40	[illegible]	[illegible]	-1.09	[illegible]	[illegible]
15	1241	40	[illegible]	[illegible]	-2.14	[illegible]	[illegible]
16	1237	40	[illegible]	[illegible]	-1.11	[illegible]	[illegible]
17	1200	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	1193	40	[illegible]	[illegible]	+6.15	[illegible]	[illegible]
19	1151	40	[illegible]	[illegible]	+6.65	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Count for [illegible] vs [illegible] Std. Instrument [illegible] Detector [illegible]

Voltage [illegible] Gain [illegible] Date Counted [illegible] Radiochemist [illegible]

Background [illegible] CPM; Factor [illegible] pCi/cpm (net)

[illegible]

[illegible]

SIGNATURE (UNIT REVIEW)

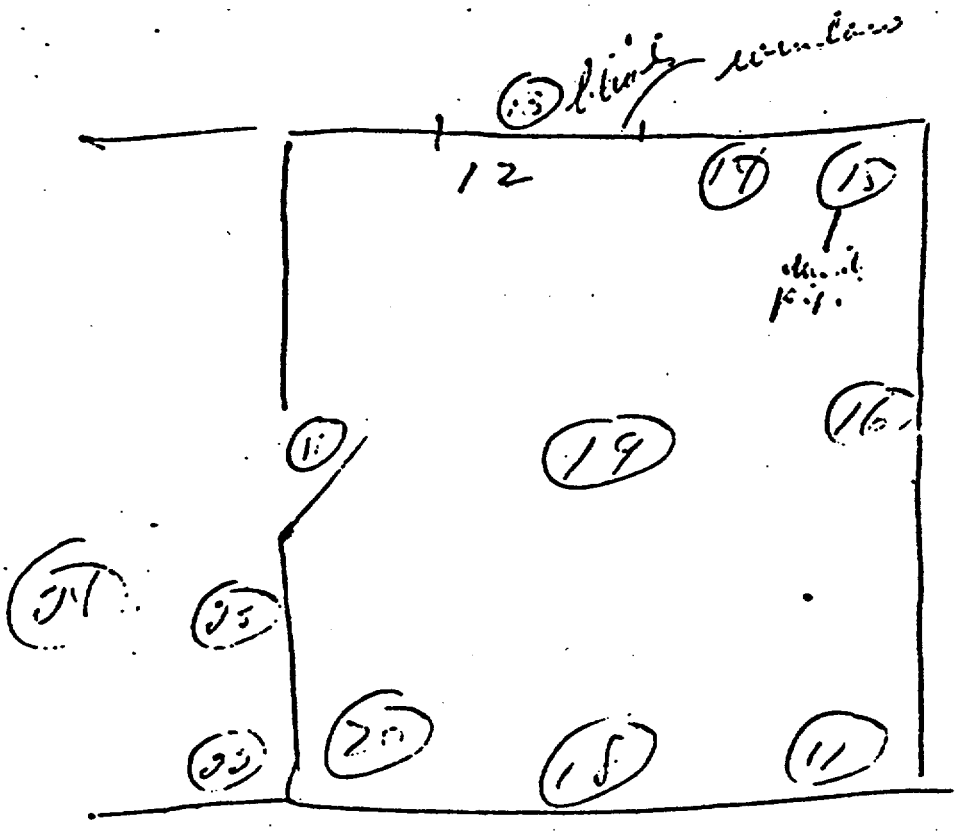
[illegible]

SIGNATURE (SECTION REVIEW)

IH-375 (6-70)

Firm [illegible] Address

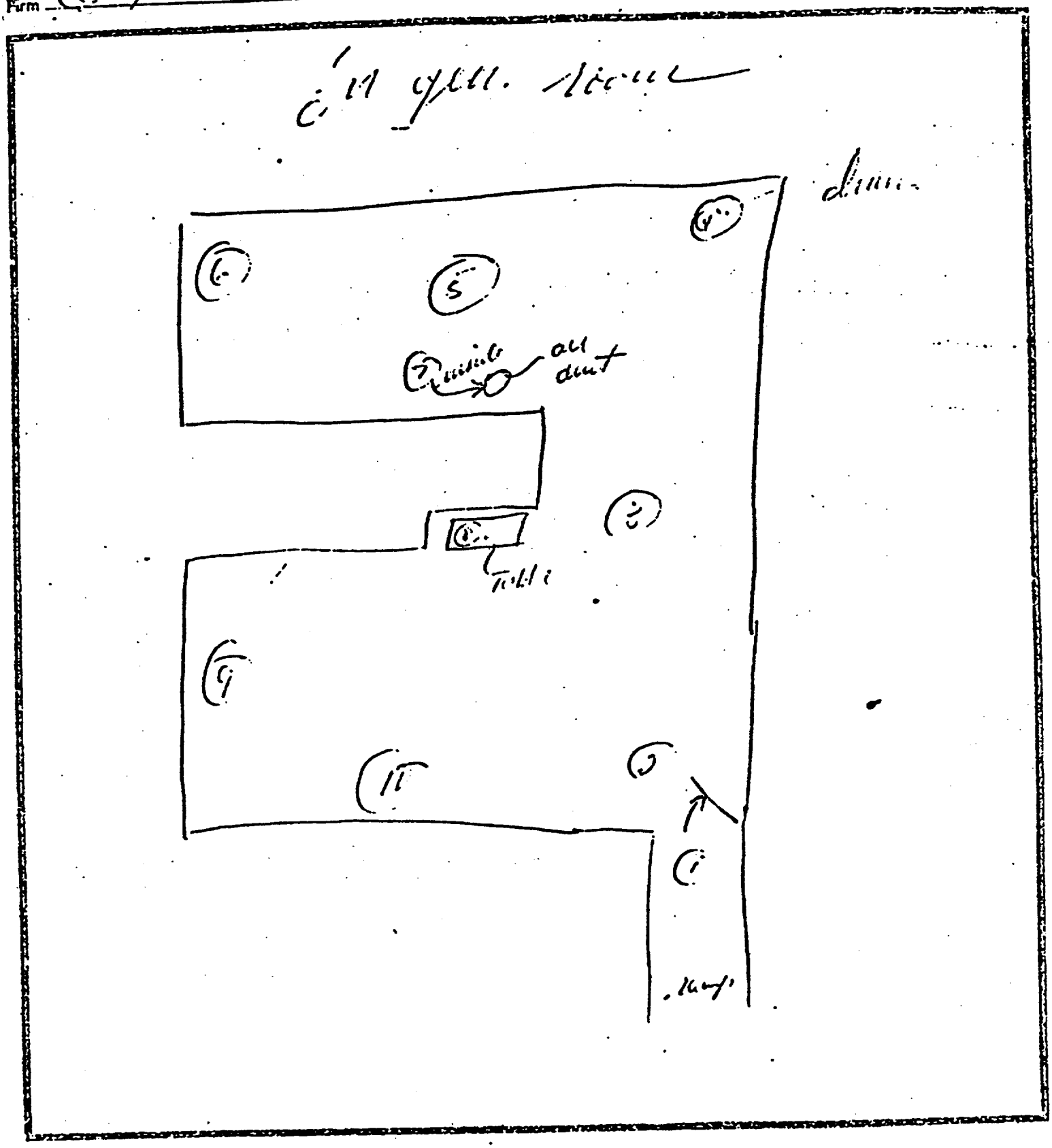
Radiochemical & analytical lab.



H: Hard; S: Soft; a: Alpha; n: Neutron
Red Numerals: Radiation in MREM/HR
Green Numerals: Smear Numbers
Blue Circled Smear Numbers: Greater Than 3 x Background Standard Deviation or as Indicated

H-371 (12-66)

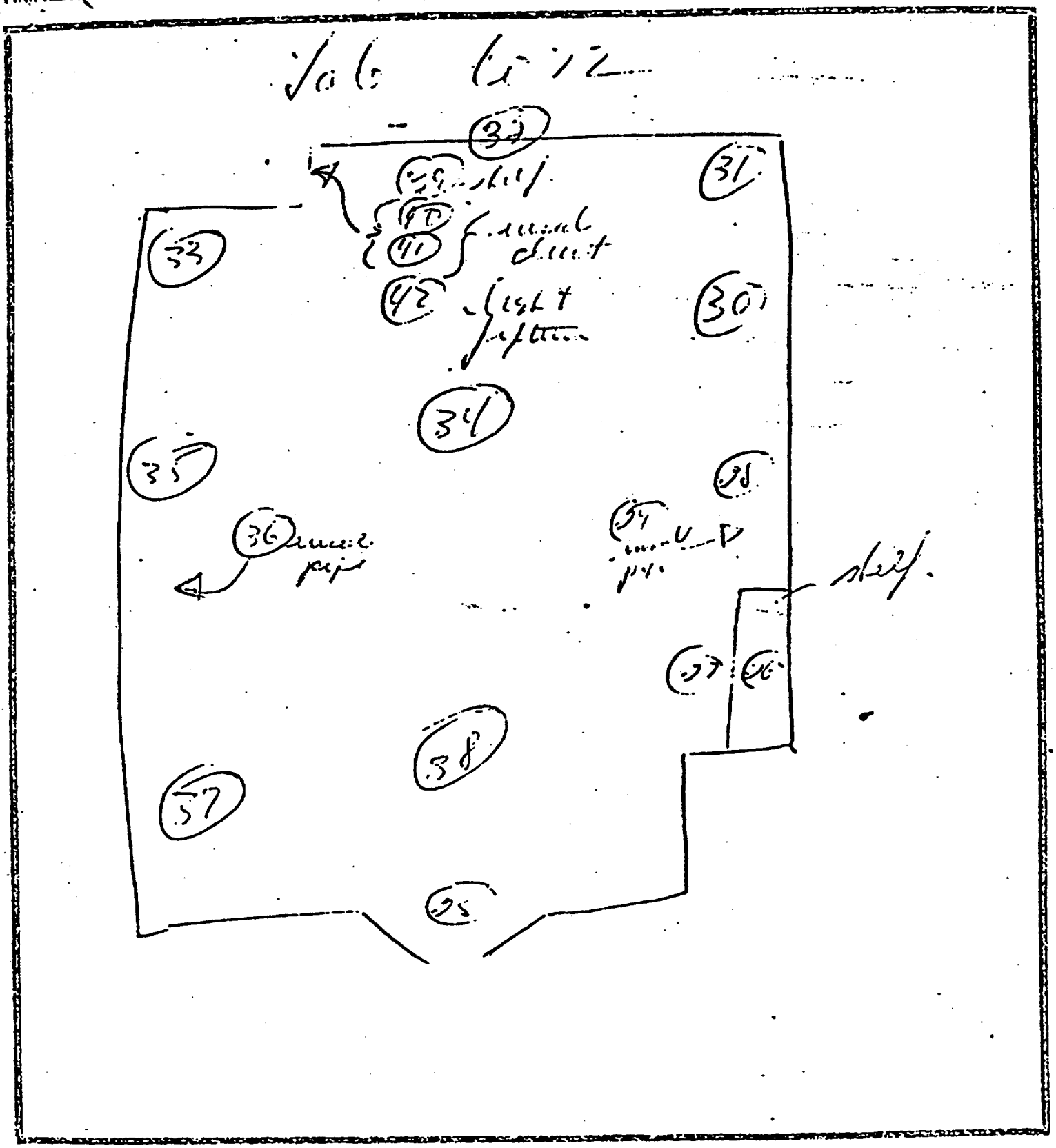
Firm CITC Address [illegible]



H: Hard; S: Soft; a: Alpha; n: Neutron
Red Numerals: Radiation in MREM/HR
Green Numerals: Smear Numbers
Blue Circled Smear Numbers: Greater Than 3 x Background Standard Deviation or as Indicated

Installation # _____ Date _____

Firm (illegible) _____ Address _____



H: Hard; S: Soft; a: Alpha; n: Neutron
Red Numerals: Radiation in MREM/HR
Green Numerals: Smear Numbers
Blue Circled Smear Numbers: Greater Than 3 x Background Standard Deviation or as Indicated