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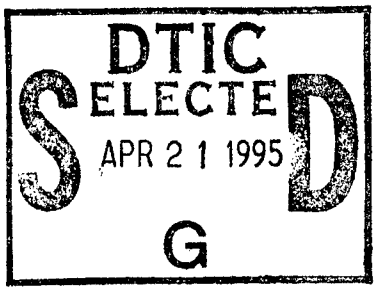


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Johnston Atoll Plutonium Cleanup Project Plant Modification and Operation

Volume 2—Annual Report Option Year 2
Appendix A

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Technical Report

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13. ABSTRACT *(Maximum 200 words)*

This report continues the documentation of the operation of TMA/Eberline's Segmented Gate System technology for removing mixed plutonium and americium contamination at DNA's Johnston Atoll site. Contaminated feed is conveyed under arrays of radiation detectors coupled with sophisticated computer software developed by Eberline Instrument Corporation. Segmented gates (chutes) on pneumatically-driven pistons move forward when contamination is detected to remove only the contaminated portion from the main flow of feed material. Only about one pint of contaminant is removed during each diversion event. At the JA site, a 98% volume reduction has been achieved, with the remediated soil cleaned to DNA's criteria for release for unrestricted use of 500 Bq/kg total transuranic alpha contamination and no "hot" particles of greater than 5000 Becquerrels. The low level waste concentrate is expected to be packaged for shipment to an approved defense waste disposal site.

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CONVERSION TABLE

Conversion factors for U.S. Customary to metric (SI) units of measurement.

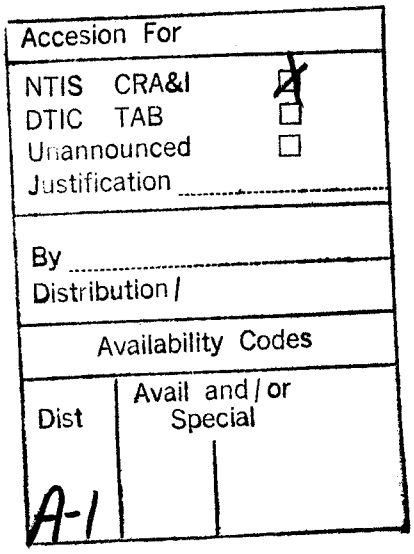
MULTIPLY ---------->	BY ---------->	TO GET
TO GET <----------	BY <----------	DIVIDE

angstrom	1.000 000 X E -10		meters (m)
atmosphere (normal)	1.013 25 X E +2		kilo pascal (kPa)
bar	1.000 000 X E +2		kilo pascal (kPa)
barn	1.000 000 X E -28		meter^2 (m^2)
British thermal unit (thermochemical)	1.054 350 X E +3		joule (J)
calorie (thermochemical)	4.184 000		joule (J)
cal (thermochemical/cm^2	4.184 000 X E -2		mega joule/m^2 (MJ/m^2)
curie	3.700 000 X E +1	*	giga becquerel (GBq)
degree (angle)	1.745 329 X E -2		radian (rad)
degree Fahrenheit	t_K = (t°f + 459.67)/1.8		degree kelvin (K)
electron volt	1.602 19 X E -19		joule (J)
erg	1.000 000 X E -7		joule (J)
erg/second	1.000 000 X E -7		watt (W)
foot	3.048 000 X E -1		meter (m)
foot-pound-force	1.355 818		joule (J)
gallon (U.S. liquid)	3.785 412 X E -3		meter^3 (m^3)
inch	2.540 000 X E -2		meter (m)
jerk	1.00 000 X E +9		joule (J)
joule/kilogram (J/kg) radiation dose absorbed	1.000 000		Gray (Gy)
kilotons	4.183		terajoules
kip (10000 lbf)	4.448 222 X E +3		newton (N)
kip/inch^2 (ksi)	6.894 757 X E +3		kilo pascal (kPa)
ktap	1.000 000 X E +2		newton-second/m^2 (N-s/m^2)
micron	1.000 000 X E -6		meter (m)
mil	2.540 000 X E -5		meter (m)
mile (international)	1.609 344 X E +3		meter (m)
ounce	2.834 952 X E -2		kilogram (kg)
pound-force (lbs avoirdupois)	4.448 222		newton (N)
pound-force inch	1.129 848 X E +2		newton-meter (N·m)
pound-force/inch	1.751 268 X E +2		newton/meter (N/m)
pound-force/foot^2	4.788 026 X E -2		kilo pascal (kPa)
pound-force/inch^2 (psi)	6.894 757		kilo pascal (kPa)
pound-mass (lbm avoirdupois)	4.535 924 X E -1		kilogram (kg)
pound-mass-foot^2 (moment of inertia)	4.214 011 X E -2		kilogram-meter^2 (kg·m^2)
pound-mass-foot^3	1.601 846 X E +1		kilogram/meter^2 (kg-m^3)
rad (radiation dose absorbed)	1.000 000 X E -2	**	Gray (Gy)
roentgen	2.579 760 X E -4		coulomb/kilogram (C/kg)
shake	1.000 000 X E -8		second (s)
slug	1.459 390 X E +1		kilogram (kg)
torr (mm Hg, O°C)	1.333 22 X E -1		kilo pascal (kPa)

*The becquerel (Bq) is the SI unit of radioactivity: 1 Bq = 1 event/s.
**The Gray (GY) is the SI unit of absorbed radiation.

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APPENDIX

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 15-May-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.45 tons	110.6 tons	
MAXIMUM/SORT	5.5 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	57.4 kg	
			99.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.36 yd³	87.6 yd³	88.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,357 kBq		
MAXIMUM/SORT	643 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,570 kBq	2,315 kBq	
MAXIMUM/SORT	362 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,705 Bq/kg	21 Bq/kg	

WORK HISTORY

WORK DAY START	04:30 AM	WORK DAY END	03:30 PM
PLANT START-UP	04:30 AM	PLANT SHUT-DOWN	03:30 PM
START SOIL PROCESSING	04:58 AM	END SOIL PROCESSING	02:46 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.0 hr	
AVAILABLE HOURS	11.0 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	9.81 hr	
DOWN-TIME	1.19 hr	
TOTAL SYSTEM PAUSE	0.00 hr	
NONAVAILABLE HOURS	0.0 hr	
START-UP	0.47 hr	
SHUT-DOWN	0.73 hr	
PLANT PERFORMANCE	89.1%	
PRODUCTIVITY	89.1%	
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,197	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	1,765	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	1,478 AD=0 & MD=0 & MND>0	
SOME SORT	287 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	4	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	92 21.3%	

UNEXPLAIN TIME	PAUSE TIME
05:19:00	None
07:46:00	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	17,650		09:40:40
2-SEC RECORDS WITH SORTS	432	(ACT_P >0 kBq)	11:31:40
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	80	83.3%	
3 DETECTORS	12	12.5%	
4 DETECTORS	3	3.1%	
5 DETECTORS	1	1.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	96		
NET 2-SEC RECORDS WITH SORTS	336		
2-SEC PERIODS WITH NO SORTS	17,314		
AVG TIME BETWEEN 2-SEC SORTS	105.1 sec		

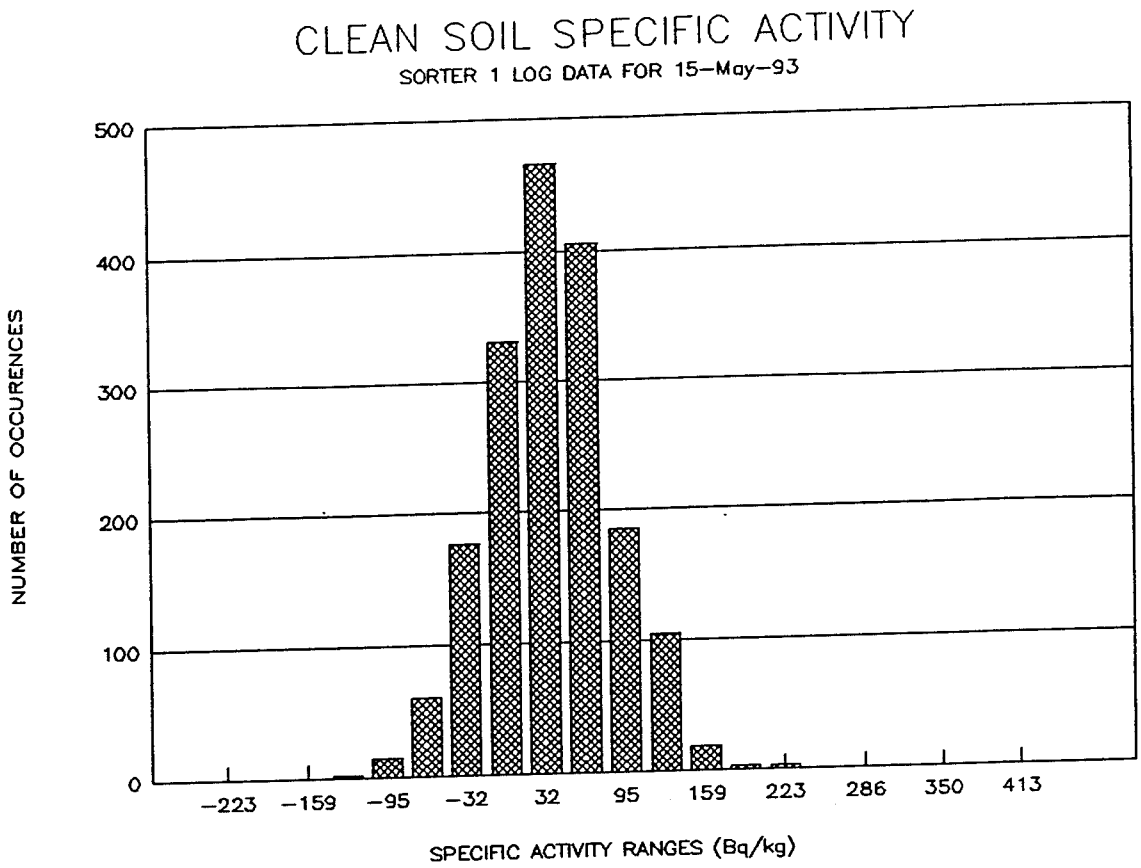
1-GATE SORTS		221	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	2	0.9%	-14000	0	-223	4000	21	4.9%	4
2	17	7.7%	-12000	0	-191	8000	195	45.1%	8
3	26	11.8%	-10000	0	-159	12000	70	16.2%	12
4	45	20.4%	-8000	2	-127	16000	29	6.7%	16
5	46	20.8%	-6000	15	-95	20000	26	6.0%	20
6	29	13.1%	-4000	60	-64	24000	12	2.8%	24
7	44	19.9%	-2000	177	-32	28000	14	3.2%	28
8	12	5.4%	0	331	0	32000	10	2.3%	32
TOTAL	221		2000	466	32	36000	9	2.1%	36
			4000	406	64	40000	4	0.9%	40
2-GATE SORTS		211	6000	185	95	44000	3	0.7%	44
DETECTR	SORTS	FREQ%	8000	105	127	48000	3	0.7%	48
8			10000	19	159	52000	4	0.9%	52
9	11	5.2%	12000	3	191	56000	2	0.5%	56
10	11	5.2%	14000	3	223	60000	4	0.9%	60
11	37	17.5%	16000	0	254	64000	4	0.9%	64
12	40	19.0%	18000	0	286	68000	2	0.5%	68
13	43	20.4%	20000	0	318	72000	3	0.7%	72
14	37	17.5%	22000	0	350	76000	3	0.7%	76
15	32	15.2%	24000	0	382	80000	1	0.2%	80
TOTAL	211		26000	0	413	84000	2	0.5%	84
			>28000	0	0	>84000	11	2.5%	>84
			TOTAL	1772		TOTAL	432		

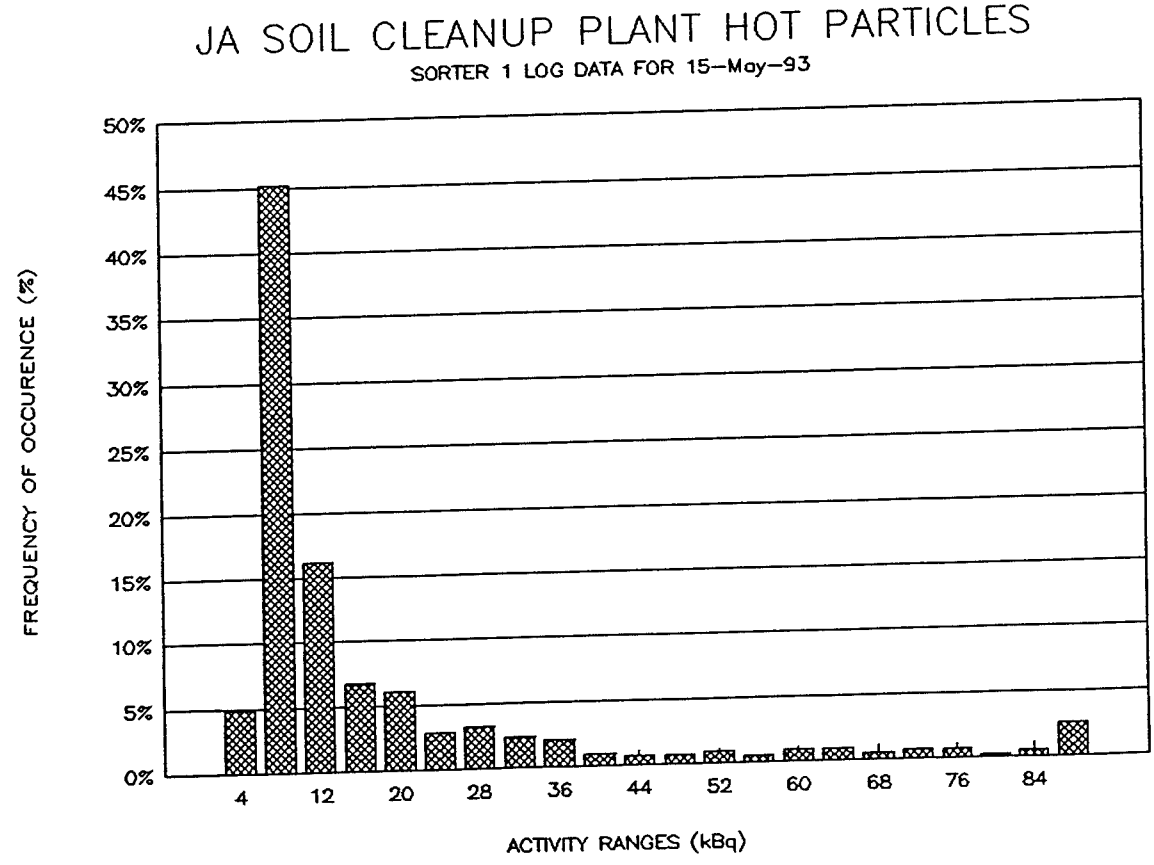
SUMMARY TOTALS

HOT PARTICLE EVENTS	453	SORTS BY ONE GATE ONLY	221
MULTIPARTICLE EVENTS	113	SORTS BY TWO GATES	211
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 15-May-93
NUMBER OF OCCURENCES
500
400
300
200
100
0
-223
-159
-95
-32
32
95
159
223
286
350
413
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 15-May-93
FREQUENCY OF OCCURENCE (%)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 15-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.41 tons	110.8 tons	
MAXIMUM/SORT	5.5 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	57.4 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.33 yd³	87.8 yd³	88.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,479 kBq		
MAXIMUM/SORT	656 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,492 kBq	1,107 kBq	
MAXIMUM/SORT	342 kBq	10 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	8,469 Bq/kg	10 Bq/kg	

WORK HISTORY

WORK DAY START	04:30 AM	WORK DAY END	03:30 PM
PLANT START-UP	04:30 AM	PLANT SHUT-DOWN	03:30 PM
START SOIL PROCESSING	04:57 AM	END SOIL PROCESSING	02:46 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.0 hr
AVAILABLE HOURS	11.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.82 hr
DOWN-TIME	1.18 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.72 hr
PLANT PERFORMANCE	89.3%
PRODUCTIVITY	89.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,187	
NONPROCESS RECORDS (Test, calibration, etc)		4	
20-SEC PROCESS RECORDS		1,768	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,506	AD=0 & MD=0 & MND>0
SOME SORT		262	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	60	14.3%	

UNEXPLAIN TIME	PAUSE TIME
05:45:01	None
08:41:01	

JA SOIL CLEANUP PLANT LOG SUMMARY

10:59:41

2-SEC COUNT PERIODS	17,680	
2-SEC RECORDS WITH SORTS	419	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	101	81.5%
3 DETECTORS	18	14.5%
4 DETECTORS	4	3.2%
5 DETECTORS	1	0.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	124	
NET 2-SEC RECORDS WITH SORTS	295	
2-SEC PERIODS WITH NO SORTS	17,385	
AVG TIME BETWEEN 2-SEC SORTS	119.9	sec

1-GATE SORTS DETECTR	SORTS	225 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	14	6.2%	-14000	1	-223
2	33	14.7%	-12000	1	-191
3	51	22.7%	-10000	2	-159
4	46	20.4%	-8000	3	-127
5	48	21.3%	-6000	20	-95
6	25	11.1%	-4000	69	-64
7	6	2.7%	-2000	232	-32
8	2	0.9%	0	435	0
TOTAL	225		2000	456	32
			4000	329	64
2-GATE SORTS		194	6000	144	95
DETECTR	SORTS	FREQ%	8000	62	127
8			10000	16	159
9	18	9.3%	12000	2	191
10	31	16.0%	14000	0	223
11	41	21.1%	16000	0	254
12	44	22.7%	18000	0	286
13	41	21.1%	20000	0	318
14	18	9.3%	22000	0	350
15	1	0.5%	24000	0	382
TOTAL	194		26000	0	413
			>28000	0	0
			TOTAL	1772	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	14	3.3%	4
8000	175	41.8%	8
12000	75	17.9%	12
16000	27	6.4%	16
20000	12	2.9%	20
24000	20	4.8%	24
28000	12	2.9%	28
32000	11	2.6%	32
36000	7	1.7%	36
40000	4	1.0%	40
44000	2	0.5%	44
48000	0	0.0%	48
52000	4	1.0%	52
56000	6	1.4%	56
60000	4	1.0%	60
64000	4	1.0%	64
68000	3	0.7%	68
72000	7	1.7%	72
76000	2	0.5%	76
80000	2	0.5%	80
84000	3	0.7%	84
>84000	25	6.0%	>84
TOTAL	419		

SUMMARY TOTALS

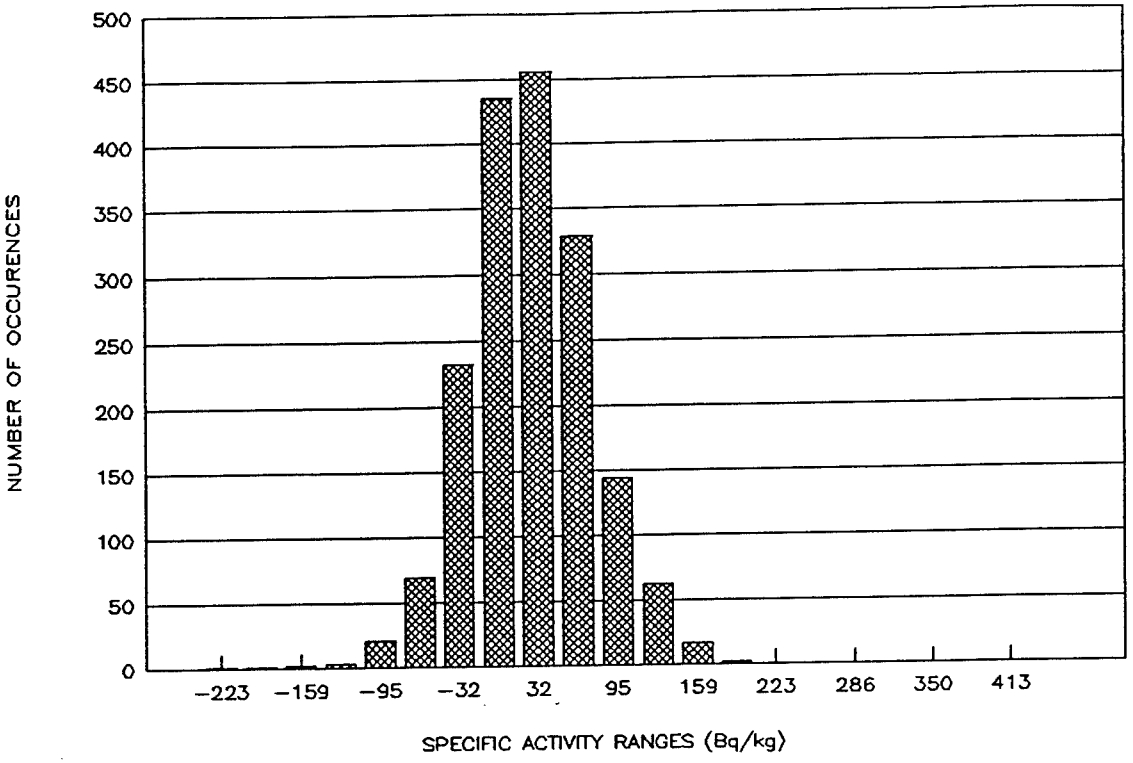
HOT PARTICLE EVENTS	401	SORTS BY ONE GATE ONLY	225
MULTIPARTICLE EVENTS	118	SORTS BY TWO GATES	194
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

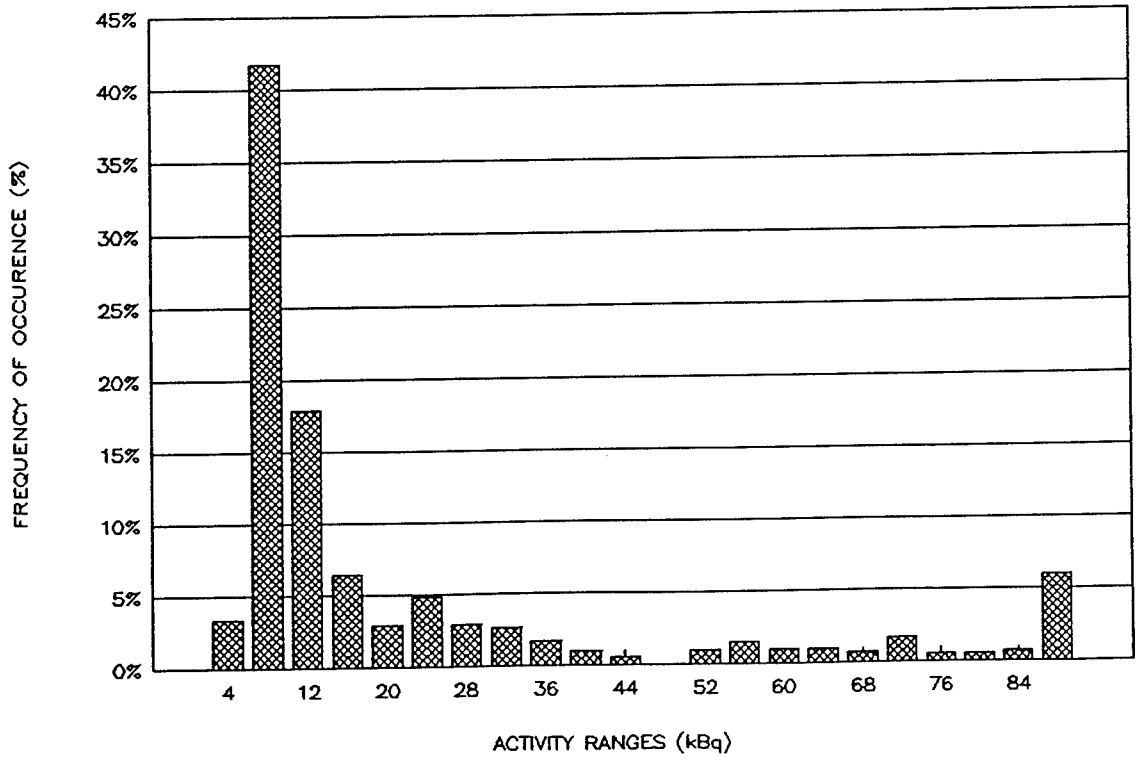
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 15-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 15-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 14-May-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.53 tons	115.6 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
			99.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.42 yd³	91.7 yd³	92.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,445 kBq		
MAXIMUM/SORT	719 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,321 kBq	4,677 kBq	
MAXIMUM/SORT	486 kBq	22 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	6,241 Bq/kg	40 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:09 AM	END SOIL PROCESSING	05:13 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.26 hr
DOWN-TIME	1.24 hr
TOTAL SYSTEM PAUSE	0.76 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.16 hr
SHUT-DOWN	0.28 hr
PLANT PERFORMANCE	89.2%
PRODUCTIVITY	89.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,369	
NONPROCESS RECORDS (Test, calibration, etc)		19	
20-SEC PROCESS RECORDS		1,847	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,520	AD=0 & MD=0 & MND>0
SOME SORT		327	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	105	20.1%	

UNEXPLAIN TIME	PAUSE TIME
12:37:58	09:24
16:57:58	11:59

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,470	
2-SEC RECORDS WITH SORTS	522	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	117	88.6%
3 DETECTORS	15	11.4%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	132	
NET 2-SEC RECORDS WITH SORTS	390	
2-SEC PERIODS WITH NO SORTS	18,080	
AVG TIME BETWEEN 2-SEC SORTS	94.7	sec

1-GATE SORTS	263	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 4	1.5%	-14000	0	-223	4000	25	4.8%	4
2 21	8.0%	-12000	0	-191	8000	246	47.1%	8
3 35	13.3%	-10000	2	-159	12000	77	14.8%	12
4 47	17.9%	-8000	8	-127	16000	43	8.2%	16
5 63	24.0%	-6000	6	-95	20000	30	5.7%	20
6 45	17.1%	-4000	28	-64	24000	17	3.3%	24
7 38	14.4%	-2000	109	-32	28000	9	1.7%	28
8 10	3.8%	0	270	0	32000	9	1.7%	32
TOTAL 263		2000	461	32	36000	4	0.8%	36
		4000	463	64	40000	6	1.1%	40
2-GATE SORTS	259	6000	273	95	44000	7	1.3%	44
DETECTR SORTS	FREQ%	8000	128	127	48000	8	1.5%	48
8		10000	54	159	52000	6	1.1%	52
9 11	4.2%	12000	30	191	56000	5	1.0%	56
10 25	9.7%	14000	15	223	60000	1	0.2%	60
11 45	17.4%	16000	10	254	64000	6	1.1%	64
12 46	17.8%	18000	4	286	68000	5	1.0%	68
13 61	23.6%	20000	3	318	72000	2	0.4%	72
14 44	17.0%	22000	2	350	76000	2	0.4%	76
15 27	10.4%	24000	0	382	80000	1	0.2%	80
TOTAL 259		26000	0	413	84000	0	0.0%	84
		>28000	0	0	>84000	13	2.5%	>84
		TOTAL	1866		TOTAL	522		

SUMMARY TOTALS

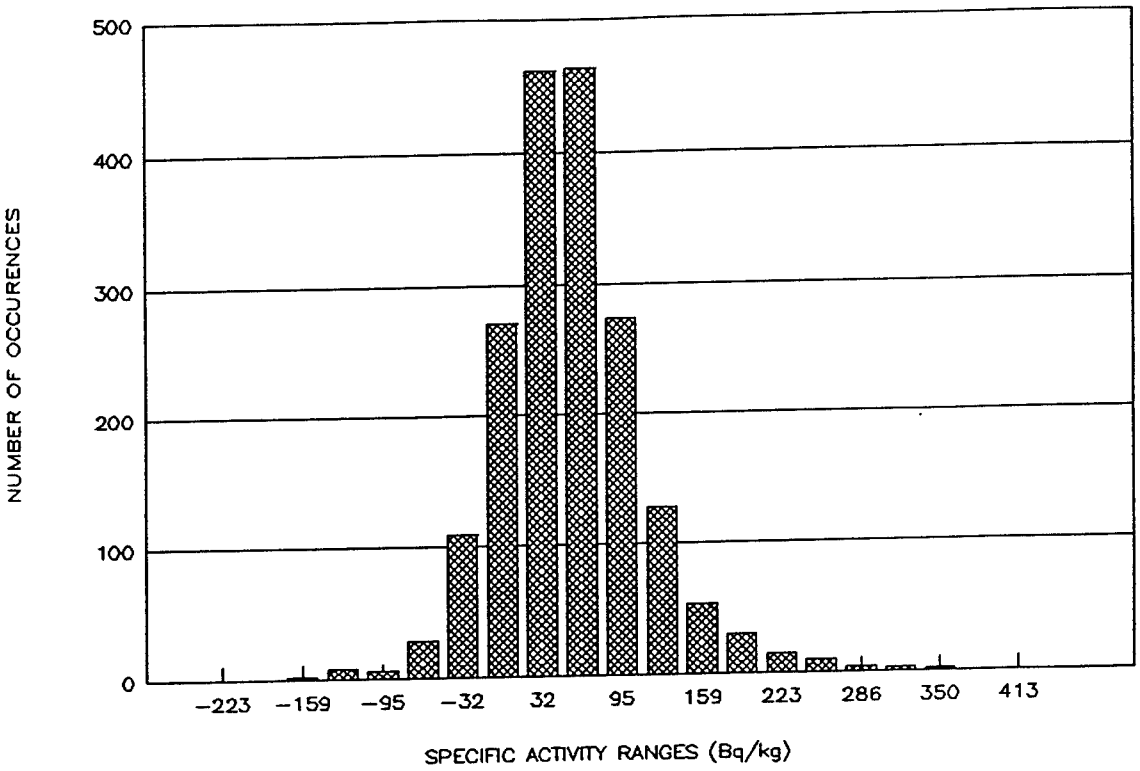
HOT PARTICLE EVENTS	521	SORTS BY ONE GATE ONLY	263
MULTIPARTICLE EVENTS	149	SORTS BY TWO GATES	259
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

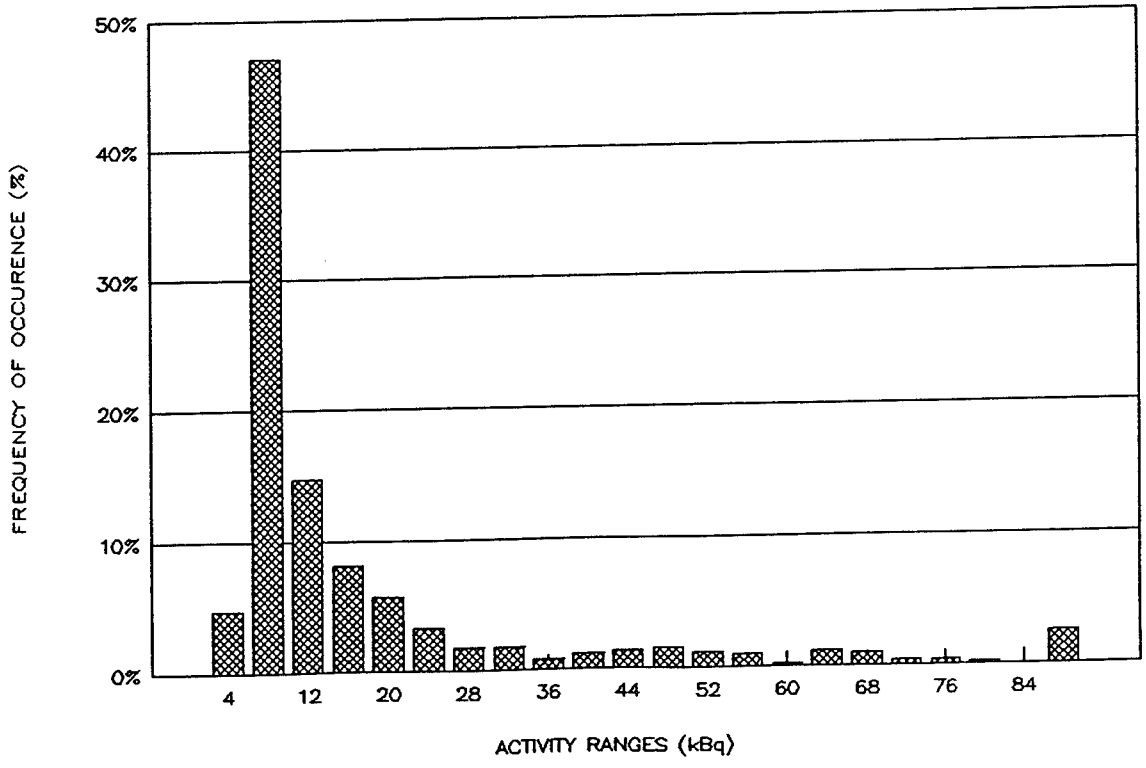
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 14–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 14–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 14-May-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.50 tons	115.4 tons	
MAXIMUM/SORT	4.7 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	58.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.40 yd³	91.5 yd³	91.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,014 kBq		
MAXIMUM/SORT	332 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,629 kBq	3,748 kBq	
MAXIMUM/SORT	184 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,235 Bq/kg	32 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:09 AM	END SOIL PROCESSING	05:12 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.24 hr
DOWN-TIME	1.26 hr
TOTAL SYSTEM PAUSE	0.76 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.15 hr
SHUT-DOWN	0.29 hr
PLANT PERFORMANCE	89.0%
PRODUCTIVITY	89.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,340	
NONPROCESS RECORDS (Test, calibration, etc)		23	
20-SEC PROCESS RECORDS		1,843	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,519	AD=0 & MD=0 & MND>0
SOME SORT		324	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	87	17.5%	

UNEXPLAIN TIME	PAUSE TIME
08:01:59	09:24
08:29:19	11:59

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,430		10:08:19
2-SEC RECORDS WITH SORTS	497	(ACT_P >0 kBq)	14:04:59
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			14:42:19
2 DETECTORS	98	83.1%	
3 DETECTORS	16	13.6%	
4 DETECTORS	3	2.5%	
5 DETECTORS	1	0.8%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	118		
NET 2-SEC RECORDS WITH SORTS	379		
2-SEC PERIODS WITH NO SORTS	18,051		
AVG TIME BETWEEN 2-SEC SORTS	97.3 sec		

1-GATE SORTS DETECTR	SORTS	259 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	12	4.6%	-14000	0	-223
2	43	16.6%	-12000	1	-191
3	42	16.2%	-10000	2	-159
4	60	23.2%	-8000	6	-127
5	37	14.3%	-6000	10	-95
6	33	12.7%	-4000	46	-64
7	24	9.3%	-2000	147	-32
8	8	3.1%	0	313	0
TOTAL	259		2000	478	32
			4000	401	64
2-GATE SORTS		238	6000	266	95
DETECTR	SORTS	FREQ%	8000	105	127
8			10000	55	159
9	22	9.2%	12000	18	191
10	35	14.7%	14000	10	223
11	47	19.7%	16000	6	254
12	55	23.1%	18000	1	286
13	42	17.6%	20000	1	318
14	25	10.5%	22000	0	350
15	12	5.0%	24000	0	382
TOTAL	238		26000	0	413
			>28000	0	0
			TOTAL	1866	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	21	4.2%	4
8000	234	47.1%	8
12000	78	15.7%	12
16000	50	10.1%	16
20000	30	6.0%	20
24000	14	2.8%	24
28000	15	3.0%	28
32000	7	1.4%	32
36000	5	1.0%	36
40000	3	0.6%	40
44000	6	1.2%	44
48000	3	0.6%	48
52000	2	0.4%	52
56000	3	0.6%	56
60000	3	0.6%	60
64000	2	0.4%	64
68000	1	0.2%	68
72000	4	0.8%	72
76000	2	0.4%	76
80000	2	0.4%	80
84000	3	0.6%	84
>84000	9	1.8%	>84
TOTAL	497		

SUMMARY TOTALS

HOT PARTICLE EVENTS	504	SORTS BY ONE GATE ONLY	259
MULTIPARTICLE EVENTS	127	SORTS BY TWO GATES	238
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

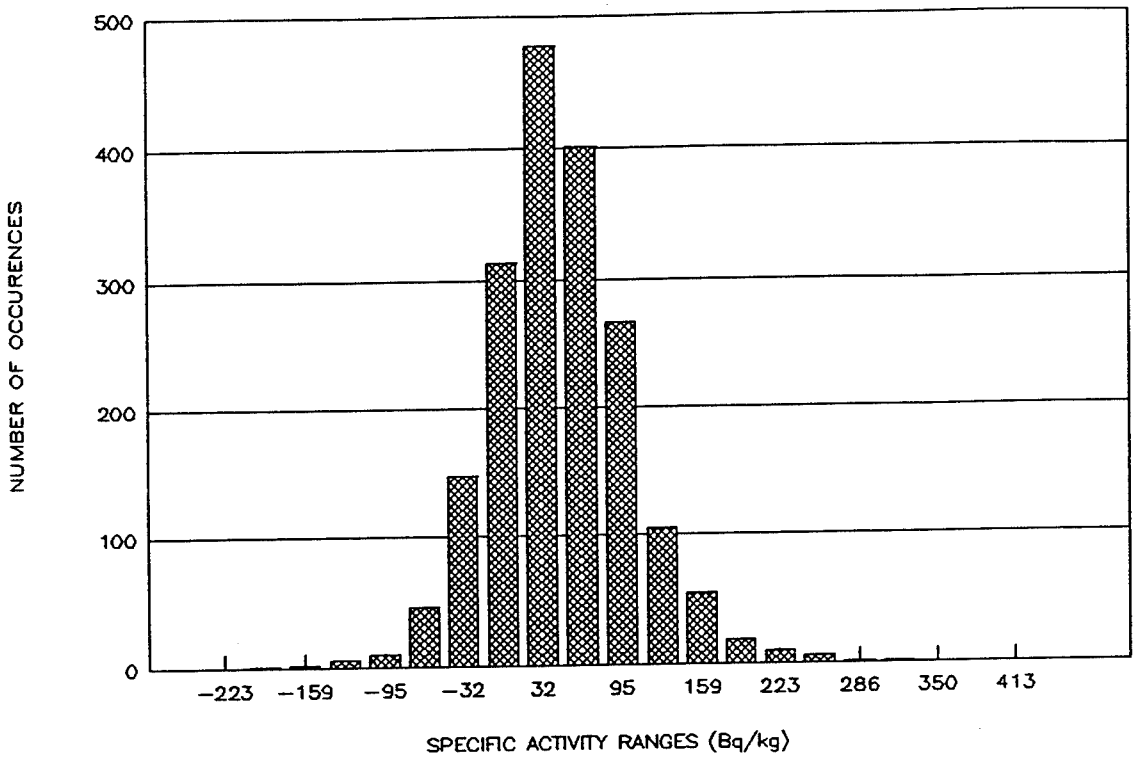
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

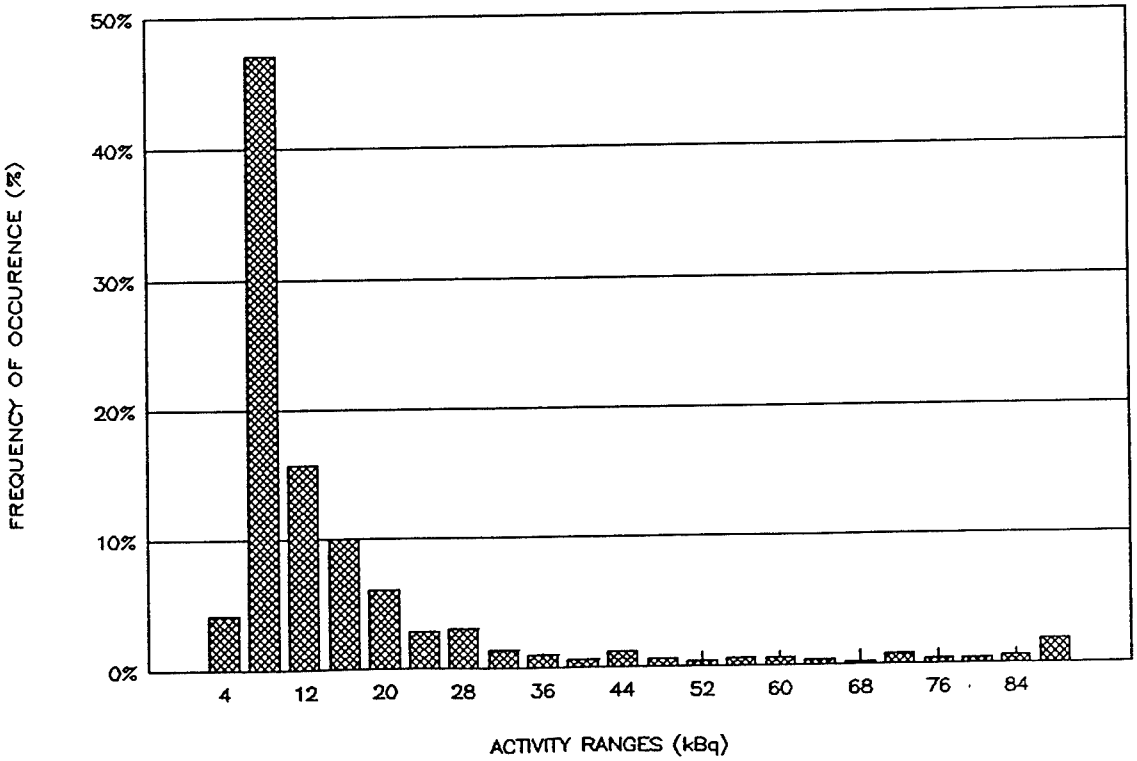
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 14-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 14-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 13-May-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec			
SORTER SOIL DENSITY	1.35 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.55 tons	121.6 tons	
MAXIMUM/SORT		6.3 kg	62.9 kg	
MINIMUM/SORT		0.8 kg	56.6 kg	
				99.5%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.44 yd³	96.4 yd³	96.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		11,872 kBq		
MAXIMUM/SORT		1,328 kBq		
MINIMUM/SORT		2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		3,839 kBq	5,096 kBq	
MAXIMUM/SORT		804 kBq	17 kBq	
MINIMUM/SORT		0 Bq	-8 kBq	
SPECIFIC ACTIVITY		6,959 Bq/kg	42 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:13 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.79 hr
DOWN-TIME	0.71 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.22 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	93.8%
PRODUCTIVITY	93.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,482	
NONPROCESS RECORDS (Test, calibration, etc)		2	
20-SEC PROCESS RECORDS		1,942	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,596	AD=0 & MD=0 & MND>0
SOME SORT		345	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	2		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	101	18.7%	

UNEXPLAIN TIME	PAUSE TIME
10:05:53	None
13:30:33	

JA SOIL CLEANUP PLANT LOG SUMMARY

14:35:33

2-SEC COUNT PERIODS	19,420	
2-SEC RECORDS WITH SORTS	540	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	111	79.9%
3 DETECTORS	23	16.5%
4 DETECTORS	4	2.9%
5 DETECTORS	1	0.7%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	139	
NET 2-SEC RECORDS WITH SORTS	401	
2-SEC PERIODS WITH NO SORTS	19,019	
AVG TIME BETWEEN 2-SEC SORTS	96.9 sec	

1-GATE SORTS		278	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	5	1.8%	-14000	0	-223	4000	24	4.4%	4
2	23	8.3%	-12000	1	-191	8000	241	44.6%	8
3	47	16.9%	-10000	0	-159	12000	79	14.6%	12
4	54	19.4%	-8000	1	-127	16000	48	8.9%	16
5	58	20.9%	-6000	4	-95	20000	32	5.9%	20
6	35	12.6%	-4000	17	-64	24000	25	4.6%	24
7	40	14.4%	-2000	106	-32	28000	13	2.4%	28
8	16	5.8%	0	277	0	32000	7	1.3%	32
TOTAL	278		2000	409	32	36000	6	1.1%	36
			4000	508	64	40000	11	2.0%	40
2-GATE SORTS		262	6000	363	95	44000	3	0.6%	44
DETECTR	SORTS	FREQ%	8000	173	127	48000	8	1.5%	48
8			10000	53	159	52000	5	0.9%	52
9	7	2.7%	12000	19	191	56000	4	0.7%	56
10	38	14.5%	14000	9	223	60000	4	0.7%	60
11	47	17.9%	16000	2	254	64000	6	1.1%	64
12	60	22.9%	18000	2	286	68000	1	0.2%	68
13	42	16.0%	20000	0	318	72000	1	0.2%	72
14	30	11.5%	22000	0	350	76000	3	0.6%	76
15	38	14.5%	24000	0	382	80000	1	0.2%	80
TOTAL	262		26000	0	413	84000	1	0.2%	84
			>28000	0	0	>84000	17	3.1%	>84
			TOTAL	1944		TOTAL	540		

SUMMARY TOTALS

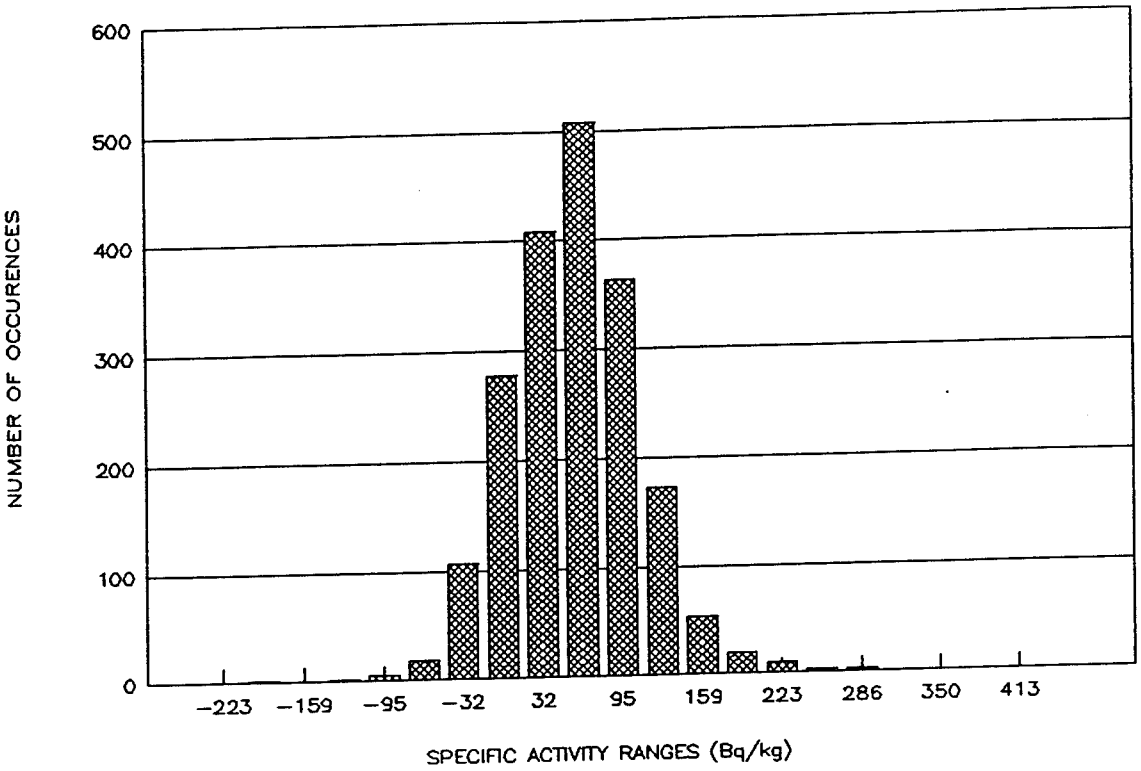
HOT PARTICLE EVENTS	536	SORTS BY ONE GATE ONLY	278
MULTIPARTICLE EVENTS	158	SORTS BY TWO GATES	262
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

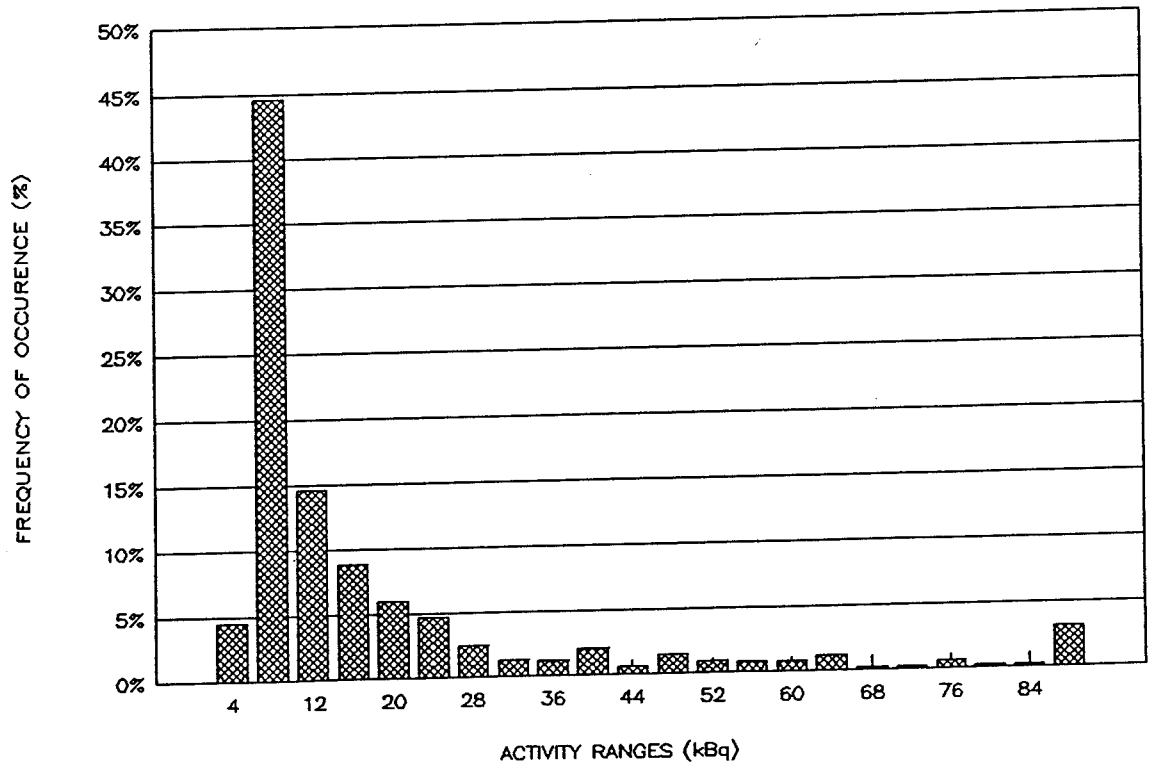
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 13–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 13–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 13-May-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.44 tons	121.6 tons	
MAXIMUM/SORT	4.7 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	58.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.35 yd³	96.4 yd³	96.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	7,787 kBq		
MAXIMUM/SORT	718 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,628 kBq	4,441 kBq	
MAXIMUM/SORT	450 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	6,033 Bq/kg	37 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:13 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.78 hr
DOWN-TIME	0.72 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.22 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	93.7%
PRODUCTIVITY	93.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,352	
NONPROCESS RECORDS (Test, calibration, etc)	4	
20-SEC PROCESS RECORDS	1,940	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	1,642	AD=0 & MD=0 & MND>0
SOME SORT	298	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	59	14.3%

UNEXPLAIN TIME	PAUSE TIME
14:46:53	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,400	
2-SEC RECORDS WITH SORTS		412	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	92		86.0%
3 DETECTORS	13		12.1%
4 DETECTORS	1		0.9%
5 DETECTORS	1		0.9%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		107	
NET 2-SEC RECORDS WITH SORTS		305	
2-SEC PERIODS WITH NO SORTS		19,095	
AVG TIME BETWEEN 2-SEC SORTS		127.2	sec

1-GATE SORTS DETECTR	SORTS	216 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	9	4.2%	-14000	0	-223	4000	12	2.9%	4
2	25	11.6%	-12000	0	-191	8000	198	48.1%	8
3	40	18.5%	-10000	0	-159	12000	75	18.2%	12
4	46	21.3%	-8000	0	-127	16000	29	7.0%	16
5	45	20.8%	-6000	9	-95	20000	19	4.6%	20
6	36	16.7%	-4000	22	-64	24000	14	3.4%	24
7	12	5.6%	-2000	124	-32	28000	9	2.2%	28
8	3	1.4%	0	310	0	32000	11	2.7%	32
TOTAL	216		2000	453	32	36000	1	0.2%	36
			4000	494	64	40000	1	0.2%	40
2-GATE SORTS		196	6000	310	95	44000	5	1.2%	44
DETECTR	SORTS	FREQ%	8000	142	127	48000	3	0.7%	48
8			10000	48	159	52000	4	1.0%	52
9	12	6.1%	12000	24	191	56000	2	0.5%	56
10	28	14.3%	14000	5	223	60000	7	1.7%	60
11	45	23.0%	16000	2	254	64000	1	0.2%	64
12	49	25.0%	18000	1	286	68000	8	1.9%	68
13	35	17.9%	20000	0	318	72000	1	0.2%	72
14	23	11.7%	22000	0	350	76000	2	0.5%	76
15	4	2.0%	24000	0	382	80000	1	0.2%	80
TOTAL	196		26000	0	413	84000	1	0.2%	84
			>28000	0	0	>84000	8	1.9%	>84
			TOTAL	1944		TOTAL	412		

SUMMARY TOTALS

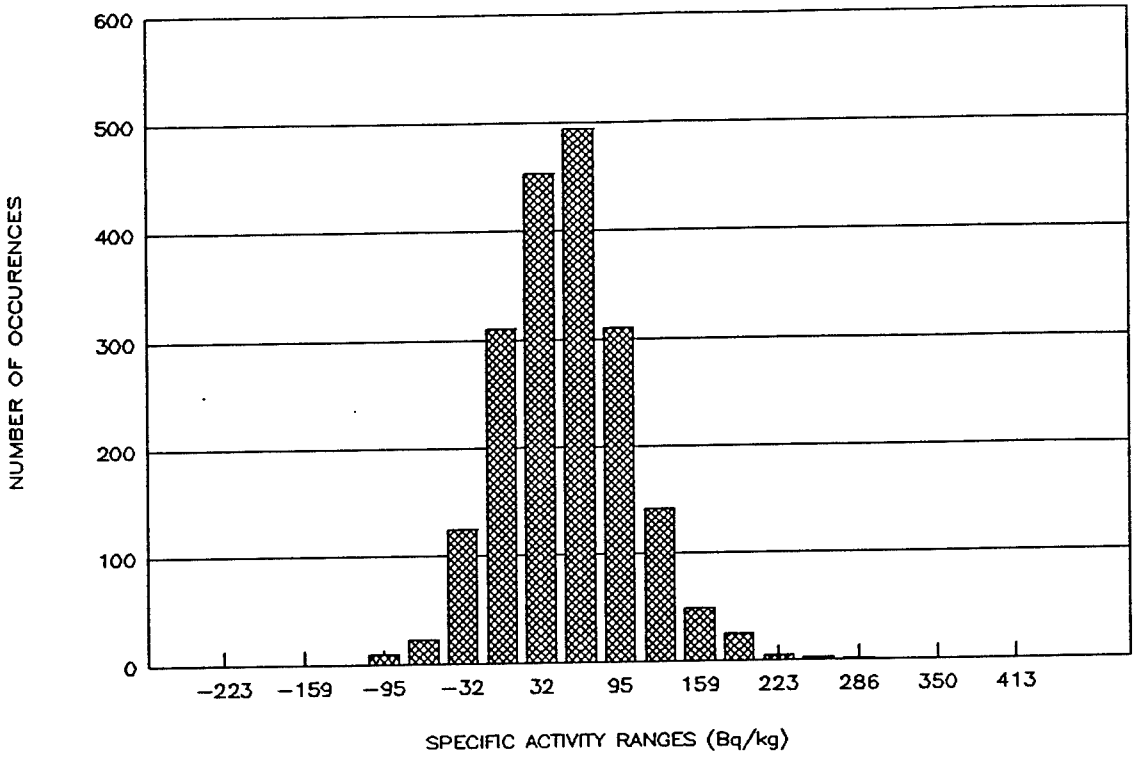
HOT PARTICLE EVENTS	418	SORTS BY ONE GATE ONLY	216
MULTIPARTICLE EVENTS	129	SORTS BY TWO GATES	196
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

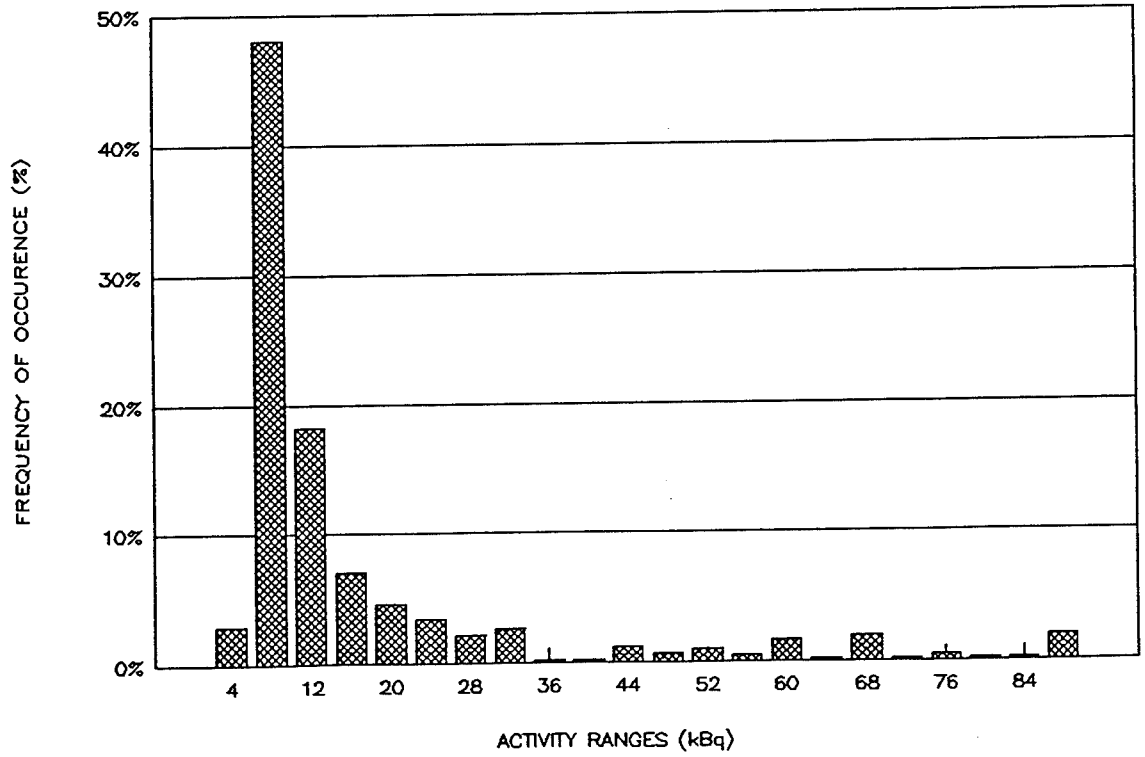
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 13-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 13-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 12-May-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.13 tons	119.6 tons	
MAXIMUM/SORT	62.9 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	57.4 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.90 yd³	94.8 yd³	95.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,765 kBq		
MAXIMUM/SORT	692 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,363 kBq	5,667 kBq	
MAXIMUM/SORT	401 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	4,739 Bq/kg	47 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.66 hr
DOWN-TIME	0.84 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.32 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	92.7%
PRODUCTIVITY	92.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,912	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	1,919	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	1,269	AD=0 & MD=0 & MND>0
SOME SORT	648	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	1	
0<AD<1kBq & MD>0	6	
AD=0 & MD	1	
AD<0 & MD	0	
ACT_P <5 kBq	220	22.2%

UNEXPLAIN TIME	PAUSE TIME
07:43:22	None
07:55:42	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,190		08:44:42
2-SEC RECORDS WITH SORTS	993	(ACT_P >0 kBq)	08:55:22
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			11:47:02
2 DETECTORS	221	83.1%	15:24:02
3 DETECTORS	39	14.7%	16:00:02
4 DETECTORS	6	2.3%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	266		
NET 2-SEC RECORDS WITH SORTS	727		
2-SEC PERIODS WITH NO SORTS	18,463		
AVG TIME BETWEEN 2-SEC SORTS	52.8 sec		

1-GATE SORTS		511	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	6	1.2%	-14000	0	-223	4000	58	5.8%	4
2	33	6.5%	-12000	1	-191	8000	450	45.3%	8
3	54	10.6%	-10000	1	-159	12000	183	18.4%	12
4	99	19.4%	-8000	2	-127	16000	88	8.9%	16
5	117	22.9%	-6000	4	-95	20000	51	5.1%	20
6	75	14.7%	-4000	23	-64	24000	33	3.3%	24
7	97	19.0%	-2000	86	-32	28000	20	2.0%	28
8	30	5.9%	0	230	0	32000	18	1.8%	32
TOTAL	511		2000	430	32	36000	15	1.5%	36
			4000	483	64	40000	16	1.6%	40
2-GATE SORTS		482	6000	337	95	44000	13	1.3%	44
DETECTR	SORTS	FREQ%	8000	204	127	48000	3	0.3%	48
8			10000	84	159	52000	3	0.3%	52
9	20	4.1%	12000	29	191	56000	4	0.4%	56
10	45	9.3%	14000	13	223	60000	7	0.7%	60
11	62	12.9%	16000	2	254	64000	2	0.2%	64
12	113	23.4%	18000	0	286	68000	2	0.2%	68
13	92	19.1%	20000	0	318	72000	3	0.3%	72
14	89	18.5%	22000	0	350	76000	0	0.0%	76
15	61	12.7%	24000	0	382	80000	3	0.3%	80
TOTAL	482		26000	0	413	84000	4	0.4%	84
			>28000	0	0	>84000	17	1.7%	>84
			TOTAL	1929		TOTAL	993		

SUMMARY TOTALS

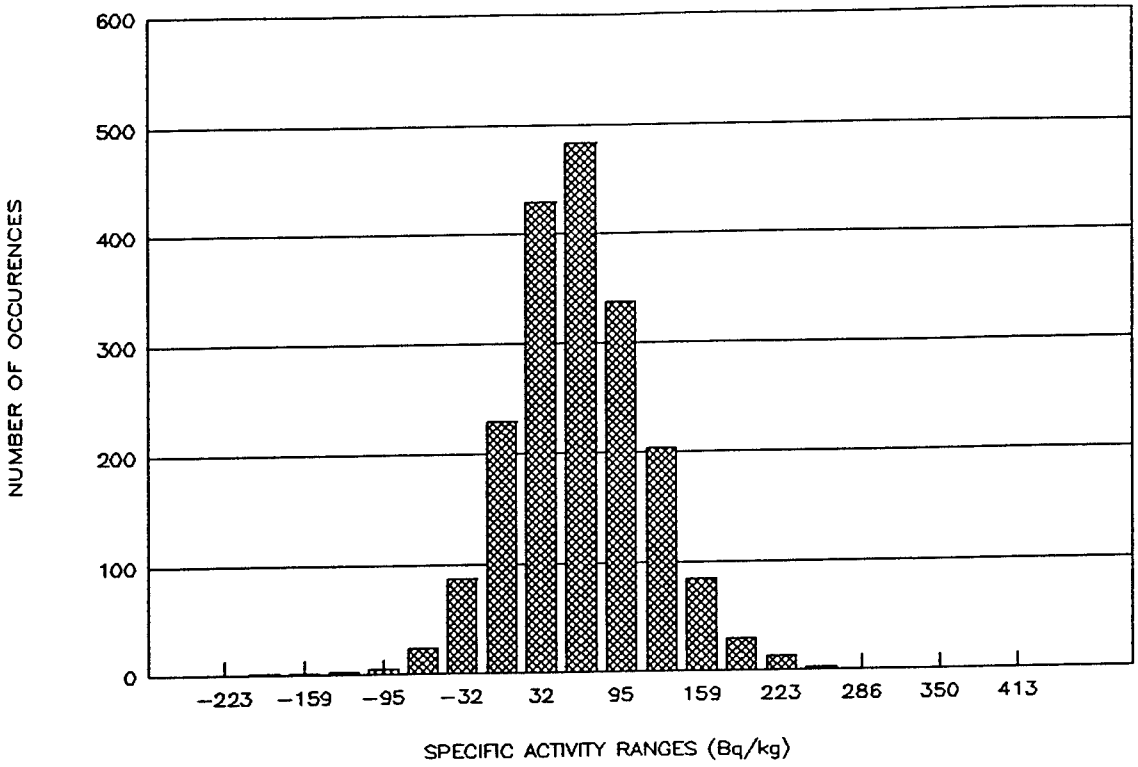
HOT PARTICLE EVENTS	1021	SORTS BY ONE GATE ONLY	511
MULTIPARTICLE EVENTS	337	SORTS BY TWO GATES	482
DISTRIBUTED EVENTS	66		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

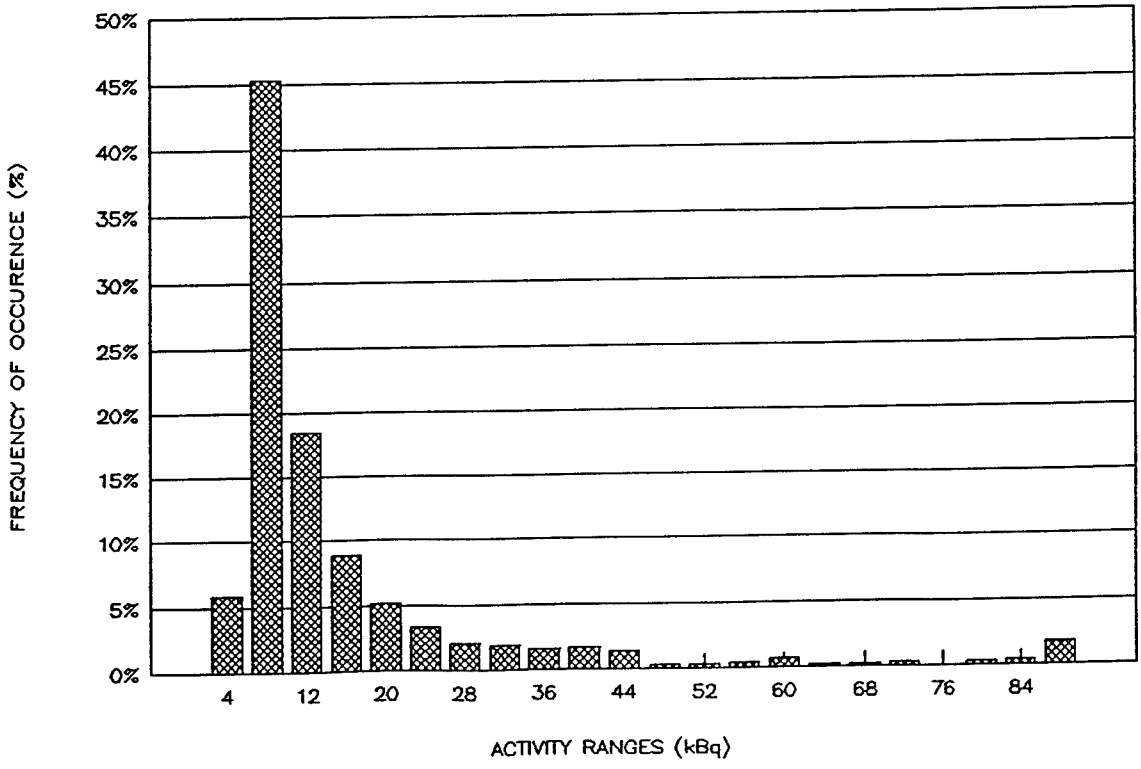
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 12-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 12-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 12-May-93

AVERAGE BACKGROUND COUNT RATE	0.86 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.91 tons	119.9 tons	
MAXIMUM/SORT	6.3 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	56.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.2%
EQUIVALENT SOIL-IN-GROUND	0.72 yd³	95.0 yd³	95.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,031 kBq		
MAXIMUM/SORT	876 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,045 kBq	4,741 kBq	
MAXIMUM/SORT	537 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,565 Bq/kg	40 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.67 hr
DOWN-TIME	0.83 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.32 hr
SHUT-DOWN	0.52 hr
PLANT PERFORMANCE	92.8%
PRODUCTIVITY	92.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,774	
NONPROCESS RECORDS (Test, calibration, etc)		9	
20-SEC PROCESS RECORDS		1,920	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,355	AD=0 & MD=0 & MND>0
SOME SORT		565	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	None	None
AD<0 & MD	0		
ACT_P <5 kBq	148 17.3%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,200	
2-SEC RECORDS WITH SORTS		854	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	166		86.0%
3 DETECTORS	25		13.0%
4 DETECTORS	2		1.0%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		193	
NET 2-SEC RECORDS WITH SORTS		661	
2-SEC PERIODS WITH NO SORTS		18,539	
AVG TIME BETWEEN 2-SEC SORTS		58.1	sec

1-GATE SORTS DETECTR	SORTS	447 FREQ%
1	15	3.4%
2	71	15.9%
3	78	17.4%
4	105	23.5%
5	88	19.7%
6	63	14.1%
7	23	5.1%
8	4	0.9%
TOTAL	447	

2-GATE SORTS DETECTR	SORTS	407 FREQ%
8		
9	37	9.1%
10	64	15.7%
11	81	19.9%
12	97	23.8%
13	62	15.2%
14	54	13.3%
15	12	2.9%
TOTAL	407	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	2	-223
-12000	0	-191
-10000	0	-159
-8000	2	-127
-6000	6	-95
-4000	31	-64
-2000	107	-32
0	294	0
2000	445	32
4000	455	64
6000	335	95
8000	163	127
10000	67	159
12000	17	191
14000	4	223
16000	1	254
18000	0	286
20000	0	318
22000	0	350
24000	0	382
26000	0	413
>28000	0	0
TOTAL	1929	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	38	4.4%	4
8000	412	48.2%	8
12000	158	18.5%	12
16000	67	7.8%	16
20000	35	4.1%	20
24000	25	2.9%	24
28000	19	2.2%	28
32000	23	2.7%	32
36000	6	0.7%	36
40000	7	0.8%	40
44000	10	1.2%	44
48000	9	1.1%	48
52000	6	0.7%	52
56000	2	0.2%	56
60000	4	0.5%	60
64000	0	0.0%	64
68000	2	0.2%	68
72000	2	0.2%	72
76000	4	0.5%	76
80000	3	0.4%	80
84000	1	0.1%	84
>84000	21	2.5%	>84
TOTAL	854		

SUMMARY TOTALS

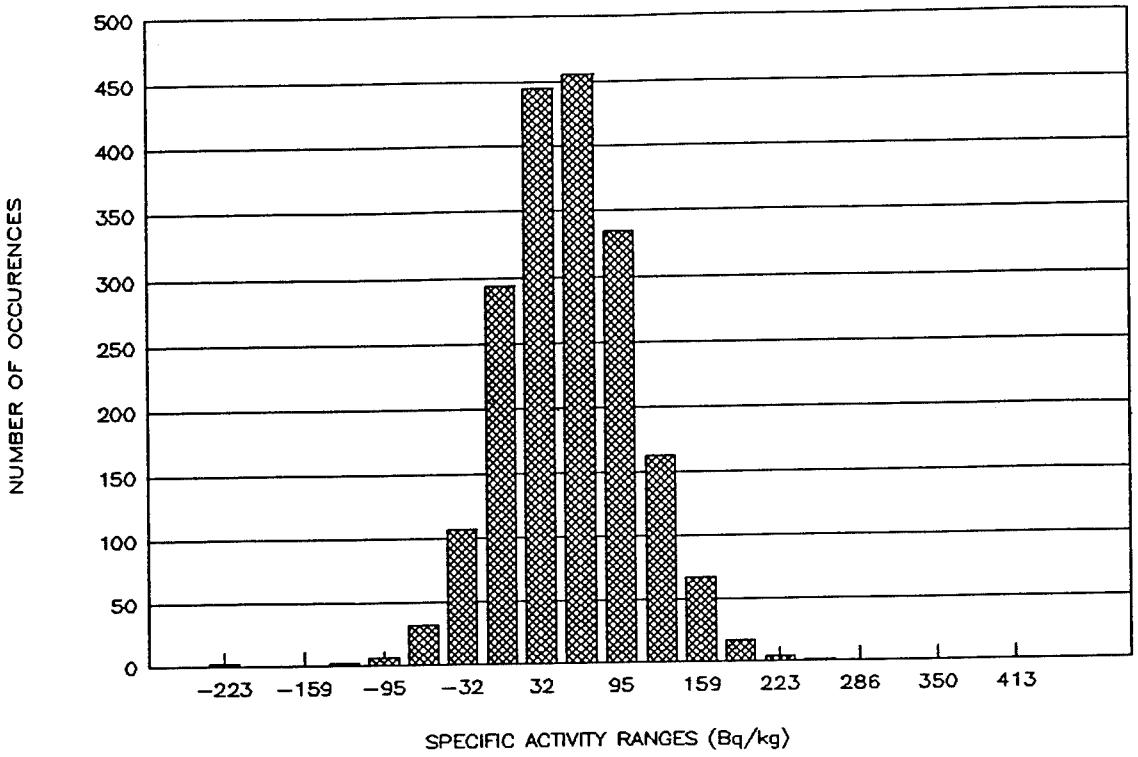
HOT PARTICLE EVENTS	880	SORTS BY ONE GATE ONLY	447
MULTIPARTICLE EVENTS	260	SORTS BY TWO GATES	407
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

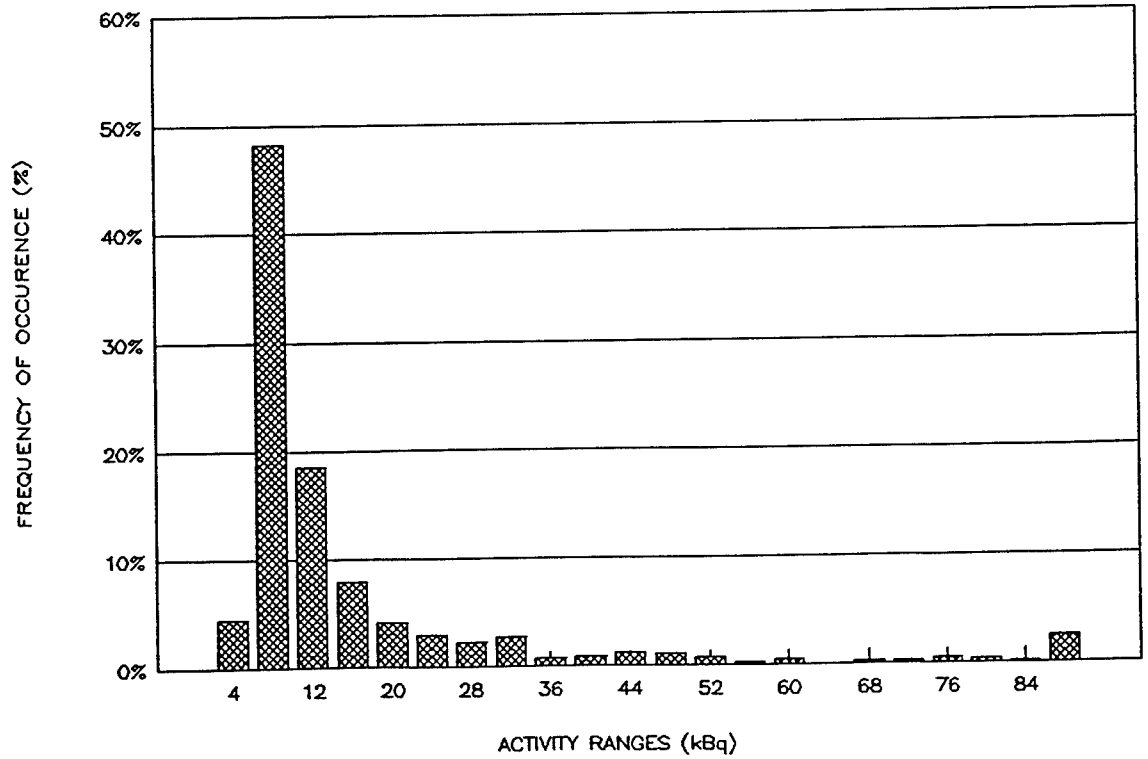
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 12-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 12-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 11-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.70 tons	119.6 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
			98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.35 yd³	94.8 yd³	96.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	24,577 kBq		
MAXIMUM/SORT	449 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,212 kBq	9,705 kBq	
MAXIMUM/SORT	229 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	4,835 Bq/kg	81 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:18 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.72 hr
DOWN-TIME	0.78 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.31 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	93.2%
PRODUCTIVITY	93.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,531	
NONPROCESS RECORDS (Test, calibration, etc)		4	
20-SEC PROCESS RECORDS		1,929	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,011	AD=0 & MD=0 & MND>0
SOME SORT		918	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	326	20.3%	

UNEXPLAIN TIME	PAUSE TIME
07:07:01	None
10:20:41	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,290		11:35:01
2-SEC RECORDS WITH SORTS	1,602	(ACT_P >0 kBq)	14:28:01
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			15:12:21
2 DETECTORS	291	82.7%	
3 DETECTORS	51	14.5%	
4 DETECTORS	9	2.6%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	352		
NET 2-SEC RECORDS WITH SORTS	1,250		
2-SEC PERIODS WITH NO SORTS	18,040		
AVG TIME BETWEEN 2-SEC SORTS	30.9 sec		

1-GATE SORTS		809	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	18	2.2%	-14000	0	-223	4000	93	5.8%	4
2	50	6.2%	-12000	0	-191	8000	720	44.9%	8
3	97	12.0%	-10000	0	-159	12000	279	17.4%	12
4	143	17.7%	-8000	2	-127	16000	162	10.1%	16
5	181	22.4%	-6000	1	-95	20000	86	5.4%	20
6	134	16.6%	-4000	6	-64	24000	60	3.7%	24
7	143	17.7%	-2000	25	-32	28000	28	1.7%	28
8	43	5.3%	0	106	0	32000	19	1.2%	32
TOTAL	809		2000	250	32	36000	26	1.6%	36
			4000	388	64	40000	17	1.1%	40
2-GATE SORTS		793	6000	452	95	44000	9	0.6%	44
DETECTR	SORTS	FREQ%	8000	354	127	48000	12	0.7%	48
8			10000	189	159	52000	14	0.9%	52
9	36	4.5%	12000	82	191	56000	11	0.7%	56
10	72	9.1%	14000	38	223	60000	14	0.9%	60
11	123	15.5%	16000	23	254	64000	5	0.3%	64
12	155	19.5%	18000	11	286	68000	5	0.3%	68
13	163	20.6%	20000	3	318	72000	3	0.2%	72
14	145	18.3%	22000	3	350	76000	3	0.2%	76
15	99	12.5%	24000	0	382	80000	3	0.2%	80
TOTAL	793		26000	0	413	84000	4	0.2%	84
			>28000	0	0	>84000	29	1.8%	>84
			TOTAL	1933		TOTAL	1602		

SUMMARY TOTALS

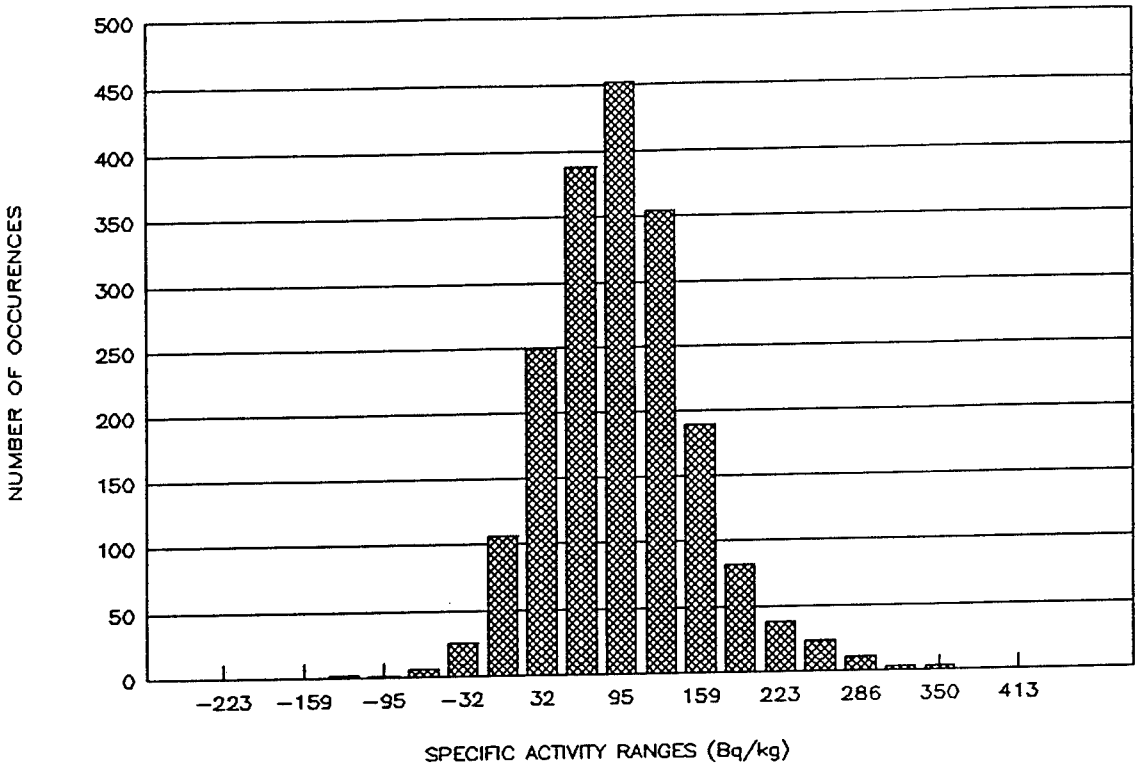
HOT PARTICLE EVENTS	1634	SORTS BY ONE GATE ONLY	809
MULTIPARTICLE EVENTS	509	SORTS BY TWO GATES	793
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

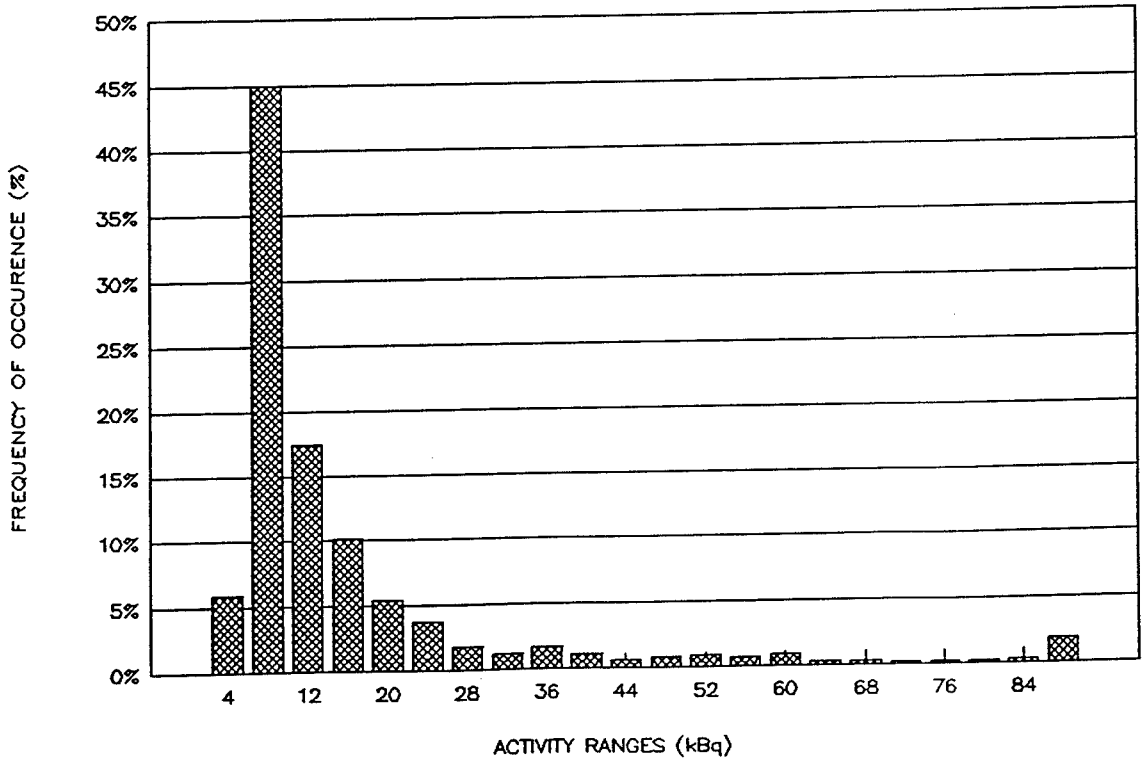
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 11–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 11–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 11-May-93

AVERAGE BACKGROUND COUNT RATE	0.88 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.63 tons	119.5 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.7%
EQUIVALENT SOIL-IN-GROUND	1.29 yd³	94.7 yd³	96.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	31,638 kBq		
MAXIMUM/SORT	1,560 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,439 kBq	8,474 kBq	
MAXIMUM/SORT	845 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	6,424 Bq/kg	71 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:18 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.70 hr
DOWN-TIME	0.80 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.31 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	93.0%
PRODUCTIVITY	93.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,454	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	1,926	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	1,043	AD=0 & MD=0 & MND>0
SOME SORT	883	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	240	15.7%

UNEXPLAIN TIME	PAUSE TIME
10:55:41	None
11:15:21	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,260	
2-SEC RECORDS WITH SORTS	1,528	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	300	85.0%
3 DETECTORS	48	13.6%
4 DETECTORS	5	1.4%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	353	
NET 2-SEC RECORDS WITH SORTS	1,175	
2-SEC PERIODS WITH NO SORTS	18,085	
AVG TIME BETWEEN 2-SEC SORTS	32.8 sec	

1-GATE SORTS DETECTR	SORTS	794 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	43	5.4%	-14000	2	-223
2	114	14.4%	-12000	2	-191
3	138	17.4%	-10000	0	-159
4	137	17.3%	-8000	2	-127
5	157	19.8%	-6000	4	-95
6	126	15.9%	-4000	8	-64
7	65	8.2%	-2000	34	-32
8	14	1.8%	0	146	0
TOTAL	794		2000	288	32
			4000	450	64
2-GATE SORTS		734	6000	426	95
DETECTR	SORTS	FREQ%	8000	302	127
8			10000	143	159
9	88	12.0%	12000	62	191
10	92	12.5%	14000	37	223
11	147	20.0%	16000	15	254
12	145	19.8%	18000	9	286
13	137	18.7%	20000	1	318
14	80	10.9%	22000	2	350
15	45	6.1%	24000	0	382
TOTAL	734		26000	0	413
			>28000	0	0
			TOTAL	1933	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	54	3.5%	4
8000	728	47.6%	8
12000	271	17.7%	12
16000	136	8.9%	16
20000	73	4.8%	20
24000	45	2.9%	24
28000	34	2.2%	28
32000	26	1.7%	32
36000	15	1.0%	36
40000	12	0.8%	40
44000	17	1.1%	44
48000	9	0.6%	48
52000	10	0.7%	52
56000	1	0.1%	56
60000	8	0.5%	60
64000	5	0.3%	64
68000	6	0.4%	68
72000	8	0.5%	72
76000	6	0.4%	76
80000	6	0.4%	80
84000	4	0.3%	84
>84000	54	3.5%	>84
TOTAL	1528		

SUMMARY TOTALS

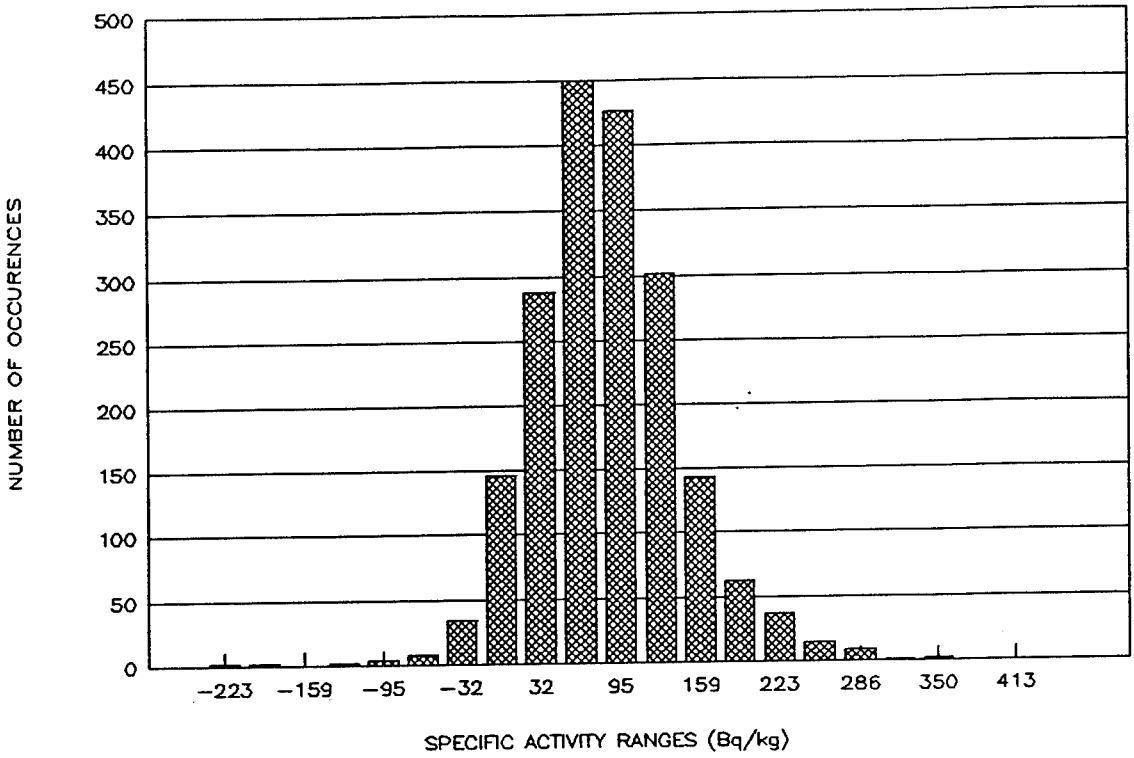
HOT PARTICLE EVENTS	1556	SORTS BY ONE GATE ONLY	794
MULTIPARTICLE EVENTS	494	SORTS BY TWO GATES	734
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

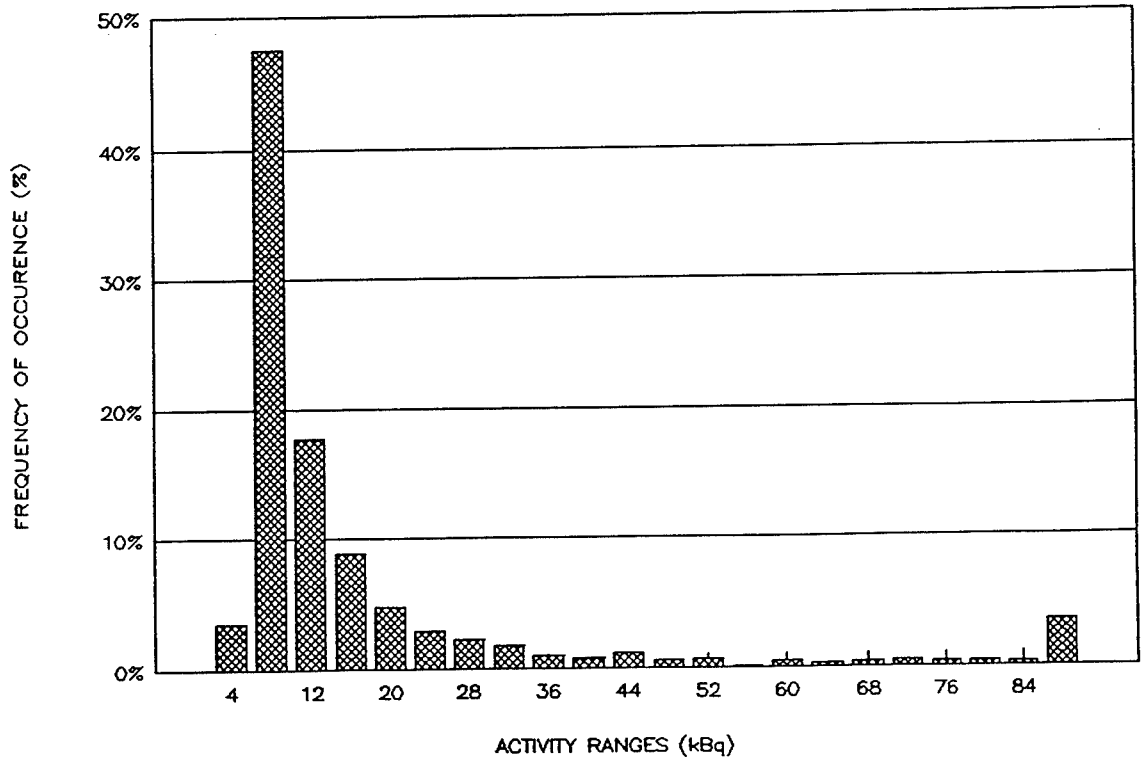
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 11–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 11–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 10-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.55 tons	119.6 tons	
MAXIMUM/SORT	10.2 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	52.7 kg	
			98.7%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.23 yd³	94.8 yd³	96.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	27,150 kBq		
MAXIMUM/SORT	800 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,850 kBq	9,446 kBq	
MAXIMUM/SORT	512 kBq	22 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	5,707 Bq/kg	79 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.70 hr
DOWN-TIME	0.80 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.27 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	93.0%
PRODUCTIVITY	93.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,391	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	1,926	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	1,068	AD=0 & MD=0 & MND>0
SOME SORT	858	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	300	20.5%

UNEXPLAIN TIME	PAUSE TIME
14:51:29	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,260	
2-SEC RECORDS WITH SORTS		1,465	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	305	79.6%
	3 DETECTORS	62	16.2%
	4 DETECTORS	13	3.4%
	5 DETECTORS	3	0.8%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	383	
NET 2-SEC RECORDS WITH SORTS		1,082	
2-SEC PERIODS WITH NO SORTS		18,178	
AVG TIME BETWEEN 2-SEC SORTS		35.6	sec

1-GATE SORTS		749	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	20	2.7%	-14000	0	-223	4000	75	5.1%	4
2	60	8.0%	-12000	0	-191	8000	651	44.4%	8
3	81	10.8%	-10000	1	-159	12000	261	17.8%	12
4	123	16.4%	-8000	4	-127	16000	122	8.3%	16
5	150	20.0%	-6000	2	-95	20000	83	5.7%	20
6	138	18.4%	-4000	11	-64	24000	46	3.1%	24
7	138	18.4%	-2000	35	-32	28000	33	2.3%	28
8	39	5.2%	0	140	0	32000	24	1.6%	32
TOTAL	749		2000	265	32	36000	22	1.5%	36
			4000	362	64	40000	8	0.5%	40
2-GATE SORTS		716	6000	401	95	44000	18	1.2%	44
DETECTR	SORTS	FREQ%	8000	313	127	48000	16	1.1%	48
8			10000	206	159	52000	12	0.8%	52
9	39	5.4%	12000	101	191	56000	4	0.3%	56
10	73	10.2%	14000	53	223	60000	6	0.4%	60
11	106	14.8%	16000	22	254	64000	5	0.3%	64
12	129	18.0%	18000	8	286	68000	5	0.3%	68
13	149	20.8%	20000	3	318	72000	8	0.5%	72
14	133	18.6%	22000	2	350	76000	6	0.4%	76
15	87	12.2%	24000	0	382	80000	5	0.3%	80
TOTAL	716		26000	0	413	84000	5	0.3%	84
			>28000	0	0	>84000	50	3.4%	>84
			TOTAL	1929		TOTAL	1465		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1484	SORTS BY ONE GATE ONLY	749
MULTIPARTICLE EVENTS	471	SORTS BY TWO GATES	716
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

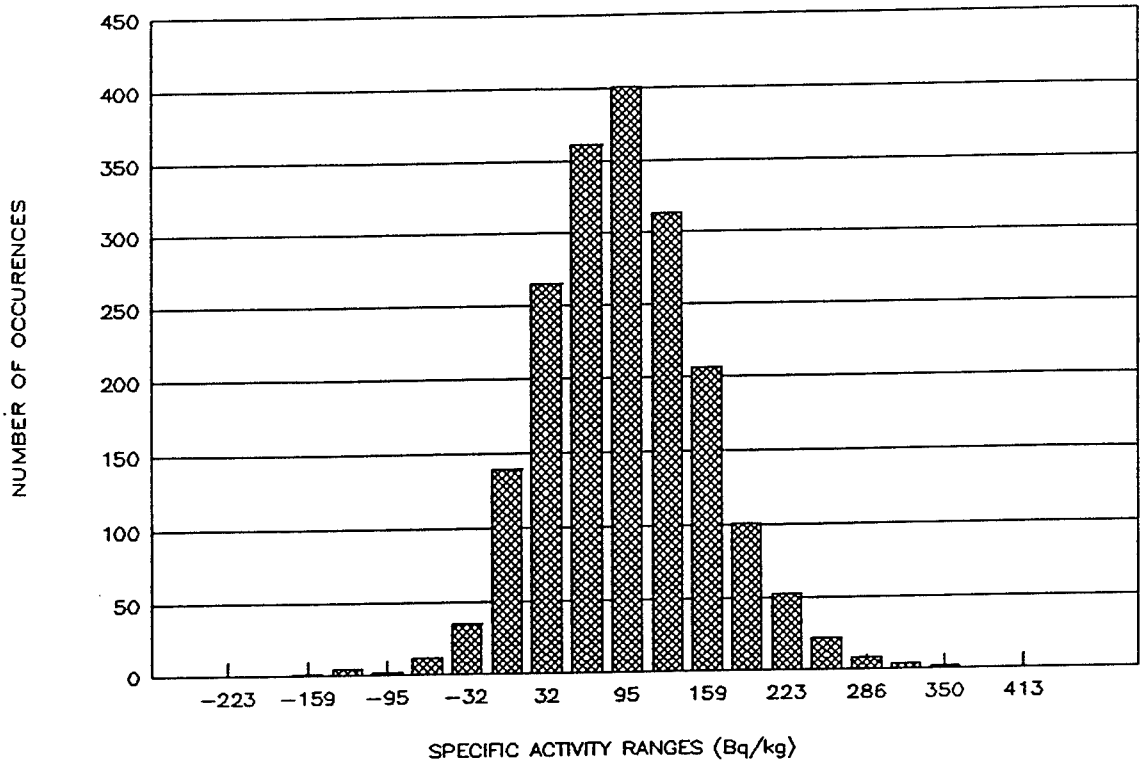
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

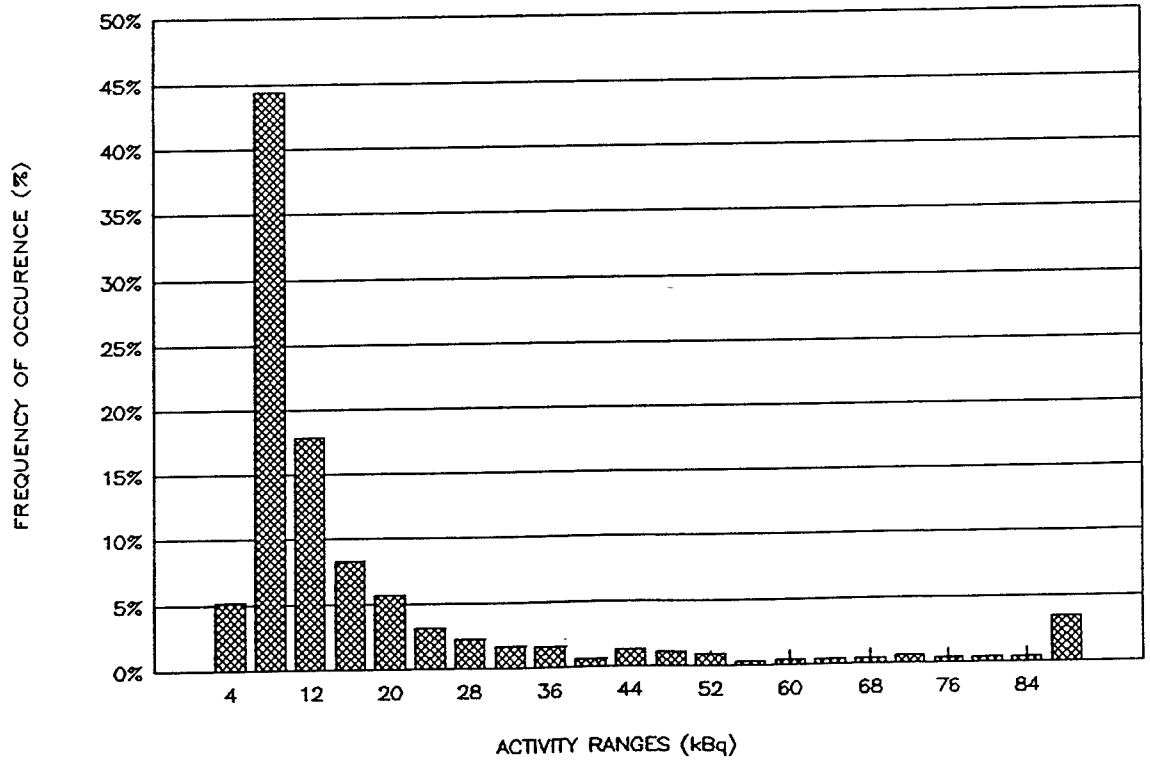
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 10–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 10–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 10-May-93

AVERAGE BACKGROUND COUNT RATE	0.87 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.69 tons	118.4 tons	
MAXIMUM/SORT	7.9 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	1.34 yd³	93.8 yd³	95.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	29,040 kBq		
MAXIMUM/SORT	1,937 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,640 kBq	8,708 kBq	
MAXIMUM/SORT	1049 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,703 Bq/kg	74 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	04:55 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.61 hr
DOWN-TIME	0.89 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.33 hr
SHUT-DOWN	0.57 hr
PLANT PERFORMANCE	92.2%
PRODUCTIVITY	92.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,501	
NONPROCESS RECORDS (Test, calibration, etc)			14	
20-SEC PROCESS RECORDS			1,909	
TOTAL SORT			0	MD>0 & MND=0
NO SORT			1,004	AD=0 & MD=0 & MND>0
SOME SORT			905	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	4		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0		06:59:50	None
AD<0 & MD	0		08:27:30	
ACT_P <5 kBq	251	15.8%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,090		14:26:50
2-SEC RECORDS WITH SORTS	1,592	(ACT_P >0 kBq)	14:36:30
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	334	83.7%	
3 DETECTORS	59	14.8%	
4 DETECTORS	5	1.3%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	399		
NET 2-SEC RECORDS WITH SORTS	1,193		
2-SEC PERIODS WITH NO SORTS	17,897		
AVG TIME BETWEEN 2-SEC SORTS	32.0 sec		

1-GATE SORTS DETECTR	SORTS	821 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	46	5.6%	-14000	3	-223	4000	56	3.5%	4
2	121	14.7%	-12000	0	-191	8000	748	47.0%	8
3	134	16.3%	-10000	4	-159	12000	287	18.0%	12
4	149	18.1%	-8000	3	-127	16000	127	8.0%	16
5	168	20.5%	-6000	4	-95	20000	89	5.6%	20
6	112	13.6%	-4000	15	-64	24000	47	3.0%	24
7	75	9.1%	-2000	53	-32	28000	36	2.3%	28
8	16	1.9%	0	163	0	32000	46	2.9%	32
TOTAL	821		2000	271	32	36000	22	1.4%	36
			4000	370	64	40000	14	0.9%	40
2-GATE SORTS		771	6000	391	95	44000	12	0.8%	44
DETECTR	SORTS	FREQ%	8000	285	127	48000	16	1.0%	48
8			10000	186	159	52000	11	0.7%	52
9	71	9.2%	12000	108	191	56000	4	0.3%	56
10	110	14.3%	14000	43	223	60000	11	0.7%	60
11	142	18.4%	16000	14	254	64000	5	0.3%	64
12	169	21.9%	18000	8	286	68000	6	0.4%	68
13	143	18.5%	20000	2	318	72000	4	0.3%	72
14	105	13.6%	22000	0	350	76000	8	0.5%	76
15	31	4.0%	24000	0	382	80000	2	0.1%	80
TOTAL	771		26000	0	413	84000	6	0.4%	84
			>28000	0	0	>84000	35	2.2%	>84
			TOTAL	1923		TOTAL	1592		

SUMMARY TOTALS

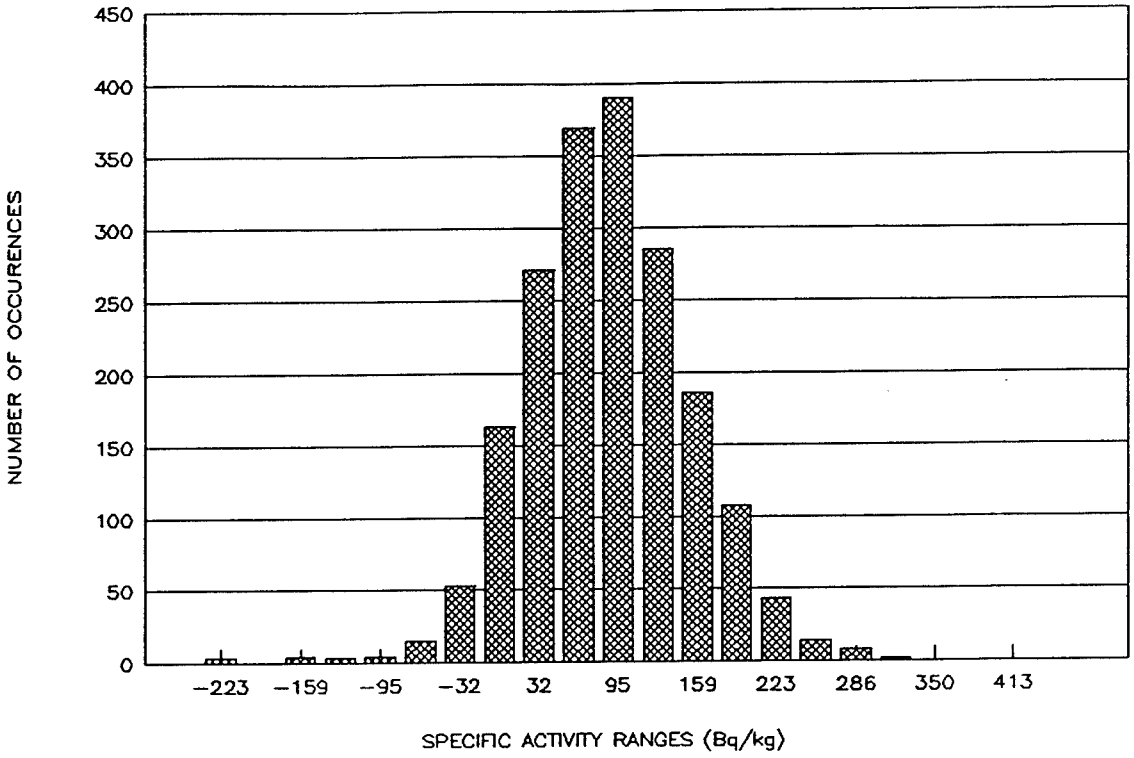
HOT PARTICLE EVENTS	1620	SORTS BY ONE GATE ONLY	821
MULTIPARTICLE EVENTS	512	SORTS BY TWO GATES	771
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

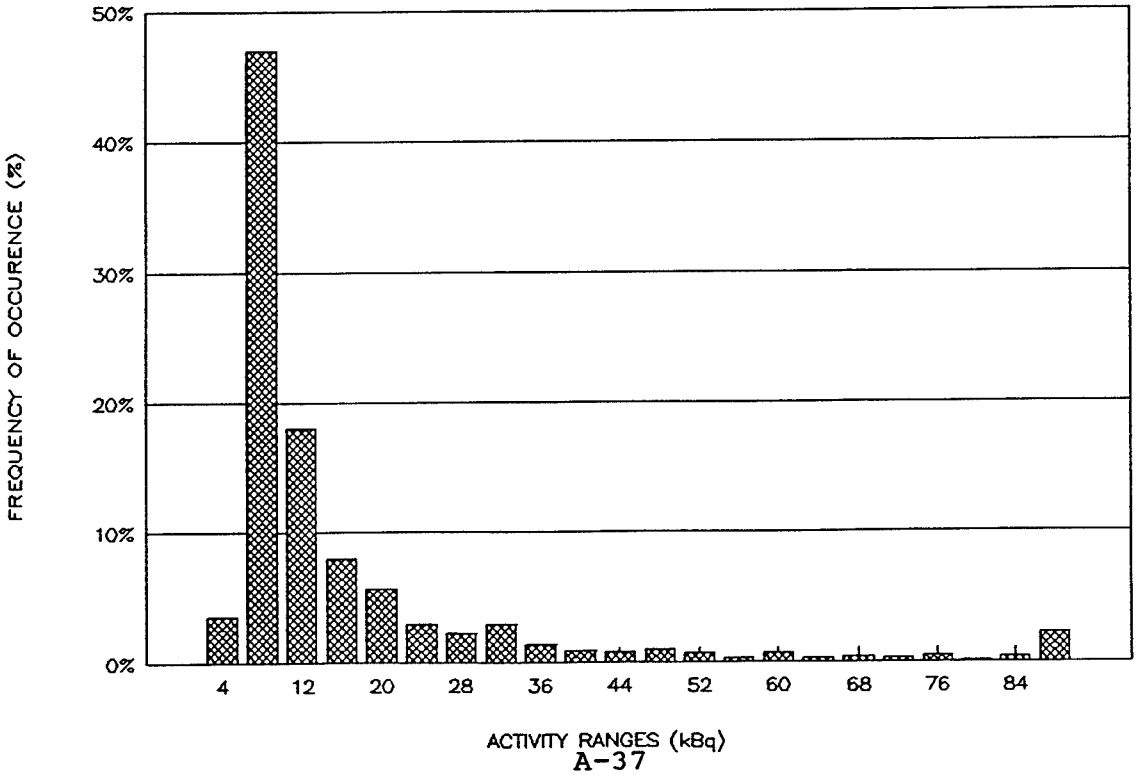
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 10–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 10–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 08-May-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.42 tons	36.3 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
			98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.34 yd³	28.8 yd³	29.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,409 kBq		
MAXIMUM/SORT	288 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,112 kBq	2,699 kBq	
MAXIMUM/SORT	153 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	4,973 Bq/kg	74 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	10:09 AM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	10:09 AM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	09:49 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	4.2 hr
AVAILABLE HOURS	4.2 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.24 hr
DOWN-TIME	0.91 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	0.32 hr
PLANT PERFORMANCE	78.2%
PRODUCTIVITY	78.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	984	
NONPROCESS RECORDS (Test, calibration, etc)	13	
20-SEC PROCESS RECORDS	584	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	339 AD=0 & MD=0 & MND>0	
SOME SORT	245 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	74	18.5%

UNEXPLAIN TIME	PAUSE TIME
09:43:44	None

2-SEC COUNT PERIODS		5,840	
2-SEC RECORDS WITH SORTS		400	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	84	86.6%
	3 DETECTORS	11	11.3%
	4 DETECTORS	2	2.1%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	97	
NET 2-SEC RECORDS WITH SORTS		303	
2-SEC PERIODS WITH NO SORTS		5,537	
AVG TIME BETWEEN 2-SEC SORTS		38.5	sec

1-GATE SORTS DETECTR	SORTS	194 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	2	1.0%	-14000	3	-223	4000	18	4.5%	4
2	12	6.2%	-12000	2	-191	8000	192	48.0%	8
3	28	14.4%	-10000	1	-159	12000	62	15.5%	12
4	35	18.0%	-8000	1	-127	16000	35	8.8%	16
5	45	23.2%	-6000	3	-95	20000	20	5.0%	20
6	34	17.5%	-4000	5	-64	24000	17	4.3%	24
7	31	16.0%	-2000	13	-32	28000	13	3.3%	28
8	7	3.6%	0	35	0	32000	8	2.0%	32
TOTAL	194		2000	96	32	36000	5	1.3%	36
			4000	138	64	40000	3	0.8%	40
2-GATE SORTS		206	6000	108	95	44000	3	0.8%	44
DETECTR	SORTS	FREQ%	8000	84	127	48000	6	1.5%	48
8			10000	52	159	52000	3	0.8%	52
9	8	3.9%	12000	32	191	56000	0	0.0%	56
10	16	7.8%	14000	12	223	60000	1	0.3%	60
11	38	18.4%	16000	10	254	64000	0	0.0%	64
12	40	19.4%	18000	2	286	68000	1	0.3%	68
13	43	20.9%	20000	0	318	72000	2	0.5%	72
14	42	20.4%	22000	0	350	76000	0	0.0%	76
15	19	9.2%	24000	0	382	80000	1	0.3%	80
TOTAL	206		26000	0	413	84000	0	0.0%	84
			>28000	0	0	>84000	10	2.5%	>84
			TOTAL	597		TOTAL	400		

SUMMARY TOTALS

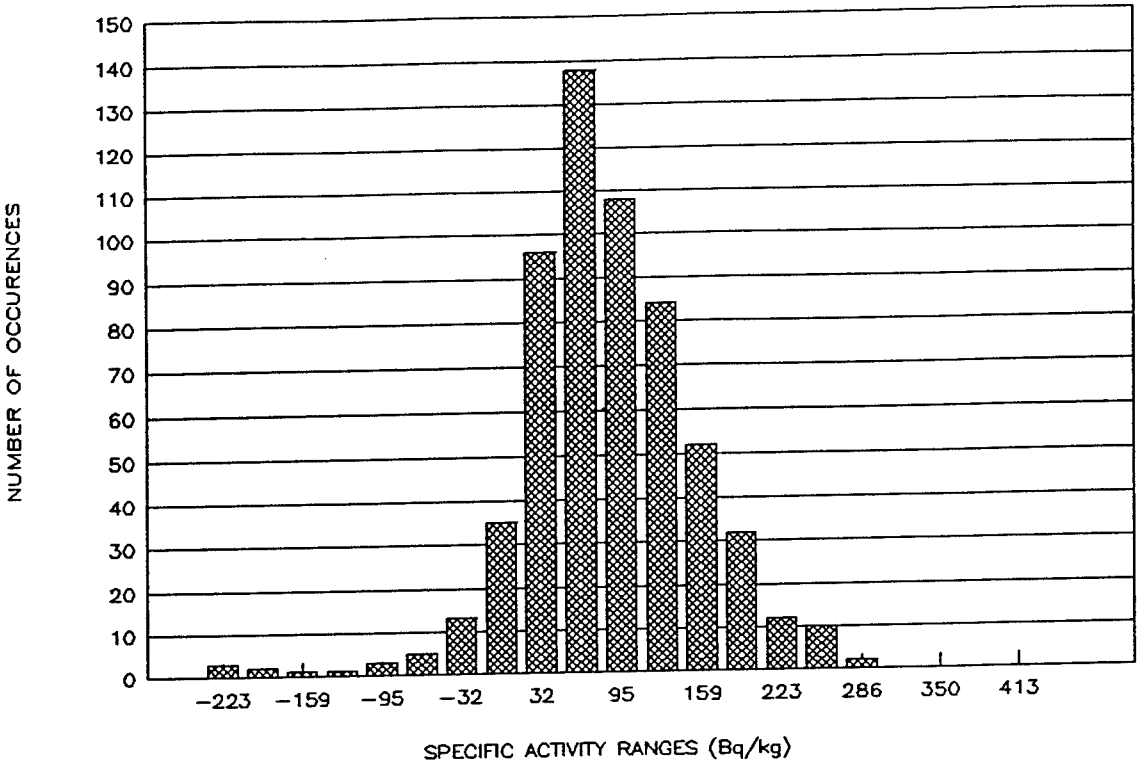
HOT PARTICLE EVENTS	415	SORTS BY ONE GATE ONLY	194
MULTIPARTICLE EVENTS	120	SORTS BY TWO GATES	206
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

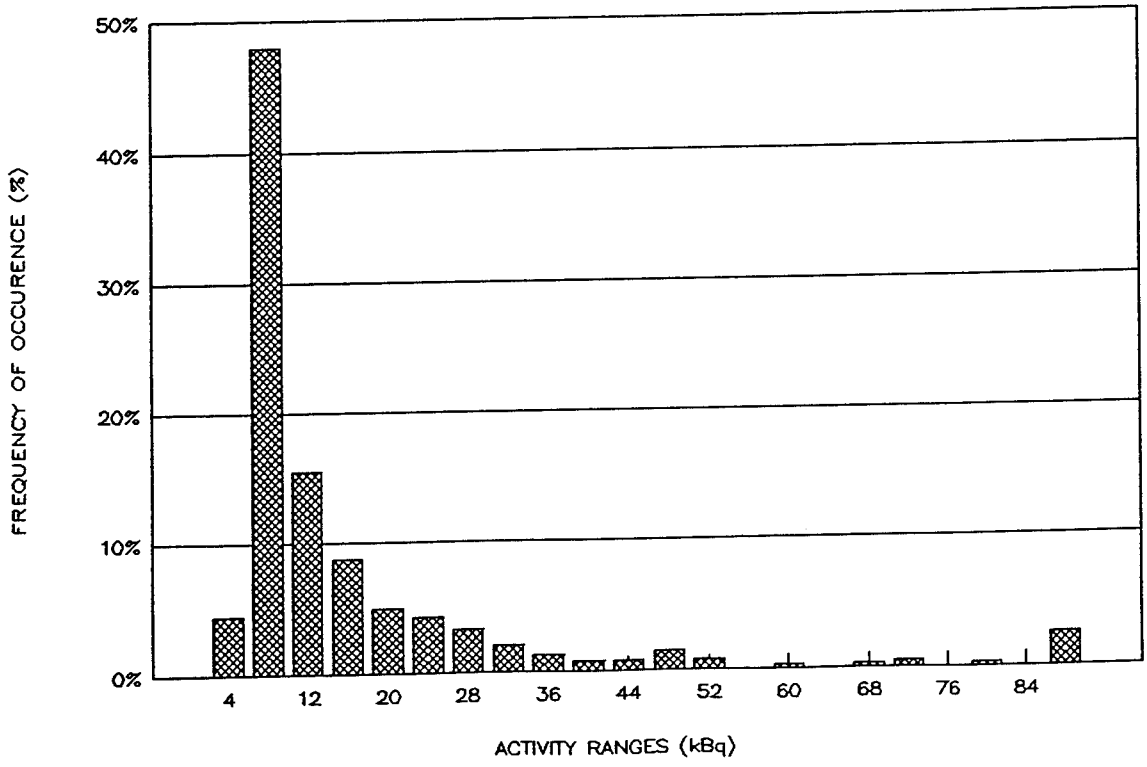
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 08-May-93

AVERAGE BACKGROUND COUNT RATE	0.83 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.36 tons	36.4 tons	
MAXIMUM/SORT	4.7 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	58.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.28 yd³	28.8 yd³	29.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,291 kBq		
MAXIMUM/SORT	215 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,548 kBq	2,734 kBq	
MAXIMUM/SORT	123 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	4,314 Bq/kg	75 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	10:09 AM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	09:50 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.0 hr
AVAILABLE HOURS	4.2 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.24 hr
DOWN-TIME	0.91 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	6.9 hr
START-UP	0.55 hr
SHUT-DOWN	0.31 hr
PLANT PERFORMANCE	78.2%
PRODUCTIVITY	29.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		915	
NONPROCESS RECORDS (Test, calibration, etc)		13	
20-SEC PROCESS RECORDS		584	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		364	AD=0 & MD=0 & MND>0
SOME SORT		220	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	56	16.9%	

UNEXPLAIN TIME	PAUSE TIME
07:40:05	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		5,840	
2-SEC RECORDS WITH SORTS		331	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	64	91.4%
	3 DETECTORS	6	8.6%
	4 DETECTORS	0	0.0%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	70	
NET 2-SEC RECORDS WITH SORTS		261	
2-SEC PERIODS WITH NO SORTS		5,579	
AVG TIME BETWEEN 2-SEC SORTS		44.8	sec

1-GATE SORTS		185	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	8	4.3%	-14000	1	-223
2	30	16.2%	-12000	1	-191
3	27	14.6%	-10000	3	-159
4	40	21.6%	-8000	1	-127
5	39	21.1%	-6000	2	-95
6	24	13.0%	-4000	7	-64
7	14	7.6%	-2000	15	-32
8	3	1.6%	0	53	0
TOTAL	185		2000	85	32
			4000	123	64
2-GATE SORTS		146	6000	100	95
DETECTR	SORTS	FREQ%	8000	83	127
8			10000	56	159
9	13	8.9%	12000	41	191
10	22	15.1%	14000	18	223
11	32	21.9%	16000	7	254
12	28	19.2%	18000	0	286
13	28	19.2%	20000	0	318
14	20	13.7%	22000	1	350
15	3	2.1%	24000	0	382
TOTAL	146		26000	0	413
			>28000	0	0
			TOTAL	597	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	15	4.5%	4
8000	163	49.2%	8
12000	60	18.1%	12
16000	32	9.7%	16
20000	20	6.0%	20
24000	6	1.8%	24
28000	6	1.8%	28
32000	7	2.1%	32
36000	5	1.5%	36
40000	2	0.6%	40
44000	5	1.5%	44
48000	0	0.0%	48
52000	0	0.0%	52
56000	1	0.3%	56
60000	0	0.0%	60
64000	2	0.6%	64
68000	0	0.0%	68
72000	0	0.0%	72
76000	1	0.3%	76
80000	0	0.0%	80
84000	3	0.9%	84
>84000	3	0.9%	>84
TOTAL	331		

SUMMARY TOTALS

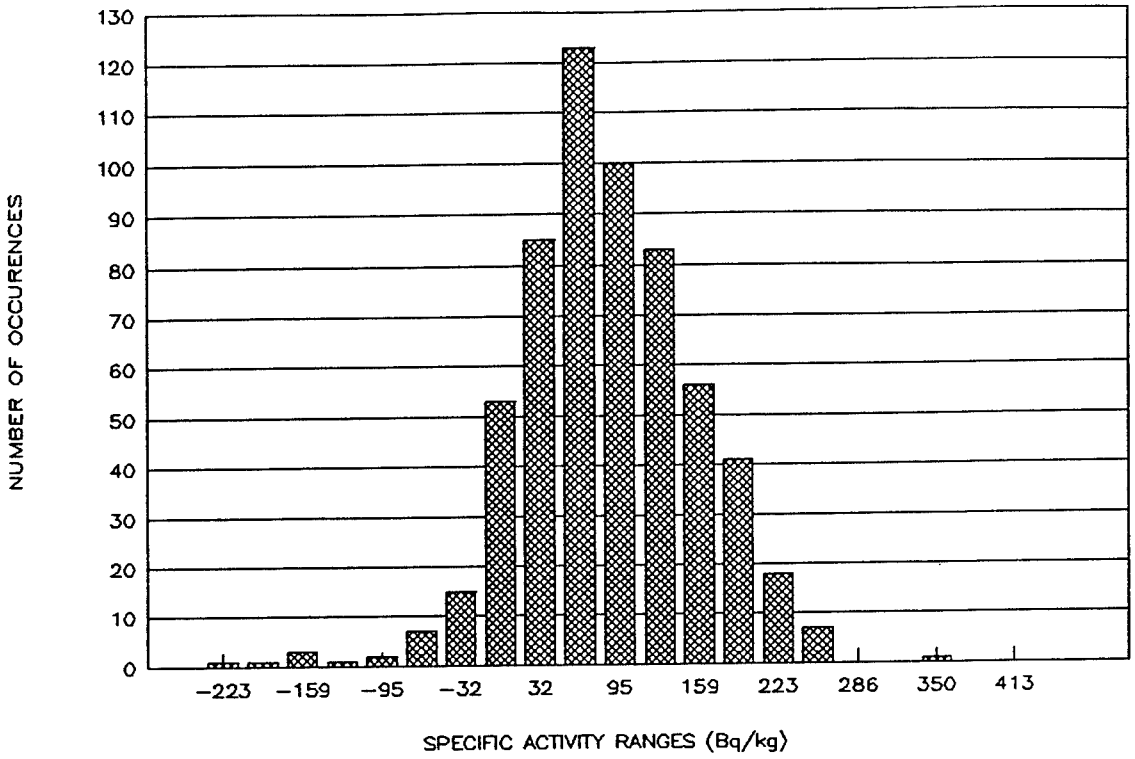
HOT PARTICLE EVENTS	337	SORTS BY ONE GATE ONLY	185
MULTIPARTICLE EVENTS	114	SORTS BY TWO GATES	146
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

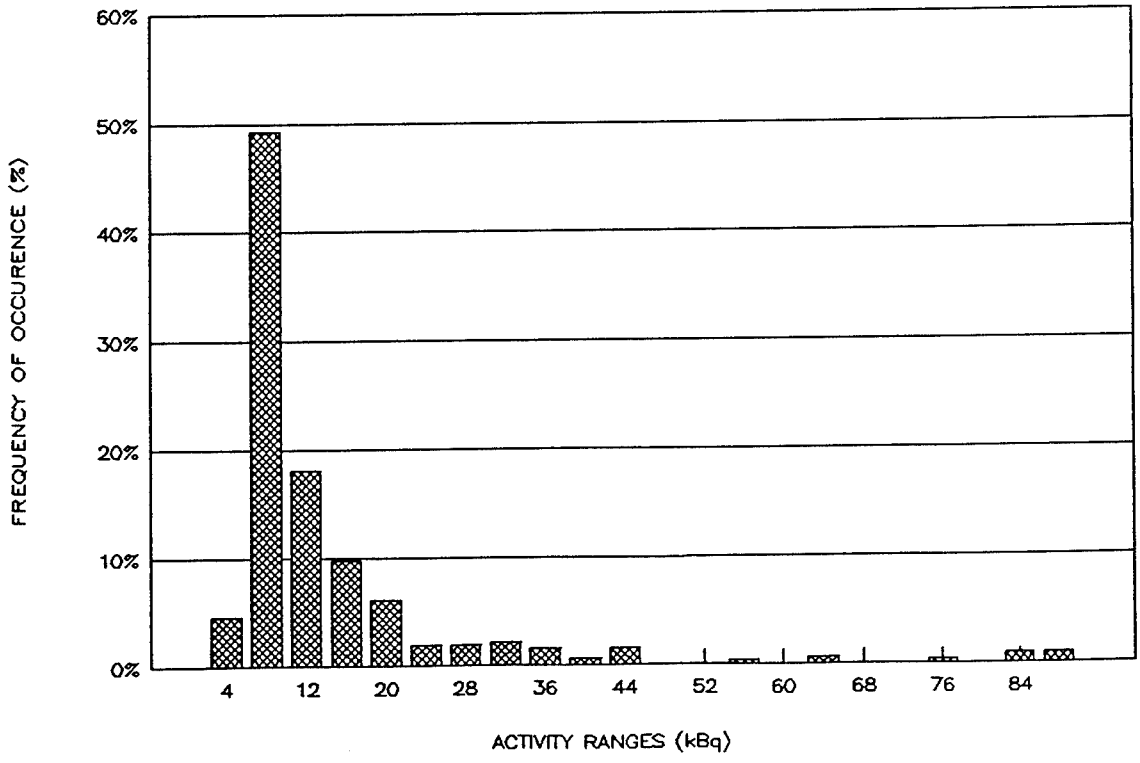
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 08-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± ERR c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.32 tons	25.9 tons	
MAXIMUM/SORT	6.3 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	56.6 kg	
			98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.25 yd³	20.5 yd³	20.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	7,278 kBq		
MAXIMUM/SORT	794 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,115 kBq	2,172 kBq	
MAXIMUM/SORT	392 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,591 Bq/kg	84 Bq/kg	

WORK HISTORY			
WORK DAY START	10:09 AM	WORK DAY END	05:30 PM
PLANT START-UP	10:09 AM	PLANT SHUT-DOWN	02:35 PM
START SOIL PROCESSING	11:39 AM	END SOIL PROCESSING	01:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	6.9 hr
AVAILABLE HOURS	3.9 hr
ACTUAL PROCESS HOURS (total 20-sec records)	2.32 hr
DOWN-TIME	1.62 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	2.9 hr
START-UP	1.50 hr
SHUT-DOWN	0.62 hr
PLANT PERFORMANCE	58.9%
PRODUCTIVITY	33.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	719	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	417	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	245 AD=0 & MD=0 & MND>0	
SOME SORT	172 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	58	19.2%

UNEXPLAIN TIME	PAUSE TIME
12:39:28	None

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JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	4,170	
2-SEC RECORDS WITH SORTS	302	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	58	80.6%
3 DETECTORS	12	16.7%
4 DETECTORS	2	2.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	72	
NET 2-SEC RECORDS WITH SORTS	230	
2-SEC PERIODS WITH NO SORTS	3,940	
AVG TIME BETWEEN 2-SEC SORTS	36.3	sec

1-GATE SORTS DETECTR	SORTS	147 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	4	2.7%	-14000	0	-223	4000	15	5.0%	4
2	11	7.5%	-12000	0	-191	8000	141	46.7%	8
3	16	10.9%	-10000	1	-159	12000	53	17.5%	12
4	32	21.8%	-8000	0	-127	16000	25	8.3%	16
5	32	21.8%	-6000	2	-95	20000	11	3.6%	20
6	22	15.0%	-4000	0	-64	24000	12	4.0%	24
7	22	15.0%	-2000	8	-32	28000	11	3.6%	28
8	8	5.4%	0	21	0	32000	3	1.0%	32
TOTAL	147		2000	54	32	36000	4	1.3%	36
			4000	70	64	40000	2	0.7%	40
2-GATE SORTS		155	6000	87	95	44000	2	0.7%	44
DETECTR	SORTS	FREQ%	8000	81	127	48000	2	0.7%	48
8			10000	59	159	52000	3	1.0%	52
9	8	5.2%	12000	27	191	56000	4	1.3%	56
10	17	11.0%	14000	8	223	60000	1	0.3%	60
11	27	17.4%	16000	2	254	64000	1	0.3%	64
12	30	19.4%	18000	0	286	68000	1	0.3%	68
13	32	20.6%	20000	0	318	72000	1	0.3%	72
14	22	14.2%	22000	0	350	76000	0	0.0%	76
15	19	12.3%	24000	0	382	80000	0	0.0%	80
TOTAL	155		26000	0	413	84000	0	0.0%	84
			>28000	0	0	>84000	10	3.3%	>84
			TOTAL	420		TOTAL	302		

SUMMARY TOTALS

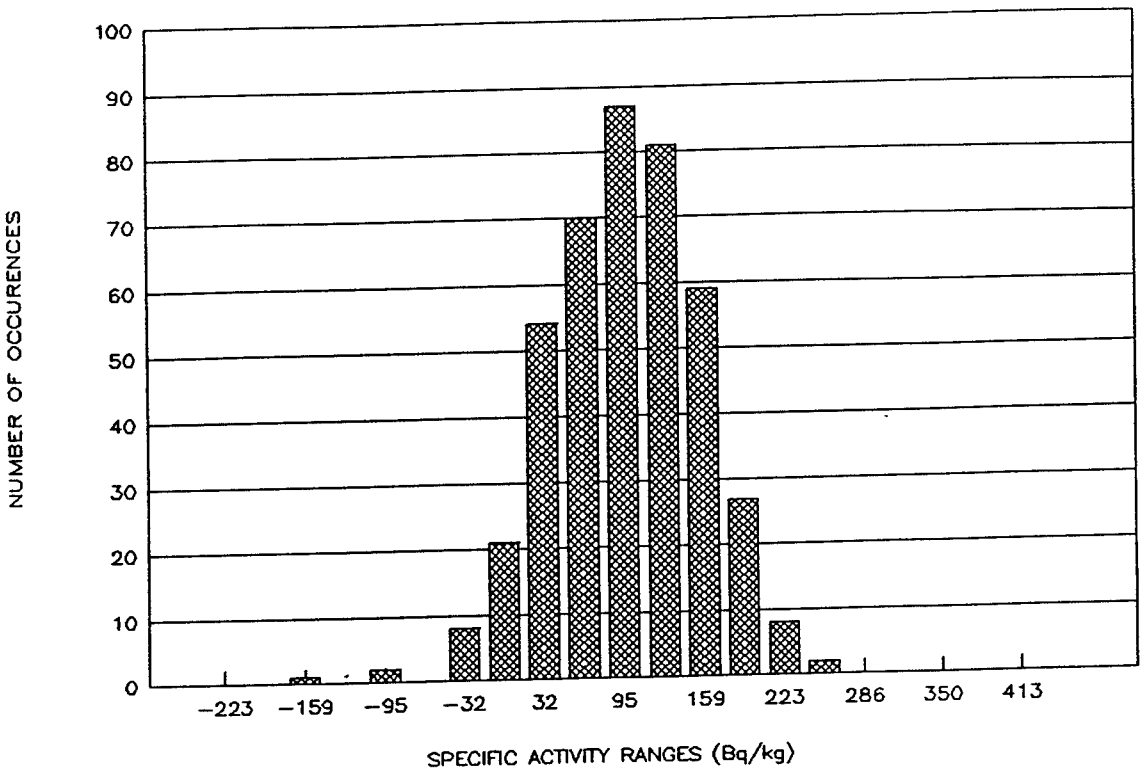
HOT PARTICLE EVENTS	322	SORTS BY ONE GATE ONLY	147
MULTIPARTICLE EVENTS	83	SORTS BY TWO GATES	155
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

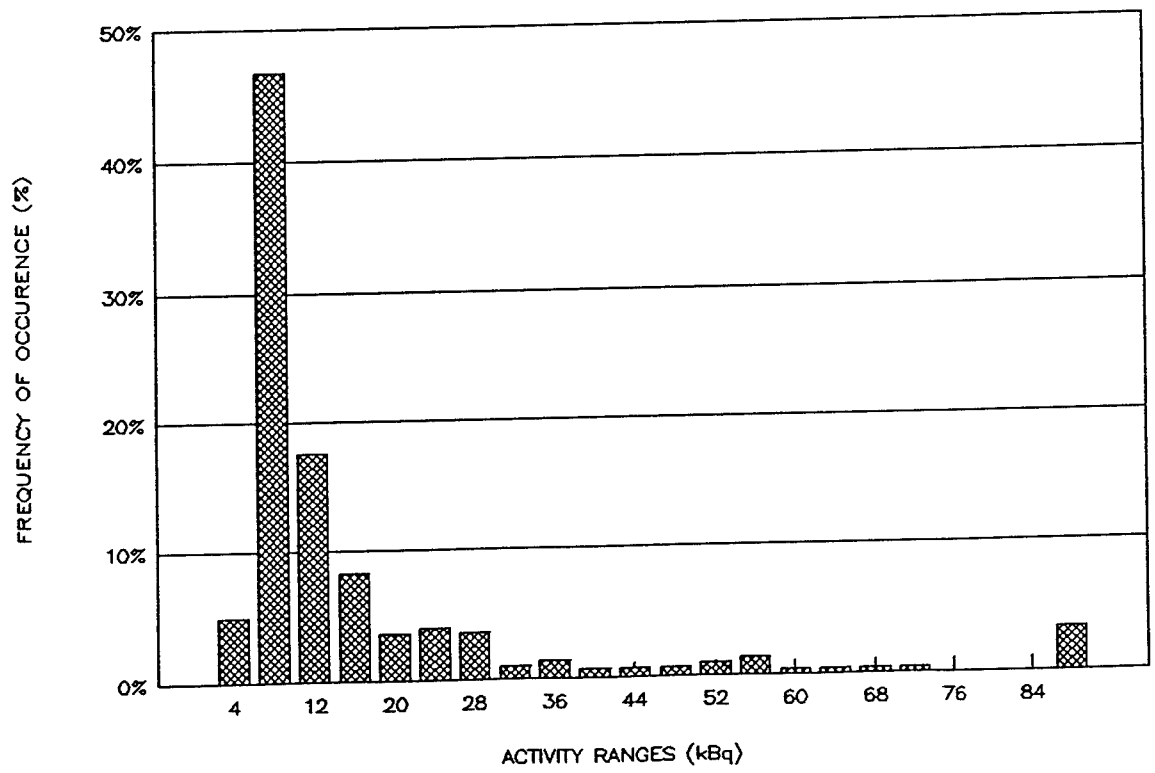
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 08-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 07-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.66 tons	117.8 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	1.32 yd³	93.4 yd³	94.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	26,033 kBq		
MAXIMUM/SORT	412 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,623 kBq	11,078 kBq	
MAXIMUM/SORT	267 kBq	23 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	5,191 Bq/kg	94 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.55 hr
DOWN-TIME	0.95 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.49 hr
PLANT PERFORMANCE	91.7%
PRODUCTIVITY	91.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,487
NONPROCESS RECORDS (Test, calibration, etc)			8
20-SEC PROCESS RECORDS			1,899
TOTAL SORT			0 MD>0 & MND=0
NO SORT			1,007 AD=0 & MD=0 & MND>0
SOME SORT			892 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	321	20.2%	

UNEXPLAIN TIME	PAUSE TIME
10:07:03	None
14:35:03	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		18,990	
2-SEC RECORDS WITH SORTS		1,588	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	340		82.9%
3 DETECTORS	62		15.1%
4 DETECTORS	8		2.0%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		410	
NET 2-SEC RECORDS WITH SORTS		1,178	
2-SEC PERIODS WITH NO SORTS		17,812	
AVG TIME BETWEEN 2-SEC SORTS		32.2	sec

1-GATE SORTS DETECTR	SORTS	810 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	15	1.9%	-14000	0	-223
2	53	6.5%	-12000	1	-191
3	121	14.9%	-10000	0	-159
4	135	16.7%	-8000	1	-127
5	176	21.7%	-6000	2	-95
6	142	17.5%	-4000	2	-64
7	114	14.1%	-2000	10	-32
8	54	6.7%	0	61	0
TOTAL	810		2000	173	32
			4000	326	64
2-GATE SORTS		778	6000	441	95
DETECTR	SORTS	FREQ%	8000	445	127
8			10000	246	159
9	40	5.1%	12000	115	191
10	91	11.7%	14000	46	223
11	131	16.8%	16000	26	254
12	134	17.2%	18000	8	286
13	149	19.2%	20000	1	318
14	132	17.0%	22000	2	350
15	101	13.0%	24000	1	382
TOTAL	778		26000	0	413
			>28000	0	0
			TOTAL	1907	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	87	5.5%	4
8000	722	45.5%	8
12000	294	18.5%	12
16000	128	8.1%	16
20000	70	4.4%	20
24000	51	3.2%	24
28000	43	2.7%	28
32000	37	2.3%	32
36000	17	1.1%	36
40000	13	0.8%	40
44000	17	1.1%	44
48000	6	0.4%	48
52000	11	0.7%	52
56000	8	0.5%	56
60000	6	0.4%	60
64000	7	0.4%	64
68000	6	0.4%	68
72000	6	0.4%	72
76000	8	0.5%	76
80000	6	0.4%	80
84000	4	0.3%	84
>84000	41	2.6%	>84
TOTAL	1588		

SUMMARY TOTALS

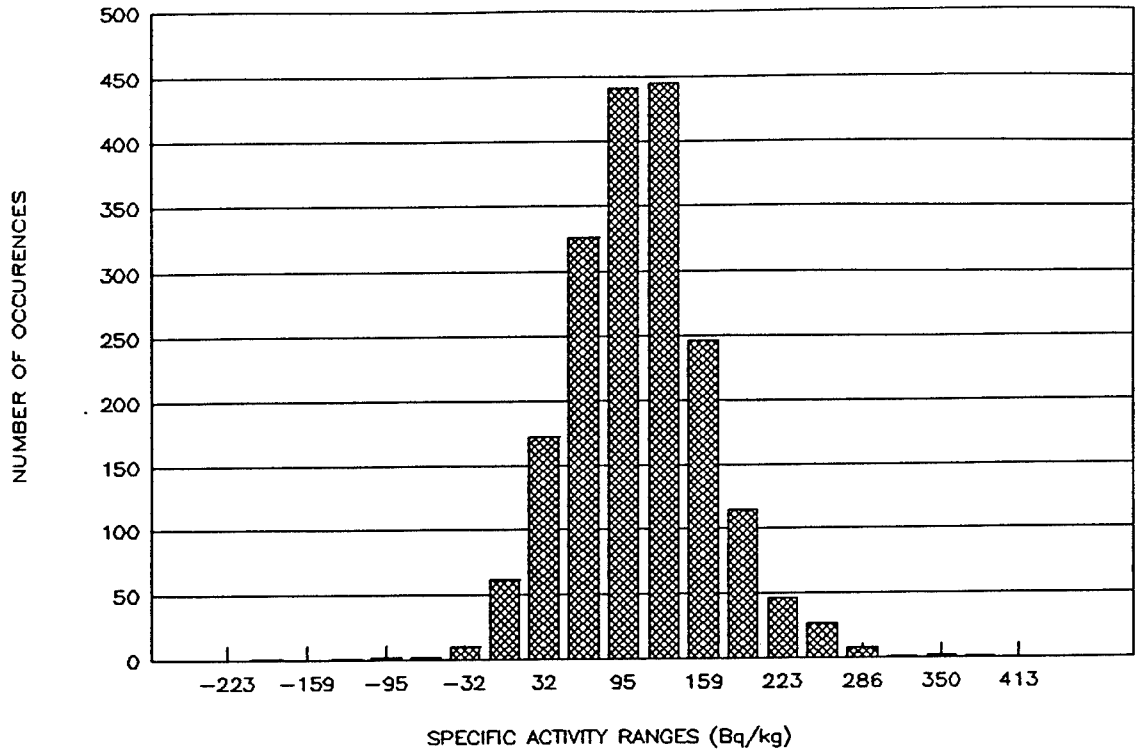
HOT PARTICLE EVENTS	1617	SORTS BY ONE GATE ONLY	810
MULTIPARTICLE EVENTS	479	SORTS BY TWO GATES	778
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

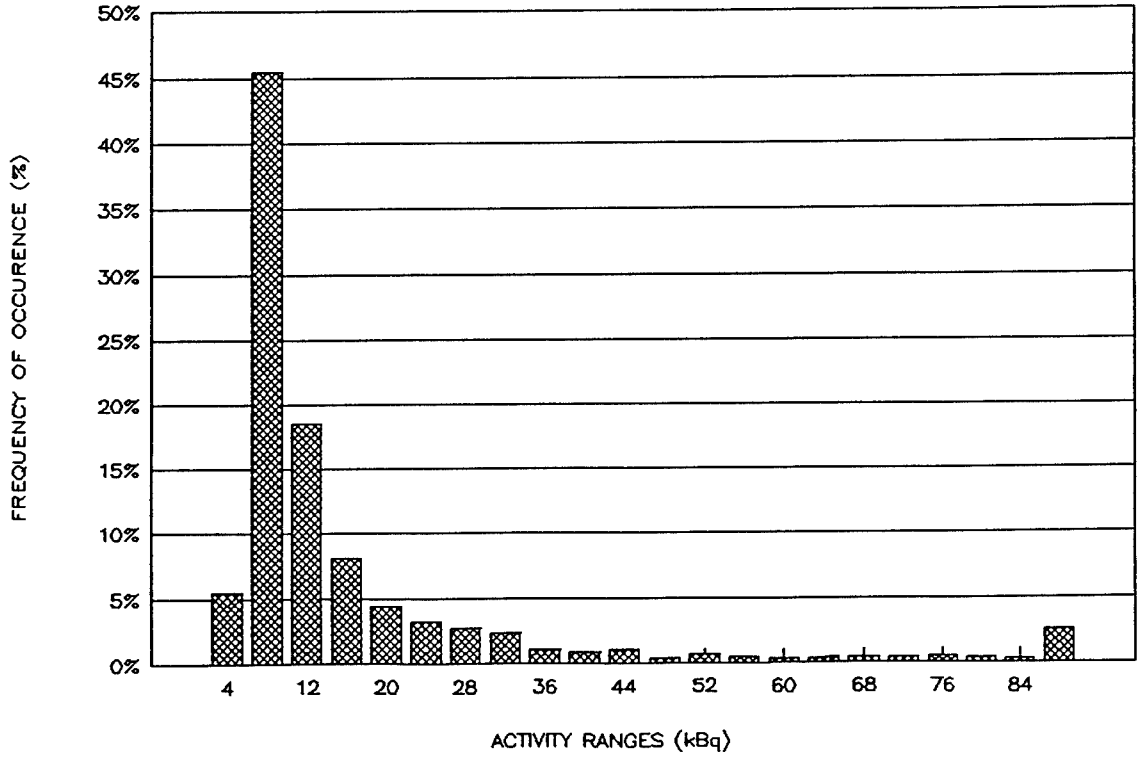
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 07-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 07-May-93



SORTER 2 07-May-93

AVERAGE BACKGROUND COUNT RATE	0.87 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.67 tons	117.8 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	1.32 yd³	93.4 yd³	94.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	33,251 kBq		
MAXIMUM/SORT	2,542 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,966 kBq	10,564 kBq	
MAXIMUM/SORT	1300 kBq	21 kBq	
MINIMUM/SORT	-24 Bq	-11 kBq	
SPECIFIC ACTIVITY	6,567 Bq/kg	90 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:25 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.55 hr
DOWN-TIME	0.95 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.42 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	91.7%
PRODUCTIVITY	91.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,429	
NONPROCESS RECORDS (Test, calibration, etc)		8	
20-SEC PROCESS RECORDS		1,899	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		956	AD=0 & MD=0 & MND>0
SOME SORT		941	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		2	
0<AD<1kBq & MD>0	5		
AD=0 & MD	1		
AD<0 & MD	1		
ACT_P <5 kBq	241	15.8%	

UNEXPLAIN TIME	PAUSE TIME
07:04:24	None
07:41:24	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,990			11:42:24
2-SEC RECORDS WITH SORTS	1,530	(ACT_P >0 kBq)		12:34:44
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				14:05:04
2 DETECTORS	312	82.3%		14:51:24
3 DETECTORS	58	15.3%		16:59:24
4 DETECTORS	9	2.4%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	379			
NET 2-SEC RECORDS WITH SORTS	1,151			
2-SEC PERIODS WITH NO SORTS	17,839			
AVG TIME BETWEEN 2-SEC SORTS	33.0 sec			

1-GATE SORTS		800	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	29	3.6%	-14000	2	-223	4000	65	4.2%	4
2	115	14.4%	-12000	1	-191	8000	688	45.0%	8
3	133	16.6%	-10000	1	-159	12000	267	17.5%	12
4	151	18.9%	-8000	3	-127	16000	129	8.4%	16
5	140	17.5%	-6000	1	-95	20000	82	5.4%	20
6	129	16.1%	-4000	7	-64	24000	50	3.3%	24
7	82	10.3%	-2000	22	-32	28000	47	3.1%	28
8	21	2.6%	0	77	0	32000	32	2.1%	32
TOTAL	800		2000	199	32	36000	24	1.6%	36
			4000	346	64	40000	14	0.9%	40
2-GATE SORTS		730	6000	436	95	44000	19	1.2%	44
DETECTR	SORTS	FREQ%	8000	393	127	48000	6	0.4%	48
8			10000	198	159	52000	12	0.8%	52
9	57	7.8%	12000	127	191	56000	8	0.5%	56
10	101	13.8%	14000	49	223	60000	9	0.6%	60
11	146	20.0%	16000	24	254	64000	7	0.5%	64
12	158	21.6%	18000	14	286	68000	7	0.5%	68
13	144	19.7%	20000	6	318	72000	1	0.1%	72
14	87	11.9%	22000	1	350	76000	7	0.5%	76
15	37	5.1%	24000	0	382	80000	3	0.2%	80
TOTAL	730		26000	0	413	84000	5	0.3%	84
			>28000	0	0	>84000	48	3.1%	>84
			TOTAL	1907		TOTAL	1530		

SUMMARY TOTALS

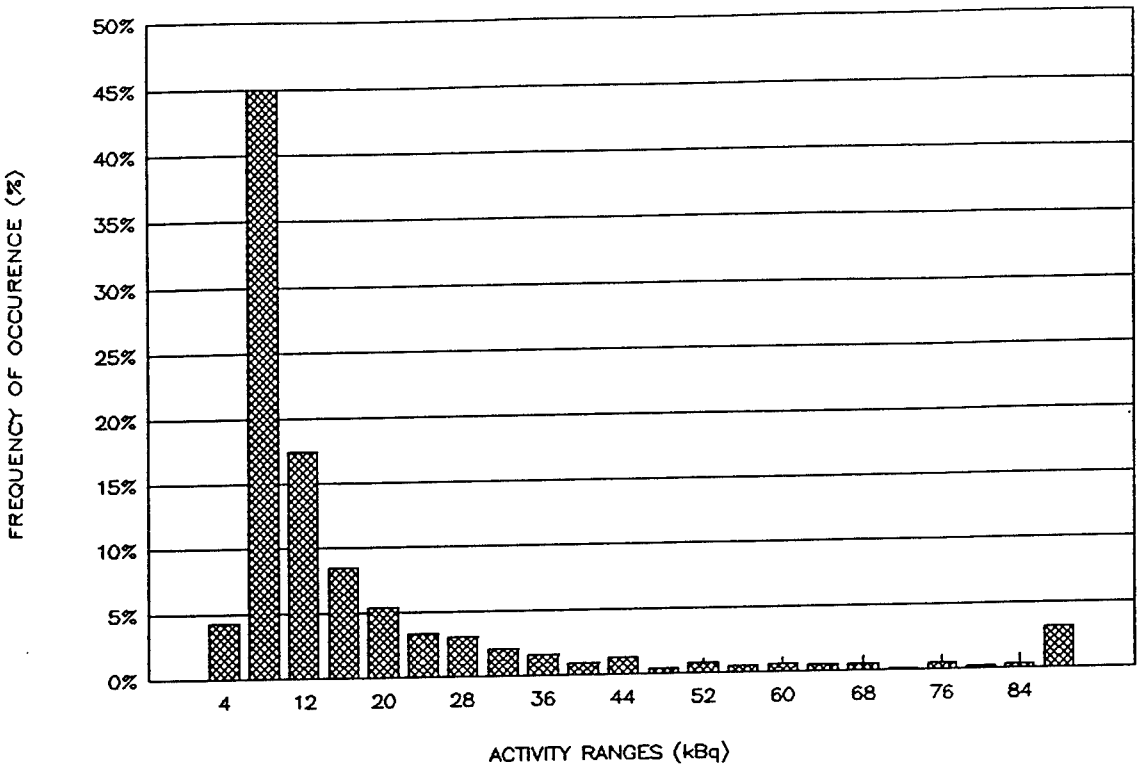
HOT PARTICLE EVENTS	1560	SORTS BY ONE GATE ONLY	800
MULTIPARTICLE EVENTS	545	SORTS BY TWO GATES	730
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

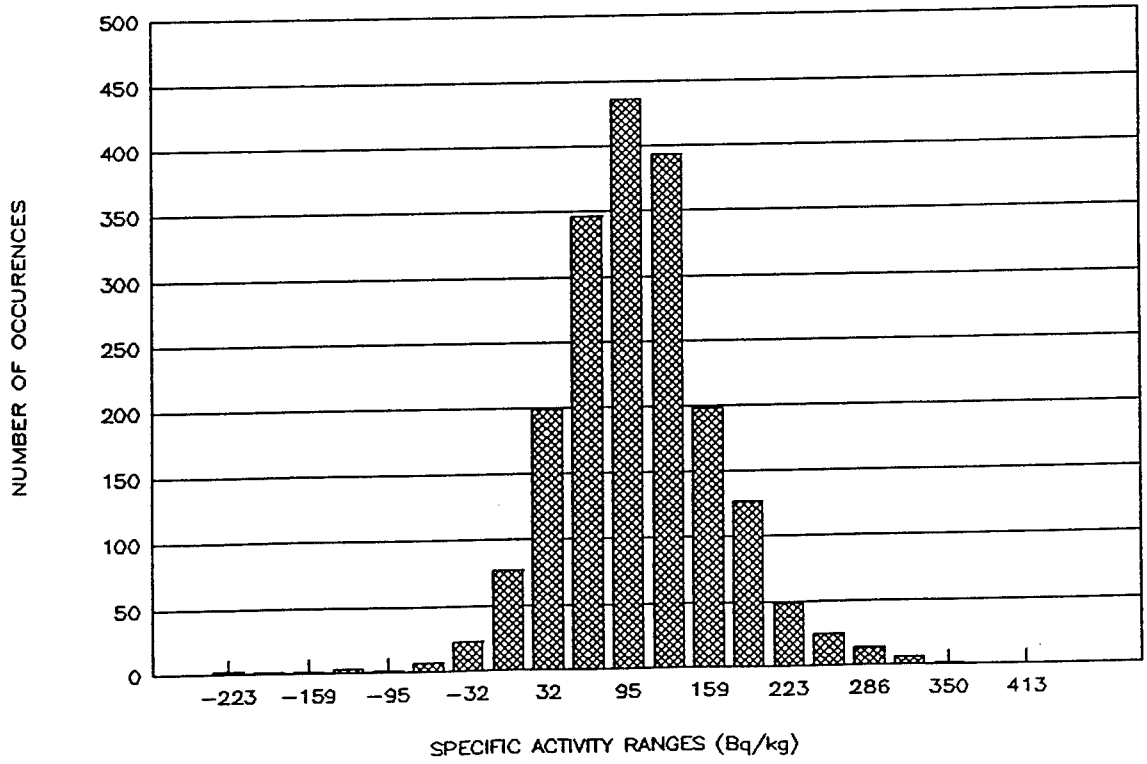
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 07–May–93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 07–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 06-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.78 tons	119.4 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.41 yd³	94.7 yd³	96.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	33,309 kBq		
MAXIMUM/SORT	1,728 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,676 kBq	11,721 kBq	
MAXIMUM/SORT	470 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	6,014 Bq/kg	98 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	05:09 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.71 hr
DOWN-TIME	0.79 hr
TOTAL SYSTEM PAUSE	0.19 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.27 hr
SHUT-DOWN	0.33 hr
PLANT PERFORMANCE	93.1%
PRODUCTIVITY	93.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,628	
NONPROCESS RECORDS (Test, calibration, etc)		9	
20-SEC PROCESS RECORDS		1,927	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		997	AD=0 & MD=0 & MND>0
SOME SORT		930	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	338	19.9%	

UNEXPLAIN TIME	PAUSE TIME
15:31:15	12:25

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,270	
2-SEC RECORDS WITH SORTS		1,701	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	369	81.5%
	3 DETECTORS	72	15.9%
	4 DETECTORS	12	2.6%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	453	
NET 2-SEC RECORDS WITH SORTS		1,248	
2-SEC PERIODS WITH NO SORTS		18,022	
AVG TIME BETWEEN 2-SEC SORTS		30.9	sec

1-GATE SORTS	863	ACT_ND	NUMBER	SPEC_A
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1 21	2.4%	-14000	1	-223
2 80	9.3%	-12000	5	-191
3 130	15.1%	-10000	3	-159
4 138	16.0%	-8000	3	-127
5 159	18.4%	-6000	4	-95
6 149	17.3%	-4000	2	-64
7 142	16.5%	-2000	5	-32
8 44	5.1%	0	52	0
TOTAL 863		2000	148	32
		4000	321	64
2-GATE SORTS	838	6000	420	95
DETECTR SORTS	FREQ%	8000	451	127
8		10000	275	159
9 45	5.4%	12000	142	191
10 118	14.1%	14000	70	223
11 145	17.3%	16000	24	254
12 144	17.2%	18000	9	286
13 147	17.5%	20000	1	318
14 145	17.3%	22000	0	350
15 94	11.2%	24000	0	382
TOTAL 838		26000	0	413
		>28000	0	0
		TOTAL	1936	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	87	5.1%	4
8000	796	46.8%	8
12000	292	17.2%	12
16000	130	7.6%	16
20000	77	4.5%	20
24000	53	3.1%	24
28000	39	2.3%	28
32000	39	2.3%	32
36000	19	1.1%	36
40000	20	1.2%	40
44000	13	0.8%	44
48000	17	1.0%	48
52000	13	0.8%	52
56000	9	0.5%	56
60000	9	0.5%	60
64000	10	0.6%	64
68000	8	0.5%	68
72000	9	0.5%	72
76000	5	0.3%	76
80000	4	0.2%	80
84000	6	0.4%	84
>84000	46	2.7%	>84
TOTAL	1701		

SUMMARY TOTALS

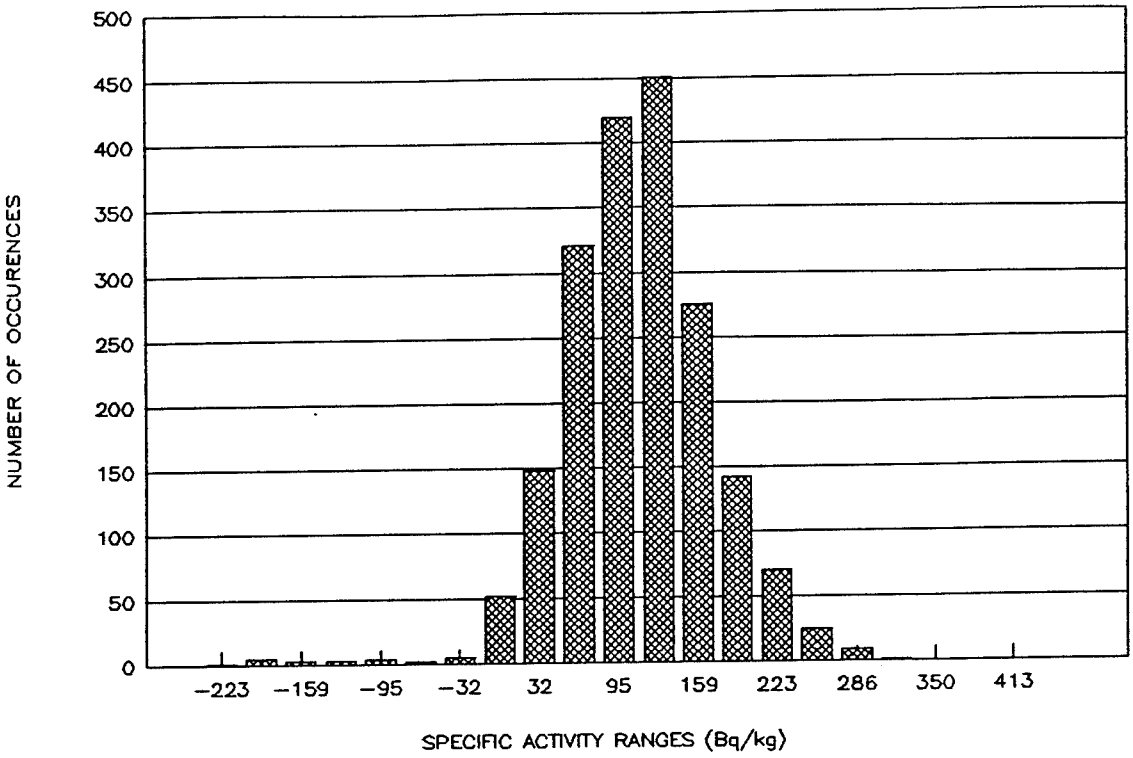
HOT PARTICLE EVENTS	1718	SORTS BY ONE GATE ONLY	863
MULTIPARTICLE EVENTS	523	SORTS BY TWO GATES	838
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

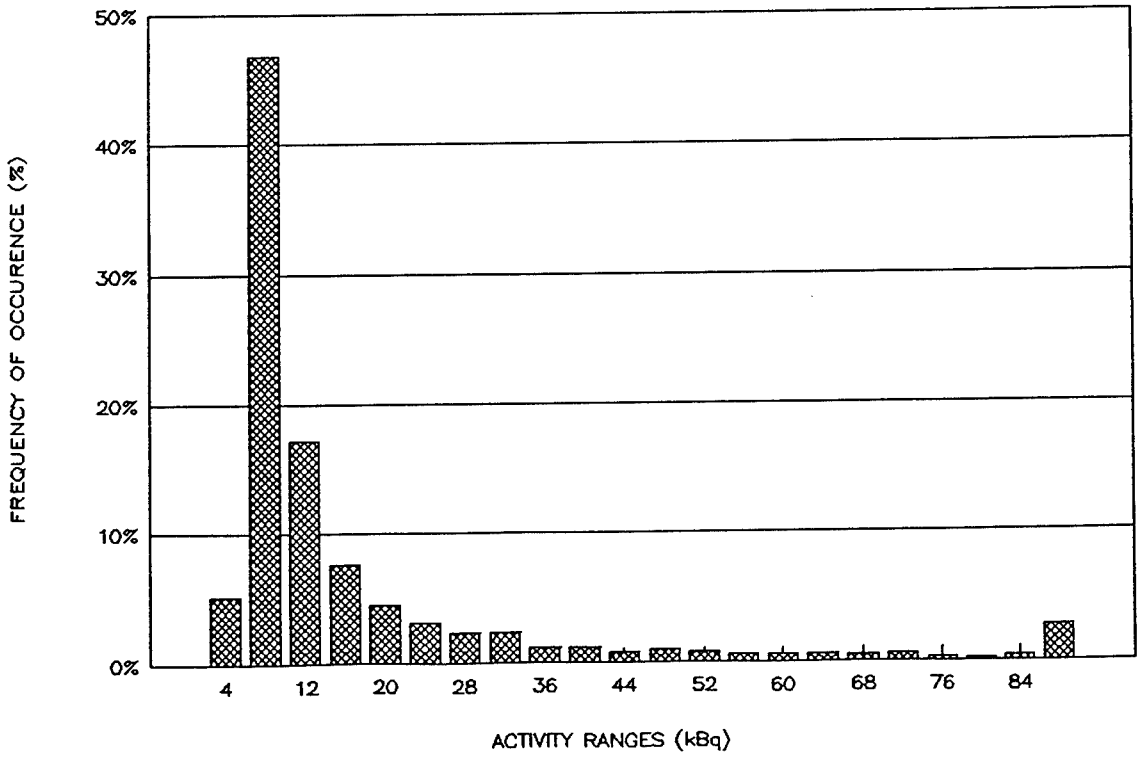
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 06-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 06-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 06-May-93

AVERAGE BACKGROUND COUNT RATE	0.85 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.65 tons	120.1 tons	
MAXIMUM/SORT	7.9 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55 kg	
			98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.31 yd³	95.2 yd³	96.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	31,706 kBq		
MAXIMUM/SORT	1,901 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,496 kBq	10,523 kBq	
MAXIMUM/SORT	1058 kBq	19 kBq	
MINIMUM/SORT	-453 Bq	-17 kBq	
SPECIFIC ACTIVITY	6,347 Bq/kg	88 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:14 AM	END SOIL PROCESSING	05:10 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.76 hr
DOWN-TIME	0.74 hr
TOTAL SYSTEM PAUSE	0.19 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.24 hr
SHUT-DOWN	0.32 hr
PLANT PERFORMANCE	93.5%
PRODUCTIVITY	93.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,446	
NONPROCESS RECORDS (Test, calibration, etc)		0	
20-SEC PROCESS RECORDS		1,936	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,001	AD=0 & MD=0 & MND>0
SOME SORT		933	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		2	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	2		
ACT_P <5 kBq	261	17.3%	

UNEXPLAIN TIME	PAUSE TIME
12:42:56	12:25
12:54:16	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,360		17:07:56
2-SEC RECORDS WITH SORTS	1,510	(ACT_P >0 kBq)	17:09:36
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	296	83.1%	
3 DETECTORS	53	14.9%	
4 DETECTORS	6	1.7%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	356		
NET 2-SEC RECORDS WITH SORTS	1,154		
2-SEC PERIODS WITH NO SORTS	18,206		
AVG TIME BETWEEN 2-SEC SORTS	33.6 sec		

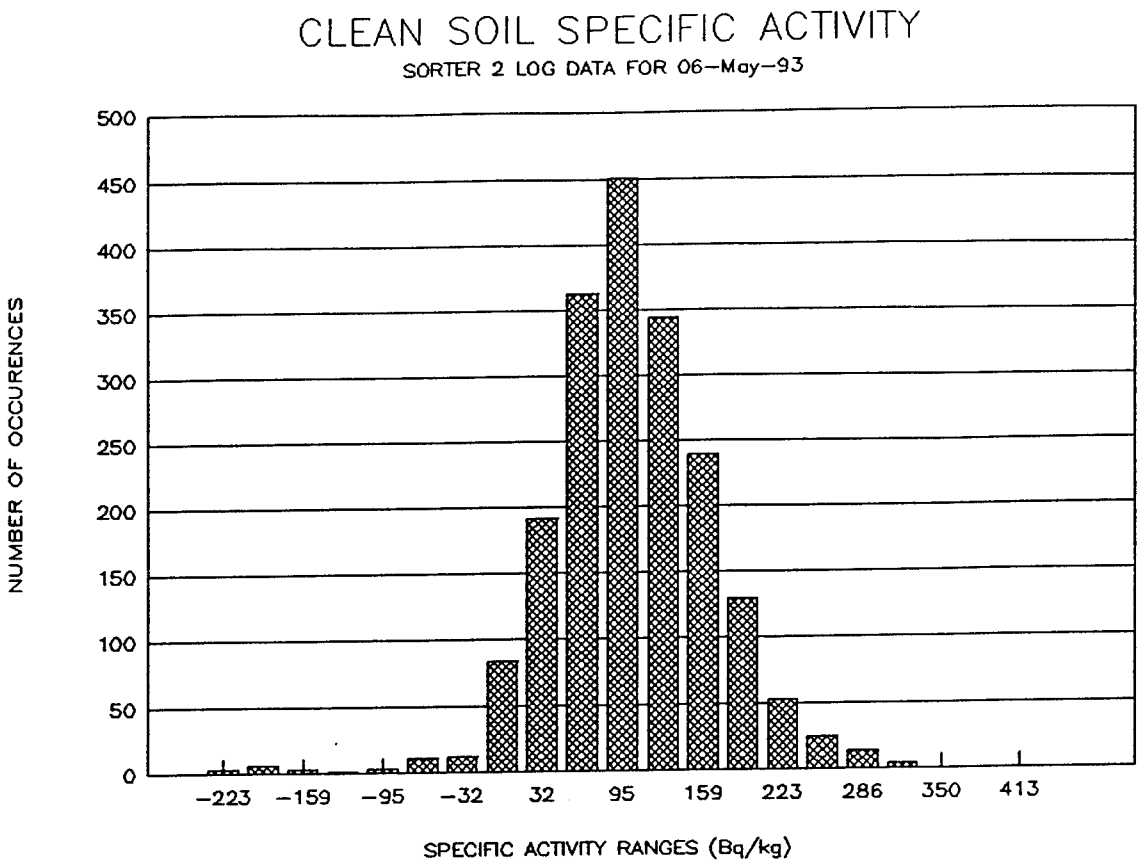
1-GATE SORTS		790	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	37	4.7%	-14000	3	-223	4000	62	4.1%	4
2	100	12.7%	-12000	6	-191	8000	719	47.6%	8
3	129	16.3%	-10000	3	-159	12000	287	19.0%	12
4	152	19.2%	-8000	1	-127	16000	119	7.9%	16
5	159	20.1%	-6000	3	-95	20000	66	4.4%	20
6	112	14.2%	-4000	11	-64	24000	34	2.3%	24
7	78	9.9%	-2000	12	-32	28000	27	1.8%	28
8	23	2.9%	0	84	0	32000	31	2.1%	32
TOTAL	790		2000	191	32	36000	20	1.3%	36
			4000	363	64	40000	14	0.9%	40
2-GATE SORTS		720	6000	451	95	44000	20	1.3%	44
DETECTR	SORTS	FREQ%	8000	344	127	48000	15	1.0%	48
8			10000	239	159	52000	8	0.5%	52
9	66	9.2%	12000	130	191	56000	4	0.3%	56
10	85	11.8%	14000	53	223	60000	6	0.4%	60
11	136	18.9%	16000	24	254	64000	3	0.2%	64
12	153	21.3%	18000	14	286	68000	1	0.1%	68
13	147	20.4%	20000	4	318	72000	5	0.3%	72
14	80	11.1%	22000	0	350	76000	10	0.7%	76
15	53	7.4%	24000	0	382	80000	4	0.3%	80
TOTAL	720		26000	0	413	84000	4	0.3%	84
			>28000	0	0	>84000	51	3.4%	>84
			TOTAL	1936		TOTAL	1510		

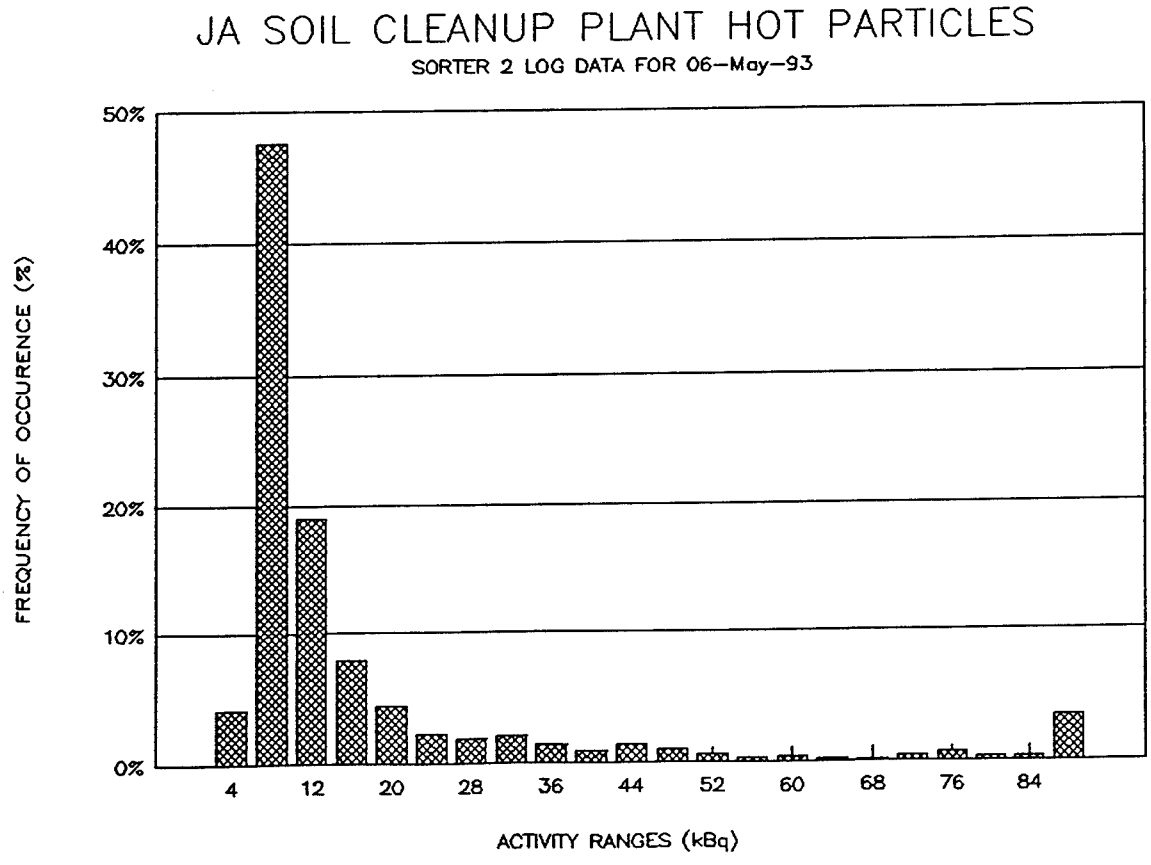
SUMMARY TOTALS

HOT PARTICLE EVENTS	1539	SORTS BY ONE GATE ONLY	790
MULTIPARTICLE EVENTS	547	SORTS BY TWO GATES	720
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 06-May-93
NUMBER OF OCCURENCES
500
450
400
350
300
250
200
150
100
50
0
-223
-159
-95
-32
32
95
159
223
286
350
413
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 06-May-93
FREQUENCY OF OCCURENCE (%)
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 05-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.61 tons	119.7 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.7%
EQUIVALENT SOIL-IN-GROUND	1.28 yd³	94.9 yd³	96.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	33,487 kBq		
MAXIMUM/SORT	1,237 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,392 kBq	8,983 kBq	
MAXIMUM/SORT	740 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	6,438 Bq/kg	75 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.72 hr
DOWN-TIME	0.78 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.28 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	93.2%
PRODUCTIVITY	93.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,519		
NONPROCESS RECORDS (Test, calibration, etc)			4		
20-SEC PROCESS RECORDS			1,929		
TOTAL SORT			0	MD>0 & MND=0	
NO SORT			1,061	AD=0 & MD=0 & MND>0	
SOME SORT			868	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	7			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			08:25:54	None
AD<0 & MD	0			09:57:14	
ACT_P <5 kBq	305	19.2%			

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,290		11:48:54
2-SEC RECORDS WITH SORTS	1,590	(ACT_P >0 kBq)	11:59:54
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			14:18:14
2 DETECTORS	357	83.0%	15:02:34
3 DETECTORS	58	13.5%	15:36:34
4 DETECTORS	13	3.0%	
5 DETECTORS	2	0.5%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	430		
NET 2-SEC RECORDS WITH SORTS	1,160		
2-SEC PERIODS WITH NO SORTS	18,130		
AVG TIME BETWEEN 2-SEC SORTS	33.3 sec		

1-GATE SORTS		807	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	20	2.5%	-14000	0	-223	4000	88	5.5%	4
2	70	8.7%	-12000	0	-191	8000	705	44.3%	8
3	92	11.4%	-10000	0	-159	12000	262	16.5%	12
4	135	16.7%	-8000	1	-127	16000	137	8.6%	16
5	153	19.0%	-6000	1	-95	20000	92	5.8%	20
6	150	18.6%	-4000	14	-64	24000	50	3.1%	24
7	138	17.1%	-2000	34	-32	28000	40	2.5%	28
8	49	6.1%	0	157	0	32000	38	2.4%	32
TOTAL	807		2000	270	32	36000	18	1.1%	36
			4000	366	64	40000	24	1.5%	40
2-GATE SORTS		783	6000	394	95	44000	15	0.9%	44
DETECTR	SORTS	FREQ%	8000	342	127	48000	7	0.4%	48
8			10000	215	159	52000	7	0.4%	52
9	36	4.6%	12000	90	191	56000	7	0.4%	56
10	87	11.1%	14000	37	223	60000	5	0.3%	60
11	114	14.6%	16000	8	254	64000	9	0.6%	64
12	135	17.2%	18000	3	286	68000	3	0.2%	68
13	153	19.5%	20000	1	318	72000	2	0.1%	72
14	146	18.6%	22000	0	350	76000	10	0.6%	76
15	112	14.3%	24000	0	382	80000	6	0.4%	80
TOTAL	783		26000	0	413	84000	3	0.2%	84
			>28000	0	0	>84000	62	3.9%	>84
			TOTAL	1933		TOTAL	1590		

SUMMARY TOTALS

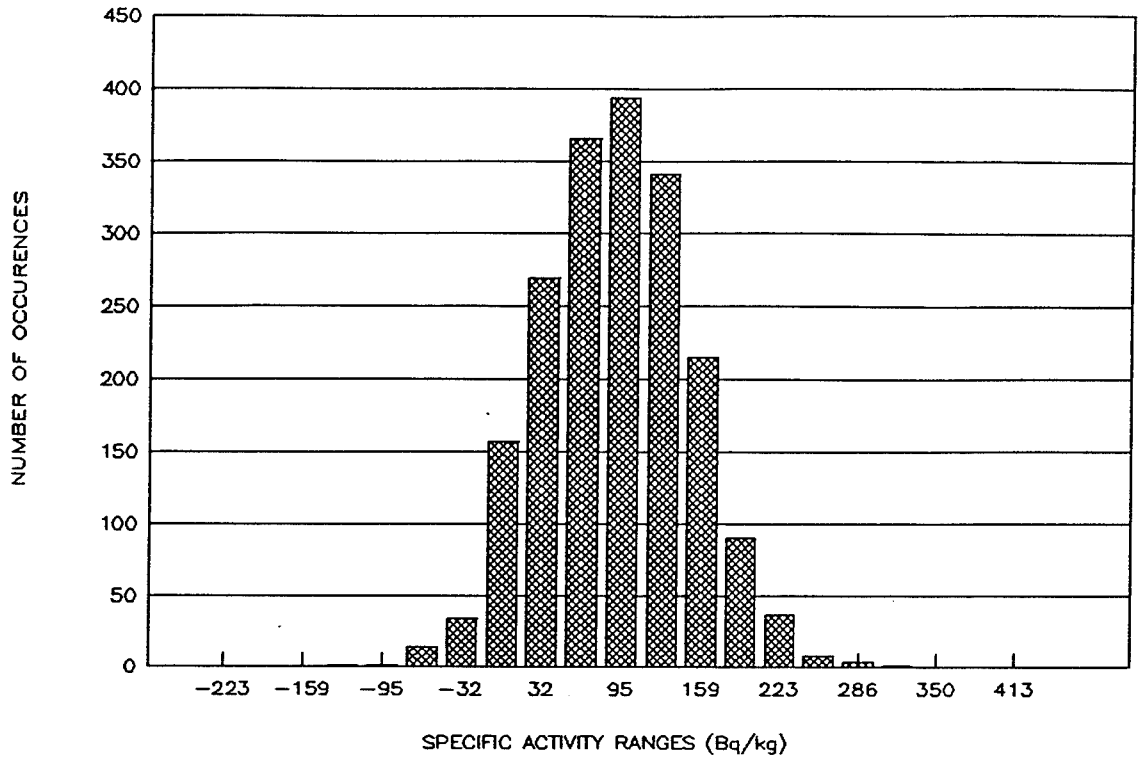
HOT PARTICLE EVENTS	1606	SORTS BY ONE GATE ONLY	807
MULTIPARTICLE EVENTS	432	SORTS BY TWO GATES	783
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

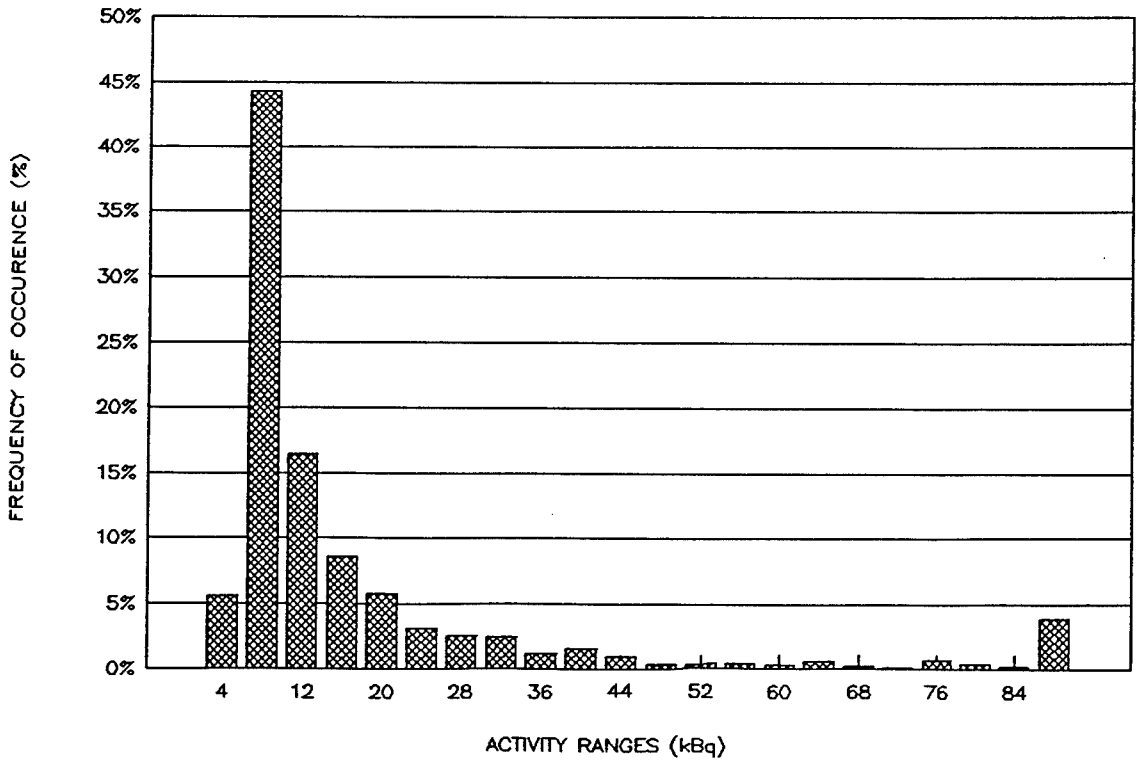
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 05–May–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 05–May–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 05-May-93

AVERAGE BACKGROUND COUNT RATE	0.87 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.67 tons	119.5 tons	
MAXIMUM/SORT	7.9 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55 kg	
			98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.32 yd³	94.7 yd³	96.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	29,918 kBq		
MAXIMUM/SORT	1,724 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,992 kBq	9,324 kBq	
MAXIMUM/SORT	1137 kBq	18 kBq	
MINIMUM/SORT	-95 Bq	-10 kBq	
SPECIFIC ACTIVITY	5,979 Bq/kg	78 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.71 hr
DOWN-TIME	0.79 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.28 hr
SHUT-DOWN	0.52 hr
PLANT PERFORMANCE	93.1%
PRODUCTIVITY	93.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,429	
NONPROCESS RECORDS (Test, calibration, etc)	6	
20-SEC PROCESS RECORDS	1,927	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	988 AD=0 & MD=0 & MND>0	
SOME SORT	938 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	1	
0<AD<1kBq & MD>0	9	
AD=0 & MD	0	
AD<0 & MD	1	
ACT_P <5 kBq	272	18.1%

UNEXPLAIN TIME	PAUSE TIME
06:26:34	None
07:57:34	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,270		08:33:34
2-SEC RECORDS WITH SORTS	1,502	(ACT_P >0 kBq)	10:46:34
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			11:25:14
2 DETECTORS	267	83.4%	11:25:54
3 DETECTORS	49	15.3%	13:40:34
4 DETECTORS	4	1.3%	13:52:14
5 DETECTORS	0	0.0%	15:07:54
6 DETECTORS	0	0.0%	16:51:34
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	320		
NET 2-SEC RECORDS WITH SORTS	1,182		
2-SEC PERIODS WITH NO SORTS	18,088		
AVG TIME BETWEEN 2-SEC SORTS	32.6 sec		

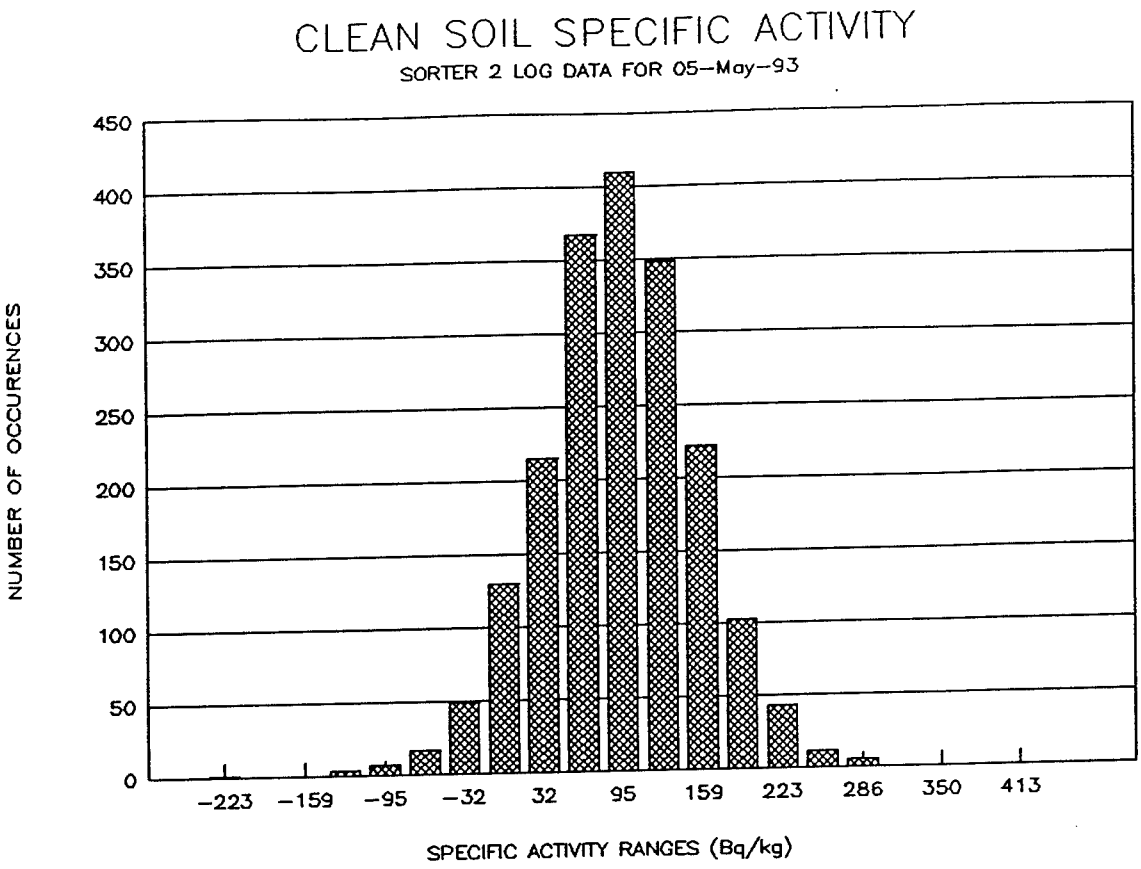
1-GATE SORTS		775	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	42	5.4%	-14000	1	-223	4000	69	4.6%	4
2	112	14.5%	-12000	0	-191	8000	695	46.3%	8
3	133	17.2%	-10000	0	-159	12000	259	17.2%	12
4	147	19.0%	-8000	3	-127	16000	142	9.5%	16
5	145	18.7%	-6000	7	-95	20000	87	5.8%	20
6	115	14.8%	-4000	17	-64	24000	40	2.7%	24
7	69	8.9%	-2000	49	-32	28000	33	2.2%	28
8	12	1.5%	0	130	0	32000	29	1.9%	32
TOTAL	775		2000	215	32	36000	28	1.9%	36
			4000	368	64	40000	10	0.7%	40
2-GATE SORTS		727	6000	410	95	44000	12	0.8%	44
DETECTR	SORTS	FREQ%	8000	349	127	48000	8	0.5%	48
8			10000	222	159	52000	7	0.5%	52
9	70	9.6%	12000	103	191	56000	7	0.5%	56
10	107	14.7%	14000	43	223	60000	6	0.4%	60
11	159	21.9%	16000	11	254	64000	4	0.3%	64
12	139	19.1%	18000	5	286	68000	4	0.3%	68
13	121	16.6%	20000	0	318	72000	3	0.2%	72
14	99	13.6%	22000	0	350	76000	5	0.3%	76
15	32	4.4%	24000	0	382	80000	3	0.2%	80
TOTAL	727		26000	0	413	84000	4	0.3%	84
			>28000	0	0	>84000	47	3.1%	>84
			TOTAL	1933		TOTAL	1502		

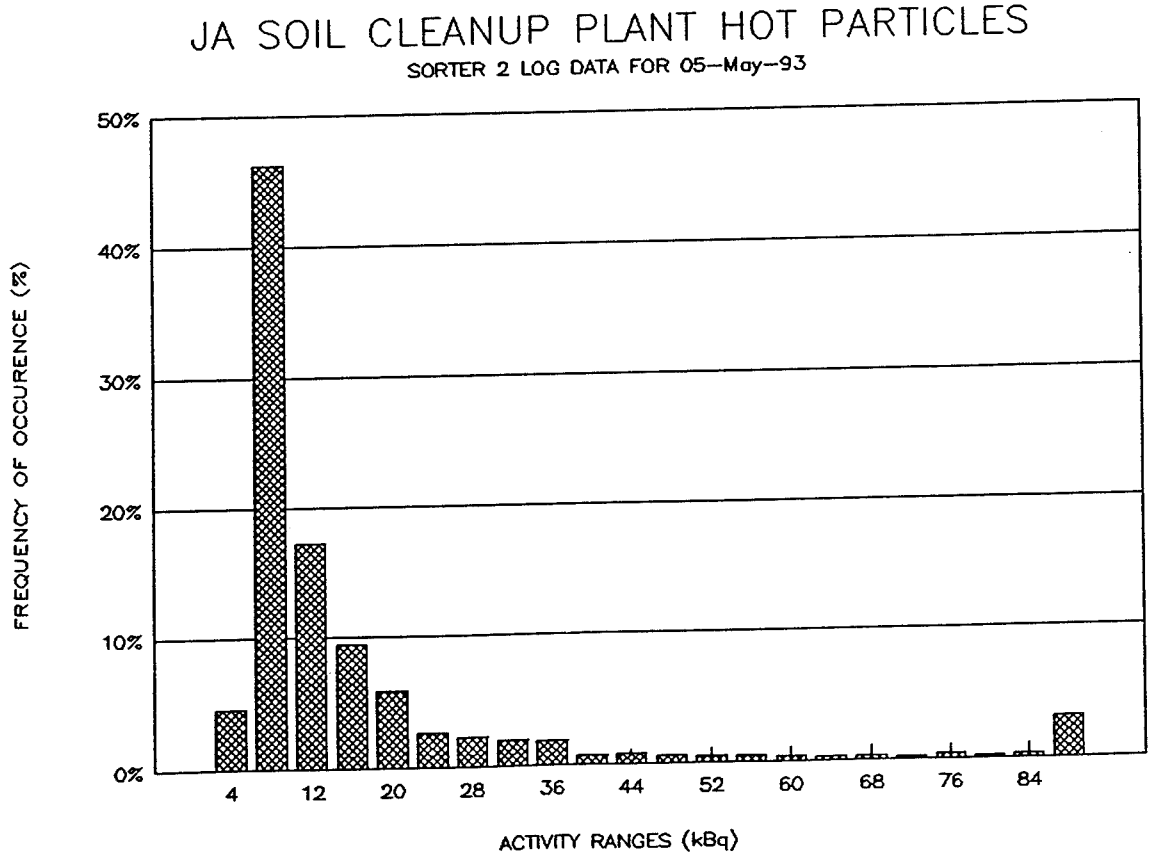
SUMMARY TOTALS

HOT PARTICLE EVENTS	1576	SORTS BY ONE GATE ONLY	775
MULTIPARTICLE EVENTS	532	SORTS BY TWO GATES	727
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 05-May-93
NUMBER OF OCCURENCES
450
400
350
300
250
200
150
100
50
0
-223
-159
-95
-32
32
95
159
223
286
350
413
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 05-May-93
FREQUENCY OF OCCURENCE (%)
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 04-May-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.35 tons	119.3 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.9%
EQUIVALENT SOIL-IN-GROUND	1.07 yd³	94.6 yd³	95.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	35,210 kBq		
MAXIMUM/SORT	6,637 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,489 kBq	6,881 kBq	
MAXIMUM/SORT	3726 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	7,781 Bq/kg	58 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:21 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.66 hr
DOWN-TIME	0.84 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.36 hr
SHUT-DOWN	0.49 hr
PLANT PERFORMANCE	92.7%
PRODUCTIVITY	92.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,226	
NONPROCESS RECORDS (Test, calibration, etc)		3	
20-SEC PROCESS RECORDS		1,918	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,179	AD=0 & MD=0 & MND>0
SOME SORT		739	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	258	19.7%	

UNEXPLAIN TIME	PAUSE TIME
08:27:07	None
09:12:07	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,180		09:18:27
2-SEC RECORDS WITH SORTS	1,308	(ACT_P >0 kBq)	11:44:07
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			15:49:27
2 DETECTORS	266	83.4%	
3 DETECTORS	46	14.4%	
4 DETECTORS	5	1.6%	
5 DETECTORS	2	0.6%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	319		
NET 2-SEC RECORDS WITH SORTS	989		
2-SEC PERIODS WITH NO SORTS	18,191		
AVG TIME BETWEEN 2-SEC SORTS	38.8 sec		

1-GATE SORTS DETECTR	SORTS	657 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	16	2.4%	-14000	1	-223
2	47	7.2%	-12000	0	-191
3	93	14.2%	-10000	0	-159
4	118	18.0%	-8000	0	-127
5	140	21.3%	-6000	2	-95
6	109	16.6%	-4000	12	-64
7	95	14.5%	-2000	79	-32
8	39	5.9%	0	221	0
TOTAL	657		2000	354	32
			4000	452	64
2-GATE SORTS		651	6000	359	95
DETECTR	SORTS	FREQ%	8000	224	127
8			10000	111	159
9	25	3.8%	12000	53	191
10	66	10.1%	14000	30	223
11	120	18.4%	16000	15	254
12	131	20.1%	18000	5	286
13	129	19.8%	20000	2	318
14	95	14.6%	22000	1	350
15	85	13.1%	24000	0	382
TOTAL	651		26000	0	413
			>28000	0	0
			TOTAL	1921	

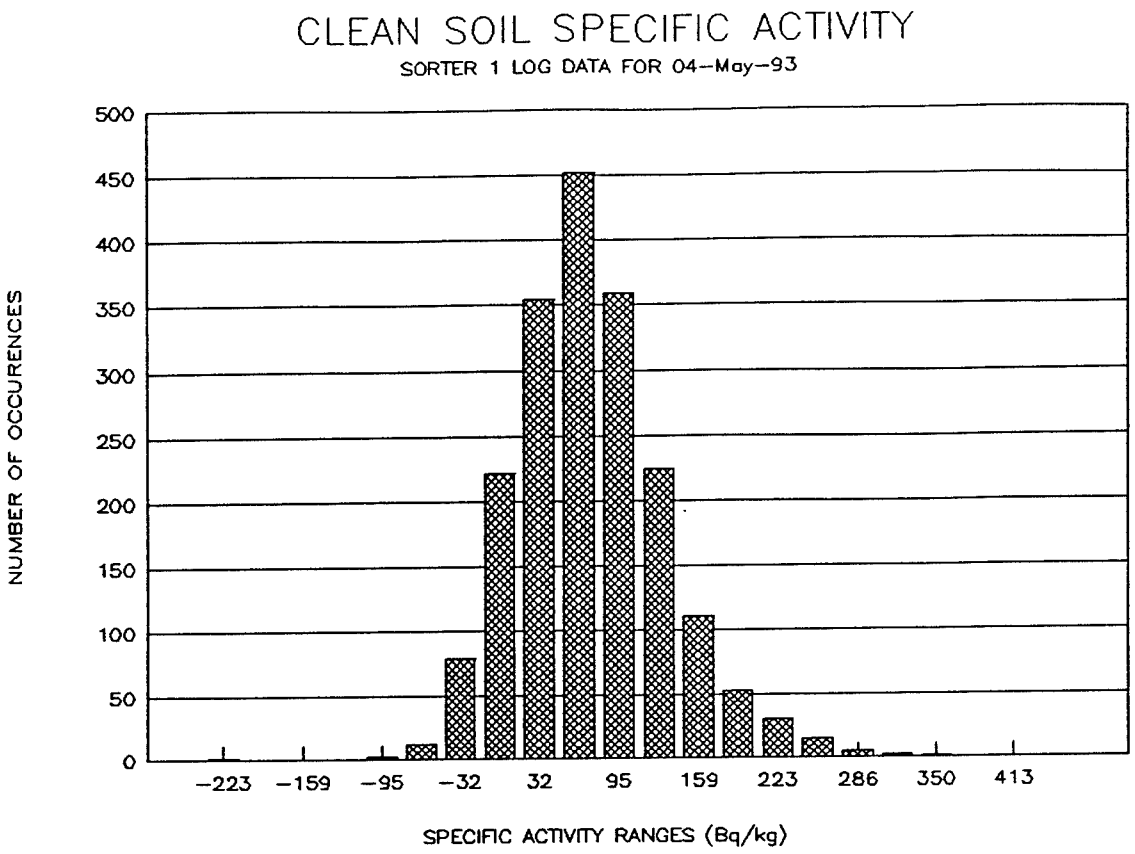
ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	68	5.2%	4
8000	619	47.3%	8
12000	225	17.2%	12
16000	110	8.4%	16
20000	70	5.4%	20
24000	37	2.8%	24
28000	31	2.4%	28
32000	26	2.0%	32
36000	13	1.0%	36
40000	14	1.1%	40
44000	10	0.8%	44
48000	8	0.6%	48
52000	9	0.7%	52
56000	7	0.5%	56
60000	5	0.4%	60
64000	4	0.3%	64
68000	6	0.5%	68
72000	3	0.2%	72
76000	5	0.4%	76
80000	1	0.1%	80
84000	3	0.2%	84
>84000	34	2.6%	>84
TOTAL	1308		

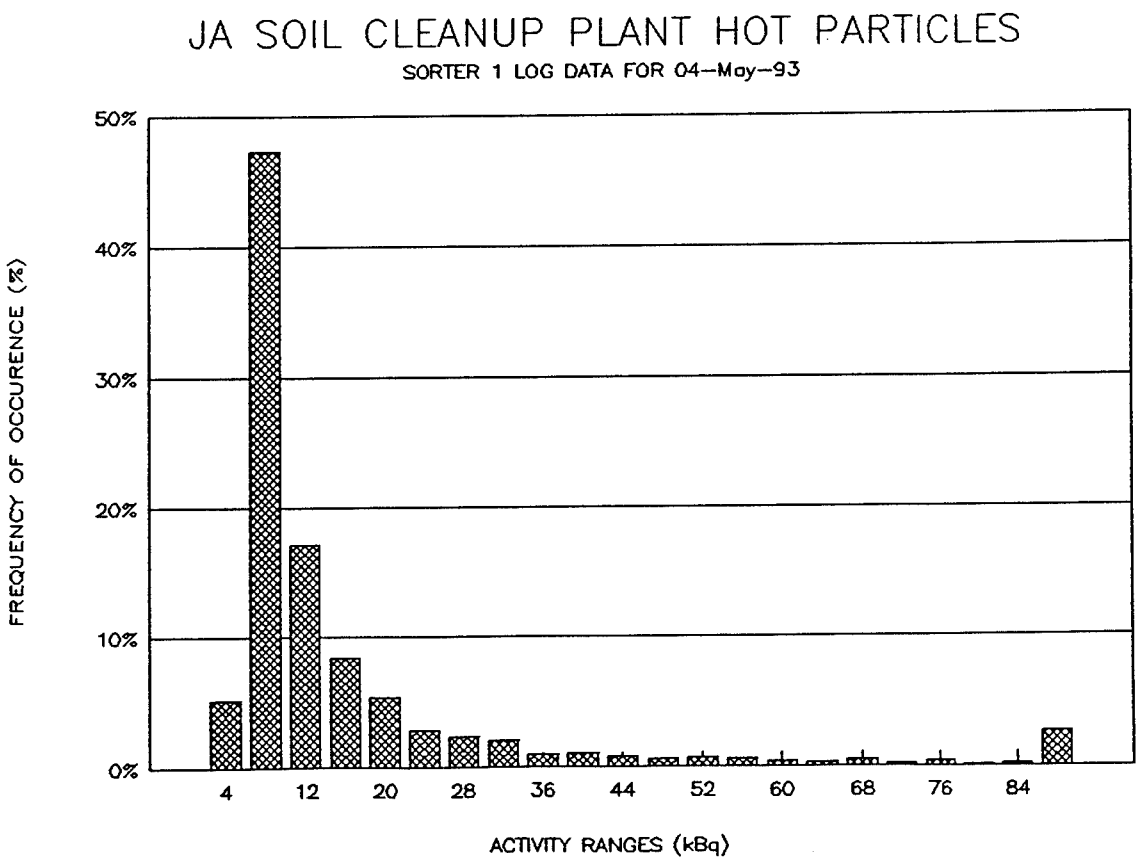
SUMMARY TOTALS

HOT PARTICLE EVENTS	1340	SORTS BY ONE GATE ONLY	657
MULTIPARTICLE EVENTS	360	SORTS BY TWO GATES	651
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 04-May-93
NUMBER OF OCCURENCES
500
450
400
350
300
250
200
150
100
50
0
-223
-159
-95
-32
32
95
159
223
286
350
413
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 04-May-93
FREQUENCY OF OCCURENCE (%)
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 04-May-93

AVERAGE BACKGROUND COUNT RATE	0.88 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.24 tons	118.7 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.98 yd³	94.1 yd³	95.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,085 kBq		
MAXIMUM/SORT	982 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,973 kBq	6,091 kBq	
MAXIMUM/SORT	576 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,614 Bq/kg	51 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:22 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.59 hr
DOWN-TIME	0.91 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.37 hr
SHUT-DOWN	0.54 hr
PLANT PERFORMANCE	92.1%
PRODUCTIVITY	92.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,064	
NONPROCESS RECORDS (Test, calibration, etc)		14	
20-SEC PROCESS RECORDS		1,907	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,199	AD=0 & MD=0 & MND>0
SOME SORT		708	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	None	None
AD<0 & MD	0		
ACT_P <5 kBq	186 16.1%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,070	
2-SEC RECORDS WITH SORTS	1,157	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	240	84.2%
3 DETECTORS	35	12.3%
4 DETECTORS	7	2.5%
5 DETECTORS	3	1.1%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	285	
NET 2-SEC RECORDS WITH SORTS	872	
2-SEC PERIODS WITH NO SORTS	18,198	
AVG TIME BETWEEN 2-SEC SORTS	43.7	sec

1-GATE SORTS		601	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	20	3.3%	-14000	5	-223	4000	39	3.4%	4
2	81	13.5%	-12000	5	-191	8000	536	46.3%	8
3	128	21.3%	-10000	1	-159	12000	213	18.4%	12
4	111	18.5%	-8000	0	-127	16000	96	8.3%	16
5	119	19.8%	-6000	6	-95	20000	55	4.8%	20
6	93	15.5%	-4000	29	-64	24000	44	3.8%	24
7	38	6.3%	-2000	103	-32	28000	34	2.9%	28
8	11	1.8%	0	257	0	32000	23	2.0%	32
TOTAL	601		2000	382	32	36000	8	0.7%	36
			4000	424	64	40000	17	1.5%	40
2-GATE SORTS		556	6000	311	95	44000	12	1.0%	44
DETECTR	SORTS	FREQ%	8000	194	127	48000	12	1.0%	48
8			10000	97	159	52000	6	0.5%	52
9	39	7.0%	12000	49	191	56000	4	0.3%	56
10	86	15.5%	14000	29	223	60000	5	0.4%	60
11	121	21.8%	16000	14	254	64000	5	0.4%	64
12	112	20.1%	18000	10	286	68000	5	0.4%	68
13	112	20.1%	20000	2	318	72000	6	0.5%	72
14	61	11.0%	22000	3	350	76000	3	0.3%	76
15	25	4.5%	24000	0	382	80000	8	0.7%	80
TOTAL	556		26000	0	413	84000	4	0.3%	84
			>28000	0	0	>84000	22	1.9%	>84
			TOTAL	1921		TOTAL	1157		

SUMMARY TOTALS

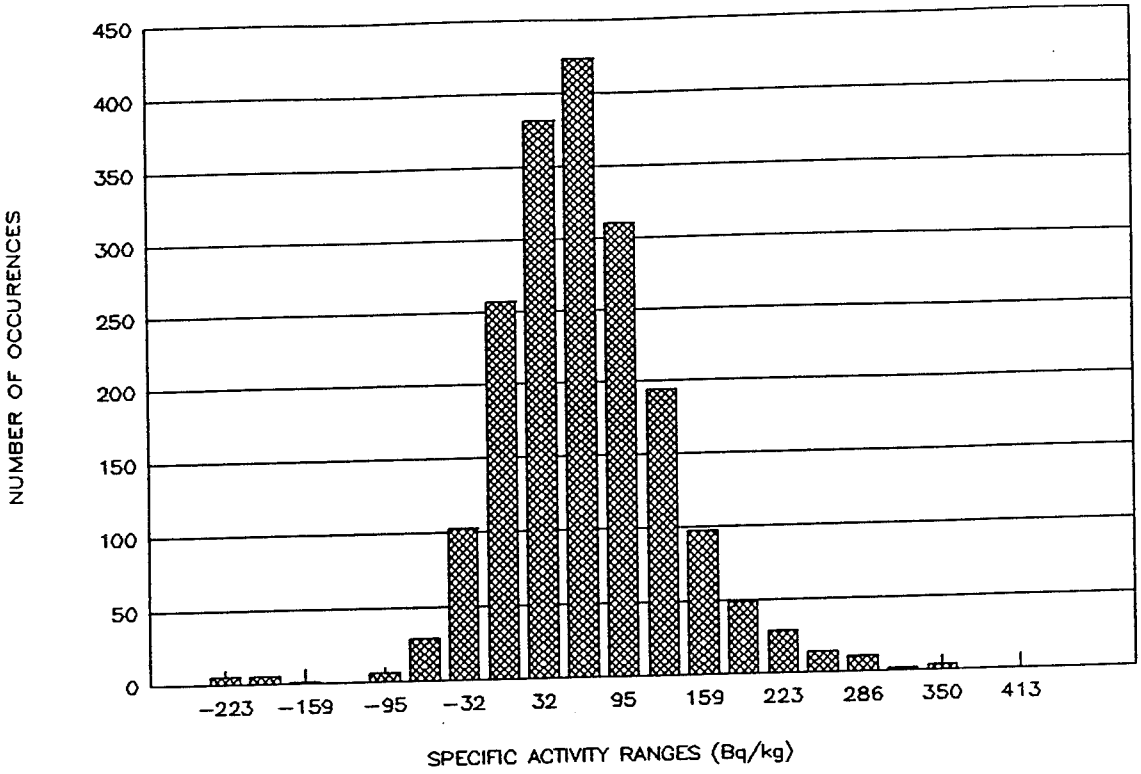
HOT PARTICLE EVENTS	1174	SORTS BY ONE GATE ONLY	601
MULTIPARTICLE EVENTS	392	SORTS BY TWO GATES	556
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

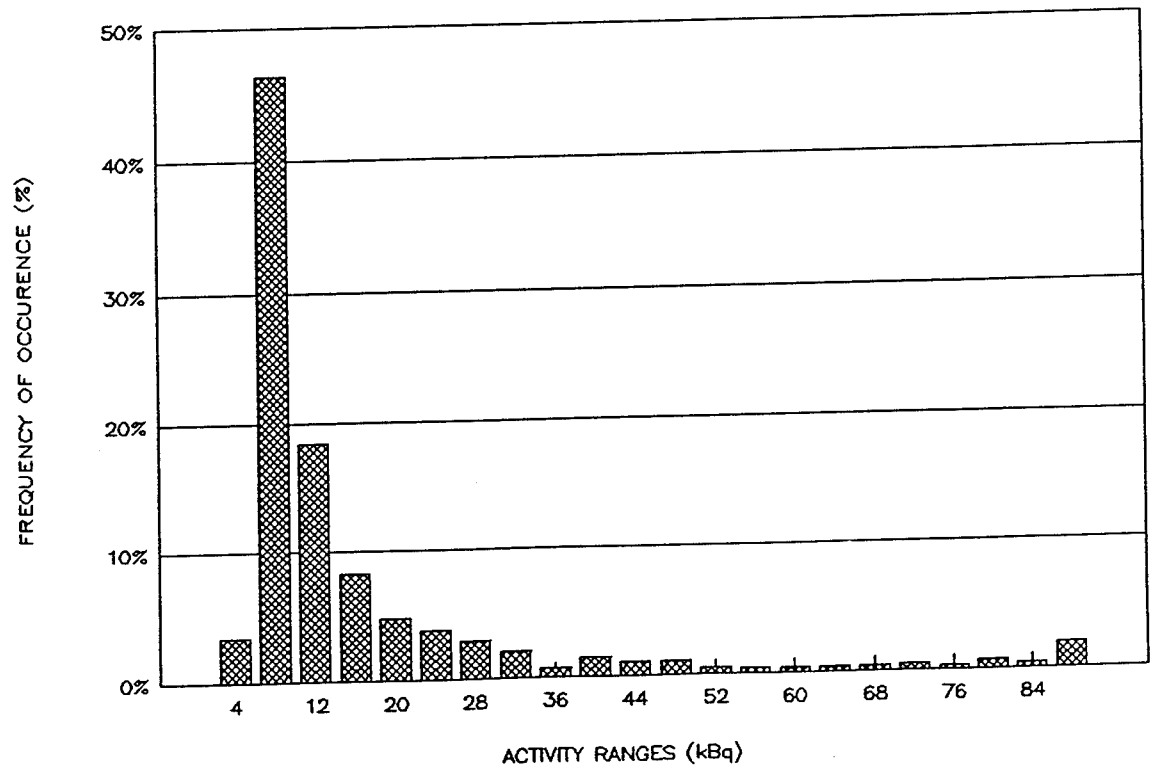
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 04-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 04-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 03-May-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.89 tons	117.9 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.4%
EQUIVALENT SOIL-IN-GROUND	1.50 yd³	93.4 yd³	94.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	34,011 kBq		
MAXIMUM/SORT	2,585 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	11,188 kBq	10,352 kBq	
MAXIMUM/SORT	1528 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	5,910 Bq/kg	88 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.58 hr
DOWN-TIME	0.92 hr
TOTAL SYSTEM PAUSE	0.01 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.45 hr
SHUT-DOWN	0.46 hr
PLANT PERFORMANCE	92.0%
PRODUCTIVITY	92.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,675	
NONPROCESS RECORDS (Test, calibration, etc)		3	
20-SEC PROCESS RECORDS		1,904	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		918	AD=0 & MD=0 & MND>0
SOME SORT		986	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	8		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	344	19.4%	

UNEXPLAIN TIME	PAUSE TIME
09:00:50	09:23
11:11:30	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,040		11:12:50
2-SEC RECORDS WITH SORTS		1,771	(ACT_P >0 kBq)	12:07:50
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				12:10:50
	2 DETECTORS	381	83.6%	13:03:30
	3 DETECTORS	59	12.9%	13:47:30
	4 DETECTORS	13	2.9%	15:31:30
	5 DETECTORS	3	0.7%	
	6 DETECTORS	0	0.0%	
	7 DETECTORS	0	0.0%	
	8 DETECTORS	0	0.0%	
	TOTAL	456		
NET 2-SEC RECORDS WITH SORTS		1,315		
2-SEC PERIODS WITH NO SORTS		17,725		
AVG TIME BETWEEN 2-SEC SORTS		29.0 sec		

1-GATE SORTS		881	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	28	3.2%	-14000	0	-223
2	64	7.3%	-12000	0	-191
3	137	15.6%	-10000	0	-159
4	163	18.5%	-8000	1	-127
5	178	20.2%	-6000	1	-95
6	159	18.0%	-4000	2	-64
7	121	13.7%	-2000	27	-32
8	31	3.5%	0	83	0
TOTAL	881		2000	213	32
			4000	336	64
2-GATE SORTS		890	6000	401	95
DETECTR	SORTS	FREQ%	8000	406	127
8			10000	242	159
9	41	4.6%	12000	131	191
10	85	9.6%	14000	48	223
11	160	18.0%	16000	13	254
12	167	18.8%	18000	3	286
13	192	21.6%	20000	0	318
14	151	17.0%	22000	0	350
15	94	10.6%	24000	0	382
TOTAL	890		26000	0	413
			>28000	0	0
			TOTAL	1907	

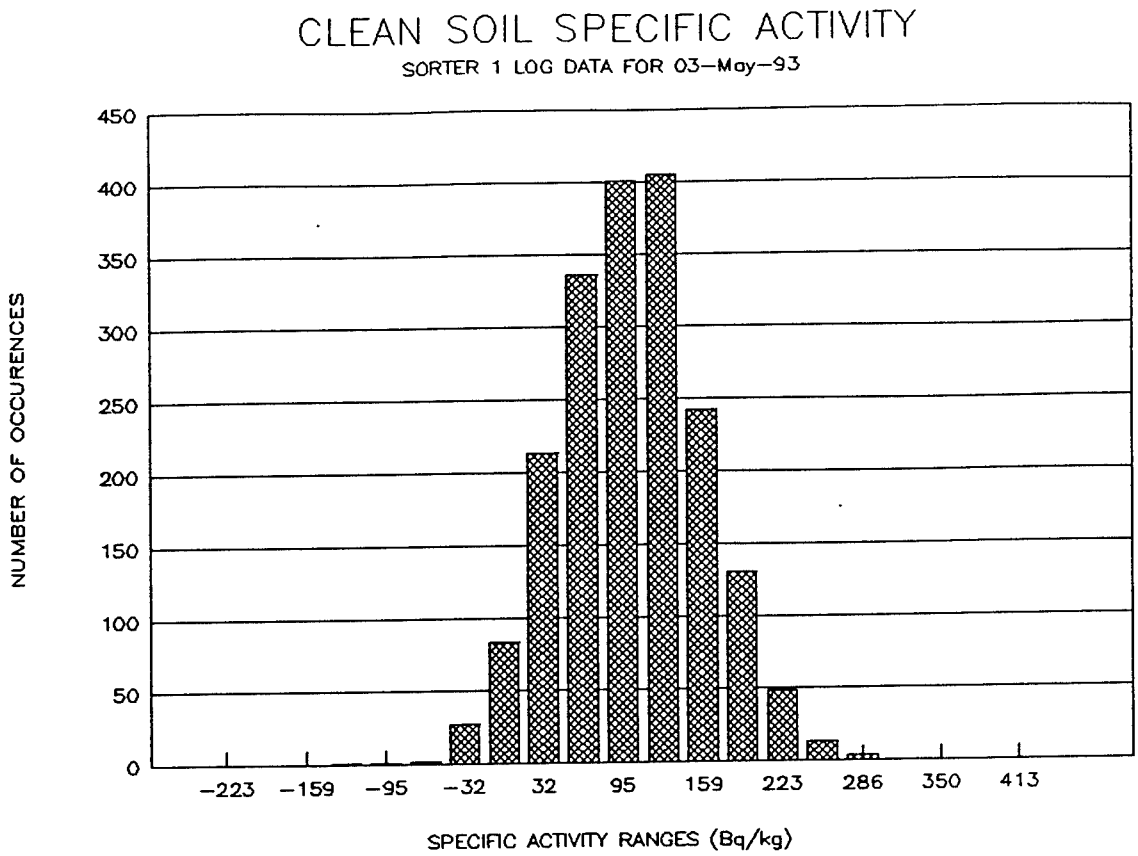
ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	100	5.6%	4
8000	808	45.6%	8
12000	305	17.2%	12
16000	157	8.9%	16
20000	96	5.4%	20
24000	53	3.0%	24
28000	43	2.4%	28
32000	46	2.6%	32
36000	24	1.4%	36
40000	20	1.1%	40
44000	19	1.1%	44
48000	12	0.7%	48
52000	8	0.5%	52
56000	5	0.3%	56
60000	2	0.1%	60
64000	6	0.3%	64
68000	4	0.2%	68
72000	6	0.3%	72
76000	7	0.4%	76
80000	3	0.2%	80
84000	4	0.2%	84
>84000	43	2.4%	>84
TOTAL	1771		

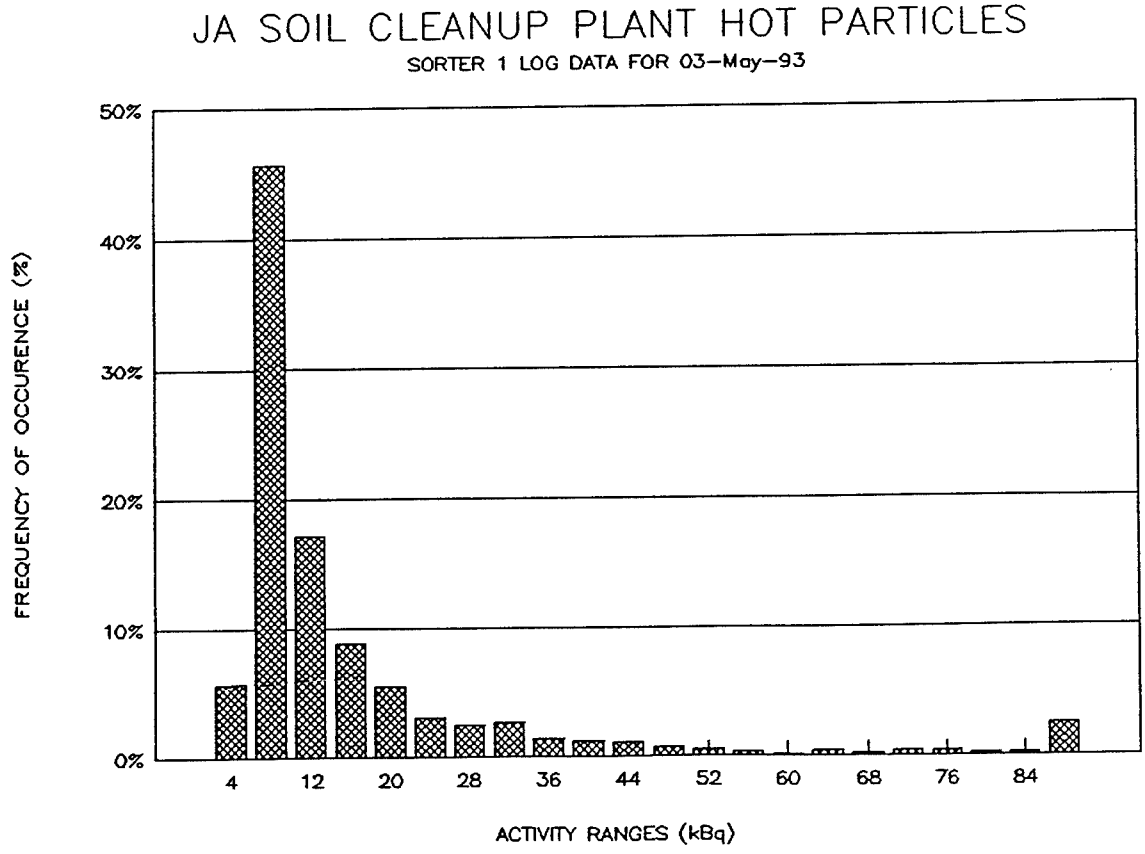
SUMMARY TOTALS

HOT PARTICLE EVENTS	1829	SORTS BY ONE GATE ONLY	881
MULTIPARTICLE EVENTS	561	SORTS BY TWO GATES	890
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 03-May-93
NUMBER OF OCCURENCES
450
400
350
300
250
200
150
100
50
0
-223
-159
-95
-32
32
95
159
223
286
350
413
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 03-May-93
FREQUENCY OF OCCURENCE (%)
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 03-May-93

AVERAGE BACKGROUND COUNT RATE	0.89 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.81 tons	117.8 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
			98.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.44 yd³	93.4 yd³	94.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	29,519 kBq		
MAXIMUM/SORT	714 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,995 kBq	9,305 kBq	
MAXIMUM/SORT	438 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,509 Bq/kg	79 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:28 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.57 hr
DOWN-TIME	0.93 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.47 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	91.9%
PRODUCTIVITY	91.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,616	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,902	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		954	AD=0 & MD=0 & MND>0
SOME SORT		948	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	6		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	267	15.6%	

UNEXPLAIN TIME	PAUSE TIME
07:24:20	None
07:36:40	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,020		10:04:00
2-SEC RECORDS WITH SORTS		1,714	(ACT_P >0 kBq)	15:13:20
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				16:11:20
	2 DETECTORS	351	84.0%	16:59:00
	3 DETECTORS	58	13.9%	
	4 DETECTORS	7	1.7%	
	5 DETECTORS	2	0.5%	
	6 DETECTORS	0	0.0%	
	7 DETECTORS	0	0.0%	
	8 DETECTORS	0	0.0%	
	TOTAL	418		
NET 2-SEC RECORDS WITH SORTS		1,296		
2-SEC PERIODS WITH NO SORTS		17,724		
AVG TIME BETWEEN 2-SEC SORTS		29.4 sec		

1-GATE SORTS		898	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	34	3.8%	-14000	2	-223	4000	90	5.3%	4
2	120	13.4%	-12000	1	-191	8000	788	46.0%	8
3	205	22.8%	-10000	0	-159	12000	284	16.6%	12
4	186	20.7%	-8000	0	-127	16000	155	9.0%	16
5	159	17.7%	-6000	4	-95	20000	96	5.6%	20
6	109	12.1%	-4000	11	-64	24000	61	3.6%	24
7	68	7.6%	-2000	45	-32	28000	40	2.3%	28
8	17	1.9%	0	115	0	32000	31	1.8%	32
TOTAL	898		2000	240	32	36000	19	1.1%	36
			4000	354	64	40000	14	0.8%	40
2-GATE SORTS		816	6000	380	95	44000	11	0.6%	44
DETECTR	SORTS	FREQ%	8000	376	127	48000	16	0.9%	48
8			10000	232	159	52000	11	0.6%	52
9	51	6.3%	12000	102	191	56000	12	0.7%	56
10	121	14.8%	14000	31	223	60000	7	0.4%	60
11	199	24.4%	16000	12	254	64000	9	0.5%	64
12	190	23.3%	18000	2	286	68000	7	0.4%	68
13	123	15.1%	20000	1	318	72000	4	0.2%	72
14	91	11.2%	22000	0	350	76000	3	0.2%	76
15	41	5.0%	24000	0	382	80000	5	0.3%	80
TOTAL	816		26000	0	413	84000	6	0.4%	84
			>28000	0	0	>84000	45	2.6%	>84
			TOTAL	1908		TOTAL	1714		

SUMMARY TOTALS

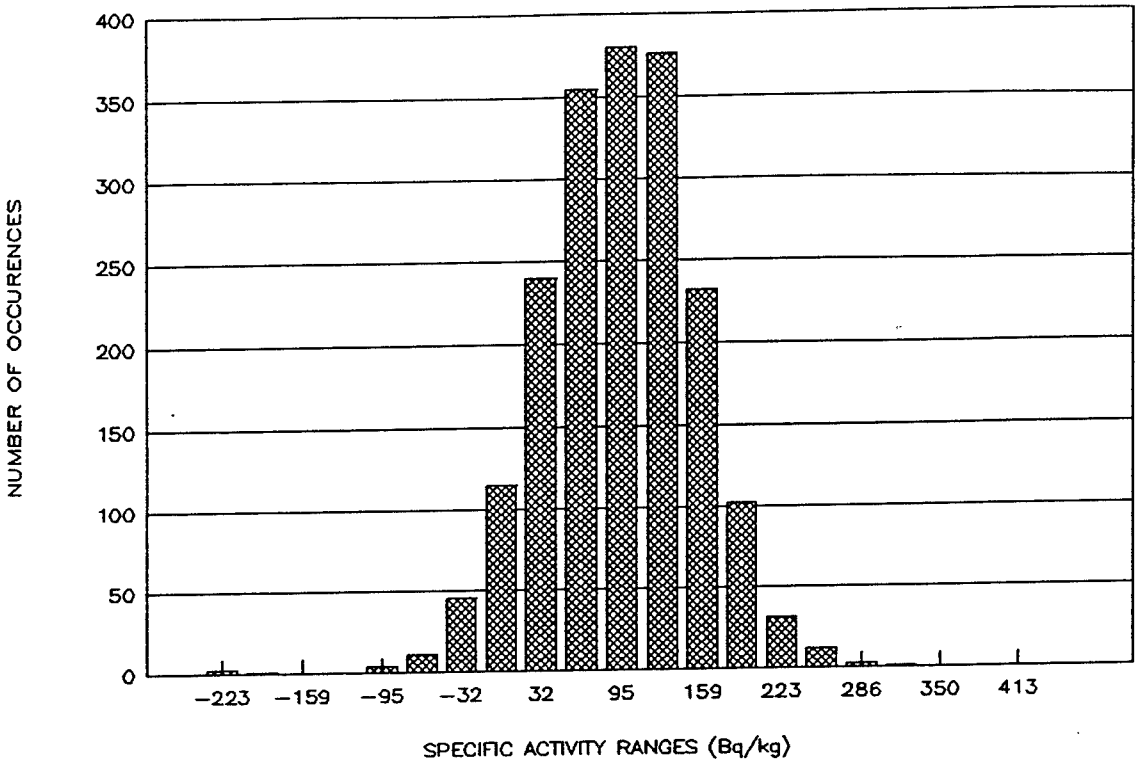
HOT PARTICLE EVENTS	1727	SORTS BY ONE GATE ONLY	898
MULTIPARTICLE EVENTS	563	SORTS BY TWO GATES	816
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

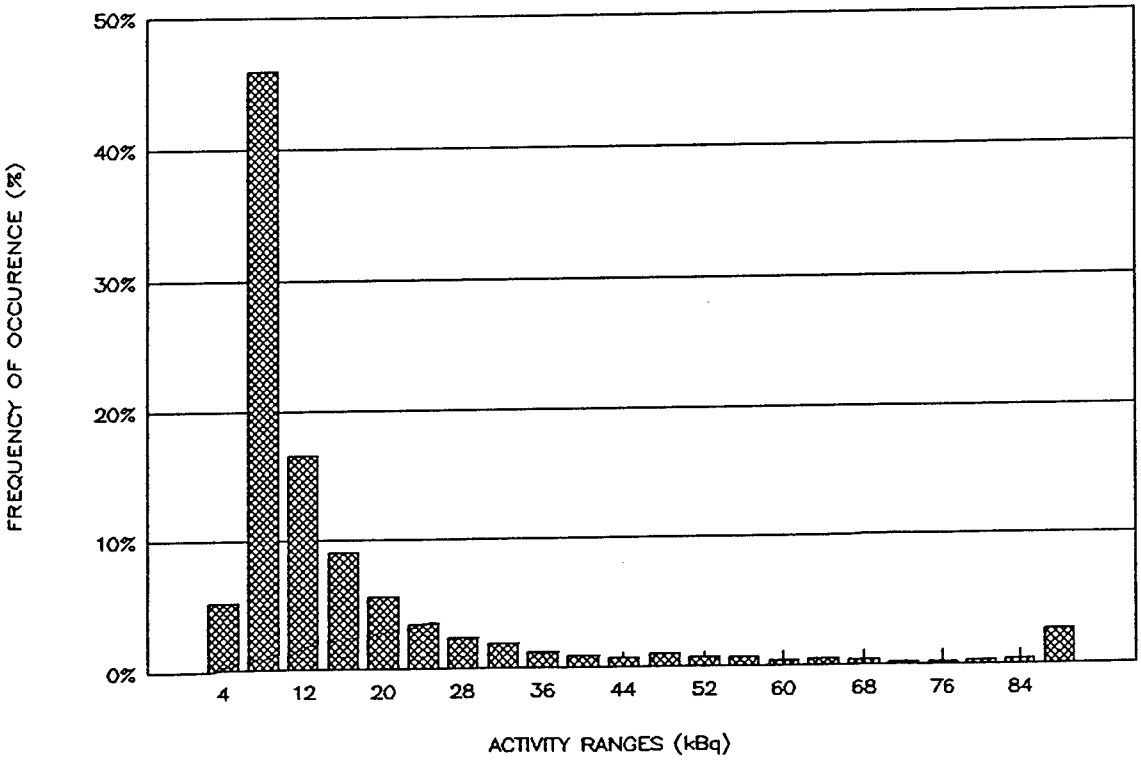
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 03-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 03-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 01-May-93

AVERAGE BACKGROUND COUNT RATE	0.82 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.16 tons	80.5 tons	
MAXIMUM/SORT	6.3 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	56.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	0.92 yd³	63.8 yd³	64.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	25,922 kBq		
MAXIMUM/SORT	1,459 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,168 kBq	6,627 kBq	
MAXIMUM/SORT	795 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	7,025 Bq/kg	82 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	01:45 PM
START SOIL PROCESSING	06:24 AM	END SOIL PROCESSING	01:37 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr	
AVAILABLE HOURS	7.7 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	7.22 hr	
DOWN-TIME	0.53 hr	
TOTAL SYSTEM PAUSE	0.00 hr	
NONAVAILABLE HOURS	3.8 hr	
START-UP	0.41 hr	
SHUT-DOWN	0.13 hr	
PLANT PERFORMANCE	93.1%	
PRODUCTIVITY	62.8%	
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,430	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	1,299	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	670 AD=0 & MD=0 & MND>0	
SOME SORT	629 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	232 20.5%	

UNEXPLAIN TIME	PAUSE TIME
06:38:44	None
12:21:24	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		12,990	
2-SEC RECORDS WITH SORTS		1,131	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	254	85.8%
	3 DETECTORS	39	13.2%
	4 DETECTORS	3	1.0%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	296	
NET 2-SEC RECORDS WITH SORTS		835	
2-SEC PERIODS WITH NO SORTS		12,155	
AVG TIME BETWEEN 2-SEC SORTS		31.1	sec

1-GATE SORTS DETECTR	SORTS	568 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	24	4.2%	-14000	3	-223
2	46	8.1%	-12000	0	-191
3	91	16.0%	-10000	2	-159
4	98	17.3%	-8000	2	-127
5	119	21.0%	-6000	1	-95
6	72	12.7%	-4000	6	-64
7	90	15.8%	-2000	20	-32
8	28	4.9%	0	67	0
TOTAL	568		2000	157	32
			4000	247	64
2-GATE SORTS		563	6000	307	95
DETECTR	SORTS	FREQ%	8000	246	127
8			10000	142	159
9	32	5.7%	12000	53	191
10	72	12.8%	14000	25	223
11	86	15.3%	16000	18	254
12	107	19.0%	18000	9	286
13	108	19.2%	20000	2	318
14	84	14.9%	22000	1	350
15	74	13.1%	24000	0	382
TOTAL	563		26000	0	413
			>28000	0	0
			TOTAL	1308	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	67	5.9%	4
8000	519	45.9%	8
12000	166	14.7%	12
16000	111	9.8%	16
20000	58	5.1%	20
24000	31	2.7%	24
28000	24	2.1%	28
32000	21	1.9%	32
36000	14	1.2%	36
40000	18	1.6%	40
44000	11	1.0%	44
48000	4	0.4%	48
52000	9	0.8%	52
56000	5	0.4%	56
60000	7	0.6%	60
64000	2	0.2%	64
68000	7	0.6%	68
72000	2	0.2%	72
76000	10	0.9%	76
80000	5	0.4%	80
84000	1	0.1%	84
>84000	39	3.4%	>84
TOTAL	1131		

SUMMARY TOTALS

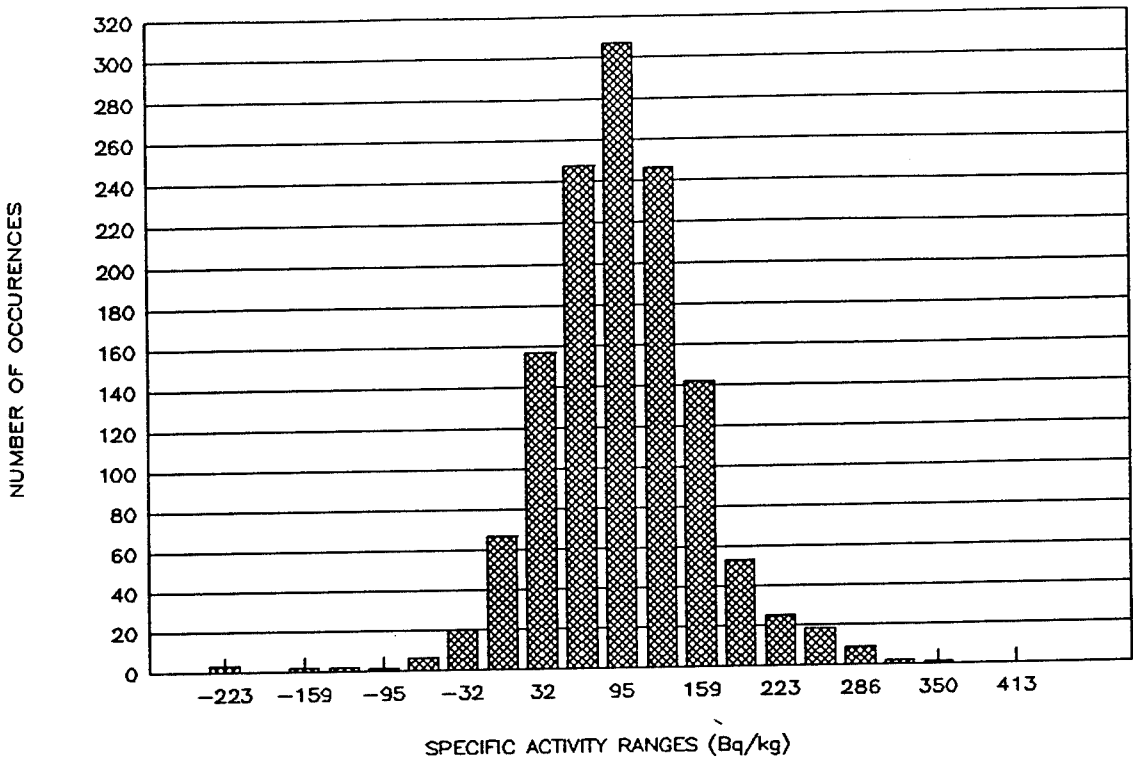
HOT PARTICLE EVENTS	1146	SORTS BY ONE GATE ONLY	568
MULTIPARTICLE EVENTS	320	SORTS BY TWO GATES	563
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

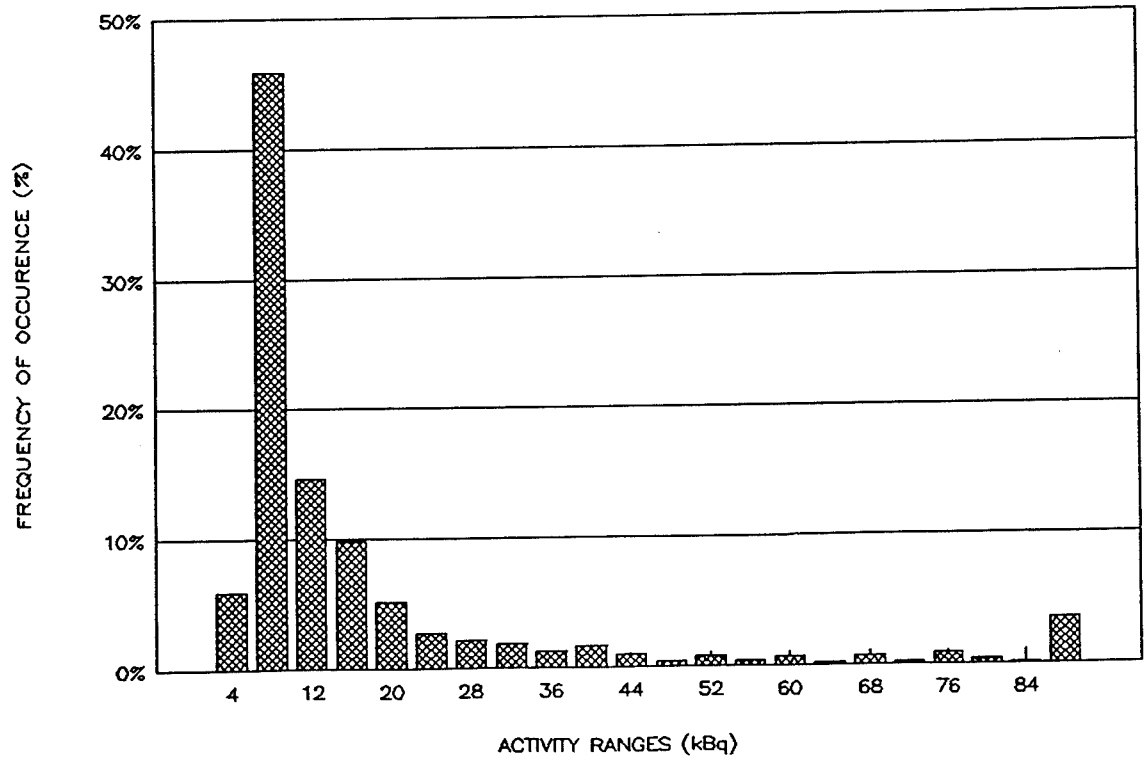
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 01-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 01-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 01-May-93

AVERAGE BACKGROUND COUNT RATE	0.89 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.19 tons	80.7 tons	
MAXIMUM/SORT	7.1 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	55.8 kg	
			98.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.94 yd³	64.0 yd³	64.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	17,388 kBq		
MAXIMUM/SORT	499 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,834 kBq	5,698 kBq	
MAXIMUM/SORT	281 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	4,913 Bq/kg	71 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	01:45 PM
START SOIL PROCESSING	06:24 AM	END SOIL PROCESSING	01:38 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	7.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.23 hr
DOWN-TIME	0.52 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	3.8 hr
START-UP	0.41 hr
SHUT-DOWN	0.11 hr
PLANT PERFORMANCE	93.3%
PRODUCTIVITY	62.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,424	
NONPROCESS RECORDS (Test, calibration, etc)	6	
20-SEC PROCESS RECORDS	1,302	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	671	AD=0 & MD=0 & MND>0
SOME SORT	631	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	3	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	197	17.6%

UNEXPLAIN TIME	PAUSE TIME
08:08:04	None
11:39:44	

JA SOIL CLEANUP PLANT LOG SUMMARY

13:36:24

2-SEC COUNT PERIODS	13,020	
2-SEC RECORDS WITH SORTS	1,122	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	227	87.0%
3 DETECTORS	32	12.3%
4 DETECTORS	2	0.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	261	
NET 2-SEC RECORDS WITH SORTS	861	
2-SEC PERIODS WITH NO SORTS	12,159	
AVG TIME BETWEEN 2-SEC SORTS	30.2 sec	

1-GATE SORTS	588	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 29	4.9%	-14000	1	-223	4000	59	5.3%	4
2 105	17.9%	-12000	0	-191	8000	510	45.5%	8
3 93	15.8%	-10000	1	-159	12000	213	19.0%	12
4 98	16.7%	-8000	1	-127	16000	97	8.6%	16
5 111	18.9%	-6000	4	-95	20000	52	4.6%	20
6 77	13.1%	-4000	9	-64	24000	44	3.9%	24
7 59	10.0%	-2000	27	-32	28000	23	2.0%	28
8 16	2.7%	0	90	0	32000	26	2.3%	32
TOTAL 588		2000	205	32	36000	9	0.8%	36
		4000	301	64	40000	15	1.3%	40
2-GATE SORTS	534	6000	276	95	44000	8	0.7%	44
DETECTR SORTS	FREQ%	8000	195	127	48000	9	0.8%	48
8		10000	119	159	52000	5	0.4%	52
9 55	10.3%	12000	41	191	56000	4	0.4%	56
10 89	16.7%	14000	21	223	60000	2	0.2%	60
11 96	18.0%	16000	13	254	64000	7	0.6%	64
12 99	18.5%	18000	3	286	68000	1	0.1%	68
13 87	16.3%	20000	1	318	72000	4	0.4%	72
14 67	12.5%	22000	0	350	76000	2	0.2%	76
15 41	7.7%	24000	0	382	80000	3	0.3%	80
TOTAL 534		26000	0	413	84000	0	0.0%	84
		>28000	0	0	>84000	29	2.6%	>84
		TOTAL	1308		TOTAL	1122		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1140	SORTS BY ONE GATE ONLY	588
MULTIPARTICLE EVENTS	358	SORTS BY TWO GATES	534
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

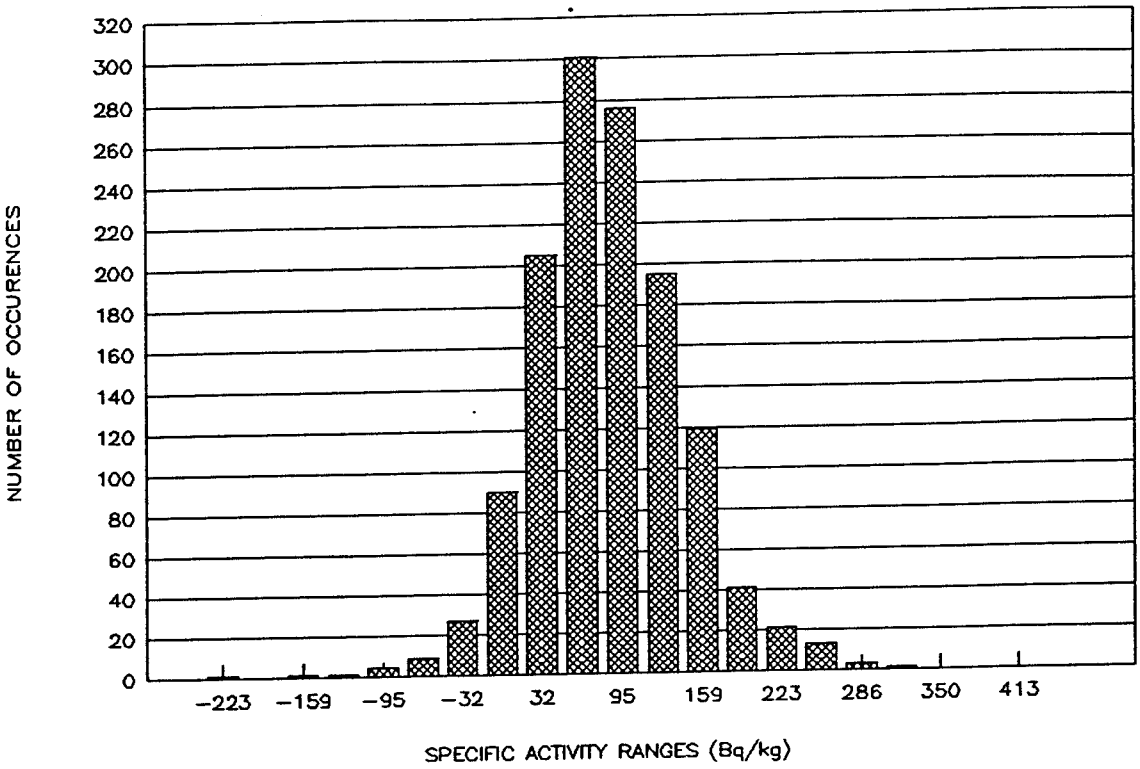
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

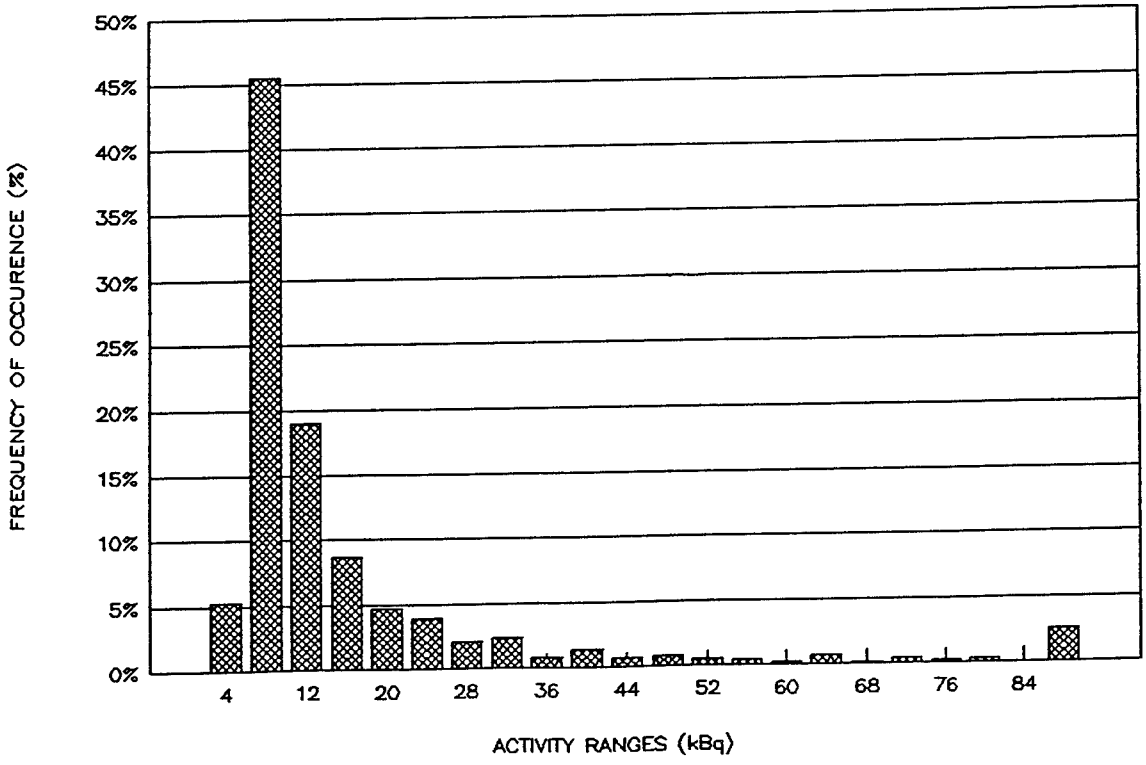
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 01-May-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 01-May-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 30-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.36 tons	116.4 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	1.08 yd³	92.3 yd³	93.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	31,331 kBq		
MAXIMUM/SORT	3,867 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,465 kBq	7,392 kBq	
MAXIMUM/SORT	2236 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,952 Bq/kg	64 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.40 hr
DOWN-TIME	1.10 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.54 hr
SHUT-DOWN	0.56 hr
PLANT PERFORMANCE	90.4%
PRODUCTIVITY	90.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,154	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,872	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,114	AD=0 & MD=0 & MND>0
SOME SORT		757	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	1		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	242	18.9%	

UNEXPLAIN TIME	PAUSE TIME
12:20:41	None
16:05:41	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,720	
2-SEC RECORDS WITH SORTS	1,282	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	280	84.3%
3 DETECTORS	41	12.3%
4 DETECTORS	9	2.7%
5 DETECTORS	2	0.6%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	332	
NET 2-SEC RECORDS WITH SORTS	950	
2-SEC PERIODS WITH NO SORTS	17,770	
AVG TIME BETWEEN 2-SEC SORTS	39.4 sec	

1-GATE SORTS DETECTR	SORTS	641 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	9	1.4%	-14000	0	-223
2	42	6.6%	-12000	2	-191
3	73	11.4%	-10000	0	-159
4	115	17.9%	-8000	0	-127
5	137	21.4%	-6000	0	-95
6	109	17.0%	-4000	18	-64
7	118	18.4%	-2000	51	-32
8	38	5.9%	0	161	0
TOTAL	641		2000	311	32
			4000	430	64
2-GATE SORTS		641	6000	406	95
DETECTR	SORTS	FREQ%	8000	279	127
8			10000	138	159
9	24	3.7%	12000	62	191
10	58	9.0%	14000	14	223
11	92	14.4%	16000	5	254
12	132	20.6%	18000	0	286
13	142	22.2%	20000	0	318
14	97	15.1%	22000	0	350
15	96	15.0%	24000	0	382
TOTAL	641		26000	0	413
			>28000	0	0
			TOTAL	1877	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	91	7.1%	4
8000	541	42.2%	8
12000	236	18.4%	12
16000	112	8.7%	16
20000	55	4.3%	20
24000	36	2.8%	24
28000	34	2.7%	28
32000	28	2.2%	32
36000	16	1.2%	36
40000	13	1.0%	40
44000	13	1.0%	44
48000	8	0.6%	48
52000	10	0.8%	52
56000	7	0.5%	56
60000	5	0.4%	60
64000	5	0.4%	64
68000	12	0.9%	68
72000	8	0.6%	72
76000	2	0.2%	76
80000	1	0.1%	80
84000	4	0.3%	84
>84000	45	3.5%	>84
TOTAL	1282		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1308	SORTS BY ONE GATE ONLY	641
MULTIPARTICLE EVENTS	408	SORTS BY TWO GATES	641
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

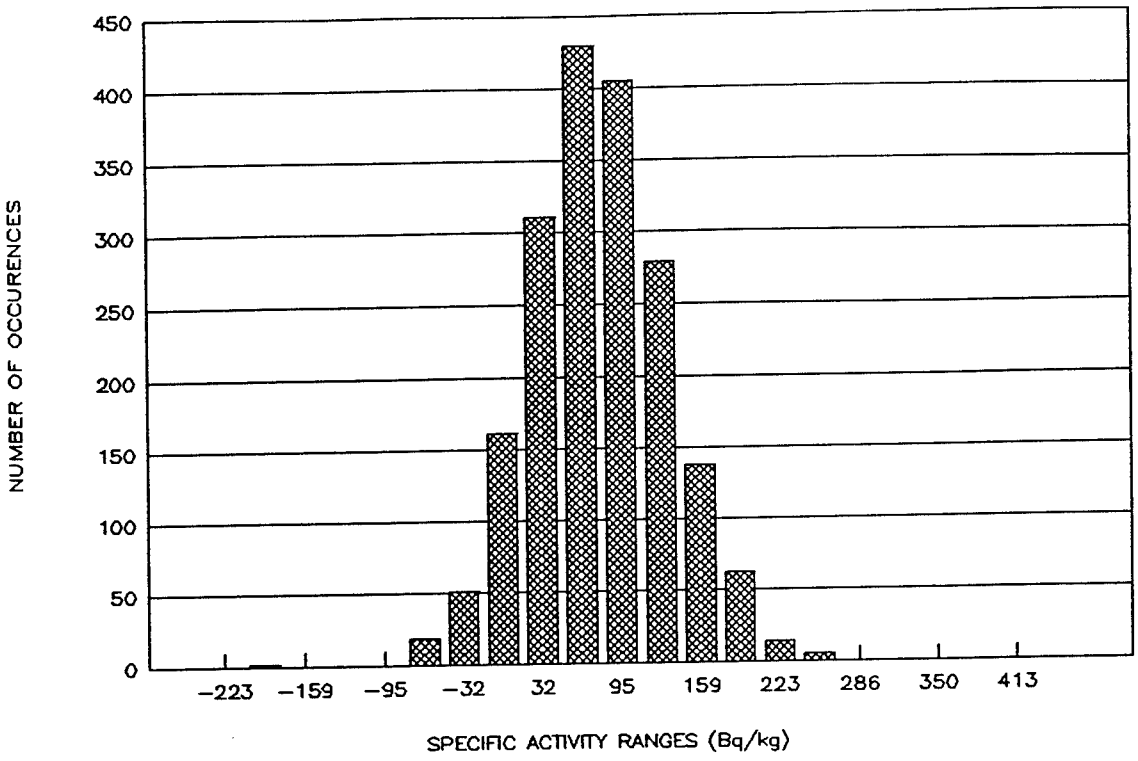
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

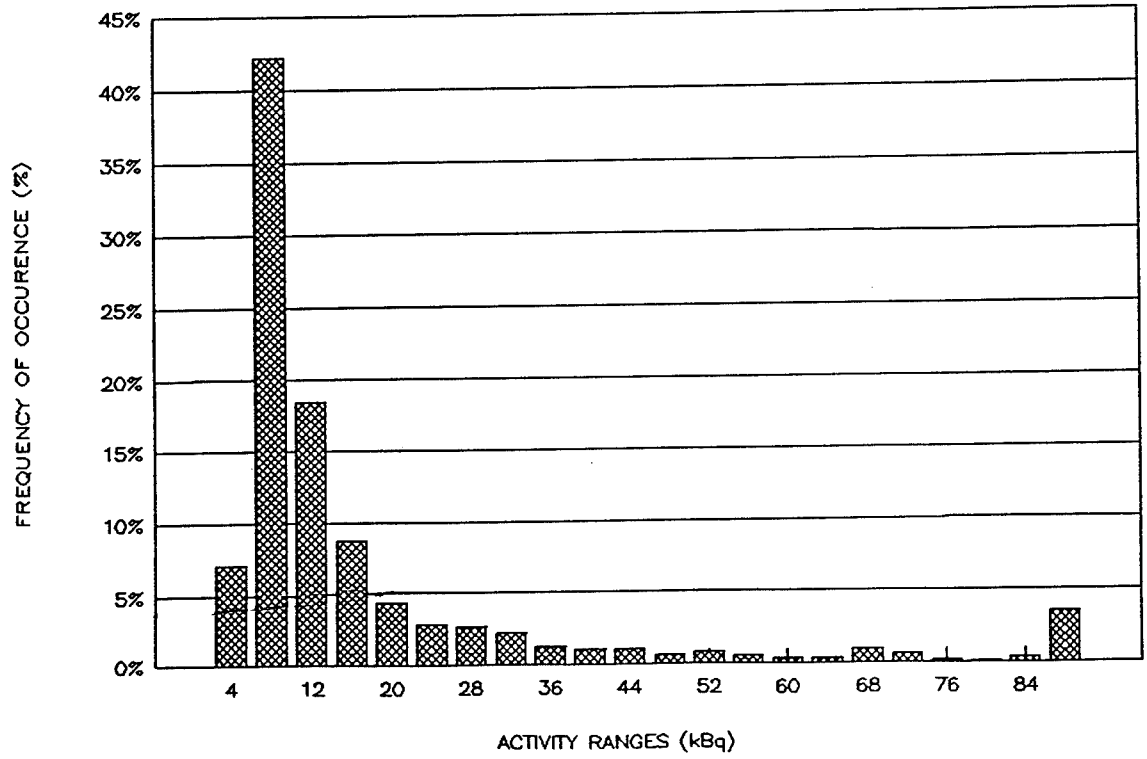
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 30-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 30-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 30-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.86 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.35 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.26 tons	116.4 tons	
MAXIMUM/SORT		8.6 kg	62.9 kg	
MINIMUM/SORT		0.8 kg	54.2 kg	
				98.9%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		1.00 yd³	92.3 yd³	93.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		36,462 kBq		
MAXIMUM/SORT		4,367 kBq		
MINIMUM/SORT		3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		11,266 kBq	6,140 kBq	
MAXIMUM/SORT		2555 kBq	16 kBq	
MINIMUM/SORT		0 Bq	-19 kBq	
SPECIFIC ACTIVITY		8,952 Bq/kg	53 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.39 hr
DOWN-TIME	1.11 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.54 hr
SHUT-DOWN	0.56 hr
PLANT PERFORMANCE	90.4%
PRODUCTIVITY	90.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,039	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,871	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,114	AD=0 & MD=0 & MND>0
SOME SORT		757	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	191	16.4%	

UNEXPLAIN TIME	PAUSE TIME
10:05:22	None
10:35:42	

JA SOIL CLEANUP PLANT LOG SUMMARY

15:16:02

2-SEC COUNT PERIODS	18,710	
2-SEC RECORDS WITH SORTS	1,168	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	218	85.8%
3 DETECTORS	29	11.4%
4 DETECTORS	5	2.0%
5 DETECTORS	2	0.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	254	
NET 2-SEC RECORDS WITH SORTS	914	
2-SEC PERIODS WITH NO SORTS	17,796	
AVG TIME BETWEEN 2-SEC SORTS	40.9 sec	

1-GATE SORTS DETECTR	SORTS	620 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	22	3.5%	-14000	3	-223	4000	49	4.2%	4
2	91	14.7%	-12000	0	-191	8000	541	46.3%	8
3	96	15.5%	-10000	1	-159	12000	212	18.2%	12
4	132	21.3%	-8000	1	-127	16000	100	8.6%	16
5	116	18.7%	-6000	1	-95	20000	61	5.2%	20
6	96	15.5%	-4000	31	-64	24000	45	3.9%	24
7	55	8.9%	-2000	91	-32	28000	31	2.7%	28
8	12	1.9%	0	200	0	32000	16	1.4%	32
TOTAL	620		2000	331	32	36000	16	1.4%	36
			4000	433	64	40000	9	0.8%	40
2-GATE SORTS		548	6000	382	95	44000	15	1.3%	44
DETECTR	SORTS	FREQ%	8000	246	127	48000	2	0.2%	48
8			10000	111	159	52000	7	0.6%	52
9	46	8.4%	12000	34	191	56000	3	0.3%	56
10	72	13.1%	14000	8	223	60000	6	0.5%	60
11	101	18.4%	16000	4	254	64000	9	0.8%	64
12	130	23.7%	18000	0	286	68000	3	0.3%	68
13	88	16.1%	20000	0	318	72000	1	0.1%	72
14	84	15.3%	22000	0	350	76000	4	0.3%	76
15	27	4.9%	24000	0	382	80000	5	0.4%	80
TOTAL	548		26000	0	413	84000	2	0.2%	84
			>28000	0	0	>84000	31	2.7%	>84
			TOTAL	1877		TOTAL	1168		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1173	SORTS BY ONE GATE ONLY	620
MULTIPARTICLE EVENTS	412	SORTS BY TWO GATES	548
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

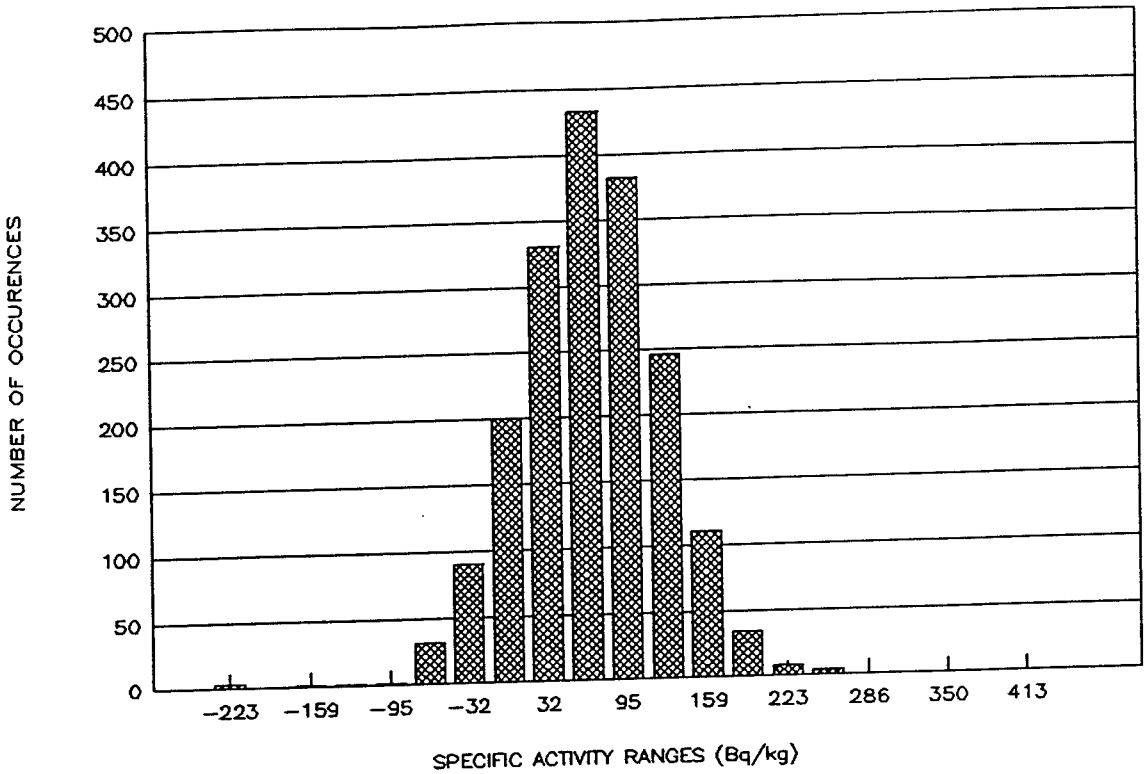
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

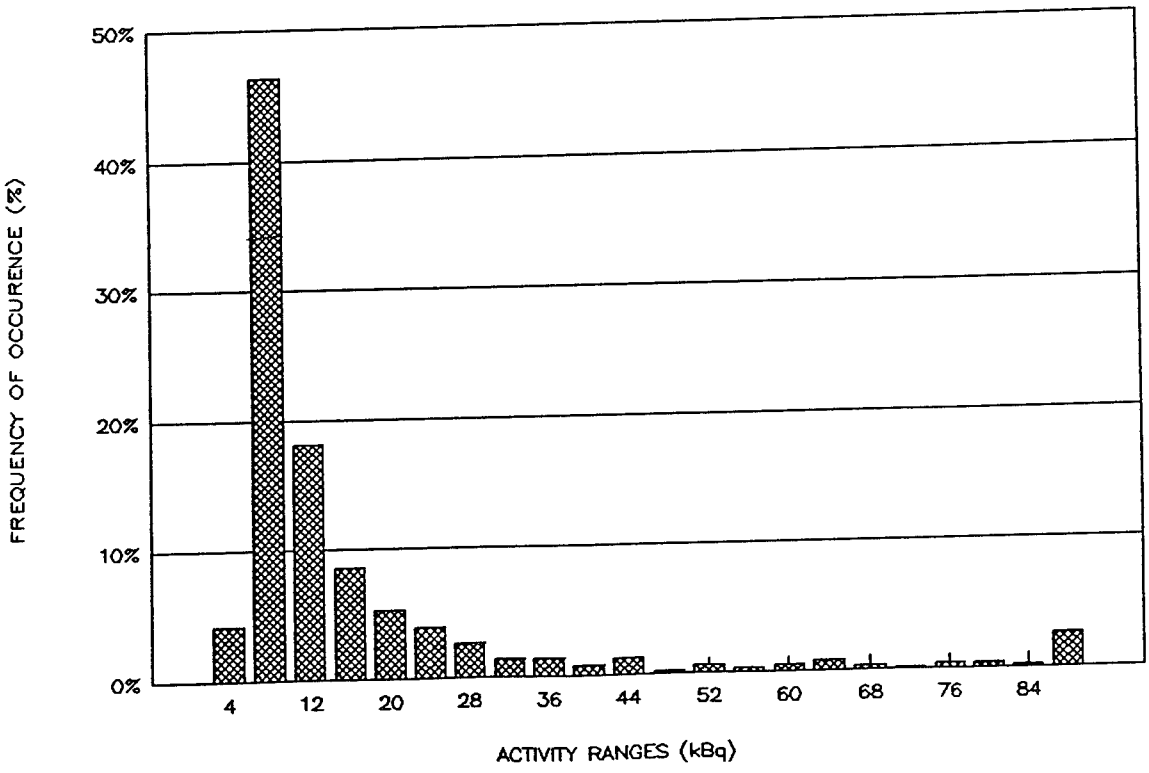
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 30-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 30-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 29-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.40 tons	117.9 tons	
MAXIMUM/SORT	8.6 kg	62.9 kg	
MINIMUM/SORT	0.8 kg	54.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	1.11 yd³	93.5 yd³	94.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	26,851 kBq		
MAXIMUM/SORT	1,133 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,455 kBq	8,323 kBq	
MAXIMUM/SORT	561 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,041 Bq/kg	71 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:26 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.54 hr
DOWN-TIME	0.96 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.44 hr
SHUT-DOWN	0.52 hr
PLANT PERFORMANCE	91.6%
PRODUCTIVITY	91.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,269	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	1,897	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	1,119	AD=0 & MD=0 & MND>0
SOME SORT	778	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	4	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	275	20.0%

UNEXPLAIN TIME	PAUSE TIME
07:07:52	None
07:30:12	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,970		11:02:52
2-SEC RECORDS WITH SORTS	1,372	(ACT_P >0 kBq)	11:22:12
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	294	81.7%	
3 DETECTORS	55	15.3%	
4 DETECTORS	10	2.8%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	360		
NET 2-SEC RECORDS WITH SORTS	1,012		
2-SEC PERIODS WITH NO SORTS	17,958		
AVG TIME BETWEEN 2-SEC SORTS	37.5 sec		

1-GATE SORTS		681	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	15	2.2%	-14000	1	-223	4000	69	5.0%	4
2	49	7.2%	-12000	0	-191	8000	647	47.2%	8
3	102	15.0%	-10000	1	-159	12000	234	17.1%	12
4	120	17.6%	-8000	0	-127	16000	105	7.7%	16
5	137	20.1%	-6000	2	-95	20000	69	5.0%	20
6	99	14.5%	-4000	11	-64	24000	52	3.8%	24
7	115	16.9%	-2000	46	-32	28000	28	2.0%	28
8	44	6.5%	0	168	0	32000	22	1.6%	32
TOTAL	681		2000	301	32	36000	21	1.5%	36
			4000	408	64	40000	18	1.3%	40
2-GATE SORTS		691	6000	367	95	44000	12	0.9%	44
DETECTR	SORTS	FREQ%	8000	288	127	48000	14	1.0%	48
8			10000	171	159	52000	6	0.4%	52
9	27	3.9%	12000	76	191	56000	4	0.3%	56
10	72	10.4%	14000	35	223	60000	7	0.5%	60
11	126	18.2%	16000	17	254	64000	5	0.4%	64
12	137	19.8%	18000	6	286	68000	6	0.4%	68
13	127	18.4%	20000	2	318	72000	5	0.4%	72
14	115	16.6%	22000	2	350	76000	3	0.2%	76
15	87	12.6%	24000	0	382	80000	2	0.1%	80
TOTAL	691		26000	0	413	84000	2	0.1%	84
			>28000	0	0	>84000	41	3.0%	>84
			TOTAL	1902		TOTAL	1372		

SUMMARY TOTALS

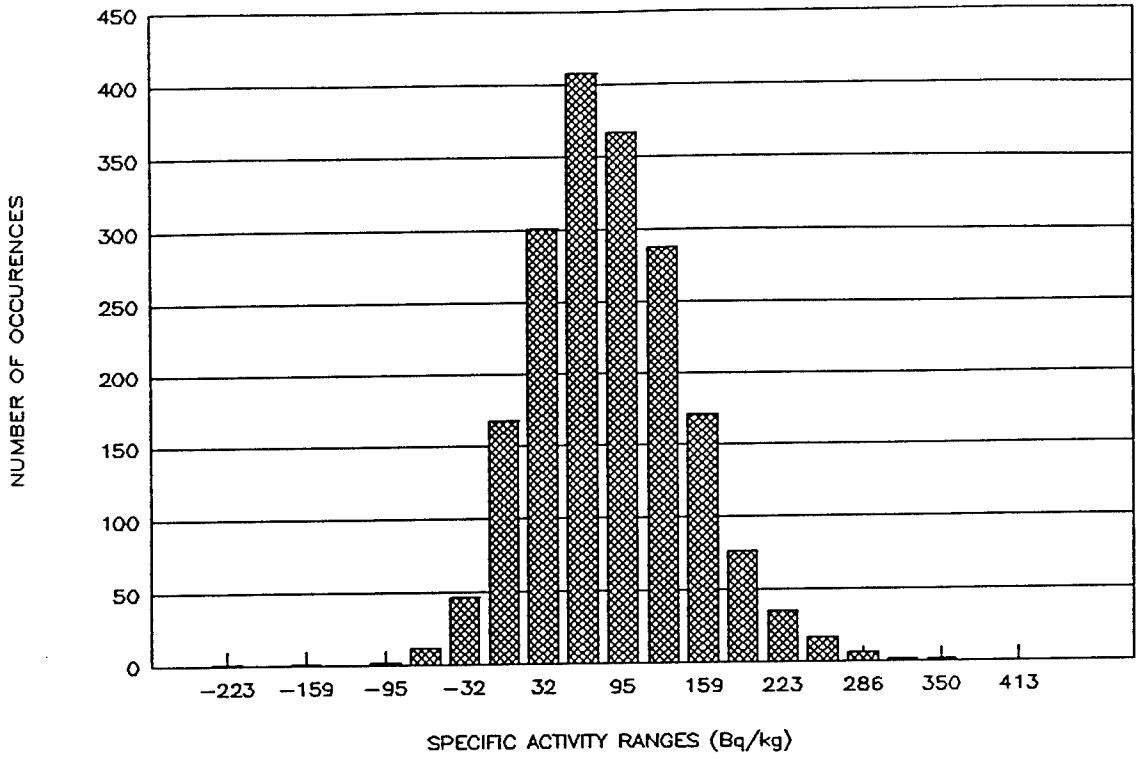
HOT PARTICLE EVENTS	1392	SORTS BY ONE GATE ONLY	681
MULTIPARTICLE EVENTS	373	SORTS BY TWO GATES	691
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

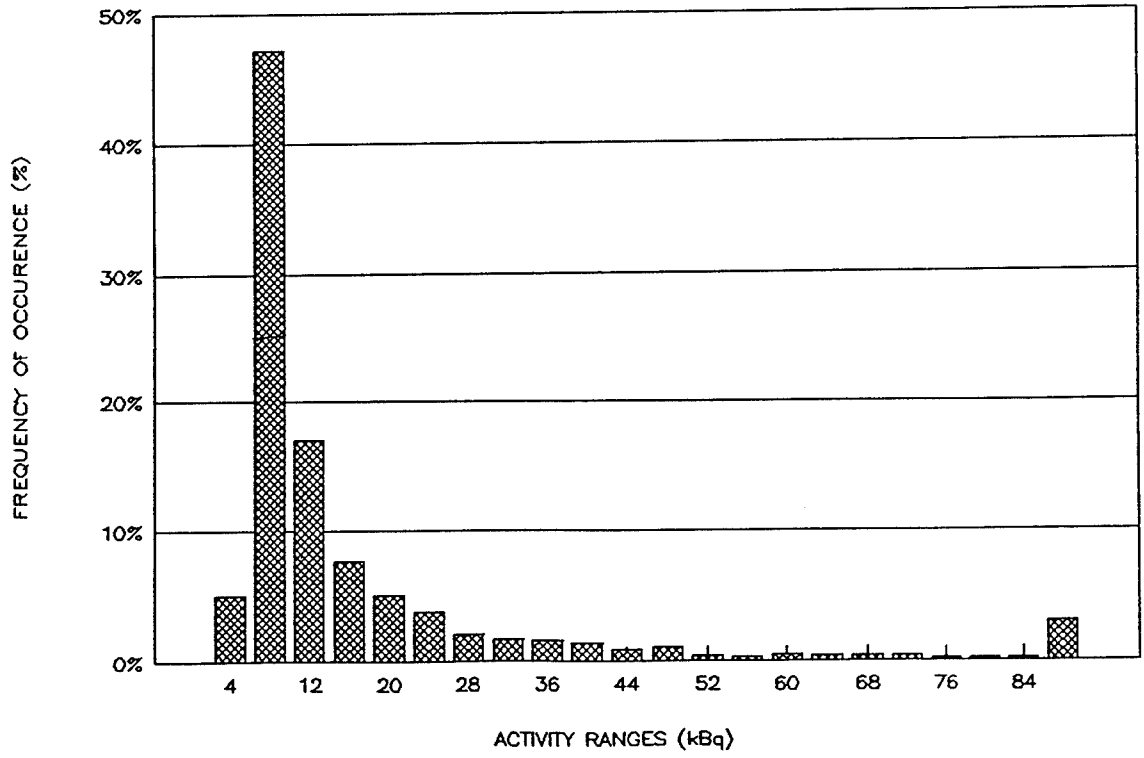
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 29-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 29-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 29-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.86 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.35 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
		CONTAMINATED	CLEAN
MASS TOTAL		1.25 tons	118.1 tons
MAXIMUM/SORT		8.6 kg	62.9 kg
MINIMUM/SORT		0.8 kg	54.2 kg
			98.9%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND		0.99 yd³	93.6 yd³ 94.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL		22,861 kBq	
MAXIMUM/SORT		1,264 kBq	
MINIMUM/SORT		2.5 kBq	
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		7,366 kBq	6,773 kBq
MAXIMUM/SORT		688 kBq	19 kBq
MINIMUM/SORT		0 Bq	-9 kBq
SPECIFIC ACTIVITY		5,870 Bq/kg	57 Bq/kg

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:26 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.54 hr
DOWN-TIME	0.96 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.44 hr
SHUT-DOWN	0.52 hr
PLANT PERFORMANCE	91.6%
PRODUCTIVITY	91.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,098	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,897	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,165	AD=0 & MD=0 & MND>0
SOME SORT		732	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	206	17.2%	

UNEXPLAIN TIME	PAUSE TIME
06:48:12	None
08:06:52	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,970		08:28:52
2-SEC RECORDS WITH SORTS	1,201	(ACT_P >0 kBq)	10:46:32
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			16:58:32
2 DETECTORS	242	80.9%	
3 DETECTORS	49	16.4%	
4 DETECTORS	8	2.7%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	299		
NET 2-SEC RECORDS WITH SORTS	902		
2-SEC PERIODS WITH NO SORTS	18,068		
AVG TIME BETWEEN 2-SEC SORTS	42.1 sec		

1-GATE SORTS DETECTR	SORTS	640 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	23	3.6%	-14000	0	-223	4000	51	4.2%	4
2	119	18.6%	-12000	1	-191	8000	556	46.3%	8
3	103	16.1%	-10000	2	-159	12000	208	17.3%	12
4	128	20.0%	-8000	1	-127	16000	99	8.2%	16
5	98	15.3%	-6000	7	-95	20000	65	5.4%	20
6	86	13.4%	-4000	35	-64	24000	36	3.0%	24
7	66	10.3%	-2000	104	-32	28000	28	2.3%	28
8	17	2.7%	0	226	0	32000	19	1.6%	32
TOTAL	640		2000	331	32	36000	22	1.8%	36
			4000	371	64	40000	11	0.9%	40
2-GATE SORTS		561	6000	335	95	44000	12	1.0%	44
DETECTR	SORTS	FREQ%	8000	221	127	48000	6	0.5%	48
8			10000	129	159	52000	10	0.8%	52
9	59	10.5%	12000	81	191	56000	6	0.5%	56
10	77	13.7%	14000	31	223	60000	4	0.3%	60
11	117	20.9%	16000	19	254	64000	7	0.6%	64
12	119	21.2%	18000	5	286	68000	4	0.3%	68
13	81	14.4%	20000	3	318	72000	5	0.4%	72
14	69	12.3%	22000	0	350	76000	6	0.5%	76
15	39	7.0%	24000	0	382	80000	7	0.6%	80
TOTAL	561		26000	0	413	84000	3	0.2%	84
			>28000	0	0	>84000	36	3.0%	>84
			TOTAL	1902		TOTAL	1201		

SUMMARY TOTALS

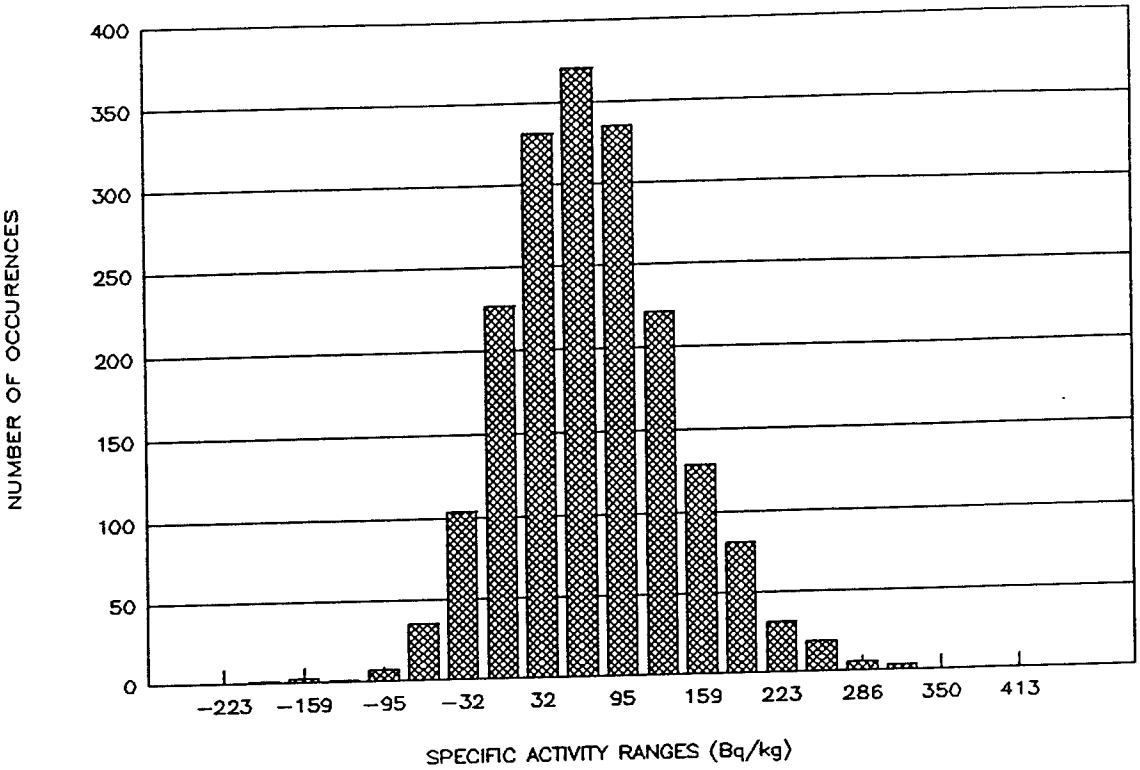
HOT PARTICLE EVENTS	1186	SORTS BY ONE GATE ONLY	640
MULTIPARTICLE EVENTS	394	SORTS BY TWO GATES	561
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

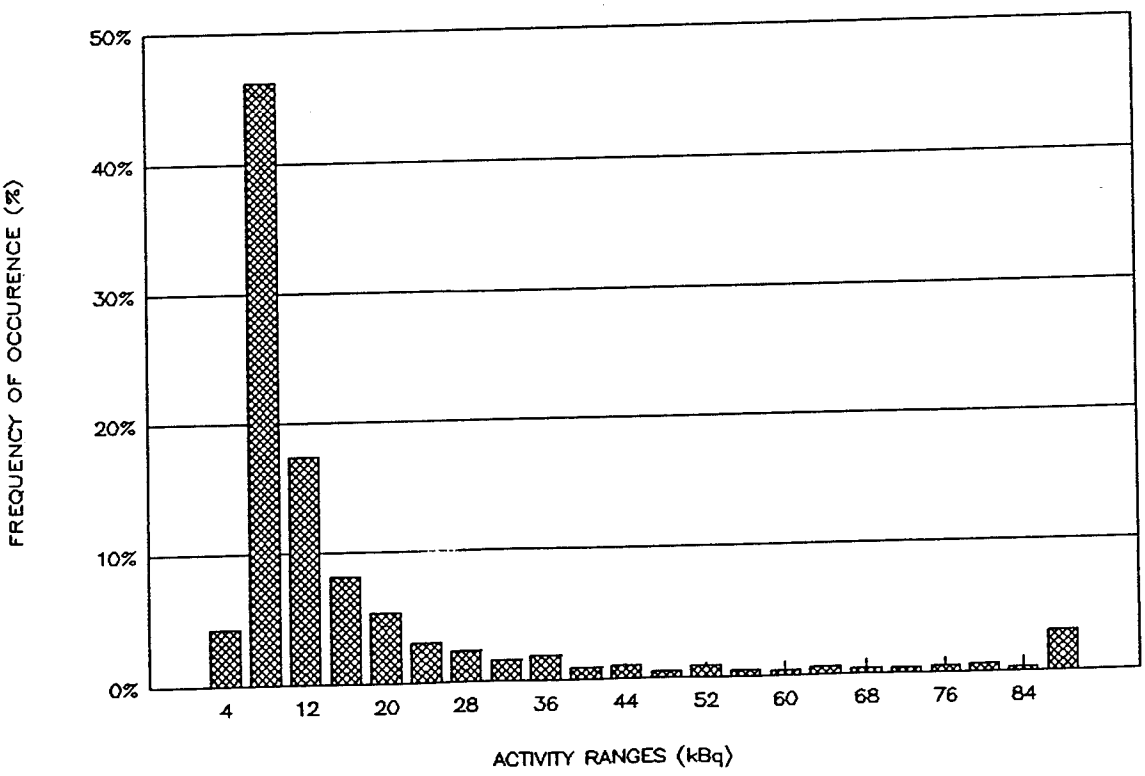
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 29-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 29-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 28-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.79 tons	114.8 tons	
MAXIMUM/SORT	9.1 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.42 yd³	91.0 yd³	92.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	40,933 kBq		
MAXIMUM/SORT	2,363 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	13,339 kBq	10,042 kBq	
MAXIMUM/SORT	1273 kBq	18 kBq	
MINIMUM/SORT	-64 Bq	-6 kBq	
SPECIFIC ACTIVITY	7,461 Bq/kg	87 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.71 hr
DOWN-TIME	0.79 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.27 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	93.1%
PRODUCTIVITY	93.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,693	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	1,927	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	960	AD=0 & MD=0 & MND>0
SOME SORT	966	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	1	

			UNEXPLAIN TIME	PAUSE TIME
0<AD<1kBq & MD>0	5		08:52:46	None
AD=0 & MD	0		10:41:46	
AD<0 & MD	1			
ACT_P <5 kBq	356	20.2%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,270		10:50:26
2-SEC RECORDS WITH SORTS	1,766	(ACT_P >0 kBq)	11:10:26
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			12:02:06
2 DETECTORS	375	83.1%	16:07:26
3 DETECTORS	63	14.0%	
4 DETECTORS	12	2.7%	
5 DETECTORS	1	0.2%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	451		
NET 2-SEC RECORDS WITH SORTS	1,315		
2-SEC PERIODS WITH NO SORTS	17,955		
AVG TIME BETWEEN 2-SEC SORTS	29.3 sec		

1-GATE SORTS DETECTR	SORTS	881 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	15	1.7%	-14000	1	-231
2	62	7.0%	-12000	1	-198
3	109	12.4%	-10000	0	-165
4	158	17.9%	-8000	0	-132
5	172	19.5%	-6000	1	-99
6	131	14.9%	-4000	9	-66
7	168	19.1%	-2000	30	-33
8	66	7.5%	0	78	0
TOTAL	881		2000	248	33
			4000	375	66
2-GATE SORTS		885	6000	409	99
DETECTR	SORTS	FREQ%	8000	365	132
8			10000	230	165
9	32	3.6%	12000	138	198
10	97	11.0%	14000	32	231
11	136	15.4%	16000	14	264
12	155	17.5%	18000	2	298
13	156	17.6%	20000	1	331
14	157	17.7%	22000	0	364
15	152	17.2%	24000	0	397
TOTAL	885		26000	0	430
			>28000	0	0
			TOTAL	1934	

ACT_P (Bq)	SORT FREQ% (#)		ACT_P (kBq)
4000	96	5.4%	4
8000	802	45.4%	8
12000	294	16.6%	12
16000	165	9.3%	16
20000	93	5.3%	20
24000	67	3.8%	24
28000	29	1.6%	28
32000	32	1.8%	32
36000	24	1.4%	36
40000	24	1.4%	40
44000	14	0.8%	44
48000	13	0.7%	48
52000	9	0.5%	52
56000	4	0.2%	56
60000	4	0.2%	60
64000	7	0.4%	64
68000	8	0.5%	68
72000	4	0.2%	72
76000	10	0.6%	76
80000	5	0.3%	80
84000	3	0.2%	84
>84000	59	3.3%	>84
TOTAL	1766		

SUMMARY TOTALS

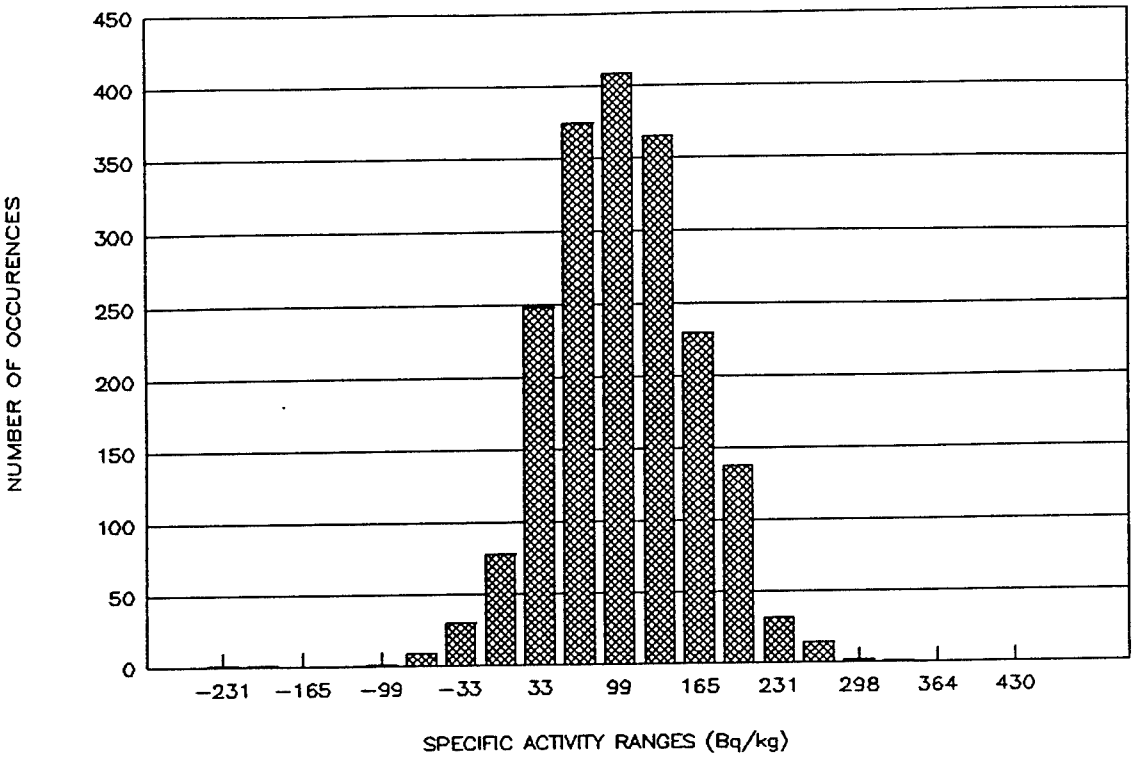
HOT PARTICLE EVENTS	1793	SORTS BY ONE GATE ONLY	881
MULTIPARTICLE EVENTS	557	SORTS BY TWO GATES	885
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

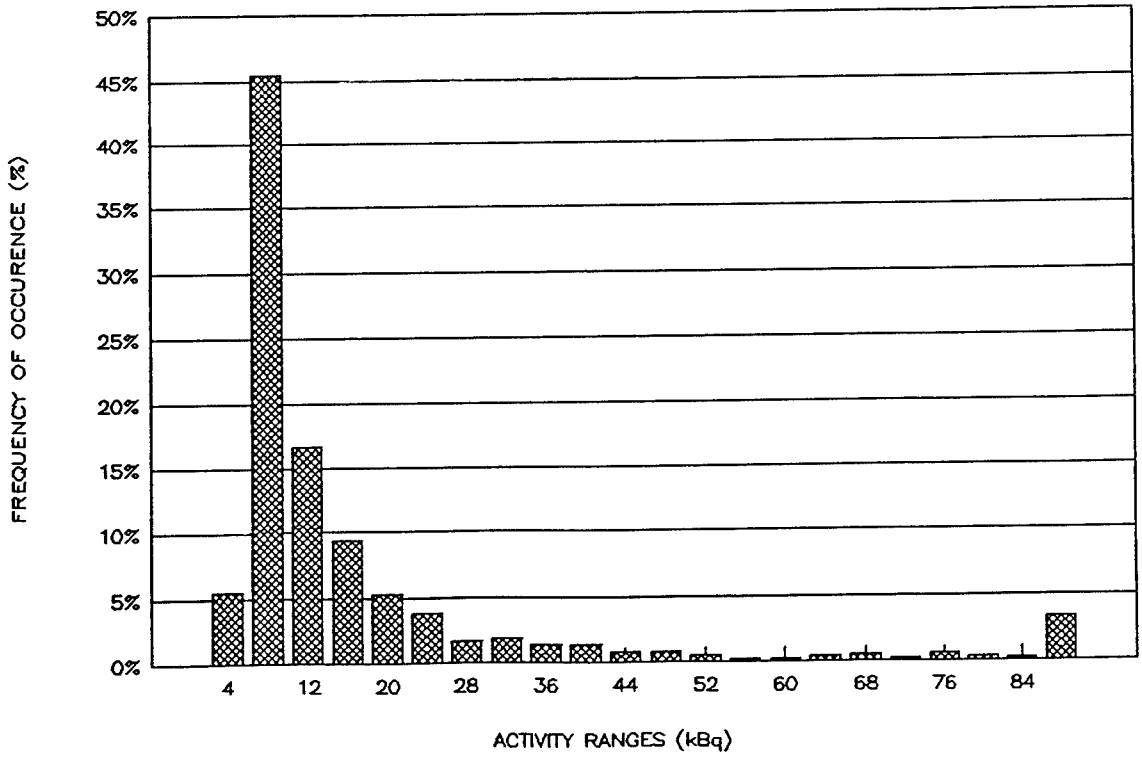
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 28–Apr–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 28–Apr–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 28-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.88 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.85 tons	114.9 tons	
MAXIMUM/SORT	8.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.2 kg	
			98.4%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.47 yd³	91.1 yd³	92.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	35,071 kBq		
MAXIMUM/SORT	1,986 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	11,444 kBq	9,190 kBq	
MAXIMUM/SORT	993 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,182 Bq/kg	80 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:15 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.72 hr
DOWN-TIME	0.78 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.26 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	93.2%
PRODUCTIVITY	93.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,740	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,929	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		905	AD=0 & MD=0 & MND>0
SOME SORT		1,024	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	4		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	315	17.4%	

UNEXPLAIN TIME	PAUSE TIME
09:25:46	None
10:54:26	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,290		13:39:26
2-SEC RECORDS WITH SORTS	1,811	(ACT_P >0 kBq)	16:58:06
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	359	84.3%	
3 DETECTORS	62	14.6%	
4 DETECTORS	5	1.2%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	426		
NET 2-SEC RECORDS WITH SORTS	1,385		
2-SEC PERIODS WITH NO SORTS	17,905		
AVG TIME BETWEEN 2-SEC SORTS	27.9 sec		

1-GATE SORTS	936	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 38	4.1%	-14000	4	-231	4000	95	5.2%	4
2 155	16.6%	-12000	1	-198	8000	803	44.3%	8
3 140	15.0%	-10000	0	-165	12000	328	18.1%	12
4 201	21.5%	-8000	0	-132	16000	154	8.5%	16
5 180	19.2%	-6000	0	-99	20000	97	5.4%	20
6 132	14.1%	-4000	15	-66	24000	71	3.9%	24
7 73	7.8%	-2000	46	-33	28000	35	1.9%	28
8 17	1.8%	0	144	0	32000	39	2.2%	32
TOTAL 936		2000	252	33	36000	23	1.3%	36
		4000	371	66	40000	23	1.3%	40
2-GATE SORTS	875	6000	371	99	44000	19	1.0%	44
DETECTR SORTS	FREQ%	8000	353	132	48000	13	0.7%	48
8		10000	218	165	52000	13	0.7%	52
9 68	7.8%	12000	105	198	56000	6	0.3%	56
10 136	15.5%	14000	35	231	60000	12	0.7%	60
11 169	19.3%	16000	15	264	64000	7	0.4%	64
12 189	21.6%	18000	2	298	68000	5	0.3%	68
13 170	19.4%	20000	2	331	72000	11	0.6%	72
14 104	11.9%	22000	0	364	76000	3	0.2%	76
15 39	4.5%	24000	0	397	80000	4	0.2%	80
TOTAL 875		26000	0	430	84000	2	0.1%	84
		>28000	0	0	>84000	48	2.7%	>84
		TOTAL	1934		TOTAL	1811		

SUMMARY TOTALS

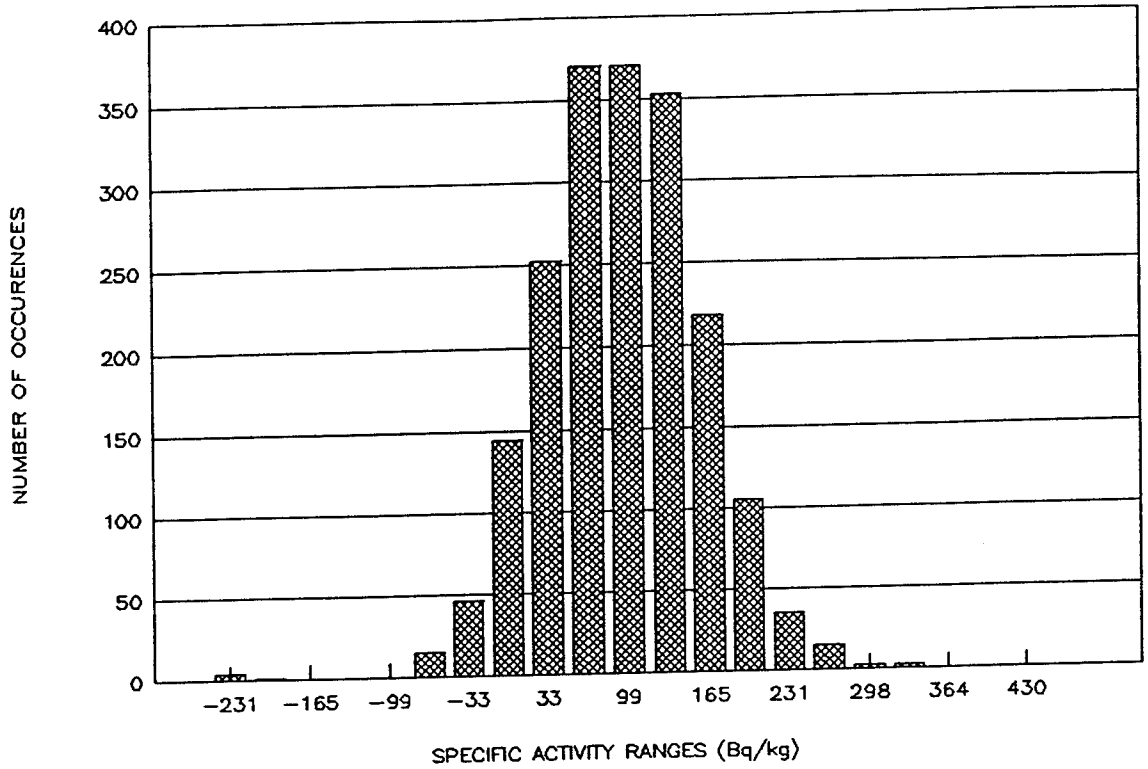
HOT PARTICLE EVENTS	1838	SORTS BY ONE GATE ONLY	936
MULTIPARTICLE EVENTS	595	SORTS BY TWO GATES	875
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

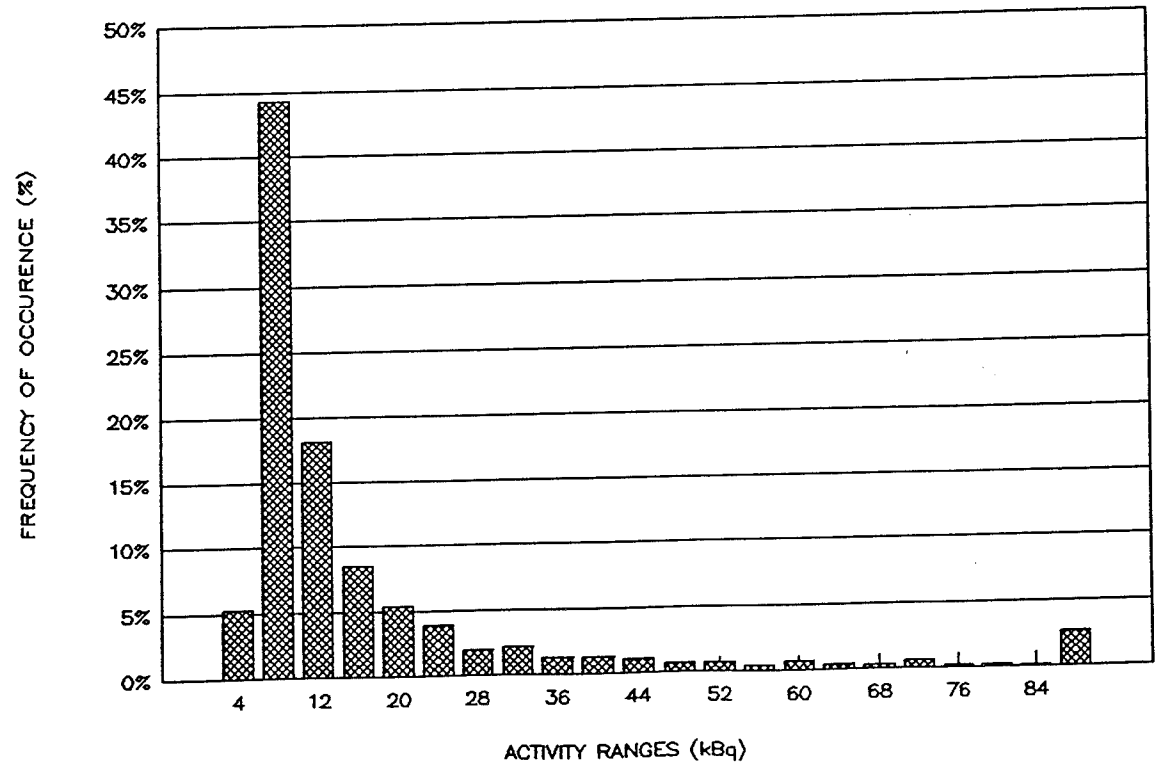
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 28-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 28-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 27-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.61 tons	112.8 tons	
MAXIMUM/SORT	6.8 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	1.27 yd³	89.5 yd³	90.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	26,212 kBq		
MAXIMUM/SORT	432 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,553 kBq	8,923 kBq	
MAXIMUM/SORT	230 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-17 kBq	
SPECIFIC ACTIVITY	5,326 Bq/kg	79 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.51 hr
DOWN-TIME	0.99 hr
TOTAL SYSTEM PAUSE	0.44 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	91.4%
PRODUCTIVITY	91.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,510		
NONPROCESS RECORDS (Test, calibration, etc)			8		
20-SEC PROCESS RECORDS			1,891		
TOTAL SORT			0	MD>0 & MND=0	
NO SORT			1,015	AD=0 & MD=0 & MND>0	
SOME SORT			875	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			1		
				UNEXPLAIN TIME	PAUSE TIME
0<AD<1kBq & MD>0	3			09:10:39	06:06
AD=0 & MD	1			10:05:39	
AD<0 & MD	0				
ACT_P <5 kBq	355	21.9%			

JA SOIL CLEANUP PLANT LOG SUMMARY

10:39:39
13:14:59

2-SEC COUNT PERIODS	18,910		
2-SEC RECORDS WITH SORTS	1,619	(ACT_P >0 kBq)	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	356	83.8%	
3 DETECTORS	63	14.8%	
4 DETECTORS	6	1.4%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	425		
NET 2-SEC RECORDS WITH SORTS	1,194		
2-SEC PERIODS WITH NO SORTS	17,716		
AVG TIME BETWEEN 2-SEC SORTS	31.7 sec		

1-GATE SORTS DETECTR	SORTS	804 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	18	2.2%	-14000	1	-231
2	76	9.5%	-12000	1	-198
3	110	13.7%	-10000	2	-165
4	147	18.3%	-8000	1	-132
5	154	19.2%	-6000	0	-99
6	127	15.8%	-4000	1	-66
7	118	14.7%	-2000	25	-33
8	54	6.7%	0	101	0
TOTAL	804		2000	250	33
			4000	392	66
2-GATE SORTS		815	6000	502	99
DETECTR	SORTS	FREQ%	8000	355	132
8			10000	180	165
9	44	5.4%	12000	64	198
10	96	11.8%	14000	15	231
11	124	15.2%	16000	7	264
12	148	18.2%	18000	2	298
13	170	20.9%	20000	0	331
14	124	15.2%	22000	0	364
15	109	13.4%	24000	0	397
TOTAL	815		26000	0	430
			>28000	0	0
			TOTAL	1899	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	103	6.4%	4
8000	741	45.8%	8
12000	263	16.2%	12
16000	141	8.7%	16
20000	92	5.7%	20
24000	43	2.7%	24
28000	42	2.6%	28
32000	24	1.5%	32
36000	16	1.0%	36
40000	21	1.3%	40
44000	11	0.7%	44
48000	21	1.3%	48
52000	11	0.7%	52
56000	12	0.7%	56
60000	4	0.2%	60
64000	6	0.4%	64
68000	10	0.6%	68
72000	7	0.4%	72
76000	7	0.4%	76
80000	8	0.5%	80
84000	1	0.1%	84
>84000	35	2.2%	>84
TOTAL	1619		

SUMMARY TOTALS

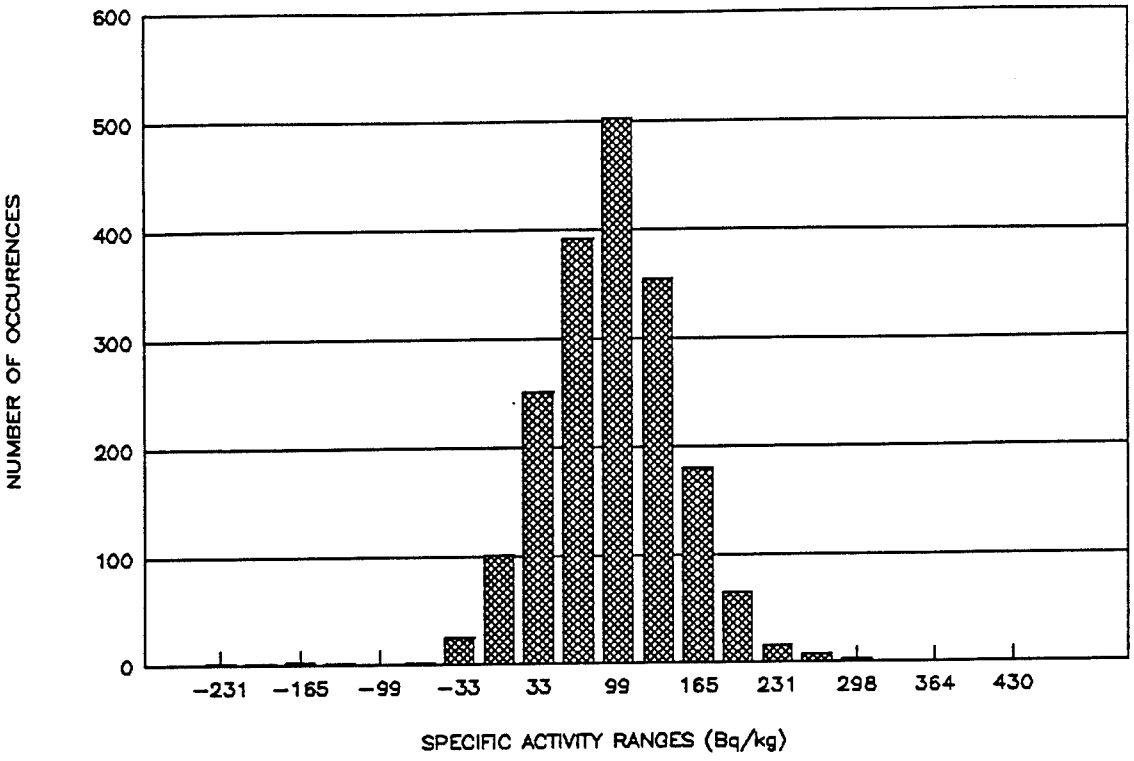
HOT PARTICLE EVENTS	1654	SORTS BY ONE GATE ONLY	804
MULTIPARTICLE EVENTS	456	SORTS BY TWO GATES	815
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

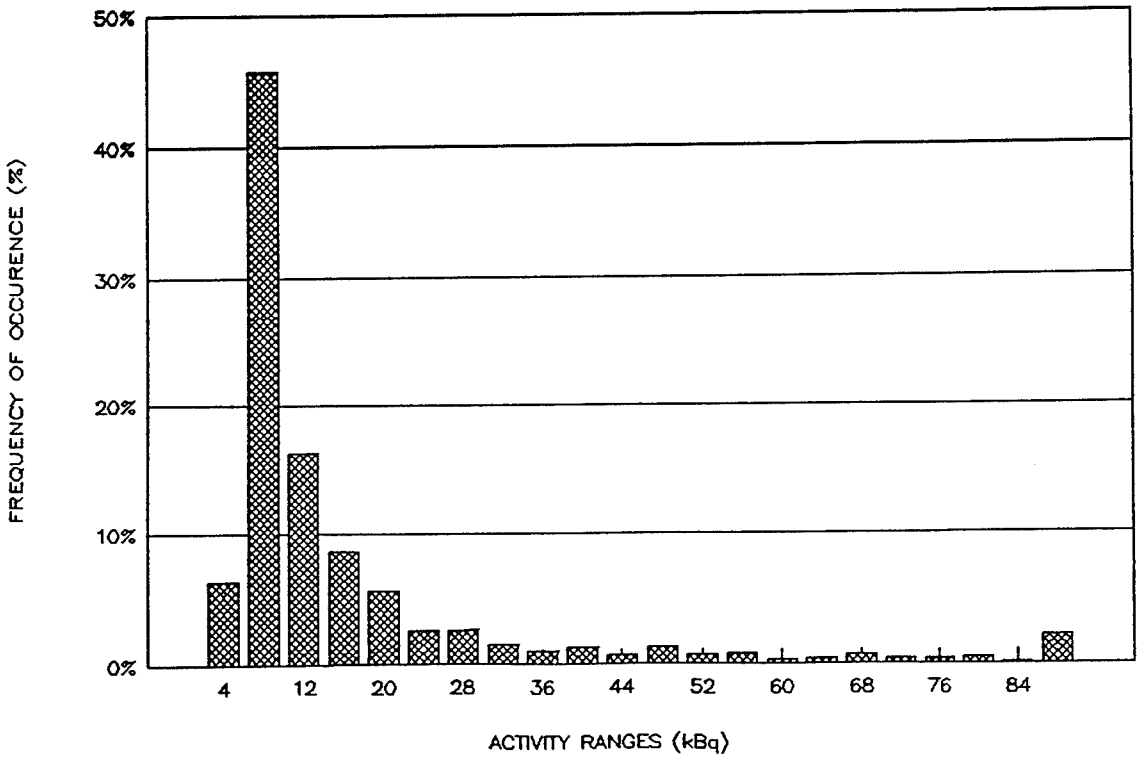
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 27-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 27-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 27-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.88 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.61 tons	113.2 tons	
MAXIMUM/SORT	7.6 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53 kg	
			98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.27 yd³	89.7 yd³	91.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	29,343 kBq		
MAXIMUM/SORT	1,302 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,863 kBq	8,889 kBq	
MAXIMUM/SORT	727 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-16 kBq	
SPECIFIC ACTIVITY	6,142 Bq/kg	79 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:32 AM	END SOIL PROCESSING	05:04 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.54 hr
DOWN-TIME	0.96 hr
TOTAL SYSTEM PAUSE	0.44 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	0.42 hr
PLANT PERFORMANCE	91.6%
PRODUCTIVITY	91.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,437	
NONPROCESS RECORDS (Test, calibration, etc)		2	
20-SEC PROCESS RECORDS		1,897	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		979	AD=0 & MD=0 & MND>0
SOME SORT		917	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	4		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	268	17.4%	

UNEXPLAIN TIME	PAUSE TIME
08:18:59	06:06
10:49:19	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,970		11:25:59
2-SEC RECORDS WITH SORTS	1,540	(ACT_P >0 kBq)	13:06:19
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			16:37:39
2 DETECTORS	291	85.8%	
3 DETECTORS	42	12.4%	
4 DETECTORS	5	1.5%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	339		
NET 2-SEC RECORDS WITH SORTS	1,201		
2-SEC PERIODS WITH NO SORTS	17,769		
AVG TIME BETWEEN 2-SEC SORTS	31.6 sec		

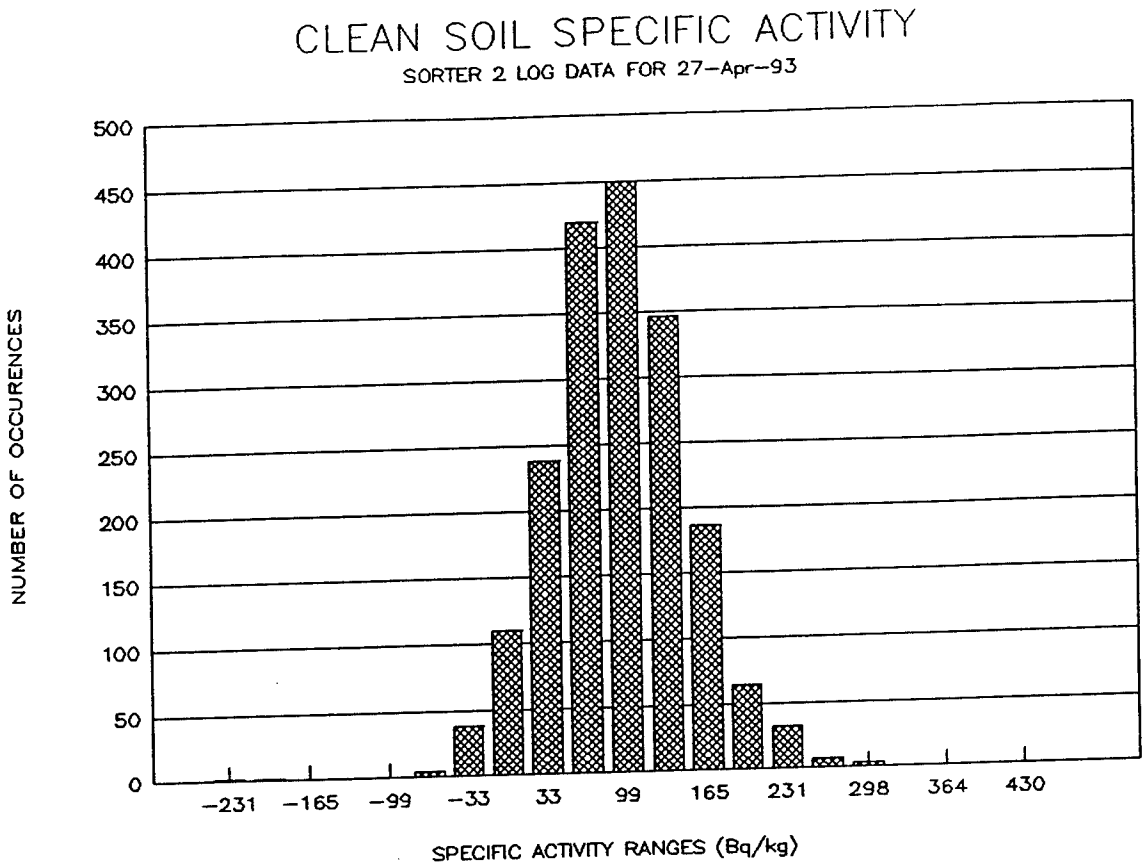
1-GATE SORTS		796	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	42	5.3%	-14000	1	-231	4000	76	4.9%	4
2	139	17.5%	-12000	1	-198	8000	740	48.1%	8
3	135	17.0%	-10000	0	-165	12000	246	16.0%	12
4	139	17.5%	-8000	0	-132	16000	130	8.4%	16
5	130	16.3%	-6000	0	-99	20000	66	4.3%	20
6	114	14.3%	-4000	4	-66	24000	57	3.7%	24
7	73	9.2%	-2000	38	-33	28000	36	2.3%	28
8	24	3.0%	0	110	0	32000	25	1.6%	32
TOTAL	796		2000	238	33	36000	23	1.5%	36
			4000	419	66	40000	20	1.3%	40
2-GATE SORTS		744	6000	450	99	44000	15	1.0%	44
DETECTR	SORTS	FREQ%	8000	346	132	48000	9	0.6%	48
8			10000	186	165	52000	7	0.5%	52
9	89	12.0%	12000	64	198	56000	4	0.3%	56
10	131	17.6%	14000	32	231	60000	9	0.6%	60
11	129	17.3%	16000	7	264	64000	6	0.4%	64
12	132	17.7%	18000	3	298	68000	5	0.3%	68
13	119	16.0%	20000	0	331	72000	4	0.3%	72
14	91	12.2%	22000	0	364	76000	3	0.2%	76
15	53	7.1%	24000	0	397	80000	4	0.3%	80
TOTAL	744		26000	0	430	84000	4	0.3%	84
			>28000	0	0	>84000	51	3.3%	>84
			TOTAL	1899		TOTAL	1540		

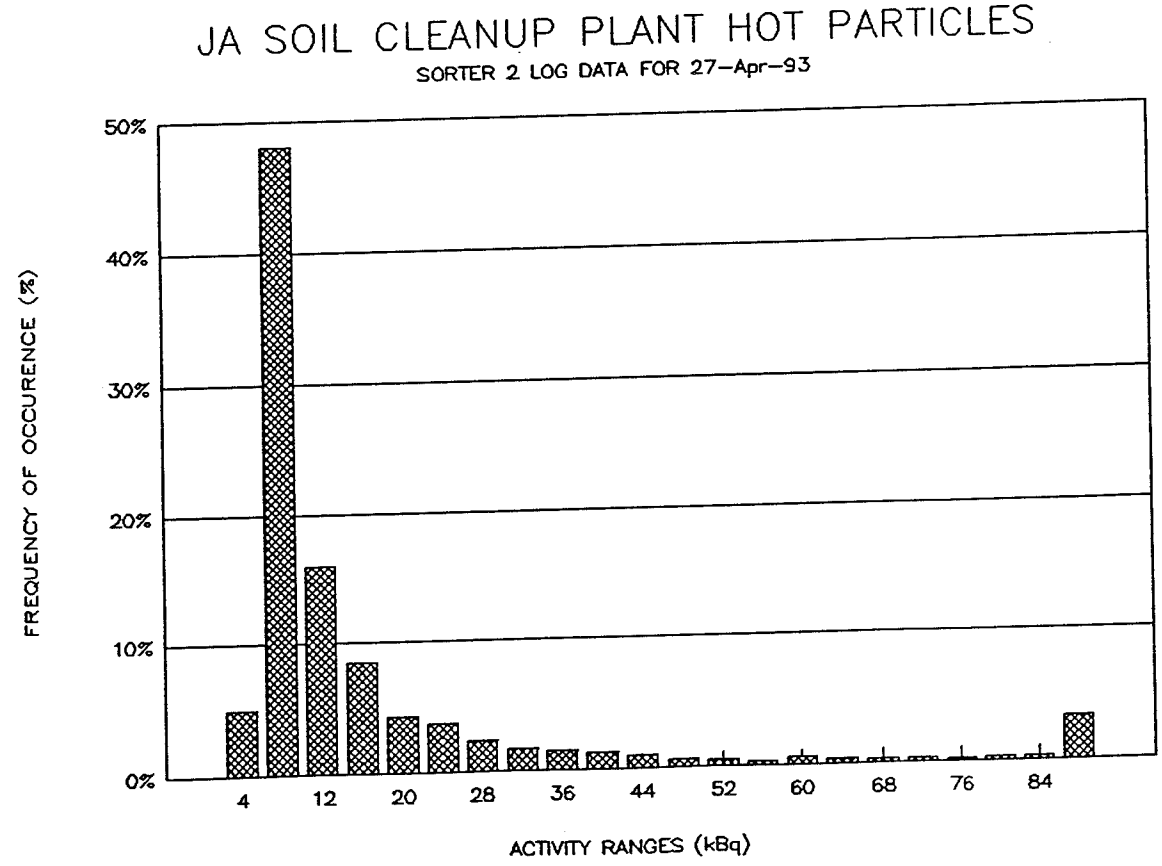
SUMMARY TOTALS

HOT PARTICLE EVENTS	1571	SORTS BY ONE GATE ONLY	796
MULTIPARTICLE EVENTS	538	SORTS BY TWO GATES	744
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 27-Apr-93
NUMBER OF OCCURENCES
500
450
400
350
300
250
200
150
100
50
0
-231
-165
-99
-33
33
99
165
231
298
364
430
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 27-Apr-93
FREQUENCY OF OCCURENCE (%)
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 26-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.82 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.71 tons	113.3 tons	
MAXIMUM/SORT	6.8 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.35 yd³	89.9 yd³	91.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	29,201 kBq		
MAXIMUM/SORT	1,053 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,481 kBq	9,107 kBq	
MAXIMUM/SORT	572 kBq	22 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,552 Bq/kg	80 Bq/kg	

WORK HISTORY

WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:50 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.7 hr
AVAILABLE HOURS	11.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.56 hr
DOWN-TIME	1.11 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.63 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	90.5%
PRODUCTIVITY	90.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,561	
NONPROCESS RECORDS (Test, calibration, etc)		14	
20-SEC PROCESS RECORDS		1,901	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		957	AD=0 & MD=0 & MND>0
SOME SORT		944	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	333	20.1%	

UNEXPLAIN TIME	PAUSE TIME
08:21:35	05:54
16:52:55	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		19,010	
2-SEC RECORDS WITH SORTS		1,660	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	343		84.3%
3 DETECTORS	54		13.3%
4 DETECTORS	9		2.2%
5 DETECTORS	1		0.2%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		407	
NET 2-SEC RECORDS WITH SORTS		1,253	
2-SEC PERIODS WITH NO SORTS		17,757	
AVG TIME BETWEEN 2-SEC SORTS		30.3 sec	

1-GATE SORTS DETECTR	SORTS	832 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	22	2.6%	-14000	1	-231
2	62	7.5%	-12000	2	-198
3	106	12.7%	-10000	0	-165
4	136	16.3%	-8000	3	-132
5	163	19.6%	-6000	5	-99
6	148	17.8%	-4000	12	-66
7	143	17.2%	-2000	36	-33
8	52	6.3%	0	112	0
TOTAL	832		2000	241	33
			4000	399	66
2-GATE SORTS		828	6000	460	99
DETECTR	SORTS	FREQ%	8000	309	132
8			10000	191	165
9	47	5.7%	12000	84	198
10	76	9.2%	14000	29	231
11	133	16.1%	16000	16	264
12	142	17.1%	18000	9	298
13	145	17.5%	20000	2	331
14	155	18.7%	22000	3	364
15	130	15.7%	24000	1	397
TOTAL	828		26000	0	430
			>28000	0	0
			TOTAL	1915	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	103	6.2%	4
8000	743	44.8%	8
12000	301	18.1%	12
16000	148	8.9%	16
20000	78	4.7%	20
24000	53	3.2%	24
28000	32	1.9%	28
32000	36	2.2%	32
36000	20	1.2%	36
40000	23	1.4%	40
44000	18	1.1%	44
48000	12	0.7%	48
52000	11	0.7%	52
56000	9	0.5%	56
60000	4	0.2%	60
64000	4	0.2%	64
68000	5	0.3%	68
72000	5	0.3%	72
76000	8	0.5%	76
80000	4	0.2%	80
84000	3	0.2%	84
>84000	40	2.4%	>84
TOTAL	1660		

SUMMARY TOTALS

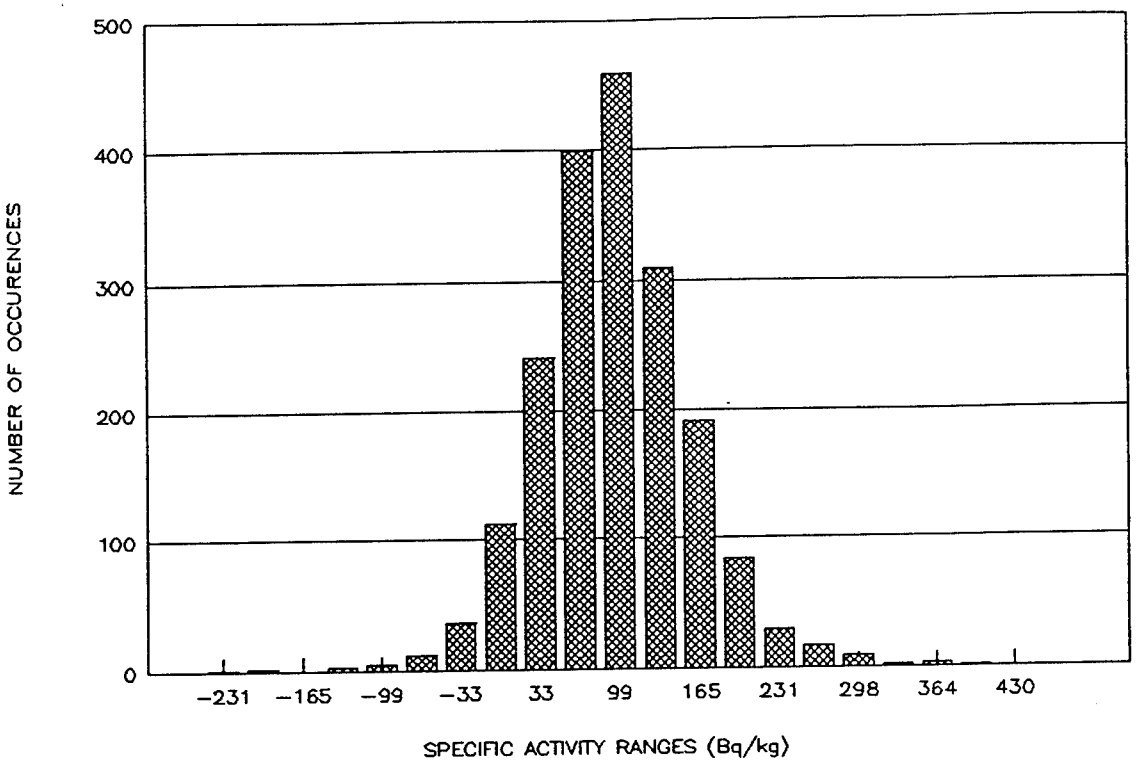
HOT PARTICLE EVENTS	1696	SORTS BY ONE GATE ONLY	832
MULTIPARTICLE EVENTS	549	SORTS BY TWO GATES	828
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

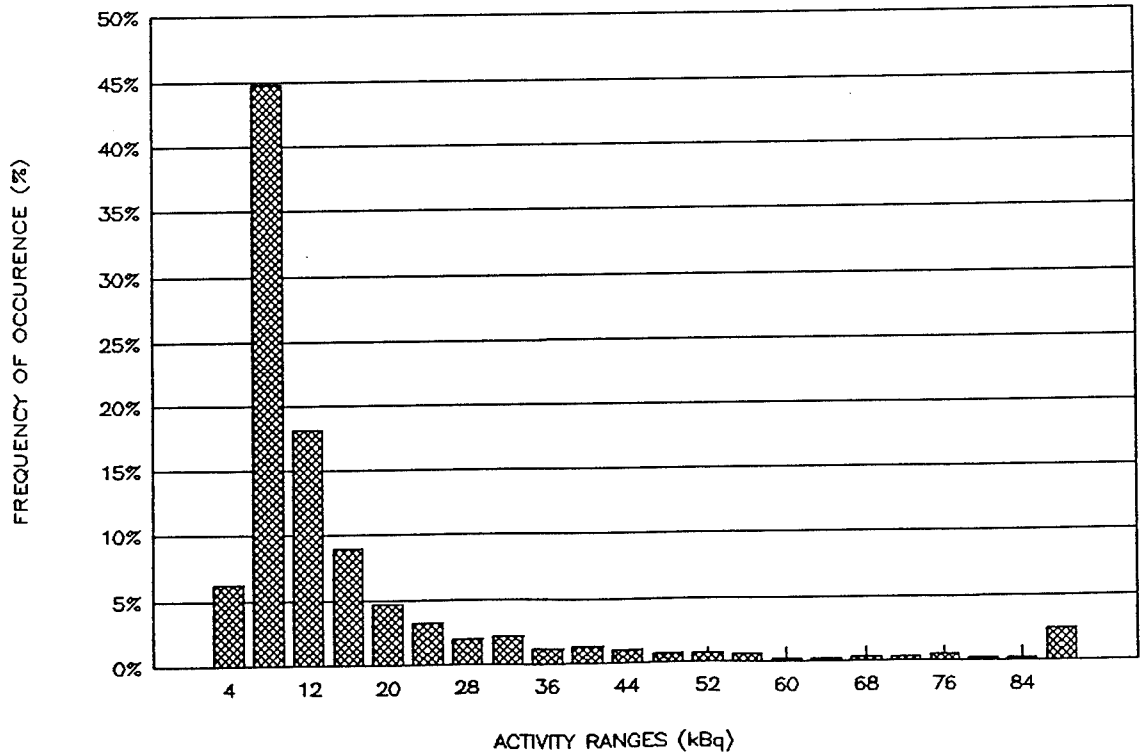
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 26-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 26-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 26-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.89 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.67 tons	113.8 tons	
MAXIMUM/SORT	6.8 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
			98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.32 yd³	90.2 yd³	91.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	31,008 kBq		
MAXIMUM/SORT	924 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,087 kBq	8,037 kBq	
MAXIMUM/SORT	501 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	6,039 Bq/kg	71 Bq/kg	

WORK HISTORY			
WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:50 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.7 hr
AVAILABLE HOURS	11.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.59 hr
DOWN-TIME	1.07 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.63 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	90.8%
PRODUCTIVITY	90.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,532	
NONPROCESS RECORDS (Test, calibration, etc)		8	
20-SEC PROCESS RECORDS		1,907	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		987	AD=0 & MD=0 & MND>0
SOME SORT		920	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	4		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	251	15.4%	

UNEXPLAIN TIME	PAUSE TIME
09:59:16	05:54
11:40:56	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,070		12:00:36
2-SEC RECORDS WITH SORTS	1,625	(ACT_P >0 kBq)	12:37:16
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	339	85.0%	
3 DETECTORS	52	13.0%	
4 DETECTORS	6	1.5%	
5 DETECTORS	2	0.5%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	399		
NET 2-SEC RECORDS WITH SORTS	1,226		
2-SEC PERIODS WITH NO SORTS	17,844		
AVG TIME BETWEEN 2-SEC SORTS	31.1	sec	

1-GATE SORTS	833	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 39	4.7%	-14000	4	-231	4000	84	5.2%	4
2 127	15.2%	-12000	0	-198	8000	721	44.4%	8
3 169	20.3%	-10000	0	-165	12000	285	17.5%	12
4 158	19.0%	-8000	2	-132	16000	152	9.4%	16
5 146	17.5%	-6000	5	-99	20000	70	4.3%	20
6 114	13.7%	-4000	10	-66	24000	56	3.4%	24
7 63	7.6%	-2000	54	-33	28000	40	2.5%	28
8 17	2.0%	0	168	0	32000	34	2.1%	32
TOTAL 833		2000	309	33	36000	24	1.5%	36
		4000	395	66	40000	25	1.5%	40
2-GATE SORTS	792	6000	388	99	44000	15	0.9%	44
DETECTR SORTS	FREQ%	8000	304	132	48000	12	0.7%	48
8		10000	167	165	52000	10	0.6%	52
9 77	9.7%	12000	62	198	56000	10	0.6%	56
10 106	13.4%	14000	22	231	60000	8	0.5%	60
11 182	23.0%	16000	15	264	64000	6	0.4%	64
12 166	21.0%	18000	8	298	68000	8	0.5%	68
13 124	15.7%	20000	2	331	72000	3	0.2%	72
14 95	12.0%	22000	0	364	76000	6	0.4%	76
15 42	5.3%	24000	0	397	80000	5	0.3%	80
TOTAL 792		26000	0	430	84000	4	0.2%	84
		>28000	0	0	>84000	47	2.9%	>84
		TOTAL	1915		TOTAL	1625		

SUMMARY TOTALS

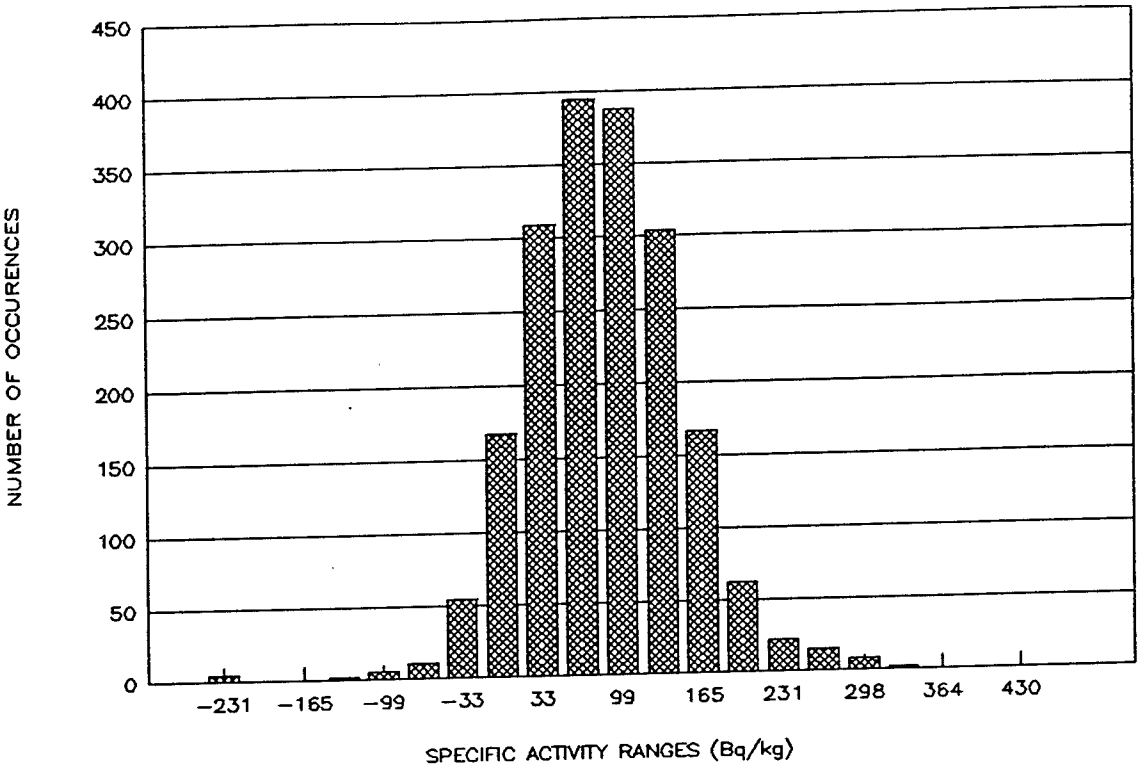
HOT PARTICLE EVENTS	1655	SORTS BY ONE GATE ONLY	833
MULTIPARTICLE EVENTS	539	SORTS BY TWO GATES	792
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

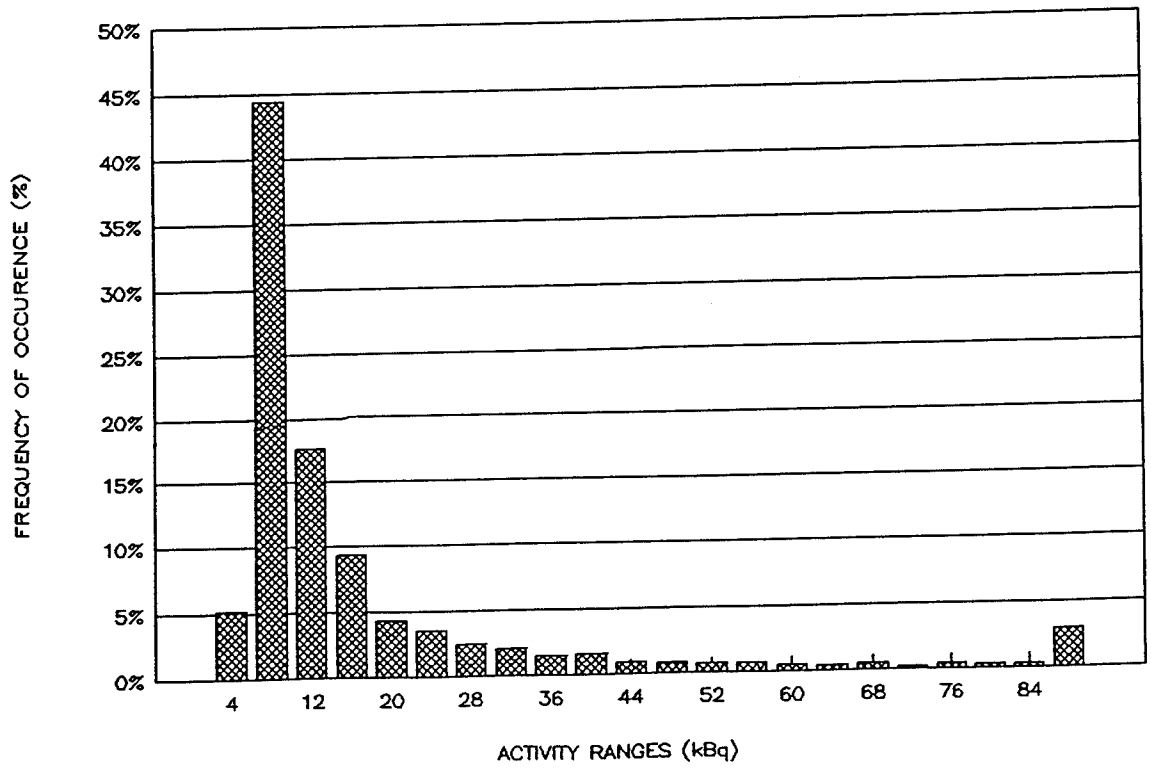
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 26-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 26-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 24-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.68 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.11 tons	11.4 tons	
MAXIMUM/SORT	3.8 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.09 yd³	9.1 yd³	9.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,255 kBq		
MAXIMUM/SORT	97 kBq		
MINIMUM/SORT	3.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	446 kBq	1,182 kBq	
MAXIMUM/SORT	53 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	4,038 Bq/kg	103 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	03:26 PM	PLANT SHUT-DOWN	04:31 PM
START SOIL PROCESSING	03:26 PM	END SOIL PROCESSING	04:30 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	1.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.06 hr
DOWN-TIME	0.02 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	9.4 hr
START-UP	0.01 hr
SHUT-DOWN	0.02 hr
PLANT PERFORMANCE	97.9%
PRODUCTIVITY	10.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		291	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		191	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		120	AD=0 & MD=0 & MND>0
SOME SORT		71	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	None	None
AD<0 & MD	0		
ACT_P <5 kBq	18 18.0%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		1,910	
2-SEC RECORDS WITH SORTS		100	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	15	75.0%	
3 DETECTORS	4	20.0%	
4 DETECTORS	1	5.0%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	20		
NET 2-SEC RECORDS WITH SORTS		80	
2-SEC PERIODS WITH NO SORTS		1,830	
AVG TIME BETWEEN 2-SEC SORTS		47.8	sec

1-GATE SORTS		51	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	0	0.0%	-14000	0	-231
2	2	3.9%	-12000	0	-198
3	6	11.8%	-10000	1	-165
4	6	11.8%	-8000	1	-132
5	12	23.5%	-6000	0	-99
6	9	17.6%	-4000	1	-66
7	12	23.5%	-2000	3	-33
8	4	7.8%	0	7	0
TOTAL	51		2000	15	33
			4000	26	66
2-GATE SORTS		49	6000	41	99
DETECTR	SORTS	FREQ%	8000	44	132
8			10000	32	165
9	0	0.0%	12000	11	198
10	3	6.1%	14000	13	231
11	7	14.3%	16000	1	264
12	8	16.3%	18000	0	298
13	10	20.4%	20000	0	331
14	11	22.4%	22000	0	364
15	10	20.4%	24000	0	397
TOTAL	49		26000	0	430
			>28000	0	0
			TOTAL	196	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	7	7.0%	4
8000	48	48.0%	8
12000	15	15.0%	12
16000	16	16.0%	16
20000	5	5.0%	20
24000	1	1.0%	24
28000	1	1.0%	28
32000	0	0.0%	32
36000	1	1.0%	36
40000	1	1.0%	40
44000	0	0.0%	44
48000	0	0.0%	48
52000	0	0.0%	52
56000	2	2.0%	56
60000	0	0.0%	60
64000	0	0.0%	64
68000	0	0.0%	68
72000	0	0.0%	72
76000	1	1.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	2	2.0%	>84
TOTAL	100		

SUMMARY TOTALS

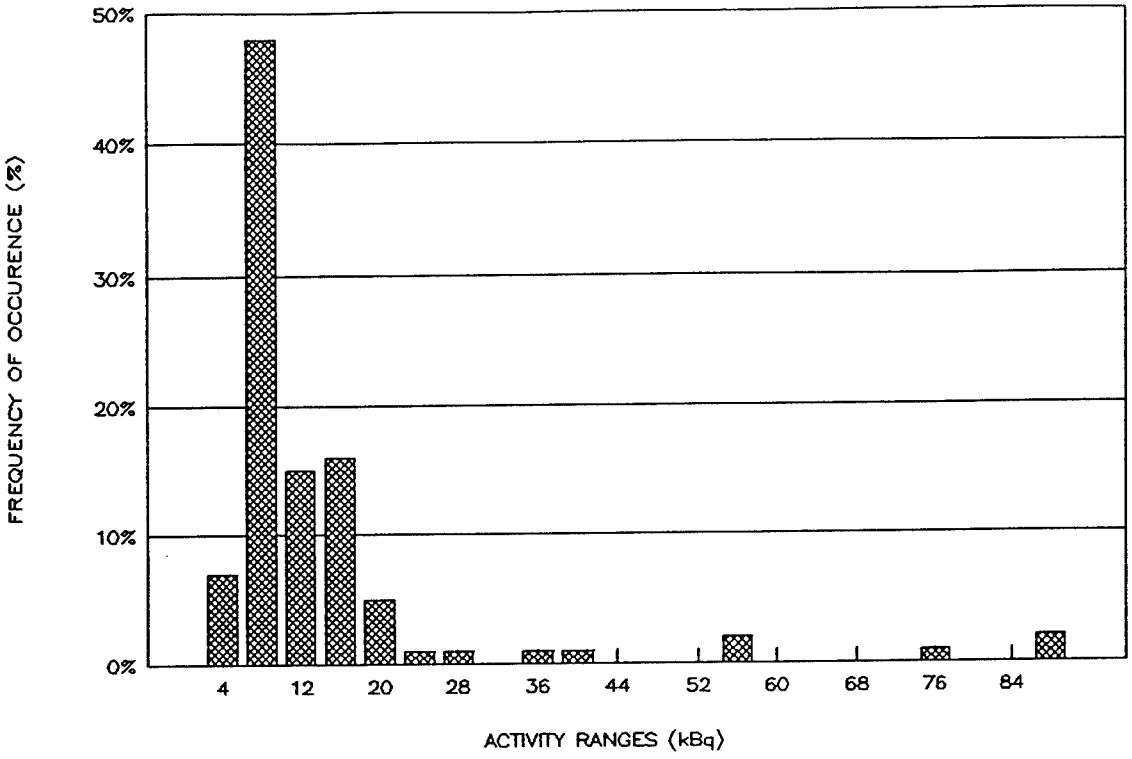
HOT PARTICLE EVENTS	105	SORTS BY ONE GATE ONLY	51
MULTIPARTICLE EVENTS	40	SORTS BY TWO GATES	49
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

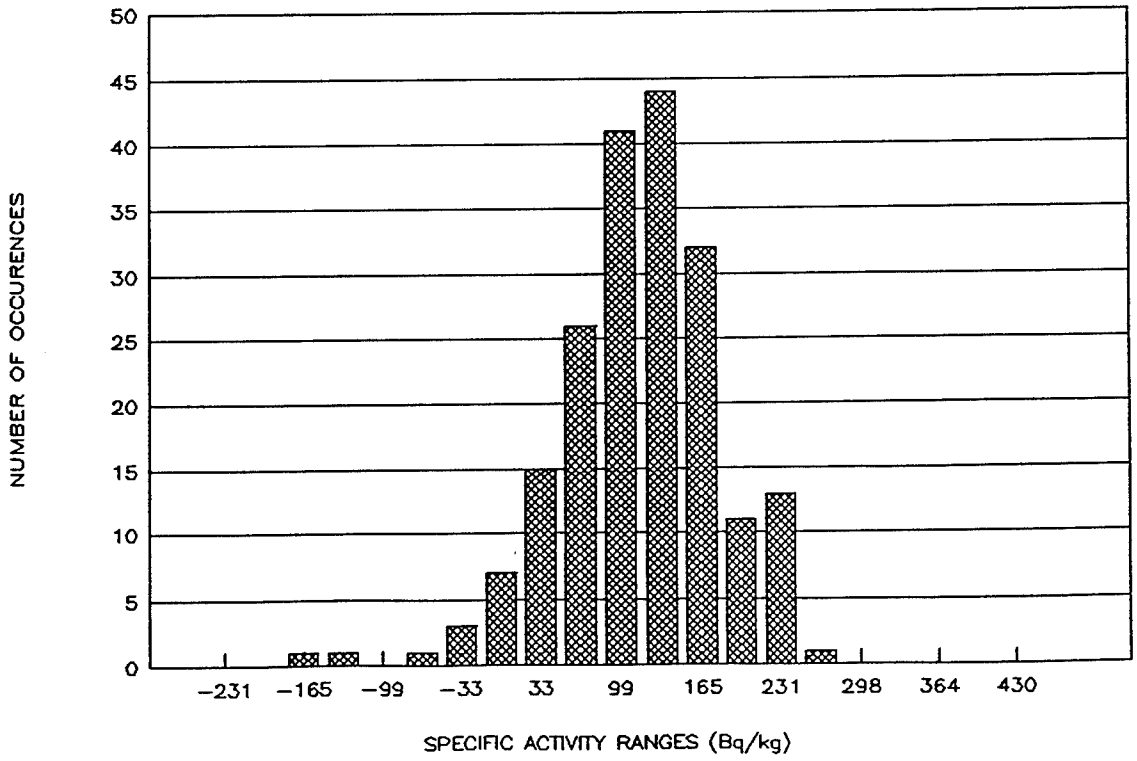
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 24-Apr-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 24-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 24-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.13 tons	11.3 tons	
MAXIMUM/SORT	5.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
			98.9%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.10 yd³	9.0 yd³	9.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,638 kBq		
MAXIMUM/SORT	1,394 kBq		
MINIMUM/SORT	3.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,400 kBq	906 kBq	
MAXIMUM/SORT	674 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-4 kBq	
SPECIFIC ACTIVITY	10,752 Bq/kg	80 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	03:26 PM	PLANT SHUT-DOWN	04:31 PM
START SOIL PROCESSING	03:26 PM	END SOIL PROCESSING	04:29 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	1.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.05 hr
DOWN-TIME	0.03 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	9.4 hr
START-UP	0.01 hr
SHUT-DOWN	0.03 hr
PLANT PERFORMANCE	96.9%
PRODUCTIVITY	10.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		309	
NONPROCESS RECORDS (Test, calibration, etc)		7	
20-SEC PROCESS RECORDS		189	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		116	AD=0 & MD=0 & MND>0
SOME SORT		73	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	17	14.2%	

UNEXPLAIN TIME	PAUSE TIME
None	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	1,890	
2-SEC RECORDS WITH SORTS	120	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	24	80.0%
3 DETECTORS	6	20.0%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	30	
NET 2-SEC RECORDS WITH SORTS	90	
2-SEC PERIODS WITH NO SORTS	1,800	
AVG TIME BETWEEN 2-SEC SORTS	42.0	sec

1-GATE SORTS		63	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	2	3.2%	-14000	0	-231	4000	6	5.0%	4
2	15	23.8%	-12000	0	-198	8000	50	41.7%	8
3	7	11.1%	-10000	3	-165	12000	18	15.0%	12
4	11	17.5%	-8000	2	-132	16000	10	8.3%	16
5	16	25.4%	-6000	0	-99	20000	5	4.2%	20
6	10	15.9%	-4000	1	-66	24000	6	5.0%	24
7	2	3.2%	-2000	8	-33	28000	6	5.0%	28
8	0	0.0%	0	18	0	32000	2	1.7%	32
TOTAL	63		2000	31	33	36000	0	0.0%	36
			4000	32	66	40000	1	0.8%	40
2-GATE SORTS		57	6000	27	99	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	28	132	48000	4	3.3%	48
8			10000	20	165	52000	2	1.7%	52
9	5	8.8%	12000	15	198	56000	1	0.8%	56
10	10	17.5%	14000	9	231	60000	1	0.8%	60
11	12	21.1%	16000	1	264	64000	1	0.8%	64
12	15	26.3%	18000	1	298	68000	0	0.0%	68
13	9	15.8%	20000	0	331	72000	1	0.8%	72
14	5	8.8%	22000	0	364	76000	0	0.0%	76
15	1	1.8%	24000	0	397	80000	0	0.0%	80
TOTAL	57		26000	0	430	84000	0	0.0%	84
			>28000	0	0	>84000	6	5.0%	>84
			TOTAL	196		TOTAL	120		

SUMMARY TOTALS

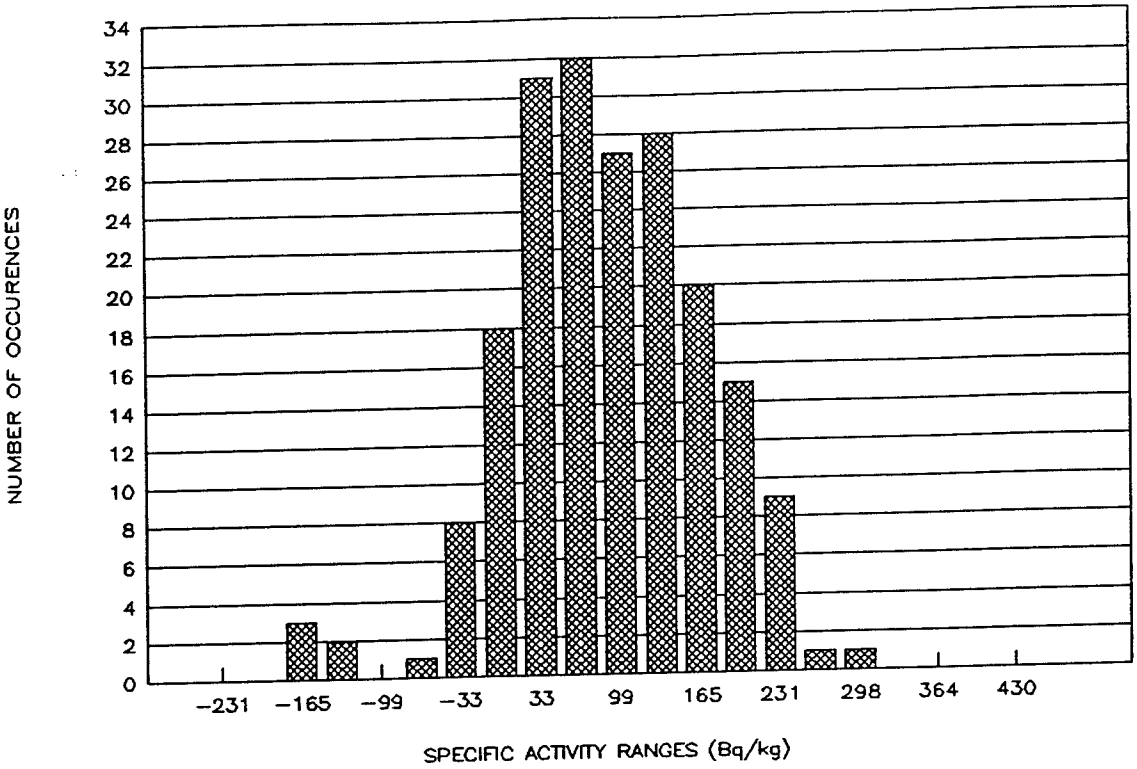
HOT PARTICLE EVENTS	117	SORTS BY ONE GATE ONLY	63
MULTIPARTICLE EVENTS	54	SORTS BY TWO GATES	57
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

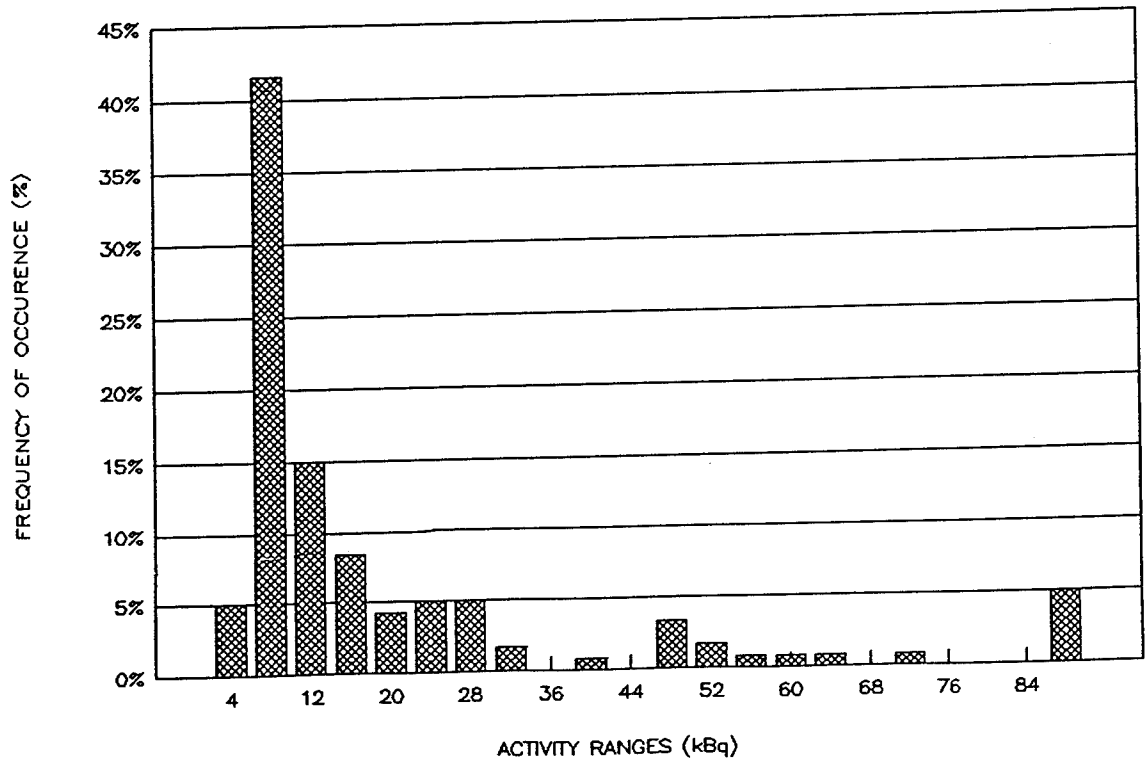
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 24-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 24-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 23-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.17 tons	113.8 tons	
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	54.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.93 yd³	90.2 yd³	91.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	12,559 kBq		
MAXIMUM/SORT	605 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,689 kBq	6,619 kBq	
MAXIMUM/SORT	415 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	4,866 Bq/kg	58 Bq/kg	

WORK HISTORY

WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:25 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.56 hr
DOWN-TIME	1.01 hr
TOTAL SYSTEM PAUSE	0.47 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.49 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	91.3%
PRODUCTIVITY	91.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,860	
NONPROCESS RECORDS (Test, calibration, etc)		7	
20-SEC PROCESS RECORDS		1,900	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,178	AD=0 & MD=0 & MND>0
SOME SORT		721	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	317	33.0%	

UNEXPLAIN TIME	PAUSE TIME
11:12:18	05:57
16:11:58	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,000	
2-SEC RECORDS WITH SORTS	960	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	218	85.5%
3 DETECTORS	33	12.9%
4 DETECTORS	4	1.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	255	
NET 2-SEC RECORDS WITH SORTS	705	
2-SEC PERIODS WITH NO SORTS	18,295	
AVG TIME BETWEEN 2-SEC SORTS	53.9	sec

1-GATE SORTS DETECTR	SORTS	477 FREQ%
1	13	2.7%
2	52	10.9%
3	76	15.9%
4	74	15.5%
5	90	18.9%
6	90	18.9%
7	67	14.0%
8	15	3.1%
TOTAL	477	

2-GATE SORTS DETECTR	SORTS	483 FREQ%
8		
9	41	8.5%
10	70	14.5%
11	78	16.1%
12	92	19.0%
13	94	19.5%
14	69	14.3%
15	39	8.1%
TOTAL	483	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	1	-231
-12000	2	-198
-10000	4	-165
-8000	0	-132
-6000	4	-99
-4000	18	-66
-2000	69	-33
0	199	0
2000	349	33
4000	439	66
6000	411	99
8000	222	132
10000	128	165
12000	45	198
14000	14	231
16000	1	264
18000	0	298
20000	1	331
22000	0	364
24000	0	397
26000	0	430
>28000	0	0
TOTAL	1907	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	165	17.2%	4
8000	429	44.7%	8
12000	137	14.3%	12
16000	57	5.9%	16
20000	50	5.2%	20
24000	20	2.1%	24
28000	20	2.1%	28
32000	15	1.6%	32
36000	6	0.6%	36
40000	4	0.4%	40
44000	9	0.9%	44
48000	5	0.5%	48
52000	5	0.5%	52
56000	5	0.5%	56
60000	4	0.4%	60
64000	1	0.1%	64
68000	7	0.7%	68
72000	4	0.4%	72
76000	3	0.3%	76
80000	1	0.1%	80
84000	0	0.0%	84
>84000	13	1.4%	>84
TOTAL	960		

SUMMARY TOTALS

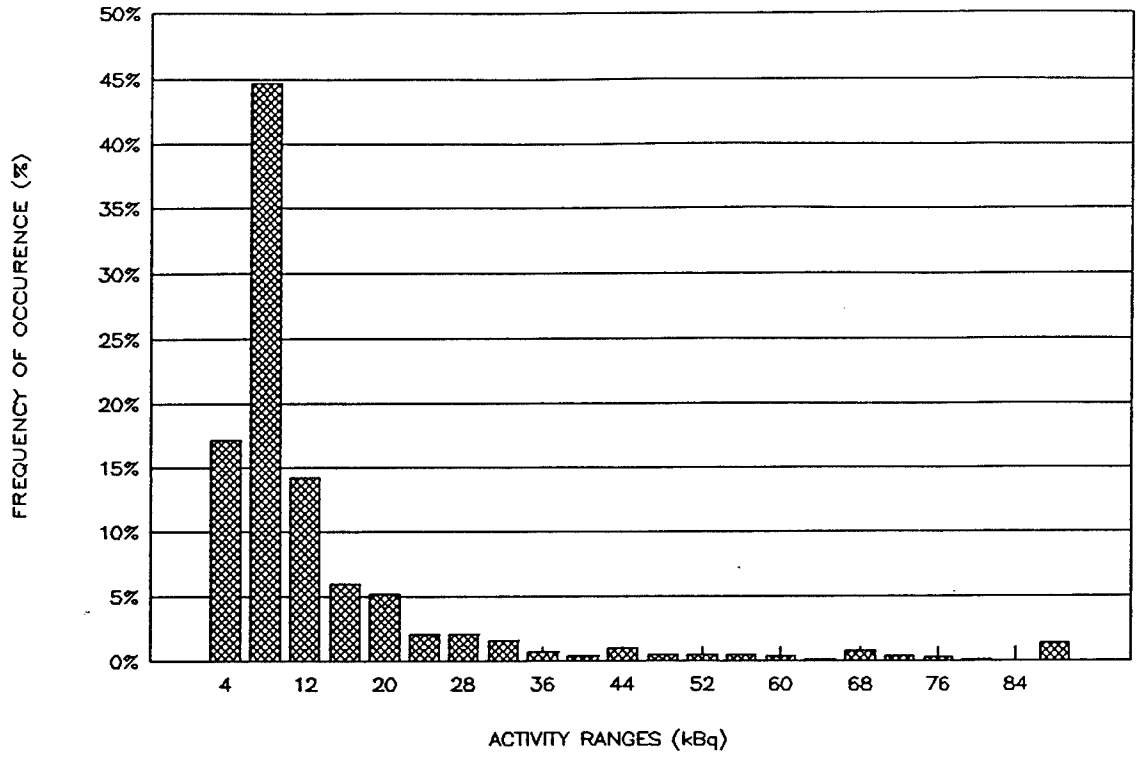
HOT PARTICLE EVENTS	988	SORTS BY ONE GATE ONLY	477
MULTIPARTICLE EVENTS	462	SORTS BY TWO GATES	483
DISTRIBUTED EVENTS	80		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

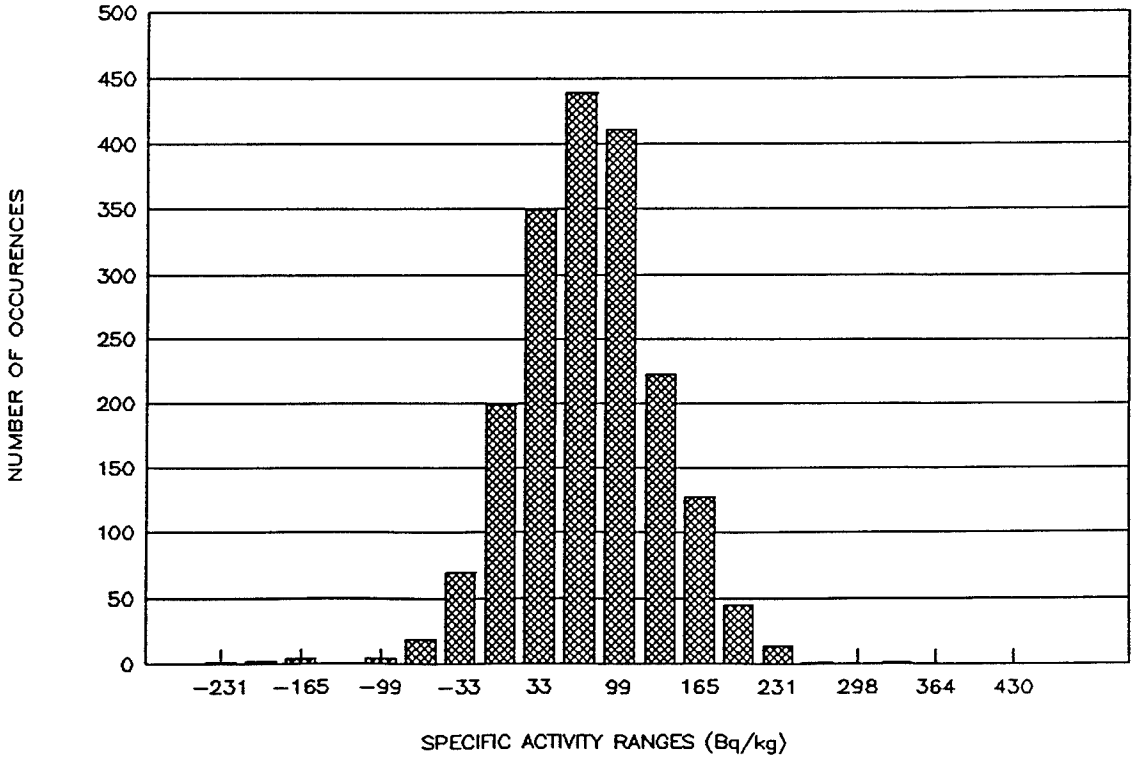
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 23-Apr-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 23-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 23-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
		CONTAMINATED	CLEAN
MASS TOTAL		1.19 tons	113.7 tons
MAXIMUM/SORT		60.5 kg	60.5 kg
MINIMUM/SORT		0.8 kg	53.7 kg
			99.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND		0.95 yd³	90.2 yd³ 91.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL		14,603 kBq	
MAXIMUM/SORT		634 kBq	
MINIMUM/SORT		2.2 kBq	
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		6,796 kBq	5,741 kBq
MAXIMUM/SORT		425 kBq	18 kBq
MINIMUM/SORT		0 Bq	-17 kBq
SPECIFIC ACTIVITY		5,690 Bq/kg	50 Bq/kg

WORK HISTORY			
WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:25 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.55 hr
DOWN-TIME	1.02 hr
TOTAL SYSTEM PAUSE	0.47 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.49 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	91.2%
PRODUCTIVITY	91.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,898	
NONPROCESS RECORDS (Test, calibration, etc)	8	
20-SEC PROCESS RECORDS	1,899	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	1,181	AD=0 & MD=0 & MND>0
SOME SORT	717	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	298	29.8%

UNEXPLAIN TIME	PAUSE TIME
09:31:38	05:57

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,990	
2-SEC RECORDS WITH SORTS	999	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	212	82.8%
3 DETECTORS	39	15.2%
4 DETECTORS	4	1.6%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	256	
NET 2-SEC RECORDS WITH SORTS	743	
2-SEC PERIODS WITH NO SORTS	18,247	
AVG TIME BETWEEN 2-SEC SORTS	51.1	sec

1-GATE SORTS		529	ACT_ND	NUMBER	SPEC_A		ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)		(Bq)	(#)		(kBq)
1	15	2.8%	-14000	8	-231		4000	145	14.5%	4
2	73	13.8%	-12000	1	-198		8000	418	41.8%	8
3	98	18.5%	-10000	2	-165		12000	156	15.6%	12
4	99	18.7%	-8000	3	-132		16000	74	7.4%	16
5	113	21.4%	-6000	12	-99		20000	49	4.9%	20
6	90	17.0%	-4000	34	-66		24000	34	3.4%	24
7	36	6.8%	-2000	90	-33		28000	17	1.7%	28
8	5	0.9%	0	239	0		32000	15	1.5%	32
TOTAL	529		2000	367	33		36000	11	1.1%	36
			4000	410	66		40000	10	1.0%	40
2-GATE SORTS		470	6000	366	99		44000	12	1.2%	44
DETECTR	SORTS	FREQ%	8000	190	132		48000	7	0.7%	48
8			10000	112	165		52000	8	0.8%	52
9	34	7.2%	12000	56	198		56000	4	0.4%	56
10	72	15.3%	14000	12	231		60000	6	0.6%	60
11	88	18.7%	16000	4	264		64000	6	0.6%	64
12	98	20.9%	18000	0	298		68000	2	0.2%	68
13	93	19.8%	20000	1	331		72000	1	0.1%	72
14	68	14.5%	22000	0	364		76000	2	0.2%	76
15	17	3.6%	24000	0	397		80000	1	0.1%	80
TOTAL	470		26000	0	430		84000	1	0.1%	84
			>28000	0	0		>84000	20	2.0%	>84
			TOTAL	1907			TOTAL	999		

SUMMARY TOTALS

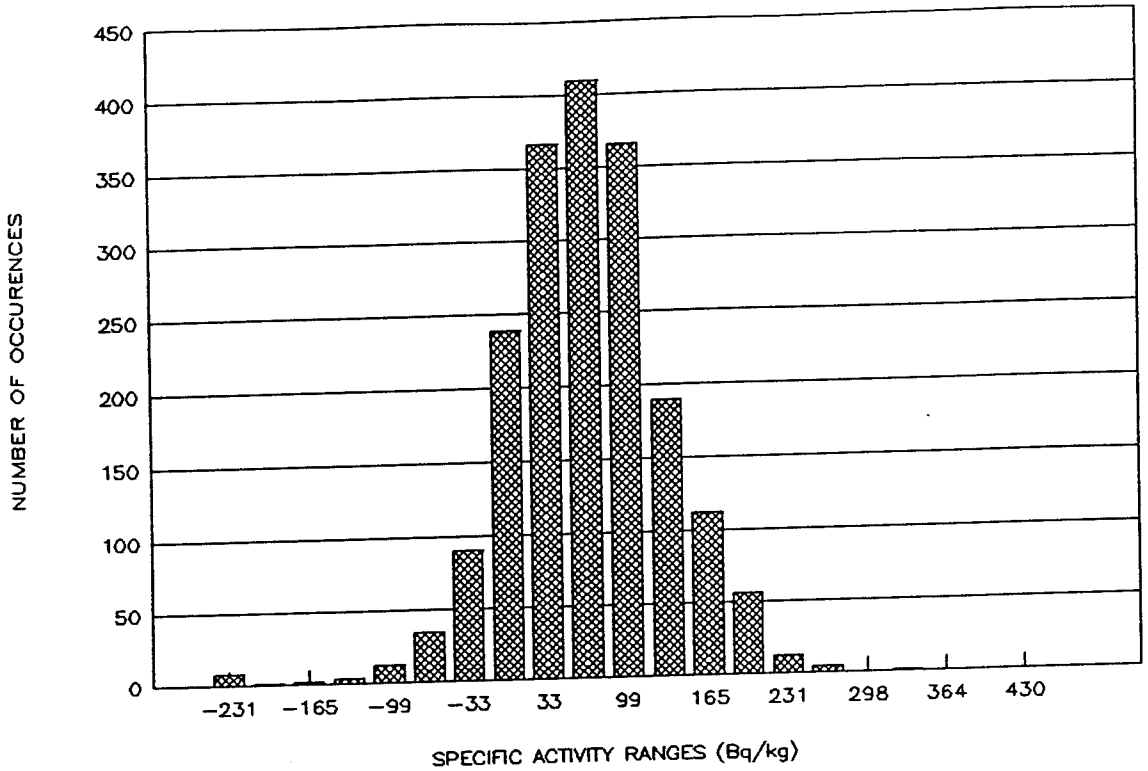
HOT PARTICLE EVENTS	987	SORTS BY ONE GATE ONLY	529
MULTIPARTICLE EVENTS	497	SORTS BY TWO GATES	470
DISTRIBUTED EVENTS	77		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

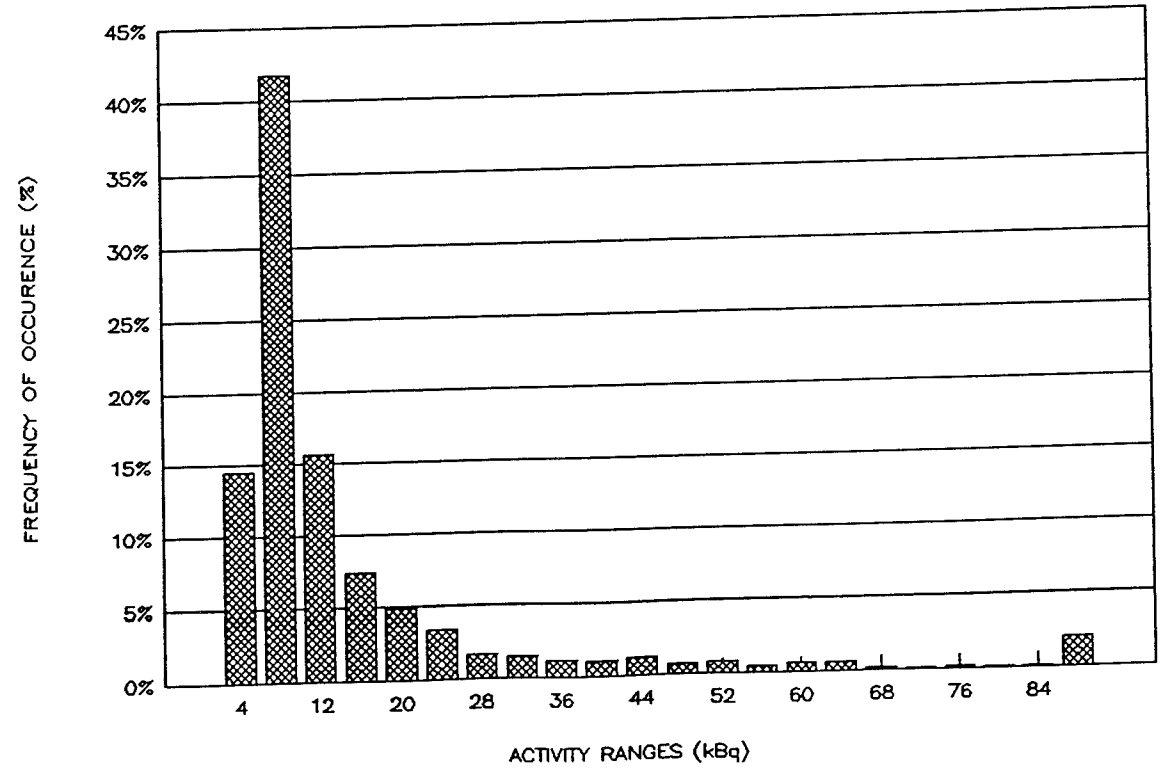
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 23-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 23-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 22-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.13 tons	112.4 tons	
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.89 yd³	89.1 yd³	90.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,094 kBq		
MAXIMUM/SORT	1,038 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,422 kBq	6,385 kBq	
MAXIMUM/SORT	785 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	6,582 Bq/kg	57 Bq/kg	

WORK HISTORY

WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.42 hr
DOWN-TIME	1.14 hr
TOTAL SYSTEM PAUSE	0.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.62 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	90.1%
PRODUCTIVITY	90.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,828	
NONPROCESS RECORDS (Test, calibration, etc)		4	
20-SEC PROCESS RECORDS		1,876	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,218	AD=0 & MD=0 & MND>0
SOME SORT		657	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	297	31.2%	

UNEXPLAIN TIME	PAUSE TIME
10:46:26	05:57

2-SEC COUNT PERIODS		18,760	
2-SEC RECORDS WITH SORTS		952	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	201	86.6%
	3 DETECTORS	28	12.1%
	4 DETECTORS	3	1.3%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	232	
NET 2-SEC RECORDS WITH SORTS		720	
2-SEC PERIODS WITH NO SORTS		18,040	
AVG TIME BETWEEN 2-SEC SORTS		52.1	sec

1-GATE SORTS		473	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	14	3.0%	-14000	0	-231	4000	155	16.3%	4
2	50	10.6%	-12000	1	-198	8000	374	39.3%	8
3	73	15.4%	-10000	0	-165	12000	134	14.1%	12
4	81	17.1%	-8000	0	-132	16000	69	7.2%	16
5	100	21.1%	-6000	4	-99	20000	40	4.2%	20
6	81	17.1%	-4000	11	-66	24000	30	3.2%	24
7	57	12.1%	-2000	71	-33	28000	23	2.4%	28
8	17	3.6%	0	188	0	32000	24	2.5%	32
TOTAL	473		2000	346	33	36000	14	1.5%	36
			4000	462	66	40000	15	1.6%	40
2-GATE SORTS		479	6000	400	99	44000	11	1.2%	44
DETECTR	SORTS	FREQ%	8000	253	132	48000	11	1.2%	48
8			10000	110	165	52000	3	0.3%	52
9	22	4.6%	12000	22	198	56000	7	0.7%	56
10	66	13.8%	14000	8	231	60000	4	0.4%	60
11	74	15.4%	16000	4	264	64000	4	0.4%	64
12	101	21.1%	18000	0	298	68000	3	0.3%	68
13	98	20.5%	20000	0	331	72000	1	0.1%	72
14	77	16.1%	22000	0	364	76000	1	0.1%	76
15	41	8.6%	24000	0	397	80000	3	0.3%	80
TOTAL	479		26000	0	430	84000	0	0.0%	84
			>28000	0	0	>84000	26	2.7%	>84
			TOTAL	1880		TOTAL	952		

SUMMARY TOTALS

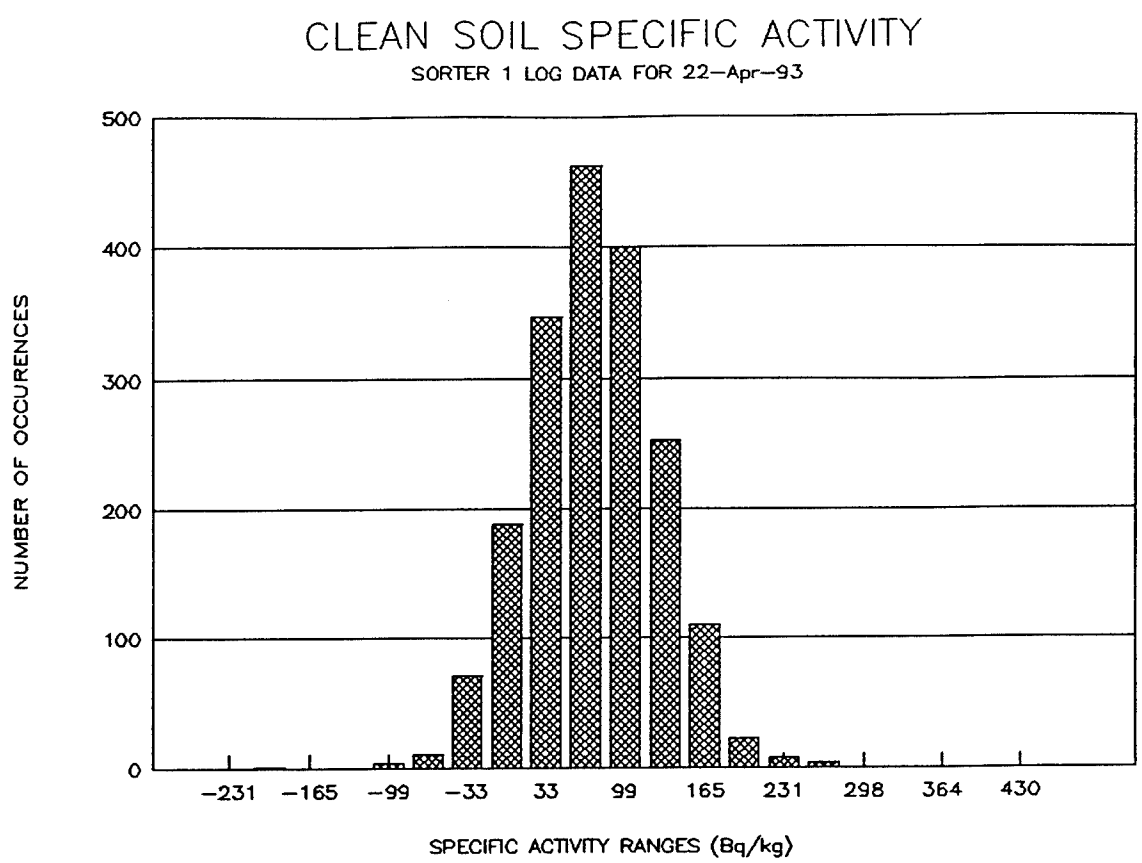
HOT PARTICLE EVENTS	968	SORTS BY ONE GATE ONLY	473
MULTIPARTICLE EVENTS	431	SORTS BY TWO GATES	479
DISTRIBUTED EVENTS	80		

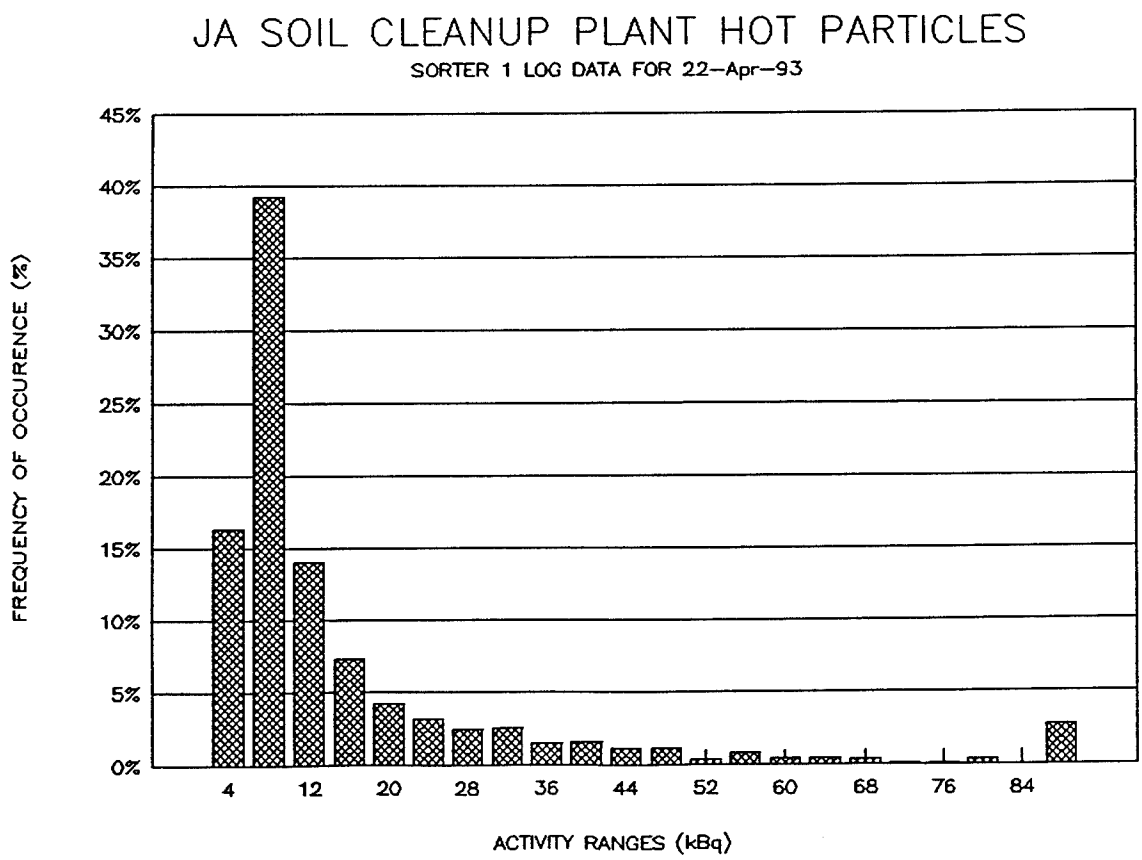
REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 22-Apr-93
NUMBER OF OCCURENCES
500
400
300
200
100
0
-231
-165
-99
-33
33
99
165
231
298
364
430
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 22-Apr-93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 22-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.15 tons	112.2 tons	
MAXIMUM/SORT	5.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
			99.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.91 yd³	88.9 yd³	89.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	17,883 kBq		
MAXIMUM/SORT	599 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,973 kBq	6,425 kBq	
MAXIMUM/SORT	464 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	6,938 Bq/kg	57 Bq/kg	

WORK HISTORY

WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.41 hr
DOWN-TIME	1.16 hr
TOTAL SYSTEM PAUSE	0.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.63 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	90.0%
PRODUCTIVITY	90.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,899		
NONPROCESS RECORDS (Test, calibration, etc)	7		
20-SEC PROCESS RECORDS	1,873		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	1,154	AD=0 & MD=0 & MND>0	
SOME SORT	719	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	288	28.1%	

UNEXPLAIN TIME	PAUSE TIME
10:41:07	05:57
12:10:07	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		18,730	
2-SEC RECORDS WITH SORTS		1,026	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	221	83.7%	
3 DETECTORS	38	14.4%	
4 DETECTORS	5	1.9%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	264		
NET 2-SEC RECORDS WITH SORTS		762	
2-SEC PERIODS WITH NO SORTS		17,968	
AVG TIME BETWEEN 2-SEC SORTS		49.2	sec

1-GATE SORTS DETECTR	SORTS	535 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	16	3.0%	-14000	0	-231	4000	125	12.2%	4
2	58	10.8%	-12000	2	-198	8000	435	42.4%	8
3	95	17.8%	-10000	0	-165	12000	155	15.1%	12
4	112	20.9%	-8000	1	-132	16000	72	7.0%	16
5	113	21.1%	-6000	3	-99	20000	52	5.1%	20
6	84	15.7%	-4000	20	-66	24000	33	3.2%	24
7	50	9.3%	-2000	71	-33	28000	18	1.8%	28
8	7	1.3%	0	203	0	32000	20	1.9%	32
TOTAL	535		2000	376	33	36000	17	1.7%	36
			4000	419	66	40000	12	1.2%	40
2-GATE SORTS		491	6000	362	99	44000	9	0.9%	44
DETECTR	SORTS	FREQ%	8000	247	132	48000	6	0.6%	48
8			10000	99	165	52000	6	0.6%	52
9	32	6.5%	12000	46	198	56000	5	0.5%	56
10	63	12.8%	14000	23	231	60000	7	0.7%	60
11	89	18.1%	16000	6	264	64000	6	0.6%	64
12	108	22.0%	18000	2	298	68000	5	0.5%	68
13	105	21.4%	20000	0	331	72000	8	0.8%	72
14	70	14.3%	22000	0	364	76000	2	0.2%	76
15	24	4.9%	24000	0	397	80000	3	0.3%	80
TOTAL	491		26000	0	430	84000	0	0.0%	84
			>28000	0	0	>84000	30	2.9%	>84
			TOTAL	1880		TOTAL	1026		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1008	SORTS BY ONE GATE ONLY	535
MULTIPARTICLE EVENTS	496	SORTS BY TWO GATES	491
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

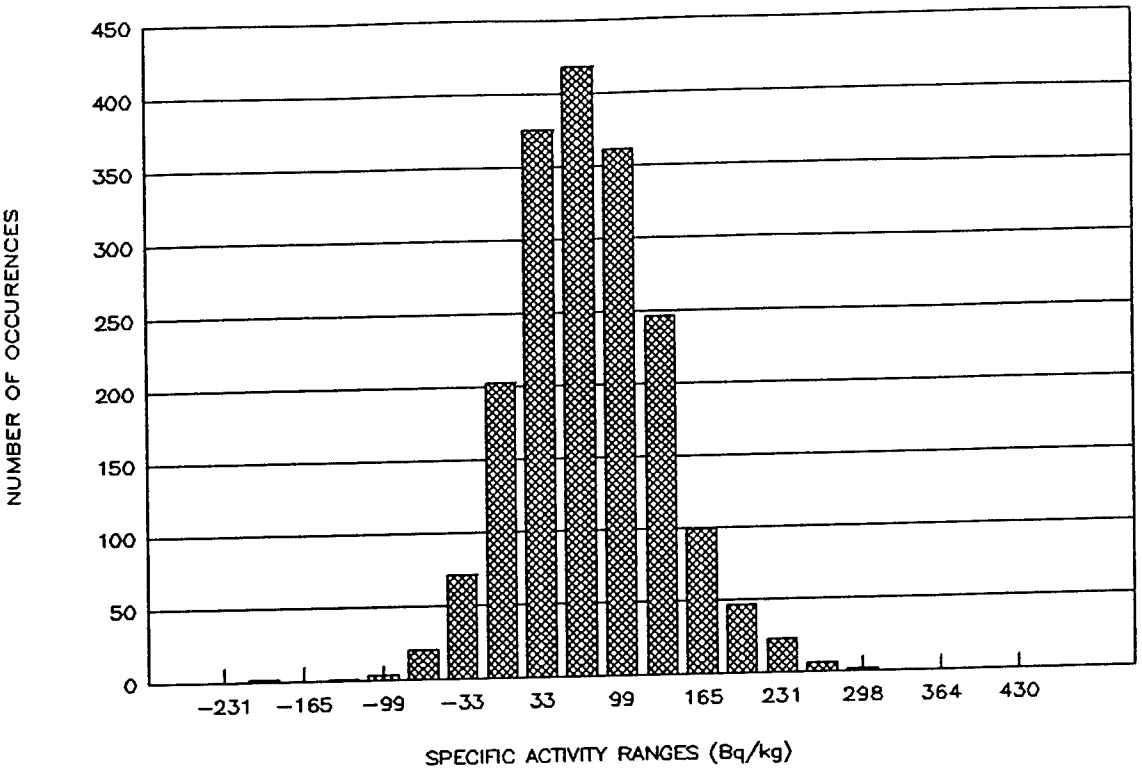
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

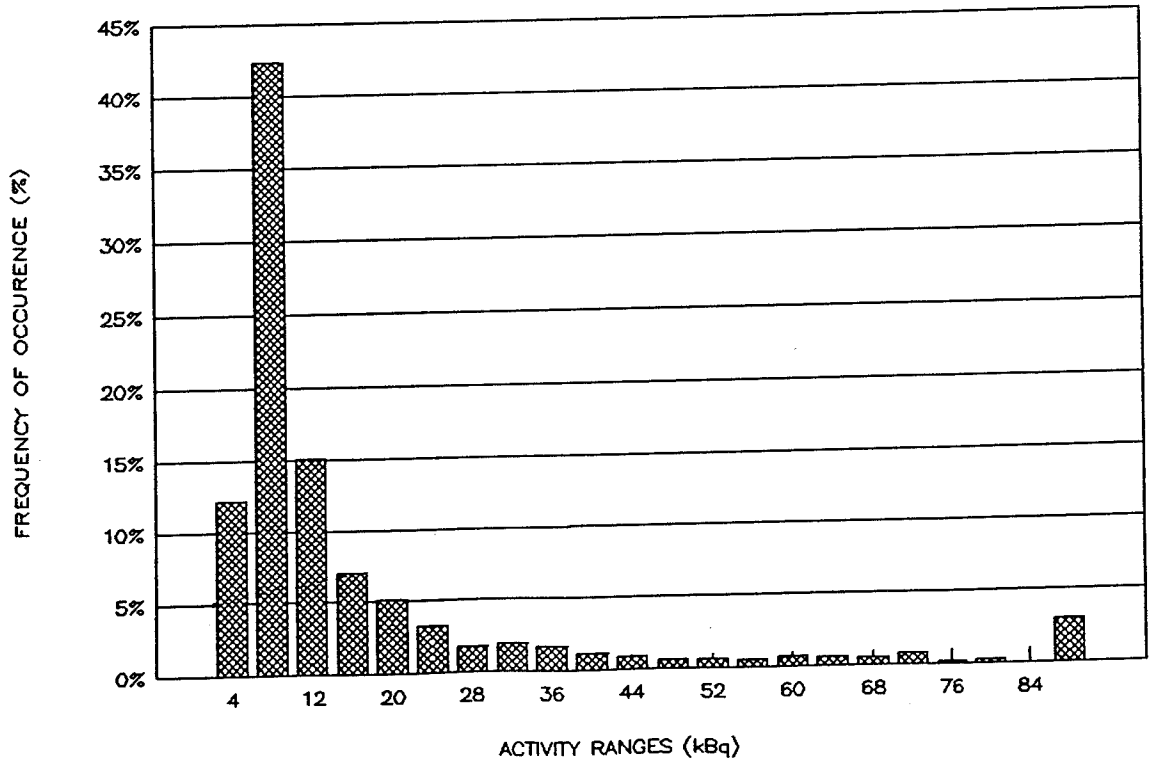
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 22-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 22-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 21-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.04 c/sec			
SORTER SOIL DENSITY	1.3 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.14 tons	114.9 tons	
MAXIMUM/SORT		7.6 kg	60.5 kg	
MINIMUM/SORT		0.8 kg	53 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				99.0%
EQUIVALENT SOIL-IN-GROUND		0.90 yd³	91.1 yd³	92.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		15,028 kBq		
MAXIMUM/SORT		410 kBq		
MINIMUM/SORT		2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		6,423 kBq	6,082 kBq	
MAXIMUM/SORT		234 kBq	14 kBq	
MINIMUM/SORT		0 Bq	-9 kBq	
SPECIFIC ACTIVITY		5,656 Bq/kg	53 Bq/kg	

WORK HISTORY			
WORK DAY START	05:54 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:54 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:14 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.65 hr
DOWN-TIME	0.95 hr
TOTAL SYSTEM PAUSE	0.40 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.34 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	91.8%
PRODUCTIVITY	91.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,978	
NONPROCESS RECORDS (Test, calibration, etc)			10	
20-SEC PROCESS RECORDS			1,917	
TOTAL SORT			0	MD>0 & MND=0
NO SORT			1,224	AD=0 & MD=0 & MND>0
SOME SORT			693	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	4			
AD=0 & MD	0			
AD<0 & MD	0			
ACT_P <5 kBq	288	27.1%		

UNEXPLAIN TIME	PAUSE TIME
07:03:39	05:54
11:24:14	08:13

JA SOIL CLEANUP PLANT LOG SUMMARY

13:07:54 10:33
14:37:34

2-SEC COUNT PERIODS	19,170		
2-SEC RECORDS WITH SORTS	1,061	(ACT_P >0 kBq)	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	246	90.1%	
3 DETECTORS	23	8.4%	
4 DETECTORS	4	1.5%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	273		
NET 2-SEC RECORDS WITH SORTS	788		
2-SEC PERIODS WITH NO SORTS	18,382		
AVG TIME BETWEEN 2-SEC SORTS	48.7	sec	

1-GATE SORTS DETECTR	SORTS	529 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	14	2.6%	-14000	0	-231
2	58	11.0%	-12000	1	-198
3	78	14.7%	-10000	0	-165
4	93	17.6%	-8000	5	-132
5	107	20.2%	-6000	2	-99
6	87	16.4%	-4000	21	-66
7	67	12.7%	-2000	78	-33
8	25	4.7%	0	228	0
TOTAL	529		2000	369	33
			4000	499	66
2-GATE SORTS		532	6000	354	99
DETECTR	SORTS	FREQ%	8000	227	132
8			10000	107	165
9	35	6.6%	12000	28	198
10	78	14.7%	14000	7	231
11	99	18.6%	16000	1	264
12	82	15.4%	18000	0	298
13	107	20.1%	20000	0	331
14	82	15.4%	22000	0	364
15	49	9.2%	24000	0	397
TOTAL	532		26000	0	430
			>28000	0	0
			TOTAL	1927	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	155	14.6%	4
8000	439	41.4%	8
12000	143	13.5%	12
16000	95	9.0%	16
20000	51	4.8%	20
24000	43	4.1%	24
28000	34	3.2%	28
32000	21	2.0%	32
36000	15	1.4%	36
40000	6	0.6%	40
44000	6	0.6%	44
48000	5	0.5%	48
52000	5	0.5%	52
56000	6	0.6%	56
60000	5	0.5%	60
64000	6	0.6%	64
68000	5	0.5%	68
72000	1	0.1%	72
76000	1	0.1%	76
80000	0	0.0%	80
84000	2	0.2%	84
>84000	17	1.6%	>84
TOTAL	1061		

SUMMARY TOTALS

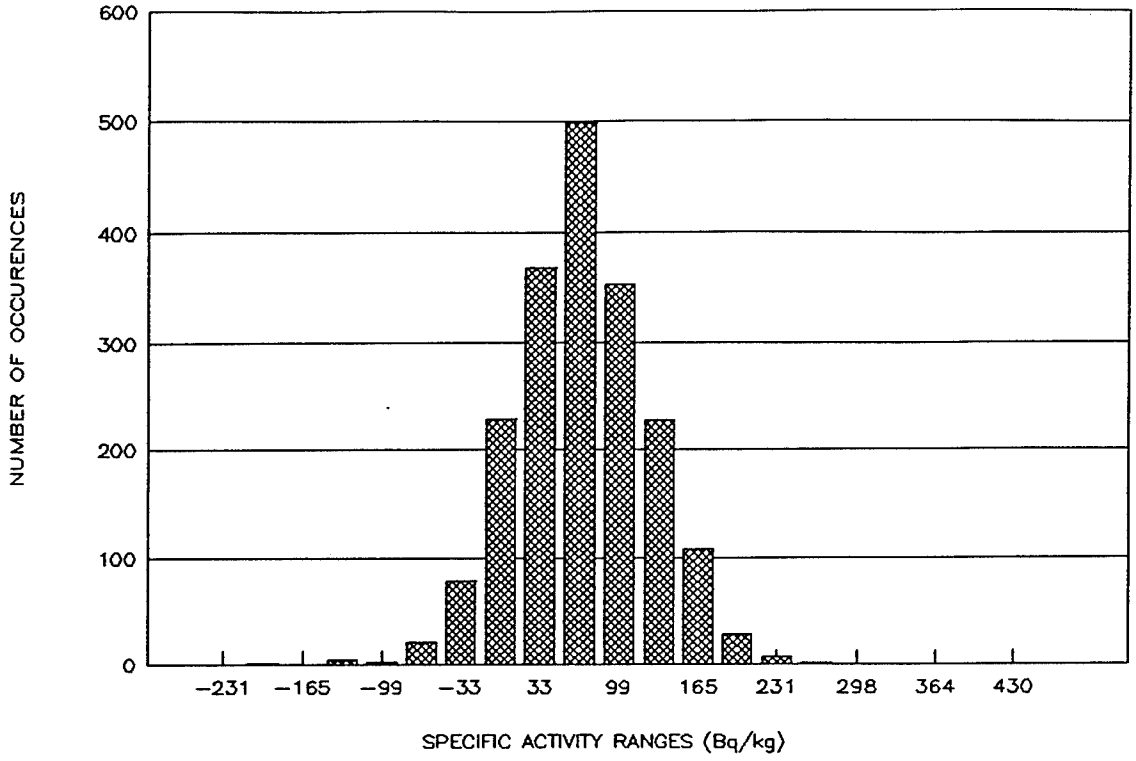
HOT PARTICLE EVENTS	1054	SORTS BY ONE GATE ONLY	529
MULTIPARTICLE EVENTS	434	SORTS BY TWO GATES	532
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

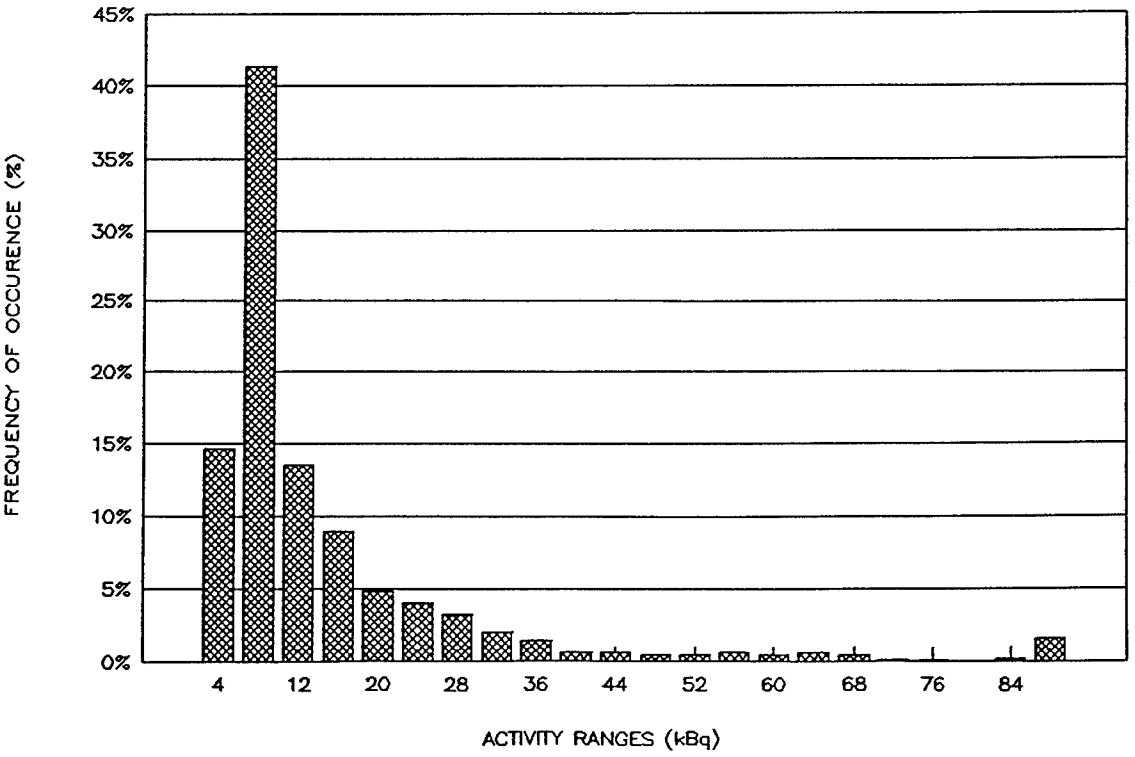
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 21-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 21-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 21-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.12 tons	115.3 tons	
MAXIMUM/SORT	5.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
			99.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.89 yd³	91.4 yd³	92.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,557 kBq		
MAXIMUM/SORT	477 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,874 kBq	6,229 kBq	
MAXIMUM/SORT	407 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,144 Bq/kg	54 Bq/kg	

WORK HISTORY

WORK DAY START	05:54 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:54 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:16 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.69 hr
DOWN-TIME	0.91 hr
TOTAL SYSTEM PAUSE	0.33 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.37 hr
SHUT-DOWN	0.55 hr
PLANT PERFORMANCE	92.1%
PRODUCTIVITY	92.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,888	
NONPROCESS RECORDS (Test, calibration, etc)		13	
20-SEC PROCESS RECORDS		1,924	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,198	AD=0 & MD=0 & MND>0
SOME SORT		726	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	289	30.0%	

UNEXPLAIN TIME	PAUSE TIME
07:27:20	05:54
07:50:00	

File S2JA0421.WR1

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JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,240		12:10:40
2-SEC RECORDS WITH SORTS	964	(ACT_P >0 kBq)	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	189	85.1%	
3 DETECTORS	29	13.1%	
4 DETECTORS	4	1.8%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	222		
NET 2-SEC RECORDS WITH SORTS	742		
2-SEC PERIODS WITH NO SORTS	18,498		
AVG TIME BETWEEN 2-SEC SORTS	51.9 sec		

1-GATE SORTS	491	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT FREQ%		ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 10	2.0%	-14000	3	-231	4000	131	13.6%	4
2 68	13.8%	-12000	3	-198	8000	417	43.3%	8
3 91	18.5%	-10000	2	-165	12000	145	15.0%	12
4 102	20.8%	-8000	3	-132	16000	77	8.0%	16
5 92	18.7%	-6000	5	-99	20000	37	3.8%	20
6 75	15.3%	-4000	24	-66	24000	21	2.2%	24
7 43	8.8%	-2000	91	-33	28000	26	2.7%	28
8 10	2.0%	0	207	0	32000	15	1.6%	32
TOTAL 491		2000	369	33	36000	12	1.2%	36
		4000	449	66	40000	10	1.0%	40
2-GATE SORTS	473	6000	391	99	44000	5	0.5%	44
DETECTR SORTS	FREQ%	8000	233	132	48000	13	1.3%	48
8		10000	91	165	52000	2	0.2%	52
9 22	4.7%	12000	43	198	56000	9	0.9%	56
10 71	15.0%	14000	20	231	60000	11	1.1%	60
11 116	24.5%	16000	2	264	64000	3	0.3%	64
12 92	19.5%	18000	1	298	68000	1	0.1%	68
13 91	19.2%	20000	0	331	72000	2	0.2%	72
14 61	12.9%	22000	0	364	76000	2	0.2%	76
15 20	4.2%	24000	0	397	80000	1	0.1%	80
TOTAL 473		26000	0	430	84000	3	0.3%	84
		>28000	0	0	>84000	21	2.2%	>84
		TOTAL	1937		TOTAL	964		

SUMMARY TOTALS

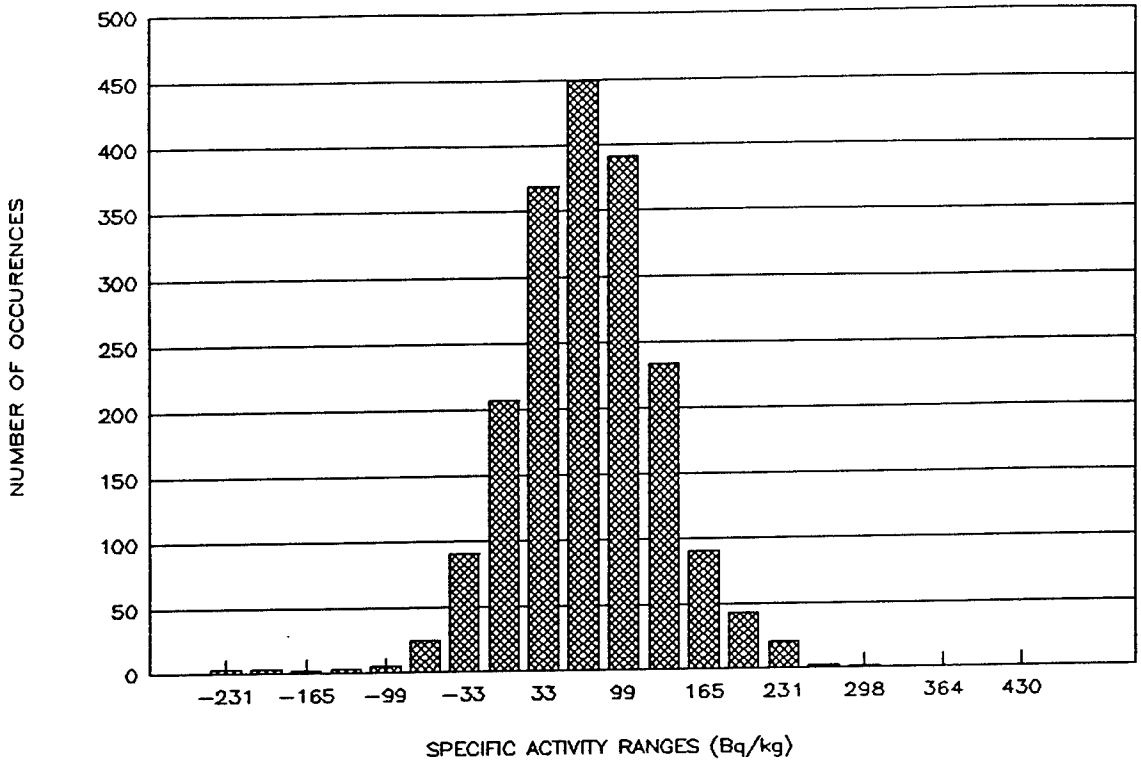
HOT PARTICLE EVENTS	979	SORTS BY ONE GATE ONLY	491
MULTIPARTICLE EVENTS	485	SORTS BY TWO GATES	473
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

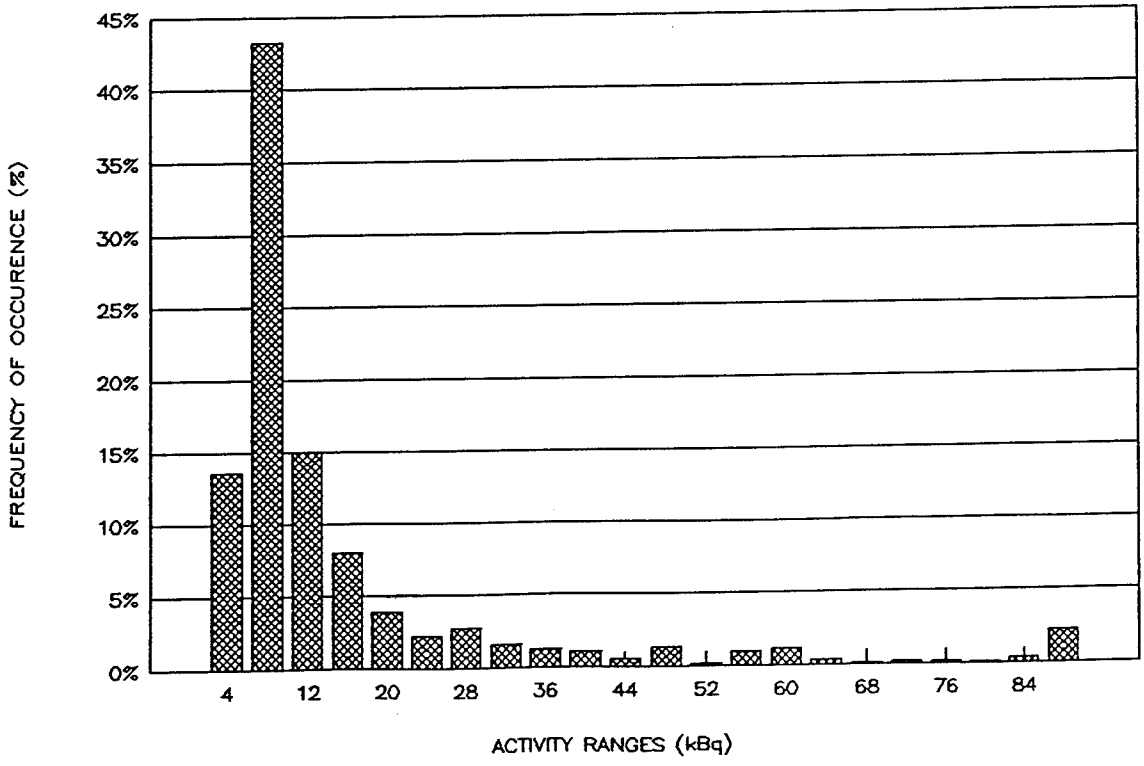
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 21-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 21-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.2 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.24 tons	102.8 tons	
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.99 yd³	81.5 yd³	82.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	17,377 kBq		
MAXIMUM/SORT	533 kBq		
MINIMUM/SORT	2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,460 kBq	7,225 kBq	
MAXIMUM/SORT	437 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	5,995 Bq/kg	70 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:35 AM	END SOIL PROCESSING	05:03 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.34 hr
DOWN-TIME	1.16 hr
TOTAL SYSTEM PAUSE	0.58 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.59 hr
SHUT-DOWN	0.44 hr
PLANT PERFORMANCE	89.9%
PRODUCTIVITY	89.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,998	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,861	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,081	AD=0 & MD=0 & MND>0
SOME SORT		779	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	4		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	382	33.6%	

UNEXPLAIN TIME	PAUSE TIME
09:02:32	06:08
10:26:52	11:48

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,610		11:48:32	11:56
2-SEC RECORDS WITH SORTS	1,137	(ACT_P >0 kBq)	11:56:11	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			13:43:51	
2 DETECTORS	234	85.4%		
3 DETECTORS	33	12.0%		
4 DETECTORS	5	1.8%		
5 DETECTORS	2	0.7%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	274			
NET 2-SEC RECORDS WITH SORTS	863			
2-SEC PERIODS WITH NO SORTS	17,747			
AVG TIME BETWEEN 2-SEC SORTS	43.1 sec			

1-GATE SORTS DETECTR	SORTS	567 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	8	1.4%	-14000	1	-250
2	61	10.8%	-12000	0	-215
3	93	16.4%	-10000	0	-179
4	107	18.9%	-8000	2	-143
5	120	21.2%	-6000	3	-107
6	86	15.2%	-4000	11	-72
7	71	12.5%	-2000	54	-36
8	21	3.7%	0	154	0
TOTAL	567		2000	315	36
			4000	427	72
2-GATE SORTS		570	6000	432	107
DETECTR	SORTS	FREQ%	8000	270	143
8			10000	128	179
9	32	5.6%	12000	52	215
10	76	13.3%	14000	19	250
11	110	19.3%	16000	2	286
12	91	16.0%	18000	1	322
13	108	18.9%	20000	0	358
14	93	16.3%	22000	0	394
15	60	10.5%	24000	0	429
TOTAL	570		26000	0	465
			>28000	0	0
			TOTAL	1871	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	185	16.3%	4
8000	492	43.3%	8
12000	136	12.0%	12
16000	72	6.3%	16
20000	57	5.0%	20
24000	49	4.3%	24
28000	31	2.7%	28
32000	23	2.0%	32
36000	17	1.5%	36
40000	4	0.4%	40
44000	5	0.4%	44
48000	5	0.4%	48
52000	4	0.4%	52
56000	2	0.2%	56
60000	5	0.4%	60
64000	10	0.9%	64
68000	3	0.3%	68
72000	1	0.1%	72
76000	2	0.2%	76
80000	2	0.2%	80
84000	1	0.1%	84
>84000	31	2.7%	>84
TOTAL	1137		

SUMMARY TOTALS

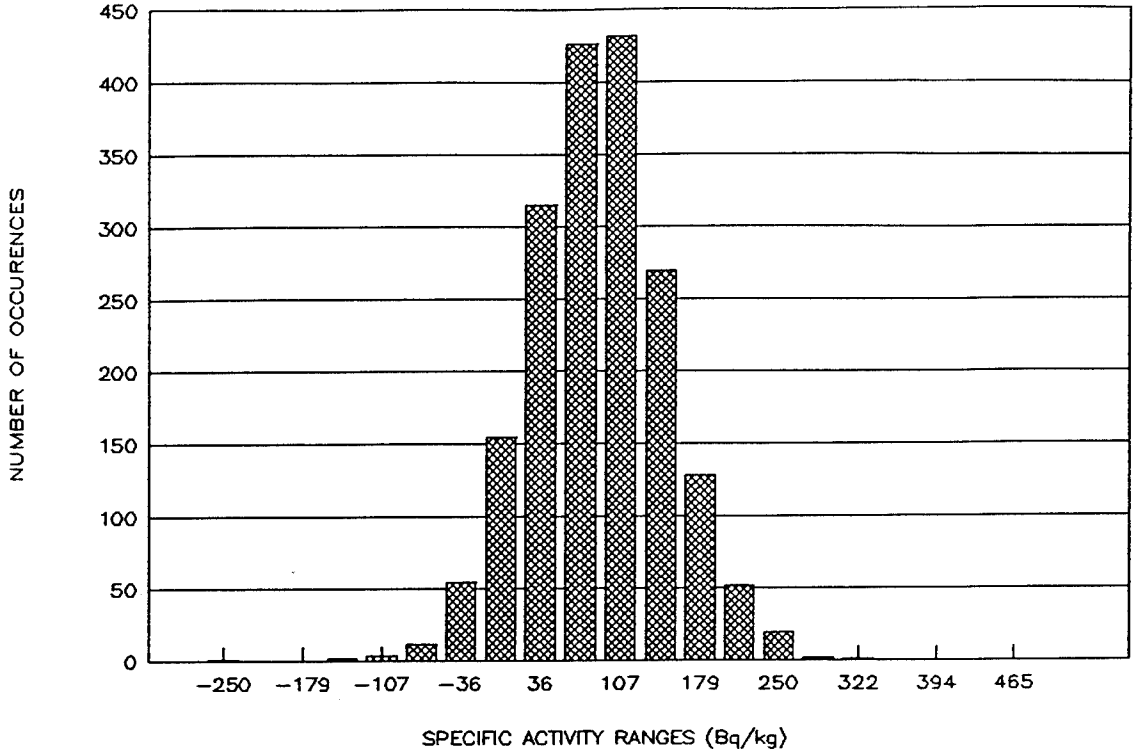
HOT PARTICLE EVENTS	1160	SORTS BY ONE GATE ONLY	567
MULTIPARTICLE EVENTS	534	SORTS BY TWO GATES	570
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

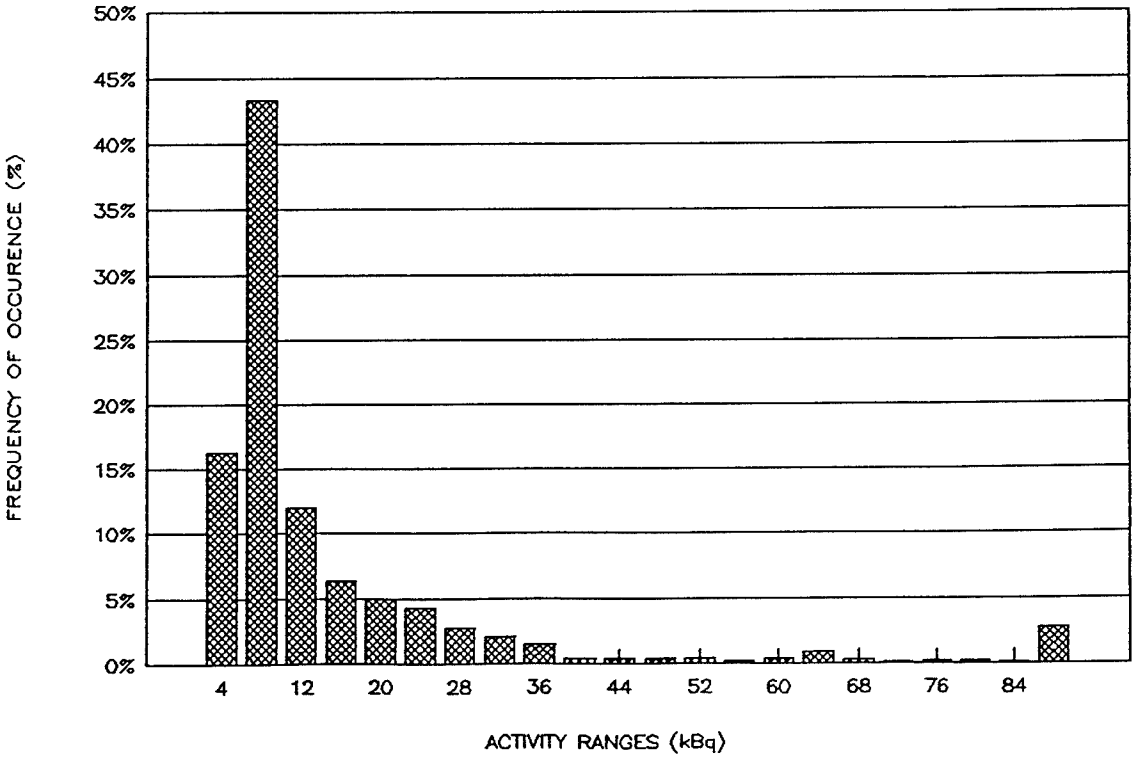
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 20-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 20-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 20-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec			
SORTER SOIL DENSITY	1.2 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.52 tons	103.5 tons	
MAXIMUM/SORT		58.7 kg	55.9 kg	
MINIMUM/SORT		0.7 kg	46.8 kg	
				98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		1.21 yd³	82.0 yd³	83.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		19,729 kBq		
MAXIMUM/SORT		1,467 kBq		
MINIMUM/SORT		2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		9,523 kBq	4,687 kBq	
MAXIMUM/SORT		1220 kBq	16 kBq	
MINIMUM/SORT		-19 Bq	-9 kBq	
SPECIFIC ACTIVITY		6,264 Bq/kg	45 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:35 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr	
AVAILABLE HOURS	11.5 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	10.43 hr	
DOWN-TIME	1.07 hr	
TOTAL SYSTEM PAUSE	0.44 hr	
NONAVAILABLE HOURS	0.0 hr	
START-UP	0.59 hr	
SHUT-DOWN	0.49 hr	
PLANT PERFORMANCE	90.7%	
PRODUCTIVITY	90.7%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,897	
NONPROCESS RECORDS (Test, calibration, etc)			17	
20-SEC PROCESS RECORDS			1,878	
TOTAL SORT			1	MD>0 & MND=0
NO SORT			855	AD=0 & MD=0 & MND>0
SOME SORT			1,021	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			1	
0<AD<1kBq & MD>0	1		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0		10:03:52	06:08
AD<0 & MD	1		12:01:16	
ACT_P <5 kBq	300	29.4%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,780	
2-SEC RECORDS WITH SORTS	1,019	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	229	87.4%
3 DETECTORS	29	11.1%
4 DETECTORS	3	1.1%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	262	
NET 2-SEC RECORDS WITH SORTS	757	
2-SEC PERIODS WITH NO SORTS	18,023	
AVG TIME BETWEEN 2-SEC SORTS	49.6	sec

1-GATE SORTS		542	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	13	2.4%	-14000	6	-250	4000	135	13.2%	4
2	66	12.2%	-12000	2	-215	8000	433	42.5%	8
3	113	20.8%	-10000	1	-179	12000	156	15.3%	12
4	109	20.1%	-8000	6	-143	16000	81	7.9%	16
5	104	19.2%	-6000	6	-107	20000	35	3.4%	20
6	86	15.9%	-4000	29	-72	24000	29	2.8%	24
7	39	7.2%	-2000	129	-36	28000	18	1.8%	28
8	12	2.2%	0	293	0	32000	14	1.4%	32
TOTAL	542		2000	393	36	36000	16	1.6%	36
			4000	441	72	40000	8	0.8%	40
2-GATE SORTS		477	6000	302	107	44000	11	1.1%	44
DETECTR	SORTS	FREQ%	8000	171	143	48000	3	0.3%	48
8			10000	73	179	52000	6	0.6%	52
9	31	6.5%	12000	28	215	56000	3	0.3%	56
10	69	14.5%	14000	5	250	60000	6	0.6%	60
11	104	21.8%	16000	7	286	64000	5	0.5%	64
12	101	21.2%	18000	3	322	68000	7	0.7%	68
13	83	17.4%	20000	0	358	72000	3	0.3%	72
14	68	14.3%	22000	0	394	76000	7	0.7%	76
15	21	4.4%	24000	0	429	80000	4	0.4%	80
TOTAL	477		26000	0	465	84000	0	0.0%	84
			>28000	0	0	>84000	39	3.8%	>84
			TOTAL	1895		TOTAL	1019		

SUMMARY TOTALS

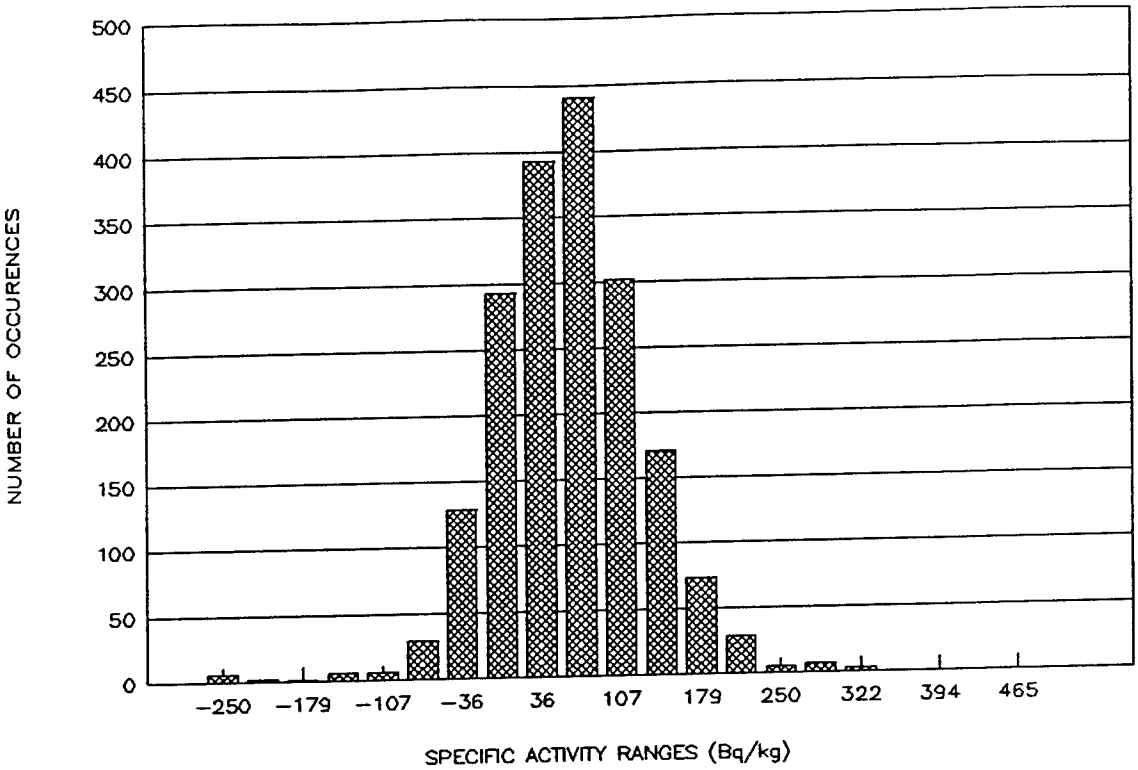
HOT PARTICLE EVENTS	1007	SORTS BY ONE GATE ONLY	542
MULTIPARTICLE EVENTS	1081	SORTS BY TWO GATES	477
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

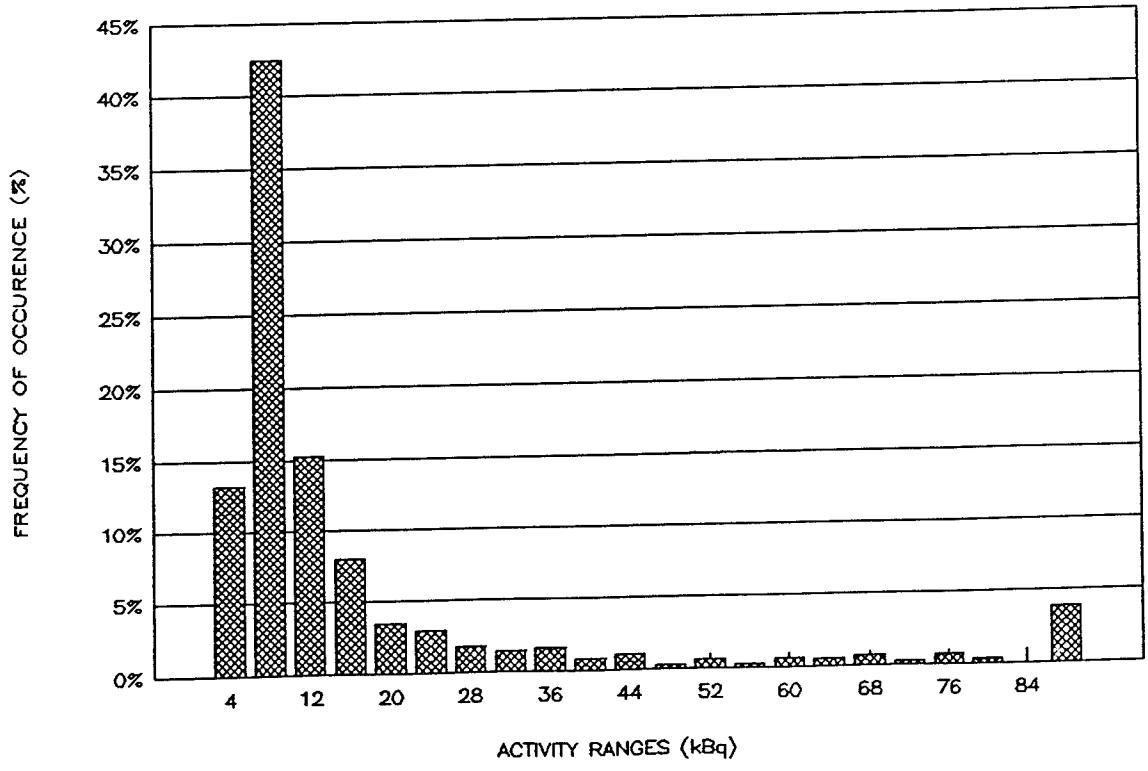
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 20-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 19-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.47 tons	98.7 tons	
MAXIMUM/SORT	7.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.17 yd³	78.2 yd³	79.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	30,900 kBq		
MAXIMUM/SORT	1,590 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	12,455 kBq	7,636 kBq	
MAXIMUM/SORT	1185 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	8,468 Bq/kg	77 Bq/kg	

WORK HISTORY

WORK DAY START	06:09 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:09 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:35 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.4 hr
AVAILABLE HOURS	11.4 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.38 hr
DOWN-TIME	0.97 hr
TOTAL SYSTEM PAUSE	0.43 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.44 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	91.5%
PRODUCTIVITY	91.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,454	
NONPROCESS RECORDS (Test, calibration, etc)		4	
20-SEC PROCESS RECORDS		1,869	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		943	AD=0 & MD=0 & MND>0
SOME SORT		926	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	473	29.8%	

UNEXPLAIN TIME	PAUSE TIME
07:48:36	06:09
12:31:56	06:10

JA SOIL CLEANUP PLANT LOG SUMMARY

12:49:56

2-SEC COUNT PERIODS		18,690	
2-SEC RECORDS WITH SORTS		1,585	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	365	83.9%
	3 DETECTORS	57	13.1%
	4 DETECTORS	11	2.5%
	5 DETECTORS	2	0.5%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	435	
NET 2-SEC RECORDS WITH SORTS		1,150	
2-SEC PERIODS WITH NO SORTS		17,540	
AVG TIME BETWEEN 2-SEC SORTS		32.5	sec

1-GATE SORTS DETECTR	SORTS	794 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	18	2.3%	-14000	1	-261
2	81	10.2%	-12000	0	-224
3	128	16.1%	-10000	1	-187
4	142	17.9%	-8000	2	-149
5	166	20.9%	-6000	1	-112
6	125	15.7%	-4000	17	-75
7	101	12.7%	-2000	57	-37
8	33	4.2%	0	159	0
TOTAL	794		2000	299	37
			4000	397	75
2-GATE SORTS		791	6000	394	112
DETECTR	SORTS	FREQ%	8000	301	149
8			10000	152	187
9	49	6.2%	12000	57	224
10	115	14.5%	14000	22	261
11	137	17.3%	16000	9	299
12	137	17.3%	18000	3	336
13	168	21.2%	20000	1	373
14	113	14.3%	22000	0	410
15	72	9.1%	24000	0	448
TOTAL	791		26000	0	485
			>28000	0	0
			TOTAL	1873	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	221	13.9%	4
8000	664	41.9%	8
12000	222	14.0%	12
16000	132	8.3%	16
20000	79	5.0%	20
24000	52	3.3%	24
28000	30	1.9%	28
32000	32	2.0%	32
36000	29	1.8%	36
40000	16	1.0%	40
44000	12	0.8%	44
48000	10	0.6%	48
52000	5	0.3%	52
56000	8	0.5%	56
60000	3	0.2%	60
64000	8	0.5%	64
68000	6	0.4%	68
72000	3	0.2%	72
76000	3	0.2%	76
80000	2	0.1%	80
84000	3	0.2%	84
>84000	45	2.8%	>84
TOTAL	1585		

SUMMARY TOTALS

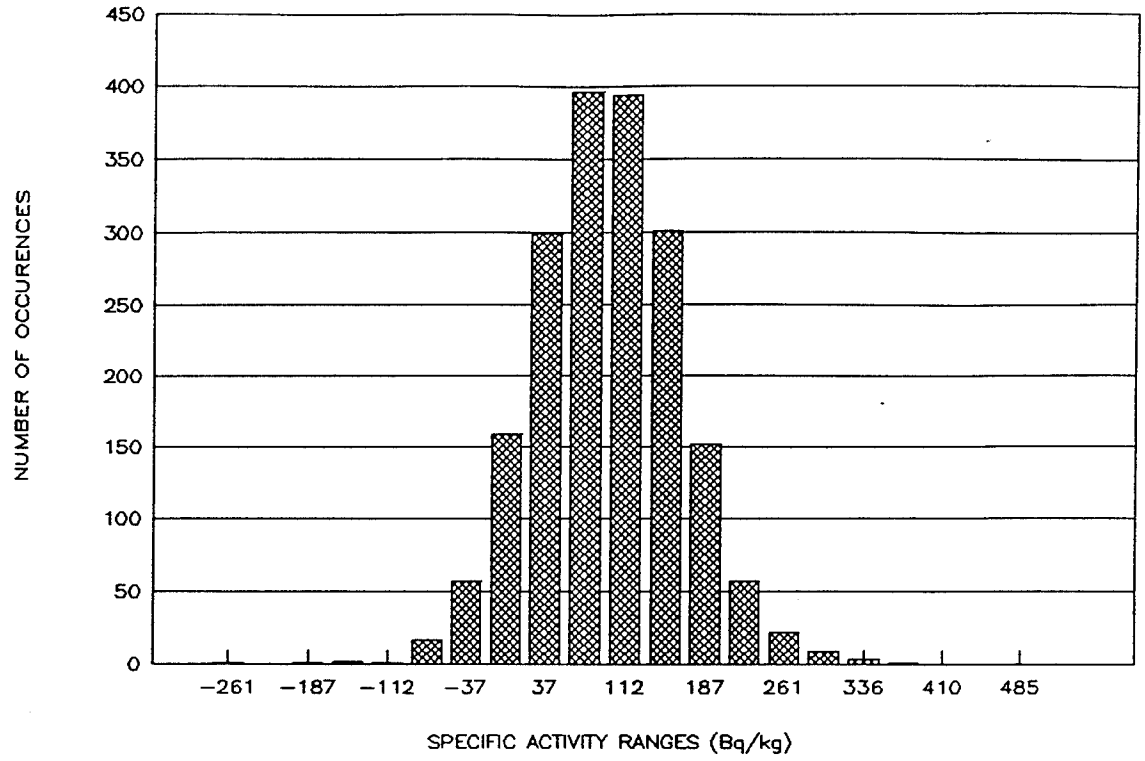
HOT PARTICLE EVENTS	1590	SORTS BY ONE GATE ONLY	794
MULTIPARTICLE EVENTS	612	SORTS BY TWO GATES	791
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

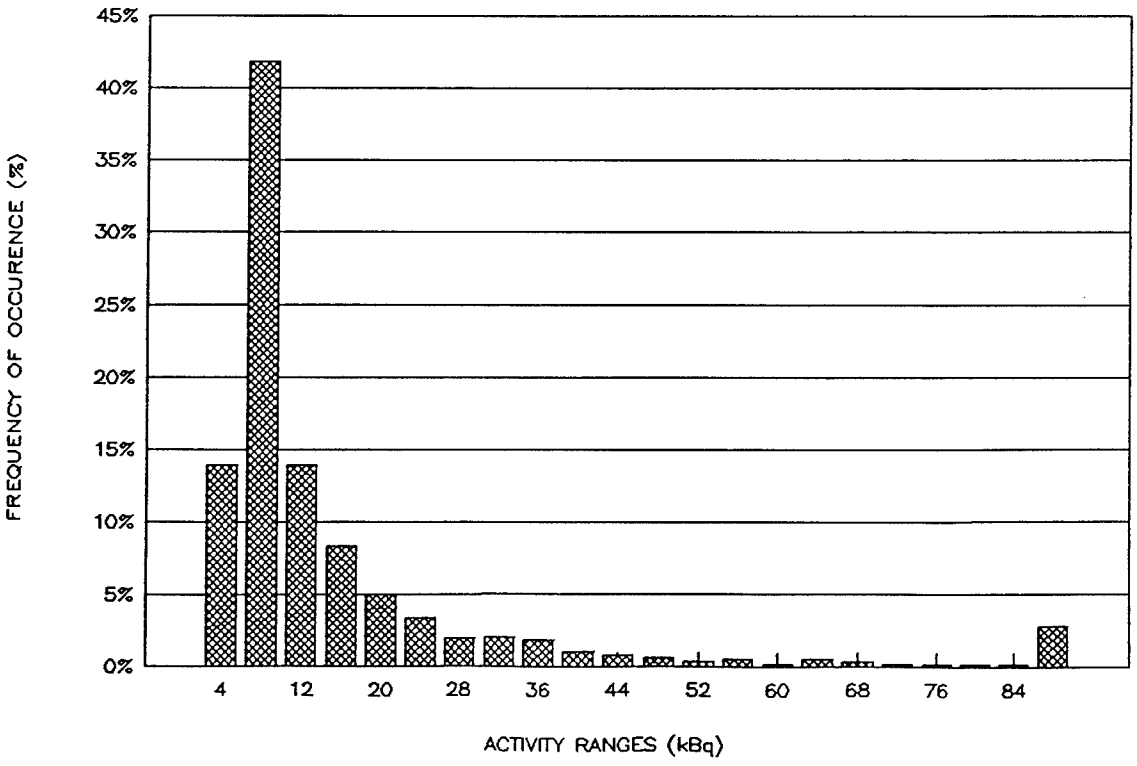
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 19-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 19-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 19-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.46 tons	97.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
			97.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			79.3 yd³/day
EQUIVALENT SOIL-IN-GROUND	1.95 yd³	77.4 yd³	
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,595 kBq		
MAXIMUM/SORT	573 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	11,691 kBq	5,269 kBq	
MAXIMUM/SORT	428 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-17 kBq	
SPECIFIC ACTIVITY	4,758 Bq/kg	54 Bq/kg	

WORK HISTORY

WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:50 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:35 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.7 hr
AVAILABLE HOURS	11.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.38 hr
DOWN-TIME	1.29 hr
TOTAL SYSTEM PAUSE	0.43 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.76 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	89.0%
PRODUCTIVITY	89.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,346	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	1,868	
TOTAL SORT	5	MD>0 & MND=0
NO SORT	541	AD=0 & MD=0 & MND>0
SOME SORT	1,322	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	463	31.3%

UNEXPLAIN TIME	PAUSE TIME
None	06:09
	06:10

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,680	
2-SEC RECORDS WITH SORTS	1,478	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	317	85.4%
3 DETECTORS	48	12.9%
4 DETECTORS	6	1.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	371	
NET 2-SEC RECORDS WITH SORTS	1,107	
2-SEC PERIODS WITH NO SORTS	17,573	
AVG TIME BETWEEN 2-SEC SORTS	33.7 sec	

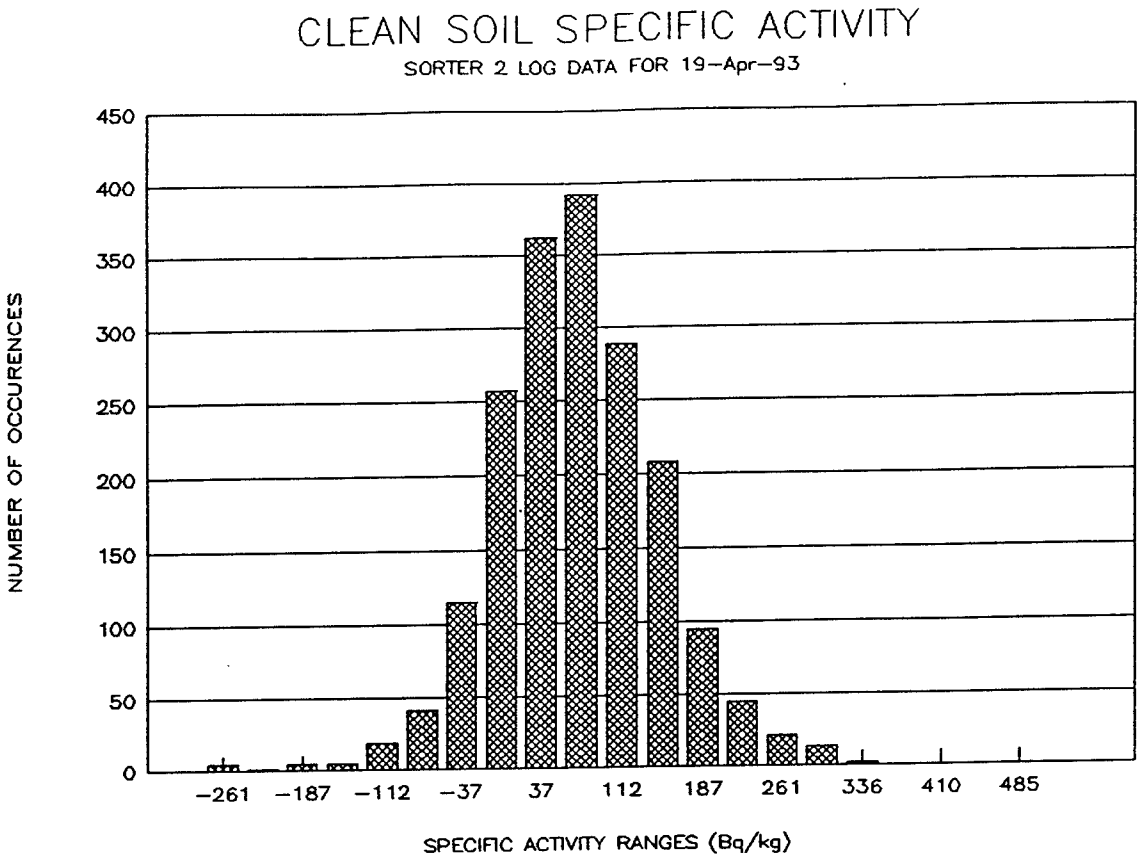
1-GATE SORTS		782	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	21	2.7%	-14000	4	-261	4000	209	14.1%	4
2	83	10.6%	-12000	1	-224	8000	641	43.4%	8
3	164	21.0%	-10000	4	-187	12000	218	14.7%	12
4	168	21.5%	-8000	4	-149	16000	129	8.7%	16
5	164	21.0%	-6000	18	-112	20000	71	4.8%	20
6	112	14.3%	-4000	41	-75	24000	42	2.8%	24
7	62	7.9%	-2000	115	-37	28000	18	1.2%	28
8	8	1.0%	0	257	0	32000	27	1.8%	32
TOTAL	782		2000	363	37	36000	22	1.5%	36
			4000	393	75	40000	11	0.7%	40
2-GATE SORTS		696	6000	289	112	44000	16	1.1%	44
DETECTR	SORTS	FREQ%	8000	208	149	48000	9	0.6%	48
8			10000	95	187	52000	4	0.3%	52
9	35	5.0%	12000	45	224	56000	5	0.3%	56
10	91	13.1%	14000	21	261	60000	6	0.4%	60
11	171	24.6%	16000	13	299	64000	7	0.5%	64
12	156	22.4%	18000	2	336	68000	4	0.3%	68
13	122	17.5%	20000	0	373	72000	1	0.1%	72
14	90	12.9%	22000	0	410	76000	3	0.2%	76
15	31	4.5%	24000	0	448	80000	2	0.1%	80
TOTAL	696		26000	0	485	84000	2	0.1%	84
			>28000	0	0	>84000	31	2.1%	>84
			TOTAL	1873		TOTAL	1478		

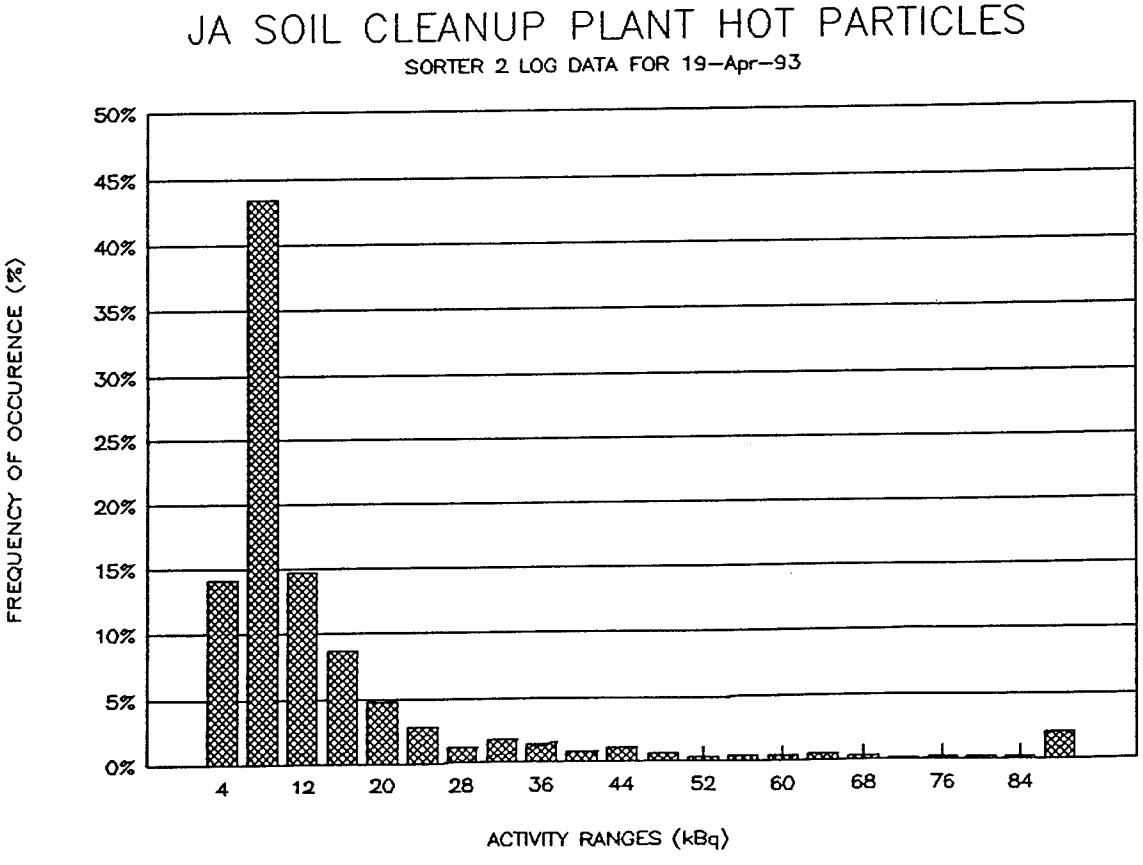
SUMMARY TOTALS

HOT PARTICLE EVENTS	1465	SORTS BY ONE GATE ONLY	782
MULTIPARTICLE EVENTS	1821	SORTS BY TWO GATES	696
DISTRIBUTED EVENTS	389		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 19-Apr-93
NUMBER OF OCCURENCES
450
400
350
300
250
200
150
100
50
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 19-Apr-93
FREQUENCY OF OCCURENCE (%)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 17-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.74 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.61 tons	73.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	40.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.9%
EQUIVALENT SOIL-IN-GROUND	1.28 yd³	58.6 yd³	59.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,566 kBq		
MAXIMUM/SORT	443 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,998 kBq	6,274 kBq	
MAXIMUM/SORT	348 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	4,957 Bq/kg	85 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:00 AM	END SOIL PROCESSING	03:08 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.83 hr
DOWN-TIME	3.67 hr
TOTAL SYSTEM PAUSE	1.23 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.01 hr
SHUT-DOWN	2.35 hr
PLANT PERFORMANCE	68.1%
PRODUCTIVITY	68.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,801		
NONPROCESS RECORDS (Test, calibration, etc)	19		
20-SEC PROCESS RECORDS	1,409		
TOTAL SORT	2	MD>0 & MND=0	
NO SORT	691	AD=0 & MD=0 & MND>0	
SOME SORT	716	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	584	42.0%	

UNEXPLAIN TIME	PAUSE TIME
13:50:35	06:00
	07:04

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		14,090	
2-SEC RECORDS WITH SORTS		1,392	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	305		90.2%
3 DETECTORS	31		9.2%
4 DETECTORS	2		0.6%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		338	
NET 2-SEC RECORDS WITH SORTS		1,054	
2-SEC PERIODS WITH NO SORTS		13,036	
AVG TIME BETWEEN 2-SEC SORTS		26.7 sec	

1-GATE SORTS DETECTR	SORTS	692 FREQ%
1	11	1.6%
2	61	8.8%
3	109	15.8%
4	121	17.5%
5	139	20.1%
6	110	15.9%
7	113	16.3%
8	28	4.0%
TOTAL	692	

2-GATE SORTS DETECTR	SORTS	700 FREQ%
8		
9	31	4.4%
10	79	11.3%
11	118	16.9%
12	133	19.0%
13	132	18.9%
14	120	17.1%
15	87	12.4%
TOTAL	700	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	5	-261
-12000	6	-224
-10000	5	-187
-8000	4	-149
-6000	4	-112
-4000	14	-75
-2000	46	-37
0	162	0
2000	230	37
4000	262	75
6000	229	112
8000	164	149
10000	120	187
12000	72	224
14000	45	261
16000	34	299
18000	15	336
20000	8	373
22000	3	410
24000	0	448
26000	0	485
>28000	0	0
TOTAL	1428	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	282	20.3%	4
8000	689	49.5%	8
12000	169	12.1%	12
16000	69	5.0%	16
20000	39	2.8%	20
24000	35	2.5%	24
28000	17	1.2%	28
32000	13	0.9%	32
36000	11	0.8%	36
40000	7	0.5%	40
44000	2	0.1%	44
48000	6	0.4%	48
52000	5	0.4%	52
56000	6	0.4%	56
60000	2	0.1%	60
64000	5	0.4%	64
68000	7	0.5%	68
72000	6	0.4%	72
76000	3	0.2%	76
80000	2	0.1%	80
84000	0	0.0%	84
>84000	17	1.2%	>84
TOTAL	1392		

SUMMARY TOTALS

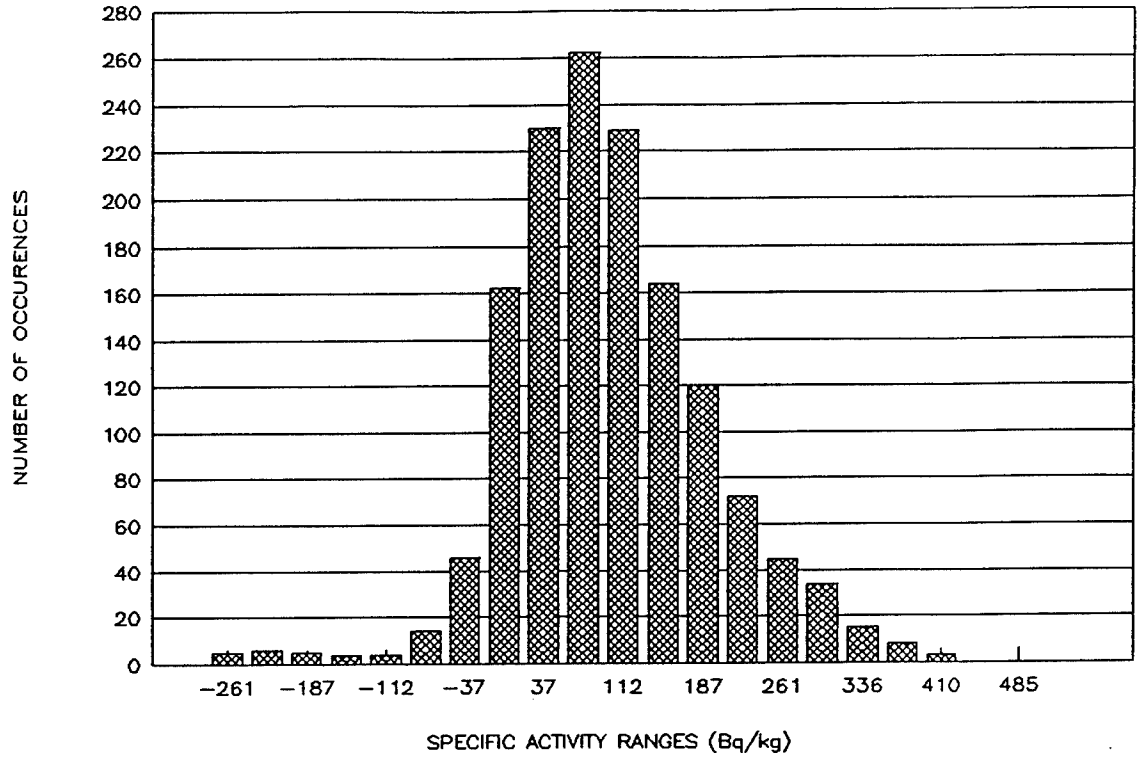
HOT PARTICLE EVENTS	1487	SORTS BY ONE GATE ONLY	692
MULTIPARTICLE EVENTS	776	SORTS BY TWO GATES	700
DISTRIBUTED EVENTS	152		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

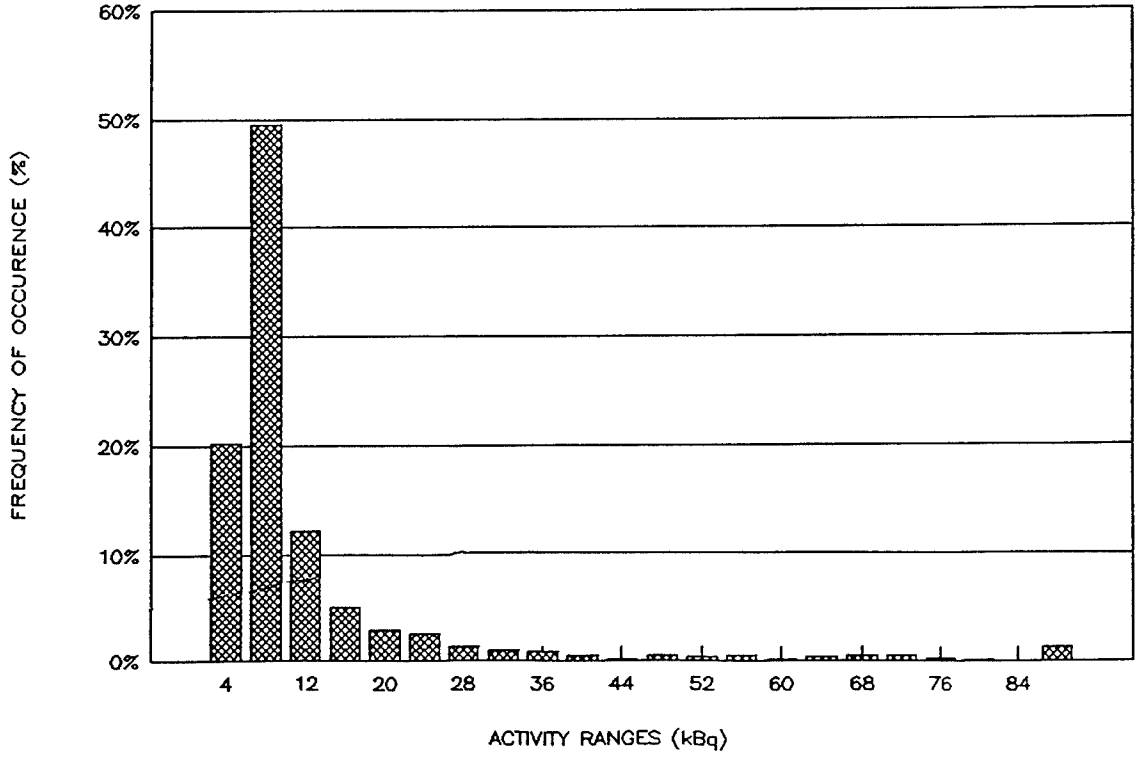
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 17-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 17-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 17-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.14 tons	71.3 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
			95.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	2.49 yd³	56.5 yd³	59.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	20,775 kBq		
MAXIMUM/SORT	1,488 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	12,371 kBq	6,805 kBq	
MAXIMUM/SORT	1316 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-17 kBq	
SPECIFIC ACTIVITY	3,935 Bq/kg	95 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:00 AM	END SOIL PROCESSING	03:07 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.72 hr
DOWN-TIME	3.78 hr
TOTAL SYSTEM PAUSE	1.23 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.00 hr
SHUT-DOWN	2.38 hr
PLANT PERFORMANCE	67.1%
PRODUCTIVITY	67.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,762	
NONPROCESS RECORDS (Test, calibration, etc)		35	
20-SEC PROCESS RECORDS		1,390	
TOTAL SORT		19	MD>0 & MND=0
NO SORT		403	AD=0 & MD=0 & MND>0
SOME SORT		967	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	1		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	520	37.9%	

UNEXPLAIN TIME	PAUSE TIME
08:11:55	06:00
11:10:55	07:04

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,900	
2-SEC RECORDS WITH SORTS	1,372	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	268	83.2%
3 DETECTORS	48	14.9%
4 DETECTORS	6	1.9%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	322	
NET 2-SEC RECORDS WITH SORTS	1,050	
2-SEC PERIODS WITH NO SORTS	12,850	
AVG TIME BETWEEN 2-SEC SORTS	26.5	sec

1-GATE SORTS DETECTR	SORTS	720 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	17	2.4%	-14000	13	-261	4000	262	19.1%	4
2	108	15.0%	-12000	6	-224	8000	657	47.9%	8
3	99	13.8%	-10000	4	-187	12000	160	11.7%	12
4	120	16.7%	-8000	4	-149	16000	84	6.1%	16
5	144	20.0%	-6000	5	-112	20000	41	3.0%	20
6	120	16.7%	-4000	11	-75	24000	25	1.8%	24
7	94	13.1%	-2000	36	-37	28000	20	1.5%	28
8	18	2.5%	0	119	0	32000	21	1.5%	32
TOTAL	720		2000	213	37	36000	13	0.9%	36
			4000	248	75	40000	13	0.9%	40
2-GATE SORTS		652	6000	252	112	44000	10	0.7%	44
DETECTR	SORTS	FREQ%	8000	177	149	48000	4	0.3%	48
8			10000	152	187	52000	5	0.4%	52
9	49	7.5%	12000	95	224	56000	8	0.6%	56
10	88	13.5%	14000	49	261	60000	3	0.2%	60
11	109	16.7%	16000	30	299	64000	3	0.2%	64
12	128	19.6%	18000	11	336	68000	6	0.4%	68
13	121	18.6%	20000	0	373	72000	1	0.1%	72
14	113	17.3%	22000	0	410	76000	4	0.3%	76
15	44	6.7%	24000	0	448	80000	2	0.1%	80
TOTAL	652		26000	0	485	84000	2	0.1%	84
			>28000	0	0	>84000	28	2.0%	>84
			TOTAL	1425		TOTAL	1372		

SUMMARY TOTALS

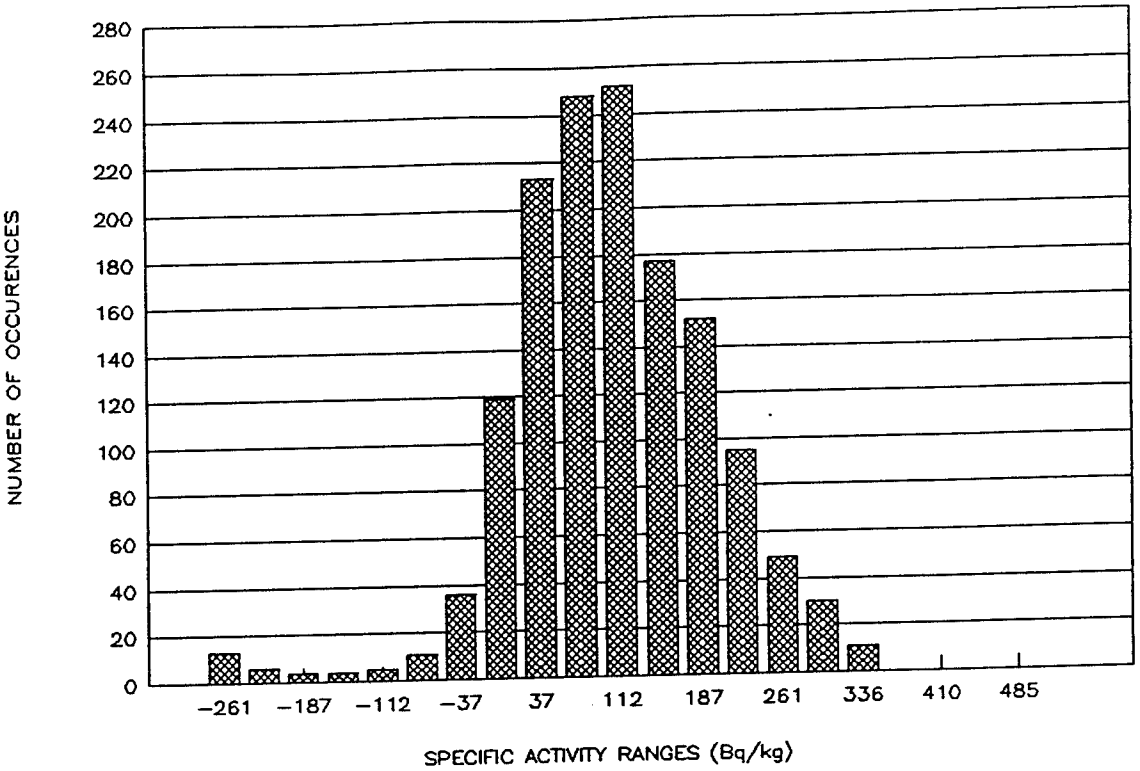
HOT PARTICLE EVENTS	1441	SORTS BY ONE GATE ONLY	720
MULTIPARTICLE EVENTS	1856	SORTS BY TWO GATES	652
DISTRIBUTED EVENTS	1402		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

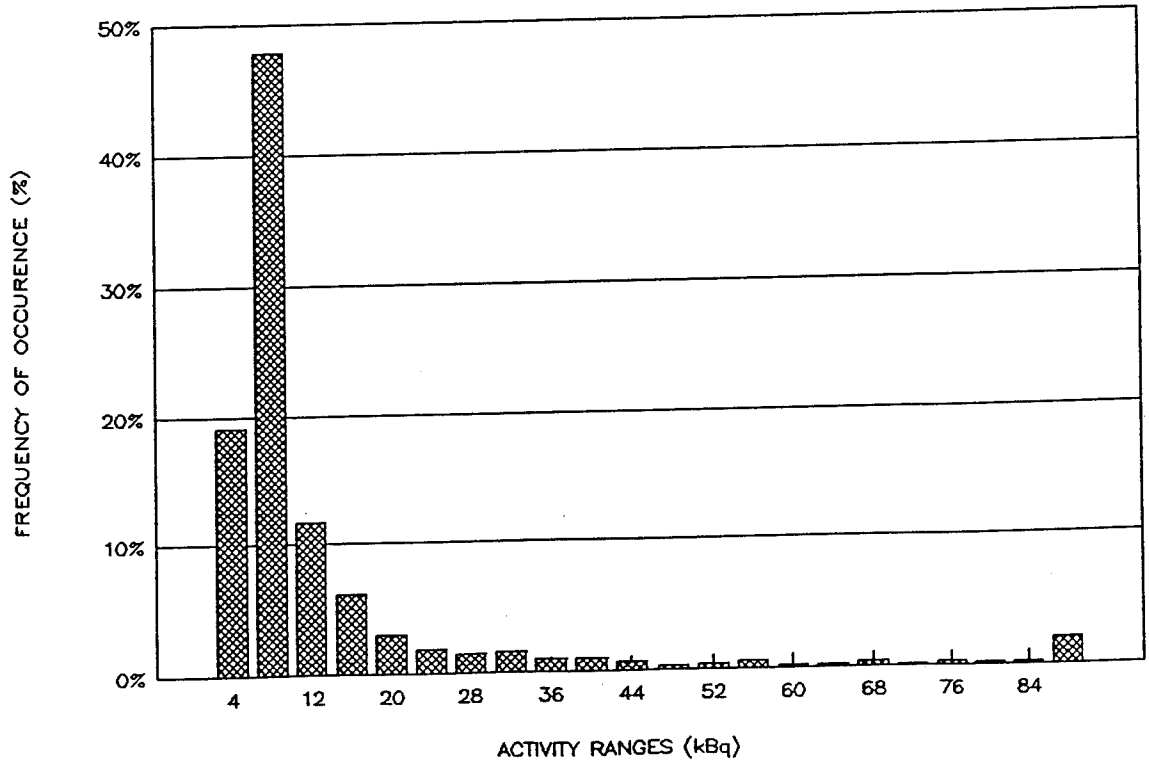
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 17-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 17-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 16-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.75 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.30 tons	66.8 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.24 yd³	52.9 yd³	53.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,975 kBq		
MAXIMUM/SORT	227 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,755 kBq	531 kBq	
MAXIMUM/SORT	188 kBq	11 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	5,812 Bq/kg	8 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	10:01 AM	PLANT SHUT-DOWN	05:01 PM
START SOIL PROCESSING	10:02 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	7.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.96 hr
DOWN-TIME	0.04 hr
TOTAL SYSTEM PAUSE	0.60 hr
NONAVAILABLE HOURS	4.5 hr
START-UP	0.02 hr
SHUT-DOWN	0.03 hr
PLANT PERFORMANCE	99.4%
PRODUCTIVITY	60.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,553	
NONPROCESS RECORDS (Test, calibration, etc)		7	
20-SEC PROCESS RECORDS		1,252	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		992	AD=0 & MD=0 & MND>0
SOME SORT		260	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	105	34.9%	

UNEXPLAIN TIME	PAUSE TIME
None	09:25
	09:35

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	12,520	
2-SEC RECORDS WITH SORTS	301	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	59	76.6%
3 DETECTORS	15	19.5%
4 DETECTORS	3	3.9%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	77	
NET 2-SEC RECORDS WITH SORTS	224	
2-SEC PERIODS WITH NO SORTS	12,296	
AVG TIME BETWEEN 2-SEC SORTS	111.8 sec	

1-GATE SORTS DETECTR	SORTS	161 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	1	0.6%	-14000	0	-261
2	5	3.1%	-12000	0	-224
3	20	12.4%	-10000	2	-187
4	39	24.2%	-8000	4	-149
5	44	27.3%	-6000	20	-112
6	25	15.5%	-4000	83	-75
7	23	14.3%	-2000	166	-37
8	4	2.5%	0	291	0
TOTAL	161		2000	326	37
			4000	203	75
2-GATE SORTS		140	6000	106	112
DETECTR	SORTS	FREQ%	8000	44	149
8			10000	11	187
9	3	2.1%	12000	3	224
10	7	5.0%	14000	0	261
11	23	16.4%	16000	0	299
12	36	25.7%	18000	0	336
13	34	24.3%	20000	0	373
14	25	17.9%	22000	0	410
15	12	8.6%	24000	0	448
TOTAL	140		26000	0	485
			>28000	0	0
			TOTAL	1259	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	54	17.9%	4
8000	131	43.5%	8
12000	43	14.3%	12
16000	19	6.3%	16
20000	14	4.7%	20
24000	8	2.7%	24
28000	6	2.0%	28
32000	8	2.7%	32
36000	1	0.3%	36
40000	0	0.0%	40
44000	1	0.3%	44
48000	0	0.0%	48
52000	1	0.3%	52
56000	2	0.7%	56
60000	2	0.7%	60
64000	1	0.3%	64
68000	1	0.3%	68
72000	1	0.3%	72
76000	1	0.3%	76
80000	1	0.3%	80
84000	0	0.0%	84
>84000	6	2.0%	>84
TOTAL	301		

SUMMARY TOTALS

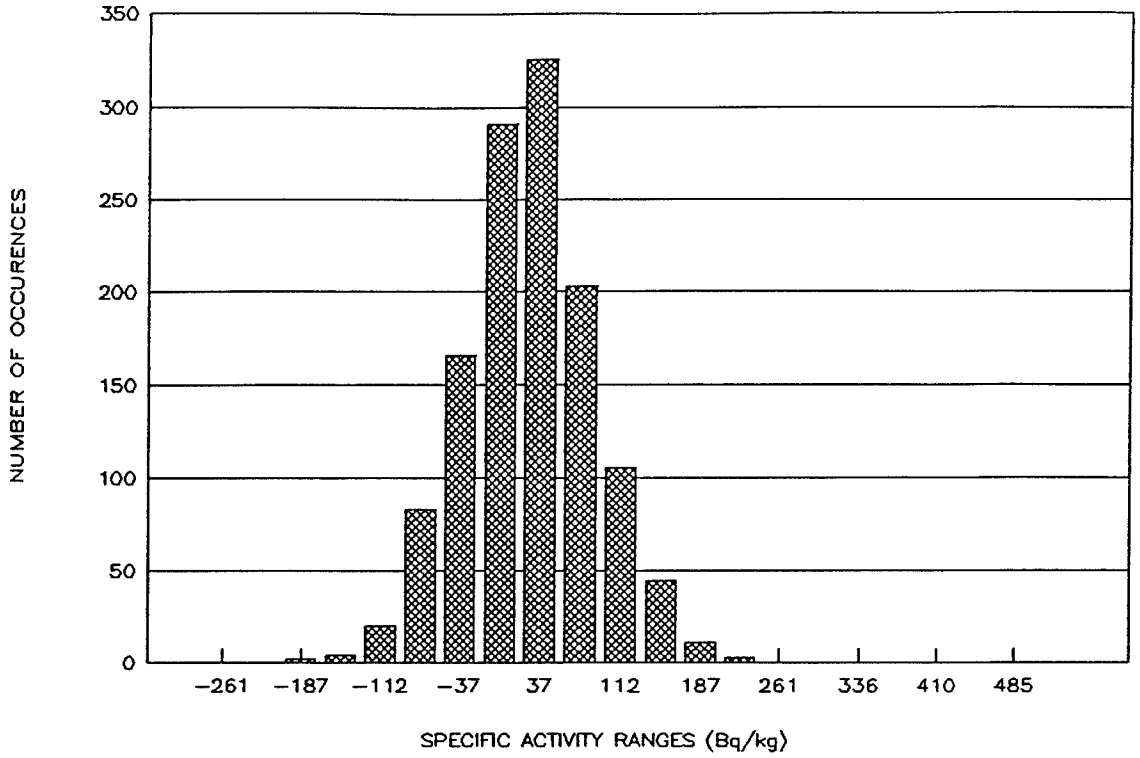
HOT PARTICLE EVENTS	299	SORTS BY ONE GATE ONLY	161
MULTIPARTICLE EVENTS	151	SORTS BY TWO GATES	140
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

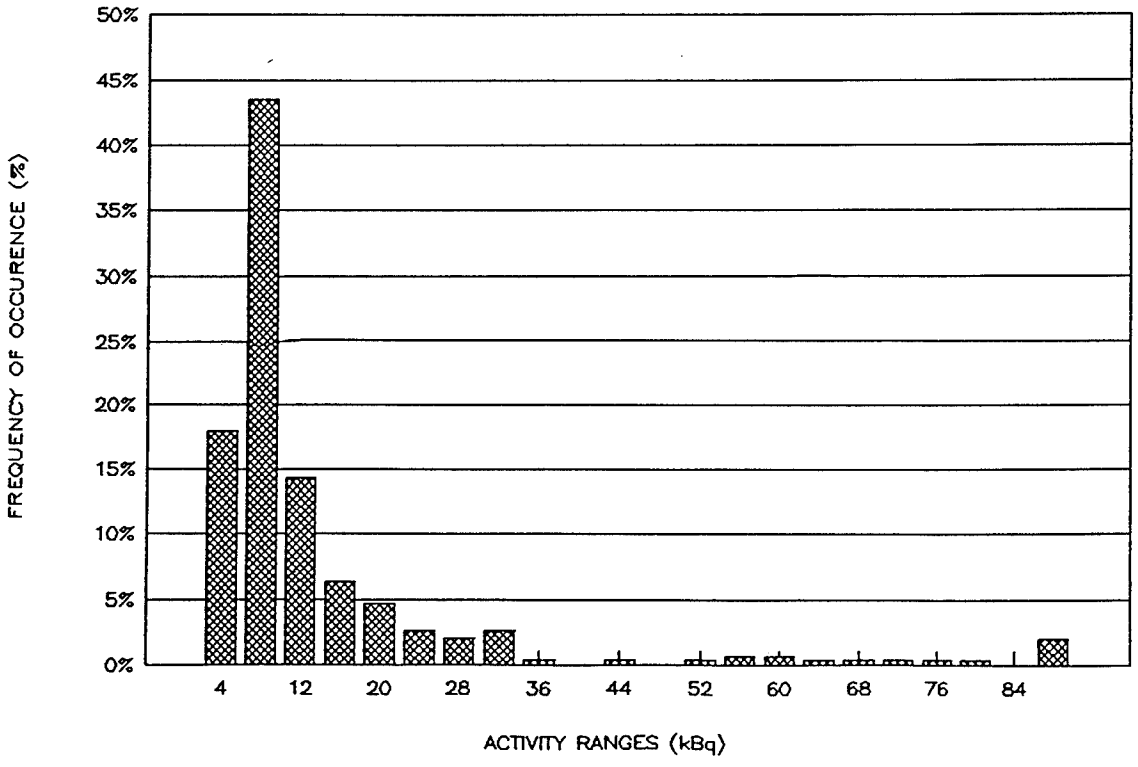
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 16-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 16-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 16-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.49 tons	64.4 tons	
MAXIMUM/SORT	6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
			99.2%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.39 yd³	51.0 yd³	51.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,634 kBq		
MAXIMUM/SORT	79 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,177 kBq	804 kBq	
MAXIMUM/SORT	78 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	4,446 Bq/kg	12 Bq/kg	

WORK HISTORY			
WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	10:01 AM	PLANT SHUT-DOWN	05:01 PM
START SOIL PROCESSING	10:02 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr
WORK HOURS		11.5 hr	
AVAILABLE HOURS		7.0 hr	
ACTUAL PROCESS HOURS (total 20-sec records)		6.72 hr	
DOWN-TIME		0.28 hr	
TOTAL SYSTEM PAUSE		0.60 hr	
NONAVAILABLE HOURS		4.5 hr	
START-UP		0.02 hr	
SHUT-DOWN		0.01 hr	
PLANT PERFORMANCE		96.0%	
PRODUCTIVITY		58.5%	
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,491	
NONPROCESS RECORDS (Test, calibration, etc)		49	
20-SEC PROCESS RECORDS		1,210	
TOTAL SORT		0 MD>0 & MND=0	
NO SORT		775 AD=0 & MD=0 & MND>0	
SOME SORT		435 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	87 31.0%		

UNEXPLAIN TIME	PAUSE TIME
None	09:25
	09:35

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	12,100	
2-SEC RECORDS WITH SORTS	281	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	63	85.1%
3 DETECTORS	11	14.9%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	74	
NET 2-SEC RECORDS WITH SORTS	207	
2-SEC PERIODS WITH NO SORTS	11,893	
AVG TIME BETWEEN 2-SEC SORTS	116.9	sec

1-GATE SORTS		148	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	2.7%	-14000	1	-261	4000	38	13.5%	4
2	16	10.8%	-12000	0	-224	8000	128	45.6%	8
3	25	16.9%	-10000	6	-187	12000	35	12.5%	12
4	31	20.9%	-8000	15	-149	16000	18	6.4%	16
5	32	21.6%	-6000	29	-112	20000	10	3.6%	20
6	27	18.2%	-4000	74	-75	24000	14	5.0%	24
7	12	8.1%	-2000	171	-37	28000	5	1.8%	28
8	1	0.7%	0	258	0	32000	6	2.1%	32
TOTAL	148		2000	287	37	36000	3	1.1%	36
			4000	227	75	40000	4	1.4%	40
2-GATE SORTS		133	6000	113	112	44000	2	0.7%	44
DETECTR	SORTS	FREQ%	8000	60	149	48000	0	0.0%	48
8			10000	12	187	52000	5	1.8%	52
9	9	6.8%	12000	4	224	56000	3	1.1%	56
10	17	12.8%	14000	2	261	60000	4	1.4%	60
11	27	20.3%	16000	0	299	64000	3	1.1%	64
12	28	21.1%	18000	0	336	68000	0	0.0%	68
13	27	20.3%	20000	0	373	72000	1	0.4%	72
14	21	15.8%	22000	0	410	76000	0	0.0%	76
15	4	3.0%	24000	0	448	80000	2	0.7%	80
TOTAL	133		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	1259		TOTAL	281		

SUMMARY TOTALS

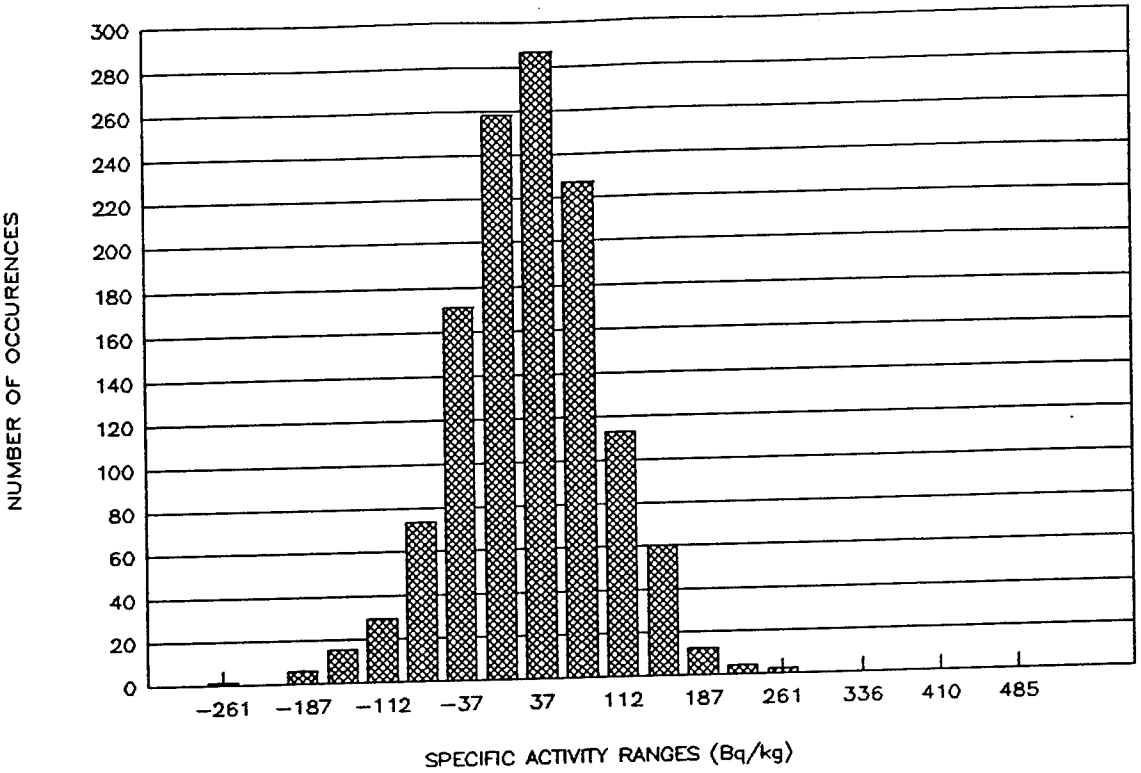
HOT PARTICLE EVENTS	276	SORTS BY ONE GATE ONLY	148
MULTIPARTICLE EVENTS	449	SORTS BY TWO GATES	133
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

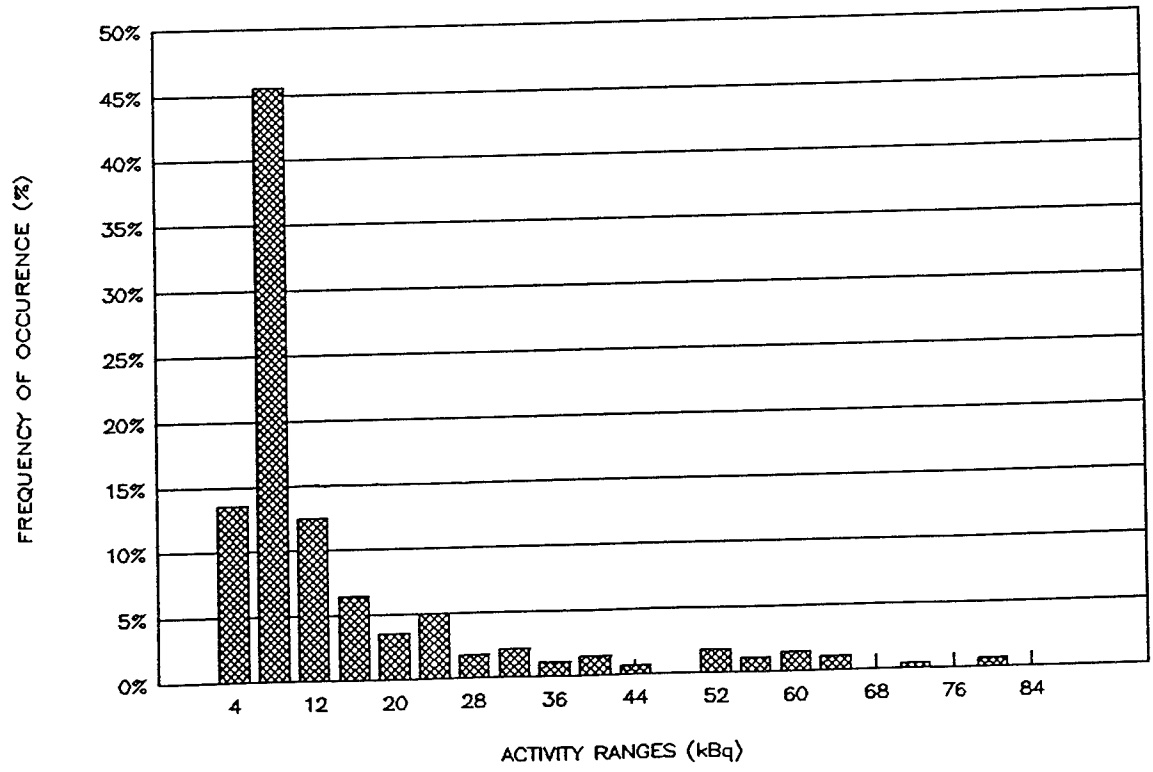
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 16-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 16-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 15-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.02 tons	11.2 tons	
MAXIMUM/SORT	2.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.8%
EQUIVALENT SOIL-IN-GROUND	0.02 yd³	8.9 yd³	8.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	399 kBq		
MAXIMUM/SORT	77 kBq		
MINIMUM/SORT	4.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	171 kBq	(164)kBq	
MAXIMUM/SORT	57 kBq	7 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	7,263 Bq/kg	(15)Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	08:15 AM
START SOIL PROCESSING	06:46 AM	END SOIL PROCESSING	07:56 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	2.3 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.17 hr
DOWN-TIME	1.08 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	9.3 hr
START-UP	0.78 hr
SHUT-DOWN	0.31 hr
PLANT PERFORMANCE	51.9%
PRODUCTIVITY	10.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			230	
NONPROCESS RECORDS (Test, calibration, etc)			2	
20-SEC PROCESS RECORDS			210	
TOTAL SORT			0	MD>0 & MND=0
NO SORT			192	AD=0 & MD=0 & MND>0
SOME SORT			18	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	0			
AD=0 & MD	0			
AD<0 & MD	0			
ACT_P <5 kBq	3	15.0%		

UNEXPLAIN TIME	PAUSE TIME
None	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	2,100	
2-SEC RECORDS WITH SORTS	20	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	6	75.0%
3 DETECTORS	2	25.0%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	8	
NET 2-SEC RECORDS WITH SORTS	12	
2-SEC PERIODS WITH NO SORTS	2,088	
AVG TIME BETWEEN 2-SEC SORTS	350.0 sec	

1-GATE SORTS

DETECTR	SORTS	FREQ%
1	0	0.0%
2	1	11.1%
3	1	11.1%
4	3	33.3%
5	4	44.4%
6	0	0.0%
7	0	0.0%
8	0	0.0%
TOTAL	9	

2-GATE SORTS

DETECTR	SORTS	FREQ%
8		
9	0	0.0%
10	1	9.1%
11	3	27.3%
12	5	45.5%
13	1	9.1%
14	0	0.0%
15	1	9.1%
TOTAL	11	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	0	-261
-12000	0	-224
-10000	0	-187
-8000	1	-149
-6000	6	-112
-4000	18	-75
-2000	34	-37
0	69	0
2000	54	37
4000	23	75
6000	6	112
8000	1	149
10000	0	187
12000	0	224
14000	0	261
16000	0	299
18000	0	336
20000	0	373
22000	0	410
24000	0	448
26000	0	485
>28000	0	0
TOTAL	212	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	0	0.0%	4
8000	9	45.0%	8
12000	1	5.0%	12
16000	3	15.0%	16
20000	2	10.0%	20
24000	1	5.0%	24
28000	0	0.0%	28
32000	0	0.0%	32
36000	0	0.0%	36
40000	0	0.0%	40
44000	1	5.0%	44
48000	0	0.0%	48
52000	1	5.0%	52
56000	0	0.0%	56
60000	0	0.0%	60
64000	1	5.0%	64
68000	0	0.0%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	1	5.0%	80
84000	0	0.0%	84
>84000	0	0.0%	>84
TOTAL	20		

SUMMARY TOTALS

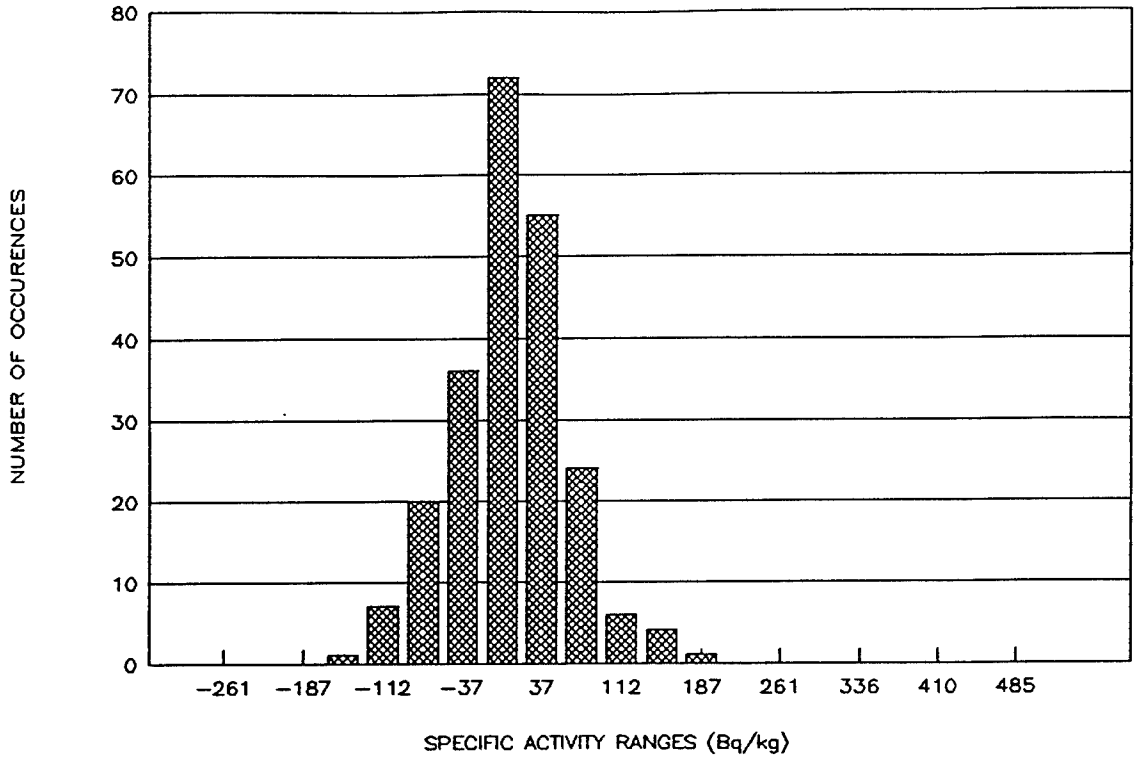
HOT PARTICLE EVENTS	21	SORTS BY ONE GATE ONLY	9
MULTIPARTICLE EVENTS	14	SORTS BY TWO GATES	11
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

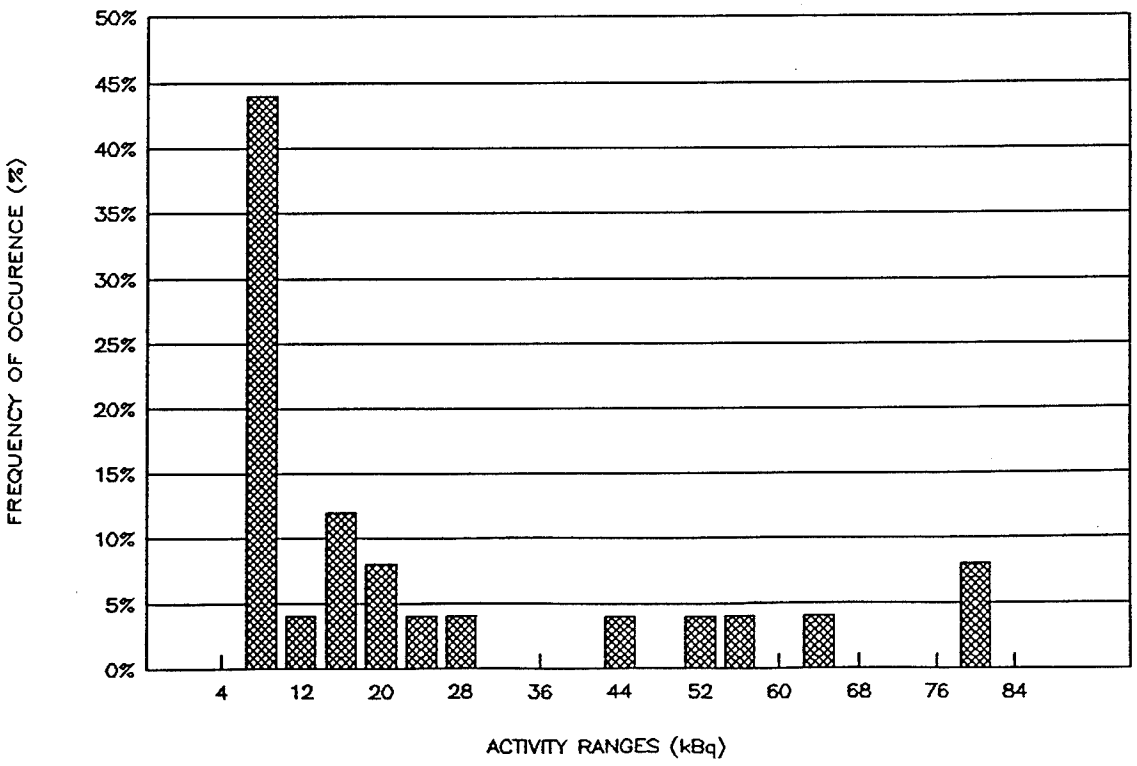
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 15-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 15-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 15-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.75 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.08 tons	11.3 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	51.6 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.07 yd³	8.9 yd³	9.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	244 kBq		
MAXIMUM/SORT	56 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	130 kBq	36 kBq	
MAXIMUM/SORT	43 kBq	9 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	1,542 Bq/kg	3 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	08:15 AM
START SOIL PROCESSING	06:46 AM	END SOIL PROCESSING	07:56 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	2.3 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.18 hr
DOWN-TIME	1.07 hr
TOTAL SYSTEM PAUSE	0.00 hr
NONAVAILABLE HOURS	9.3 hr
START-UP	0.78 hr
SHUT-DOWN	0.30 hr
PLANT PERFORMANCE	52.3%
PRODUCTIVITY	10.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	231	
NONPROCESS RECORDS (Test, calibration, etc)	0	
20-SEC PROCESS RECORDS	212	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	182	AD=0 & MD=0 & MND>0
SOME SORT	29	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	5	26.3%

UNEXPLAIN TIME	PAUSE TIME
None	None

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	2,120	
2-SEC RECORDS WITH SORTS	19	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	4	80.0%
3 DETECTORS	1	20.0%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	5	
NET 2-SEC RECORDS WITH SORTS	14	
2-SEC PERIODS WITH NO SORTS	2,106	
AVG TIME BETWEEN 2-SEC SORTS	302.9	sec

1-GATE SORTS	9	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	0 0.0%	-14000	0	-261	4000	2	10.5%	4
2	1 11.1%	-12000	0	-224	8000	8	42.1%	8
3	3 33.3%	-10000	0	-187	12000	3	15.8%	12
4	2 22.2%	-8000	1	-149	16000	3	15.8%	16
5	2 22.2%	-6000	3	-112	20000	0	0.0%	20
6	1 11.1%	-4000	12	-75	24000	1	5.3%	24
7	0 0.0%	-2000	32	-37	28000	0	0.0%	28
8	0 0.0%	0	56	0	32000	0	0.0%	32
TOTAL	9	2000	55	37	36000	0	0.0%	36
		4000	33	75	40000	0	0.0%	40
2-GATE SORTS	10	6000	14	112	44000	1	5.3%	44
DETECTR	SORTS FREQ%	8000	4	149	48000	0	0.0%	48
8		10000	2	187	52000	0	0.0%	52
9	0 0.0%	12000	0	224	56000	1	5.3%	56
10	2 20.0%	14000	0	261	60000	0	0.0%	60
11	2 20.0%	16000	0	299	64000	0	0.0%	64
12	3 30.0%	18000	0	336	68000	0	0.0%	68
13	3 30.0%	20000	0	373	72000	0	0.0%	72
14	0 0.0%	22000	0	410	76000	0	0.0%	76
15	0 0.0%	24000	0	448	80000	0	0.0%	80
TOTAL	10	26000	0	485	84000	0	0.0%	84
		>28000	0	0	>84000	0	0.0%	>84
		TOTAL	212		TOTAL	19		

SUMMARY TOTALS

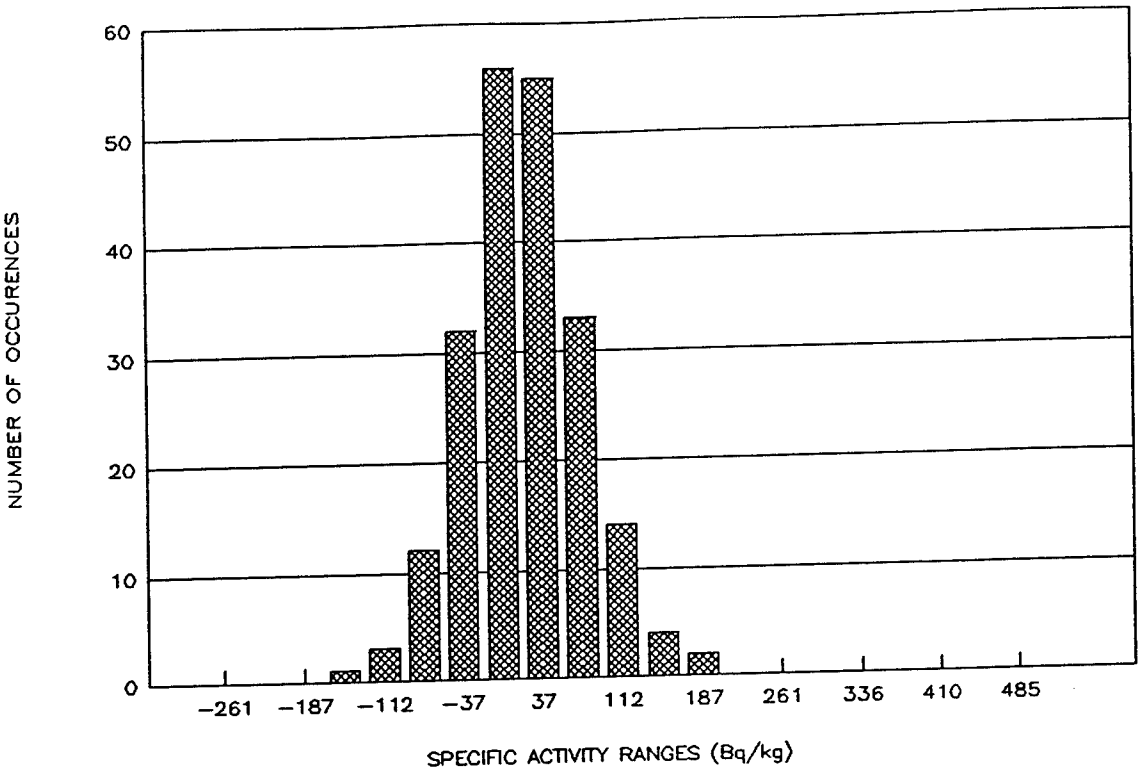
HOT PARTICLE EVENTS	20	SORTS BY ONE GATE ONLY	9
MULTIPARTICLE EVENTS	22	SORTS BY TWO GATES	10
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

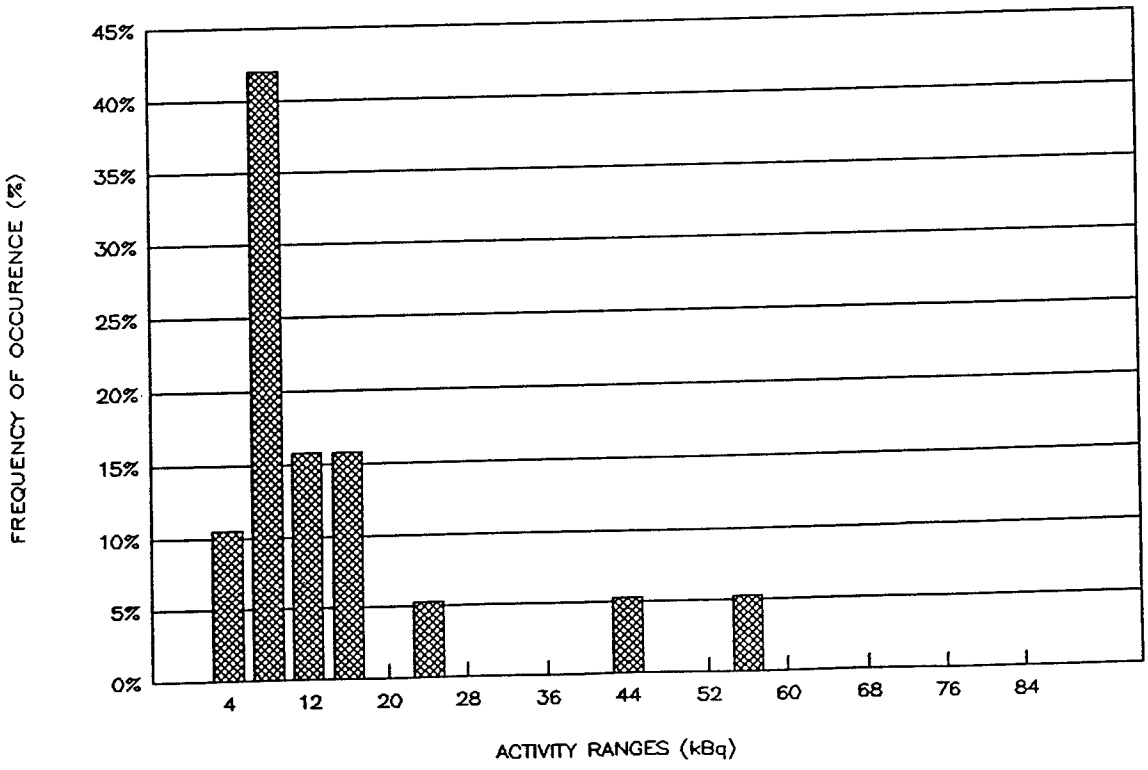
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 15-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 15-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 14-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.17 tons	45.6 tons	
MAXIMUM/SORT	3.3 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.14 yd³	36.1 yd³	36.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,957 kBq		
MAXIMUM/SORT	783 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,633 kBq	1,168 kBq	
MAXIMUM/SORT	606 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	9,544 Bq/kg	26 Bq/kg	

WORK HISTORY

WORK DAY START	06:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	12:16 PM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.1 hr
AVAILABLE HOURS	10.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	4.74 hr
DOWN-TIME	5.34 hr
TOTAL SYSTEM PAUSE	5.52 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	5.35 hr
SHUT-DOWN	0.49 hr
PLANT PERFORMANCE	47.1%
PRODUCTIVITY	47.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,032		
NONPROCESS RECORDS (Test, calibration, etc)	4		
20-SEC PROCESS RECORDS	854		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	714	AD=0 & MD=0 & MND>0	
SOME SORT	140	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	63	35.4%	

UNEXPLAIN TIME	PAUSE TIME
16:06:08	06:55
	17:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		8,540	
2-SEC RECORDS WITH SORTS		178	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	36		73.5%
3 DETECTORS	9		18.4%
4 DETECTORS	2		4.1%
5 DETECTORS	2		4.1%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		49	
NET 2-SEC RECORDS WITH SORTS		129	
2-SEC PERIODS WITH NO SORTS		8,411	
AVG TIME BETWEEN 2-SEC SORTS		132.4	sec

1-GATE SORTS DETECTR	SORTS	91 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	1	1.1%	-14000	0	-261
2	5	5.5%	-12000	0	-224
3	11	12.1%	-10000	0	-187
4	20	22.0%	-8000	0	-149
5	24	26.4%	-6000	7	-112
6	15	16.5%	-4000	28	-75
7	13	14.3%	-2000	112	-37
8	2	2.2%	0	167	0
TOTAL	91		2000	201	37
			4000	162	75
2-GATE SORTS		87	6000	91	112
DETECTR	SORTS	FREQ%	8000	59	149
8			10000	14	187
9	2	2.3%	12000	11	224
10	7	8.0%	14000	1	261
11	17	19.5%	16000	2	299
12	17	19.5%	18000	3	336
13	18	20.7%	20000	0	373
14	15	17.2%	22000	0	410
15	11	12.6%	24000	0	448
TOTAL	87		26000	0	485
			>28000	0	0
			TOTAL	858	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	38	21.3%	4
8000	69	38.8%	8
12000	12	6.7%	12
16000	19	10.7%	16
20000	5	2.8%	20
24000	7	3.9%	24
28000	4	2.2%	28
32000	4	2.2%	32
36000	2	1.1%	36
40000	1	0.6%	40
44000	0	0.0%	44
48000	3	1.7%	48
52000	1	0.6%	52
56000	2	1.1%	56
60000	2	1.1%	60
64000	2	1.1%	64
68000	0	0.0%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	1	0.6%	84
>84000	6	3.4%	>84
TOTAL	178		

SUMMARY TOTALS

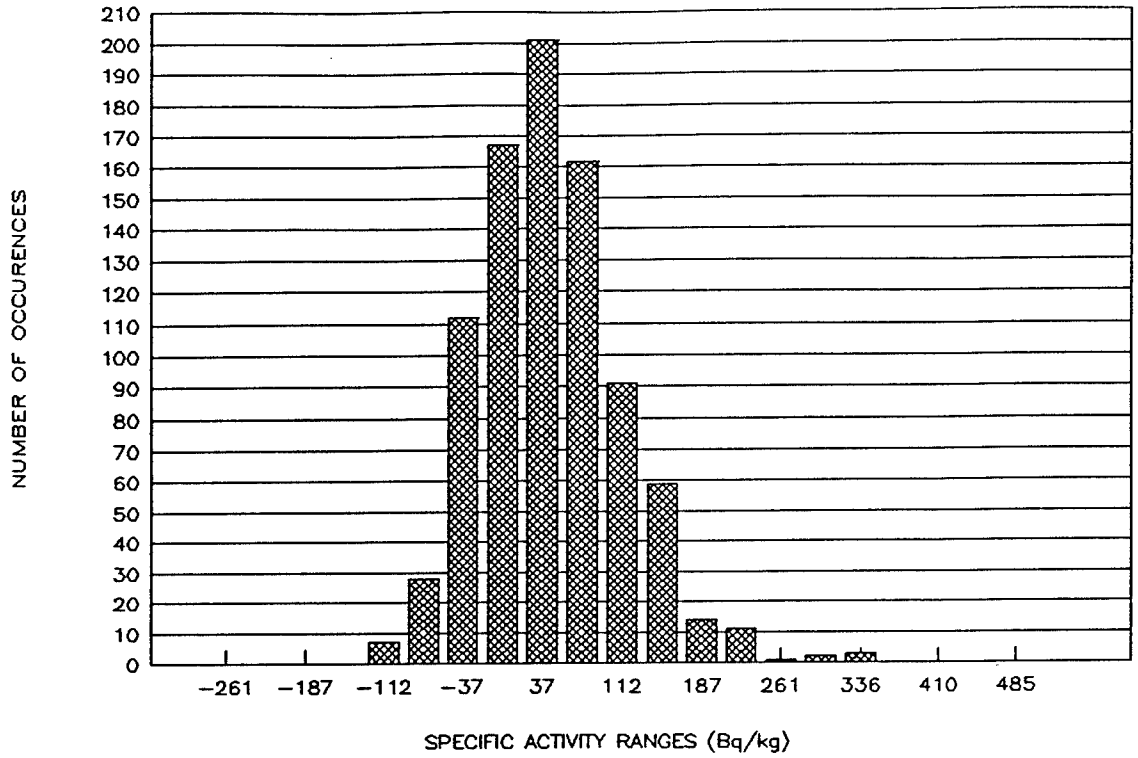
HOT PARTICLE EVENTS	177	SORTS BY ONE GATE ONLY	91
MULTIPARTICLE EVENTS	79	SORTS BY TWO GATES	87
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

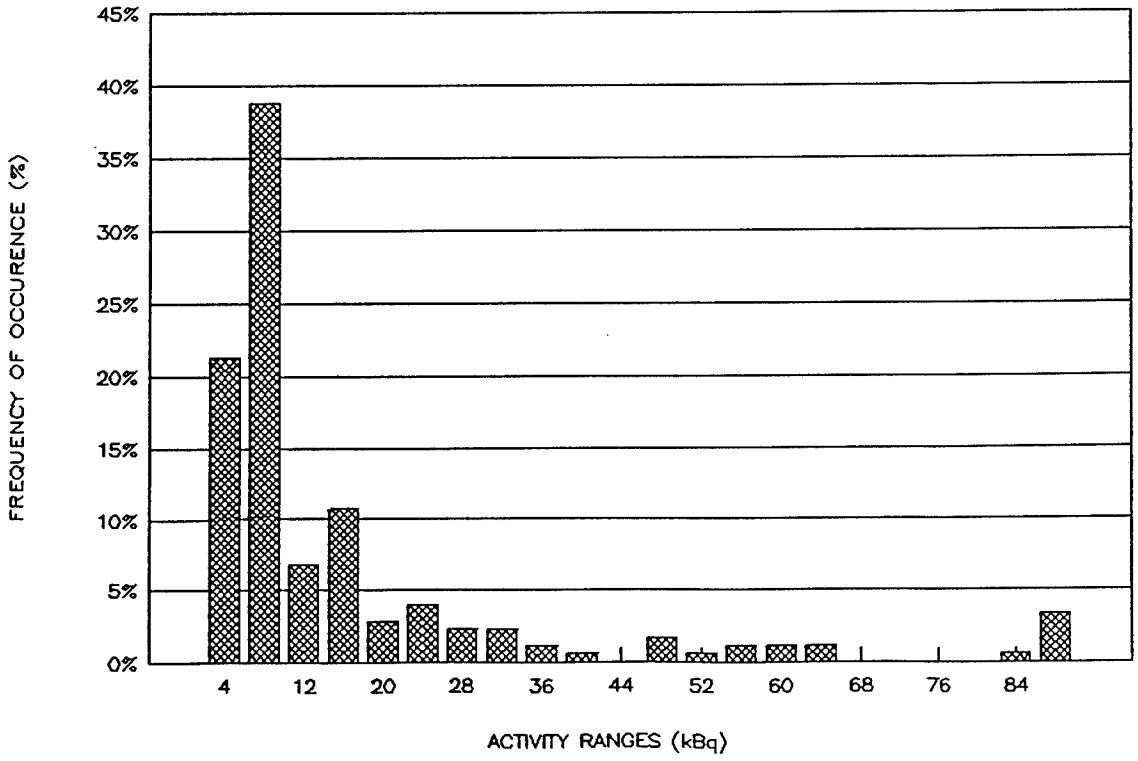
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 14-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 14-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 14-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.26 tons	45.5 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.4%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.21 yd³	36.0 yd³	36.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,326 kBq		
MAXIMUM/SORT	503 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,951 kBq	2,041 kBq	
MAXIMUM/SORT	375 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	7,520 Bq/kg	45 Bq/kg	

WORK HISTORY

WORK DAY START	06:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	12:16 PM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.1 hr
AVAILABLE HOURS	10.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	4.74 hr
DOWN-TIME	5.34 hr
TOTAL SYSTEM PAUSE	5.34 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	5.35 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	47.0%
PRODUCTIVITY	47.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,045	
NONPROCESS RECORDS (Test, calibration, etc)	4	
20-SEC PROCESS RECORDS	853	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	624 AD=0 & MD=0 & MND>0	
SOME SORT	229 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	49	25.5%

UNEXPLAIN TIME	PAUSE TIME
14:48:49	06:55

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	8,530	
2-SEC RECORDS WITH SORTS	192	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	45	90.0%
3 DETECTORS	5	10.0%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	50	
NET 2-SEC RECORDS WITH SORTS	142	
2-SEC PERIODS WITH NO SORTS	8,388	
AVG TIME BETWEEN 2-SEC SORTS	120.1	sec

1-GATE DETECTR	SORTS	99 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	1	1.0%	-14000	0	-261	4000	15	7.8%	4
2	9	9.1%	-12000	0	-224	8000	85	44.3%	8
3	20	20.2%	-10000	2	-187	12000	24	12.5%	12
4	22	22.2%	-8000	3	-149	16000	20	10.4%	16
5	24	24.2%	-6000	2	-112	20000	8	4.2%	20
6	14	14.1%	-4000	19	-75	24000	6	3.1%	24
7	8	8.1%	-2000	53	-37	28000	4	2.1%	28
8	1	1.0%	0	129	0	32000	3	1.6%	32
TOTAL	99		2000	192	37	36000	1	0.5%	36
			4000	197	75	40000	4	2.1%	40
2-GATE SORTS		93	6000	147	112	44000	3	1.6%	44
DETECTR	SORTS	FREQ%	8000	62	149	48000	0	0.0%	48
8			10000	28	187	52000	3	1.6%	52
9	2	2.2%	12000	16	224	56000	0	0.0%	56
10	14	15.1%	14000	4	261	60000	2	1.0%	60
11	22	23.7%	16000	2	299	64000	1	0.5%	64
12	15	16.1%	18000	1	336	68000	2	1.0%	68
13	24	25.8%	20000	0	373	72000	0	0.0%	72
14	13	14.0%	22000	0	410	76000	1	0.5%	76
15	3	3.2%	24000	0	448	80000	2	1.0%	80
TOTAL	93		26000	0	485	84000	1	0.5%	84
			>28000	0	0	>84000	7	3.6%	>84
			TOTAL	857		TOTAL	192		

SUMMARY TOTALS

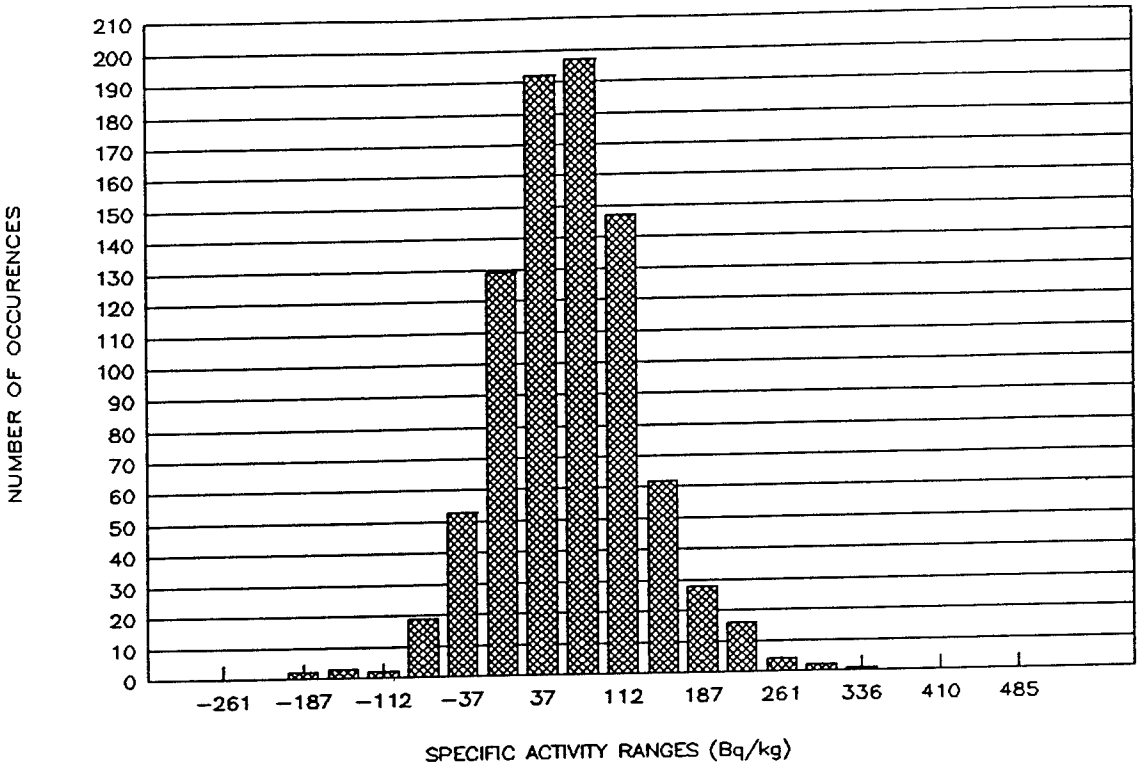
HOT PARTICLE EVENTS	189	SORTS BY ONE GATE ONLY	99
MULTIPARTICLE EVENTS	196	SORTS BY TWO GATES	93
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

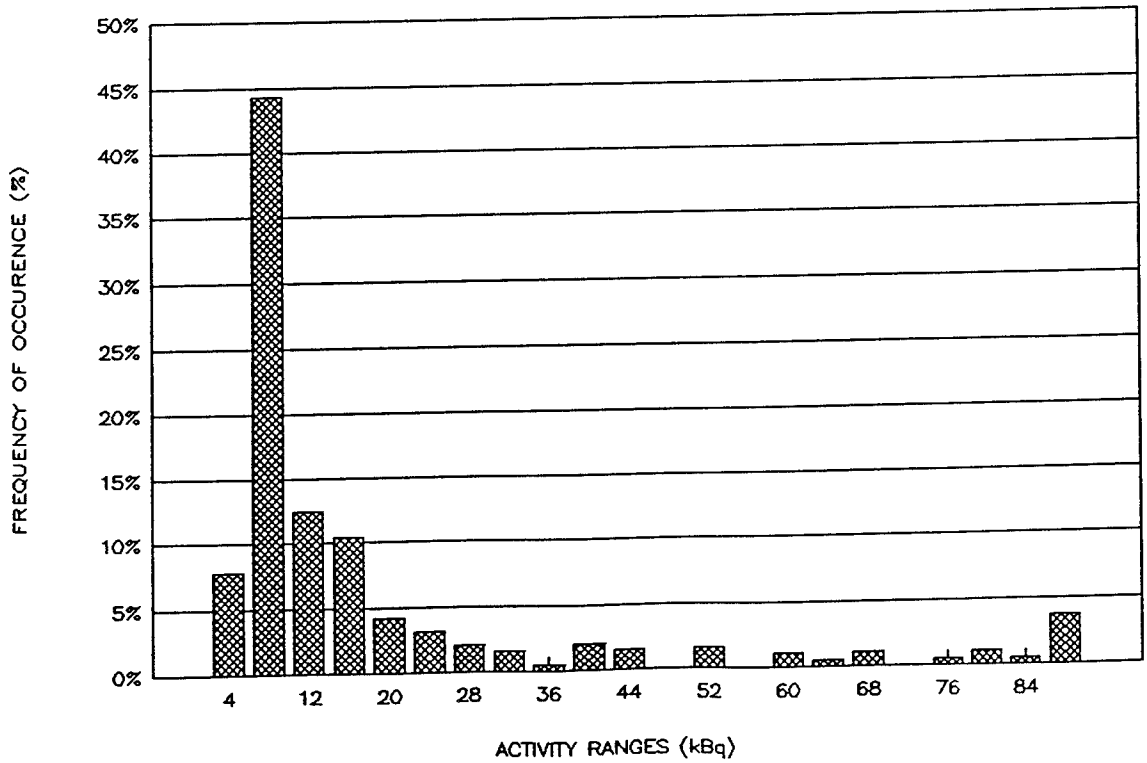
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 14-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 14-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 13-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	10.00 tons	87.2 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			89.7%
EQUIVALENT SOIL-IN-GROUND	7.92 yd³	69.1 yd³	77.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	20,678 kBq		
MAXIMUM/SORT	2,285 kBq		
MINIMUM/SORT	2.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	13,538 kBq	6,446 kBq	
MAXIMUM/SORT	1530 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	1,354 Bq/kg	74 Bq/kg	

WORK HISTORY

WORK DAY START	05:57 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:57 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:26 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.08 hr
DOWN-TIME	1.47 hr
TOTAL SYSTEM PAUSE	0.88 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.49 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	87.3%
PRODUCTIVITY	87.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,789	
NONPROCESS RECORDS (Test, calibration, etc)		24	
20-SEC PROCESS RECORDS		1,814	
TOTAL SORT		173	MD>0 & MND=0
NO SORT		1,145	AD=0 & MD=0 & MND>0
SOME SORT		496	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	331	33.9%	

UNEXPLAIN TIME	PAUSE TIME
10:35:38	05:57
16:04:18	06:31

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		18,140	
2-SEC RECORDS WITH SORTS		975	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	204		75.6%
3 DETECTORS	53		19.6%
4 DETECTORS	10		3.7%
5 DETECTORS	3		1.1%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		270	
NET 2-SEC RECORDS WITH SORTS		705	
2-SEC PERIODS WITH NO SORTS		17,435	
AVG TIME BETWEEN 2-SEC SORTS		51.5	sec

1-GATE SORTS		487	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	7	1.4%	-14000	2	-261
2	30	6.2%	-12000	1	-224
3	67	13.8%	-10000	5	-187
4	88	18.1%	-8000	5	-149
5	123	25.3%	-6000	18	-112
6	76	15.6%	-4000	50	-75
7	78	16.0%	-2000	138	-37
8	18	3.7%	0	397	0
TOTAL	487		2000	305	37
			4000	257	75
2-GATE SORTS		488	6000	196	112
DETECTR	SORTS	FREQ%	8000	128	149
8			10000	85	187
9	11	2.3%	12000	60	224
10	54	11.1%	14000	46	261
11	70	14.3%	16000	58	299
12	107	21.9%	18000	46	336
13	117	24.0%	20000	33	373
14	80	16.4%	22000	8	410
15	49	10.0%	24000	0	448
TOTAL	488		26000	0	485
			>28000	0	0
			TOTAL	1838	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	161	16.5%	4
8000	406	41.6%	8
12000	123	12.6%	12
16000	70	7.2%	16
20000	44	4.5%	20
24000	23	2.4%	24
28000	26	2.7%	28
32000	19	1.9%	32
36000	19	1.9%	36
40000	9	0.9%	40
44000	3	0.3%	44
48000	8	0.8%	48
52000	7	0.7%	52
56000	5	0.5%	56
60000	7	0.7%	60
64000	6	0.6%	64
68000	7	0.7%	68
72000	2	0.2%	72
76000	2	0.2%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	28	2.9%	>84
TOTAL	975		

SUMMARY TOTALS

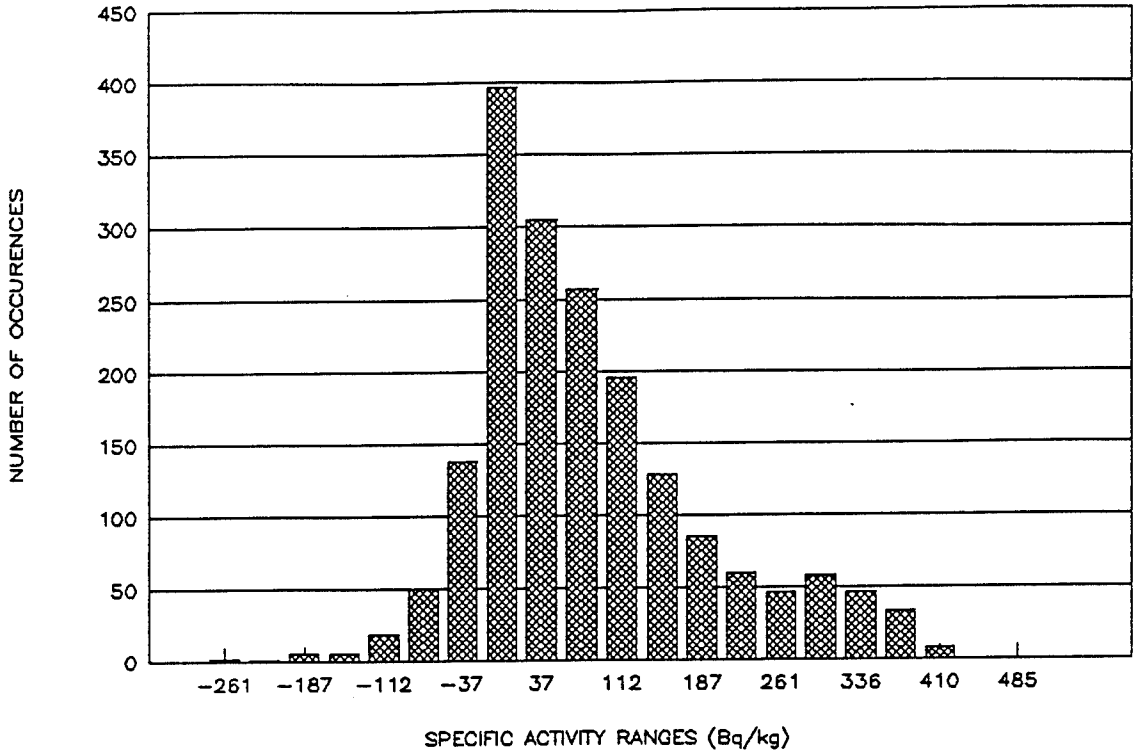
HOT PARTICLE EVENTS	969	SORTS BY ONE GATE ONLY	487
MULTIPARTICLE EVENTS	1052	SORTS BY TWO GATES	488
DISTRIBUTED EVENTS	12900		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

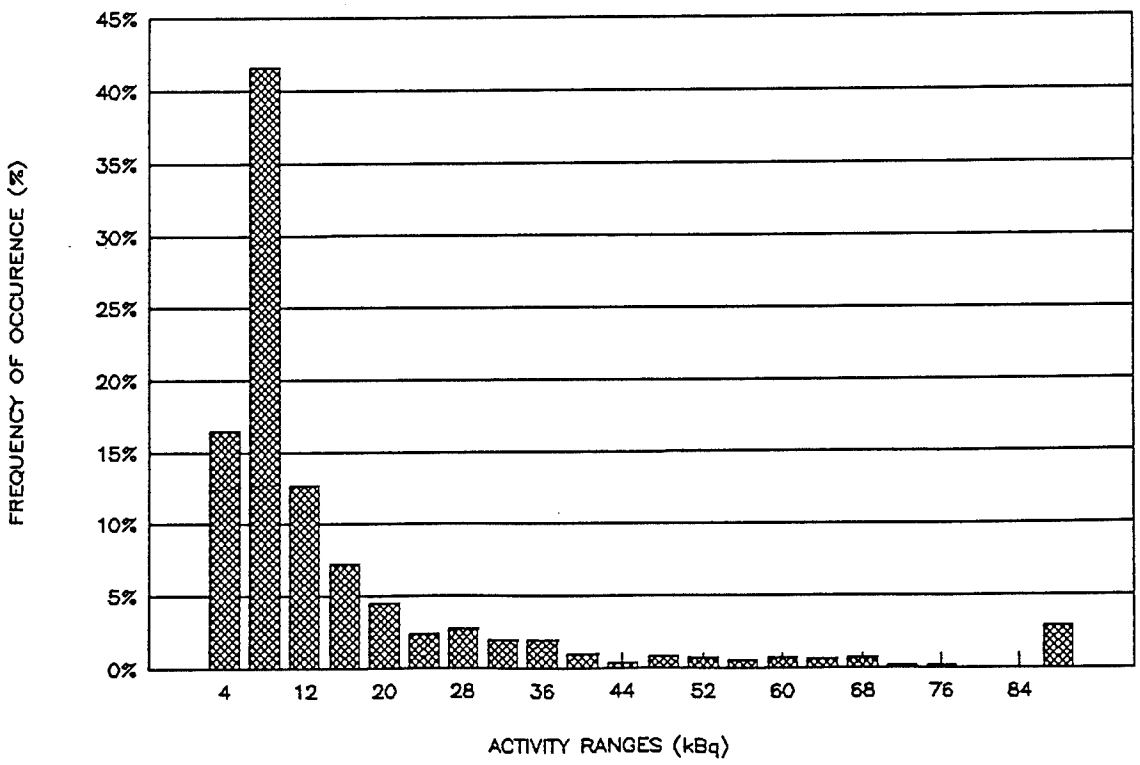
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 13-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 13-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 13-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		15.95 tons	80.4 tons	
MAXIMUM/SORT		56.2 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	46.9 kg	
				83.4%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		12.64 yd³	63.7 yd³	76.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		25,099 kBq		
MAXIMUM/SORT		959 kBq		
MINIMUM/SORT		2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		21,422 kBq	6,568 kBq	
MAXIMUM/SORT		771 kBq	20 kBq	
MINIMUM/SORT		0 Bq	-12 kBq	
SPECIFIC ACTIVITY		1,343 Bq/kg	82 Bq/kg	

WORK HISTORY			
WORK DAY START	05:57 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:57 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:25 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.98 hr
DOWN-TIME	1.57 hr
TOTAL SYSTEM PAUSE	1.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.48 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	86.4%
PRODUCTIVITY	86.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,076	
NONPROCESS RECORDS (Test, calibration, etc)	21	
20-SEC PROCESS RECORDS	1,797	
TOTAL SORT	279	MD>0 & MND=0
NO SORT	882	AD=0 & MD=0 & MND>0
SOME SORT	636	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	389	30.4%

UNEXPLAIN TIME	PAUSE TIME
09:13:39	05:57
10:05:19	06:31

JA SOIL CLEANUP PLANT LOG SUMMARY

12:46

2-SEC COUNT PERIODS	17,970	
2-SEC RECORDS WITH SORTS	1,279	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	301	78.0%
3 DETECTORS	71	18.4%
4 DETECTORS	13	3.4%
5 DETECTORS	1	0.3%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	386	
NET 2-SEC RECORDS WITH SORTS	893	
2-SEC PERIODS WITH NO SORTS	17,077	
AVG TIME BETWEEN 2-SEC SORTS	40.2 sec	

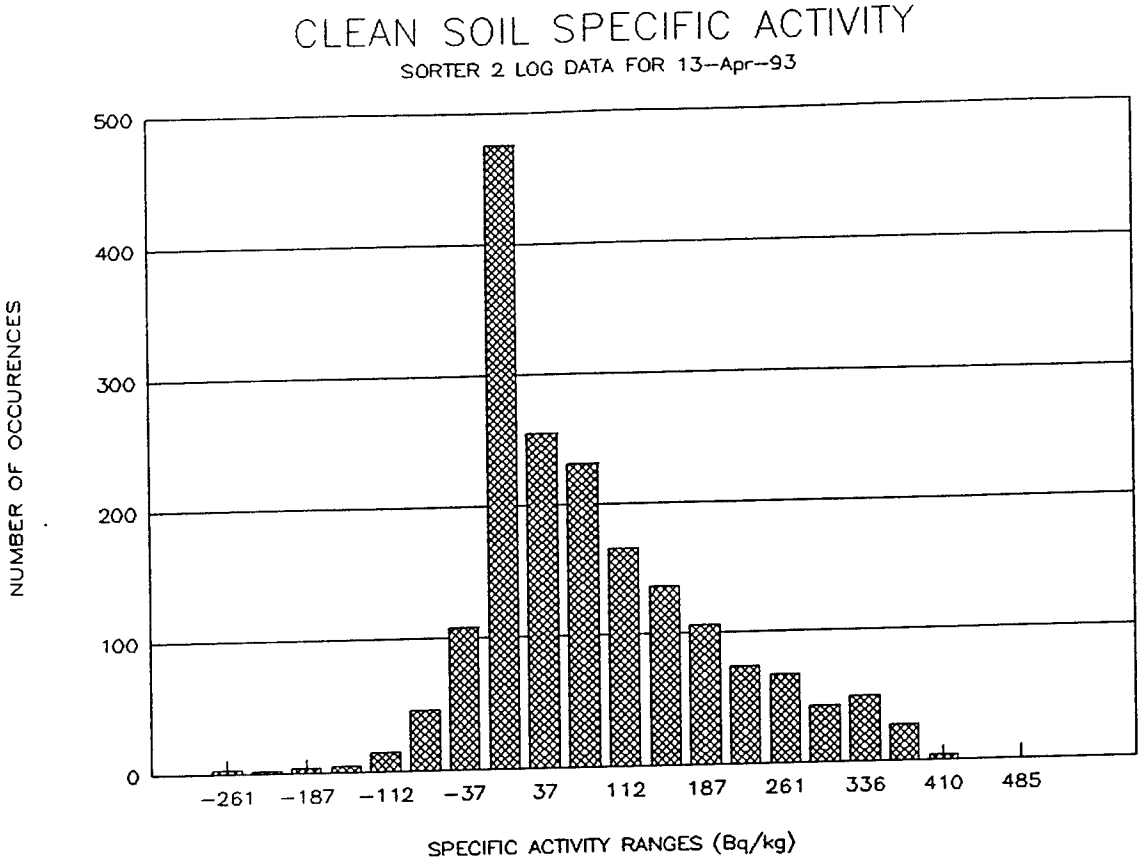
1-GATE SORTS DETECTR	SORTS	654 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	25	3.8%	-14000	3	-261	4000	182	14.2%	4
2	86	13.1%	-12000	2	-224	8000	540	42.2%	8
3	126	19.3%	-10000	4	-187	12000	190	14.9%	12
4	132	20.2%	-8000	5	-149	16000	80	6.3%	16
5	114	17.4%	-6000	15	-112	20000	62	4.8%	20
6	95	14.5%	-4000	46	-75	24000	38	3.0%	24
7	63	9.6%	-2000	108	-37	28000	25	2.0%	28
8	13	2.0%	0	476	0	32000	18	1.4%	32
TOTAL	654		2000	255	37	36000	13	1.0%	36
			4000	231	75	40000	15	1.2%	40
2-GATE SORTS		625	6000	166	112	44000	21	1.6%	44
DETECTR	SORTS	FREQ%	8000	136	149	48000	10	0.8%	48
8			10000	106	187	52000	5	0.4%	52
9	43	6.9%	12000	74	224	56000	8	0.6%	56
10	100	16.0%	14000	67	261	60000	8	0.6%	60
11	133	21.3%	16000	43	299	64000	7	0.5%	64
12	130	20.8%	18000	50	336	68000	3	0.2%	68
13	101	16.2%	20000	27	373	72000	4	0.3%	72
14	85	13.6%	22000	4	410	76000	5	0.4%	76
15	33	5.3%	24000	0	448	80000	0	0.0%	80
TOTAL	625		26000	0	485	84000	3	0.2%	84
			>28000	0	0	>84000	42	3.3%	>84
			TOTAL	1818		TOTAL	1279		

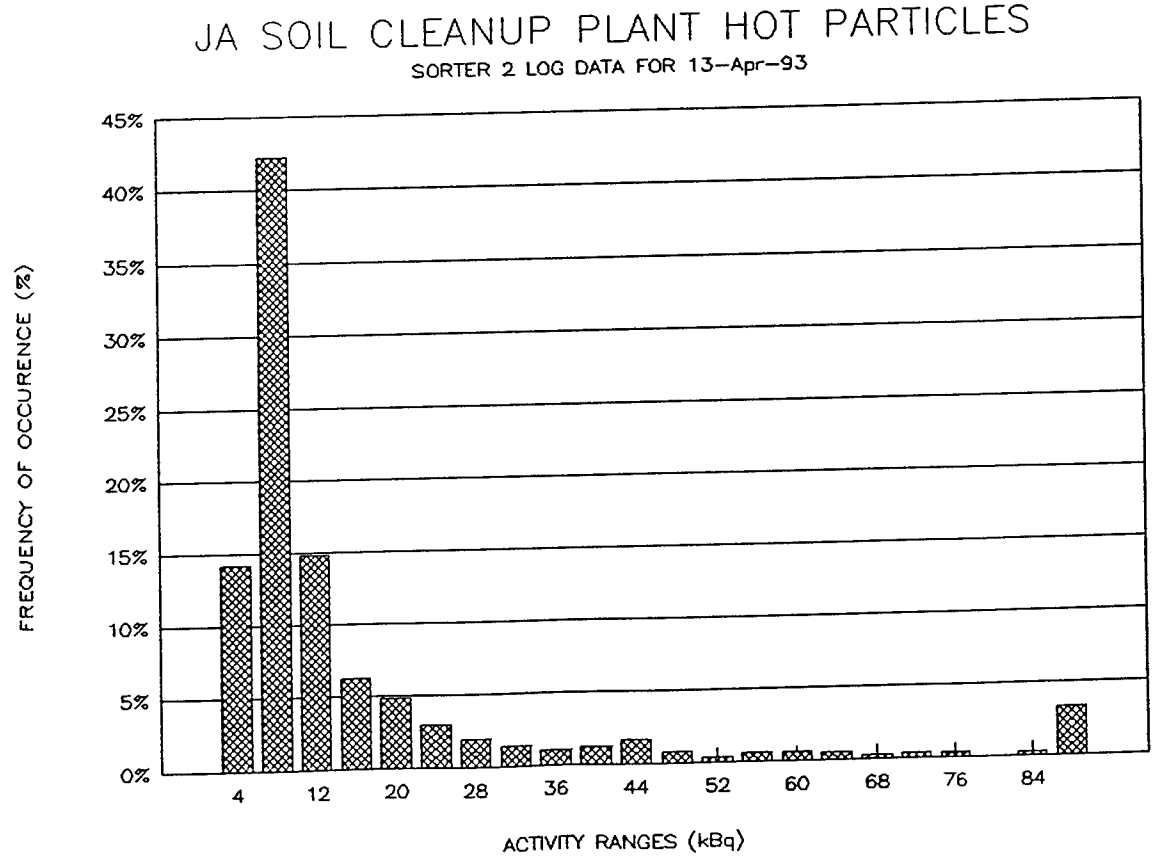
SUMMARY TOTALS

HOT PARTICLE EVENTS	1242	SORTS BY ONE GATE ONLY	654
MULTIPARTICLE EVENTS	2093	SORTS BY TWO GATES	625
DISTRIBUTED EVENTS	20466		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 13-Apr-93
NUMBER OF OCCURENCES
500
400
300
200
100
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 13-Apr-93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 12-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.75 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.3 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		9.01 tons	71.3 tons	
MAXIMUM/SORT		63.6 kg	60.5 kg	
MINIMUM/SORT		0.8 kg	51.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				88.8%
EQUIVALENT SOIL-IN-GROUND		7.14 yd³	56.5 yd³	63.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		27,283 kBq		
MAXIMUM/SORT		2,368 kBq		
MINIMUM/SORT		2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		14,855 kBq	7,452 kBq	
MAXIMUM/SORT		1921 kBq	22 kBq	
MINIMUM/SORT		0 Bq	-9 kBq	
SPECIFIC ACTIVITY		1,649 Bq/kg	104 Bq/kg	

WORK HISTORY

WORK DAY START	05:59 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:59 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:28 AM	END SOIL PROCESSING	03:21 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.37 hr
DOWN-TIME	4.14 hr
TOTAL SYSTEM PAUSE	2.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.49 hr
SHUT-DOWN	2.15 hr
PLANT PERFORMANCE	64.0%
PRODUCTIVITY	64.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,387	
NONPROCESS RECORDS (Test, calibration, etc)			7	
20-SEC PROCESS RECORDS			1,327	
TOTAL SORT			132	MD>0 & MND=0
NO SORT			644	AD=0 & MD=0 & MND>0
SOME SORT			551	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	0			
AD=0 & MD	0			
AD<0 & MD	0			
ACT_P <5 kBq	355	33.5%		

UNEXPLAIN TIME	PAUSE TIME
08:34:05	06:00
	07:41

JA SOIL CLEANUP PLANT LOG SUMMARY

08:27
08:32
13:27

2-SEC COUNT PERIODS		13,270	
2-SEC RECORDS WITH SORTS		1,060	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	244	80.3%	
3 DETECTORS	50	16.4%	
4 DETECTORS	10	3.3%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	304		
NET 2-SEC RECORDS WITH SORTS	756		
2-SEC PERIODS WITH NO SORTS	12,514		
AVG TIME BETWEEN 2-SEC SORTS	35.1 sec		

1-GATE SORTS DETECTR	SORTS	553 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	12	2.2%	-14000	2	-231
2	29	5.2%	-12000	2	-198
3	83	15.0%	-10000	1	-165
4	100.	18.1%	-8000	1	-132
5	126	22.8%	-6000	6	-99
6	86	15.6%	-4000	19	-66
7	86	15.6%	-2000	55	-33
8	31	5.6%	0	246	0
TOTAL	553		2000	162	33
			4000	153	66
2-GATE SORTS		507	6000	144	99
DETECTR	SORTS	FREQ%	8000	136	132
8			10000	84	165
9	19	3.7%	12000	82	198
10	53	10.5%	14000	66	231
11	86	17.0%	16000	52	264
12	96	18.9%	18000	51	298
13	106	20.9%	20000	42	331
14	82	16.2%	22000	30	364
15	65	12.8%	24000	0	397
TOTAL	507		26000	0	430
			>28000	0	0
			TOTAL	1334	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	184	17.4%	4
8000	432	40.8%	8
12000	128	12.1%	12
16000	88	8.3%	16
20000	44	4.2%	20
24000	29	2.7%	24
28000	24	2.3%	28
32000	17	1.6%	32
36000	9	0.8%	36
40000	6	0.6%	40
44000	6	0.6%	44
48000	8	0.8%	48
52000	8	0.8%	52
56000	7	0.7%	56
60000	6	0.6%	60
64000	7	0.7%	64
68000	2	0.2%	68
72000	3	0.3%	72
76000	6	0.6%	76
80000	4	0.4%	80
84000	5	0.5%	84
>84000	37	3.5%	>84
TOTAL	1060		

SUMMARY TOTALS

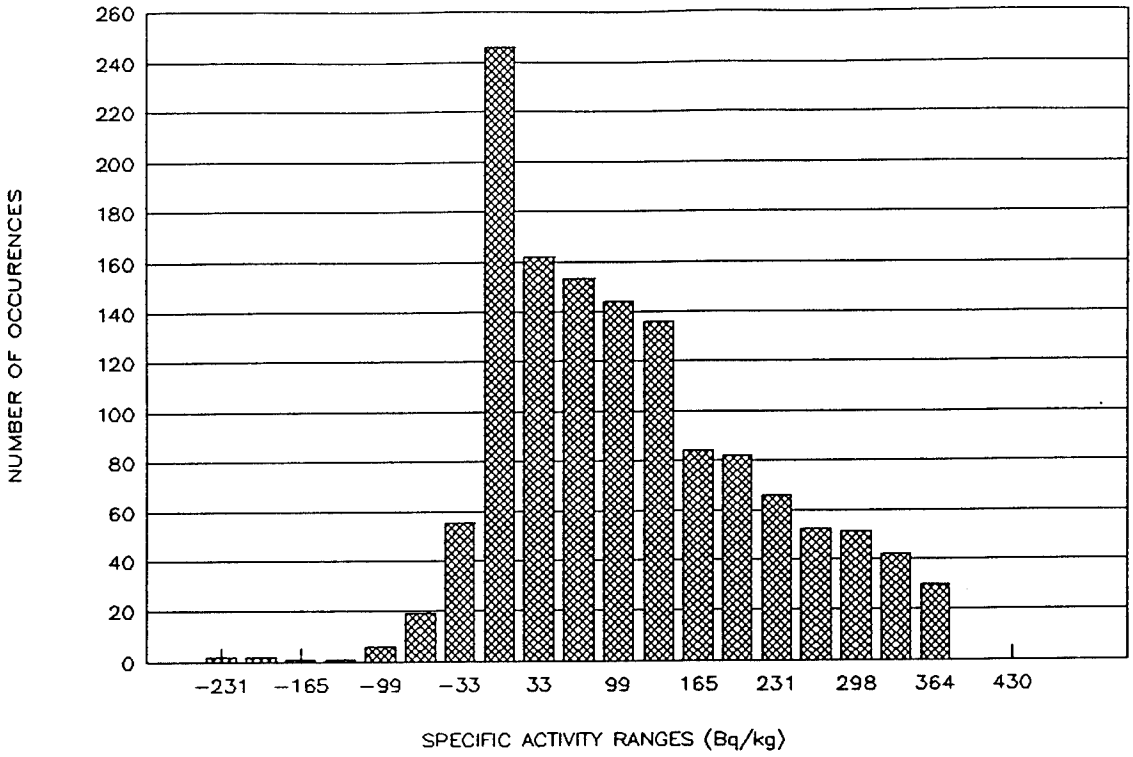
HOT PARTICLE EVENTS	1053	SORTS BY ONE GATE ONLY	553
MULTIPARTICLE EVENTS	855	SORTS BY TWO GATES	507
DISTRIBUTED EVENTS	9989		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

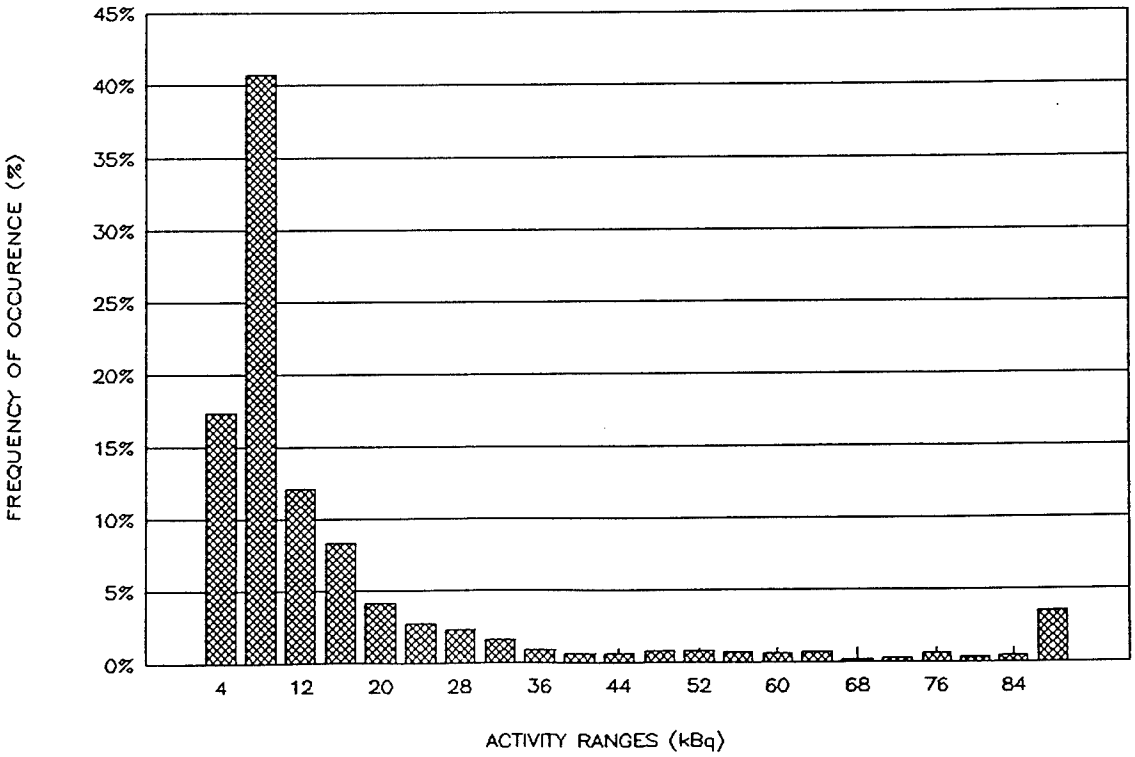
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 12-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 12-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 12-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	16.00 tons	64.1 tons	
MAXIMUM/SORT	63.6 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53 kg	
			80.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	12.68 yd³	50.8 yd³	63.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,270 kBq		
MAXIMUM/SORT	603 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	18,718 kBq	6,571 kBq	
MAXIMUM/SORT	452 kBq	21 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	1,170 Bq/kg	102 Bq/kg	

WORK HISTORY

WORK DAY START	05:59 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:59 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	05:59 AM	END SOIL PROCESSING	03:21 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.36 hr
DOWN-TIME	4.16 hr
TOTAL SYSTEM PAUSE	2.02 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.00 hr
SHUT-DOWN	2.14 hr
PLANT PERFORMANCE	63.9%
PRODUCTIVITY	63.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,665	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	1,324	
TOTAL SORT	247	MD>0 & MND=0
NO SORT	530	AD=0 & MD=0 & MND>0
SOME SORT	547	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	2	
AD<0 & MD	0	
ACT_P <5 kBq	392	29.2%

UNEXPLAIN TIME	PAUSE TIME
07:08:24	05:59
08:32:14	06:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,240		14:10:15	07:41
2-SEC RECORDS WITH SORTS	1,341	(ACT_P >0 kBq)		08:26
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				08:27
2 DETECTORS	288	81.6%		13:27
3 DETECTORS	56	15.9%		14:10
4 DETECTORS	8	2.3%		
5 DETECTORS	1	0.3%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	353			
NET 2-SEC RECORDS WITH SORTS	988			
2-SEC PERIODS WITH NO SORTS	12,252			
AVG TIME BETWEEN 2-SEC SORTS	26.8 sec			

1-GATE SORTS		711	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	25	3.5%	-14000	4	-231	4000	177	13.2%	4
2	89	12.5%	-12000	1	-198	8000	570	42.5%	8
3	128	18.0%	-10000	2	-165	12000	207	15.4%	12
4	145	20.4%	-8000	3	-132	16000	113	8.4%	16
5	128	18.0%	-6000	12	-99	20000	63	4.7%	20
6	107	15.0%	-4000	23	-66	24000	41	3.1%	24
7	75	10.5%	-2000	41	-33	28000	34	2.5%	28
8	14	2.0%	0	338	0	32000	15	1.1%	32
TOTAL	711		2000	135	33	36000	13	1.0%	36
			4000	139	66	40000	13	1.0%	40
2-GATE SORTS		630	6000	150	99	44000	13	1.0%	44
DETECTR	SORTS	FREQ%	8000	132	132	48000	10	0.7%	48
8			10000	81	165	52000	9	0.7%	52
9	42	6.7%	12000	64	198	56000	5	0.4%	56
10	90	14.3%	14000	63	231	60000	11	0.8%	60
11	121	19.2%	16000	50	264	64000	3	0.2%	64
12	129	20.5%	18000	35	298	68000	4	0.3%	68
13	115	18.3%	20000	40	331	72000	2	0.1%	72
14	91	14.4%	22000	21	364	76000	3	0.2%	76
15	42	6.7%	24000	0	397	80000	1	0.1%	80
TOTAL	630		26000	0	430	84000	2	0.1%	84
			>28000	0	0	>84000	32	2.4%	>84
			TOTAL	1334		TOTAL	1341		

SUMMARY TOTALS

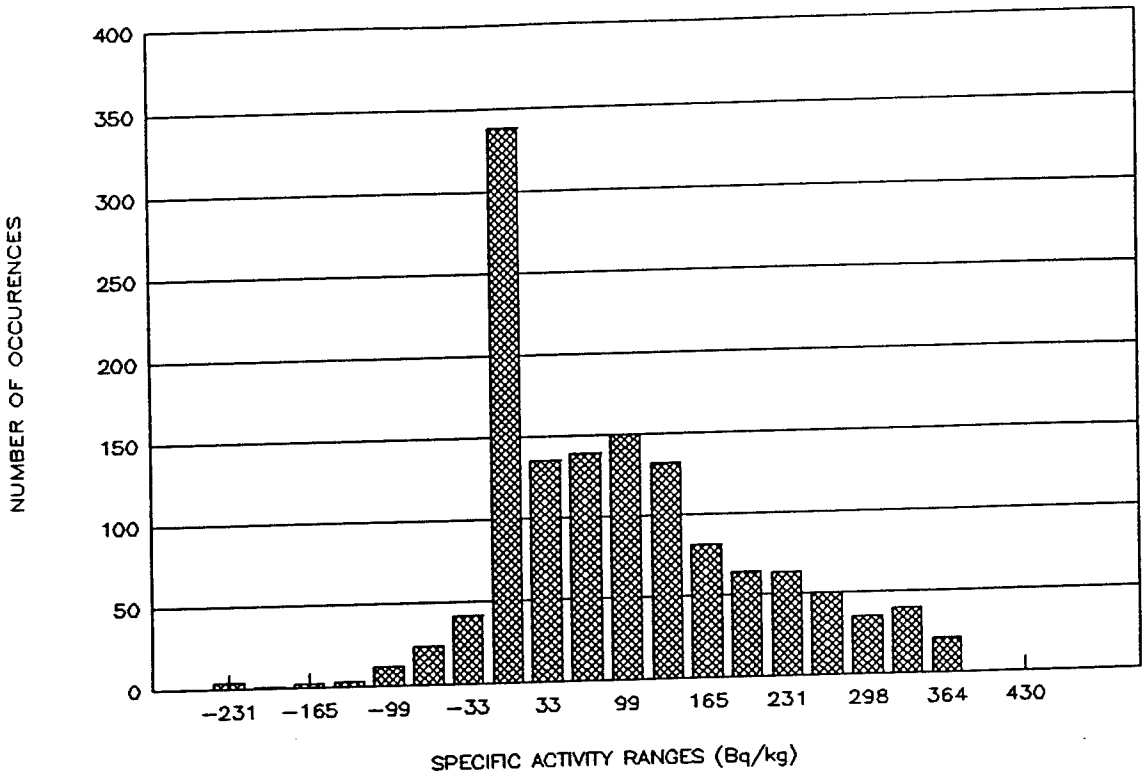
HOT PARTICLE EVENTS	1300	SORTS BY ONE GATE ONLY	711
MULTIPARTICLE EVENTS	1487	SORTS BY TWO GATES	630
DISTRIBUTED EVENTS	18354		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

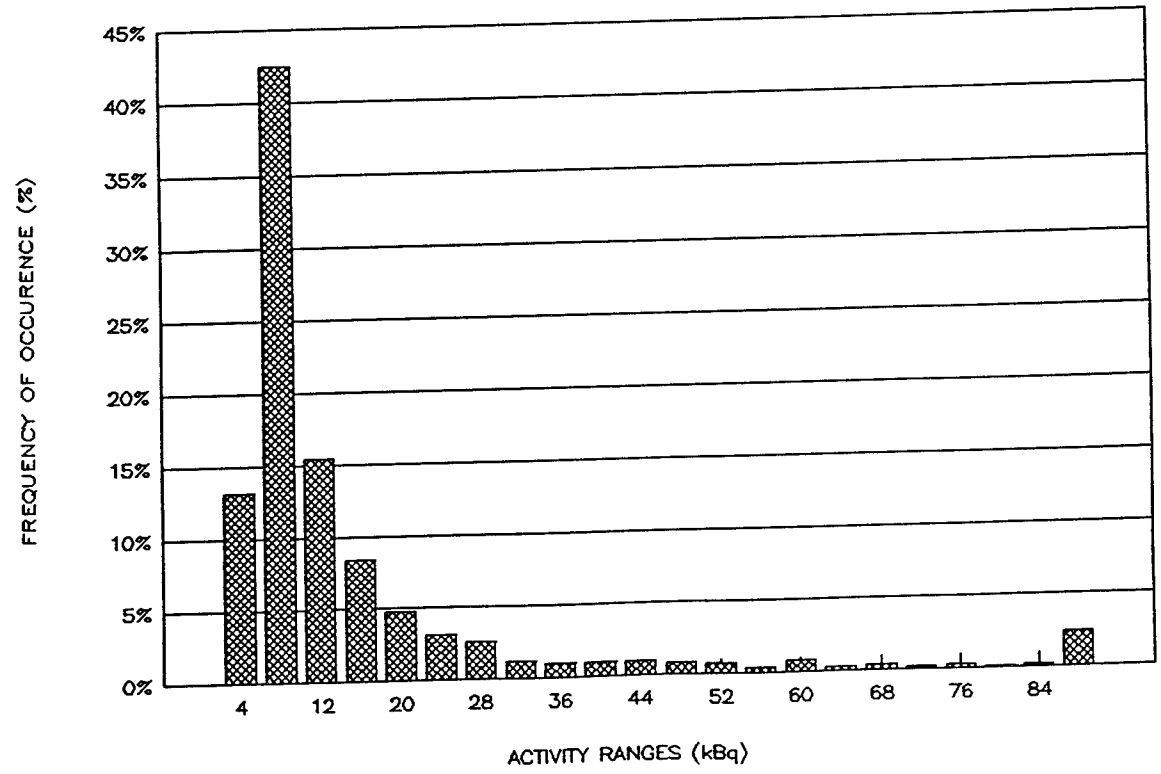
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 12-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 12-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 10-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.20 tons	105.9 tons	
MAXIMUM/SORT	14.4 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.9%
EQUIVALENT SOIL-IN-GROUND	0.95 yd³	84.0 yd³	84.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	41,187 kBq		
MAXIMUM/SORT	8,862 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	23,363 kBq	6,851 kBq	
MAXIMUM/SORT	16078 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	19,460 Bq/kg	65 Bq/kg	

WORK HISTORY

WORK DAY START	06:06 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:06 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	04:53 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.4 hr
AVAILABLE HOURS	11.4 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.83 hr
DOWN-TIME	1.57 hr
TOTAL SYSTEM PAUSE	0.87 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.62 hr
PLANT PERFORMANCE	86.3%
PRODUCTIVITY	86.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,861	
NONPROCESS RECORDS (Test, calibration, etc)			22	
20-SEC PROCESS RECORDS			1,770	
TOTAL SORT			0	MD>0 & MND=0
NO SORT			1,066	AD=0 & MD=0 & MND>0
SOME SORT			704	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	1		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0		09:39:42	06:06
AD<0 & MD	0			07:40
ACT_P <5 kBq	330	30.2%		

2-SEC COUNT PERIODS		17,700	
2-SEC RECORDS WITH SORTS		1,091	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	235	84.8%	
3 DETECTORS	37	13.4%	
4 DETECTORS	5	1.8%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		277	
NET 2-SEC RECORDS WITH SORTS		814	
2-SEC PERIODS WITH NO SORTS		16,886	
AVG TIME BETWEEN 2-SEC SORTS		43.5 sec	

1-GATE SORTS DETECTR	SORTS	557 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	10	1.8%	-14000	2	-231	4000	140	12.8%	4
2	39	7.0%	-12000	4	-198	8000	470	43.1%	8
3	81	14.5%	-10000	5	-165	12000	159	14.6%	12
4	103	18.5%	-8000	3	-132	16000	86	7.9%	16
5	119	21.4%	-6000	5	-99	20000	41	3.8%	20
6	85	15.3%	-4000	9	-66	24000	49	4.5%	24
7	90	16.2%	-2000	63	-33	28000	35	3.2%	28
8	30	5.4%	0	139	0	32000	17	1.6%	32
TOTAL	557		2000	339	33	36000	7	0.6%	36
			4000	409	66	40000	10	0.9%	40
2-GATE SORTS		534	6000	351	99	44000	8	0.7%	44
DETECTR	SORTS	FREQ%	8000	239	132	48000	11	1.0%	48
8			10000	133	165	52000	5	0.5%	52
9	19	3.6%	12000	62	198	56000	4	0.4%	56
10	53	9.9%	14000	20	231	60000	5	0.5%	60
11	105	19.7%	16000	7	264	64000	5	0.5%	64
12	101	18.9%	18000	2	298	68000	2	0.2%	68
13	112	21.0%	20000	0	331	72000	2	0.2%	72
14	82	15.4%	22000	0	364	76000	3	0.3%	76
15	62	11.6%	24000	0	397	80000	1	0.1%	80
TOTAL	534		26000	0	430	84000	1	0.1%	84
			>28000	0	0	>84000	30	2.7%	>84
			TOTAL	1792		TOTAL	1091		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1076	SORTS BY ONE GATE ONLY	557
MULTIPARTICLE EVENTS	496	SORTS BY TWO GATES	534
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

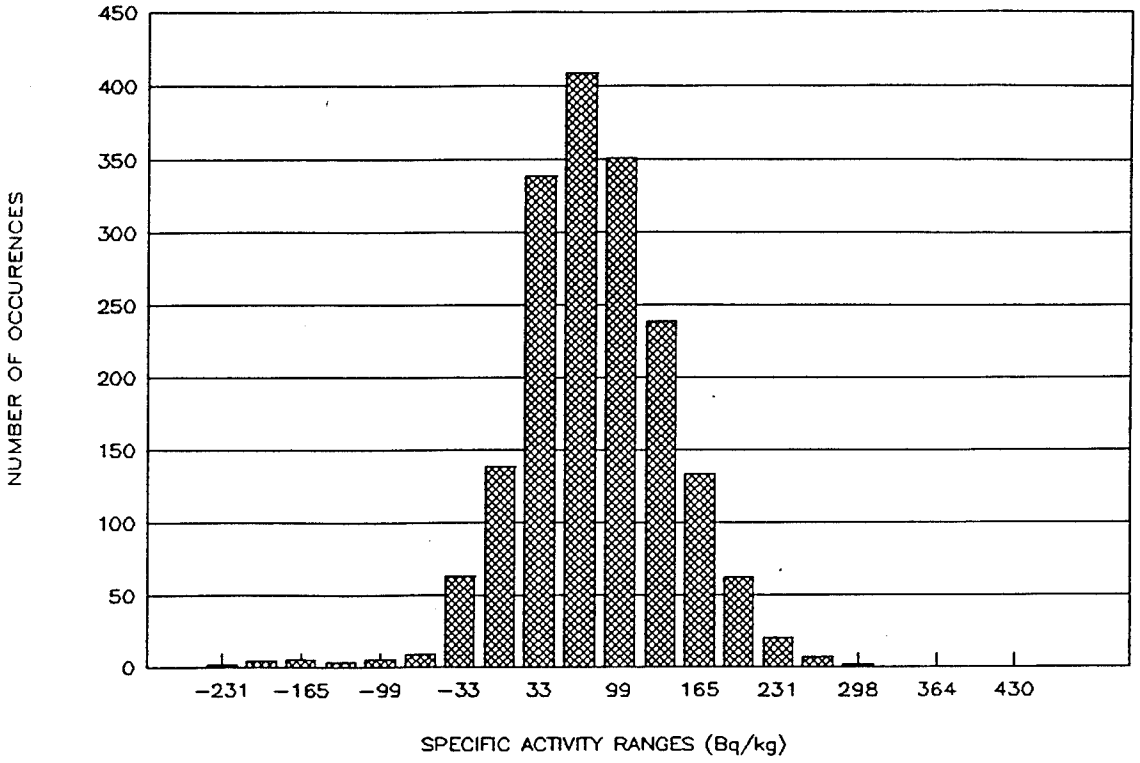
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

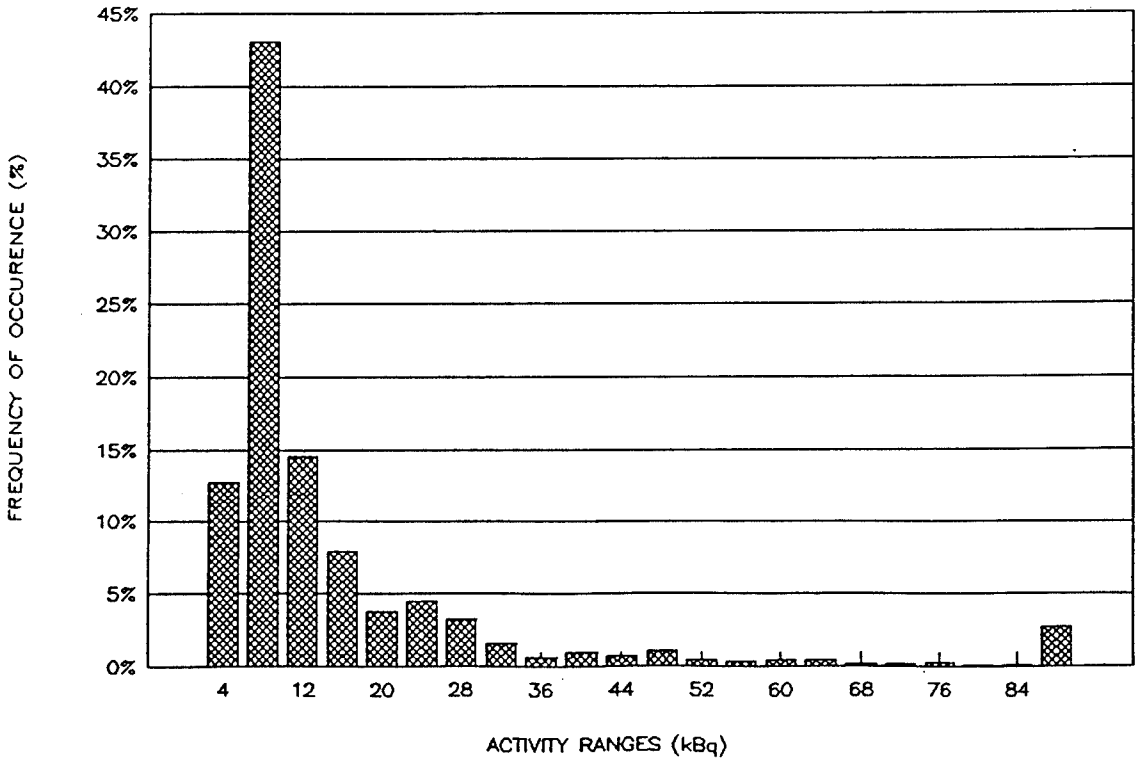
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 10-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 10-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 10-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.3 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.32 tons	105.3 tons	
MAXIMUM/SORT	63.6 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	54.5 kg	
			98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.05 yd³	83.4 yd³	84.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,514 kBq		
MAXIMUM/SORT	1,650 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,783 kBq	6,926 kBq	
MAXIMUM/SORT	1341 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	7,389 Bq/kg	66 Bq/kg	

WORK HISTORY

WORK DAY START	06:06 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:06 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	04:54 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.4 hr
AVAILABLE HOURS	11.4 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.78 hr
DOWN-TIME	1.62 hr
TOTAL SYSTEM PAUSE	0.91 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.45 hr
SHUT-DOWN	0.59 hr
PLANT PERFORMANCE	85.8%
PRODUCTIVITY	85.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,877	
NONPROCESS RECORDS (Test, calibration, etc)	26	
20-SEC PROCESS RECORDS	1,761	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	1,010	AD=0 & MD=0 & MND>0
SOME SORT	750	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	320	28.7%

UNEXPLAIN TIME	PAUSE TIME
12:23:26	06:06
13:10:26	07:40

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	17,610		08:02
2-SEC RECORDS WITH SORTS	1,116	(ACT_P >0 kBq)	11:58
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	225	79.2%	
3 DETECTORS	46	16.2%	
4 DETECTORS	10	3.5%	
5 DETECTORS	3	1.1%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	284		
NET 2-SEC RECORDS WITH SORTS	832		
2-SEC PERIODS WITH NO SORTS	16,778		
AVG TIME BETWEEN 2-SEC SORTS	42.3	sec	

1-GATE SORTS		587	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	14	2.4%	-14000	10	-231	4000	151	13.5%	4
2	85	14.5%	-12000	5	-198	8000	455	40.8%	8
3	76	12.9%	-10000	3	-165	12000	172	15.4%	12
4	129	22.0%	-8000	2	-132	16000	89	8.0%	16
5	130	22.1%	-6000	9	-99	20000	56	5.0%	20
6	94	16.0%	-4000	26	-66	24000	30	2.7%	24
7	51	8.7%	-2000	76	-33	28000	27	2.4%	28
8	8	1.4%	0	178	0	32000	15	1.3%	32
TOTAL	587		2000	280	33	36000	11	1.0%	36
			4000	369	66	40000	14	1.3%	40
2-GATE SORTS		529	6000	318	99	44000	11	1.0%	44
DETECTR	SORTS	FREQ%	8000	228	132	48000	8	0.7%	48
8			10000	149	165	52000	7	0.6%	52
9	44	8.3%	12000	82	198	56000	5	0.4%	56
10	63	11.9%	14000	35	231	60000	7	0.6%	60
11	89	16.8%	16000	12	264	64000	7	0.6%	64
12	131	24.8%	18000	4	298	68000	5	0.4%	68
13	100	18.9%	20000	1	331	72000	6	0.5%	72
14	78	14.7%	22000	0	364	76000	3	0.3%	76
15	24	4.5%	24000	0	397	80000	0	0.0%	80
TOTAL	529		26000	0	430	84000	2	0.2%	84
			>28000	0	0	>84000	35	3.1%	>84
			TOTAL	1787		TOTAL	1116		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1103	SORTS BY ONE GATE ONLY	587
MULTIPARTICLE EVENTS	549	SORTS BY TWO GATES	529
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

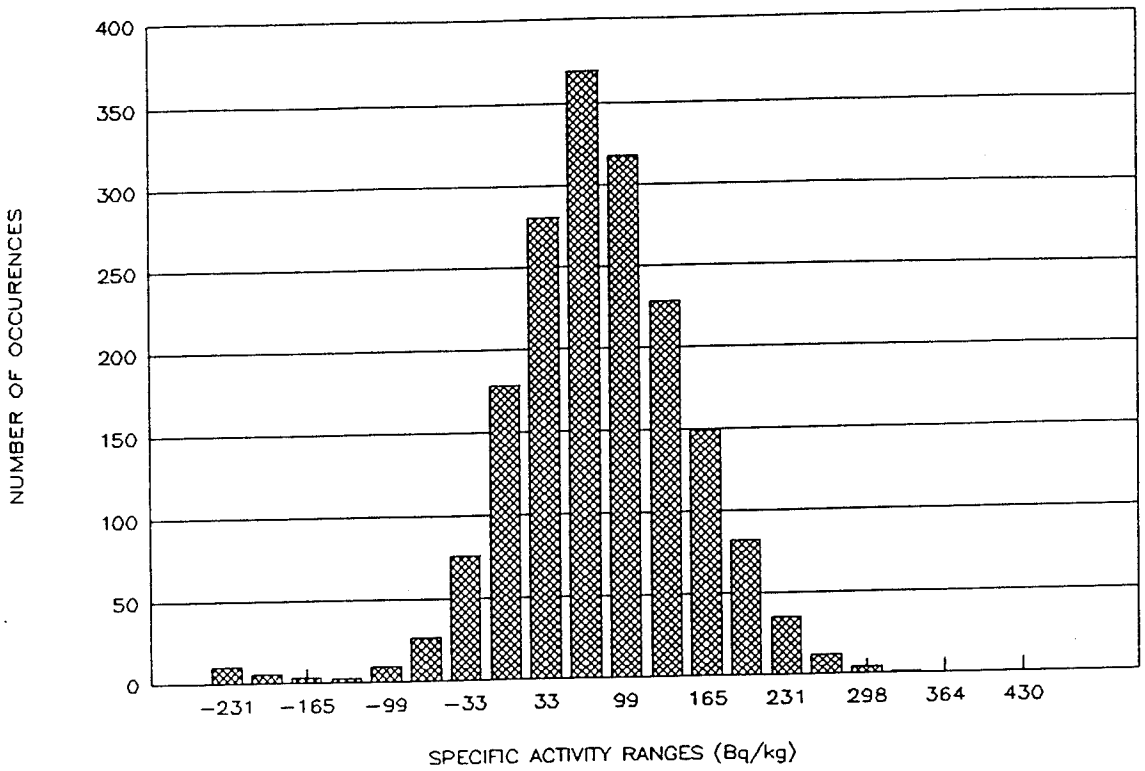
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

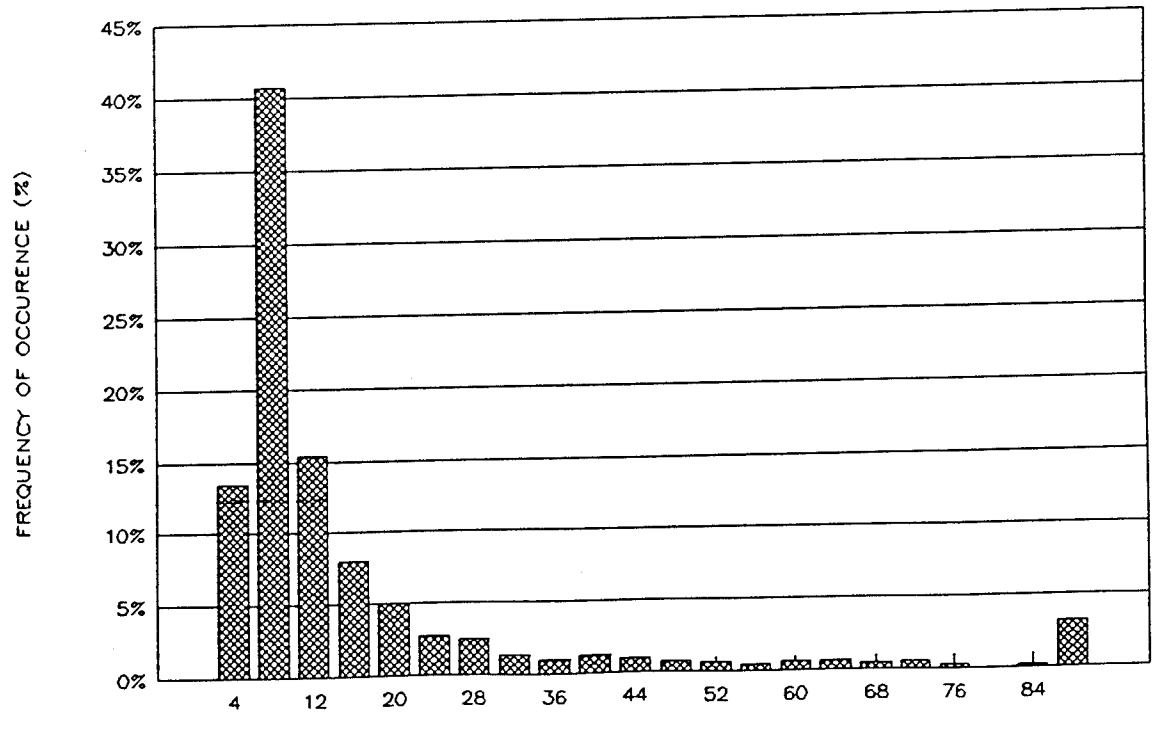
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 10-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 10-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 08-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.2 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.37 tons	85.4 tons	
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.4%
EQUIVALENT SOIL-IN-GROUND	1.08 yd³	67.7 yd³	68.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,817 kBq		
MAXIMUM/SORT	869 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,887 kBq	7,501 kBq	
MAXIMUM/SORT	609 kBq	19 kBq	
MINIMUM/SORT	-10376 Bq	-14 kBq	
SPECIFIC ACTIVITY	5,039 Bq/kg	88 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.62 hr
DOWN-TIME	2.88 hr
TOTAL SYSTEM PAUSE	2.41 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	75.0%
PRODUCTIVITY	75.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,650		
NONPROCESS RECORDS (Test, calibration, etc)	3		
20-SEC PROCESS RECORDS	1,552		
TOTAL SORT	4	MD>0 & MND=0	
NO SORT	823	AD=0 & MD=0 & MND>0	
SOME SORT	725	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	363	33.1%	

UNEXPLAIN TIME	PAUSE TIME
15:45:22	06:00
	13:36

2-SEC COUNT PERIODS		15,520	
2-SEC RECORDS WITH SORTS		1,098	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	256	85.3%	
3 DETECTORS	37	12.3%	
4 DETECTORS	6	2.0%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	300		
NET 2-SEC RECORDS WITH SORTS		798	
2-SEC PERIODS WITH NO SORTS		14,722	
AVG TIME BETWEEN 2-SEC SORTS		38.9	sec

1-GATE SORTS DETECTR	SORTS	565 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	8	1.4%	-14000	0	-250	4000	183	16.7%	4
2	50	8.8%	-12000	2	-215	8000	447	40.7%	8
3	88	15.6%	-10000	3	-179	12000	185	16.8%	12
4	100	17.7%	-8000	4	-143	16000	81	7.4%	16
5	109	19.3%	-6000	4	-107	20000	54	4.9%	20
6	105	18.6%	-4000	9	-72	24000	27	2.5%	24
7	86	15.2%	-2000	26	-36	28000	19	1.7%	28
8	19	3.4%	0	102	0	32000	13	1.2%	32
TOTAL	565		2000	176	36	36000	13	1.2%	36
			4000	342	72	40000	13	1.2%	40
2-GATE SORTS		533	6000	330	107	44000	5	0.5%	44
DETECTR	SORTS	FREQ%	8000	262	143	48000	11	1.0%	48
8			10000	149	179	52000	6	0.5%	52
9	18	3.4%	12000	81	215	56000	4	0.4%	56
10	61	11.4%	14000	39	250	60000	3	0.3%	60
11	87	16.3%	16000	20	286	64000	5	0.5%	64
12	98	18.4%	18000	4	322	68000	5	0.5%	68
13	113	21.2%	20000	2	358	72000	2	0.2%	72
14	91	17.1%	22000	0	394	76000	4	0.4%	76
15	65	12.2%	24000	0	429	80000	0	0.0%	80
TOTAL	533		26000	0	465	84000	0	0.0%	84
			>28000	0	0	>84000	18	1.6%	>84
			TOTAL	1555		TOTAL	1098		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1096	SORTS BY ONE GATE ONLY	565
MULTIPARTICLE EVENTS	532	SORTS BY TWO GATES	533
DISTRIBUTED EVENTS	323		

REC CODE EXPLANATION

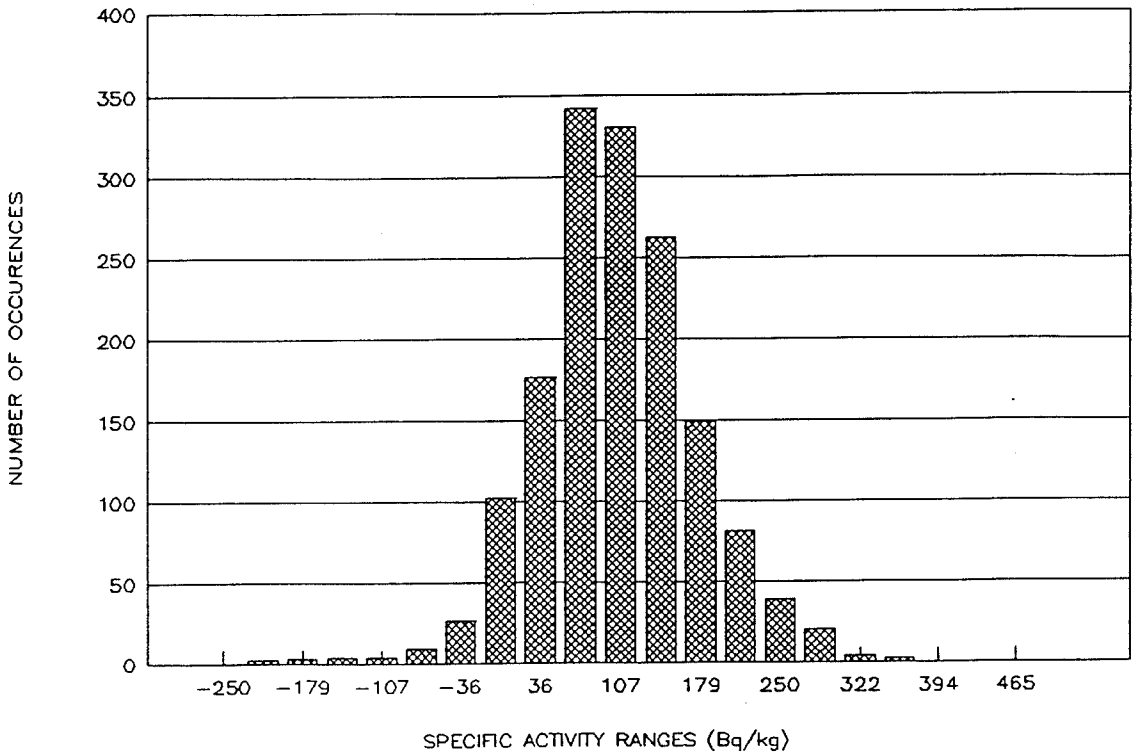
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

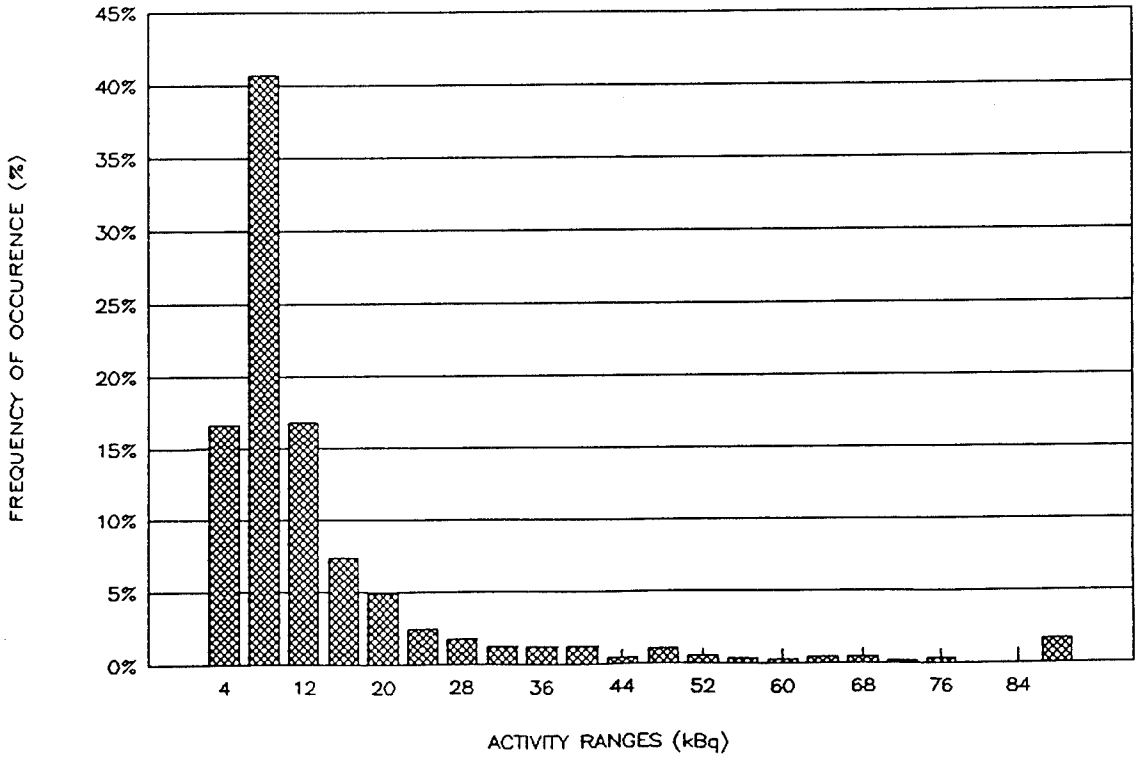
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 08-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 08-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 08-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.2 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.04 tons	84.6 tons	
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.6%
EQUIVALENT SOIL-IN-GROUND	1.61 yd³	67.0 yd³	68.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,718 kBq		
MAXIMUM/SORT	702 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,473 kBq	5,974 kBq	
MAXIMUM/SORT	366 kBq	19 kBq	
MINIMUM/SORT	-14666 Bq	-17 kBq	
SPECIFIC ACTIVITY	4,163 Bq/kg	71 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.61 hr
DOWN-TIME	2.89 hr
TOTAL SYSTEM PAUSE	2.44 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	74.8%
PRODUCTIVITY	74.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,661	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	1,549	
TOTAL SORT	10 MD>0 & MND=0	
NO SORT	585 AD=0 & MD=0 & MND>0	
SOME SORT	954 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	1	
AD<0 & MD	1	
ACT_P <5 kBq	330	29.7%

UNEXPLAIN TIME	PAUSE TIME
13:40:20	06:00
15:45:22	11:46

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	15,490		13:36
2-SEC RECORDS WITH SORTS	1,112	(ACT_P >0 kBq)	13:52
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	229	84.2%	
3 DETECTORS	36	13.2%	
4 DETECTORS	6	2.2%	
5 DETECTORS	1	0.4%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	272		
NET 2-SEC RECORDS WITH SORTS	840		
2-SEC PERIODS WITH NO SORTS	14,650		
AVG TIME BETWEEN 2-SEC SORTS	36.9 sec		

1-GATE SORTS		590	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	16	2.7%	-14000	5	-250	4000	157	14.1%	4
2	86	14.6%	-12000	3	-215	8000	469	42.2%	8
3	100	16.9%	-10000	3	-179	12000	174	15.6%	12
4	119	20.2%	-8000	4	-143	16000	78	7.0%	16
5	119	20.2%	-6000	8	-107	20000	54	4.9%	20
6	95	16.1%	-4000	20	-72	24000	39	3.5%	24
7	48	8.1%	-2000	63	-36	28000	24	2.2%	28
8	7	1.2%	0	149	0	32000	17	1.5%	32
TOTAL	590		2000	228	36	36000	15	1.3%	36
			4000	334	72	40000	8	0.7%	40
2-GATE SORTS		522	6000	309	107	44000	9	0.8%	44
DETECTR	SORTS	FREQ%	8000	204	143	48000	12	1.1%	48
8			10000	117	179	52000	4	0.4%	52
9	33	6.3%	12000	44	215	56000	8	0.7%	56
10	82	15.7%	14000	28	250	60000	5	0.4%	60
11	108	20.7%	16000	18	286	64000	3	0.3%	64
12	114	21.8%	18000	14	322	68000	7	0.6%	68
13	96	18.4%	20000	1	358	72000	1	0.1%	72
14	63	12.1%	22000	0	394	76000	3	0.3%	76
15	26	5.0%	24000	0	429	80000	1	0.1%	80
TOTAL	522		26000	0	465	84000	4	0.4%	84
			>28000	0	0	>84000	20	1.8%	>84
			TOTAL	1552		TOTAL	1112		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1126	SORTS BY ONE GATE ONLY	590
MULTIPARTICLE EVENTS	990	SORTS BY TWO GATES	522
DISTRIBUTED EVENTS	790		

REC CODE EXPLANATION

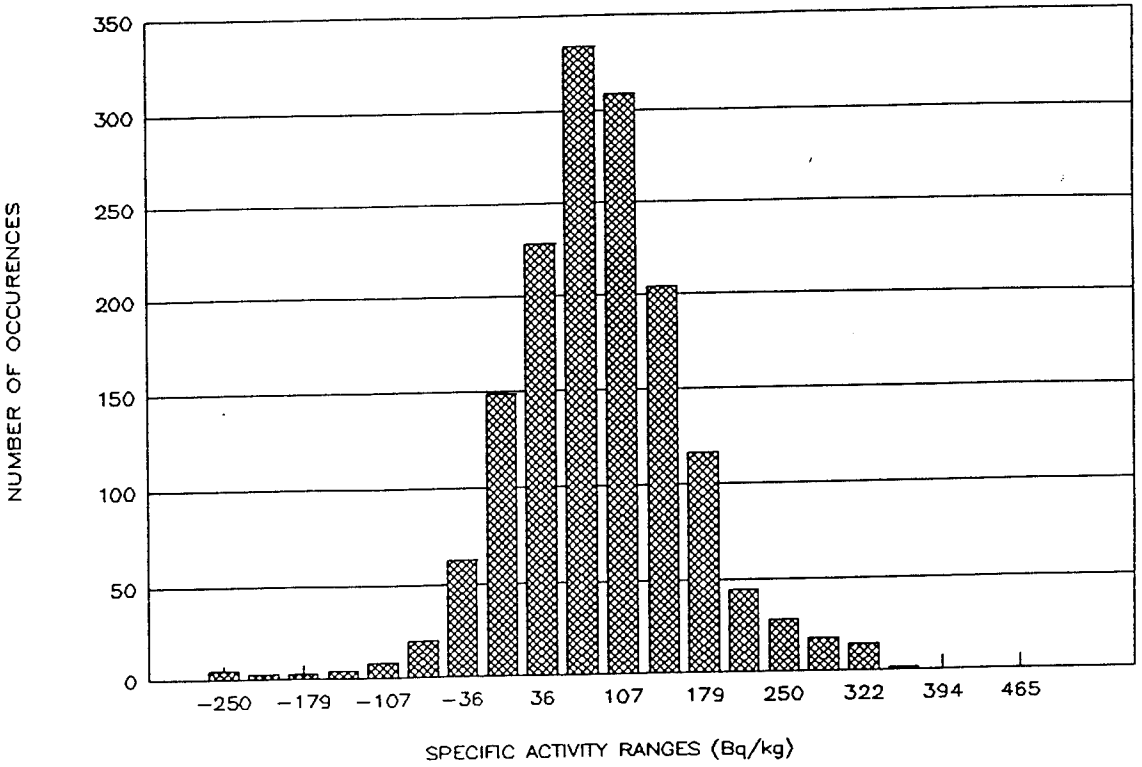
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

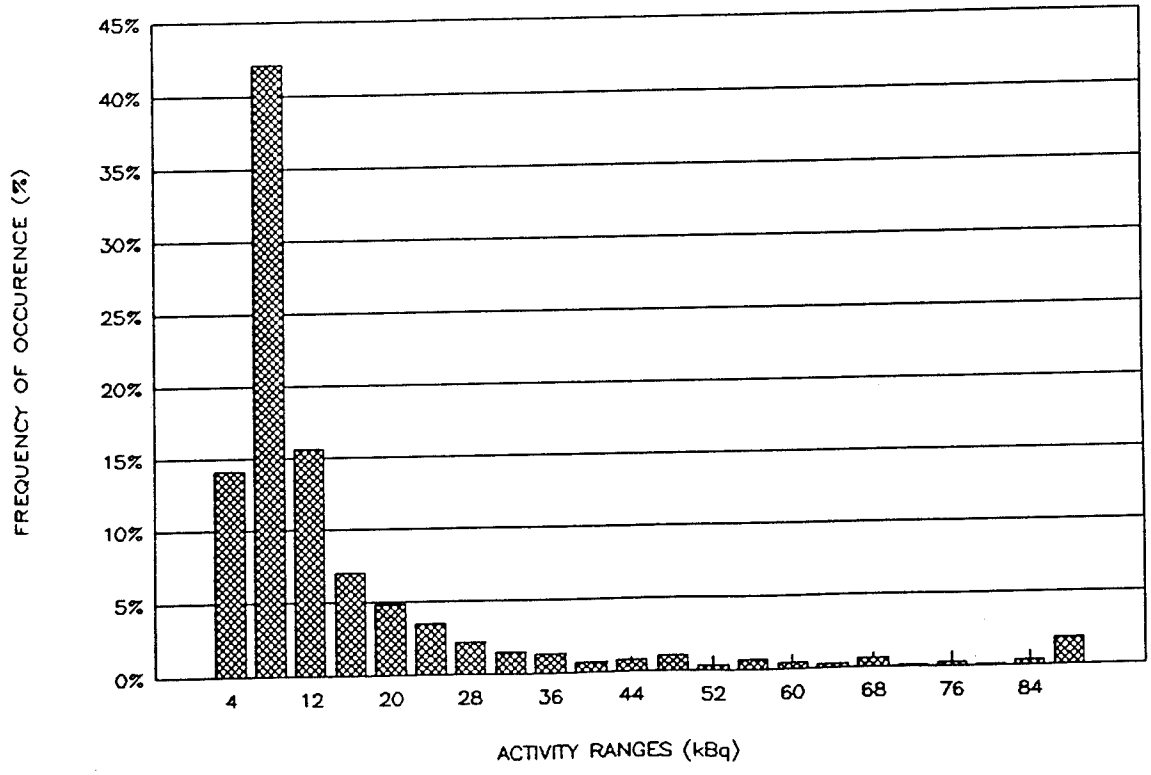
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 08-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 08-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 07-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.56 tons	100.3 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.23 yd³	79.5 yd³	80.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	18,848 kBq		
MAXIMUM/SORT	469 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,458 kBq	8,106 kBq	
MAXIMUM/SORT	280 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	5,431 Bq/kg	81 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.56 hr
DOWN-TIME	0.94 hr
TOTAL SYSTEM PAUSE	0.47 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	91.8%
PRODUCTIVITY	91.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,284	
NONPROCESS RECORDS (Test, calibration, etc)		2	
20-SEC PROCESS RECORDS		1,901	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		915	AD=0 & MD=0 & MND>0
SOME SORT		985	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	4		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	468	33.8%	

UNEXPLAIN TIME	PAUSE TIME
07:31:57	06:00
08:56:37	12:26

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,010		13:04:57	13:20
2-SEC RECORDS WITH SORTS	1,383	(ACT_P >0 kBq)	16:09:41	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				
2 DETECTORS	310	83.1%		
3 DETECTORS	58	15.5%		
4 DETECTORS	5	1.3%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	373			
NET 2-SEC RECORDS WITH SORTS	1,010			
2-SEC PERIODS WITH NO SORTS	18,000			
AVG TIME BETWEEN 2-SEC SORTS	37.6 sec			

1-GATE SORTS DETECTR	SORTS	698 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	12	1.7%	-14000	0	-261	4000	226	16.3%	4
2	54	7.7%	-12000	0	-224	8000	620	44.8%	8
3	102	14.6%	-10000	1	-187	12000	199	14.4%	12
4	129	18.5%	-8000	2	-149	16000	80	5.8%	16
5	156	22.3%	-6000	5	-112	20000	53	3.8%	20
6	135	19.3%	-4000	16	-75	24000	46	3.3%	24
7	93	13.3%	-2000	41	-37	28000	31	2.2%	28
8	17	2.4%	0	141	0	32000	14	1.0%	32
TOTAL	698		2000	300	37	36000	23	1.7%	36
			4000	397	75	40000	11	0.8%	40
2-GATE SORTS		685	6000	438	112	44000	7	0.5%	44
DETECTR	SORTS	FREQ%	8000	294	149	48000	6	0.4%	48
8			10000	162	187	52000	3	0.2%	52
9	29	4.2%	12000	61	224	56000	12	0.9%	56
10	85	12.4%	14000	26	261	60000	5	0.4%	60
11	118	17.2%	16000	15	299	64000	6	0.4%	64
12	144	21.0%	18000	2	336	68000	0	0.0%	68
13	155	22.6%	20000	2	373	72000	3	0.2%	72
14	108	15.8%	22000	0	410	76000	3	0.2%	76
15	46	6.7%	24000	0	448	80000	3	0.2%	80
TOTAL	685		26000	0	485	84000	2	0.1%	84
			>28000	0	0	>84000	30	2.2%	>84
			TOTAL	1903		TOTAL	1383		

SUMMARY TOTALS

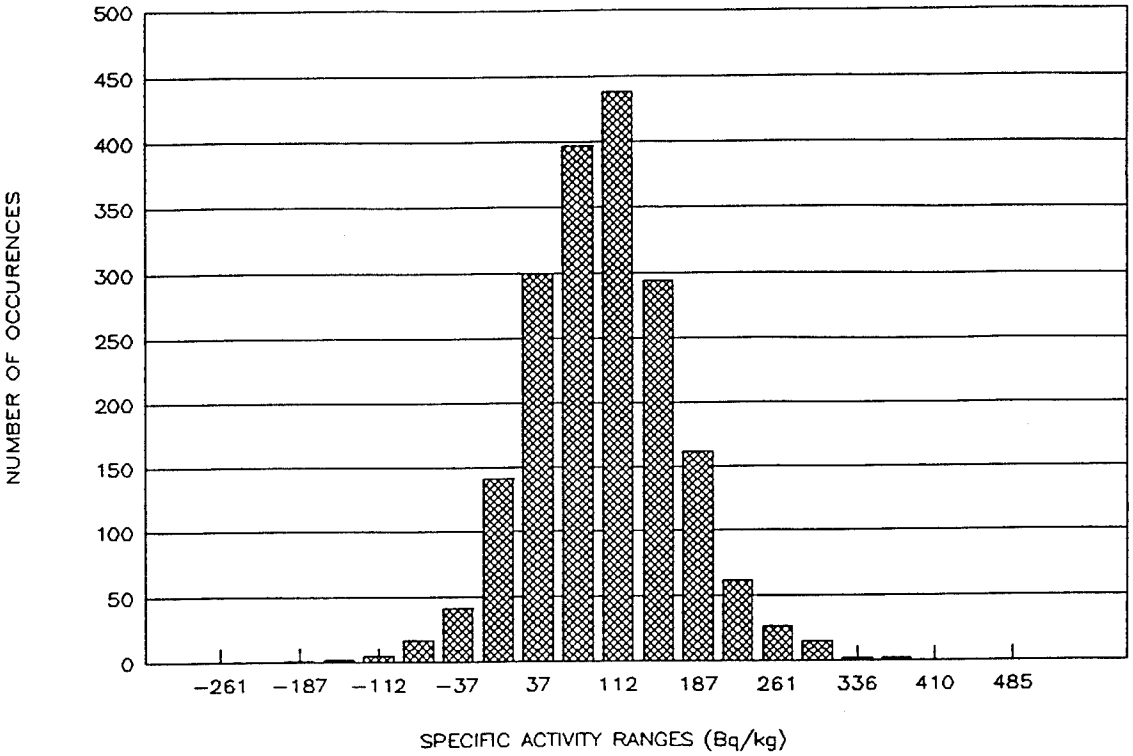
HOT PARTICLE EVENTS	1396	SORTS BY ONE GATE ONLY	698
MULTIPARTICLE EVENTS	849	SORTS BY TWO GATES	685
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

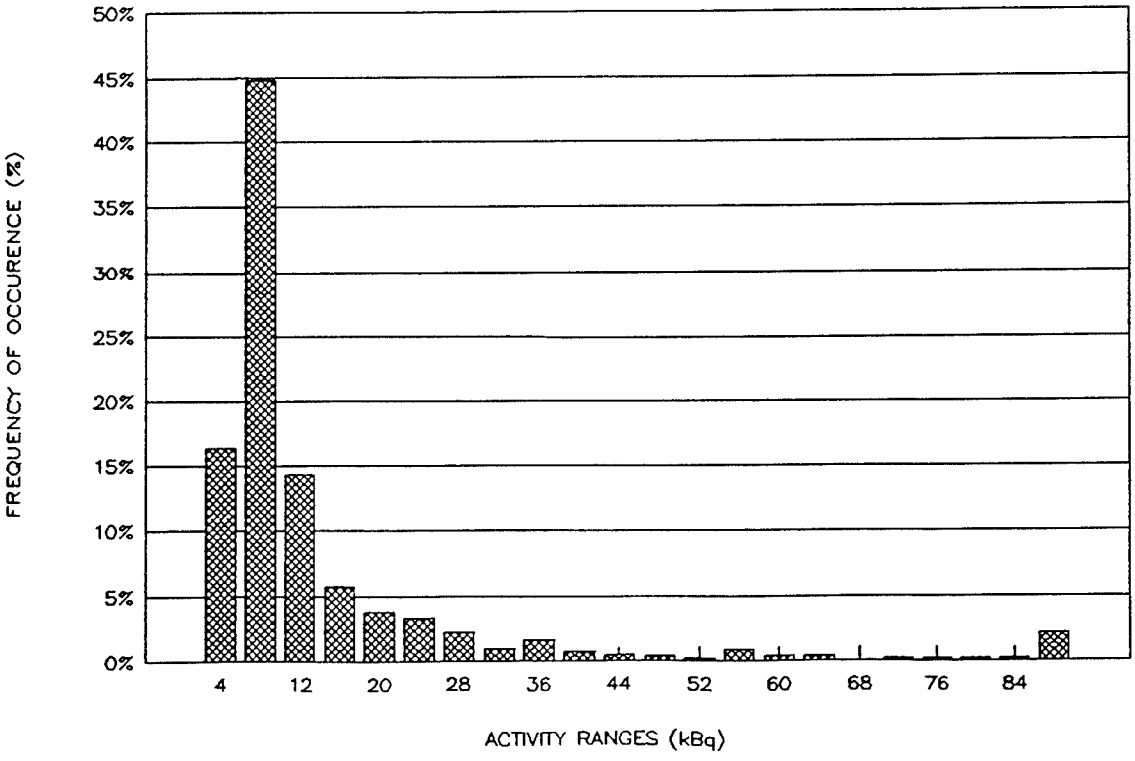
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 07-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 07-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 07-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.45 tons	97.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
			97.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.94 yd³	76.9 yd³	78.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	24,158 kBq		
MAXIMUM/SORT	1,110 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	12,408 kBq	6,221 kBq	
MAXIMUM/SORT	841 kBq	18 kBq	
MINIMUM/SORT	-270 Bq	-17 kBq	
SPECIFIC ACTIVITY	5,067 Bq/kg	64 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.31 hr
DOWN-TIME	1.19 hr
TOTAL SYSTEM PAUSE	0.70 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	89.7%
PRODUCTIVITY	89.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,197	
NONPROCESS RECORDS (Test, calibration, etc)		7	
20-SEC PROCESS RECORDS		1,856	
TOTAL SORT		8	MD>0 & MND=0
NO SORT		600	AD=0 & MD=0 & MND>0
SOME SORT		1,248	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	380	28.3%	

UNEXPLAIN TIME	PAUSE TIME
07:16:38	06:00
07:36:18	13:03

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,560		13:12:07	13:12
2-SEC RECORDS WITH SORTS	1,341	(ACT_P >0 kBq)	13:18:58	13:20
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				
2 DETECTORS	290	82.2%		
3 DETECTORS	56	15.9%		
4 DETECTORS	7	2.0%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	353			
NET 2-SEC RECORDS WITH SORTS	988			
2-SEC PERIODS WITH NO SORTS	17,572			
AVG TIME BETWEEN 2-SEC SORTS	37.6 sec			

1-GATE SORTS	676	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 21	3.1%	-14000	4	-261	4000	169	12.6%	4
2 87	12.9%	-12000	1	-224	8000	540	40.3%	8
3 128	18.9%	-10000	0	-187	12000	218	16.3%	12
4 138	20.4%	-8000	4	-149	16000	109	8.1%	16
5 136	20.1%	-6000	14	-112	20000	67	5.0%	20
6 107	15.8%	-4000	38	-75	24000	42	3.1%	24
7 54	8.0%	-2000	86	-37	28000	34	2.5%	28
8 5	0.7%	0	214	0	32000	27	2.0%	32
TOTAL 676		2000	337	37	36000	18	1.3%	36
		4000	393	75	40000	15	1.1%	40
2-GATE SORTS	665	6000	323	112	44000	14	1.0%	44
DETECTR SORTS	FREQ%	8000	231	149	48000	7	0.5%	48
8		10000	110	187	52000	8	0.6%	52
9 43	6.5%	12000	55	224	56000	5	0.4%	56
10 83	12.5%	14000	28	261	60000	10	0.7%	60
11 161	24.2%	16000	13	299	64000	4	0.3%	64
12 146	22.0%	18000	9	336	68000	2	0.1%	68
13 118	17.7%	20000	3	373	72000	7	0.5%	72
14 92	13.8%	22000	0	410	76000	6	0.4%	76
15 22	3.3%	24000	0	448	80000	2	0.1%	80
TOTAL 665		26000	0	485	84000	2	0.1%	84
		>28000	0	0	>84000	35	2.6%	>84
		TOTAL	1863		TOTAL	1341		

SUMMARY TOTALS

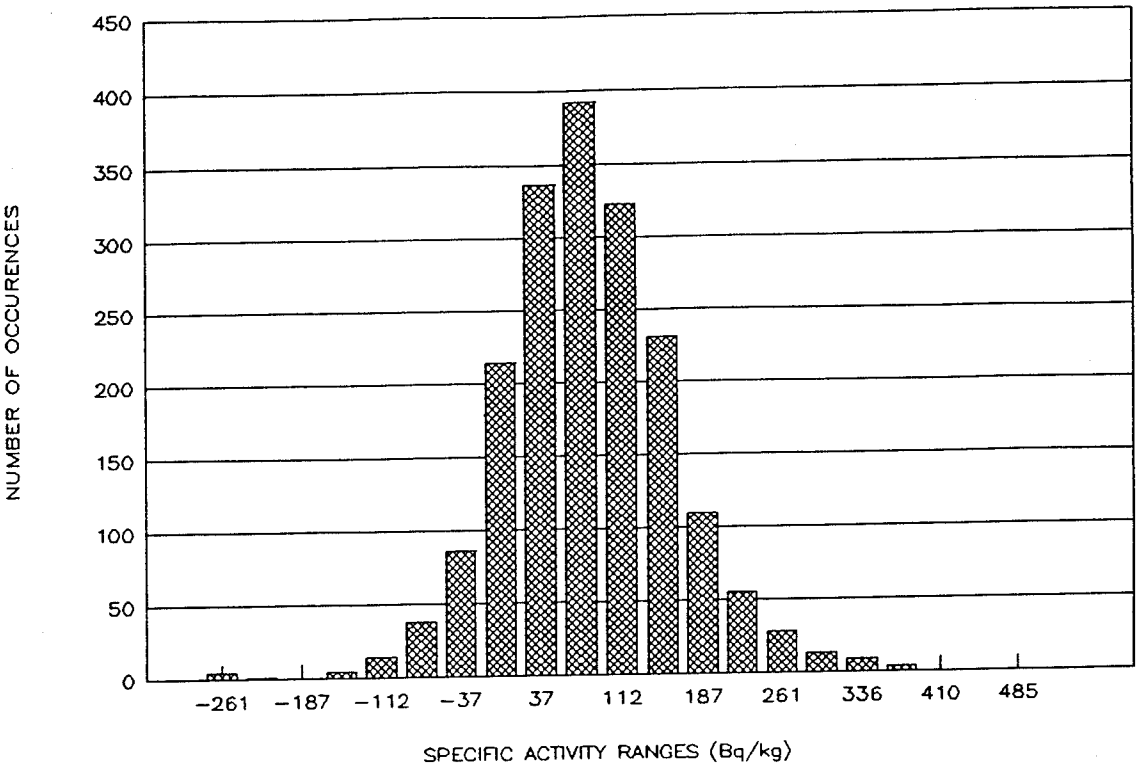
HOT PARTICLE EVENTS	1346	SORTS BY ONE GATE ONLY	676
MULTIPARTICLE EVENTS	1677	SORTS BY TWO GATES	665
DISTRIBUTED EVENTS	635		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

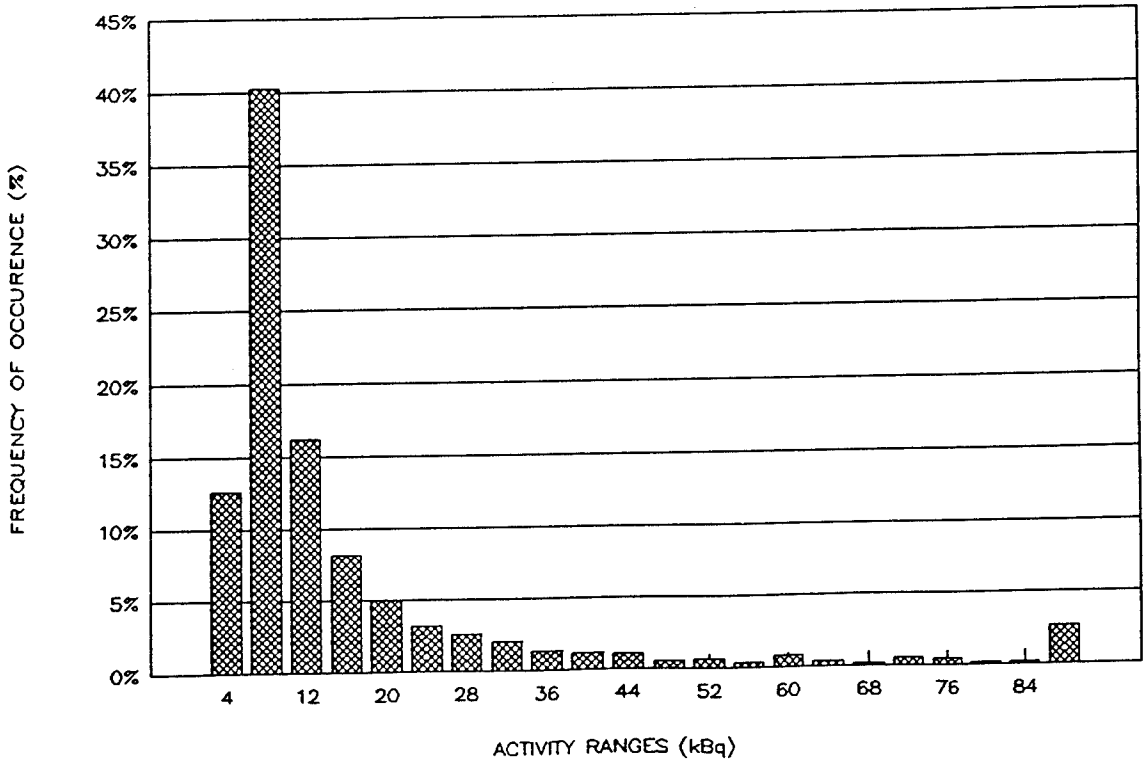
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 07-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 07-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 06-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.80 tons	99.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.3%
EQUIVALENT SOIL-IN-GROUND	2.22 yd³	79.2 yd³	81.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	19,249 kBq		
MAXIMUM/SORT	245 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,907 kBq	9,744 kBq	
MAXIMUM/SORT	162 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	3,540 Bq/kg	98 Bq/kg	

WORK HISTORY

WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:50 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:22 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.7 hr
AVAILABLE HOURS	11.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.65 hr
DOWN-TIME	1.02 hr
TOTAL SYSTEM PAUSE	0.53 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	0.46 hr
PLANT PERFORMANCE	91.3%
PRODUCTIVITY	91.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,318
NONPROCESS RECORDS (Test, calibration, etc)			6
20-SEC PROCESS RECORDS			1,917
TOTAL SORT			23 MD>0 & MND=0
NO SORT			858 AD=0 & MD=0 & MND>0
SOME SORT			1,036 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	477	34.0%	

UNEXPLAIN TIME	PAUSE TIME
None	05:50

2-SEC COUNT PERIODS		19,170	
2-SEC RECORDS WITH SORTS		1,401	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	305	80.9%
	3 DETECTORS	58	15.4%
	4 DETECTORS	12	3.2%
	5 DETECTORS	2	0.5%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	377	
NET 2-SEC RECORDS WITH SORTS		1,024	
2-SEC PERIODS WITH NO SORTS		18,146	
AVG TIME BETWEEN 2-SEC SORTS		37.4	sec

1-GATE SORTS DETECTR	SORTS	707 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	10	1.4%	-14000	0	-261
2	40	5.7%	-12000	1	-224
3	105	14.9%	-10000	2	-187
4	144	20.4%	-8000	1	-149
5	165	23.3%	-6000	4	-112
6	117	16.5%	-4000	16	-75
7	98	13.9%	-2000	40	-37
8	28	4.0%	0	118	0
TOTAL	707		2000	189	37
			4000	335	75
2-GATE SORTS		694	6000	433	112
DETECTR	SORTS	FREQ%	8000	386	149
8			10000	248	187
9	17	2.4%	12000	108	224
10	61	8.8%	14000	32	261
11	118	17.0%	16000	8	299
12	158	22.8%	18000	1	336
13	155	22.3%	20000	1	373
14	113	16.3%	22000	0	410
15	72	10.4%	24000	0	448
TOTAL	694		26000	0	485
			>28000	0	0
			TOTAL	1923	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	252	18.0%	4
8000	588	42.0%	8
12000	185	13.2%	12
16000	110	7.9%	16
20000	57	4.1%	20
24000	43	3.1%	24
28000	22	1.6%	28
32000	22	1.6%	32
36000	13	0.9%	36
40000	19	1.4%	40
44000	9	0.6%	44
48000	8	0.6%	48
52000	6	0.4%	52
56000	6	0.4%	56
60000	10	0.7%	60
64000	4	0.3%	64
68000	5	0.4%	68
72000	2	0.1%	72
76000	2	0.1%	76
80000	2	0.1%	80
84000	3	0.2%	84
>84000	33	2.4%	>84
TOTAL	1401		

SUMMARY TOTALS

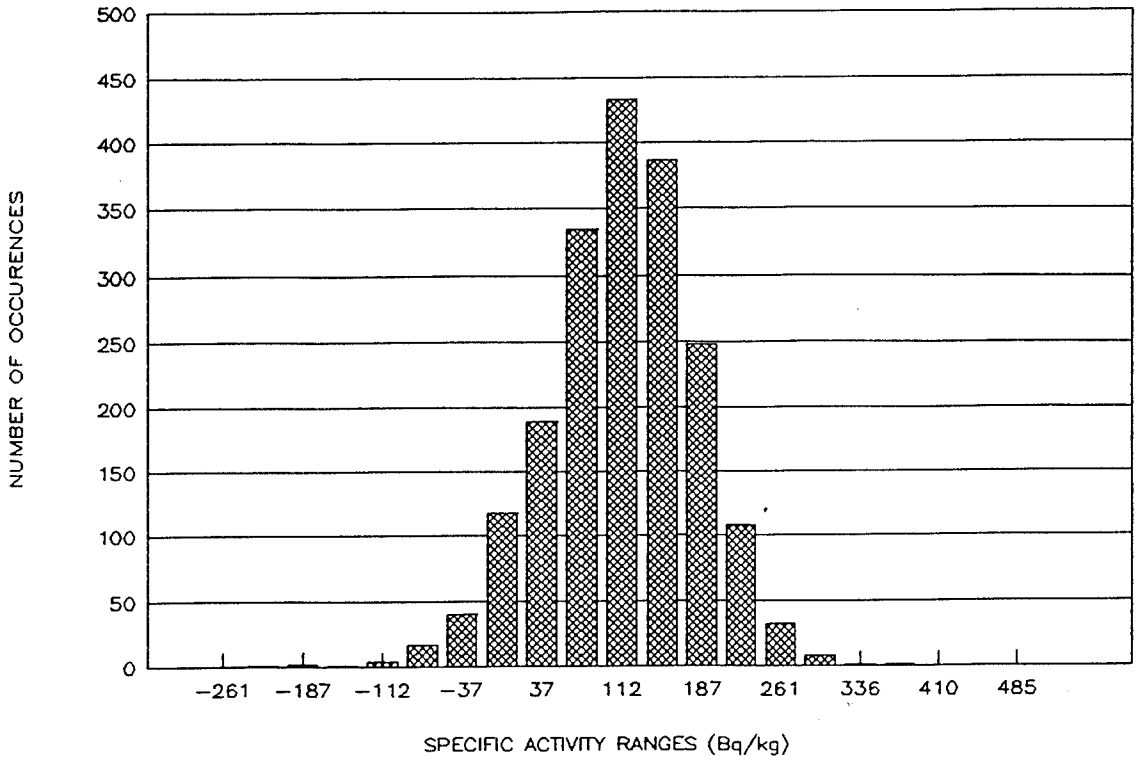
HOT PARTICLE EVENTS	1416	SORTS BY ONE GATE ONLY	707
MULTIPARTICLE EVENTS	1189	SORTS BY TWO GATES	694
DISTRIBUTED EVENTS	1575		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

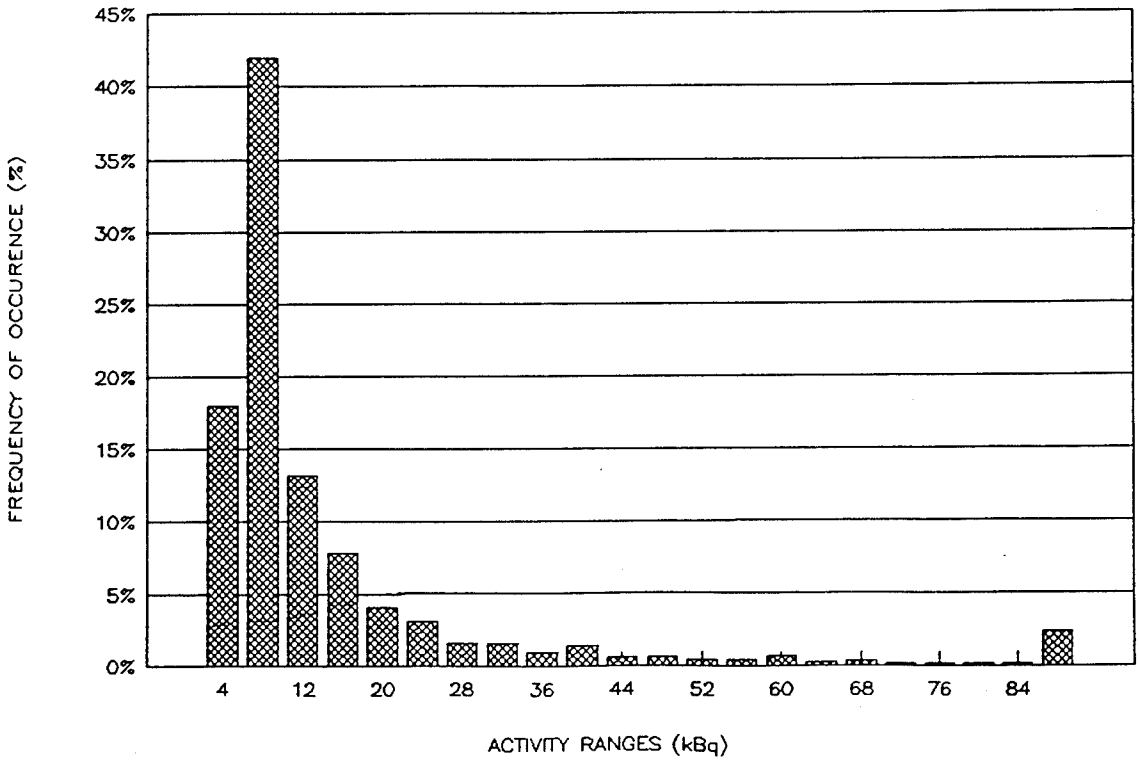
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 06-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 06-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 06-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	4.10 tons	98.6 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
			96.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	3.25 yd³	78.2 yd³	81.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	22,754 kBq		
MAXIMUM/SORT	304 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	13,771 kBq	9,812 kBq	
MAXIMUM/SORT	268 kBq	18 kBq	
MINIMUM/SORT	-16679 Bq	-20 kBq	
SPECIFIC ACTIVITY	3,361 Bq/kg	100 Bq/kg	

WORK HISTORY

WORK DAY START	05:30 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:30 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	05:50 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	12.0 hr
AVAILABLE HOURS	12.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.65 hr
DOWN-TIME	1.35 hr
TOTAL SYSTEM PAUSE	0.53 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.34 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	88.8%
PRODUCTIVITY	88.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,373	
NONPROCESS RECORDS (Test, calibration, etc)		1	
20-SEC PROCESS RECORDS		1,917	
TOTAL SORT		30	MD>0 & MND=0
NO SORT		506	AD=0 & MD=0 & MND>0
SOME SORT		1,380	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	2		
ACT_P <5 kBq	474	32.6%	

UNEXPLAIN TIME	PAUSE TIME
05:50:36	05:50
11:43:36	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,170		13:13:16
2-SEC RECORDS WITH SORTS	1,456	(ACT_P >0 kBq)	14:14:16
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	309	83.1%	
3 DETECTORS	55	14.8%	
4 DETECTORS	7	1.9%	
5 DETECTORS	1	0.3%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	372		
NET 2-SEC RECORDS WITH SORTS	1,084		
2-SEC PERIODS WITH NO SORTS	18,086		
AVG TIME BETWEEN 2-SEC SORTS	35.4 sec		

1-GATE SORTS		736	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	19	2.6%	-14000	4	-261	4000	233	16.0%	4
2	99	13.5%	-12000	2	-224	8000	620	42.6%	8
3	118	16.0%	-10000	1	-187	12000	197	13.5%	12
4	165	22.4%	-8000	2	-149	16000	105	7.2%	16
5	145	19.7%	-6000	8	-112	20000	55	3.8%	20
6	112	15.2%	-4000	16	-75	24000	54	3.7%	24
7	69	9.4%	-2000	45	-37	28000	34	2.3%	28
8	9	1.2%	0	112	0	32000	23	1.6%	32
TOTAL	736		2000	213	37	36000	17	1.2%	36
			4000	322	75	40000	12	0.8%	40
2-GATE SORTS		720	6000	396	112	44000	18	1.2%	44
DETECTR	SORTS	FREQ%	8000	365	149	48000	6	0.4%	48
8			10000	224	187	52000	6	0.4%	52
9	43	6.0%	12000	110	224	56000	4	0.3%	56
10	91	12.6%	14000	69	261	60000	11	0.8%	60
11	164	22.8%	16000	21	299	64000	8	0.5%	64
12	161	22.4%	18000	8	336	68000	7	0.5%	68
13	129	17.9%	20000	0	373	72000	6	0.4%	72
14	95	13.2%	22000	0	410	76000	2	0.1%	76
15	37	5.1%	24000	0	448	80000	1	0.1%	80
TOTAL	720		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	37	2.5%	>84
			TOTAL	1918		TOTAL	1456		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1481	SORTS BY ONE GATE ONLY	736
MULTIPARTICLE EVENTS	2633	SORTS BY TWO GATES	720
DISTRIBUTED EVENTS	2012		

REC CODE EXPLANATION

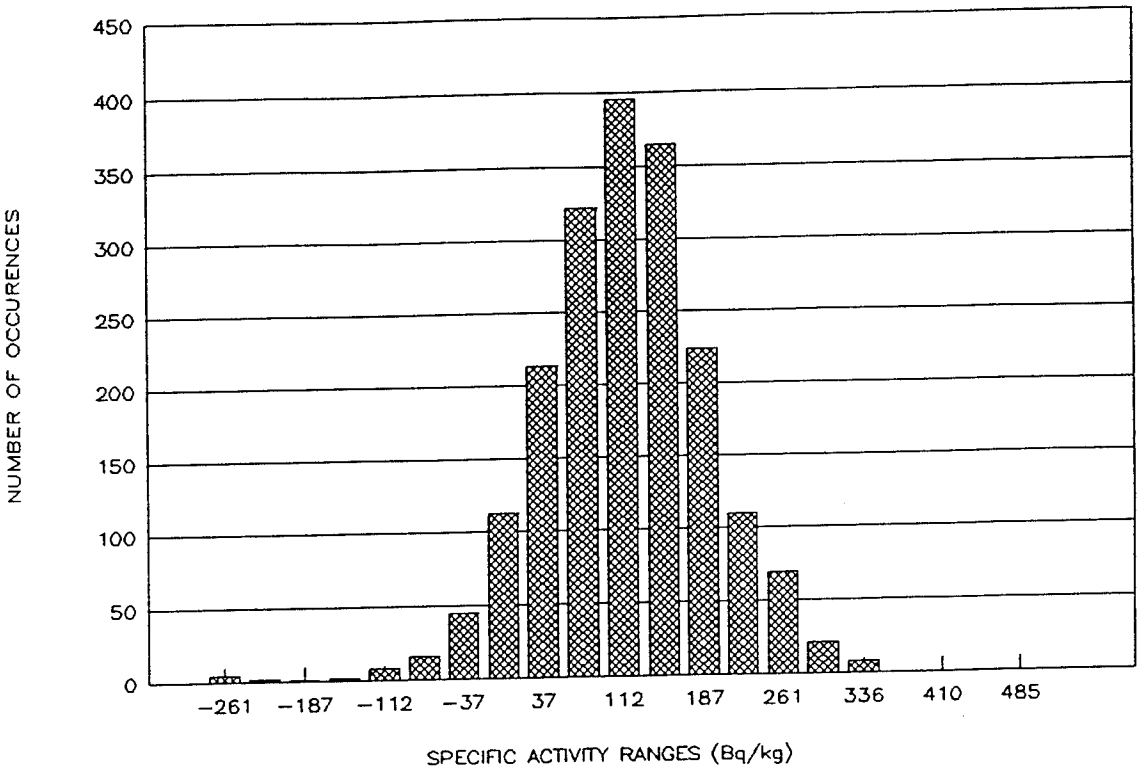
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

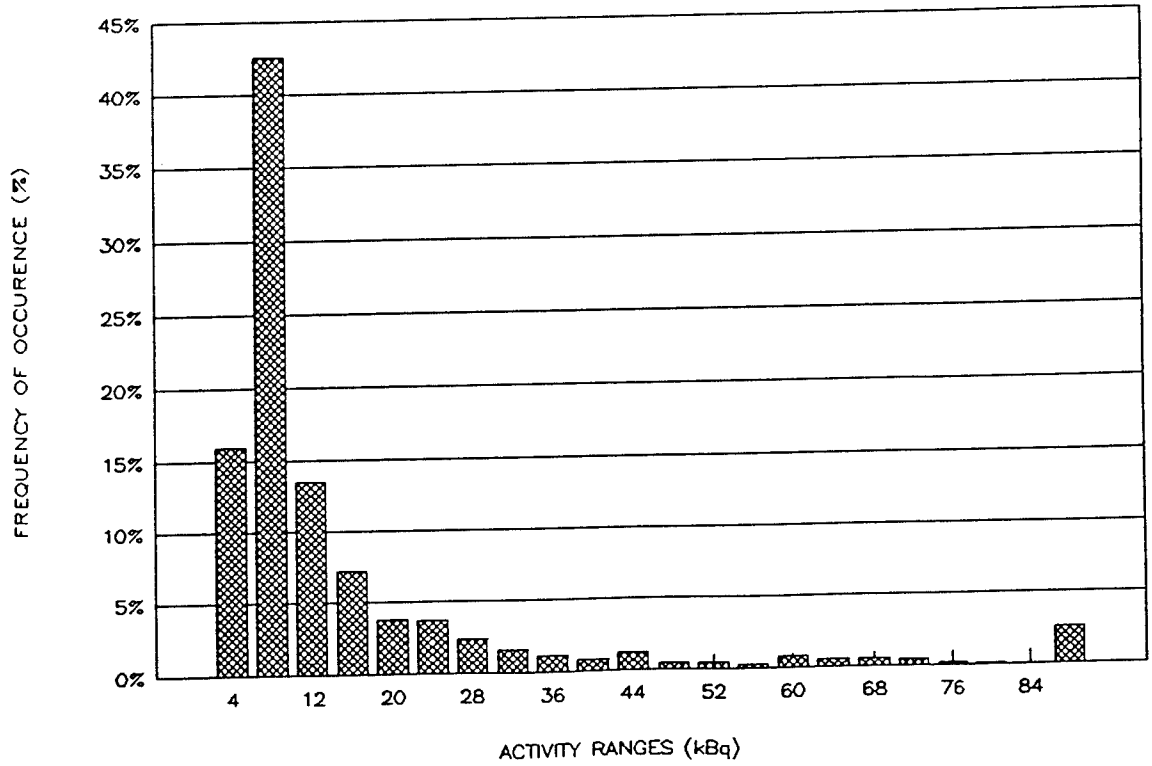
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 06-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 06-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 05-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.60 tons	96.6 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.4%
EQUIVALENT SOIL-IN-GROUND	0.48 yd³	76.5 yd³	77.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,780 kBq		
MAXIMUM/SORT	218 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,010 kBq	1,247 kBq	
MAXIMUM/SORT	191 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	4,997 Bq/kg	13 Bq/kg	

WORK HISTORY

WORK DAY START	05:44 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:44 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:22 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.8 hr
AVAILABLE HOURS	11.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.07 hr
DOWN-TIME	1.69 hr
TOTAL SYSTEM PAUSE	1.14 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.63 hr
SHUT-DOWN	0.49 hr
PLANT PERFORMANCE	85.6%
PRODUCTIVITY	85.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,267		
NONPROCESS RECORDS (Test, calibration, etc)			7		
20-SEC PROCESS RECORDS			1,813		
TOTAL SORT			2	MD>0 & MND=0	
NO SORT			1,421	AD=0 & MD=0 & MND>0	
SOME SORT			390	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	1			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	1			14:34:00	05:49
AD<0 & MD	0			15:12:05	14:13
ACT_P <5 kBq	140	30.8%			

2-SEC COUNT PERIODS	18,130	
2-SEC RECORDS WITH SORTS	454	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	100	83.3%
3 DETECTORS	19	15.8%
4 DETECTORS	1	0.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	120	
NET 2-SEC RECORDS WITH SORTS	334	
2-SEC PERIODS WITH NO SORTS	17,796	
AVG TIME BETWEEN 2-SEC SORTS	108.6	sec

1-GATE SORTS		228	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	1	0.4%	-14000	1	-261	4000	69	15.2%	4
2	10	4.4%	-12000	0	-224	8000	189	41.6%	8
3	30	13.2%	-10000	2	-187	12000	70	15.4%	12
4	47	20.6%	-8000	4	-149	16000	21	4.6%	16
5	59	25.9%	-6000	28	-112	20000	27	5.9%	20
6	46	20.2%	-4000	101	-75	24000	11	2.4%	24
7	29	12.7%	-2000	255	-37	28000	11	2.4%	28
8	6	2.6%	0	392	0	32000	10	2.2%	32
TOTAL	228		2000	439	37	36000	4	0.9%	36
			4000	309	75	40000	3	0.7%	40
2-GATE SORTS		226	6000	187	112	44000	7	1.5%	44
DETECTR	SORTS	FREQ%	8000	58	149	48000	4	0.9%	48
8			10000	30	187	52000	2	0.4%	52
9	6	2.7%	12000	11	224	56000	7	1.5%	56
10	17	7.5%	14000	3	261	60000	3	0.7%	60
11	47	20.8%	16000	0	299	64000	3	0.7%	64
12	50	22.1%	18000	0	336	68000	1	0.2%	68
13	50	22.1%	20000	0	373	72000	1	0.2%	72
14	41	18.1%	22000	0	410	76000	2	0.4%	76
15	15	6.6%	24000	0	448	80000	0	0.0%	80
TOTAL	226		26000	0	485	84000	1	0.2%	84
			>28000	0	0	>84000	8	1.8%	>84
			TOTAL	1820		TOTAL	454		

SUMMARY TOTALS

HOT PARTICLE EVENTS	445	SORTS BY ONE GATE ONLY	228
MULTIPARTICLE EVENTS	285	SORTS BY TWO GATES	226
DISTRIBUTED EVENTS	166		

REC CODE EXPLANATION

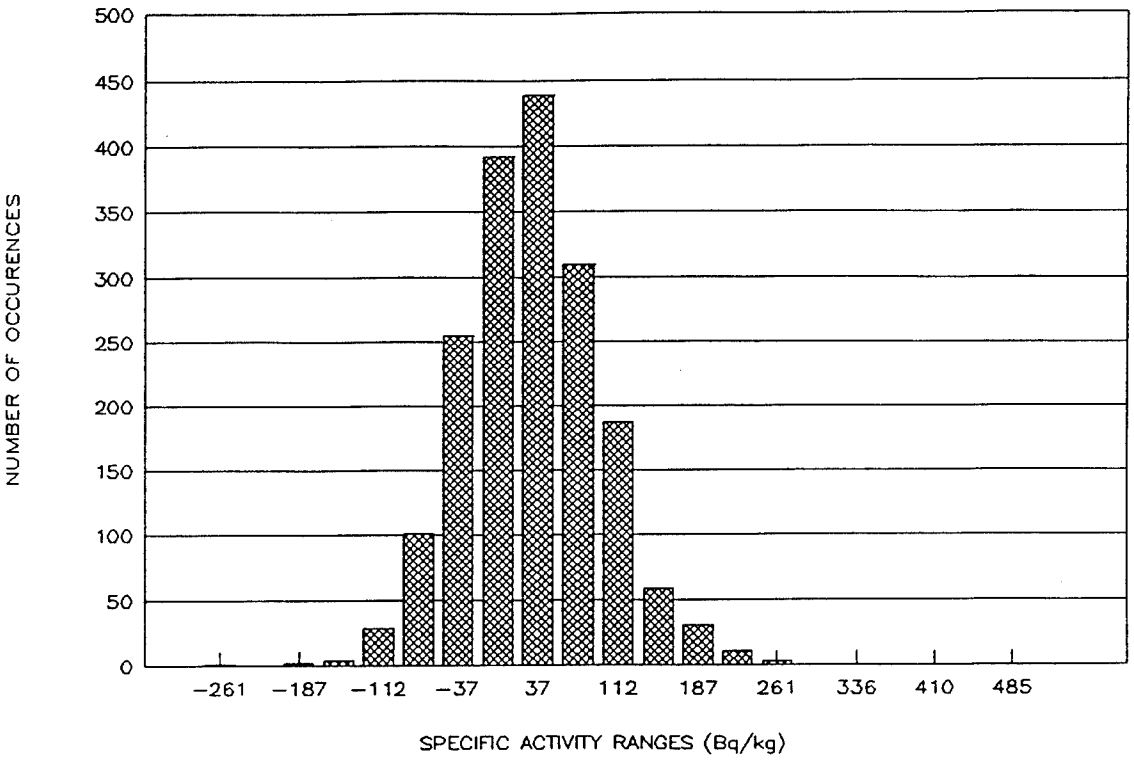
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

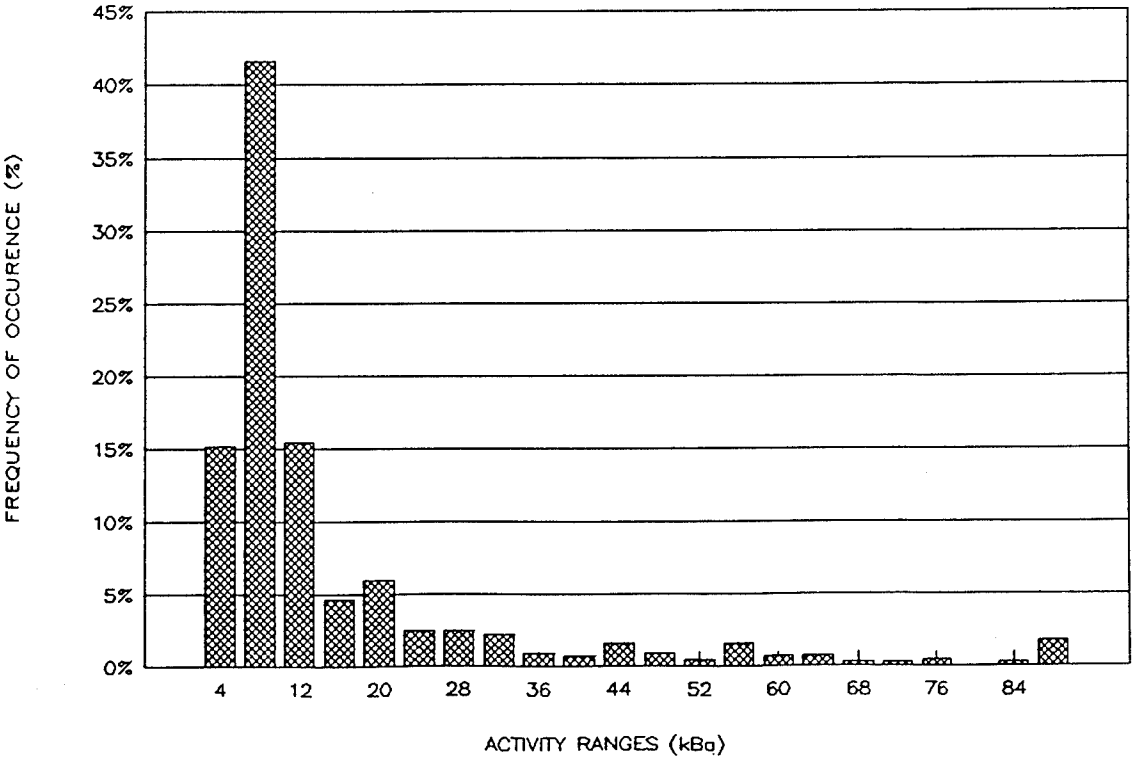
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 05-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 05-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 05-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.88 tons	97.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.70 yd³	76.9 yd³	77.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,374 kBq		
MAXIMUM/SORT	222 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,412 kBq	165 kBq	
MAXIMUM/SORT	155 kBq	15 kBq	
MINIMUM/SORT	-1079 Bq	-12 kBq	
SPECIFIC ACTIVITY	3,884 Bq/kg	2 Bq/kg	

WORK HISTORY

WORK DAY START	05:44 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:44 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	05:48 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.8 hr
AVAILABLE HOURS	11.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.15 hr
DOWN-TIME	1.62 hr
TOTAL SYSTEM PAUSE	1.15 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.08 hr
SHUT-DOWN	0.41 hr
PLANT PERFORMANCE	86.3%
PRODUCTIVITY	86.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,221	
NONPROCESS RECORDS (Test, calibration, etc)		0	
20-SEC PROCESS RECORDS		1,827	
TOTAL SORT		4	MD>0 & MND=0
NO SORT		1,242	AD=0 & MD=0 & MND>0
SOME SORT		581	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	2		
AD<0 & MD	1		
ACT_P <5 kBq	97	24.6%	

	UNEXPLAIN TIME	PAUSE TIME
	05:48:45	05:49
	14:34:00	14:13

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,270		14:49:47	14:34
2-SEC RECORDS WITH SORTS	394	(ACT_P >0 kBq)		
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				
2 DETECTORS	90	82.6%		
3 DETECTORS	14	12.8%		
4 DETECTORS	5	4.6%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	109			
NET 2-SEC RECORDS WITH SORTS	285			
2-SEC PERIODS WITH NO SORTS	17,985			
AVG TIME BETWEEN 2-SEC SORTS	128.2 sec			

1-GATE SORTS	209	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 12	5.7%	-14000	0	-261	4000	37	9.4%	4
2 15	7.2%	-12000	0	-224	8000	157	39.8%	8
3 35	16.7%	-10000	3	-187	12000	55	14.0%	12
4 49	23.4%	-8000	11	-149	16000	33	8.4%	16
5 57	27.3%	-6000	39	-112	20000	29	7.4%	20
6 24	11.5%	-4000	162	-75	24000	22	5.6%	24
7 14	6.7%	-2000	281	-37	28000	9	2.3%	28
8 3	1.4%	0	420	0	32000	10	2.5%	32
TOTAL 209		2000	394	37	36000	6	1.5%	36
		4000	270	75	40000	8	2.0%	40
2-GATE SORTS	185	6000	145	112	44000	1	0.3%	44
DETECTR SORTS	FREQ%	8000	72	149	48000	1	0.3%	48
8		10000	22	187	52000	2	0.5%	52
9 14	7.6%	12000	5	224	56000	6	1.5%	56
10 23	12.4%	14000	1	261	60000	4	1.0%	60
11 41	22.2%	16000	2	299	64000	3	0.8%	64
12 54	29.2%	18000	0	336	68000	0	0.0%	68
13 34	18.4%	20000	0	373	72000	0	0.0%	72
14 14	7.6%	22000	0	410	76000	2	0.5%	76
15 5	2.7%	24000	0	448	80000	0	0.0%	80
TOTAL 185		26000	0	485	84000	0	0.0%	84
		>28000	0	0	>84000	9	2.3%	>84
		TOTAL	1827		TOTAL	394		

SUMMARY TOTALS

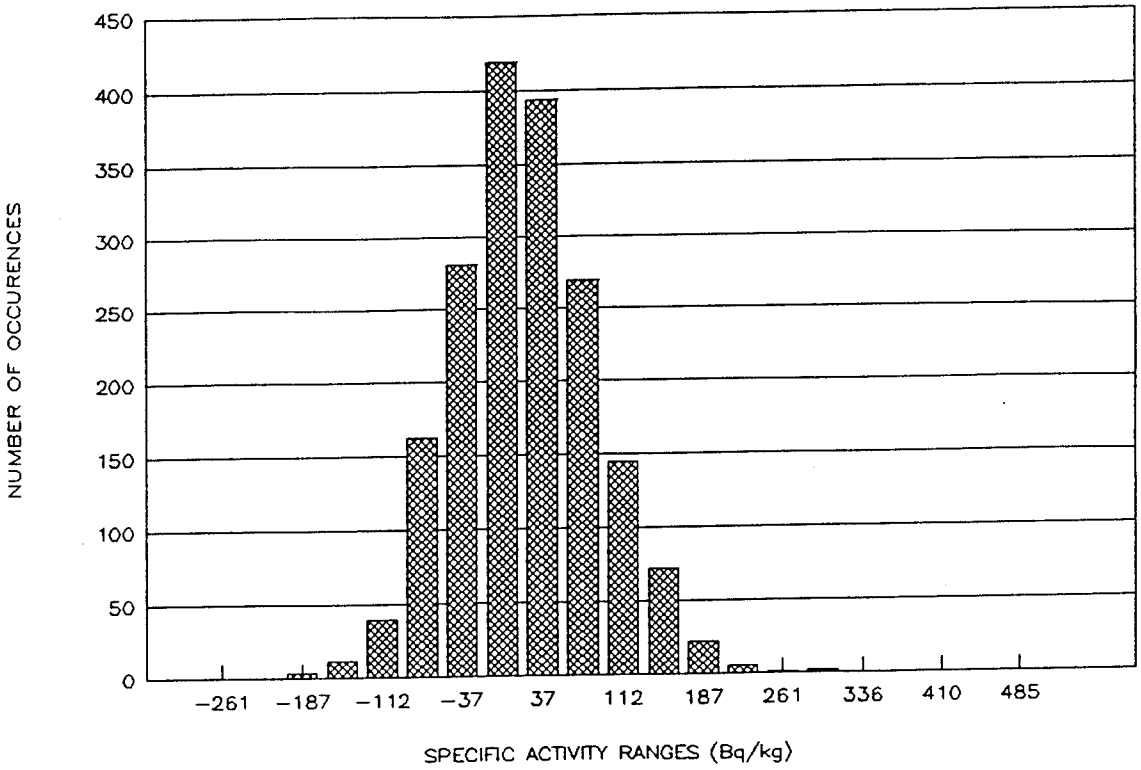
HOT PARTICLE EVENTS	379	SORTS BY ONE GATE ONLY	209
MULTIPARTICLE EVENTS	593	SORTS BY TWO GATES	185
DISTRIBUTED EVENTS	329		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

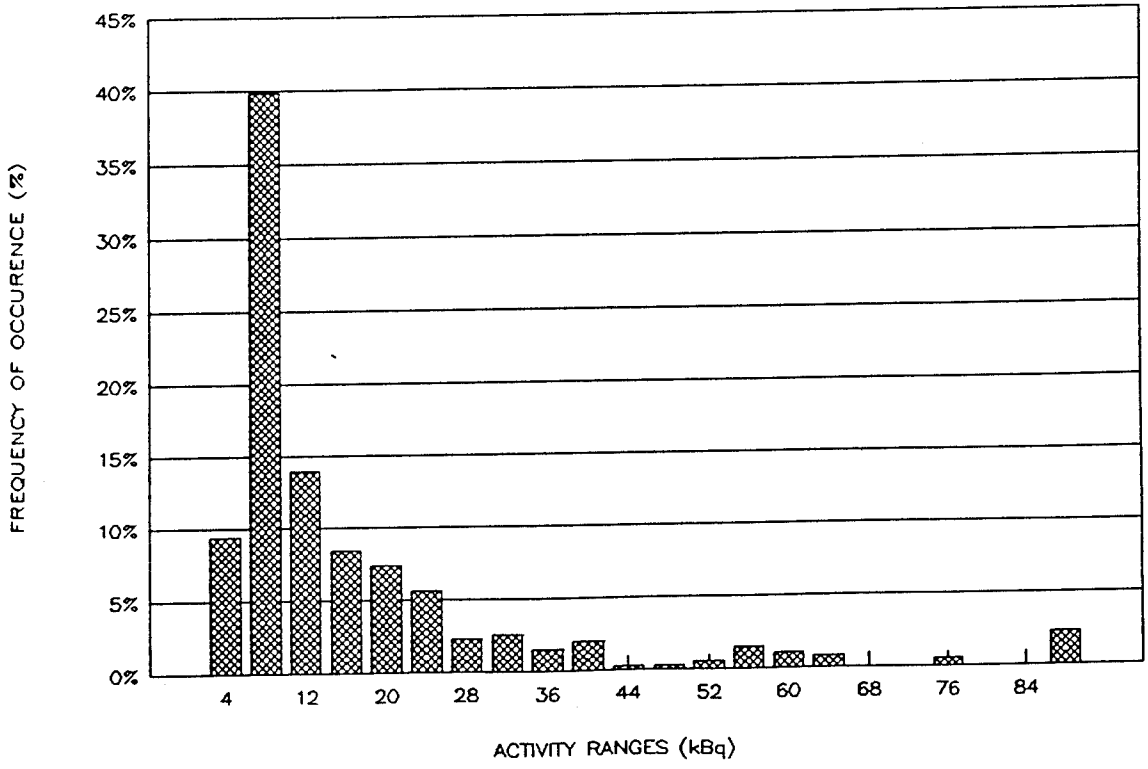
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 05–Apr–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 05–Apr–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 03-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.99 tons	78.5 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.79 yd³	62.3 yd³	63.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,506 kBq		
MAXIMUM/SORT	452 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,288 kBq	3,287 kBq	
MAXIMUM/SORT	257 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	4,327 Bq/kg	42 Bq/kg	

WORK HISTORY

WORK DAY START	06:07 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:07 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:40 AM	END SOIL PROCESSING	03:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.4 hr
AVAILABLE HOURS	11.4 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.24 hr
DOWN-TIME	3.14 hr
TOTAL SYSTEM PAUSE	0.62 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	2.48 hr
PLANT PERFORMANCE	72.4%
PRODUCTIVITY	72.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,120		
NONPROCESS RECORDS (Test, calibration, etc)	12		
20-SEC PROCESS RECORDS	1,484		
TOTAL SORT	5	MD>0 & MND=0	
NO SORT	965	AD=0 & MD=0 & MND>0	
SOME SORT	514	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	218	34.3%	

UNEXPLAIN TIME	PAUSE TIME
None	06:07
	12:17

2-SEC COUNT PERIODS	14,840	
2-SEC RECORDS WITH SORTS	636	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	142	80.2%
3 DETECTORS	29	16.4%
4 DETECTORS	5	2.8%
5 DETECTORS	1	0.6%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	177	
NET 2-SEC RECORDS WITH SORTS	459	
2-SEC PERIODS WITH NO SORTS	14,381	
AVG TIME BETWEEN 2-SEC SORTS	64.7	sec

1-GATE SORTS		323	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	1	0.3%	-14000	1	-261
2	25	7.7%	-12000	2	-224
3	46	14.2%	-10000	3	-187
4	70	21.7%	-8000	3	-149
5	57	17.6%	-6000	10	-112
6	55	17.0%	-4000	41	-75
7	50	15.5%	-2000	135	-37
8	19	5.9%	0	257	0
TOTAL	323		2000	352	37
			4000	283	75
2-GATE SORTS		313	6000	194	112
DETECTR	SORTS	FREQ%	8000	86	149
8			10000	53	187
9	9	2.9%	12000	29	224
10	41	13.1%	14000	17	261
11	58	18.5%	16000	22	299
12	60	19.2%	18000	6	336
13	63	20.1%	20000	2	373
14	41	13.1%	22000	0	410
15	41	13.1%	24000	0	448
TOTAL	313		26000	0	485
			>28000	0	0
			TOTAL	1496	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	108	17.0%	4
8000	268	42.1%	8
12000	90	14.2%	12
16000	45	7.1%	16
20000	24	3.8%	20
24000	17	2.7%	24
28000	14	2.2%	28
32000	10	1.6%	32
36000	10	1.6%	36
40000	7	1.1%	40
44000	3	0.5%	44
48000	3	0.5%	48
52000	1	0.2%	52
56000	7	1.1%	56
60000	5	0.8%	60
64000	4	0.6%	64
68000	2	0.3%	68
72000	1	0.2%	72
76000	0	0.0%	76
80000	1	0.2%	80
84000	0	0.0%	84
>84000	16	2.5%	>84
TOTAL	636		

SUMMARY TOTALS

HOT PARTICLE EVENTS	626	SORTS BY ONE GATE ONLY	323
MULTIPARTICLE EVENTS	460	SORTS BY TWO GATES	313
DISTRIBUTED EVENTS	392		

REC CODE EXPLANATION

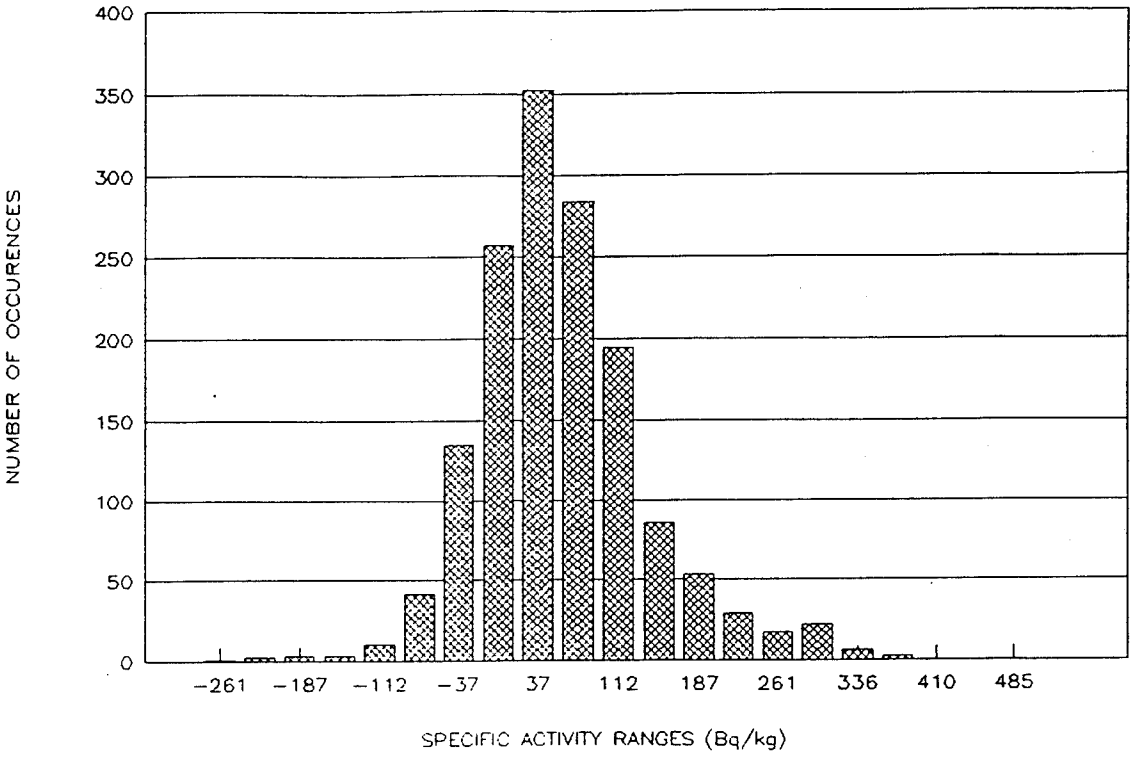
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

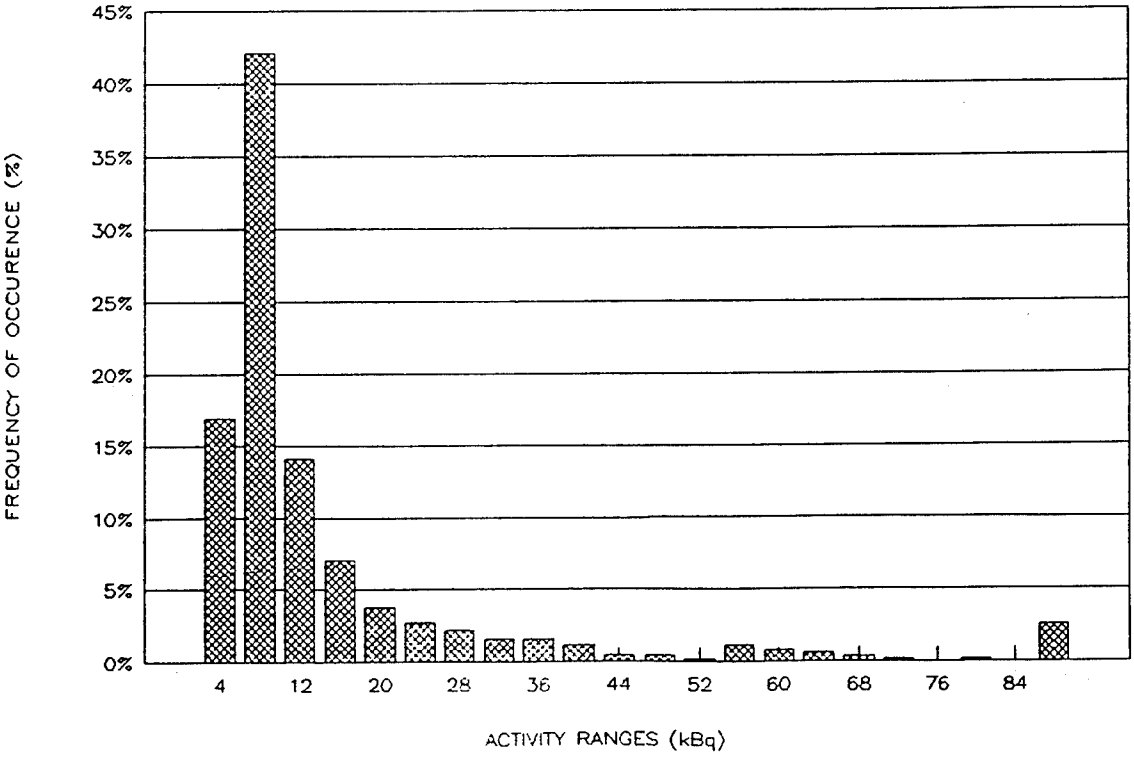
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 03-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 03-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 03-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.41 tons	78.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.2%
EQUIVALENT SOIL-IN-GROUND	1.12 yd³	61.9 yd³	63.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,346 kBq		
MAXIMUM/SORT	583 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,045 kBq	1,751 kBq	
MAXIMUM/SORT	396 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	3,585 Bq/kg	22 Bq/kg	

WORK HISTORY

WORK DAY START	06:07 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:07 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:40 AM	END SOIL PROCESSING	03:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.4 hr
AVAILABLE HOURS	11.4 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.24 hr
DOWN-TIME	3.14 hr
TOTAL SYSTEM PAUSE	0.59 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.55 hr
SHUT-DOWN	2.49 hr
PLANT PERFORMANCE	72.4%
PRODUCTIVITY	72.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,045	
NONPROCESS RECORDS (Test, calibration, etc)	16	
20-SEC PROCESS RECORDS	1,484	
TOTAL SORT	11	MD>0 & MND=0
NO SORT	847	AD=0 & MD=0 & MND>0
SOME SORT	626	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	167	29.8%

UNEXPLAIN TIME	PAUSE TIME
10:51:04	06:07
14:17:24	14:52

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	14,840	
2-SEC RECORDS WITH SORTS	561	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	131	85.1%
3 DETECTORS	20	13.0%
4 DETECTORS	2	1.3%
5 DETECTORS	1	0.6%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	154	
NET 2-SEC RECORDS WITH SORTS	407	
2-SEC PERIODS WITH NO SORTS	14,433	
AVG TIME BETWEEN 2-SEC SORTS	72.9	sec

1-GATE SORTS		297	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	2.4%	-14000	3	-261	4000	79	14.1%	4
2	39	13.1%	-12000	4	-224	8000	226	40.3%	8
3	47	15.8%	-10000	3	-187	12000	86	15.3%	12
4	65	21.9%	-8000	6	-149	16000	44	7.8%	16
5	54	18.2%	-6000	29	-112	20000	30	5.3%	20
6	46	15.5%	-4000	90	-75	24000	16	2.9%	24
7	29	9.8%	-2000	188	-37	28000	14	2.5%	28
8	10	3.4%	0	307	0	32000	5	0.9%	32
TOTAL	297		2000	340	37	36000	10	1.8%	36
			4000	234	75	40000	8	1.4%	40
2-GATE SORTS		264	6000	127	112	44000	7	1.2%	44
DETECTR	SORTS	FREQ%	8000	72	149	48000	2	0.4%	48
8			10000	37	187	52000	4	0.7%	52
9	22	8.3%	12000	25	224	56000	3	0.5%	56
10	32	12.1%	14000	16	261	60000	3	0.5%	60
11	58	22.0%	16000	13	299	64000	4	0.7%	64
12	46	17.4%	18000	5	336	68000	1	0.2%	68
13	46	17.4%	20000	1	373	72000	1	0.2%	72
14	42	15.9%	22000	0	410	76000	2	0.4%	76
15	18	6.8%	24000	0	448	80000	0	0.0%	80
TOTAL	264		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	16	2.9%	>84
			TOTAL	1500		TOTAL	561		

SUMMARY TOTALS

HOT PARTICLE EVENTS	551	SORTS BY ONE GATE ONLY	297
MULTIPARTICLE EVENTS	690	SORTS BY TWO GATES	264
DISTRIBUTED EVENTS	856		

REC CODE EXPLANATION

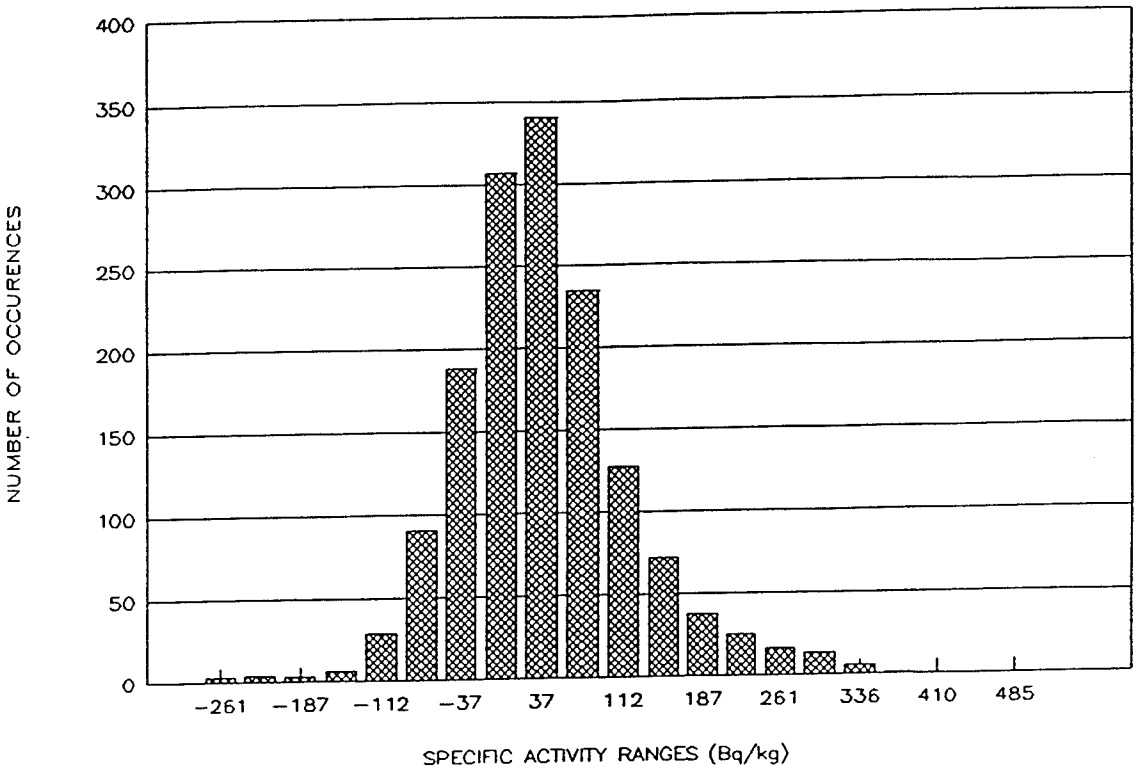
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

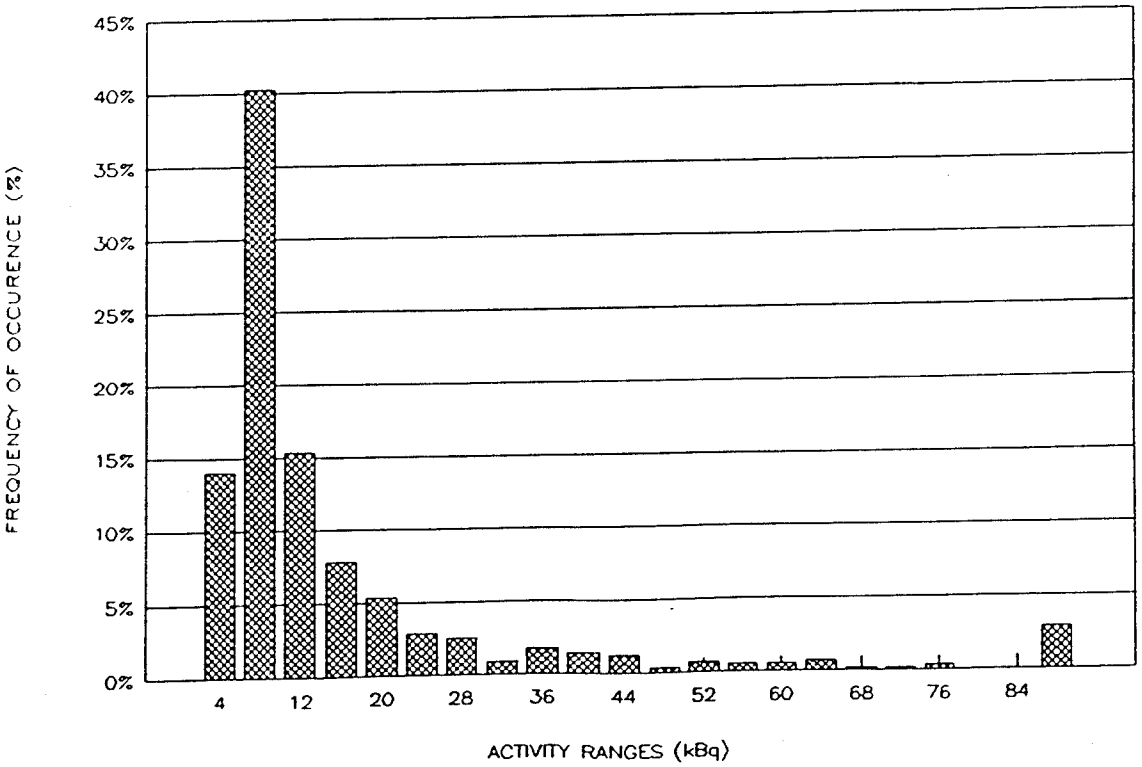
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 03-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 03-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 02-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.20 tons	37.1 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.16 yd³	29.4 yd³	29.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,427 kBq		
MAXIMUM/SORT	332 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,460 kBq	157 kBq	
MAXIMUM/SORT	251 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	7,459 Bq/kg	4 Bq/kg	

WORK HISTORY

WORK DAY START	05:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:48 AM	END SOIL PROCESSING	11:39 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.1 hr
AVAILABLE HOURS	11.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.86 hr
DOWN-TIME	7.22 hr
TOTAL SYSTEM PAUSE	6.06 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.89 hr
SHUT-DOWN	5.84 hr
PLANT PERFORMANCE	34.8%
PRODUCTIVITY	34.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	870		
NONPROCESS RECORDS (Test, calibration, etc)	5		
20-SEC PROCESS RECORDS	695		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	534	AD=0 & MD=0 & MND>0	
SOME SORT	161	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	52	29.7%	

UNEXPLAIN TIME	PAUSE TIME
None	05:58
	06:30

11:39

2-SEC COUNT PERIODS	6,950	
2-SEC RECORDS WITH SORTS	175	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	42	73.7%
3 DETECTORS	11	19.3%
4 DETECTORS	3	5.3%
5 DETECTORS	1	1.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	57	
NET 2-SEC RECORDS WITH SORTS	118	
2-SEC PERIODS WITH NO SORTS	6,832	
AVG TIME BETWEEN 2-SEC SORTS	117.8	sec

1-GATE SORTS DETECTR	SORTS	94 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	0	0.0%	-14000	0	-261	4000	31	17.7%	4
2	7	7.4%	-12000	1	-224	8000	59	33.7%	8
3	15	16.0%	-10000	1	-187	12000	21	12.0%	12
4	16	17.0%	-8000	0	-149	16000	12	6.9%	16
5	8	8.5%	-6000	17	-112	20000	13	7.4%	20
6	23	24.5%	-4000	46	-75	24000	3	1.7%	24
7	21	22.3%	-2000	122	-37	28000	5	2.9%	28
8	4	4.3%	0	142	0	32000	2	1.1%	32
TOTAL	94		2000	181	37	36000	3	1.7%	36
			4000	110	75	40000	4	2.3%	40
2-GATE SORTS		81	6000	41	112	44000	5	2.9%	44
DETECTR	SORTS	FREQ%	8000	22	149	48000	5	2.9%	48
8			10000	12	187	52000	2	1.1%	52
9	3	3.7%	12000	4	224	56000	1	0.6%	56
10	13	16.0%	14000	0	261	60000	1	0.6%	60
11	12	14.8%	16000	1	299	64000	1	0.6%	64
12	13	16.0%	18000	0	336	68000	0	0.0%	68
13	7	8.6%	20000	0	373	72000	0	0.0%	72
14	18	22.2%	22000	0	410	76000	0	0.0%	76
15	15	18.5%	24000	0	448	80000	0	0.0%	80
TOTAL	81		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	7	4.0%	>84
			TOTAL	700		TOTAL	175		

SUMMARY TOTALS

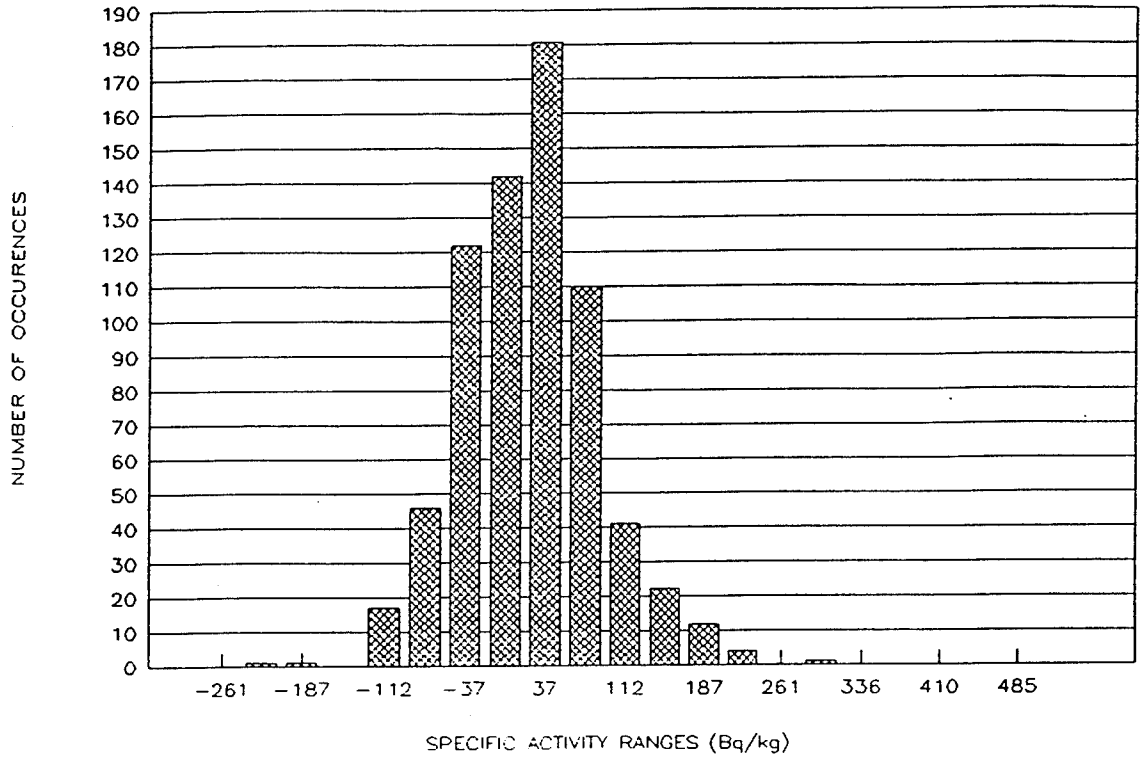
HOT PARTICLE EVENTS	161	SORTS BY ONE GATE ONLY	94
MULTIPARTICLE EVENTS	129	SORTS BY TWO GATES	81
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

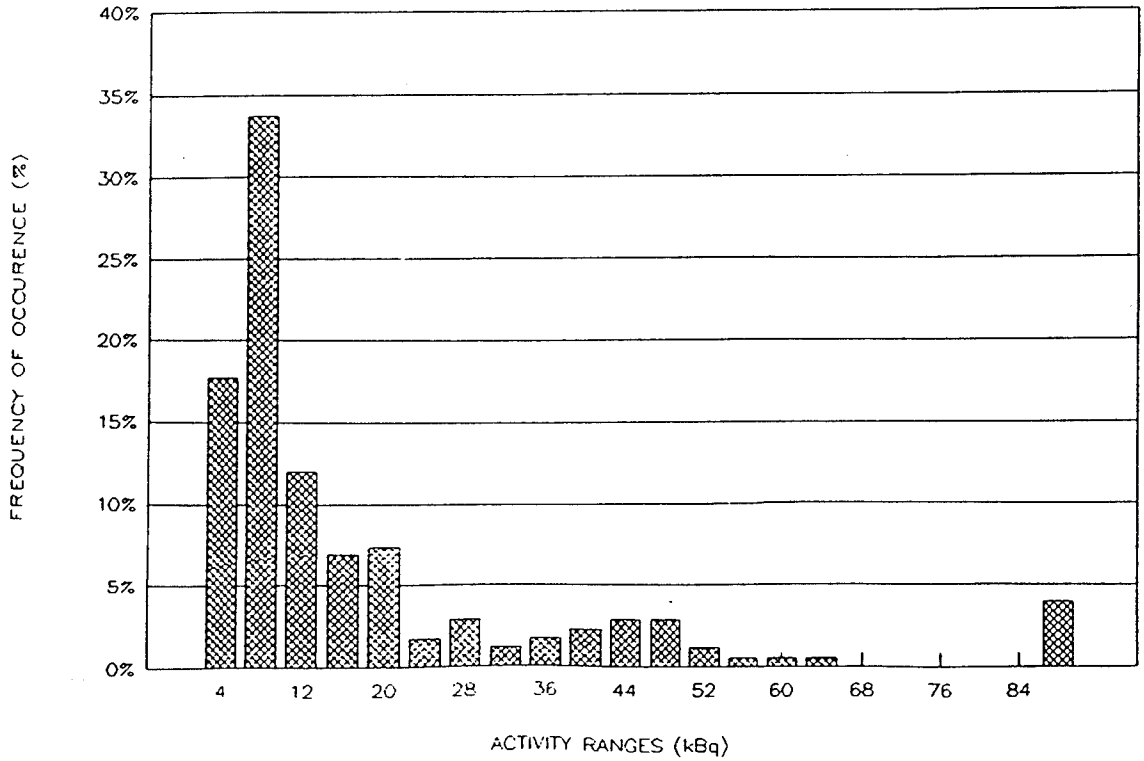
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 02-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 02-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 02-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.25 tons	37.2 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.20 yd³	29.5 yd³	29.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	2,822 kBq		
MAXIMUM/SORT	231 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,488 kBq	(1,574)kBq	
MAXIMUM/SORT	194 kBq	11 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	5,908 Bq/kg	(42)Bq/kg	

WORK HISTORY

WORK DAY START	05:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:48 AM	END SOIL PROCESSING	11:40 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.1 hr
AVAILABLE HOURS	11.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.88 hr
DOWN-TIME	7.21 hr
TOTAL SYSTEM PAUSE	6.04 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.89 hr
SHUT-DOWN	5.82 hr
PLANT PERFORMANCE	35.0%
PRODUCTIVITY	35.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	855	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	698	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	474	AD=0 & MD=0 & MND>0
SOME SORT	224	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	45	28.7%

UNEXPLAIN TIME	PAUSE TIME
None	05:58
	06:30

11:41

2-SEC COUNT PERIODS	6,980	
2-SEC RECORDS WITH SORTS	157	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	37	82.2%
3 DETECTORS	7	15.6%
4 DETECTORS	1	2.2%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	45	
NET 2-SEC RECORDS WITH SORTS	112	
2-SEC PERIODS WITH NO SORTS	6,868	
AVG TIME BETWEEN 2-SEC SORTS	124.6 sec	

1-GATE SORTS		78	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	2	2.6%	-14000	0	-261	4000	25	15.9%	4
2	13	16.7%	-12000	2	-224	8000	55	35.0%	8
3	12	15.4%	-10000	5	-187	12000	22	14.0%	12
4	12	15.4%	-8000	34	-149	16000	12	7.6%	16
5	15	19.2%	-6000	81	-112	20000	7	4.5%	20
6	15	19.2%	-4000	108	-75	24000	5	3.2%	24
7	9	11.5%	-2000	165	-37	28000	4	2.5%	28
8	0	0.0%	0	142	0	32000	5	3.2%	32
TOTAL	78		2000	78	37	36000	3	1.9%	36
			4000	40	75	40000	0	0.0%	40
2-GATE SORTS		79	6000	18	112	44000	3	1.9%	44
DETECTR	SORTS	FREQ%	8000	16	149	48000	4	2.5%	48
8			10000	11	187	52000	3	1.9%	52
9	8	10.1%	12000	3	224	56000	3	1.9%	56
10	8	10.1%	14000	0	261	60000	0	0.0%	60
11	15	19.0%	16000	0	299	64000	1	0.6%	64
12	16	20.3%	18000	0	336	68000	0	0.0%	68
13	17	21.5%	20000	0	373	72000	0	0.0%	72
14	11	13.9%	22000	0	410	76000	0	0.0%	76
15	4	5.1%	24000	0	448	80000	0	0.0%	80
TOTAL	79		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	5	3.2%	>84
			TOTAL	703		TOTAL	157		

SUMMARY TOTALS

HOT PARTICLE EVENTS	158	SORTS BY ONE GATE ONLY	78
MULTIPARTICLE EVENTS	216	SORTS BY TWO GATES	79
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

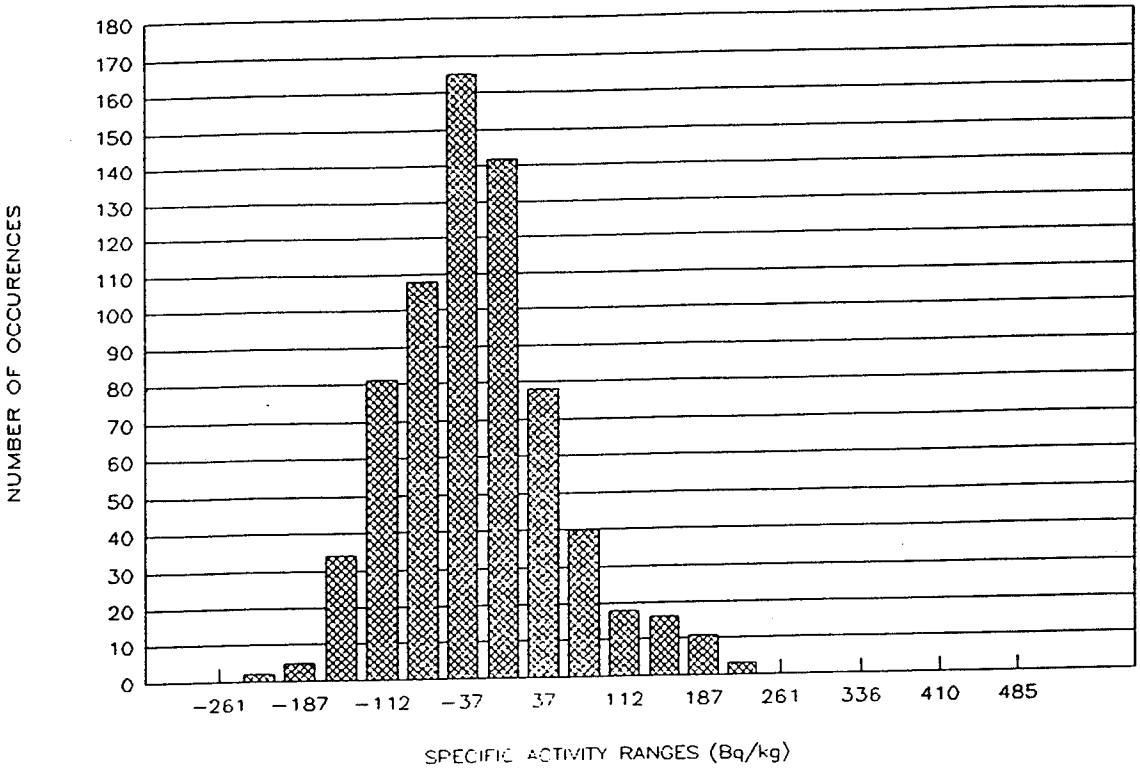
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

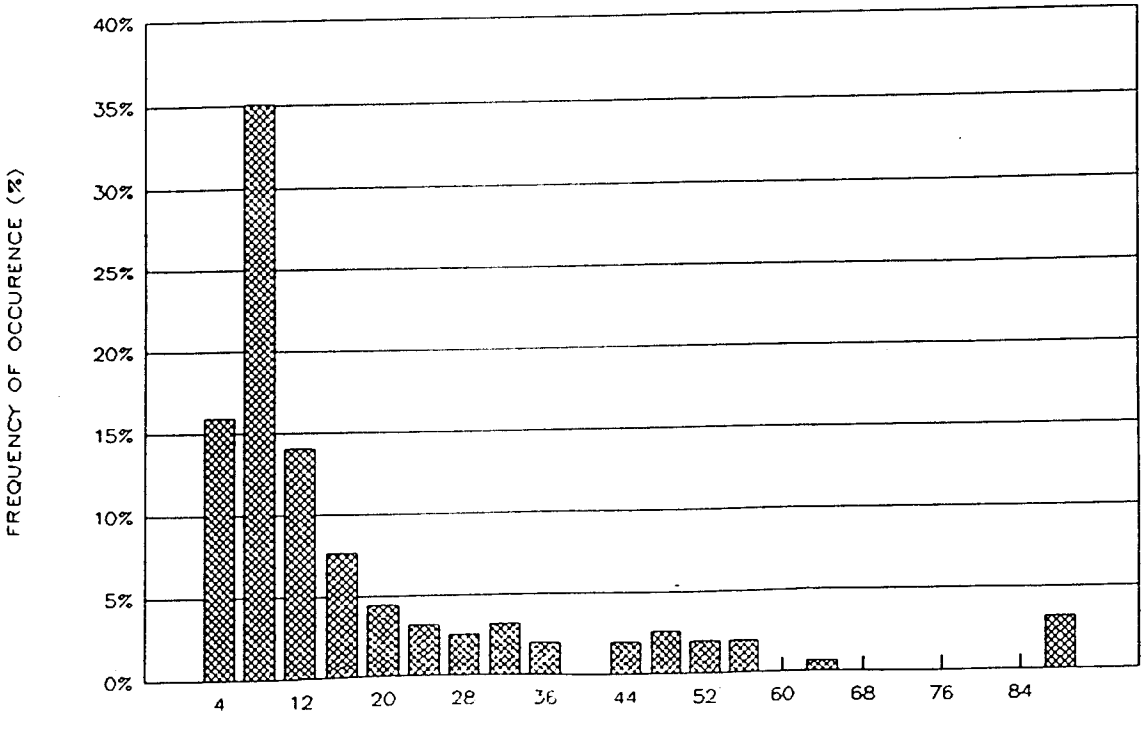
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 02-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 02-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 01-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.55 tons	95.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.4%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.44 yd³	75.3 yd³	75.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,254 kBq		
MAXIMUM/SORT	260 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,454 kBq	145 kBq	
MAXIMUM/SORT	179 kBq	13 kBq	
MINIMUM/SORT	-3132 Bq	-11 kBq	
SPECIFIC ACTIVITY	4,471 Bq/kg	2 Bq/kg	

WORK HISTORY

WORK DAY START	05:44 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:44 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	04:55 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.8 hr
AVAILABLE HOURS	11.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.90 hr
DOWN-TIME	1.87 hr
TOTAL SYSTEM PAUSE	1.25 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.59 hr
SHUT-DOWN	0.58 hr
PLANT PERFORMANCE	84.1%
PRODUCTIVITY	84.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,193	
NONPROCESS RECORDS (Test, calibration, etc)		11	
20-SEC PROCESS RECORDS		1,782	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,368	AD=0 & MD=0 & MND>0
SOME SORT		413	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD>0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	134	32.6%	

	UNEXPLAIN TIME	PAUSE TIME
	07:39:28	05:44
	08:06:28	06:59

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		17,820	
2-SEC RECORDS WITH SORTS		411	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	89	84.8%
	3 DETECTORS	13	12.4%
	4 DETECTORS	2	1.9%
	5 DETECTORS	1	1.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	105	
NET 2-SEC RECORDS WITH SORTS		306	
2-SEC PERIODS WITH NO SORTS		17,514	
AVG TIME BETWEEN 2-SEC SORTS		116.5	sec

1-GATE SORTS DETECTR	SORTS	210 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	1	0.5%	-14000	1	-261	4000	78	19.0%	4
2	17	8.1%	-12000	4	-224	8000	161	39.2%	8
3	32	15.2%	-10000	7	-187	12000	66	16.1%	12
4	45	21.4%	-8000	13	-149	16000	32	7.8%	16
5	39	18.6%	-6000	38	-112	20000	18	4.4%	20
6	34	16.2%	-4000	113	-75	24000	17	4.1%	24
7	29	13.8%	-2000	326	-37	28000	7	1.7%	28
8	13	6.2%	0	415	0	32000	3	0.7%	32
TOTAL	210		2000	425	37	36000	1	0.2%	36
			4000	237	75	40000	4	1.0%	40
2-GATE SORTS		201	6000	128	112	44000	4	1.0%	44
DETECTR	SORTS	FREQ%	8000	50	149	48000	2	0.5%	48
8			10000	25	187	52000	2	0.5%	52
9	7	3.5%	12000	9	224	56000	6	1.5%	56
10	26	12.9%	14000	2	261	60000	2	0.5%	60
11	34	16.9%	16000	0	299	64000	0	0.0%	64
12	51	25.4%	18000	0	336	68000	2	0.5%	68
13	35	17.4%	20000	0	373	72000	0	0.0%	72
14	28	13.9%	22000	0	410	76000	1	0.2%	76
15	20	10.0%	24000	0	448	80000	0	0.0%	80
TOTAL	201		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	5	1.2%	>84
			TOTAL	1793		TOTAL	411		

SUMMARY TOTALS

HOT PARTICLE EVENTS	415	SORTS BY ONE GATE ONLY	210
MULTIPARTICLE EVENTS	317	SORTS BY TWO GATES	201
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

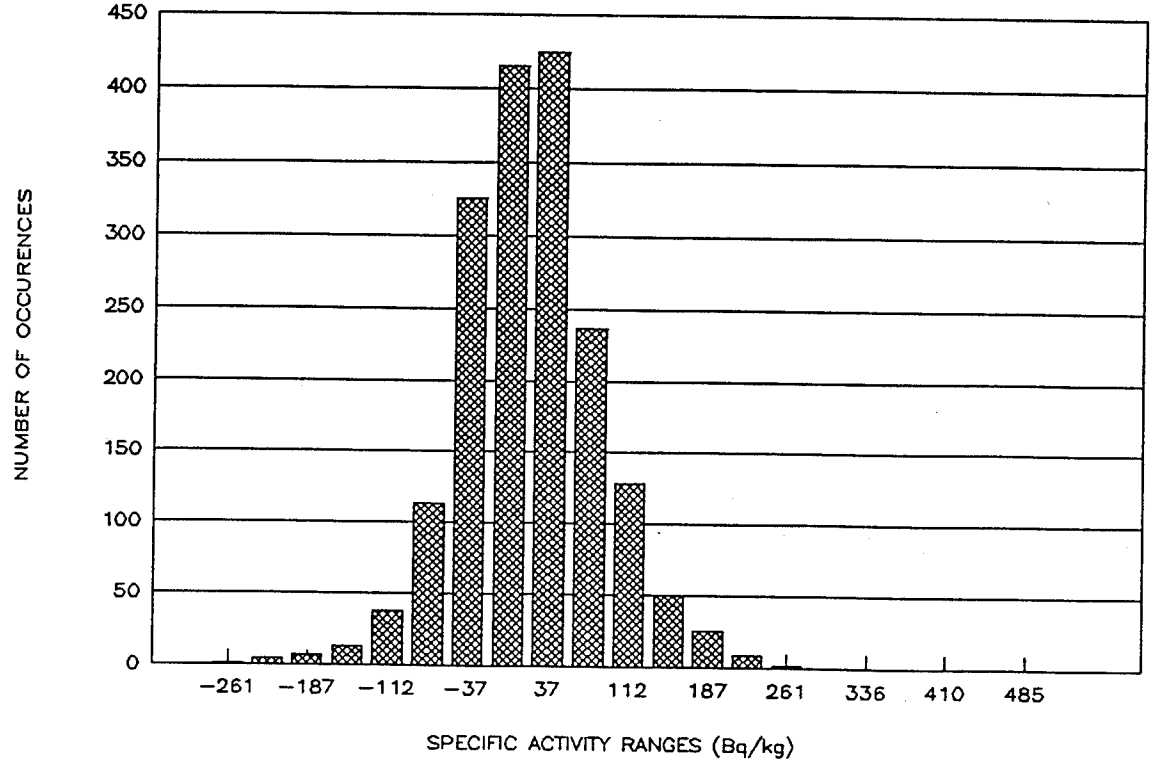
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

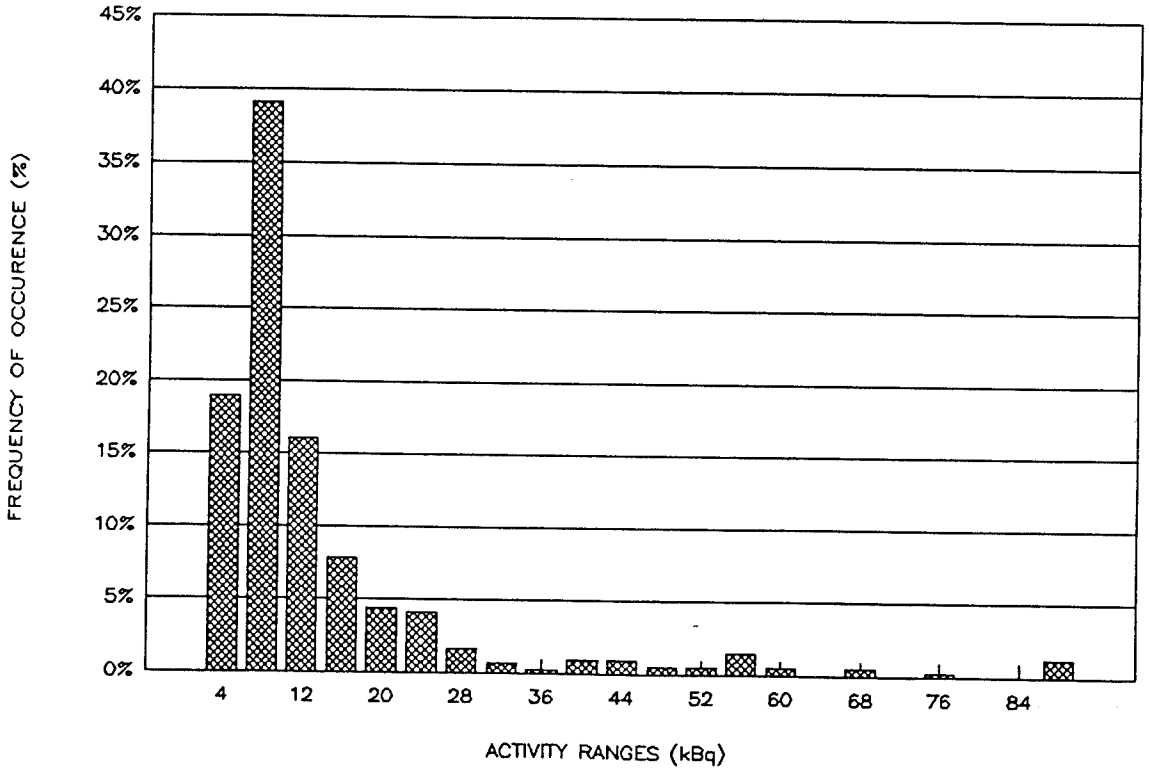
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 01-Apr-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 01-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 01-Apr-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.68 tons	93.7 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.54 yd³	74.3 yd³	74.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,437 kBq		
MAXIMUM/SORT	364 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,025 kBq	(2,919)kBq	
MAXIMUM/SORT	272 kBq	14 kBq	
MINIMUM/SORT	-8239 Bq	-19 kBq	
SPECIFIC ACTIVITY	4,426 Bq/kg	(31)Bq/kg	

WORK HISTORY

WORK DAY START	05:44 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:44 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	04:52 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.8 hr
AVAILABLE HOURS	11.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.79 hr
DOWN-TIME	1.98 hr
TOTAL SYSTEM PAUSE	1.28 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.59 hr
SHUT-DOWN	0.62 hr
PLANT PERFORMANCE	83.2%
PRODUCTIVITY	83.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,133	
NONPROCESS RECORDS (Test, calibration, etc)		26	
20-SEC PROCESS RECORDS		1,762	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,202	AD=0 & MD=0 & MND>0
SOME SORT		559	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	102	27.5%	

UNEXPLAIN TIME	PAUSE TIME
07:39:28	05:44
	06:57

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	17,620	
2-SEC RECORDS WITH SORTS	371	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	67	84.8%
3 DETECTORS	11	13.9%
4 DETECTORS	1	1.3%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	79	
NET 2-SEC RECORDS WITH SORTS	292	
2-SEC PERIODS WITH NO SORTS	17,328	
AVG TIME BETWEEN 2-SEC SORTS	120.7	sec

1-GATE SORTS		187	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	2.1%	-14000	12	-261	4000	41	11.1%	4
2	21	11.2%	-12000	7	-224	8000	178	48.0%	8
3	40	21.4%	-10000	16	-187	12000	56	15.1%	12
4	41	21.9%	-8000	49	-149	16000	28	7.5%	16
5	34	18.2%	-6000	111	-112	20000	13	3.5%	20
6	23	12.3%	-4000	274	-75	24000	6	1.6%	24
7	21	11.2%	-2000	344	-37	28000	4	1.1%	28
8	3	1.6%	0	455	0	32000	6	1.6%	32
TOTAL	187		2000	272	37	36000	4	1.1%	36
			4000	149	75	40000	1	0.3%	40
2-GATE SORTS		184	6000	63	112	44000	5	1.3%	44
DETECTR	SORTS	FREQ%	8000	22	149	48000	9	2.4%	48
8			10000	11	187	52000	4	1.1%	52
9	12	6.5%	12000	2	224	56000	2	0.5%	56
10	27	14.7%	14000	1	261	60000	3	0.8%	60
11	44	23.9%	16000	0	299	64000	0	0.0%	64
12	36	19.6%	18000	0	336	68000	0	0.0%	68
13	32	17.4%	20000	0	373	72000	0	0.0%	72
14	26	14.1%	22000	0	410	76000	3	0.8%	76
15	7	3.8%	24000	0	448	80000	0	0.0%	80
TOTAL	184		26000	0	485	84000	1	0.3%	84
			>28000	0	0	>84000	7	1.9%	>84
			TOTAL	1788		TOTAL	371		

SUMMARY TOTALS

HOT PARTICLE EVENTS	389	SORTS BY ONE GATE ONLY	187
MULTIPARTICLE EVENTS	541	SORTS BY TWO GATES	184
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

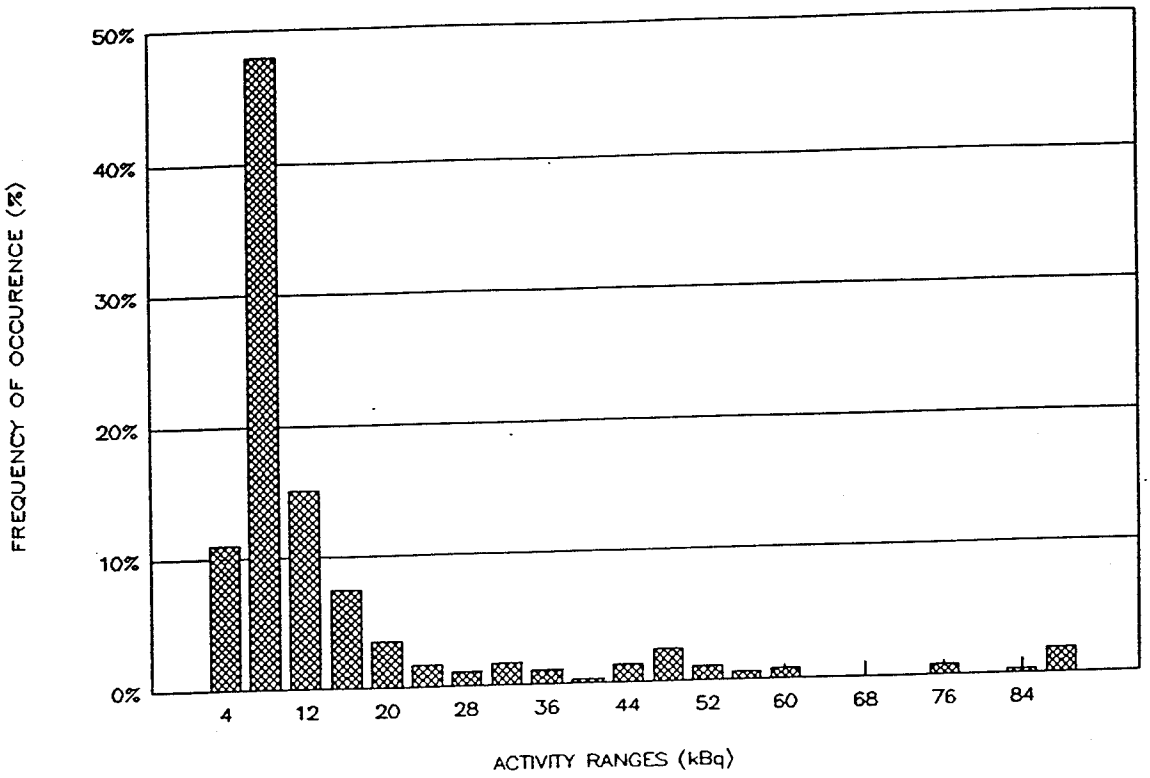
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

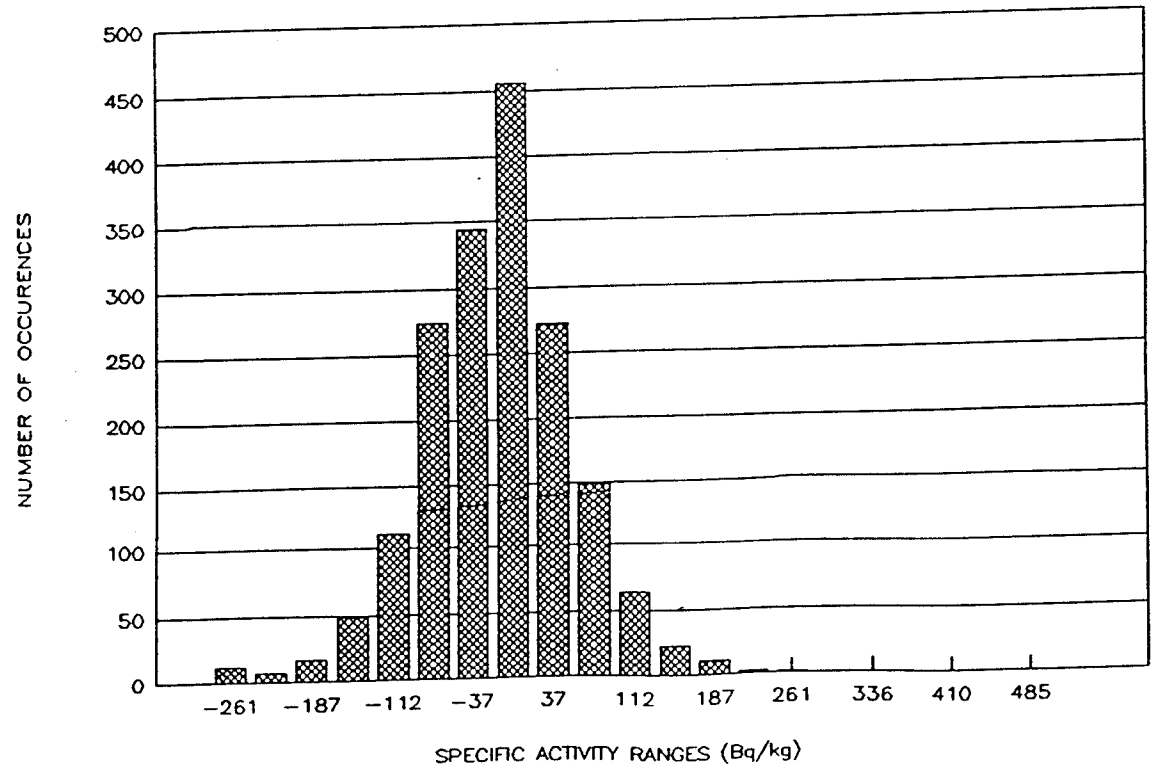
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 01-Apr-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 01-Apr-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 31-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.01 tons	99.1 tons	
MAXIMUM/SORT		6 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				99.0%
EQUIVALENT SOIL-IN-GROUND		0.80 yd³	78.6 yd³	79.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		14,635 kBq		
MAXIMUM/SORT		1,310 kBq		
MINIMUM/SORT		2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		6,455 kBq	3,725 kBq	
MAXIMUM/SORT		1024 kBq	14 kBq	
MINIMUM/SORT		0 Bq	-8 kBq	
SPECIFIC ACTIVITY		6,377 Bq/kg	38 Bq/kg	

WORK HISTORY

WORK DAY START	05:54 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:54 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:30 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.38 hr
DOWN-TIME	1.22 hr
TOTAL SYSTEM PAUSE	0.62 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.61 hr
SHUT-DOWN	0.41 hr
PLANT PERFORMANCE	89.5%
PRODUCTIVITY	89.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,821	
NONPROCESS RECORDS (Test, calibration, etc)		37	
20-SEC PROCESS RECORDS		1,869	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,155	AD=0 & MD=0 & MND>0
SOME SORT		714	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	319	33.5%	

	UNEXPLAIN TIME	PAUSE TIME
	07:52:11	05:54
	08:30:31	17:03

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,690		08:38:31
2-SEC RECORDS WITH SORTS	952	(ACT_P >0 kBq)	14:27:31
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			15:12:11
2 DETECTORS	216	82.1%	
3 DETECTORS	40	15.2%	
4 DETECTORS	6	2.3%	
5 DETECTORS	1	0.4%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	263		
NET 2-SEC RECORDS WITH SORTS	689		
2-SEC PERIODS WITH NO SORTS	18,001		
AVG TIME BETWEEN 2-SEC SORTS	54.3 sec		

1-GATE SORTS		481	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	1.5%	-14000	0	-261	4000	146	15.3%	4
2	47	9.8%	-12000	2	-224	8000	414	43.5%	8
3	74	15.4%	-10000	10	-187	12000	140	14.7%	12
4	78	16.2%	-8000	13	-149	16000	65	6.8%	16
5	98	20.4%	-6000	14	-112	20000	39	4.1%	20
6	76	15.8%	-4000	66	-75	24000	29	3.0%	24
7	77	16.0%	-2000	149	-37	28000	26	2.7%	28
8	24	5.0%	0	309	0	32000	15	1.6%	32
TOTAL	481		2000	417	37	36000	14	1.5%	36
			4000	415	75	40000	5	0.5%	40
2-GATE SORTS		471	6000	296	112	44000	6	0.6%	44
DETECTR	SORTS	FREQ%	8000	145	149	48000	8	0.8%	48
8			10000	48	187	52000	5	0.5%	52
9	20	4.2%	12000	18	224	56000	5	0.5%	56
10	55	11.7%	14000	3	261	60000	7	0.7%	60
11	77	16.3%	16000	1	299	64000	6	0.6%	64
12	96	20.4%	18000	0	336	68000	1	0.1%	68
13	92	19.5%	20000	0	373	72000	2	0.2%	72
14	69	14.6%	22000	0	410	76000	3	0.3%	76
15	62	13.2%	24000	0	448	80000	1	0.1%	80
TOTAL	471		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	14	1.5%	>84
			TOTAL	1906		TOTAL	952		

SUMMARY TOTALS

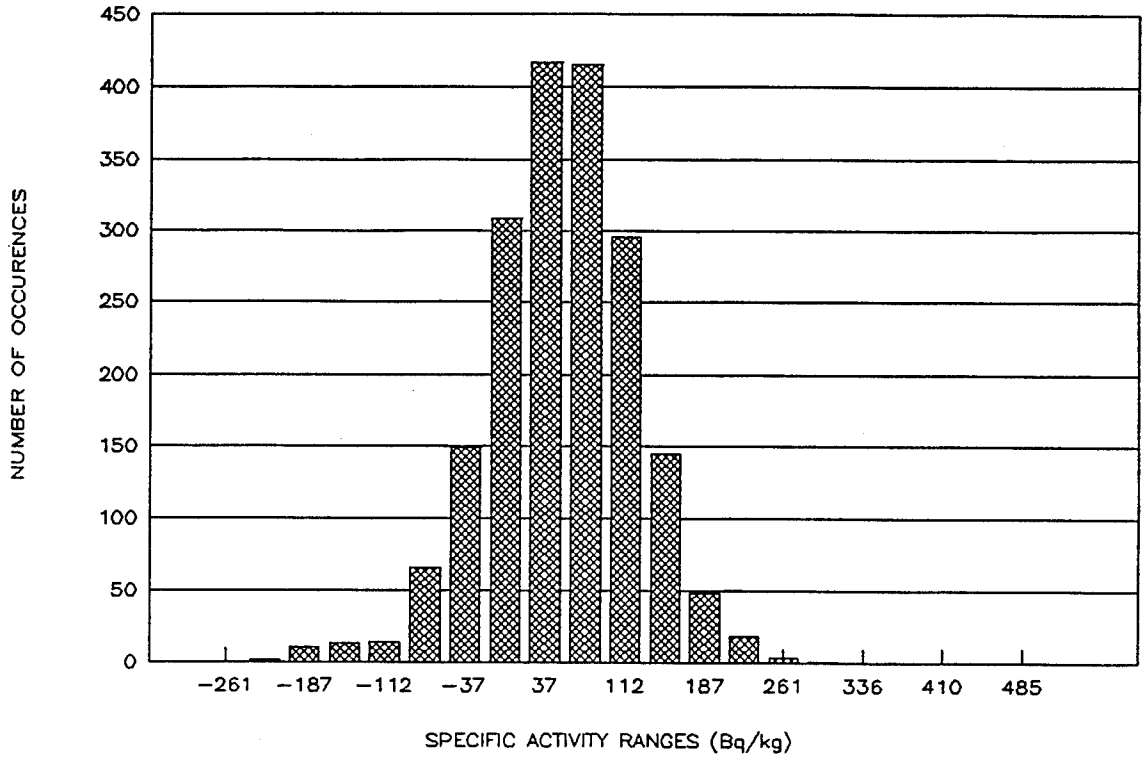
HOT PARTICLE EVENTS	940	SORTS BY ONE GATE ONLY	481
MULTIPARTICLE EVENTS	572	SORTS BY TWO GATES	471
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

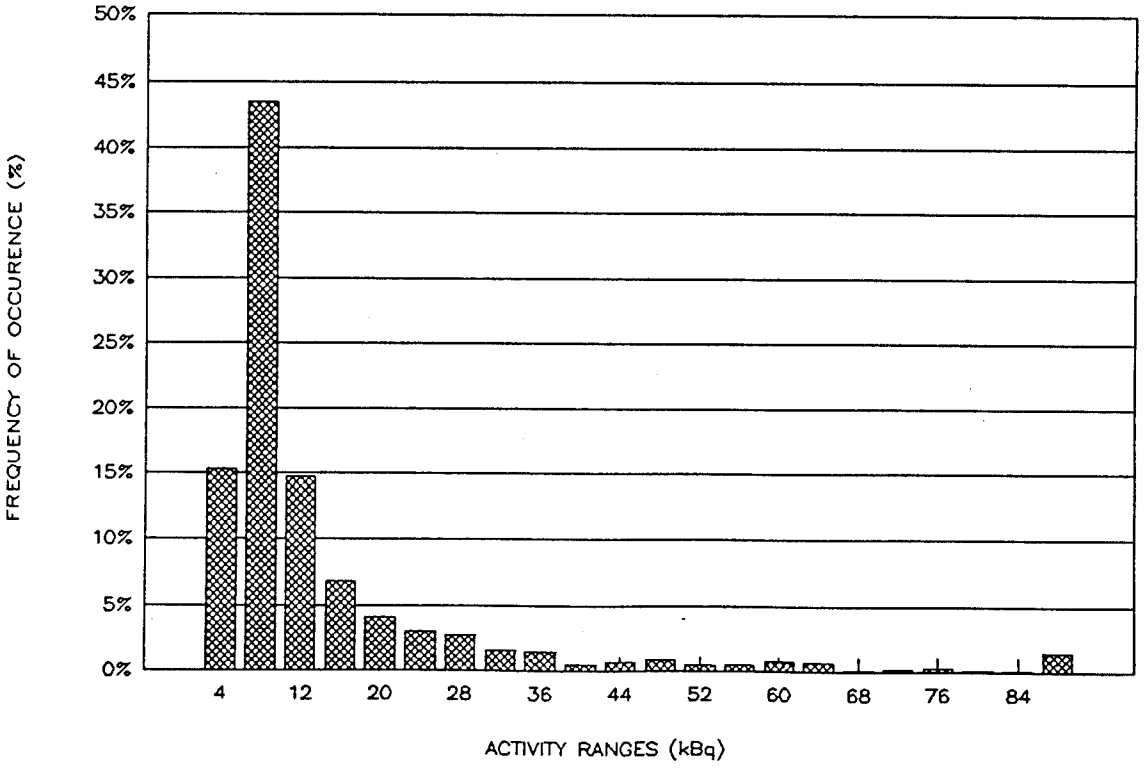
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 31–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 31–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 31-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.78 tons	89.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.0%
EQUIVALENT SOIL-IN-GROUND	1.41 yd³	70.5 yd³	72.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,990 kBq		
MAXIMUM/SORT	400 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,623 kBq	7,992 kBq	
MAXIMUM/SORT	307 kBq	15 kBq	
MINIMUM/SORT	-17880 Bq	-6 kBq	
SPECIFIC ACTIVITY	3,715 Bq/kg	90 Bq/kg	

WORK HISTORY

WORK DAY START	05:54 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:54 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.41 hr
DOWN-TIME	2.19 hr
TOTAL SYSTEM PAUSE	1.57 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.66 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	81.1%
PRODUCTIVITY	81.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,481	
NONPROCESS RECORDS (Test, calibration, etc)		39	
20-SEC PROCESS RECORDS		1,694	
TOTAL SORT		4	MD>0 & MND=0
NO SORT		581	AD=0 & MD=0 & MND>0
SOME SORT		1,109	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	2		
AD<0 & MD	2		
ACT_P <5 kBq	264	33.5%	

UNEXPLAIN TIME	PAUSE TIME
10:24:11	05:54
10:39:55	09:39

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,940		10:43:40	10:34
2-SEC RECORDS WITH SORTS	787	(ACT_P >0 kBq)	10:50:51	10:38
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				10:39
2 DETECTORS	170	87.6%		10:45
3 DETECTORS	23	11.9%		
4 DETECTORS	1	0.5%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	194			
NET 2-SEC RECORDS WITH SORTS	593			
2-SEC PERIODS WITH NO SORTS	16,347			
AVG TIME BETWEEN 2-SEC SORTS	57.1 sec			

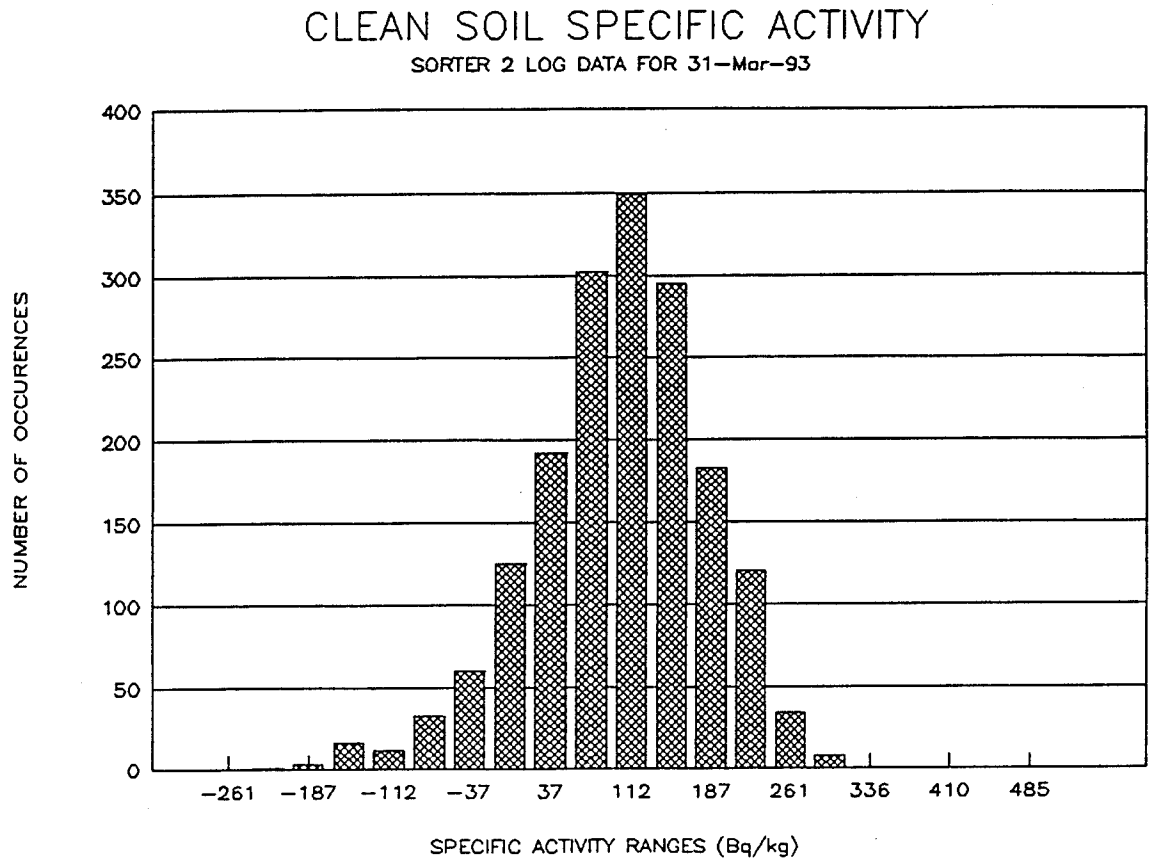
1-GATE SORTS		399	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT FREQ%		ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	10	2.5%	-14000	0	-261	4000	123	15.6%	4
2	60	15.0%	-12000	1	-224	8000	354	45.0%	8
3	73	18.3%	-10000	3	-187	12000	98	12.5%	12
4	79	19.8%	-8000	16	-149	16000	52	6.6%	16
5	90	22.6%	-6000	12	-112	20000	43	5.5%	20
6	32	8.0%	-4000	33	-75	24000	26	3.3%	24
7	43	10.8%	-2000	60	-37	28000	15	1.9%	28
8	12	3.0%	0	125	0	32000	16	2.0%	32
TOTAL	399		2000	192	37	36000	9	1.1%	36
			4000	302	75	40000	5	0.6%	40
2-GATE SORTS		388	6000	349	112	44000	5	0.6%	44
DETECTR	SORTS	FREQ%	8000	295	149	48000	3	0.4%	48
8			10000	183	187	52000	4	0.5%	52
9	23	5.9%	12000	120	224	56000	5	0.6%	56
10	52	13.4%	14000	34	261	60000	4	0.5%	60
11	67	17.3%	16000	8	299	64000	3	0.4%	64
12	88	22.7%	18000	0	336	68000	5	0.6%	68
13	80	20.6%	20000	0	373	72000	2	0.3%	72
14	52	13.4%	22000	0	410	76000	0	0.0%	76
15	26	6.7%	24000	0	448	80000	1	0.1%	80
TOTAL	388		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	13	1.7%	>84
			TOTAL	1733		TOTAL	787		

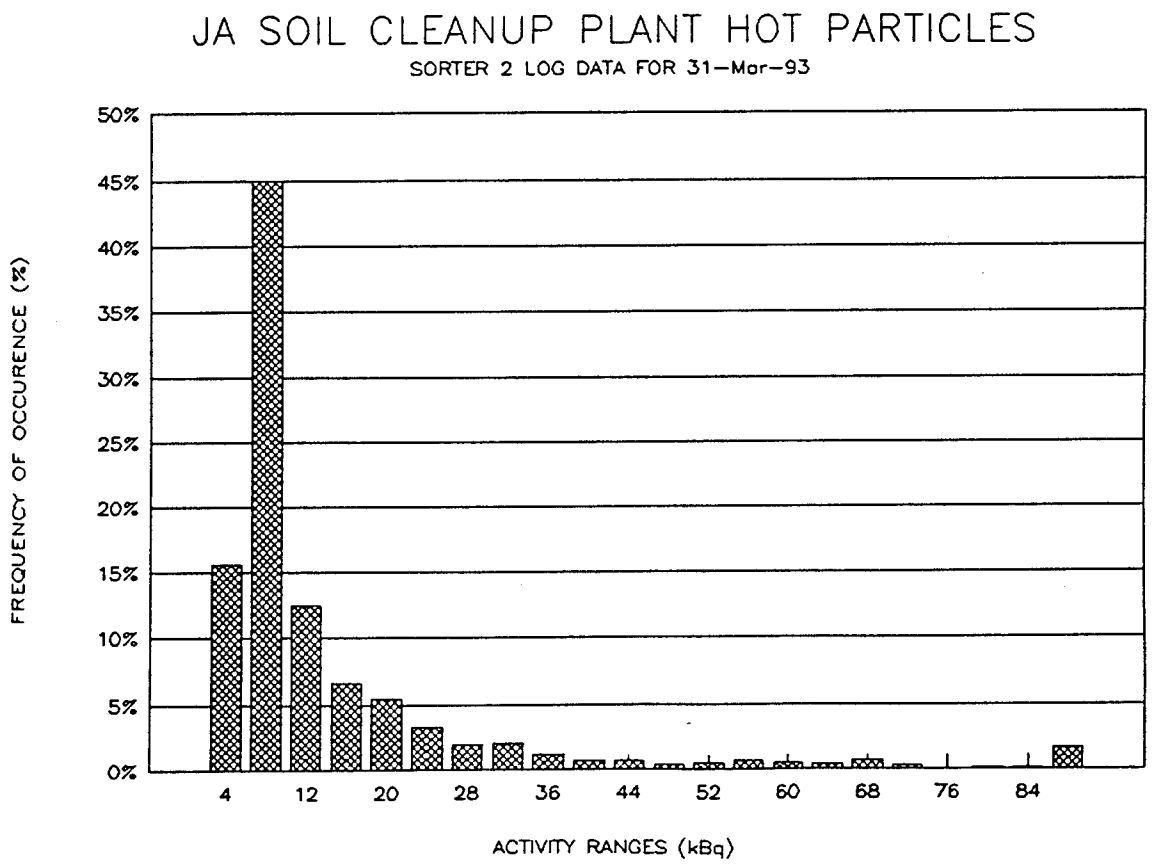
SUMMARY TOTALS

HOT PARTICLE EVENTS	802	SORTS BY ONE GATE ONLY	399
MULTIPARTICLE EVENTS	1524	SORTS BY TWO GATES	388
DISTRIBUTED EVENTS	332		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 31-Mar-93
NUMBER OF OCCURENCES
400
350
300
250
200
150
100
50
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 31-Mar-93
FREQUENCY OF OCCURENCE (%)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 30-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.03 tons	98.6 tons	
MAXIMUM/SORT	8.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.82 yd³	78.1 yd³	79.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,604 kBq		
MAXIMUM/SORT	453 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,093 kBq	3,873 kBq	
MAXIMUM/SORT	268 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,895 Bq/kg	39 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.33 hr
DOWN-TIME	1.17 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.56 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	89.8%
PRODUCTIVITY	89.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,814	
NONPROCESS RECORDS (Test, calibration, etc)		32	
20-SEC PROCESS RECORDS		1,859	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,148	AD=0 & MD=0 & MND>0
SOME SORT		711	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	308	32.3%	

UNEXPLAIN TIME	PAUSE TIME
None	06:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,590	
2-SEC RECORDS WITH SORTS	955	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	208	80.9%
3 DETECTORS	41	16.0%
4 DETECTORS	7	2.7%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	257	
NET 2-SEC RECORDS WITH SORTS	698	
2-SEC PERIODS WITH NO SORTS	17,892	
AVG TIME BETWEEN 2-SEC SORTS	53.3	sec

1-GATE SORTS		483	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	6	1.2%	-14000	4	-261	4000	159	16.6%	4
2	33	6.8%	-12000	9	-224	8000	399	41.8%	8
3	61	12.6%	-10000	10	-187	12000	136	14.2%	12
4	100	20.7%	-8000	4	-149	16000	65	6.8%	16
5	112	23.2%	-6000	10	-112	20000	46	4.8%	20
6	73	15.1%	-4000	47	-75	24000	37	3.9%	24
7	73	15.1%	-2000	164	-37	28000	25	2.6%	28
8	25	5.2%	0	303	0	32000	15	1.6%	32
TOTAL	483		2000	403	37	36000	13	1.4%	36
			4000	420	75	40000	5	0.5%	40
2-GATE SORTS		472	6000	293	112	44000	5	0.5%	44
DETECTR	SORTS	FREQ%	8000	148	149	48000	4	0.4%	48
8			10000	53	187	52000	5	0.5%	52
9	14	3.0%	12000	16	224	56000	7	0.7%	56
10	54	11.4%	14000	4	261	60000	5	0.5%	60
11	76	16.1%	16000	3	299	64000	4	0.4%	64
12	96	20.3%	18000	0	336	68000	4	0.4%	68
13	102	21.6%	20000	0	373	72000	2	0.2%	72
14	68	14.4%	22000	0	410	76000	0	0.0%	76
15	62	13.1%	24000	0	448	80000	1	0.1%	80
TOTAL	472		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	16	1.7%	>84
			TOTAL	1891		TOTAL	955		

SUMMARY TOTALS

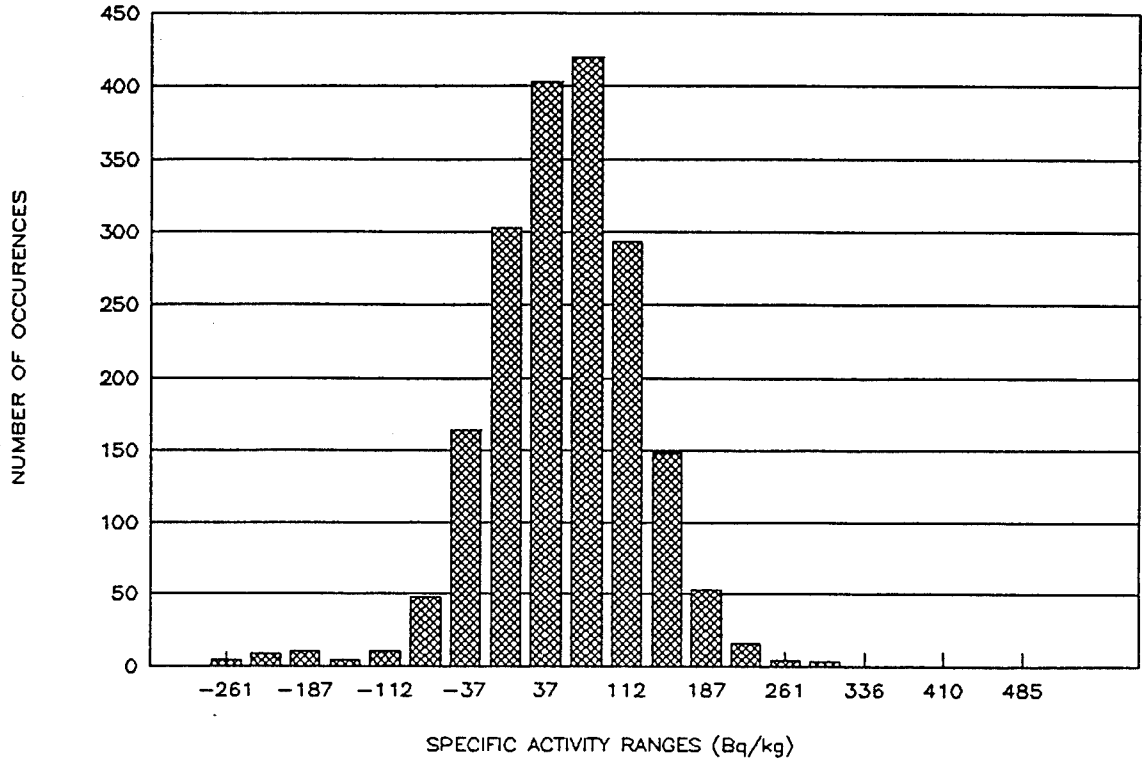
HOT PARTICLE EVENTS	950	SORTS BY ONE GATE ONLY	483
MULTIPARTICLE EVENTS	595	SORTS BY TWO GATES	472
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

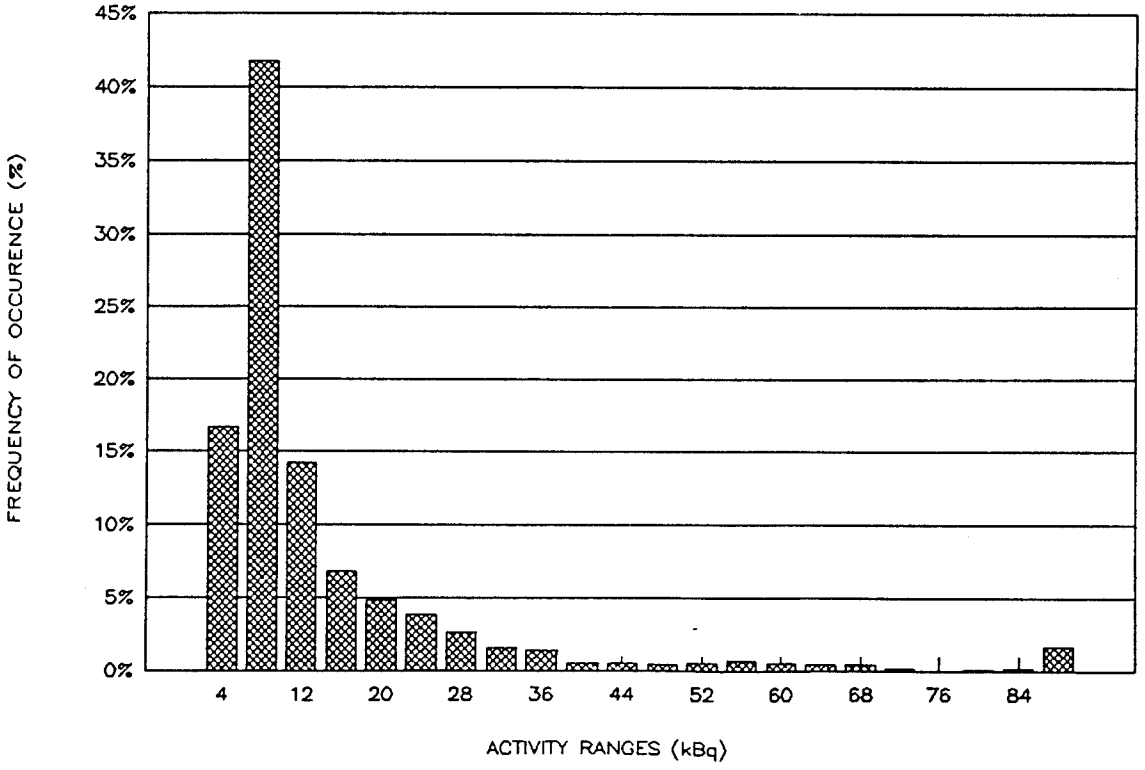
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 30-Mar-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 30-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 30-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.31 tons	98.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
			98.7%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.04 yd³	78.4 yd³	79.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,325 kBq		
MAXIMUM/SORT	290 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,984 kBq	8,534 kBq	
MAXIMUM/SORT	226 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	5,330 Bq/kg	86 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:33 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.39 hr
DOWN-TIME	1.11 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.56 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	90.4%
PRODUCTIVITY	90.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,740	
NONPROCESS RECORDS (Test, calibration, etc)	20	
20-SEC PROCESS RECORDS	1,871	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	978	AD=0 & MD=0 & MND>0
SOME SORT	892	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	230	26.5%

UNEXPLAIN TIME	PAUSE TIME
12:53:03	06:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,710	
2-SEC RECORDS WITH SORTS	869	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	190	83.7%
3 DETECTORS	29	12.8%
4 DETECTORS	6	2.6%
5 DETECTORS	2	0.9%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	227	
NET 2-SEC RECORDS WITH SORTS	642	
2-SEC PERIODS WITH NO SORTS	18,068	
AVG TIME BETWEEN 2-SEC SORTS	58.3	sec

1-GATE SORTS DETECTR	SORTS	450 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	15	3.3%	-14000	2	-261
2	63	14.0%	-12000	5	-224
3	84	18.7%	-10000	12	-187
4	109	24.2%	-8000	6	-149
5	84	18.7%	-6000	4	-112
6	60	13.3%	-4000	16	-75
7	32	7.1%	-2000	46	-37
8	3	0.7%	0	140	0
TOTAL	450		2000	273	37
			4000	345	75
2-GATE SORTS		419	6000	408	112
DETECTR	SORTS	FREQ%	8000	297	149
8			10000	164	187
9	35	8.4%	12000	105	224
10	60	14.3%	14000	41	261
11	94	22.4%	16000	19	299
12	100	23.9%	18000	7	336
13	69	16.5%	20000	1	373
14	50	11.9%	22000	0	410
15	11	2.6%	24000	0	448
TOTAL	419		26000	0	485
			>28000	0	0
			TOTAL	1891	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	101	11.6%	4
8000	376	43.3%	8
12000	136	15.7%	12
16000	76	8.7%	16
20000	37	4.3%	20
24000	35	4.0%	24
28000	14	1.6%	28
32000	13	1.5%	32
36000	15	1.7%	36
40000	4	0.5%	40
44000	7	0.8%	44
48000	5	0.6%	48
52000	8	0.9%	52
56000	4	0.5%	56
60000	6	0.7%	60
64000	3	0.3%	64
68000	1	0.1%	68
72000	2	0.2%	72
76000	2	0.2%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	24	2.8%	>84
TOTAL	869		

SUMMARY TOTALS

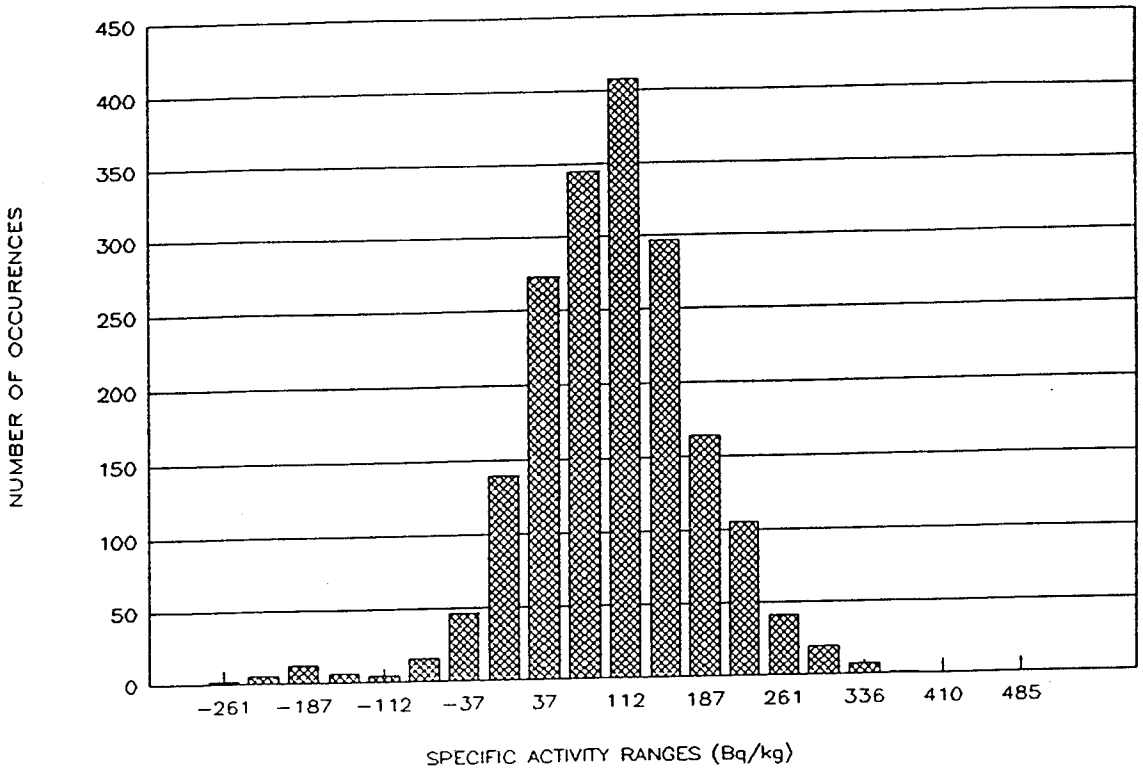
HOT PARTICLE EVENTS	863	SORTS BY ONE GATE ONLY	450
MULTIPARTICLE EVENTS	1015	SORTS BY TWO GATES	419
DISTRIBUTED EVENTS	76		

REC CODE EXPLANATION

1.00 Source check (soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

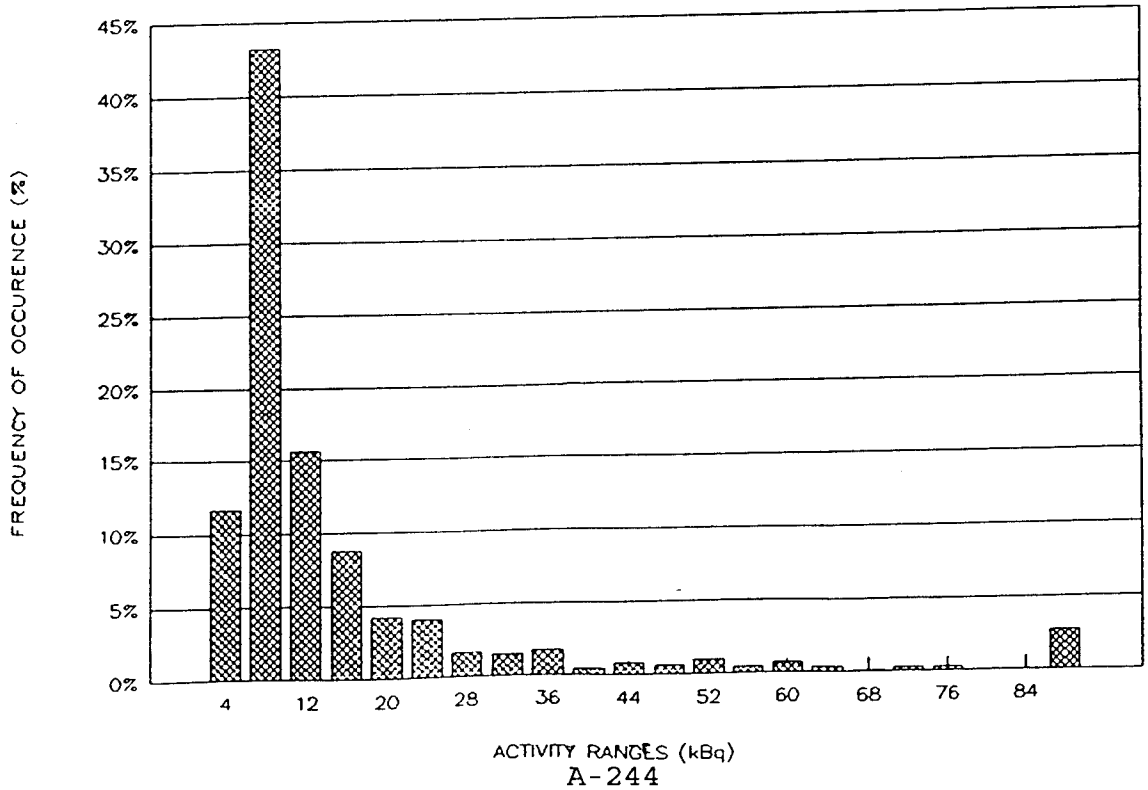
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 30–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 30–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 29-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.61 tons	85.3 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.1%
EQUIVALENT SOIL-IN-GROUND	1.28 yd³	67.6 yd³	68.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	12,988 kBq		
MAXIMUM/SORT	1,119 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,109 kBq	1,426 kBq	
MAXIMUM/SORT	978 kBq	18 kBq	
MINIMUM/SORT	-641 Bq	-13 kBq	
SPECIFIC ACTIVITY	3,794 Bq/kg	17 Bq/kg	

WORK HISTORY

WORK DAY START	05:49 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:49 AM	PLANT SHUT-DOWN	05:04 PM
START SOIL PROCESSING	06:22 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.2 hr
AVAILABLE HOURS	10.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.01 hr
DOWN-TIME	1.74 hr
TOTAL SYSTEM PAUSE	2.08 hr
NONAVAILABLE HOURS	0.4 hr
START-UP	0.55 hr
SHUT-DOWN	0.02 hr
PLANT PERFORMANCE	83.8%
PRODUCTIVITY	80.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)				2,483		
NONPROCESS RECORDS (Test, calibration, etc)				35		
20-SEC PROCESS RECORDS				1,622		
TOTAL SORT				14	MD>0 & MND=0	
NO SORT				1,114	AD=0 & MD=0 & MND>0	
SOME SORT				494	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS				0		
0<AD<1kBq & MD>0	1				UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0				12:47:40	05:50
AD<0 & MD	1				16:12:40	10:13
ACT_P <5 kBq	249	28.9%				

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,220		10:24
2-SEC RECORDS WITH SORTS	861	(ACT_P >0 kBq)	10:39
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			10:58
2 DETECTORS	209	84.6%	
3 DETECTORS	33	13.4%	
4 DETECTORS	4	1.6%	
5 DETECTORS	1	0.4%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	247		
NET 2-SEC RECORDS WITH SORTS	614		
2-SEC PERIODS WITH NO SORTS	15,606		
AVG TIME BETWEEN 2-SEC SORTS	52.8 sec		

1-GATE SORTS	429	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 5	1.2%	-14000	0	-261	4000	117	13.6%	4
2 20	4.7%	-12000	1	-224	8000	372	43.2%	8
3 45	10.5%	-10000	4	-187	12000	139	16.1%	12
4 86	20.0%	-8000	8	-149	16000	60	7.0%	16
5 100	23.3%	-6000	23	-112	20000	41	4.8%	20
6 82	19.1%	-4000	103	-75	24000	22	2.6%	24
7 71	16.6%	-2000	216	-37	28000	20	2.3%	28
8 20	4.7%	0	400	0	32000	21	2.4%	32
TOTAL 429		2000	400	37	36000	8	0.9%	36
		4000	228	75	40000	12	1.4%	40
2-GATE SORTS	432	6000	114	112	44000	6	0.7%	44
DETECTR SORTS	FREQ%	8000	62	149	48000	5	0.6%	48
8		10000	34	187	52000	4	0.5%	52
9 11	2.5%	12000	20	224	56000	9	1.0%	56
10 33	7.6%	14000	18	261	60000	4	0.5%	60
11 71	16.4%	16000	16	299	64000	2	0.2%	64
12 89	20.6%	18000	10	336	68000	2	0.2%	68
13 100	23.1%	20000	0	373	72000	0	0.0%	72
14 77	17.8%	22000	0	410	76000	3	0.3%	76
15 51	11.8%	24000	0	448	80000	1	0.1%	80
TOTAL 432		26000	0	485	84000	3	0.3%	84
		>28000	0	0	>84000	10	1.2%	>84
		TOTAL	1657		TOTAL	861		

SUMMARY TOTALS

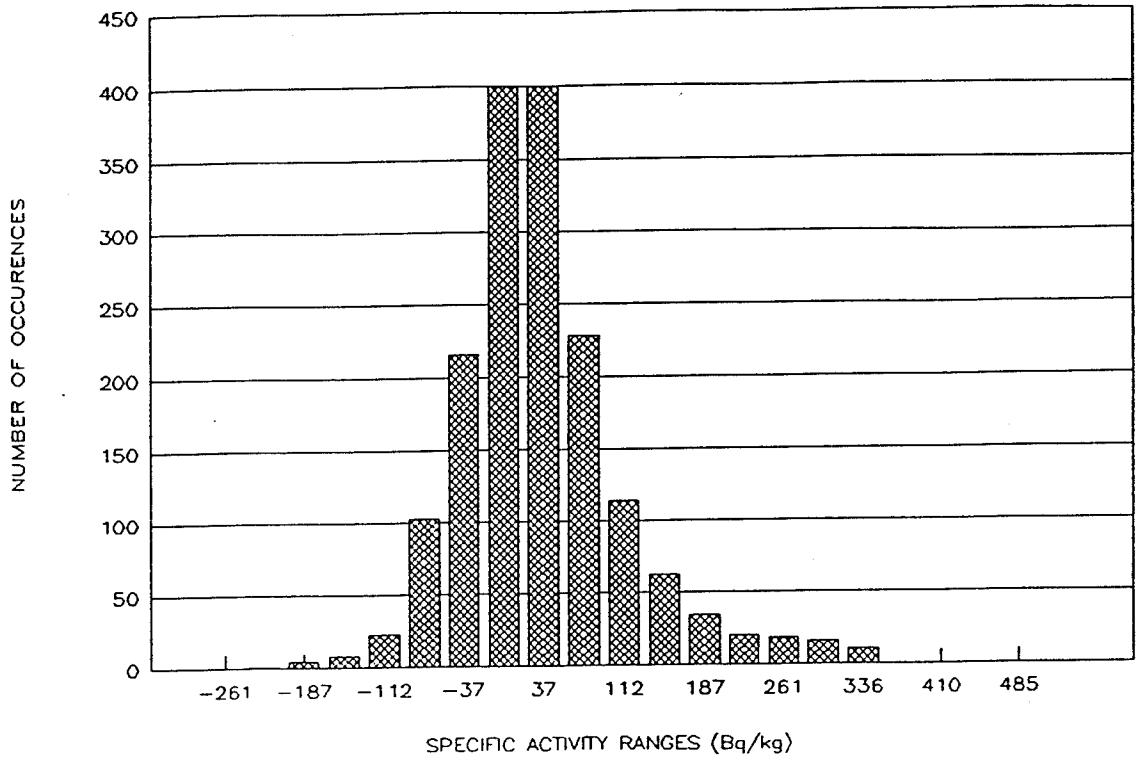
HOT PARTICLE EVENTS	840	SORTS BY ONE GATE ONLY	429
MULTIPARTICLE EVENTS	507	SORTS BY TWO GATES	432
DISTRIBUTED EVENTS	1056		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

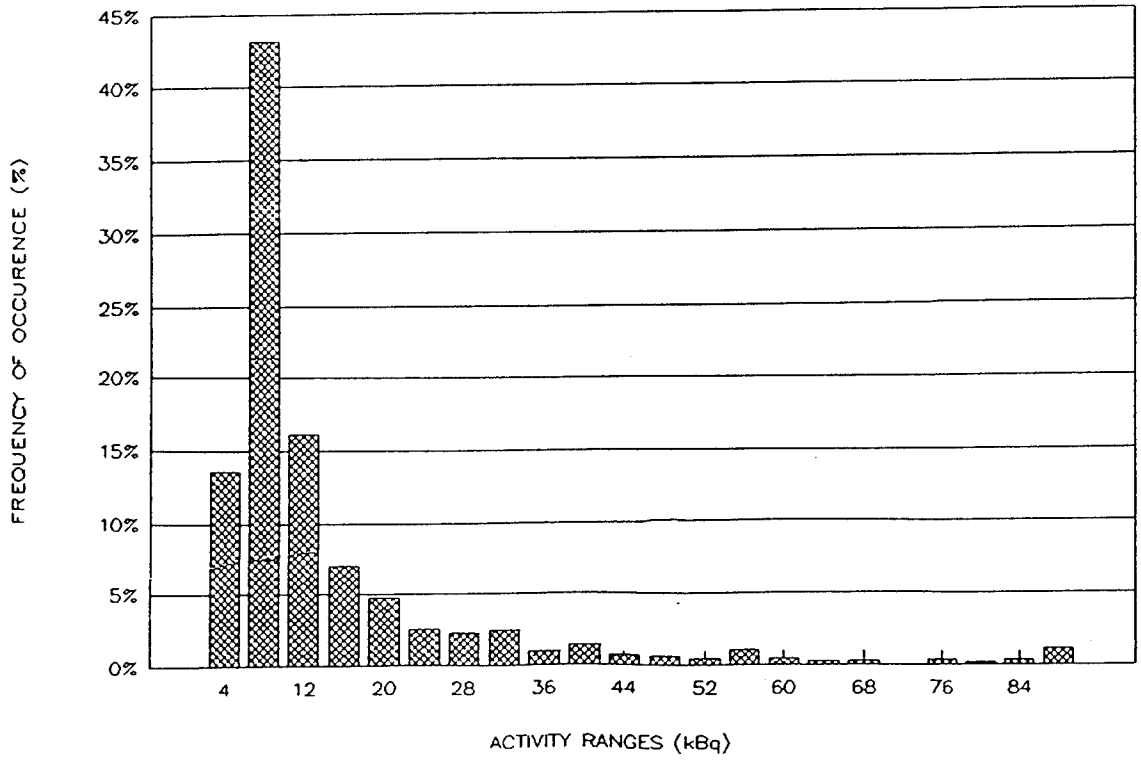
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 29-Mar-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 29-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 29-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.32 tons	74.3 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	41.5 kg	
			97.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.84 yd³	58.9 yd³	60.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	23,059 kBq		
MAXIMUM/SORT	4,264 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,787 kBq	4,602 kBq	
MAXIMUM/SORT	3501 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	4,643 Bq/kg	62 Bq/kg	

WORK HISTORY

WORK DAY START	05:49 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:49 AM	PLANT SHUT-DOWN	05:04 PM
START SOIL PROCESSING	06:22 AM	END SOIL PROCESSING	05:03 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.2 hr
AVAILABLE HOURS	10.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.94 hr
DOWN-TIME	2.81 hr
TOTAL SYSTEM PAUSE	3.11 hr
NONAVAILABLE HOURS	0.4 hr
START-UP	0.55 hr
SHUT-DOWN	0.01 hr
PLANT PERFORMANCE	73.9%
PRODUCTIVITY	71.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,168		
NONPROCESS RECORDS (Test, calibration, etc)	59		
20-SEC PROCESS RECORDS	1,430		
TOTAL SORT	27	MD>0 & MND=0	
NO SORT	834	AD=0 & MD=0 & MND>0	
SOME SORT	569	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	204	27.6%	

UNEXPLAIN TIME	PAUSE TIME
None	05:50
	10:13

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		14,300		10:24
2-SEC RECORDS WITH SORTS		738	(ACT_P >0 kBq)	10:29
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				10:34
2 DETECTORS	167	77.0%		10:35
3 DETECTORS	33	15.2%		10:41
4 DETECTORS	13	6.0%		10:44
5 DETECTORS	4	1.8%		12:07
6 DETECTORS	0	0.0%		12:08
7 DETECTORS	0	0.0%		12:53
8 DETECTORS	0	0.0%		12:59
TOTAL		217		13:00
NET 2-SEC RECORDS WITH SORTS		521		
2-SEC PERIODS WITH NO SORTS		13,779		
AVG TIME BETWEEN 2-SEC SORTS		54.9 sec		

1-GATE SORTS		377	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	13	3.4%	-14000	1	-261	4000	84	11.2%	4
2	55	14.3%	-12000	2	-224	8000	317	42.3%	8
3	99	25.8%	-10000	3	-187	12000	117	15.6%	12
4	89	23.2%	-8000	6	-149	16000	64	8.5%	16
5	74	19.3%	-6000	6	-112	20000	35	4.7%	20
6	32	8.3%	-4000	23	-75	24000	25	3.3%	24
7	18	4.7%	-2000	78	-37	28000	16	2.1%	28
8	4	1.0%	0	191	0	32000	12	1.6%	32
TOTAL	384		2000	294	37	36000	11	1.5%	36
			4000	315	75	40000	6	0.8%	40
2-GATE SORTS		361	6000	232	112	44000	4	0.5%	44
DETECTR	SORTS	FREQ%	8000	152	149	48000	5	0.7%	48
8			10000	76	187	52000	3	0.4%	52
9	28	7.7%	12000	34	224	56000	3	0.4%	56
10	71	19.5%	14000	29	261	60000	6	0.8%	60
11	97	26.6%	16000	21	299	64000	7	0.9%	64
12	84	23.0%	18000	9	336	68000	3	0.4%	68
13	54	14.8%	20000	6	373	72000	1	0.1%	72
14	22	6.0%	22000	0	410	76000	1	0.1%	76
15	9	2.5%	24000	0	448	80000	2	0.3%	80
TOTAL	365		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	26	3.5%	>84
			TOTAL	1478		TOTAL	749		

SUMMARY TOTALS

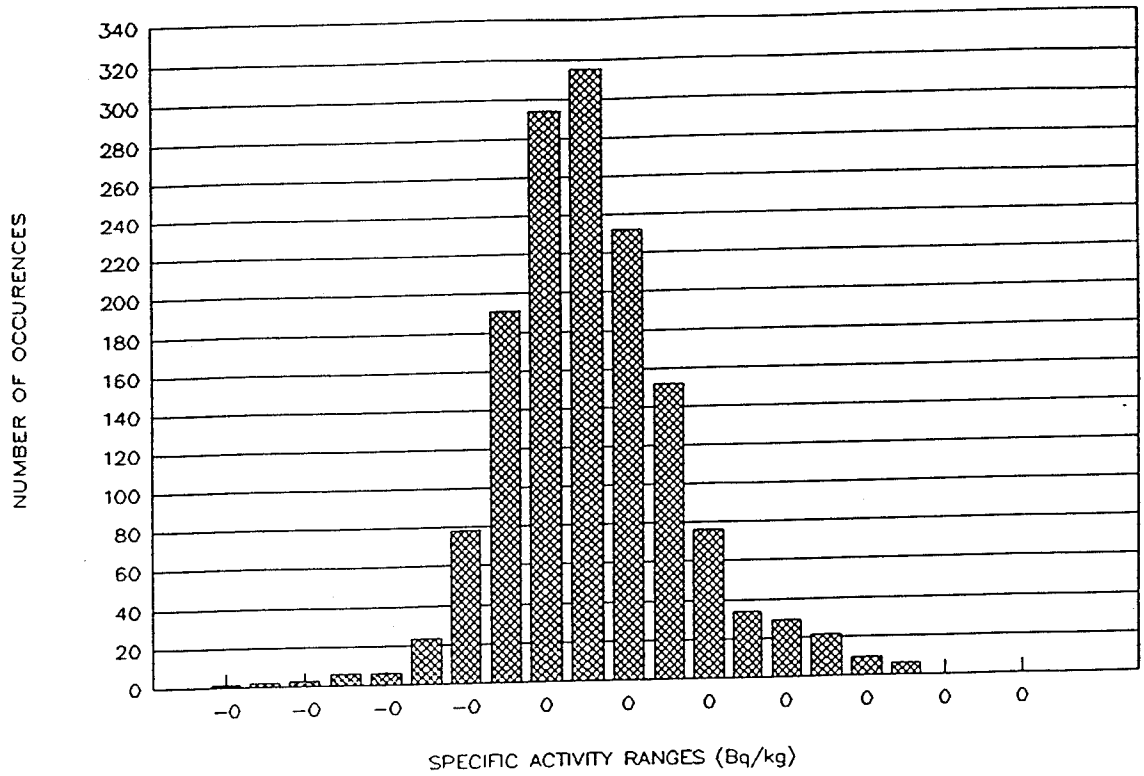
HOT PARTICLE EVENTS	692	SORTS BY ONE GATE ONLY	377
MULTIPARTICLE EVENTS	662	SORTS BY TWO GATES	361
DISTRIBUTED EVENTS	2108		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

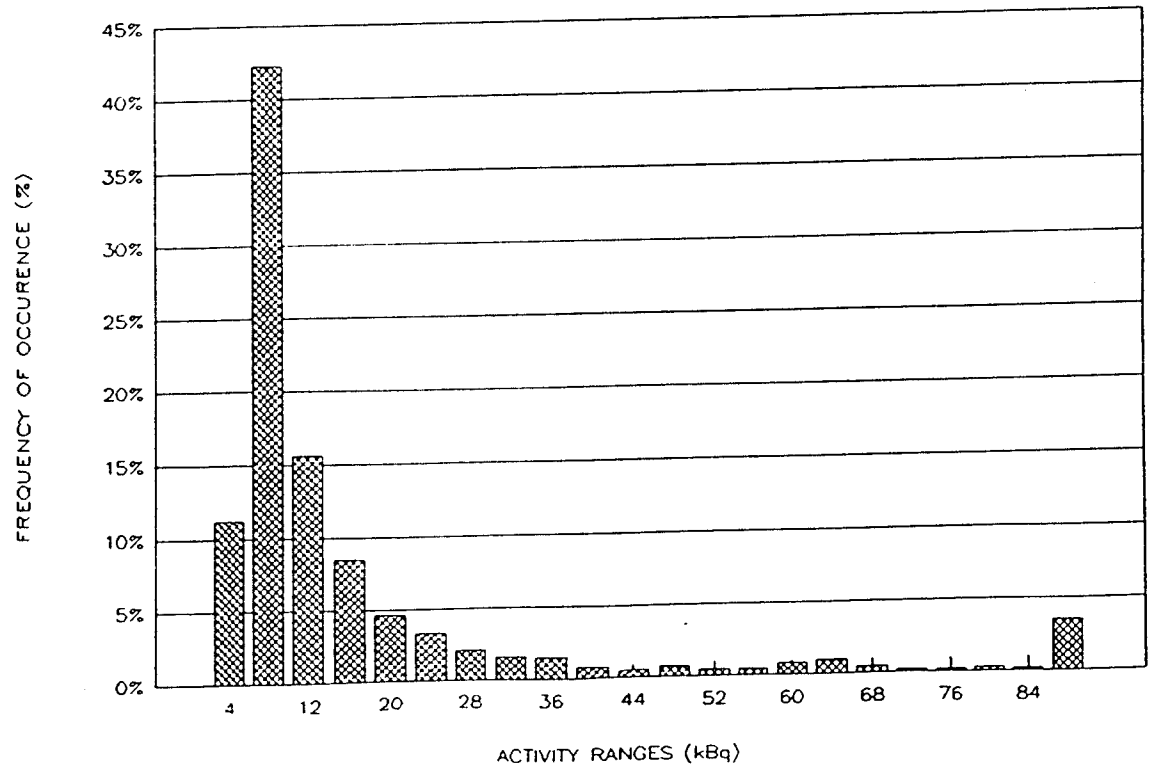
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 29-Mar-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 29-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 27-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.68 tons	67.9 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.6%
EQUIVALENT SOIL-IN-GROUND	1.33 yd³	53.8 yd³	55.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,500 kBq		
MAXIMUM/SORT	307 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,568 kBq	4,338 kBq	
MAXIMUM/SORT	242 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	3,311 Bq/kg	64 Bq/kg	

WORK HISTORY

WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	02:30 PM
START SOIL PROCESSING	06:40 AM	END SOIL PROCESSING	02:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	8.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.21 hr
DOWN-TIME	1.36 hr
TOTAL SYSTEM PAUSE	0.85 hr
NONAVAILABLE HOURS	3.0 hr
START-UP	0.74 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	84.2%
PRODUCTIVITY	62.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,081		
NONPROCESS RECORDS (Test, calibration, etc)	12		
20-SEC PROCESS RECORDS	1,298		
TOTAL SORT	15	MD>0 & MND=0	
NO SORT	705	AD=0 & MD=0 & MND>0	
SOME SORT	578	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	257	32.8%	

UNEXPLAIN TIME	PAUSE TIME
None	05:56
	06:47

JA SOIL CLEANUP PLANT LOG SUMMARY

06:53
06:55
06:56

2-SEC COUNT PERIODS	12,980	
2-SEC RECORDS WITH SORTS	783	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	174	80.2%
3 DETECTORS	33	15.2%
4 DETECTORS	10	4.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	217	
NET 2-SEC RECORDS WITH SORTS	566	
2-SEC PERIODS WITH NO SORTS	12,414	
AVG TIME BETWEEN 2-SEC SORTS	45.9 sec	

1-GATE SORTS DETECTR	SORTS	393 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	11	2.8%	-14000	0	-261
2	50	12.7%	-12000	0	-224
3	48	12.2%	-10000	4	-187
4	68	17.3%	-8000	1	-149
5	79	20.1%	-6000	7	-112
6	65	16.5%	-4000	20	-75
7	57	14.5%	-2000	72	-37
8	15	3.8%	0	166	0
TOTAL	393		2000	251	37
			4000	260	75
2-GATE SORTS		390	6000	227	112
DETECTR	SORTS	FREQ%	8000	140	149
8			10000	84	187
9	31	7.9%	12000	40	224
10	50	12.8%	14000	21	261
11	63	16.2%	16000	10	299
12	67	17.2%	18000	6	336
13	70	17.9%	20000	1	373
14	77	19.7%	22000	0	410
15	32	8.2%	24000	0	448
TOTAL	390		26000	0	485
			>28000	0	0
			TOTAL	1310	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	138	17.6%	4
8000	285	36.4%	8
12000	143	18.3%	12
16000	64	8.2%	16
20000	25	3.2%	20
24000	20	2.6%	24
28000	23	2.9%	28
32000	11	1.4%	32
36000	5	0.6%	36
40000	11	1.4%	40
44000	5	0.6%	44
48000	7	0.9%	48
52000	7	0.9%	52
56000	6	0.8%	56
60000	3	0.4%	60
64000	2	0.3%	64
68000	4	0.5%	68
72000	1	0.1%	72
76000	1	0.1%	76
80000	2	0.3%	80
84000	2	0.3%	84
>84000	18	2.3%	>84
TOTAL	783		

SUMMARY TOTALS

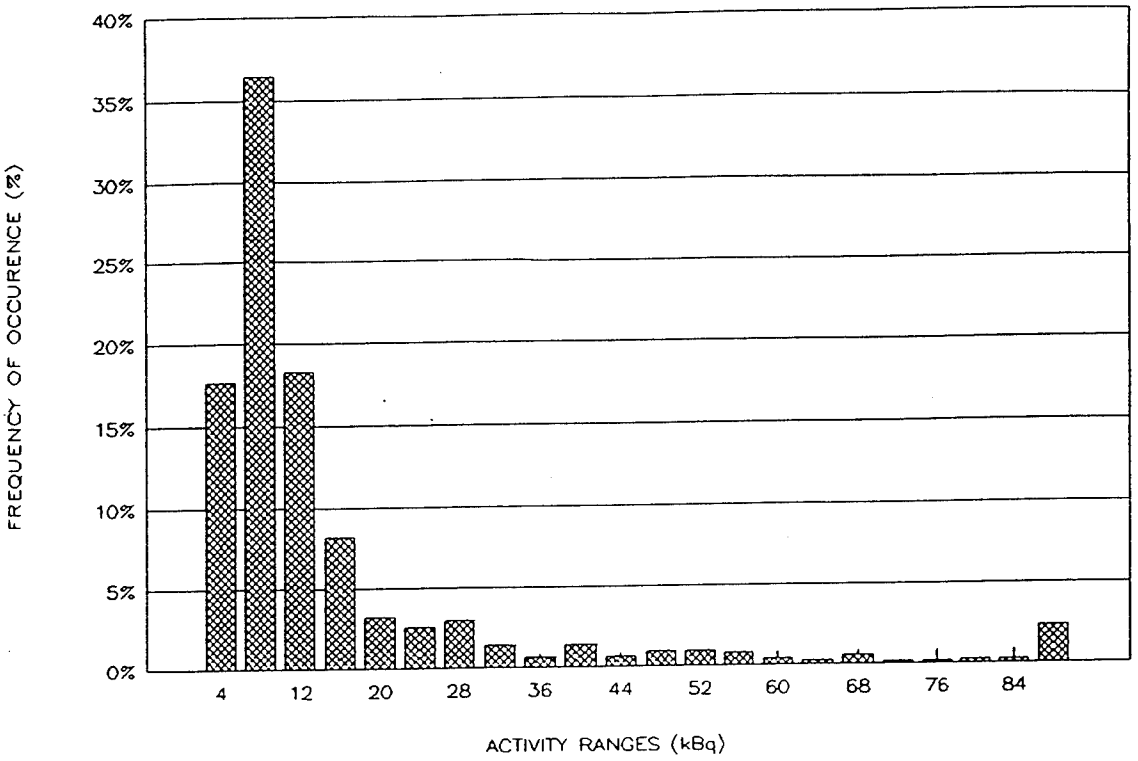
HOT PARTICLE EVENTS	790	SORTS BY ONE GATE ONLY	393
MULTIPARTICLE EVENTS	541	SORTS BY TWO GATES	390
DISTRIBUTED EVENTS	1180		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

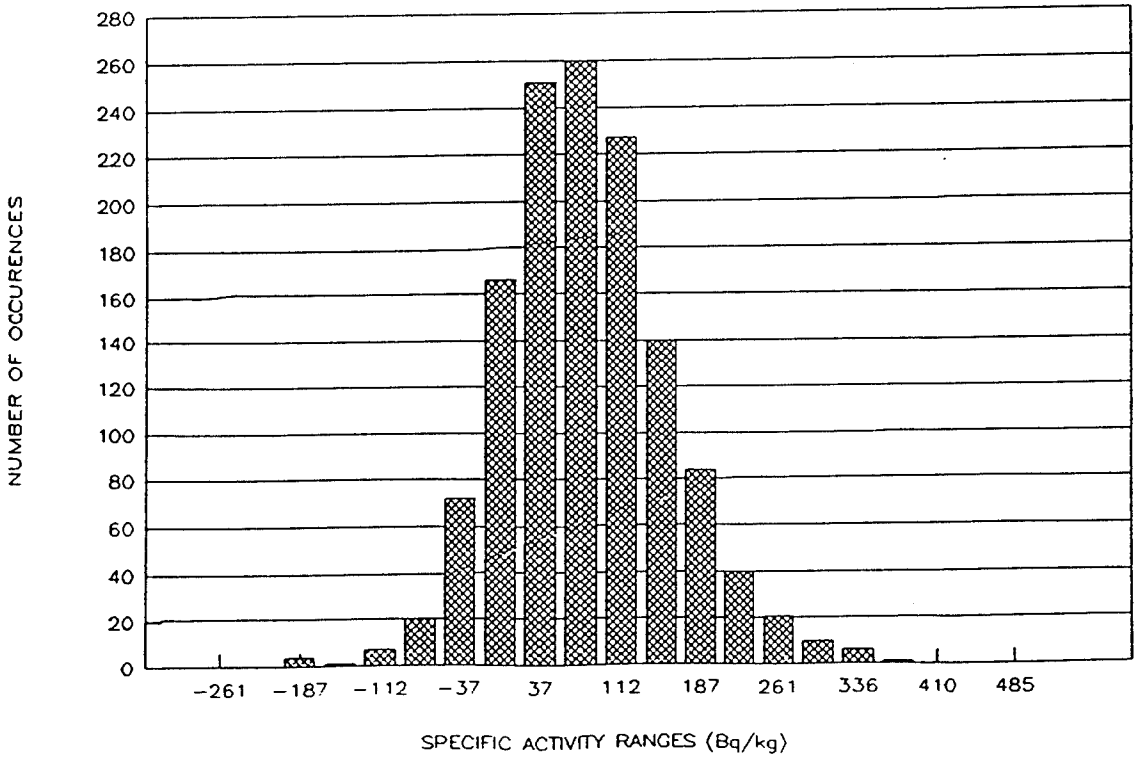
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 27-Mar-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 27-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 27-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.04 tons	67.9 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.1%
EQUIVALENT SOIL-IN-GROUND	1.62 yd³	53.8 yd³	55.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,094 kBq		
MAXIMUM/SORT	842 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,374 kBq	7,411 kBq	
MAXIMUM/SORT	693 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	3,123 Bq/kg	109 Bq/kg	

WORK HISTORY

WORK DAY START	05:56 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:56 AM	PLANT SHUT-DOWN	02:30 PM
START SOIL PROCESSING	06:39 AM	END SOIL PROCESSING	02:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	8.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.25 hr
DOWN-TIME	1.32 hr
TOTAL SYSTEM PAUSE	0.85 hr
NONAVAILABLE HOURS	3.0 hr
START-UP	0.72 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	84.6%
PRODUCTIVITY	62.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,876	
NONPROCESS RECORDS (Test, calibration, etc)		3	
20-SEC PROCESS RECORDS		1,305	
TOTAL SORT		23	MD>0 & MND=0
NO SORT		696	AD=0 & MD=0 & MND>0
SOME SORT		586	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	161	28.2%	

UNEXPLAIN TIME	PAUSE TIME
None	05:56
	06:47

2-SEC COUNT PERIODS	13,050		06:55
2-SEC RECORDS WITH SORTS	571	(ACT_P >0 kBq)	06:56
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	134	82.7%	
3 DETECTORS	23	14.2%	
4 DETECTORS	4	2.5%	
5 DETECTORS	1	0.6%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	162		
NET 2-SEC RECORDS WITH SORTS	409		
2-SEC PERIODS WITH NO SORTS	12,641		
AVG TIME BETWEEN 2-SEC SORTS	63.8 sec		

1-GATE SORTS		297	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	11	3.7%	-14000	0	-261	4000	76	13.3%	4
2	42	14.1%	-12000	0	-224	8000	262	45.9%	8
3	48	16.2%	-10000	1	-187	12000	72	12.6%	12
4	66	22.2%	-8000	0	-149	16000	38	6.7%	16
5	62	20.9%	-6000	3	-112	20000	26	4.6%	20
6	43	14.5%	-4000	4	-75	24000	19	3.3%	24
7	21	7.1%	-2000	12	-37	28000	8	1.4%	28
8	4	1.3%	0	78	0	32000	14	2.5%	32
TOTAL	297		2000	147	37	36000	9	1.6%	36
			4000	229	75	40000	4	0.7%	40
2-GATE SORTS		274	6000	260	112	44000	8	1.4%	44
DETECTR	SORTS	FREQ%	8000	239	149	48000	3	0.5%	48
8			10000	140	187	52000	5	0.9%	52
9	23	8.4%	12000	103	224	56000	3	0.5%	56
10	35	12.8%	14000	47	261	60000	3	0.5%	60
11	48	17.5%	16000	28	299	64000	2	0.4%	64
12	63	23.0%	18000	13	336	68000	0	0.0%	68
13	55	20.1%	20000	4	373	72000	1	0.2%	72
14	36	13.1%	22000	0	410	76000	1	0.2%	76
15	14	5.1%	24000	0	448	80000	1	0.2%	80
TOTAL	274		26000	0	485	84000	1	0.2%	84
			>28000	0	0	>84000	15	2.6%	>84
			TOTAL	1308		TOTAL	571		

SUMMARY TOTALS

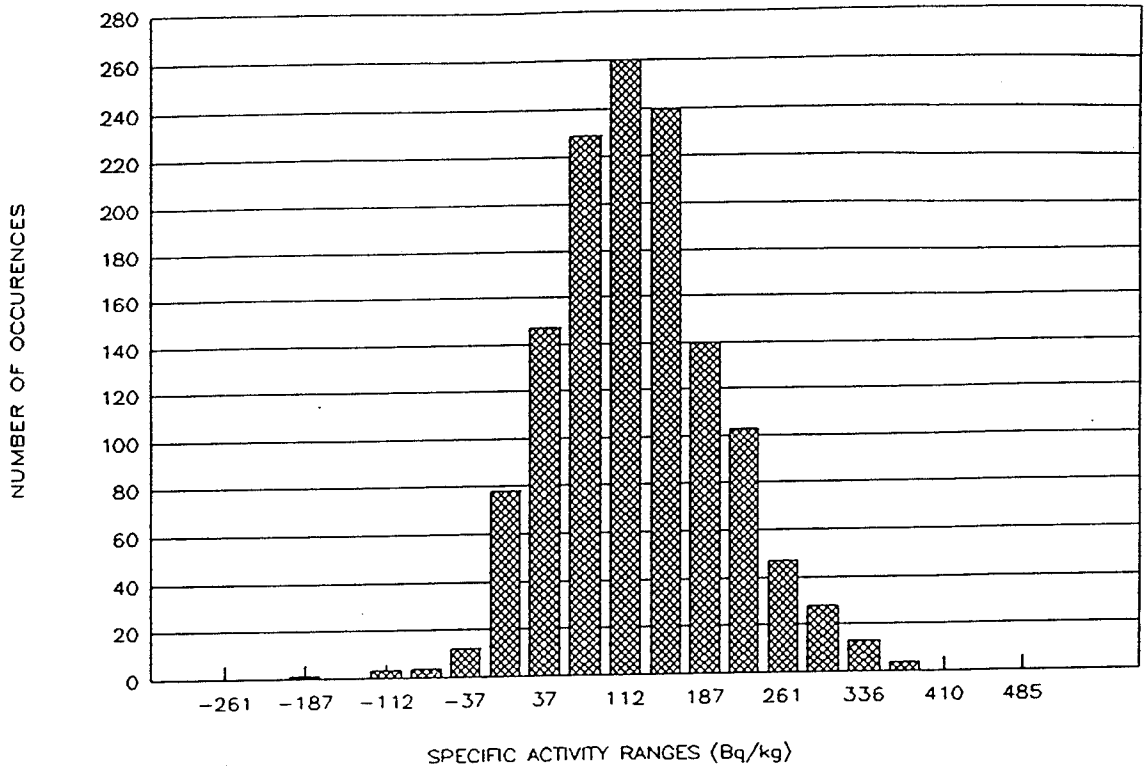
HOT PARTICLE EVENTS	559	SORTS BY ONE GATE ONLY	297
MULTIPARTICLE EVENTS	674	SORTS BY TWO GATES	274
DISTRIBUTED EVENTS	1810		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

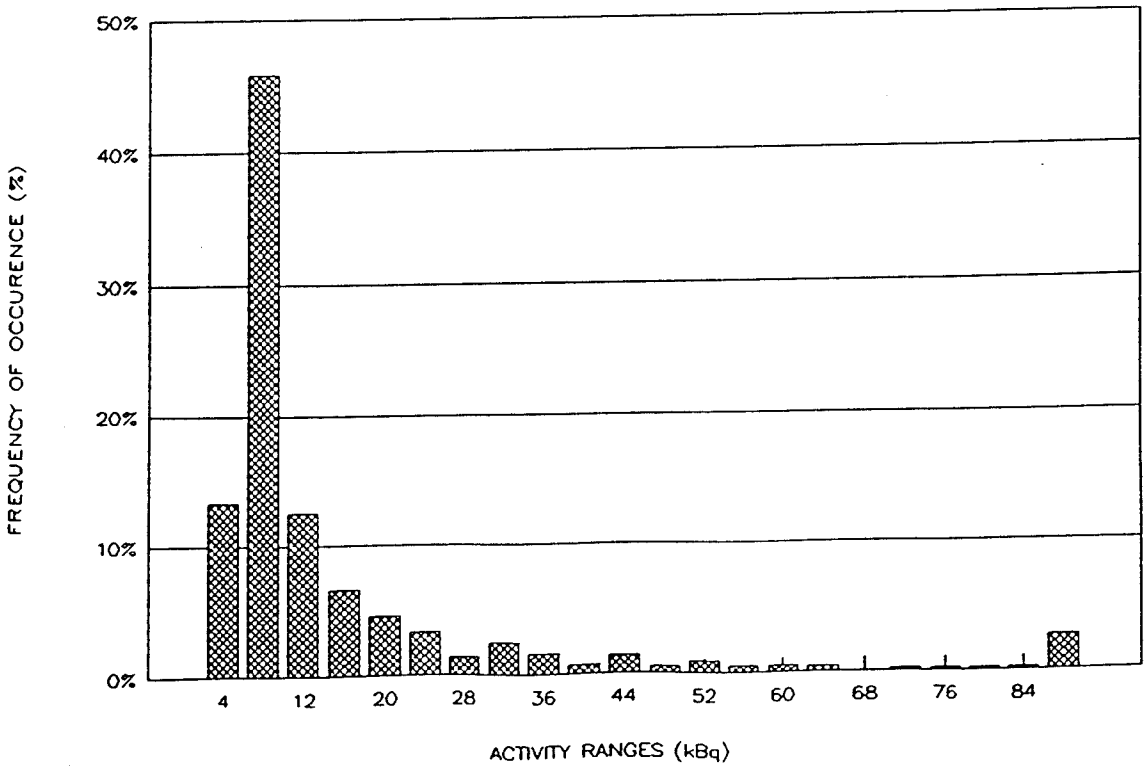
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 27-Mar-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 27-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 26-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.70 tons	87.4 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	41.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.0%
EQUIVALENT SOIL-IN-GROUND	2.14 yd³	69.3 yd³	71.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	19,825 kBq		
MAXIMUM/SORT	327 kBq		
MINIMUM/SORT	1.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,559 kBq	4,803 kBq	
MAXIMUM/SORT	249 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-15 kBq	
SPECIFIC ACTIVITY	3,545 Bq/kg	55 Bq/kg	

WORK HISTORY

WORK DAY START	05:51 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:51 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:18 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.34 hr
DOWN-TIME	2.31 hr
TOTAL SYSTEM PAUSE	1.72 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.55 hr
PLANT PERFORMANCE	80.2%
PRODUCTIVITY	80.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,051		
NONPROCESS RECORDS (Test, calibration, etc)			14		
20-SEC PROCESS RECORDS			1,681		
TOTAL SORT			26	MD>0 & MND=0	
NO SORT			940	AD=0 & MD=0 & MND>0	
SOME SORT			715	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	2			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			12:51:57	05:51
AD<0 & MD	0			13:50:17	11:27
ACT_P <5 kBq	441	32.2%			

2-SEC COUNT PERIODS		16,810	
2-SEC RECORDS WITH SORTS		1,370	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	329	82.5%	
3 DETECTORS	59	14.8%	
4 DETECTORS	9	2.3%	
5 DETECTORS	2	0.5%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	399		
NET 2-SEC RECORDS WITH SORTS		971	
2-SEC PERIODS WITH NO SORTS		15,839	
AVG TIME BETWEEN 2-SEC SORTS		34.6	sec

1-GATE SORTS		701	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	13	1.9%	-14000	1	-261
2	74	10.6%	-12000	1	-224
3	108	15.4%	-10000	2	-187
4	111	15.8%	-8000	3	-149
5	130	18.5%	-6000	5	-112
6	108	15.4%	-4000	20	-75
7	121	17.3%	-2000	113	-37
8	36	5.1%	0	274	0
TOTAL	701		2000	381	37
			4000	330	75
2-GATE SORTS		669	6000	250	112
DETECTR	SORTS	FREQ%	8000	146	149
8			10000	73	187
9	37	5.5%	12000	46	224
10	92	13.8%	14000	27	261
11	104	15.5%	16000	20	299
12	112	16.7%	18000	3	336
13	131	19.6%	20000	0	373
14	118	17.6%	22000	0	410
15	75	11.2%	24000	0	448
TOTAL	669		26000	0	485
			>28000	0	0
			TOTAL	1695	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	230	16.8%	4
8000	550	40.1%	8
12000	204	14.9%	12
16000	94	6.9%	16
20000	53	3.9%	20
24000	44	3.2%	24
28000	33	2.4%	28
32000	25	1.8%	32
36000	19	1.4%	36
40000	15	1.1%	40
44000	17	1.2%	44
48000	10	0.7%	48
52000	8	0.6%	52
56000	10	0.7%	56
60000	9	0.7%	60
64000	3	0.2%	64
68000	4	0.3%	68
72000	4	0.3%	72
76000	4	0.3%	76
80000	3	0.2%	80
84000	4	0.3%	84
>84000	27	2.0%	>84
TOTAL	1370		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1319	SORTS BY ONE GATE ONLY	701
MULTIPARTICLE EVENTS	854	SORTS BY TWO GATES	669
DISTRIBUTED EVENTS	1851		

REC CODE EXPLANATION

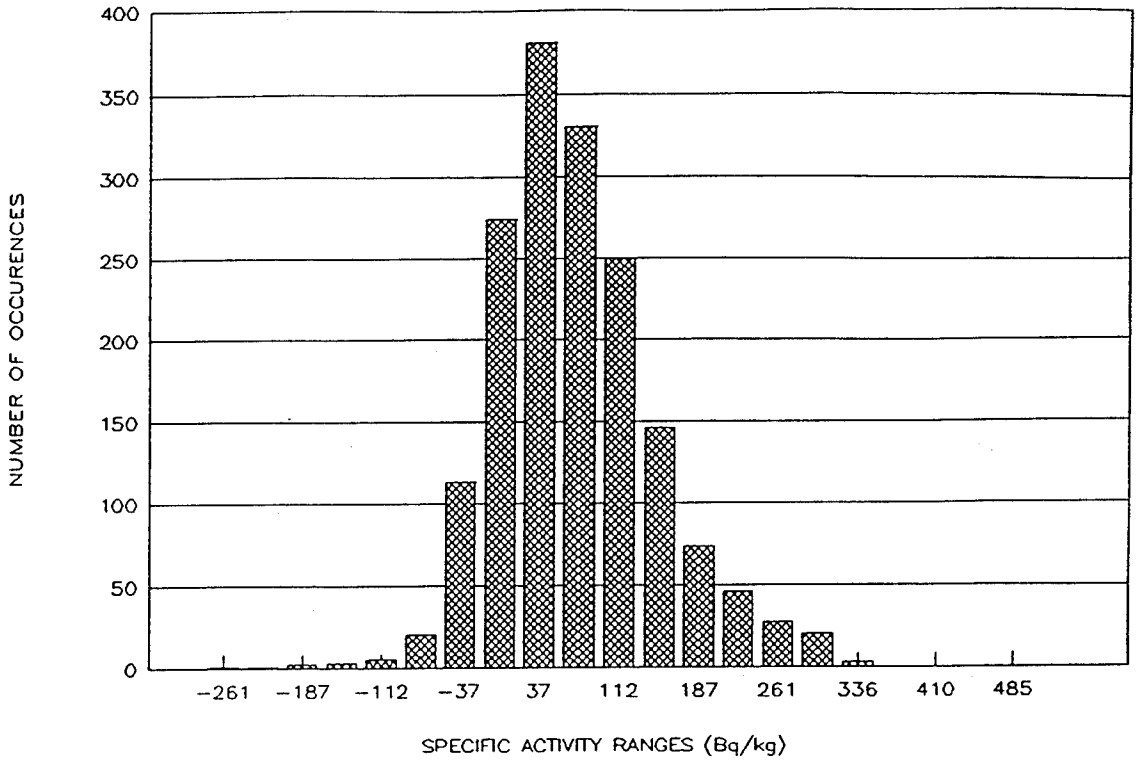
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

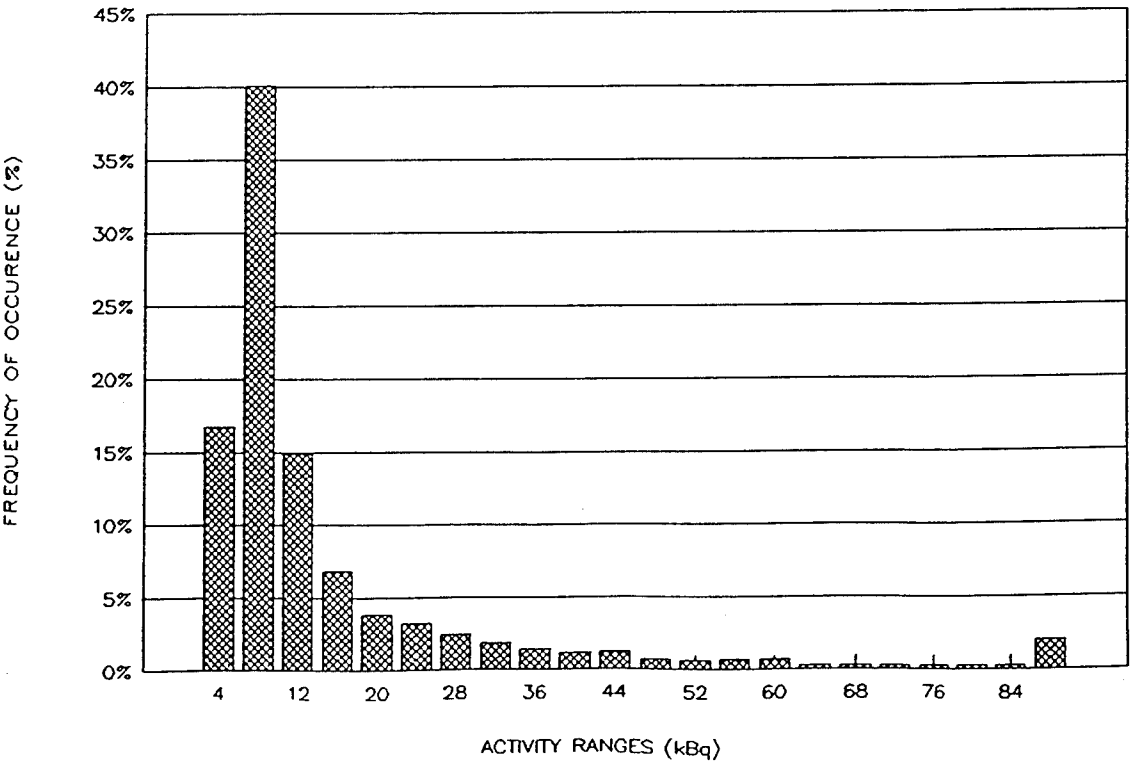
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1. LOG DATA FOR 26–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 26–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 26-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		3.61 tons	86.5 tons	
MAXIMUM/SORT		56.2 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	43.5 kg	
				96.0%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		2.86 yd³	68.5 yd³	71.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		21,955 kBq		
MAXIMUM/SORT		694 kBq		
MINIMUM/SORT		2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		11,913 kBq	8,254 kBq	
MAXIMUM/SORT		639 kBq	19 kBq	
MINIMUM/SORT		-18 Bq	-6 kBq	
SPECIFIC ACTIVITY		3,301 Bq/kg	95 Bq/kg	

WORK HISTORY			
WORK DAY START	05:51 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:51 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:15 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.34 hr
DOWN-TIME	2.31 hr
TOTAL SYSTEM PAUSE	1.78 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.41 hr
SHUT-DOWN	0.54 hr
PLANT PERFORMANCE	80.2%
PRODUCTIVITY	80.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,914	
NONPROCESS RECORDS (Test, calibration, etc)		3	
20-SEC PROCESS RECORDS		1,681	
TOTAL SORT		44	MD>0 & MND=0
NO SORT		828	AD=0 & MD=0 & MND>0
SOME SORT		809	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	327	26.5%	

UNEXPLAIN TIME	PAUSE TIME
12:51:58	05:51
	11:27

12:45

2-SEC COUNT PERIODS	16,810	
2-SEC RECORDS WITH SORTS	1,233	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	287	76.3%
3 DETECTORS	74	19.7%
4 DETECTORS	14	3.7%
5 DETECTORS	1	0.3%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	376	
NET 2-SEC RECORDS WITH SORTS	857	
2-SEC PERIODS WITH NO SORTS	15,953	
AVG TIME BETWEEN 2-SEC SORTS	39.2 sec	

1-GATE SORTS		628	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	22	3.5%	-14000	0	-261	4000	153	12.4%	4
2	100	15.9%	-12000	0	-224	8000	488	39.6%	8
3	117	18.6%	-10000	1	-187	12000	204	16.5%	12
4	142	22.6%	-8000	0	-149	16000	109	8.8%	16
5	123	19.6%	-6000	0	-112	20000	55	4.5%	20
6	91	14.5%	-4000	6	-75	24000	37	3.0%	24
7	26	4.1%	-2000	28	-37	28000	28	2.3%	28
8	7	1.1%	0	162	0	32000	17	1.4%	32
TOTAL	628		2000	219	37	36000	18	1.5%	36
			4000	321	75	40000	13	1.1%	40
2-GATE SORTS		605	6000	322	112	44000	13	1.1%	44
DETECTR	SORTS	FREQ%	8000	285	149	48000	10	0.8%	48
8			10000	162	187	52000	13	1.1%	52
9	51	8.4%	12000	93	224	56000	7	0.6%	56
10	105	17.4%	14000	49	261	60000	6	0.5%	60
11	124	20.5%	16000	23	299	64000	2	0.2%	64
12	125	20.7%	18000	9	336	68000	7	0.6%	68
13	120	19.8%	20000	4	373	72000	4	0.3%	72
14	63	10.4%	22000	0	410	76000	2	0.2%	76
15	17	2.8%	24000	0	448	80000	4	0.3%	80
TOTAL	605		26000	0	485	84000	3	0.2%	84
			>28000	0	0	>84000	40	3.2%	>84
			TOTAL	1684		TOTAL	1233		

SUMMARY TOTALS

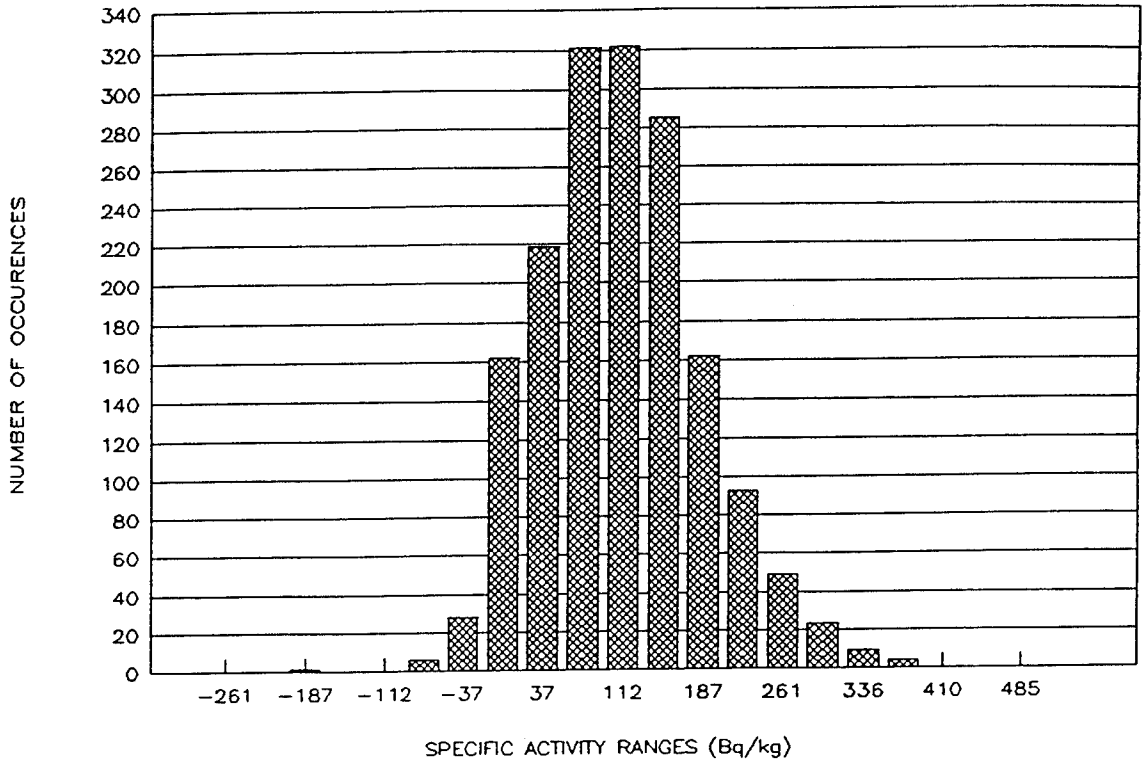
HOT PARTICLE EVENTS	1185	SORTS BY ONE GATE ONLY	628
MULTIPARTICLE EVENTS	1137	SORTS BY TWO GATES	605
DISTRIBUTED EVENTS	3062		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

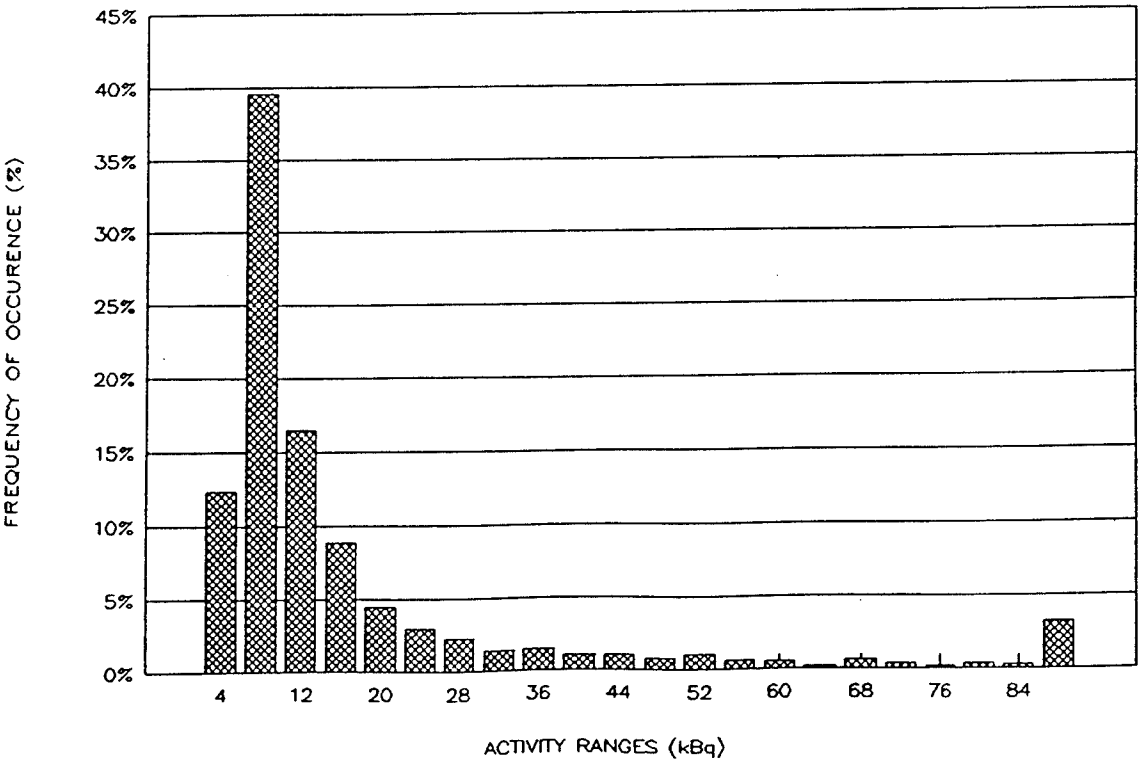
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2-LOG DATA FOR 26–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 26–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 25-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.40 tons	102.8 tons	
MAXIMUM/SORT	10.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.7%
EQUIVALENT SOIL-IN-GROUND	1.11 yd³	81.5 yd³	82.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,427 kBq		
MAXIMUM/SORT	551 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,541 kBq	4,028 kBq	
MAXIMUM/SORT	501 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-15 kBq	
SPECIFIC ACTIVITY	6,809 Bq/kg	39 Bq/kg	

WORK HISTORY

WORK DAY START	05:51 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:51 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.80 hr
DOWN-TIME	0.85 hr
TOTAL SYSTEM PAUSE	0.44 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.44 hr
SHUT-DOWN	0.41 hr
PLANT PERFORMANCE	92.7%
PRODUCTIVITY	92.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,357		
NONPROCESS RECORDS (Test, calibration, etc)	5		
20-SEC PROCESS RECORDS	1,944		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	1,101	AD=0 & MD=0 & MND>0	
SOME SORT	843	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	3	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	12:41:28	05:50
AD<0 & MD	0	14:04:48	
ACT_P <5 kBq	433 30.6%		

JA SOIL CLEANUP PLANT LOG SUMMARY

14:24:28

2-SEC COUNT PERIODS	19,440	
2-SEC RECORDS WITH SORTS	1,413	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	343	80.9%
3 DETECTORS	68	16.0%
4 DETECTORS	10	2.4%
5 DETECTORS	3	0.7%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	424	
NET 2-SEC RECORDS WITH SORTS	989	
2-SEC PERIODS WITH NO SORTS	18,451	
AVG TIME BETWEEN 2-SEC SORTS	39.3 sec	

1-GATE SORTS		702	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	10	1.4%	-14000	1	-261
2	56	8.0%	-12000	3	-224
3	95	13.5%	-10000	2	-187
4	133	18.9%	-8000	6	-149
5	150	21.4%	-6000	12	-112
6	110	15.7%	-4000	53	-75
7	123	17.5%	-2000	143	-37
8	25	3.6%	0	338	0
TOTAL	702		2000	450	37
			4000	380	75
2-GATE SORTS		711	6000	304	112
DETECTR	SORTS	FREQ%	8000	151	149
8			10000	68	187
9	30	4.2%	12000	25	224
10	80	11.3%	14000	8	261
11	113	15.9%	16000	5	299
12	147	20.7%	18000	0	336
13	145	20.4%	20000	0	373
14	117	16.5%	22000	0	410
15	79	11.1%	24000	0	448
TOTAL	711		26000	0	485
			>28000	0	0
			TOTAL	1949	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	202	14.3%	4
8000	572	40.5%	8
12000	221	15.6%	12
16000	115	8.1%	16
20000	75	5.3%	20
24000	50	3.5%	24
28000	38	2.7%	28
32000	26	1.8%	32
36000	19	1.3%	36
40000	12	0.8%	40
44000	10	0.7%	44
48000	15	1.1%	48
52000	7	0.5%	52
56000	3	0.2%	56
60000	7	0.5%	60
64000	3	0.2%	64
68000	2	0.1%	68
72000	7	0.5%	72
76000	0	0.0%	76
80000	1	0.1%	80
84000	3	0.2%	84
>84000	25	1.8%	>84
TOTAL	1413		

SUMMARY TOTALS

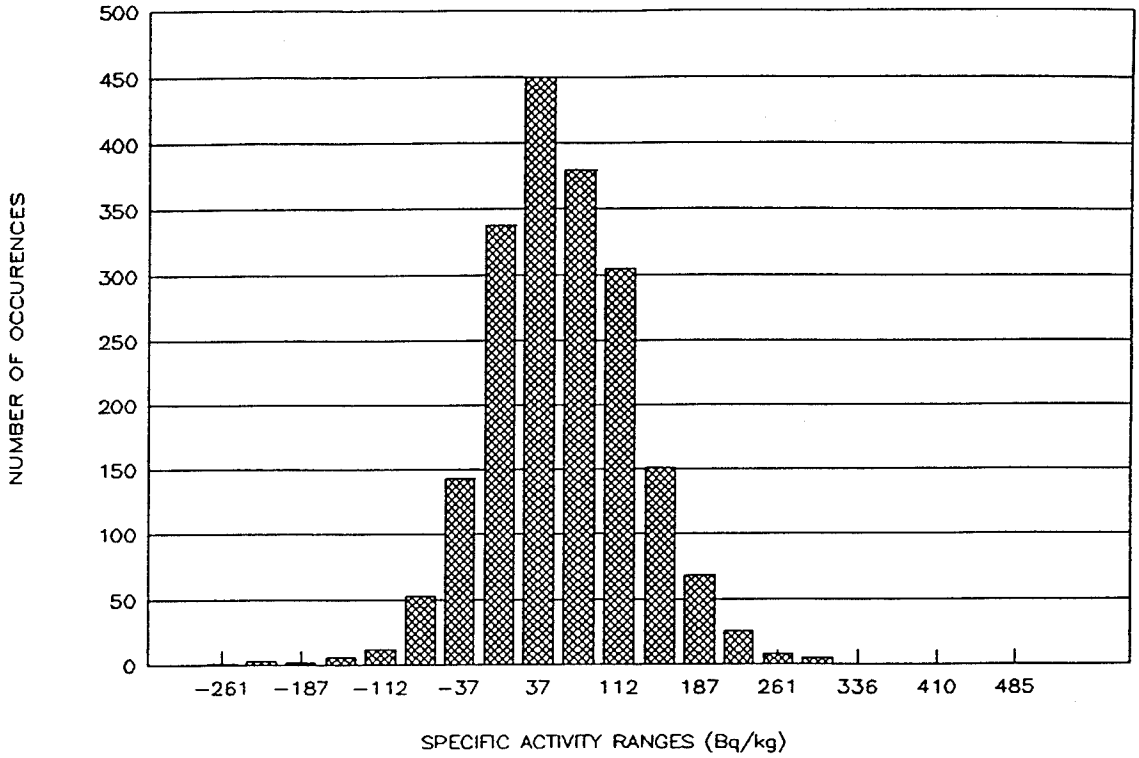
HOT PARTICLE EVENTS	1369	SORTS BY ONE GATE ONLY	702
MULTIPARTICLE EVENTS	727	SORTS BY TWO GATES	711
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

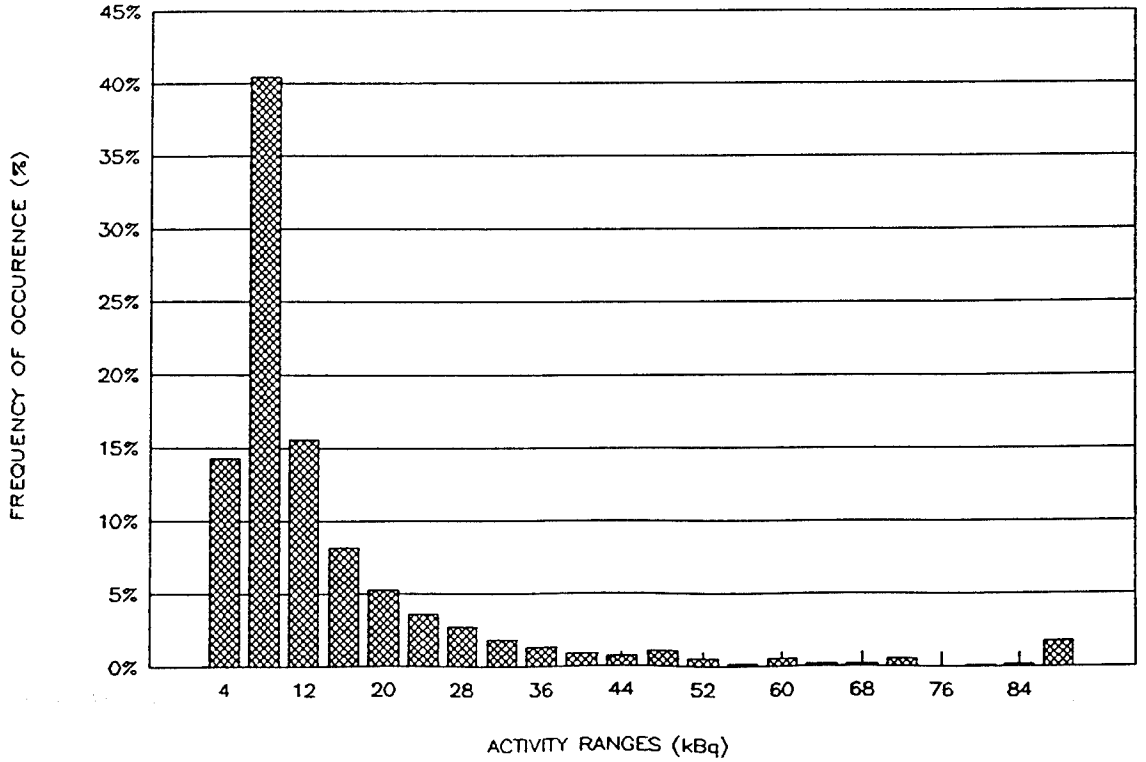
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 25—Mar—93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 25—Mar—93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 25-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.62 tons	100.5 tons	
MAXIMUM/SORT		56.2 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	46.2 kg	
				98.4%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		1.28 yd³	79.7 yd³	81.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		18,229 kBq		
MAXIMUM/SORT		438 kBq		
MINIMUM/SORT		2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		9,115 kBq	8,636 kBq	
MAXIMUM/SORT		340 kBq	19 kBq	
MINIMUM/SORT		0 Bq	-14 kBq	
SPECIFIC ACTIVITY		5,632 Bq/kg	86 Bq/kg	

WORK HISTORY			
WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:50 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	04:54 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.7 hr
AVAILABLE HOURS	11.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.59 hr
DOWN-TIME	1.08 hr
TOTAL SYSTEM PAUSE	0.48 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.46 hr
SHUT-DOWN	0.59 hr
PLANT PERFORMANCE	90.8%
PRODUCTIVITY	90.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,064	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,906	
TOTAL SORT		4	MD>0 & MND=0
NO SORT		978	AD=0 & MD=0 & MND>0
SOME SORT		924	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	308	26.6%	

UNEXPLAIN TIME	PAUSE TIME
11:03:06	05:50
	08:27

2-SEC COUNT PERIODS	19,060	
2-SEC RECORDS WITH SORTS	1,158	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	263	83.5%
3 DETECTORS	45	14.3%
4 DETECTORS	7	2.2%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	315	
NET 2-SEC RECORDS WITH SORTS	843	
2-SEC PERIODS WITH NO SORTS	18,217	
AVG TIME BETWEEN 2-SEC SORTS	45.2 sec	

1-GATE SORTS		592	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	24	4.1%	-14000	1	-261	4000	124	10.7%	4
2	96	16.2%	-12000	3	-224	8000	496	42.8%	8
3	117	19.8%	-10000	2	-187	12000	192	16.6%	12
4	148	25.0%	-8000	2	-149	16000	85	7.3%	16
5	108	18.2%	-6000	2	-112	20000	54	4.7%	20
6	63	10.6%	-4000	8	-75	24000	40	3.5%	24
7	27	4.6%	-2000	38	-37	28000	33	2.8%	28
8	9	1.5%	0	127	0	32000	24	2.1%	32
TOTAL	592		2000	284	37	36000	21	1.8%	36
			4000	401	75	40000	14	1.2%	40
2-GATE SORTS		566	6000	413	112	44000	8	0.7%	44
DETECTR	SORTS	FREQ%	8000	334	149	48000	3	0.3%	48
8			10000	164	187	52000	6	0.5%	52
9	51	9.0%	12000	68	224	56000	7	0.6%	56
10	97	17.1%	14000	45	261	60000	4	0.3%	60
11	134	23.7%	16000	11	299	64000	7	0.6%	64
12	125	22.1%	18000	6	336	68000	2	0.2%	68
13	92	16.3%	20000	2	373	72000	2	0.2%	72
14	43	7.6%	22000	0	410	76000	1	0.1%	76
15	24	4.2%	24000	0	448	80000	2	0.2%	80
TOTAL	566		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	31	2.7%	>84
			TOTAL	1911		TOTAL	1158		

SUMMARY TOTALS

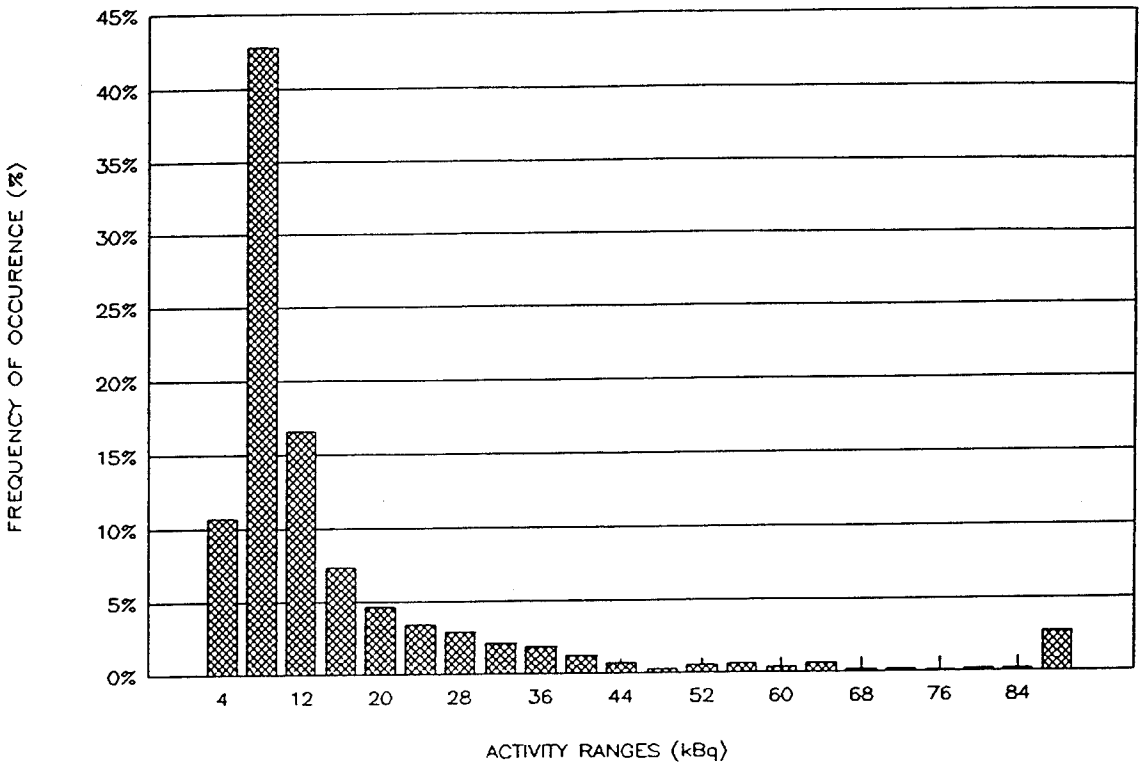
HOT PARTICLE EVENTS	1154	SORTS BY ONE GATE ONLY	592
MULTIPARTICLE EVENTS	944	SORTS BY TWO GATES	566
DISTRIBUTED EVENTS	318		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

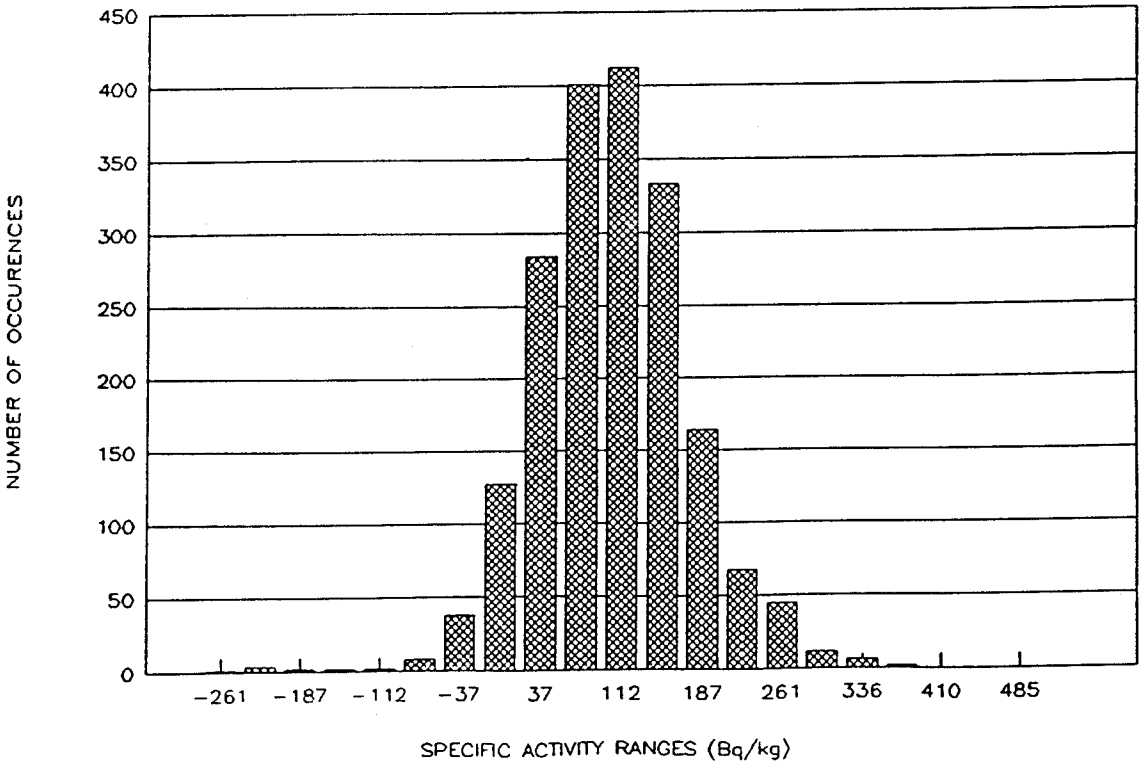
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 25-Mar-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 25-Mar-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 24-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.88 tons	38.5 tons	
MAXIMUM/SORT	14.1 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	39.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.8%
EQUIVALENT SOIL-IN-GROUND	0.70 yd³	30.5 yd³	31.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	23,430 kBq		
MAXIMUM/SORT	3,247 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,594 kBq	2,246 kBq	
MAXIMUM/SORT	2667 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	10,938 Bq/kg	58 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	12:49 PM	END SOIL PROCESSING	04:53 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	4.08 hr
DOWN-TIME	5.92 hr
TOTAL SYSTEM PAUSE	3.66 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	5.83 hr
SHUT-DOWN	0.60 hr
PLANT PERFORMANCE	40.8%
PRODUCTIVITY	40.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,710		
NONPROCESS RECORDS (Test, calibration, etc)	7		
20-SEC PROCESS RECORDS	734		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	382	AD=0 & MD=0 & MND>0	
SOME SORT	352	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	291	29.8%	

UNEXPLAIN TIME	PAUSE TIME
None	09:10

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		7,340	
2-SEC RECORDS WITH SORTS		976	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	252	77.1%
	3 DETECTORS	60	18.3%
	4 DETECTORS	10	3.1%
	5 DETECTORS	3	0.9%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	327	
NET 2-SEC RECORDS WITH SORTS		649	
2-SEC PERIODS WITH NO SORTS		6,691	
AVG TIME BETWEEN 2-SEC SORTS		22.6	sec

1-GATE SORTS		491	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	3	0.6%	-14000	0	-261
2	27	5.5%	-12000	2	-224
3	63	12.8%	-10000	0	-187
4	93	18.9%	-8000	2	-149
5	125	25.5%	-6000	0	-112
6	100	20.4%	-4000	18	-75
7	69	14.1%	-2000	56	-37
8	11	2.2%	0	108	0
TOTAL	491		2000	152	37
			4000	136	75
2-GATE SORTS		485	6000	121	112
DETECTR	SORTS	FREQ%	8000	46	149
8			10000	38	187
9	19	3.9%	12000	29	224
10	49	10.1%	14000	25	261
11	71	14.6%	16000	5	299
12	114	23.5%	18000	3	336
13	112	23.1%	20000	0	373
14	80	16.5%	22000	0	410
15	40	8.2%	24000	0	448
TOTAL	485		26000	0	485
			>28000	0	0
			TOTAL	741	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	152	15.6%	4
8000	366	37.5%	8
12000	136	13.9%	12
16000	80	8.2%	16
20000	56	5.7%	20
24000	42	4.3%	24
28000	28	2.9%	28
32000	20	2.0%	32
36000	10	1.0%	36
40000	8	0.8%	40
44000	6	0.6%	44
48000	7	0.7%	48
52000	4	0.4%	52
56000	6	0.6%	56
60000	8	0.8%	60
64000	8	0.8%	64
68000	1	0.1%	68
72000	3	0.3%	72
76000	2	0.2%	76
80000	1	0.1%	80
84000	4	0.4%	84
>84000	28	2.9%	>84
TOTAL	976		

SUMMARY TOTALS

HOT PARTICLE EVENTS	893	SORTS BY ONE GATE ONLY	491
MULTIPARTICLE EVENTS	417	SORTS BY TWO GATES	485
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

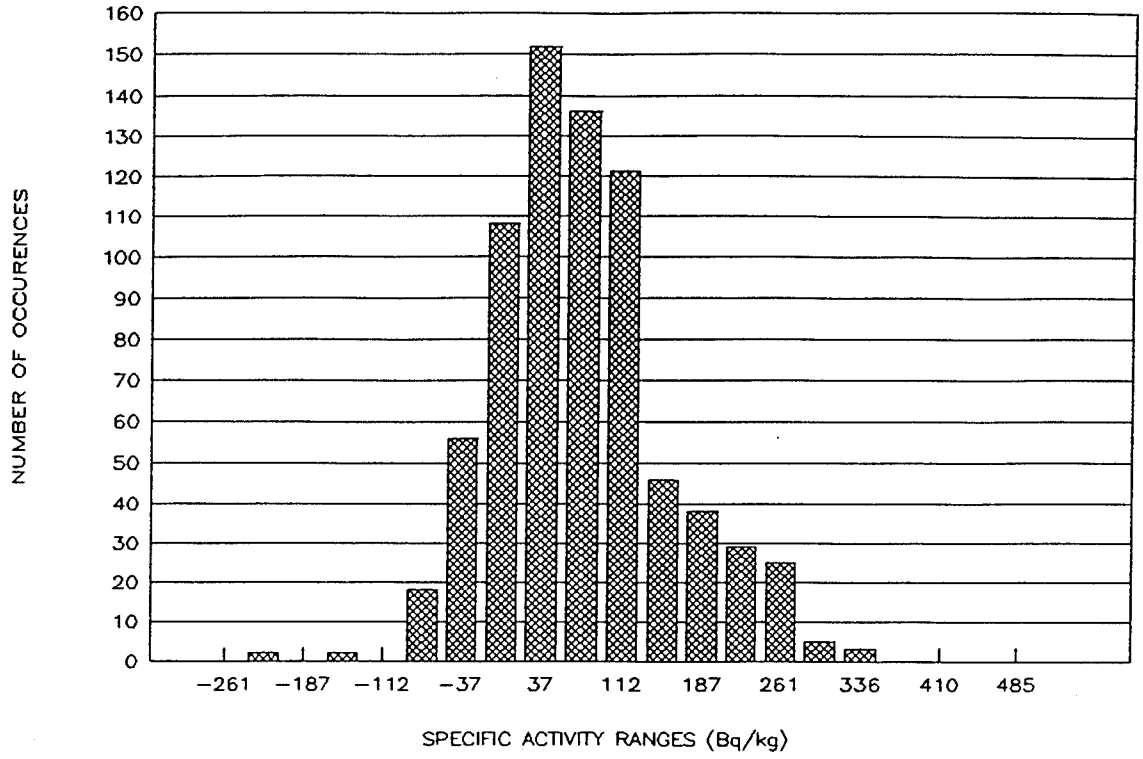
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

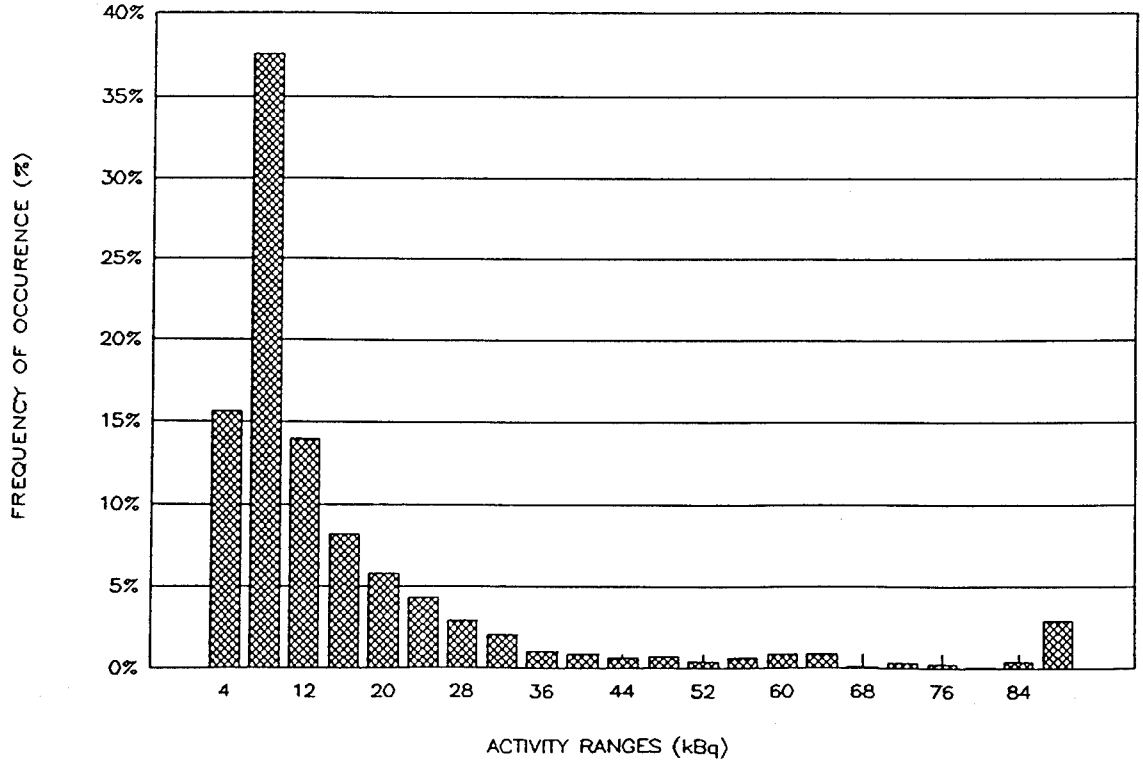
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 24—Mar—93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 24—Mar—93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 24-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.86 tons	38.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	43.5 kg	
			97.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.69 yd³	30.6 yd³	31.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,309 kBq		
MAXIMUM/SORT	387 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,941 kBq	3,787 kBq	
MAXIMUM/SORT	251 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	5,713 Bq/kg	98 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	12:49 PM	END SOIL PROCESSING	04:54 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	4.09 hr
DOWN-TIME	5.91 hr
TOTAL SYSTEM PAUSE	3.66 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	5.83 hr
SHUT-DOWN	0.59 hr
PLANT PERFORMANCE	40.9%
PRODUCTIVITY	40.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,340	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	736	
TOTAL SORT	4	MD>0 & MND=0
NO SORT	391	AD=0 & MD=0 & MND>0
SOME SORT	341	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	147	24.3%

UNEXPLAIN TIME	PAUSE TIME
13:51:57	09:10

2-SEC COUNT PERIODS	7,360	
2-SEC RECORDS WITH SORTS	604	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	158	80.6%
3 DETECTORS	33	16.8%
4 DETECTORS	5	2.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	196	
NET 2-SEC RECORDS WITH SORTS	408	
2-SEC PERIODS WITH NO SORTS	6,952	
AVG TIME BETWEEN 2-SEC SORTS	36.1 sec	

1-GATE SORTS		309	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	1.3%	-14000	1	-261	4000	68	11.3%	4
2	44	14.2%	-12000	1	-224	8000	221	36.6%	8
3	77	24.9%	-10000	0	-187	12000	104	17.2%	12
4	66	21.4%	-8000	0	-149	16000	64	10.6%	16
5	60	19.4%	-6000	1	-112	20000	30	5.0%	20
6	31	10.0%	-4000	4	-75	24000	26	4.3%	24
7	21	6.8%	-2000	16	-37	28000	15	2.5%	28
8	6	1.9%	0	44	0	32000	15	2.5%	32
TOTAL	309		2000	93	37	36000	10	1.7%	36
			4000	150	75	40000	5	0.8%	40
2-GATE SORTS		295	6000	153	112	44000	4	0.7%	44
DETECTR	SORTS	FREQ%	8000	115	149	48000	4	0.7%	48
8			10000	69	187	52000	3	0.5%	52
9	21	7.1%	12000	46	224	56000	5	0.8%	56
10	44	14.9%	14000	34	261	60000	5	0.8%	60
11	76	25.8%	16000	10	299	64000	2	0.3%	64
12	59	20.0%	18000	3	336	68000	2	0.3%	68
13	55	18.6%	20000	1	373	72000	1	0.2%	72
14	24	8.1%	22000	0	410	76000	1	0.2%	76
15	16	5.4%	24000	0	448	80000	1	0.2%	80
TOTAL	295		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	18	3.0%	>84
			TOTAL	741		TOTAL	604		

SUMMARY TOTALS

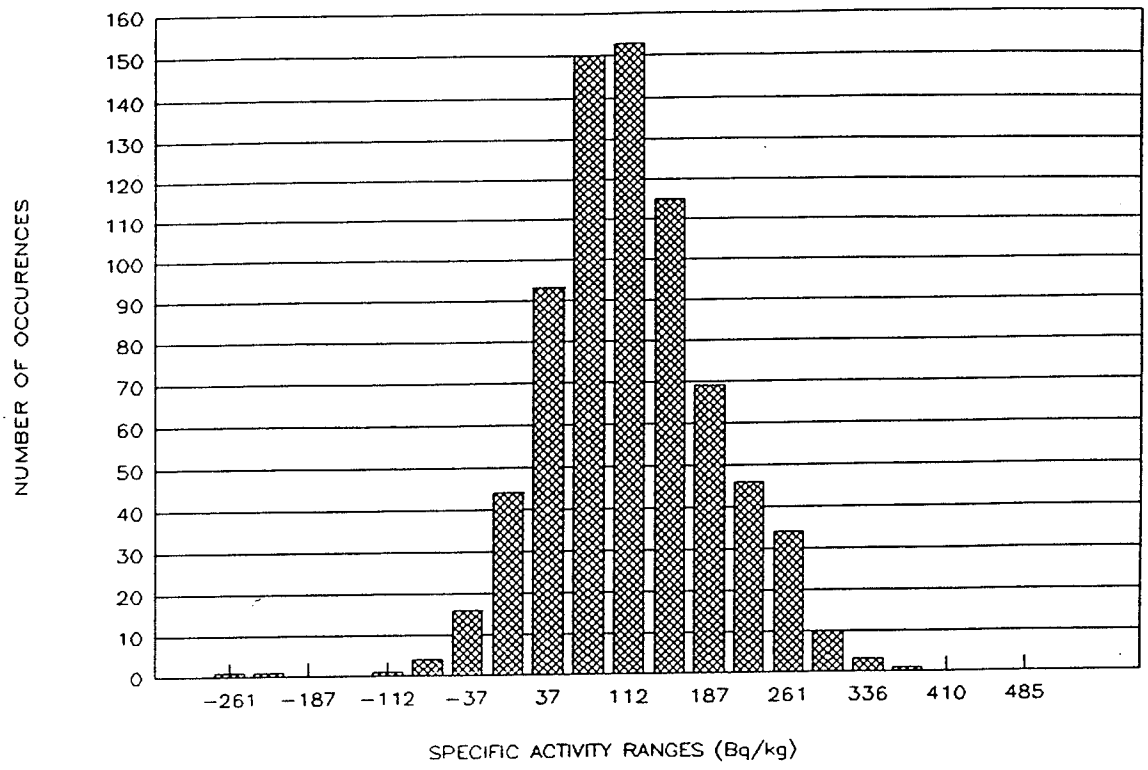
HOT PARTICLE EVENTS	568	SORTS BY ONE GATE ONLY	309
MULTIPARTICLE EVENTS	449	SORTS BY TWO GATES	295
DISTRIBUTED EVENTS	274		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

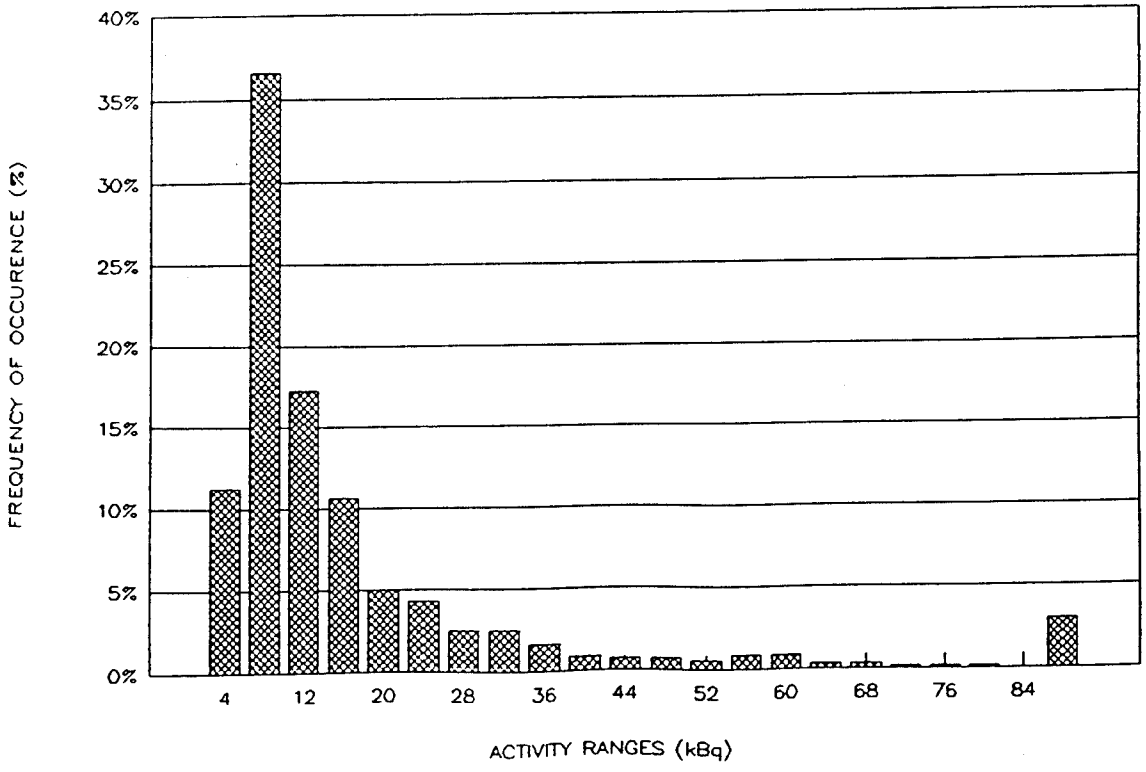
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 24–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 24–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 23-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.74 tons	99.2 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.3%
EQUIVALENT SOIL-IN-GROUND	0.59 yd³	78.6 yd³	79.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,215 kBq		
MAXIMUM/SORT	172 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,411 kBq	1,608 kBq	
MAXIMUM/SORT	134 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	5,974 Bq/kg	16 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:15 AM	END SOIL PROCESSING	04:49 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.36 hr
DOWN-TIME	1.14 hr
TOTAL SYSTEM PAUSE	0.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.25 hr
SHUT-DOWN	0.67 hr
PLANT PERFORMANCE	90.1%
PRODUCTIVITY	90.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,555	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,865	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		1,390	AD=0 & MD=0 & MND>0
SOME SORT		474	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	1		
AD<0 & MD	0		
ACT_P <5 kBq	193	28.0%	

UNEXPLAIN TIME	PAUSE TIME
11:29:41	05:53
	11:17

11:30

2-SEC COUNT PERIODS	18,650	
2-SEC RECORDS WITH SORTS	690	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	160	81.6%
3 DETECTORS	33	16.8%
4 DETECTORS	3	1.5%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	196	
NET 2-SEC RECORDS WITH SORTS	494	
2-SEC PERIODS WITH NO SORTS	18,156	
AVG TIME BETWEEN 2-SEC SORTS	75.5	sec

1-GATE SORTS		338	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	6	1.8%	-14000	1	-261
2	36	10.7%	-12000	4	-224
3	44	13.0%	-10000	6	-187
4	63	18.6%	-8000	2	-149
5	67	19.8%	-6000	20	-112
6	57	16.9%	-4000	81	-75
7	54	16.0%	-2000	238	-37
8	11	3.3%	0	407	0
TOTAL	338		2000	478	37
			4000	343	75
2-GATE SORTS		352	6000	166	112
DETECTR	SORTS	FREQ%	8000	90	149
8			10000	27	187
9	23	6.5%	12000	9	224
10	41	11.6%	14000	3	261
11	55	15.6%	16000	0	299
12	67	19.0%	18000	0	336
13	71	20.2%	20000	0	373
14	66	18.8%	22000	0	410
15	29	8.2%	24000	0	448
TOTAL	352		26000	0	485
			>28000	0	0
			TOTAL	1875	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	101	14.6%	4
8000	257	37.2%	8
12000	101	14.6%	12
16000	65	9.4%	16
20000	31	4.5%	20
24000	20	2.9%	24
28000	20	2.9%	28
32000	16	2.3%	32
36000	12	1.7%	36
40000	10	1.4%	40
44000	11	1.6%	44
48000	3	0.4%	48
52000	4	0.6%	52
56000	9	1.3%	56
60000	7	1.0%	60
64000	3	0.4%	64
68000	4	0.6%	68
72000	0	0.0%	72
76000	3	0.4%	76
80000	0	0.0%	80
84000	2	0.3%	84
>84000	11	1.6%	>84
TOTAL	690		

SUMMARY TOTALS

HOT PARTICLE EVENTS	682	SORTS BY ONE GATE ONLY	338
MULTIPARTICLE EVENTS	337	SORTS BY TWO GATES	352
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

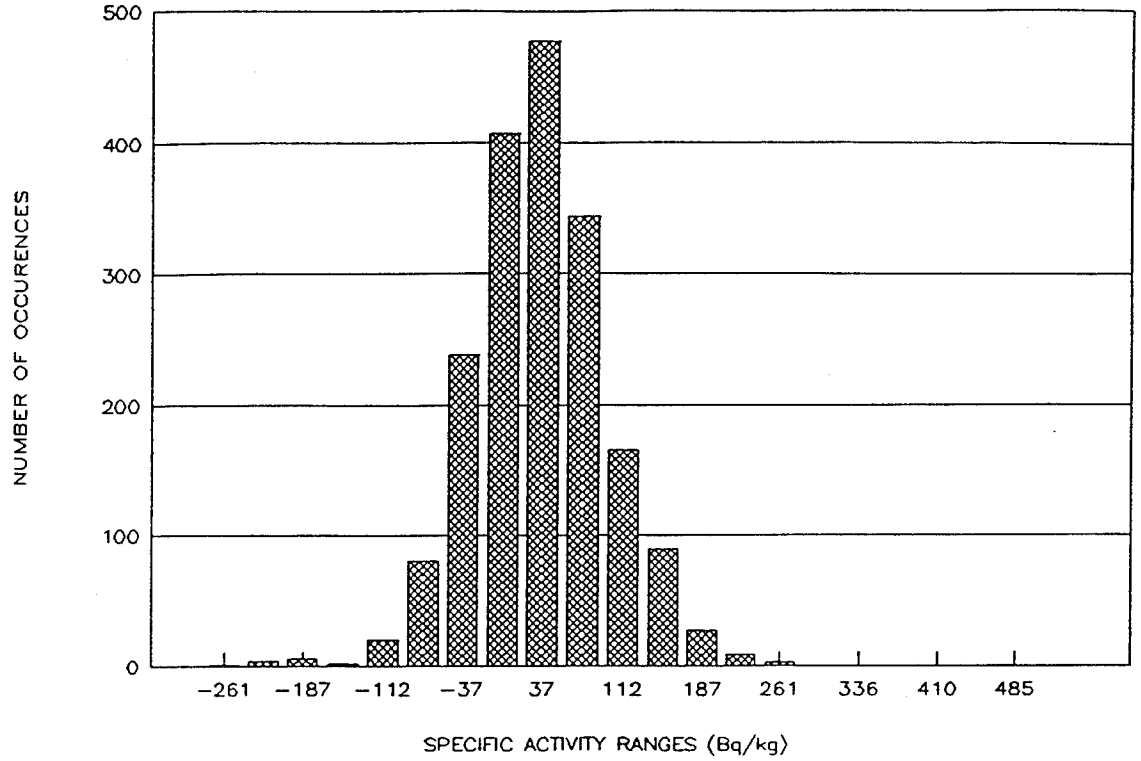
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

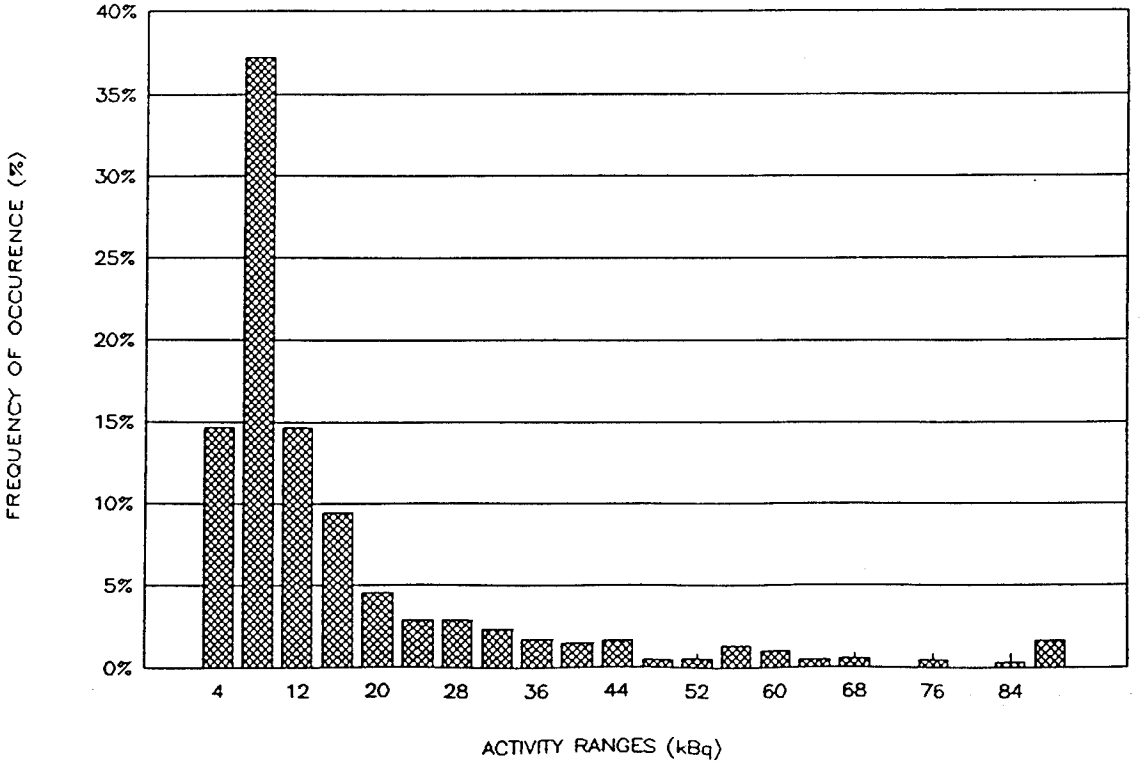
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 23–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 23–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 23-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.25 tons	32.8 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.20 yd³	26.0 yd³	26.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	2,207 kBq		
MAXIMUM/SORT	179 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,111 kBq	2,490 kBq	
MAXIMUM/SORT	141 kBq	17 kBq	
MINIMUM/SORT	-8078 Bq	-11 kBq	
SPECIFIC ACTIVITY	4,497 Bq/kg	76 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	10:52 AM	END SOIL PROCESSING	02:31 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.43 hr
DOWN-TIME	8.07 hr
TOTAL SYSTEM PAUSE	6.35 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	4.88 hr
SHUT-DOWN	2.98 hr
PLANT PERFORMANCE	29.8%
PRODUCTIVITY	29.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		753	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		617	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		449	AD=0 & MD=0 & MND>0
SOME SORT		167	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	1		
ACT_P <5 kBq	32	23.5%	

UNEXPLAIN TIME	PAUSE TIME
11:29:42	05:53
	11:17

11:30
14:32

2-SEC COUNT PERIODS	6,170	
2-SEC RECORDS WITH SORTS	136	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	34	87.2%
3 DETECTORS	5	12.8%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	39	
NET 2-SEC RECORDS WITH SORTS	97	
2-SEC PERIODS WITH NO SORTS	6,073	
AVG TIME BETWEEN 2-SEC SORTS	127.2	sec

1-GATE SORTS		70	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	4	5.7%	-14000	0	-261
2	10	14.3%	-12000	0	-224
3	12	17.1%	-10000	3	-187
4	12	17.1%	-8000	3	-149
5	13	18.6%	-6000	2	-112
6	10	14.3%	-4000	7	-75
7	7	10.0%	-2000	18	-37
8	2	2.9%	0	49	0
TOTAL	70		2000	98	37
			4000	138	75
2-GATE SORTS		66	6000	141	112
DETECTR	SORTS	FREQ%	8000	73	149
8			10000	44	187
9	9	13.6%	12000	26	224
10	11	16.7%	14000	10	261
11	15	22.7%	16000	7	299
12	11	16.7%	18000	3	336
13	12	18.2%	20000	0	373
14	5	7.6%	22000	0	410
15	3	4.5%	24000	0	448
TOTAL	66		26000	0	485
			>28000	0	0
			TOTAL	622	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	14	10.3%	4
8000	54	39.7%	8
12000	22	16.2%	12
16000	11	8.1%	16
20000	3	2.2%	20
24000	9	6.6%	24
28000	2	1.5%	28
32000	3	2.2%	32
36000	0	0.0%	36
40000	5	3.7%	40
44000	2	1.5%	44
48000	1	0.7%	48
52000	1	0.7%	52
56000	2	1.5%	56
60000	0	0.0%	60
64000	3	2.2%	64
68000	1	0.7%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	1	0.7%	84
>84000	2	1.5%	>84
TOTAL	136		

SUMMARY TOTALS

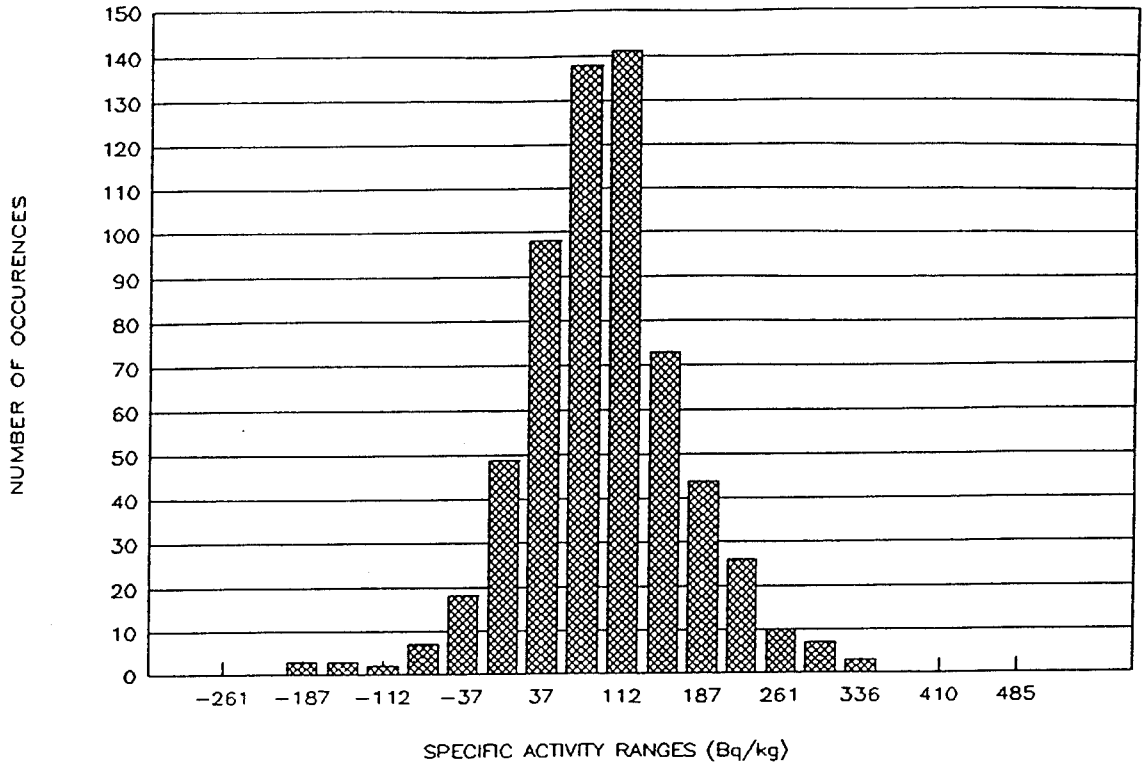
HOT PARTICLE EVENTS	134	SORTS BY ONE GATE ONLY	70
MULTIPARTICLE EVENTS	150	SORTS BY TWO GATES	66
DISTRIBUTED EVENTS	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

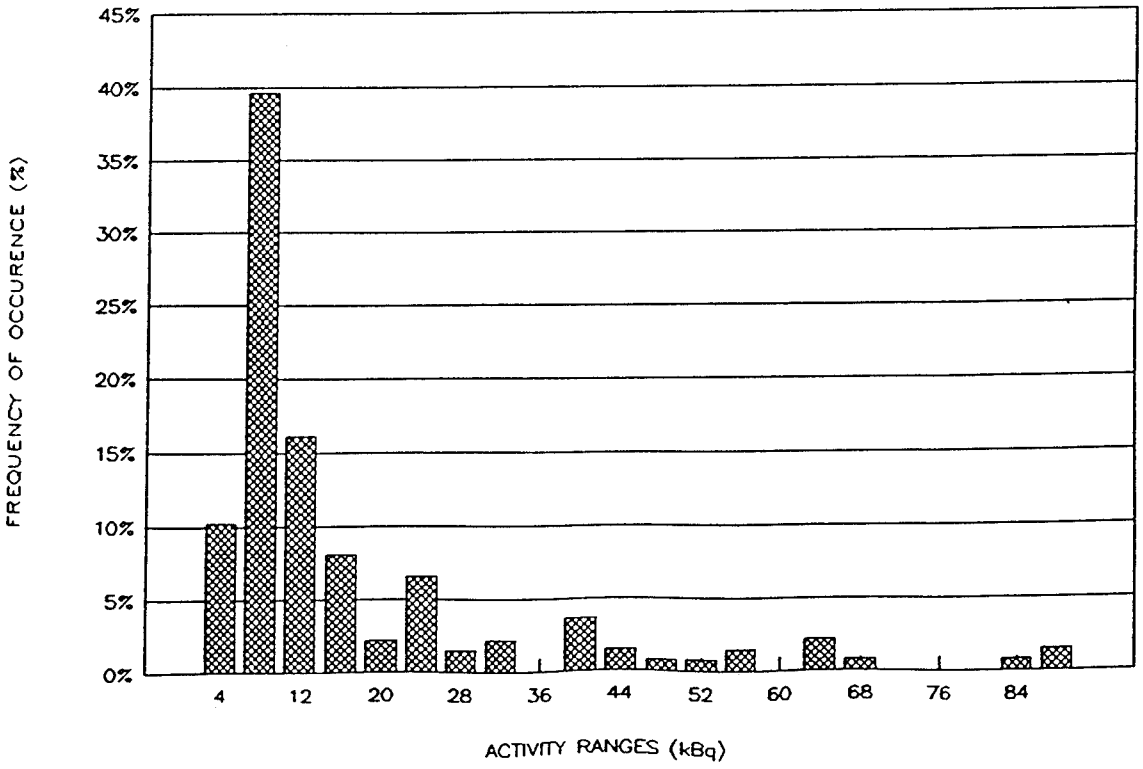
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2_LOG DATA FOR 23—Mar—93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 23—Mar—93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 22-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.59 tons	100.3 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.5%
EQUIVALENT SOIL-IN-GROUND	2.84 yd³	79.5 yd³	82.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	18,406 kBq		
MAXIMUM/SORT	825 kBq		
MINIMUM/SORT	2.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,579 kBq	4,211 kBq	
MAXIMUM/SORT	644 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	2,671 Bq/kg	42 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	05:10 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.77 hr
DOWN-TIME	0.73 hr
TOTAL SYSTEM PAUSE	0.40 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.30 hr
SHUT-DOWN	0.33 hr
PLANT PERFORMANCE	93.7%
PRODUCTIVITY	93.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,057		
NONPROCESS RECORDS (Test, calibration, etc)	25		
20-SEC PROCESS RECORDS	1,939		
TOTAL SORT	47	MD>0 & MND=0	
NO SORT	1,239	AD=0 & MD=0 & MND>0	
SOME SORT	653	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	381	34.1%	

UNEXPLAIN TIME	PAUSE TIME
15:09:13	05:53

2-SEC COUNT PERIODS		19,390	
2-SEC RECORDS WITH SORTS		1,118	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	264	83.0%
	3 DETECTORS	45	14.2%
	4 DETECTORS	7	2.2%
	5 DETECTORS	1	0.3%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	318	
NET 2-SEC RECORDS WITH SORTS		800	
2-SEC PERIODS WITH NO SORTS		18,590	
AVG TIME BETWEEN 2-SEC SORTS		48.5	sec

1-GATE SORTS DETECTR	SORTS	577 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	9	1.6%	-14000	3	-261	4000	196	17.5%	4
2	41	7.1%	-12000	1	-224	8000	436	39.0%	8
3	85	14.7%	-10000	6	-187	12000	163	14.6%	12
4	116	20.1%	-8000	9	-149	16000	91	8.1%	16
5	124	21.5%	-6000	13	-112	20000	47	4.2%	20
6	105	18.2%	-4000	54	-75	24000	37	3.3%	24
7	77	13.3%	-2000	155	-37	28000	23	2.1%	28
8	20	3.5%	0	367	0	32000	23	2.1%	32
TOTAL	577		2000	467	37	36000	13	1.2%	36
			4000	350	75	40000	4	0.4%	40
2-GATE SORTS		541	6000	268	112	44000	13	1.2%	44
DETECTR	SORTS	FREQ%	8000	123	149	48000	4	0.4%	48
8			10000	79	187	52000	4	0.4%	52
9	22	4.1%	12000	29	224	56000	6	0.5%	56
10	64	11.8%	14000	18	261	60000	8	0.7%	60
11	98	18.1%	16000	6	299	64000	7	0.6%	64
12	115	21.3%	18000	14	336	68000	5	0.4%	68
13	110	20.3%	20000	2	373	72000	4	0.4%	72
14	86	15.9%	22000	0	410	76000	3	0.3%	76
15	46	8.5%	24000	0	448	80000	3	0.3%	80
TOTAL	541		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	26	2.3%	>84
			TOTAL	1964		TOTAL	1118		

SUMMARY TOTALS

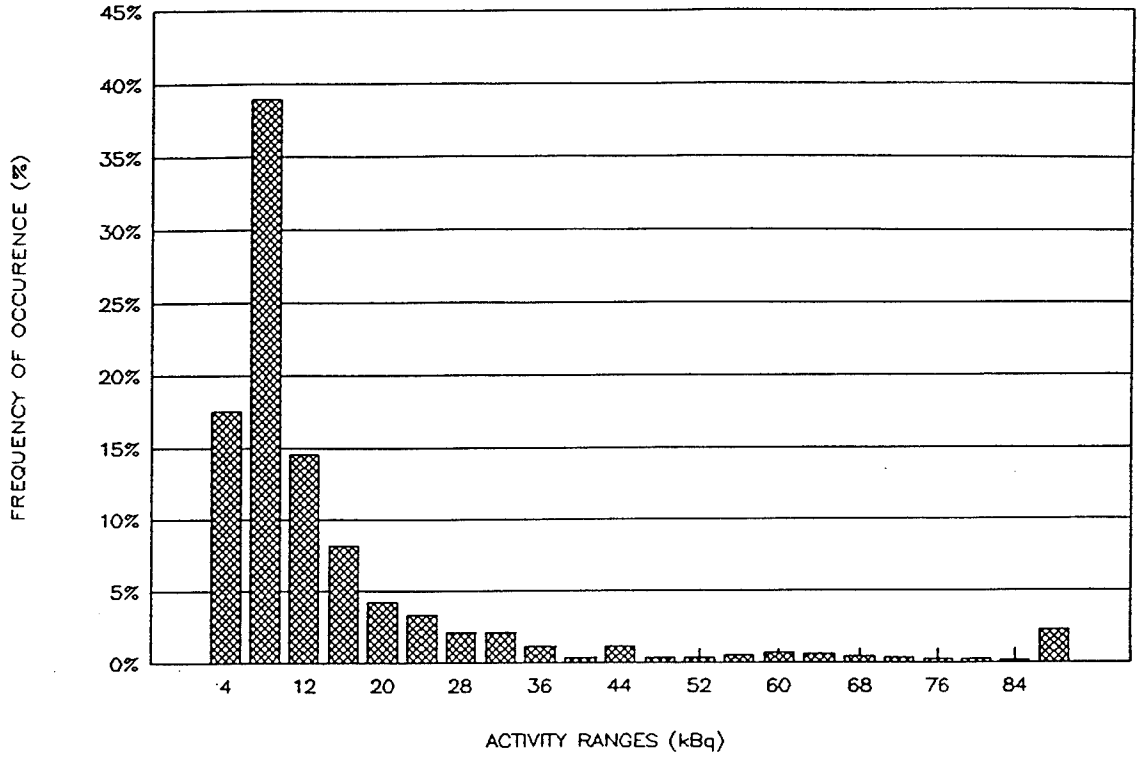
HOT PARTICLE EVENTS	1081	SORTS BY ONE GATE ONLY	577
MULTIPARTICLE EVENTS	861	SORTS BY TWO GATES	541
DISTRIBUTED EVENTS	3412		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

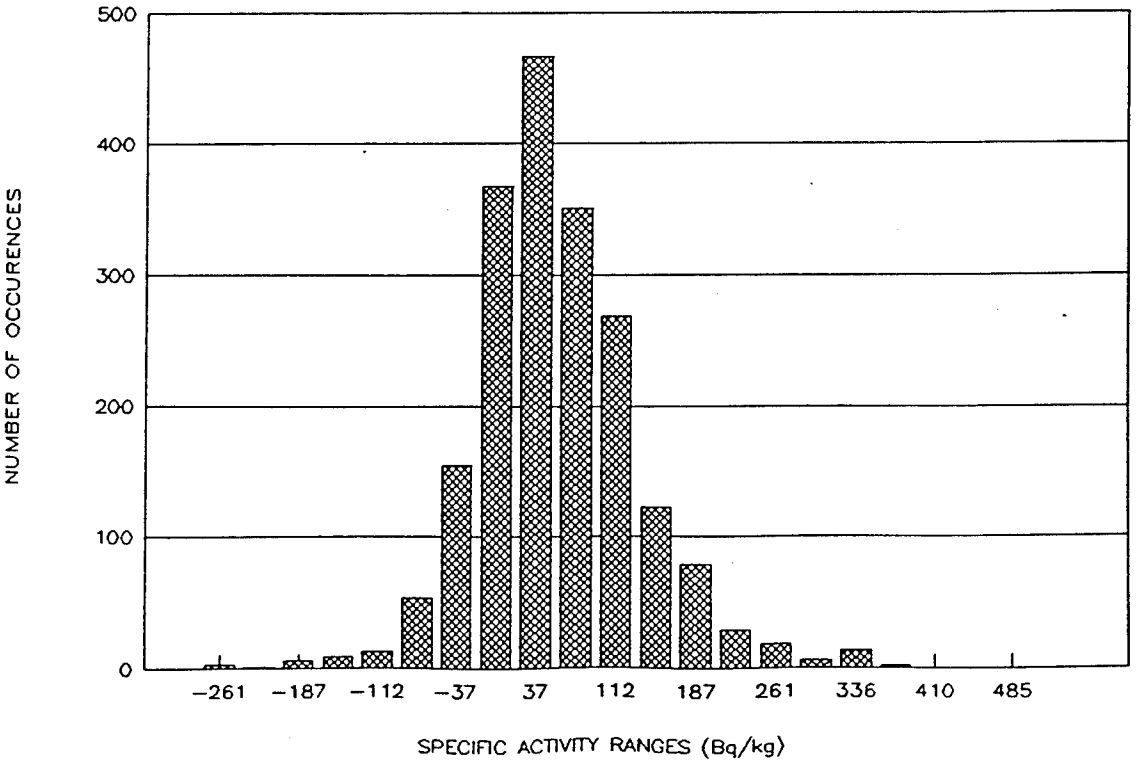
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 22–Mar–93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 22–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 22-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	5.13 tons	98.7 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			95.1%
EQUIVALENT SOIL-IN-GROUND	4.06 yd³	78.3 yd³	82.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,449 kBq		
MAXIMUM/SORT	772 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,975 kBq	9,062 kBq	
MAXIMUM/SORT	598 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	2,141 Bq/kg	92 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	05:10 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.77 hr
DOWN-TIME	0.73 hr
TOTAL SYSTEM PAUSE	0.40 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.30 hr
SHUT-DOWN	0.32 hr
PLANT PERFORMANCE	93.6%
PRODUCTIVITY	93.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,944	
NONPROCESS RECORDS (Test, calibration, etc)		25	
20-SEC PROCESS RECORDS		1,938	
TOTAL SORT		74	MD>0 & MND=0
NO SORT		1,057	AD=0 & MD=0 & MND>0
SOME SORT		807	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	264	26.2%	

UNEXPLAIN TIME	PAUSE TIME
07:48:53	05:53

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,380	
2-SEC RECORDS WITH SORTS	1,006	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	226	81.3%
3 DETECTORS	40	14.4%
4 DETECTORS	10	3.6%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	278	
NET 2-SEC RECORDS WITH SORTS	728	
2-SEC PERIODS WITH NO SORTS	18,652	
AVG TIME BETWEEN 2-SEC SORTS	53.2 sec	

1-GATE SORTS	519	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 31	6.0%	-14000	0	-261	4000	116	11.5%	4
2 75	14.5%	-12000	2	-224	8000	405	40.3%	8
3 97	18.7%	-10000	5	-187	12000	175	17.4%	12
4 94	18.1%	-8000	8	-149	16000	85	8.4%	16
5 113	21.8%	-6000	4	-112	20000	41	4.1%	20
6 70	13.5%	-4000	12	-75	24000	41	4.1%	24
7 33	6.4%	-2000	37	-37	28000	26	2.6%	28
8 6	1.2%	0	183	0	32000	20	2.0%	32
TOTAL 519		2000	277	37	36000	18	1.8%	36
		4000	378	75	40000	10	1.0%	40
2-GATE SORTS	487	6000	378	112	44000	8	0.8%	44
DETECTR SORTS	FREQ%	8000	332	149	48000	7	0.7%	48
8		10000	182	187	52000	6	0.6%	52
9 60	12.3%	12000	85	224	56000	7	0.7%	56
10 80	16.4%	14000	54	261	60000	2	0.2%	60
11 90	18.5%	16000	17	299	64000	7	0.7%	64
12 98	20.1%	18000	8	336	68000	4	0.4%	68
13 90	18.5%	20000	2	373	72000	5	0.5%	72
14 50	10.3%	22000	0	410	76000	1	0.1%	76
15 19	3.9%	24000	0	448	80000	0	0.0%	80
TOTAL 487		26000	0	485	84000	2	0.2%	84
		>28000	0	0	>84000	20	2.0%	>84
		TOTAL	1964		TOTAL	1006		

SUMMARY TOTALS

HOT PARTICLE EVENTS	978	SORTS BY ONE GATE ONLY	519
MULTIPARTICLE EVENTS	1462	SORTS BY TWO GATES	487
DISTRIBUTED EVENTS	5206		

REC CODE EXPLANATION

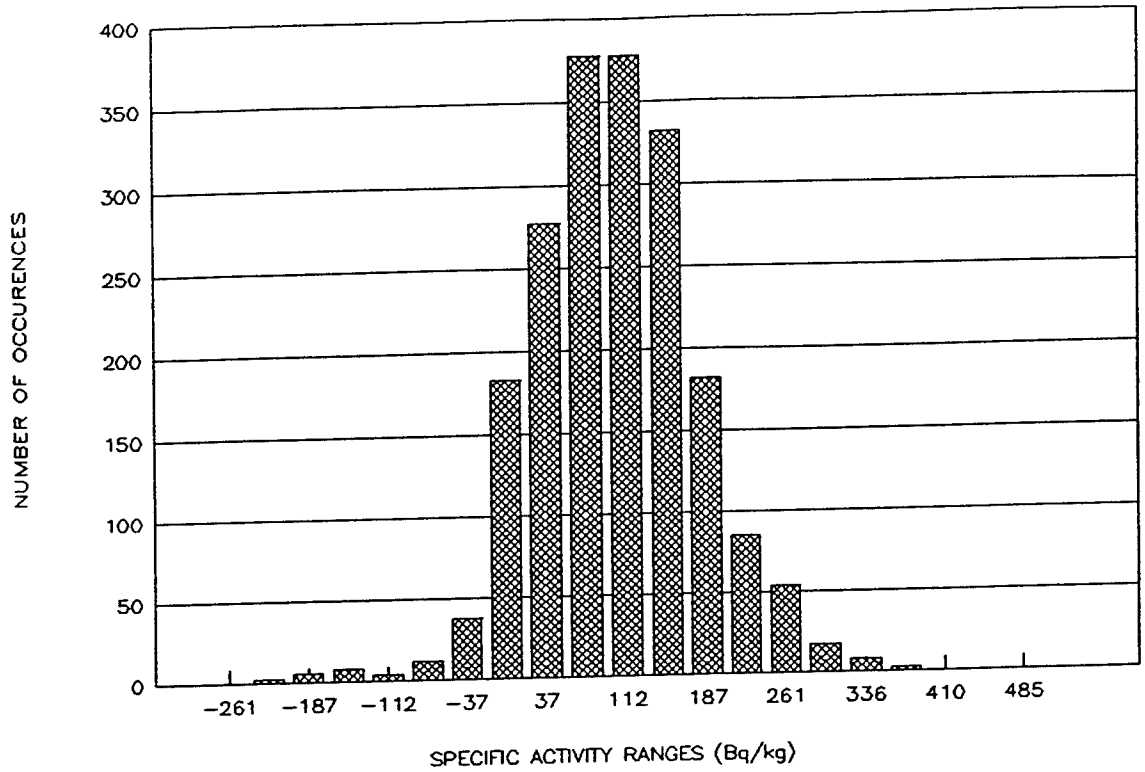
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

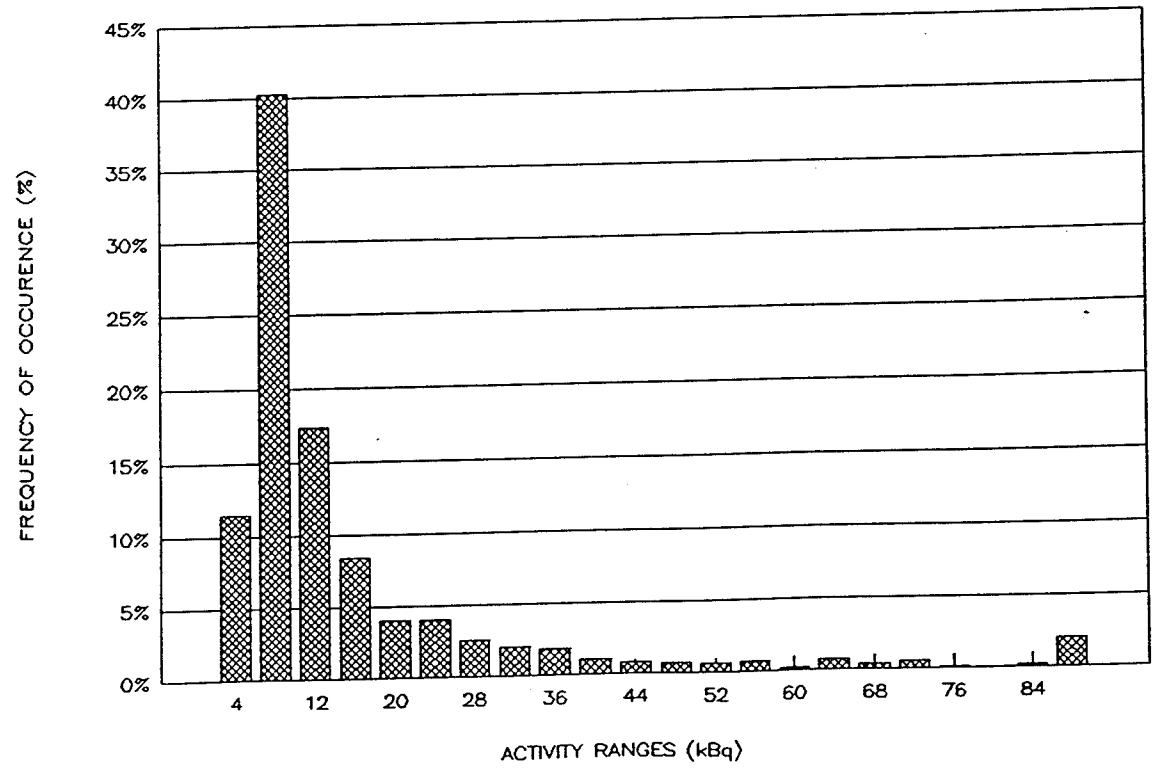
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 22–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 22–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.49 tons	49.9 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.39 yd³	39.6 yd³	40.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,043 kBq		
MAXIMUM/SORT	186 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,281 kBq	1,238 kBq	
MAXIMUM/SORT	133 kBq	17 kBq	
MINIMUM/SORT	-21618 Bq	-9 kBq	
SPECIFIC ACTIVITY	4,640 Bq/kg	25 Bq/kg	

WORK HISTORY

WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	11:37 AM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	11:33 AM
LUNCH START	12:00 PM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.2 hr
AVAILABLE HOURS	5.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.23 hr
DOWN-TIME	0.47 hr
TOTAL SYSTEM PAUSE	0.41 hr
NONAVAILABLE HOURS	5.5 hr
START-UP	0.40 hr
SHUT-DOWN	0.06 hr
PLANT PERFORMANCE	91.7%
PRODUCTIVITY	46.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)				1,290	
NONPROCESS RECORDS (Test, calibration, etc)				14	
20-SEC PROCESS RECORDS				941	
TOTAL SORT				2	MD>0 & MND=0
NO SORT				657	AD=0 & MD=0 & MND>0
SOME SORT				282	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS				0	
0<AD<1kBq & MD>0		0		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD		1		09:05:34	05:55
AD<0 & MD		1		09:06:11	09:04
ACT_P <5 kBq	100	28.7%			

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		9,410	
2-SEC RECORDS WITH SORTS		349	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	85	81.7%	
3 DETECTORS	17	16.3%	
4 DETECTORS	2	1.9%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	104		
NET 2-SEC RECORDS WITH SORTS		245	
2-SEC PERIODS WITH NO SORTS		9,165	
AVG TIME BETWEEN 2-SEC SORTS		76.8	sec

1-GATE SORTS		176	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	3	1.7%	-14000	0	-261
2	6	3.4%	-12000	1	-224
3	33	18.8%	-10000	1	-187
4	35	19.9%	-8000	4	-149
5	39	22.2%	-6000	13	-112
6	26	14.8%	-4000	40	-75
7	24	13.6%	-2000	132	-37
8	10	5.7%	0	190	0
TOTAL	176		2000	202	37
			4000	170	75
2-GATE SORTS		173	6000	93	112
DETECTR	SORTS	FREQ%	8000	59	149
8			10000	33	187
9	5	2.9%	12000	13	224
10	15	8.7%	14000	3	261
11	38	22.0%	16000	0	299
12	38	22.0%	18000	1	336
13	35	20.2%	20000	0	373
14	21	12.1%	22000	0	410
15	21	12.1%	24000	0	448
TOTAL	173		26000	0	485
			>28000	0	0
			TOTAL	955	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	45	12.9%	4
8000	145	41.5%	8
12000	52	14.9%	12
16000	25	7.2%	16
20000	14	4.0%	20
24000	18	5.2%	24
28000	9	2.6%	28
32000	9	2.6%	32
36000	7	2.0%	36
40000	2	0.6%	40
44000	2	0.6%	44
48000	2	0.6%	48
52000	2	0.6%	52
56000	1	0.3%	56
60000	4	1.1%	60
64000	1	0.3%	64
68000	1	0.3%	68
72000	1	0.3%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	9	2.6%	>84
TOTAL	349		

SUMMARY TOTALS

HOT PARTICLE EVENTS	337	SORTS BY ONE GATE ONLY	176
MULTIPARTICLE EVENTS	227	SORTS BY TWO GATES	173
DISTRIBUTED EVENTS	166		

REC CODE EXPLANATION

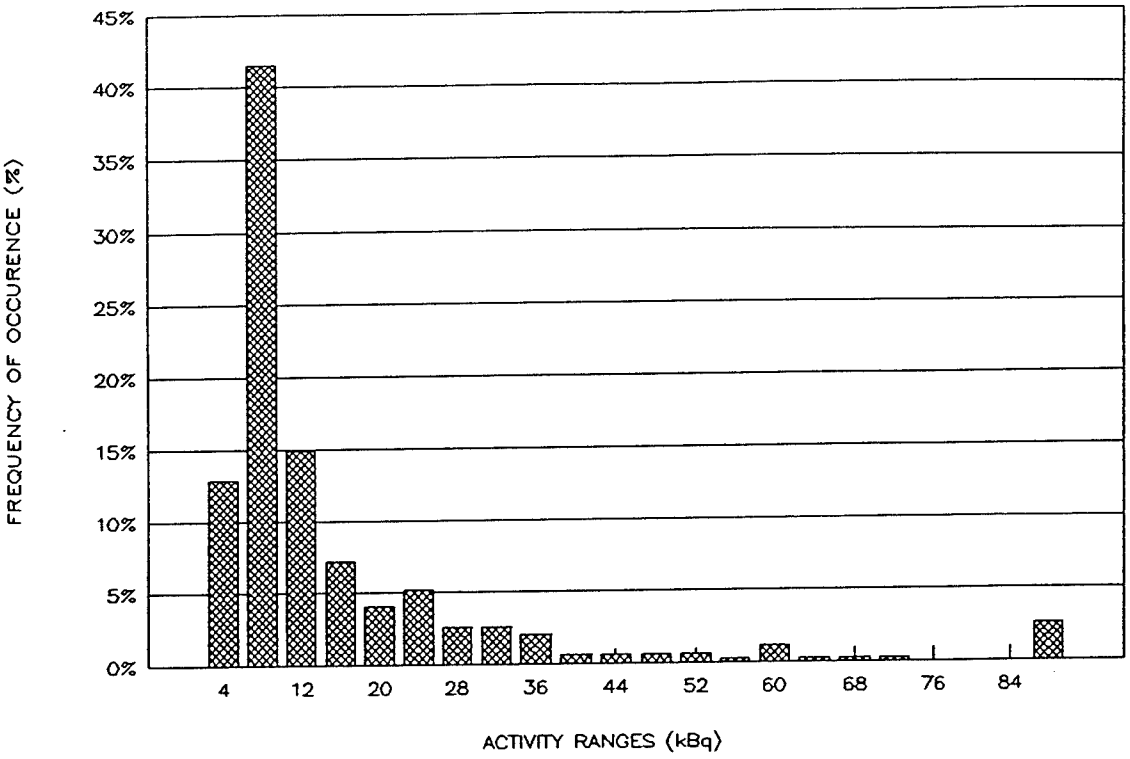
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

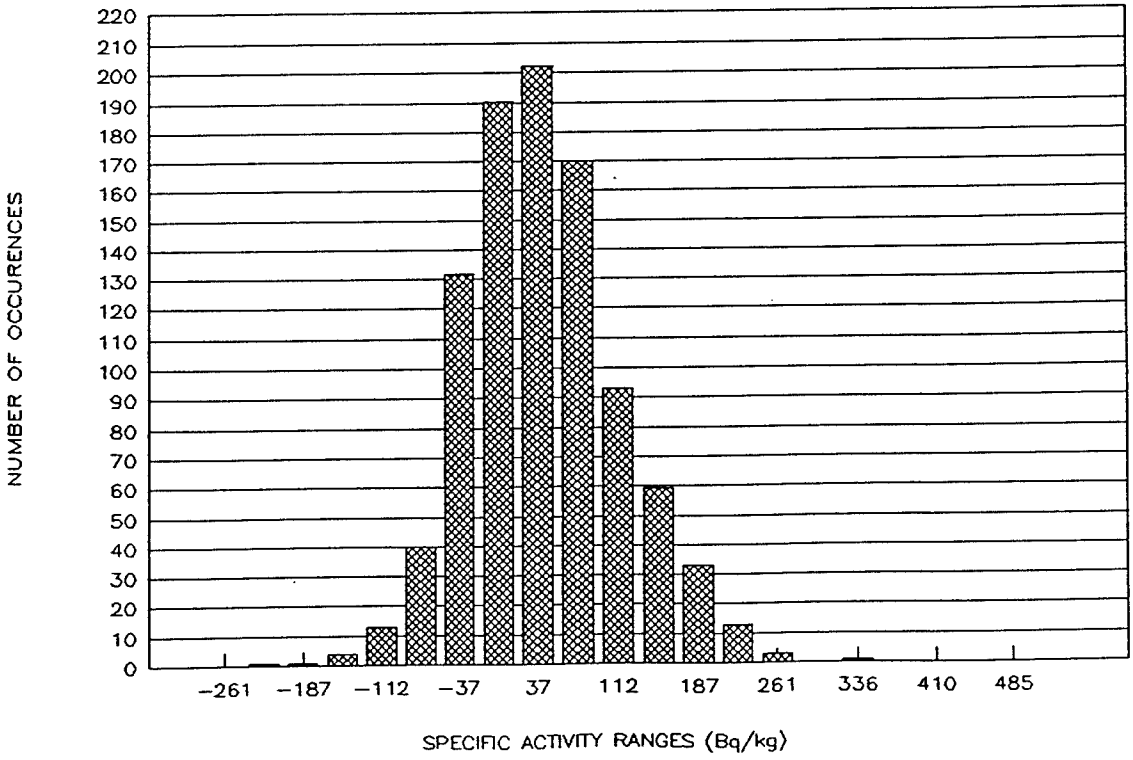
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 20–Mar–93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 20–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 20-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.59 tons	50.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
			98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY	0.46 yd³	39.8 yd³	40.3 yd³/day
EQUIVALENT SOIL-IN-GROUND			
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,644 kBq		
MAXIMUM/SORT	431 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,057 kBq	3,861 kBq	
MAXIMUM/SORT	367 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	6,915 Bq/kg	77 Bq/kg	

WORK HISTORY

WORK DAY START	05:50 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	11:37 AM
START SOIL PROCESSING	06:19 AM	END SOIL PROCESSING	11:34 AM
LUNCH START	12:00 PM	LUNCH PERIOD	0.5 hr

WORK HOURS	11.2 hr
AVAILABLE HOURS	5.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.27 hr
DOWN-TIME	0.43 hr
TOTAL SYSTEM PAUSE	0.39 hr
NONAVAILABLE HOURS	5.5 hr
START-UP	0.40 hr
SHUT-DOWN	0.04 hr
PLANT PERFORMANCE	92.4%
PRODUCTIVITY	47.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,392	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	948	
TOTAL SORT	1 MD>0 & MND=0	
NO SORT	569 AD=0 & MD=0 & MND>0	
SOME SORT	378 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	115	25.9%

UNEXPLAIN TIME	PAUSE TIME
None	05:55

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	9,480	
2-SEC RECORDS WITH SORTS	444	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	106	84.8%
3 DETECTORS	18	14.4%
4 DETECTORS	1	0.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	125	
NET 2-SEC RECORDS WITH SORTS	319	
2-SEC PERIODS WITH NO SORTS	9,161	
AVG TIME BETWEEN 2-SEC SORTS	59.4	sec

1-GATE SORTS		226	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	5	2.2%	-14000	0	-261	4000	53	11.9%	4
2	29	12.8%	-12000	0	-224	8000	161	36.3%	8
3	47	20.8%	-10000	1	-187	12000	63	14.2%	12
4	41	18.1%	-8000	0	-149	16000	43	9.7%	16
5	39	17.3%	-6000	4	-112	20000	28	6.3%	20
6	38	16.8%	-4000	5	-75	24000	13	2.9%	24
7	23	10.2%	-2000	31	-37	28000	13	2.9%	28
8	4	1.8%	0	98	0	32000	8	1.8%	32
TOTAL	226		2000	162	37	36000	9	2.0%	36
			4000	215	75	40000	8	1.8%	40
2-GATE SORTS		218	6000	200	112	44000	6	1.4%	44
DETECTR	SORTS	FREQ%	8000	95	149	48000	3	0.7%	48
8			10000	78	187	52000	2	0.5%	52
9	13	6.0%	12000	36	224	56000	3	0.7%	56
10	42	19.3%	14000	21	261	60000	8	1.8%	60
11	33	15.1%	16000	7	299	64000	4	0.9%	64
12	44	20.2%	18000	4	336	68000	1	0.2%	68
13	41	18.8%	20000	0	373	72000	5	1.1%	72
14	34	15.6%	22000	0	410	76000	1	0.2%	76
15	11	5.0%	24000	0	448	80000	0	0.0%	80
TOTAL	218		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	12	2.7%	>84
			TOTAL	957		TOTAL	444		

SUMMARY TOTALS

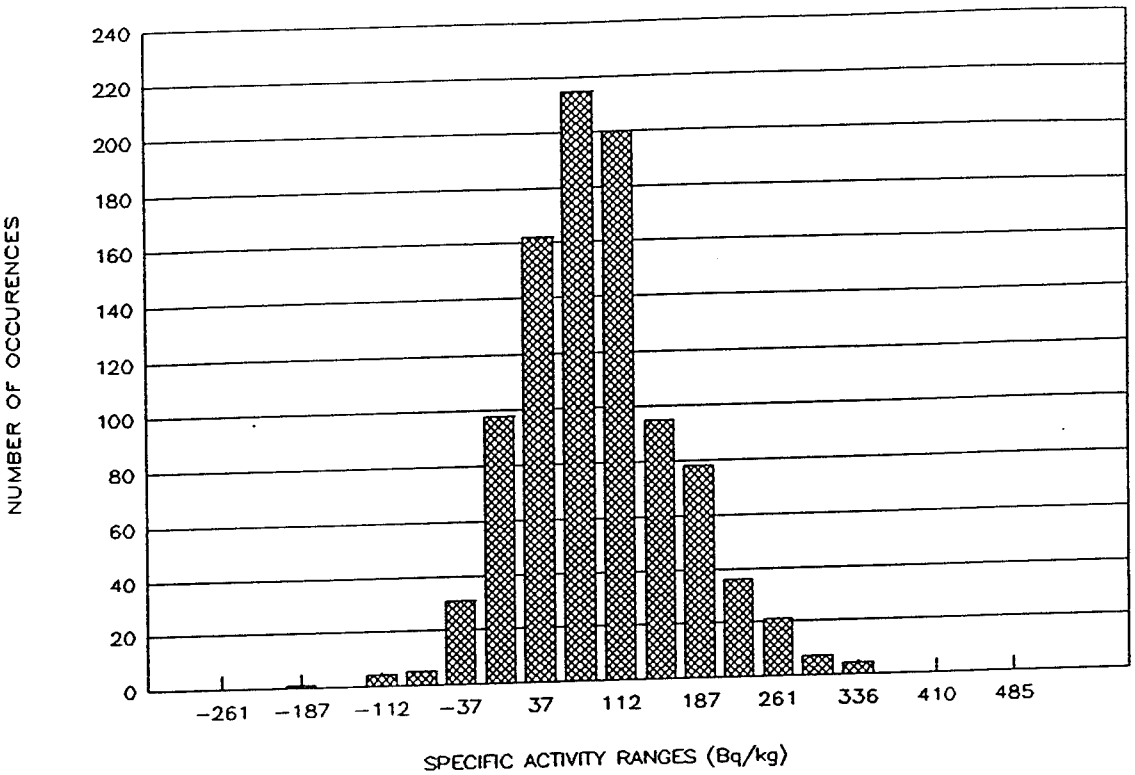
HOT PARTICLE EVENTS	426	SORTS BY ONE GATE ONLY	226
MULTIPARTICLE EVENTS	374	SORTS BY TWO GATES	218
DISTRIBUTED EVENTS	73		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

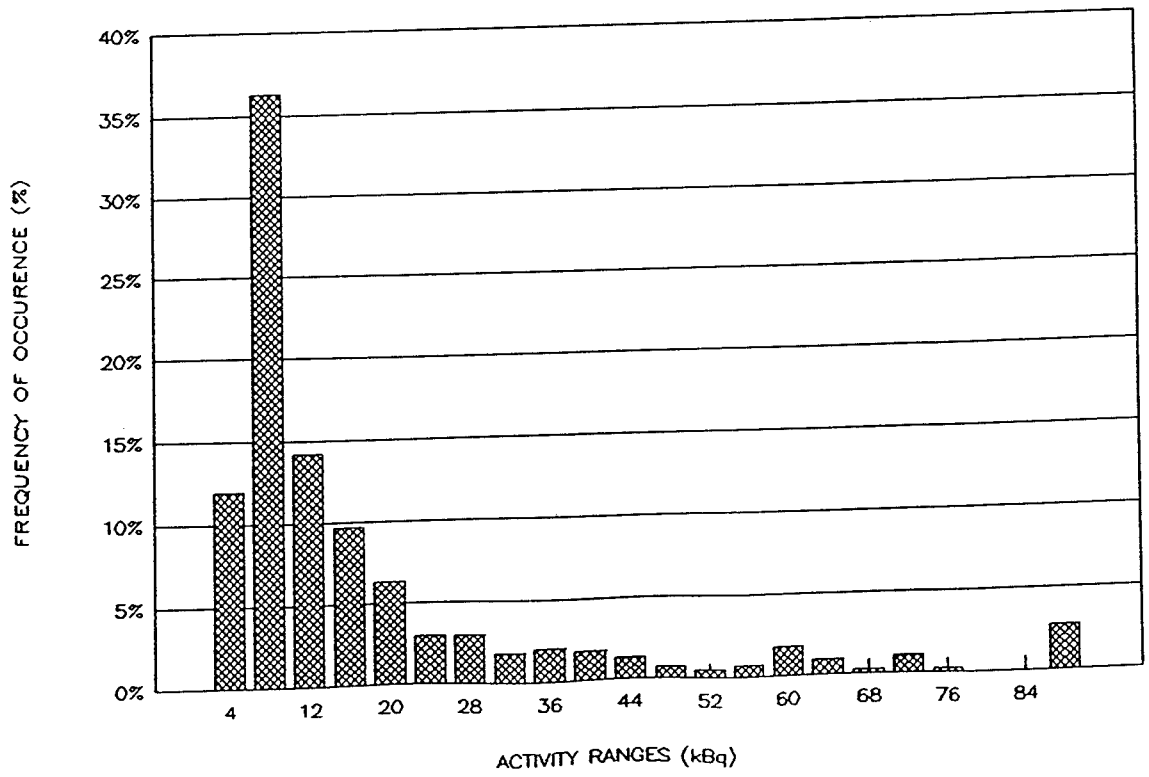
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2_LOG DATA FOR 20–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 19-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.18 tons	100.8 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.94 yd³	79.9 yd³	80.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,871 kBq		
MAXIMUM/SORT	1,320 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,229 kBq	3,465 kBq	
MAXIMUM/SORT	1034 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	6,111 Bq/kg	34 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:18 AM	END SOIL PROCESSING	05:04 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.57 hr
DOWN-TIME	0.93 hr
TOTAL SYSTEM PAUSE	0.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.31 hr
SHUT-DOWN	0.42 hr
PLANT PERFORMANCE	91.9%
PRODUCTIVITY	91.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,906		
NONPROCESS RECORDS (Test, calibration, etc)	8		
20-SEC PROCESS RECORDS	1,903		
TOTAL SORT	3	MD>0 & MND=0	
NO SORT	1,254	AD=0 & MD=0 & MND>0	
SOME SORT	646	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	5		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	293	29.2%	

UNEXPLAIN TIME	PAUSE TIME
07:46:06	05:54
09:43:26	06:51

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,030		11:14:06	11:31
2-SEC RECORDS WITH SORTS	1,003	(ACT_P >0 kBq)	13:21:09	11:32
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			16:40:09	12:23
2 DETECTORS	218	75.4%		12:24
3 DETECTORS	52	18.0%		12:26
4 DETECTORS	15	5.2%		
5 DETECTORS	3	1.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	289			
NET 2-SEC RECORDS WITH SORTS	714			
2-SEC PERIODS WITH NO SORTS	18,316			
AVG TIME BETWEEN 2-SEC SORTS	53.3 sec			

1-GATE SORTS DETECTR	SORTS	500 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	8	1.6%	-14000	0	-261
2	50	10.0%	-12000	2	-224
3	84	16.8%	-10000	1	-187
4	114	22.8%	-8000	2	-149
5	96	19.2%	-6000	7	-112
6	70	14.0%	-4000	67	-75
7	64	12.8%	-2000	199	-37
8	14	2.8%	0	334	0
TOTAL	500		2000	432	37
			4000	379	75
2-GATE SORTS		503	6000	256	112
DETECTR	SORTS	FREQ%	8000	137	149
8			10000	59	187
9	21	4.2%	12000	24	224
10	67	13.3%	14000	6	261
11	110	21.9%	16000	6	299
12	102	20.3%	18000	0	336
13	83	16.5%	20000	0	373
14	70	13.9%	22000	0	410
15	50	9.9%	24000	0	448
TOTAL	503		26000	0	485
			>28000	0	0
			TOTAL	1911	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	152	15.2%	4
8000	405	40.4%	8
12000	154	15.4%	12
16000	77	7.7%	16
20000	48	4.8%	20
24000	35	3.5%	24
28000	22	2.2%	28
32000	17	1.7%	32
36000	17	1.7%	36
40000	7	0.7%	40
44000	6	0.6%	44
48000	5	0.5%	48
52000	5	0.5%	52
56000	7	0.7%	56
60000	6	0.6%	60
64000	9	0.9%	64
68000	6	0.6%	68
72000	2	0.2%	72
76000	2	0.2%	76
80000	0	0.0%	80
84000	2	0.2%	84
>84000	19	1.9%	>84
TOTAL	1003		

SUMMARY TOTALS

HOT PARTICLE EVENTS	990	SORTS BY ONE GATE ONLY	500
MULTIPARTICLE EVENTS	526	SORTS BY TWO GATES	503
DISTRIBUTED EVENTS	249		

REC CODE EXPLANATION

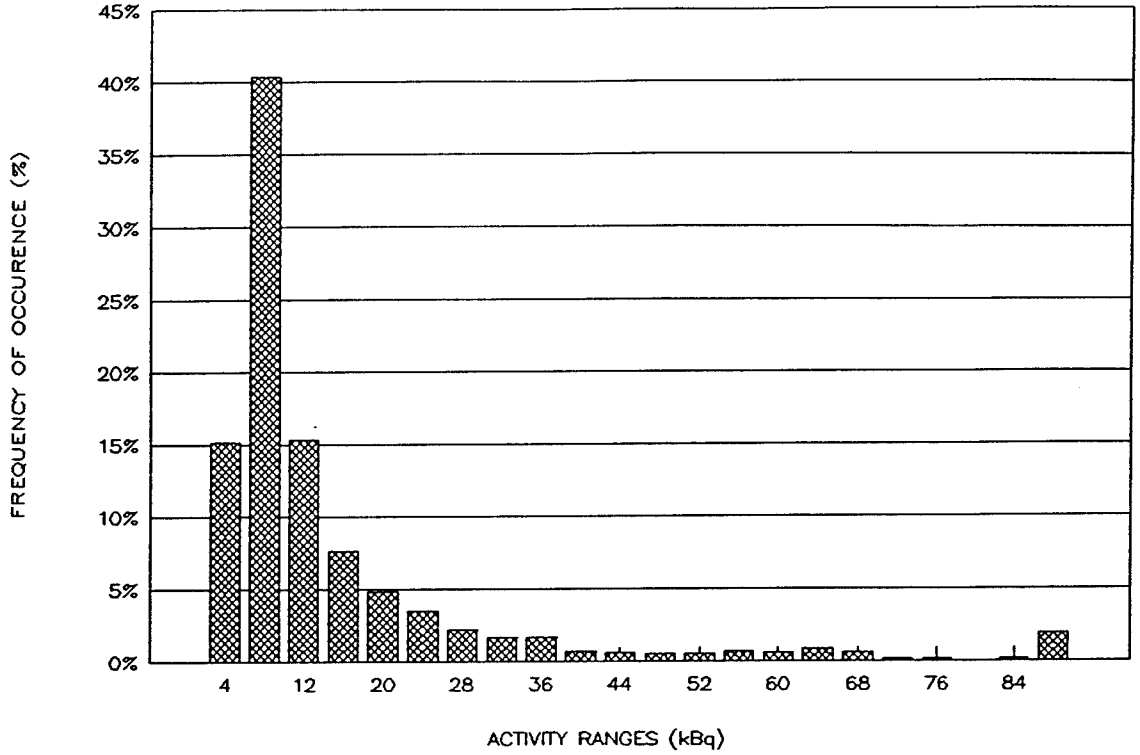
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

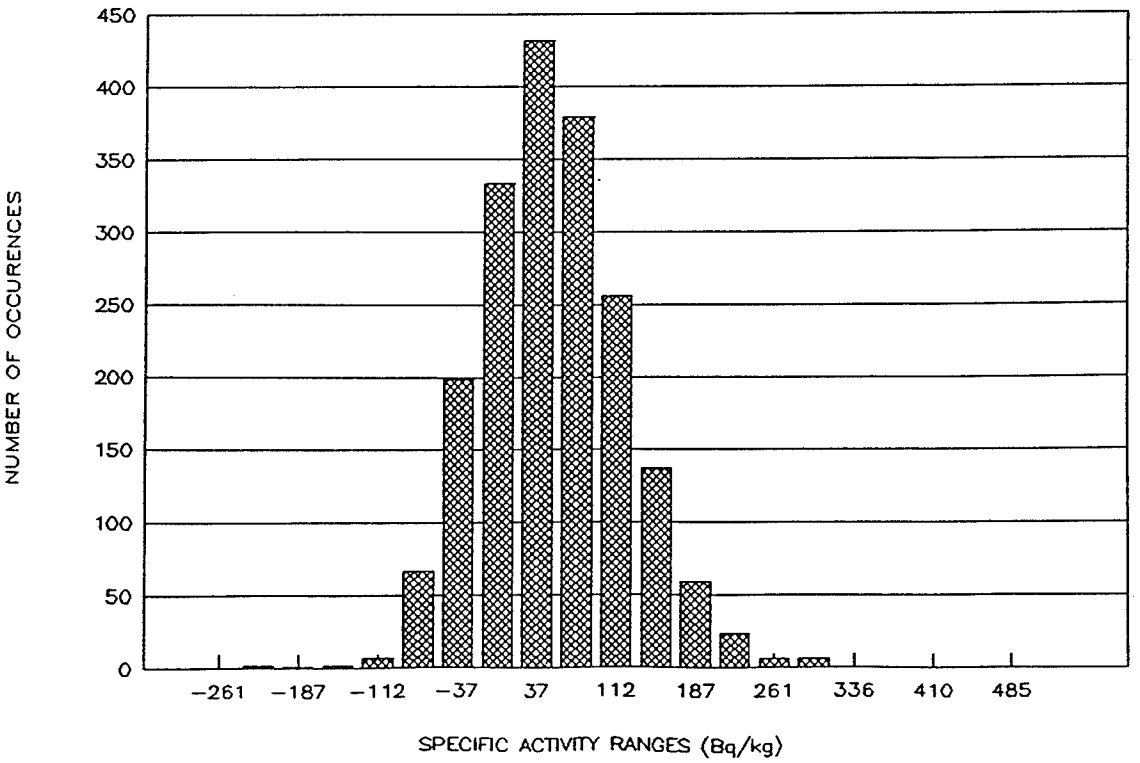
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 19—Mar—93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 19—Mar—93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 19-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.52 tons	100.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	1.21 yd³	79.3 yd³	80.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,046 kBq		
MAXIMUM/SORT	678 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,421 kBq	8,736 kBq	
MAXIMUM/SORT	566 kBq	18 kBq	
MINIMUM/SORT	-5510 Bq	-7 kBq	
SPECIFIC ACTIVITY	4,875 Bq/kg	87 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:18 AM	END SOIL PROCESSING	05:03 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.52 hr
DOWN-TIME	0.98 hr
TOTAL SYSTEM PAUSE	0.64 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.31 hr
SHUT-DOWN	0.43 hr
PLANT PERFORMANCE	91.5%
PRODUCTIVITY	91.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,695	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,894	
TOTAL SORT		8	MD>0 & MND=0
NO SORT		1,067	AD=0 & MD=0 & MND>0
SOME SORT		819	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	2		
AD<0 & MD	2		
ACT_P <5 kBq	211	26.3%	

UNEXPLAIN TIME	PAUSE TIME
11:48:47	05:54
12:25:41	06:51

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	18,940			12:32:04	12:24
2-SEC RECORDS WITH SORTS	801	(ACT_P >0 kBq)		12:33:08	12:26
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				12:35:38	12:30
2 DETECTORS	183	81.7%			12:32
3 DETECTORS	38	17.0%			12:33
4 DETECTORS	3	1.3%			
5 DETECTORS	0	0.0%			
6 DETECTORS	0	0.0%			
7 DETECTORS	0	0.0%			
8 DETECTORS	0	0.0%			
TOTAL	224				
NET 2-SEC RECORDS WITH SORTS	577				
2-SEC PERIODS WITH NO SORTS	18,363				
AVG TIME BETWEEN 2-SEC SORTS	65.6 sec				

1-GATE SORTS		427	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	20	4.7%	-14000	1	-261	4000	96	12.0%	4
2	75	17.6%	-12000	0	-224	8000	331	41.3%	8
3	73	17.1%	-10000	1	-187	12000	121	15.1%	12
4	86	20.1%	-8000	3	-149	16000	71	8.9%	16
5	79	18.5%	-6000	4	-112	20000	42	5.2%	20
6	49	11.5%	-4000	12	-75	24000	18	2.2%	24
7	40	9.4%	-2000	49	-37	28000	23	2.9%	28
8	5	1.2%	0	127	0	32000	16	2.0%	32
TOTAL	427		2000	239	37	36000	11	1.4%	36
			4000	422	75	40000	4	0.5%	40
2-GATE SORTS		374	6000	397	112	44000	6	0.7%	44
DETECTR	SORTS	FREQ%	8000	329	149	48000	8	1.0%	48
8			10000	187	187	52000	2	0.2%	52
9	40	10.7%	12000	87	224	56000	4	0.5%	56
10	50	13.4%	14000	33	261	60000	9	1.1%	60
11	78	20.9%	16000	8	299	64000	8	1.0%	64
12	84	22.5%	18000	4	336	68000	1	0.1%	68
13	56	15.0%	20000	1	373	72000	0	0.0%	72
14	44	11.8%	22000	0	410	76000	0	0.0%	76
15	22	5.9%	24000	0	448	80000	2	0.2%	80
TOTAL	374		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	26	3.2%	>84
			TOTAL	1904		TOTAL	801		

SUMMARY TOTALS

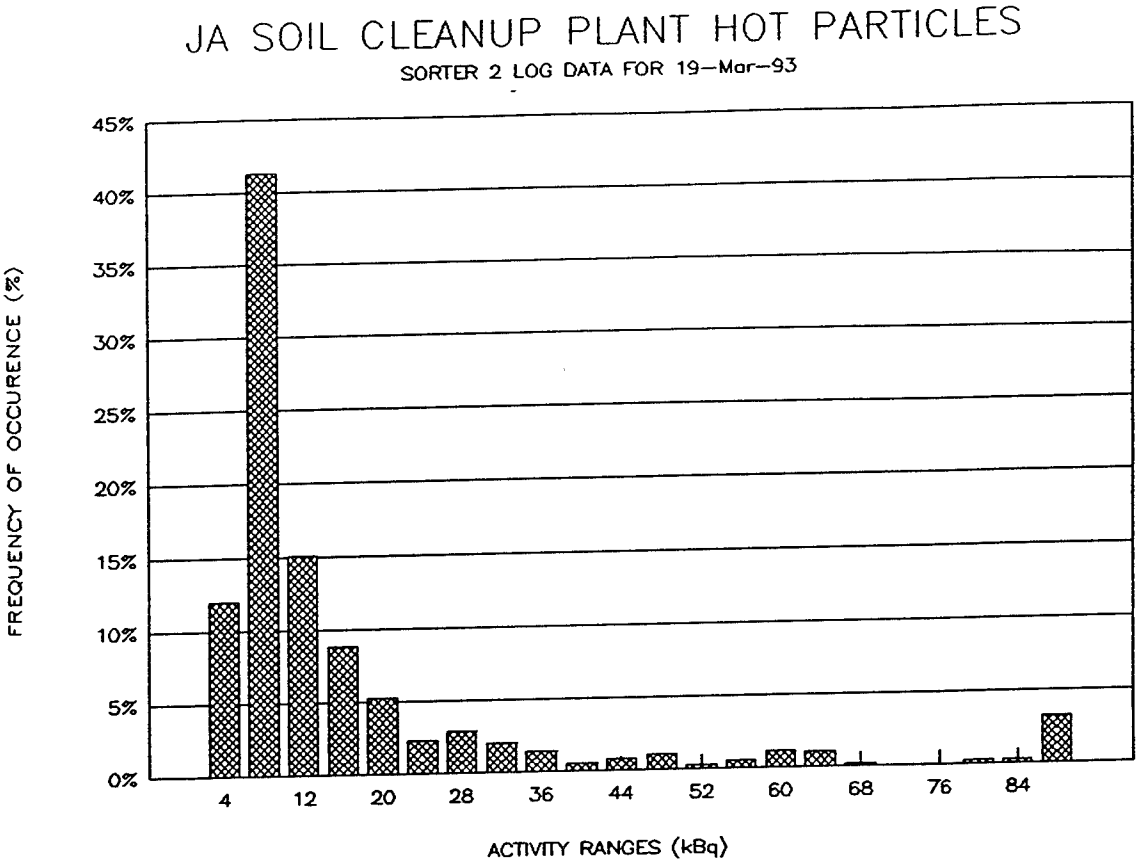
HOT PARTICLE EVENTS	767	SORTS BY ONE GATE ONLY	427
MULTIPARTICLE EVENTS	842	SORTS BY TWO GATES	374
DISTRIBUTED EVENTS	653		

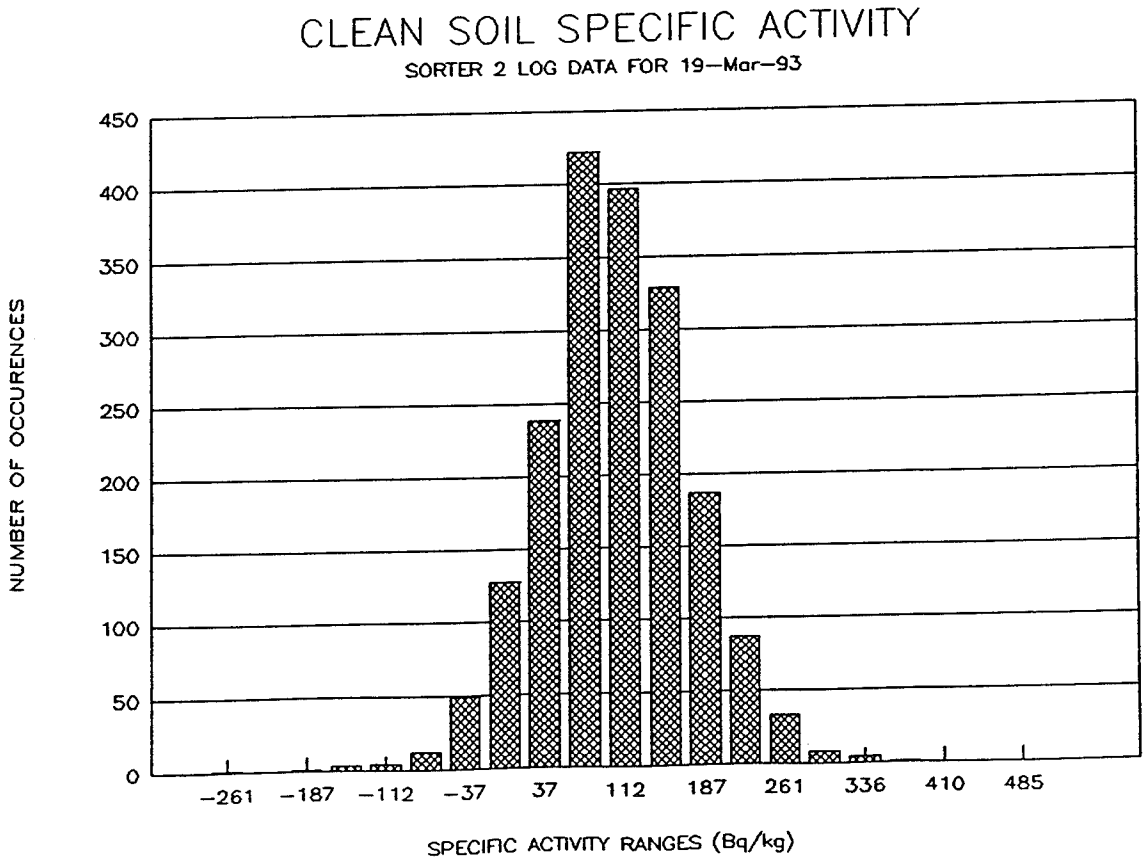
REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 19-Mar-93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 19-Mar-93
NUMBER OF OCCURENCES
450
400
350
300
250
200
150
100
50
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 18-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.78 tons	101.5 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.2%
WEIGHT RECOVERY OR VOLUME RECOVERY			81.1 yd³/day
EQUIVALENT SOIL-IN-GROUND	0.62 yd³	80.4 yd³	
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,917 kBq		
MAXIMUM/SORT	303 kBq		
MINIMUM/SORT	2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,486 kBq	1,928 kBq	
MAXIMUM/SORT	233 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	5,743 Bq/kg	19 Bq/kg	

WORK HISTORY

WORK DAY START	05:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.60 hr
DOWN-TIME	0.98 hr
TOTAL SYSTEM PAUSE	0.52 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.54 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	91.5%
PRODUCTIVITY	91.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,636	
NONPROCESS RECORDS (Test, calibration, etc)		4	
20-SEC PROCESS RECORDS		1,908	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,320	AD=0 & MD=0 & MND>0
SOME SORT		588	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	212	29.1%	

UNEXPLAIN TIME	PAUSE TIME
10:35:30	05:55
12:57:30	

JA SOIL CLEANUP PLANT LOG SUMMARY

14:35:10

2-SEC COUNT PERIODS	19,080	
2-SEC RECORDS WITH SORTS	728	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	168	88.0%
3 DETECTORS	21	11.0%
4 DETECTORS	2	1.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	191	
NET 2-SEC RECORDS WITH SORTS	537	
2-SEC PERIODS WITH NO SORTS	18,543	
AVG TIME BETWEEN 2-SEC SORTS	71.1	sec

1-GATE SORTS		363	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	2	0.6%	-14000	0	-261
2	24	6.6%	-12000	1	-224
3	49	13.5%	-10000	0	-187
4	73	20.1%	-8000	1	-149
5	81	22.3%	-6000	11	-112
6	65	17.9%	-4000	66	-75
7	52	14.3%	-2000	208	-37
8	17	4.7%	0	442	0
TOTAL	363		2000	524	37
			4000	368	75
2-GATE SORTS		365	6000	199	112
DETECTR	SORTS	FREQ%	8000	51	149
8			10000	25	187
9	6	1.6%	12000	11	224
10	35	9.6%	14000	4	261
11	62	17.0%	16000	1	299
12	85	23.3%	18000	0	336
13	85	23.3%	20000	0	373
14	50	13.7%	22000	0	410
15	42	11.5%	24000	0	448
TOTAL	365		26000	0	485
			>28000	0	0
			TOTAL	1912	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	105	14.4%	4
8000	305	41.9%	8
12000	115	15.8%	12
16000	55	7.6%	16
20000	32	4.4%	20
24000	27	3.7%	24
28000	18	2.5%	28
32000	16	2.2%	32
36000	6	0.8%	36
40000	8	1.1%	40
44000	4	0.5%	44
48000	3	0.4%	48
52000	4	0.5%	52
56000	5	0.7%	56
60000	2	0.3%	60
64000	4	0.5%	64
68000	2	0.3%	68
72000	0	0.0%	72
76000	1	0.1%	76
80000	3	0.4%	80
84000	0	0.0%	84
>84000	13	1.8%	>84
TOTAL	728		

SUMMARY TOTALS

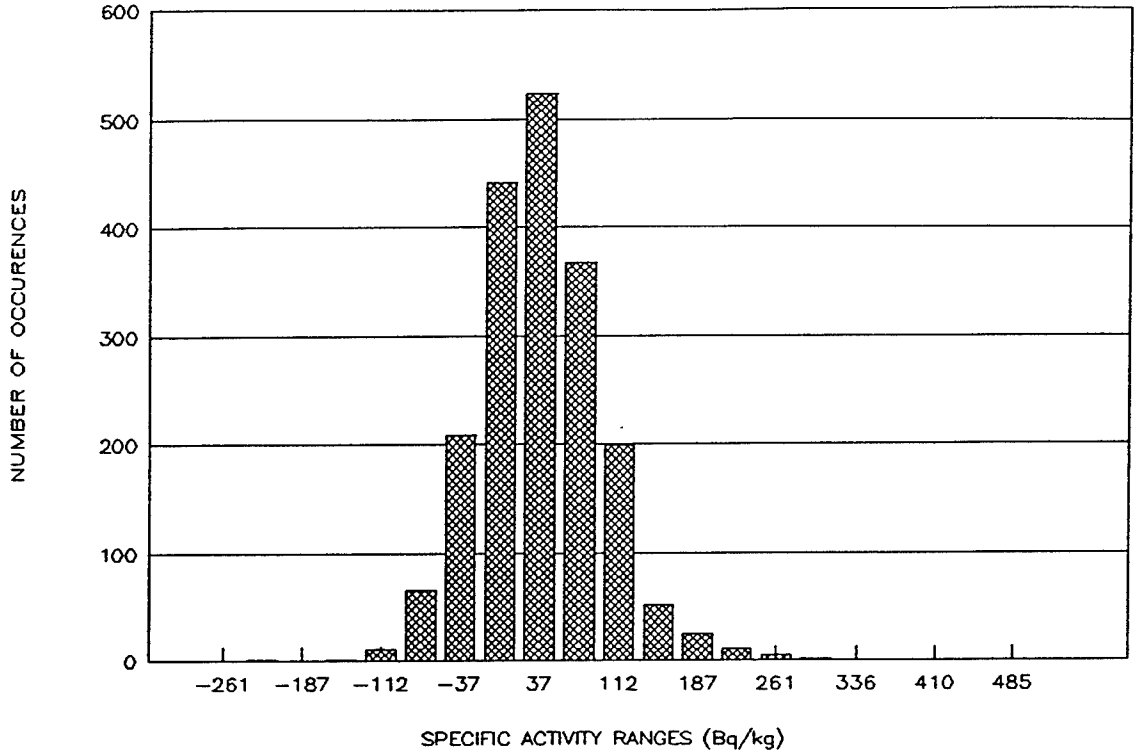
HOT PARTICLE EVENTS	727	SORTS BY ONE GATE ONLY	363
MULTIPARTICLE EVENTS	439	SORTS BY TWO GATES	365
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

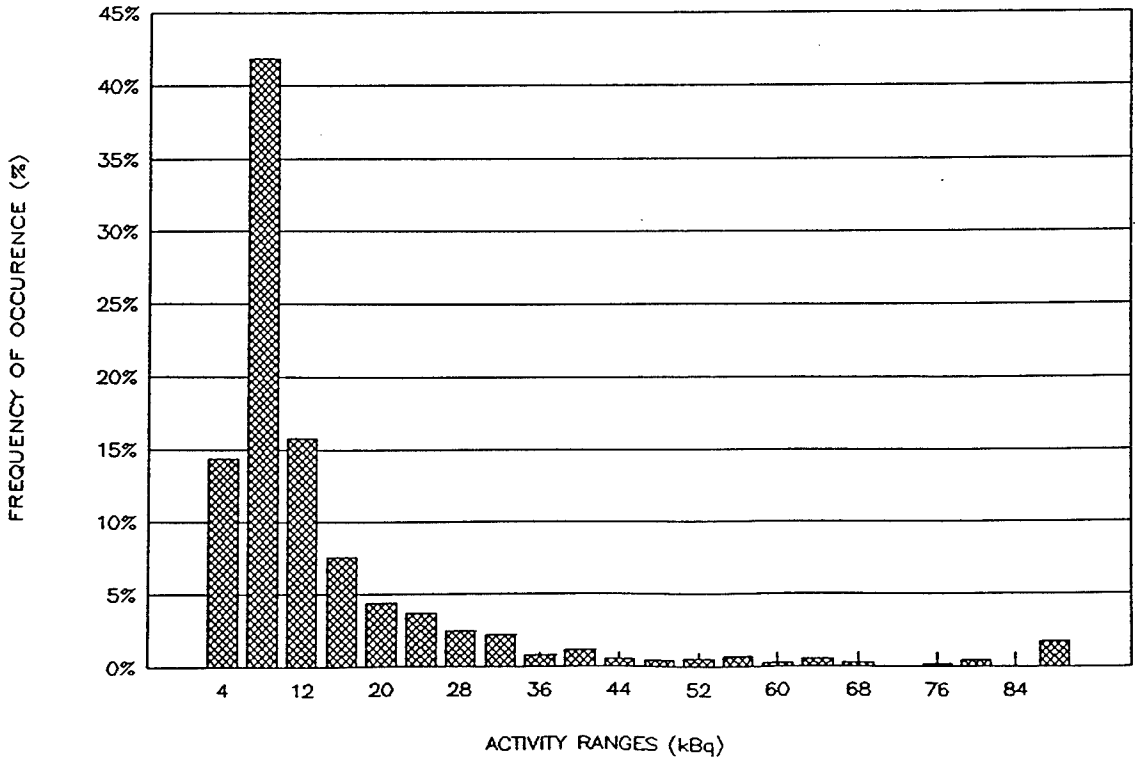
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 18–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 18–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 18-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.06 tons	91.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			98.9%
WEIGHT RECOVERY OR VOLUME RECOVERY			73.1 yd³/day
EQUIVALENT SOIL-IN-GROUND	0.84 yd³	72.2 yd³	
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,107 kBq		
MAXIMUM/SORT	207 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,764 kBq	6,616 kBq	
MAXIMUM/SORT	117 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	4,508 Bq/kg	73 Bq/kg	

WORK HISTORY

WORK DAY START	05:55 AM	WORK DAY END	05:30 PM
PLANT START-UP	05:55 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:27 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.6 hr
AVAILABLE HOURS	11.6 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.56 hr
DOWN-TIME	2.03 hr
TOTAL SYSTEM PAUSE	1.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.54 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	82.5%
PRODUCTIVITY	82.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,325	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,720	
TOTAL SORT		4	MD>0 & MND=0
NO SORT		1,056	AD=0 & MD=0 & MND>0
SOME SORT		660	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	142	23.5%	

UNEXPLAIN TIME	PAUSE TIME
09:48:10	05:55
	14:59

2-SEC COUNT PERIODS		17,200	
2-SEC RECORDS WITH SORTS		605	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	140	87.0%	
3 DETECTORS	18	11.2%	
4 DETECTORS	3	1.9%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		161	
NET 2-SEC RECORDS WITH SORTS		444	
2-SEC PERIODS WITH NO SORTS		16,756	
AVG TIME BETWEEN 2-SEC SORTS		77.5	sec

1-GATE SORTS		306	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	12	3.9%	-14000	0	-261	4000	60	9.9%	4
2	62	20.3%	-12000	1	-224	8000	257	42.5%	8
3	48	15.7%	-10000	1	-187	12000	82	13.6%	12
4	70	22.9%	-8000	2	-149	16000	68	11.2%	16
5	48	15.7%	-6000	2	-112	20000	30	5.0%	20
6	40	13.1%	-4000	20	-75	24000	20	3.3%	24
7	25	8.2%	-2000	62	-37	28000	8	1.3%	28
8	1	0.3%	0	177	0	32000	13	2.1%	32
TOTAL	306		2000	299	37	36000	7	1.2%	36
			4000	390	75	40000	8	1.3%	40
2-GATE SORTS		299	6000	337	112	44000	8	1.3%	44
DETECTR	SORTS	FREQ%	8000	221	149	48000	5	0.8%	48
8			10000	114	187	52000	2	0.3%	52
9	37	12.4%	12000	53	224	56000	5	0.8%	56
10	54	18.1%	14000	22	261	60000	4	0.7%	60
11	61	20.4%	16000	21	299	64000	5	0.8%	64
12	55	18.4%	18000	6	336	68000	4	0.7%	68
13	42	14.0%	20000	2	373	72000	5	0.8%	72
14	37	12.4%	22000	0	410	76000	2	0.3%	76
15	13	4.3%	24000	0	448	80000	2	0.3%	80
TOTAL	299		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	10	1.7%	>84
			TOTAL	1730		TOTAL	605		

SUMMARY TOTALS

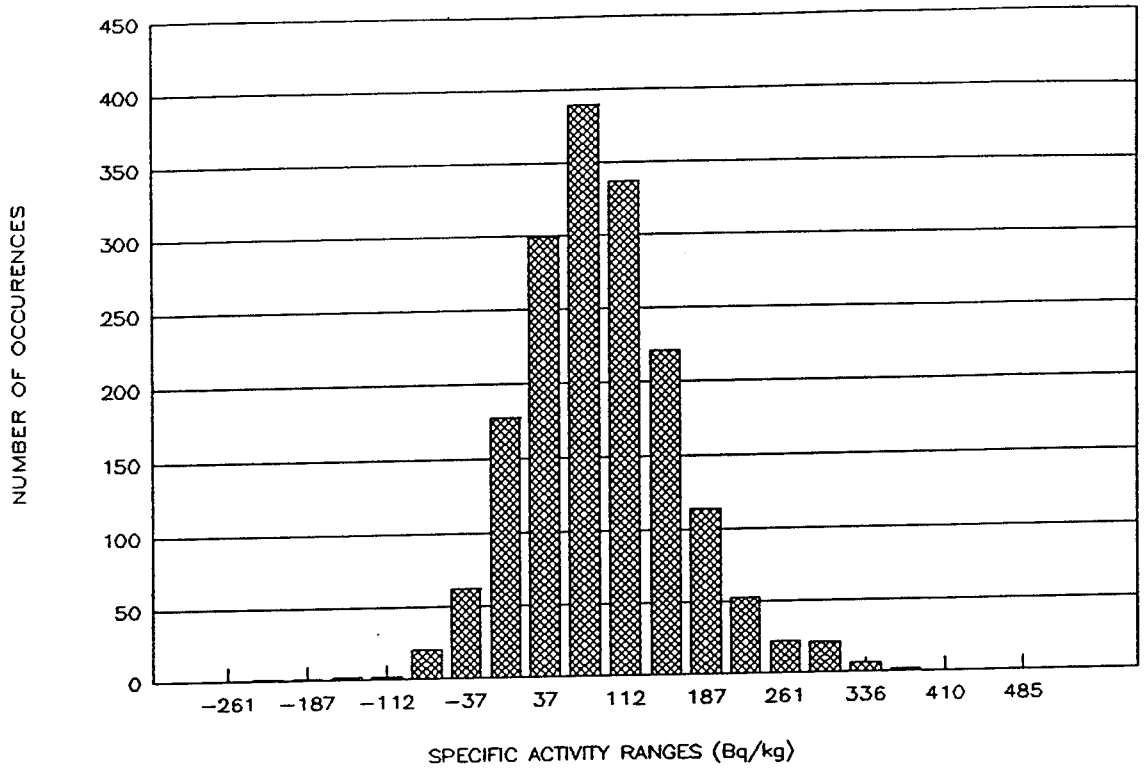
HOT PARTICLE EVENTS	605	SORTS BY ONE GATE ONLY	306
MULTIPARTICLE EVENTS	654	SORTS BY TWO GATES	299
DISTRIBUTED EVENTS	317		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

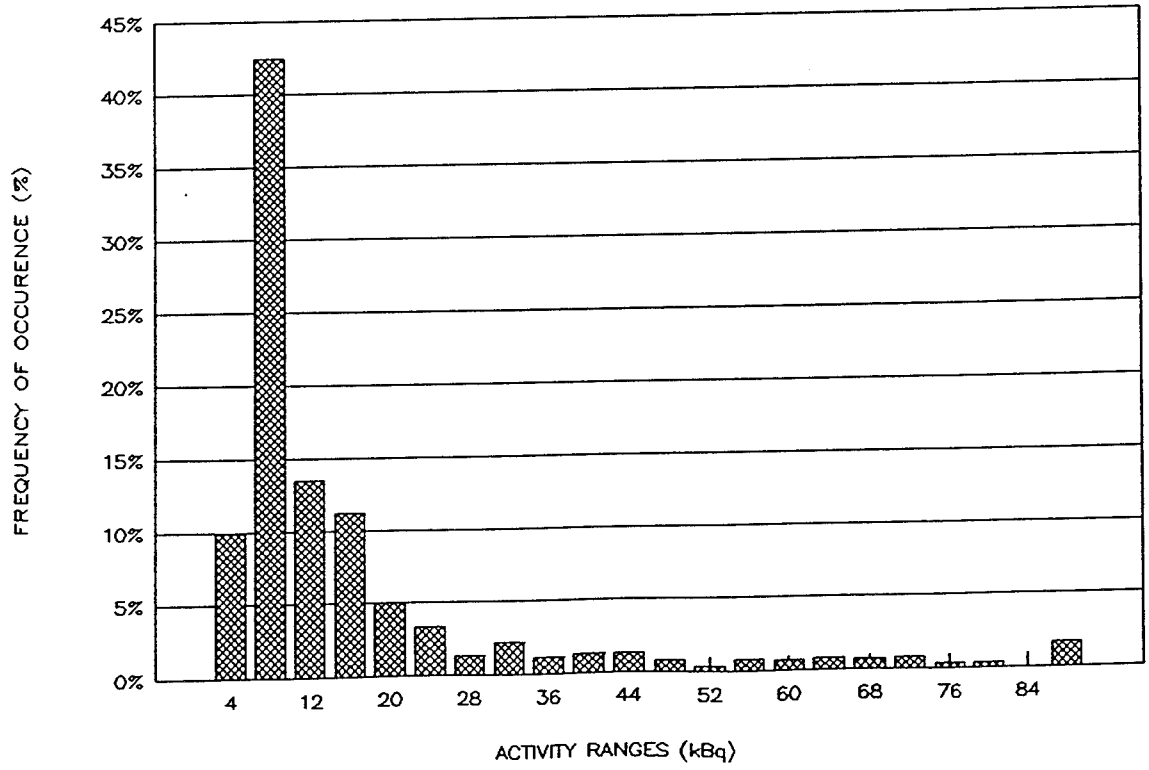
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 18–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 18–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 17-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.79 tons	102.5 tons	
MAXIMUM/SORT	6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.2%
EQUIVALENT SOIL-IN-GROUND	0.63 yd³	81.2 yd³	81.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,593 kBq		
MAXIMUM/SORT	1,425 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,409 kBq	1,251 kBq	
MAXIMUM/SORT	1050 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	8,065 Bq/kg	12 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:30 AM	END SOIL PROCESSING	05:12 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.71 hr
DOWN-TIME	0.79 hr
TOTAL SYSTEM PAUSE	0.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.51 hr
SHUT-DOWN	0.29 hr
PLANT PERFORMANCE	93.1%
PRODUCTIVITY	93.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,706	
NONPROCESS RECORDS (Test, calibration, etc)		8	
20-SEC PROCESS RECORDS		1,927	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,344	AD=0 & MD=0 & MND>0
SOME SORT		583	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	235	30.2%	

UNEXPLAIN TIME	PAUSE TIME
15:22:32	06:01
	13:33

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,270	
2-SEC RECORDS WITH SORTS	779	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	180	81.1%
3 DETECTORS	35	15.8%
4 DETECTORS	7	3.2%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	222	
NET 2-SEC RECORDS WITH SORTS	557	
2-SEC PERIODS WITH NO SORTS	18,713	
AVG TIME BETWEEN 2-SEC SORTS	69.2	sec

1-GATE SORTS DETECTR	SORTS	394 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	4	1.0%	-14000	0	-261
2	16	4.1%	-12000	0	-224
3	49	12.4%	-10000	2	-187
4	71	18.0%	-8000	3	-149
5	94	23.9%	-6000	22	-112
6	73	18.5%	-4000	98	-75
7	65	16.5%	-2000	299	-37
8	22	5.6%	0	417	0
TOTAL	394		2000	490	37
			4000	332	75
2-GATE SORTS		385	6000	164	112
DETECTR	SORTS	FREQ%	8000	65	149
8			10000	24	187
9	8	2.1%	12000	14	224
10	29	7.5%	14000	5	261
11	68	17.7%	16000	0	299
12	73	19.0%	18000	0	336
13	94	24.4%	20000	0	373
14	66	17.1%	22000	0	410
15	47	12.2%	24000	0	448
TOTAL	385		26000	0	485
			>28000	0	0
			TOTAL	1935	

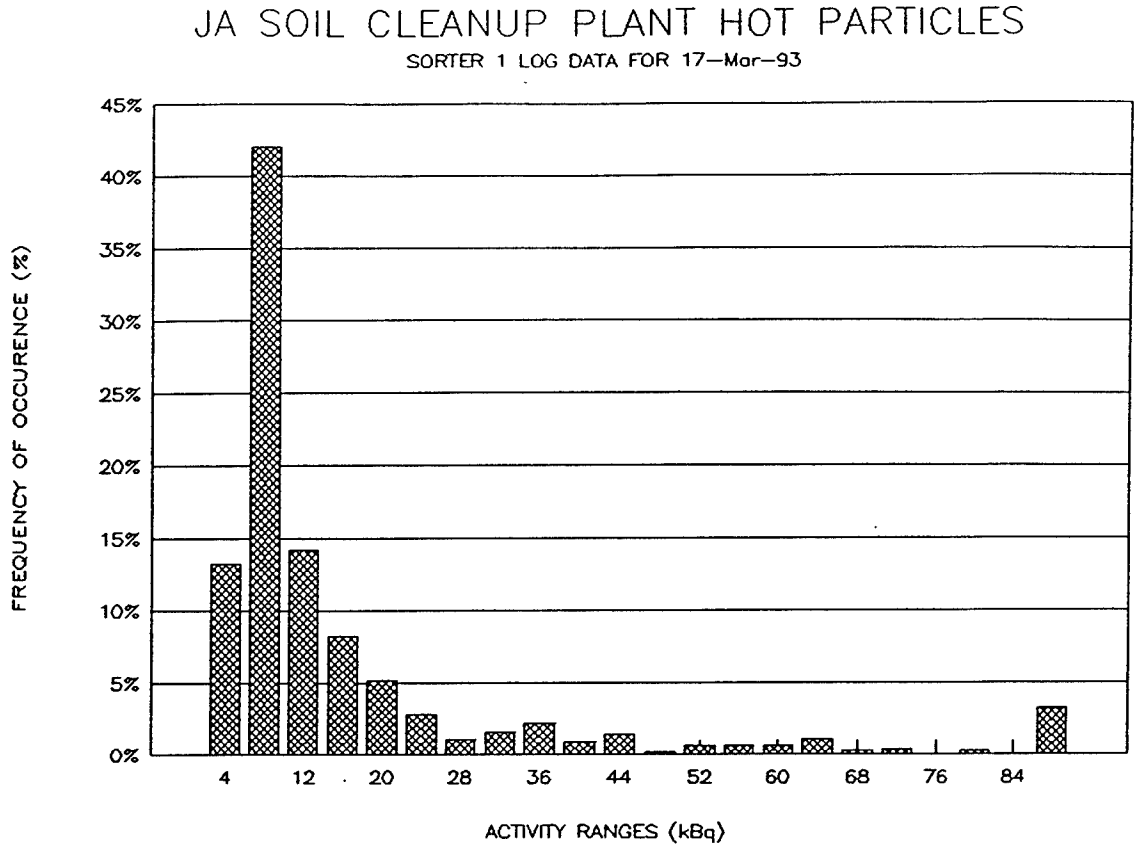
ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	103	13.2%	4
8000	328	42.1%	8
12000	111	14.2%	12
16000	64	8.2%	16
20000	40	5.1%	20
24000	22	2.8%	24
28000	8	1.0%	28
32000	12	1.5%	32
36000	17	2.2%	36
40000	7	0.9%	40
44000	11	1.4%	44
48000	1	0.1%	48
52000	5	0.6%	52
56000	5	0.6%	56
60000	5	0.6%	60
64000	8	1.0%	64
68000	2	0.3%	68
72000	3	0.4%	72
76000	0	0.0%	76
80000	2	0.3%	80
84000	0	0.0%	84
>84000	25	3.2%	>84
TOTAL	779		

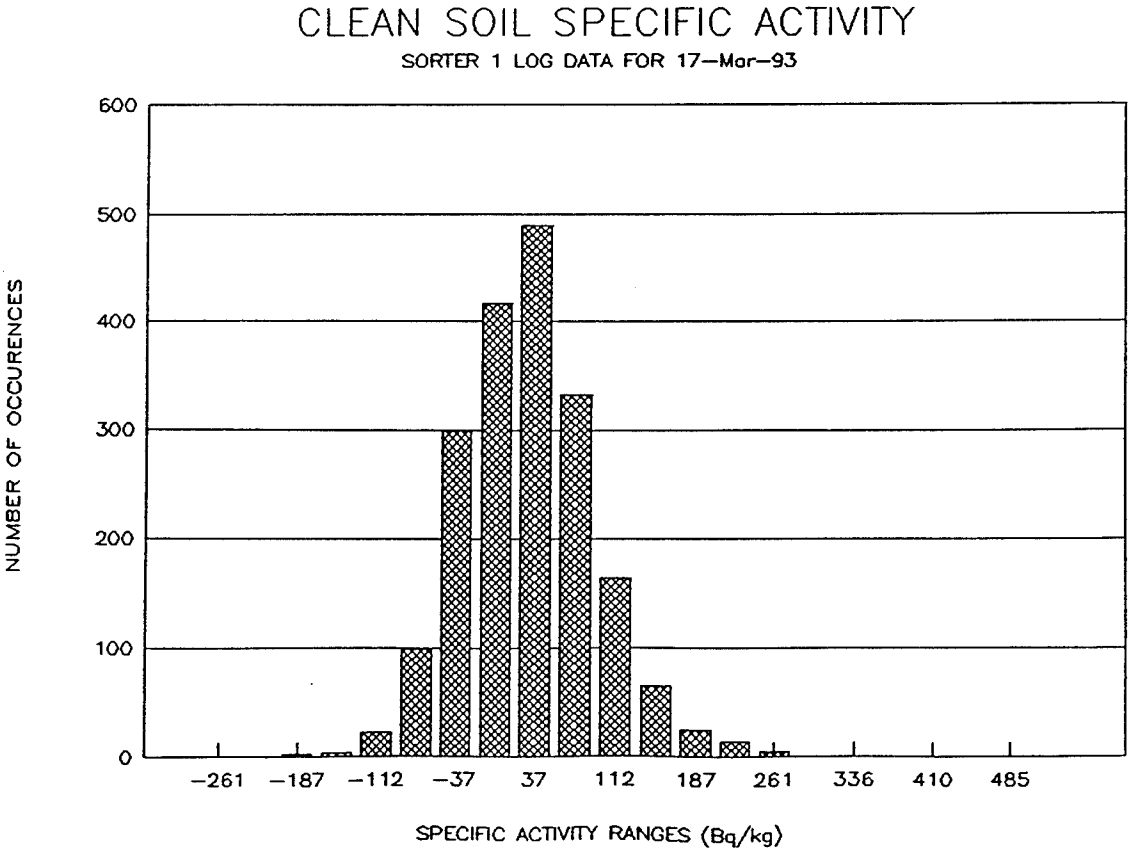
SUMMARY TOTALS

HOT PARTICLE EVENTS	750	SORTS BY ONE GATE ONLY	394
MULTIPARTICLE EVENTS	436	SORTS BY TWO GATES	385
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 17–Mar–93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 17–Mar–93
NUMBER OF OCCURENCES
600
500
400
300
200
100
0
–261
–187
–112
–37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 17-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.92 tons	102.0 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.73 yd³	80.9 yd³	81.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	12,448 kBq		
MAXIMUM/SORT	899 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,009 kBq	7,134 kBq	
MAXIMUM/SORT	489 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	6,530 Bq/kg	70 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:30 AM	END SOIL PROCESSING	05:10 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.67 hr
DOWN-TIME	0.83 hr
TOTAL SYSTEM PAUSE	0.49 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.51 hr
SHUT-DOWN	0.32 hr
PLANT PERFORMANCE	92.8%
PRODUCTIVITY	92.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,588	
NONPROCESS RECORDS (Test, calibration, etc)	6	
20-SEC PROCESS RECORDS	1,921	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	1,178	AD=0 & MD=0 & MND>0
SOME SORT	743	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	167	25.0%

UNEXPLAIN TIME	PAUSE TIME
None	06:01

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,210	
2-SEC RECORDS WITH SORTS	667	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	158	84.0%
3 DETECTORS	25	13.3%
4 DETECTORS	4	2.1%
5 DETECTORS	1	0.5%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	188	
NET 2-SEC RECORDS WITH SORTS	479	
2-SEC PERIODS WITH NO SORTS	18,731	
AVG TIME BETWEEN 2-SEC SORTS	80.2 sec	

1-GATE SORTS		354	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	14	4.0%	-14000	0	-261	4000	74	11.1%	4
2	53	15.0%	-12000	1	-224	8000	267	40.0%	8
3	62	17.5%	-10000	1	-187	12000	94	14.1%	12
4	76	21.5%	-8000	1	-149	16000	50	7.5%	16
5	79	22.3%	-6000	5	-112	20000	36	5.4%	20
6	45	12.7%	-4000	15	-75	24000	31	4.6%	24
7	20	5.6%	-2000	68	-37	28000	21	3.1%	28
8	5	1.4%	0	160	0	32000	13	1.9%	32
TOTAL	354		2000	347	37	36000	11	1.6%	36
			4000	462	75	40000	8	1.2%	40
2-GATE SORTS		313	6000	435	112	44000	13	1.9%	44
DETECTR	SORTS	FREQ%	8000	237	149	48000	3	0.4%	48
8			10000	127	187	52000	5	0.7%	52
9	32	10.2%	12000	35	224	56000	11	1.6%	56
10	43	13.7%	14000	21	261	60000	6	0.9%	60
11	59	18.8%	16000	10	299	64000	3	0.4%	64
12	73	23.3%	18000	1	336	68000	3	0.4%	68
13	62	19.8%	20000	1	373	72000	1	0.1%	72
14	33	10.5%	22000	0	410	76000	2	0.3%	76
15	11	3.5%	24000	0	448	80000	1	0.1%	80
TOTAL	313		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	14	2.1%	>84
			TOTAL	1927		TOTAL	667		

SUMMARY TOTALS

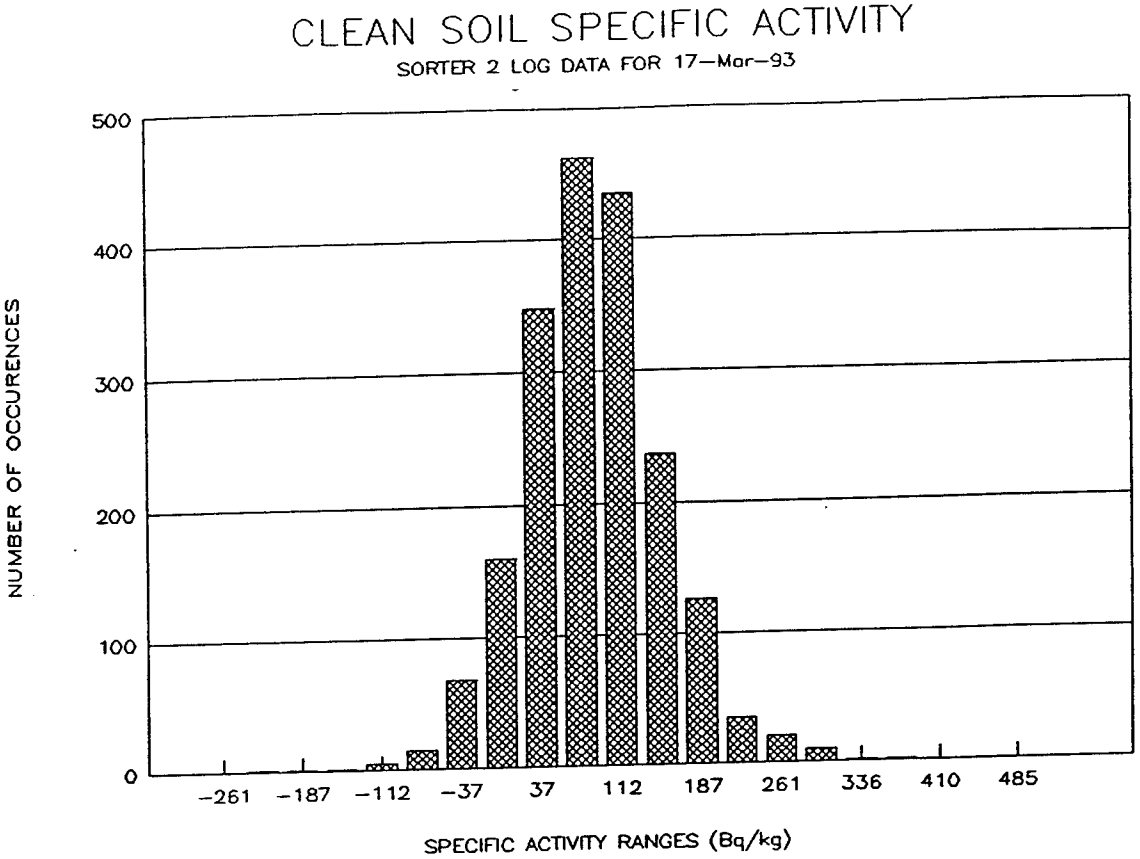
HOT PARTICLE EVENTS	657	SORTS BY ONE GATE ONLY	354
MULTIPARTICLE EVENTS	710	SORTS BY TWO GATES	313
DISTRIBUTED EVENTS	0		

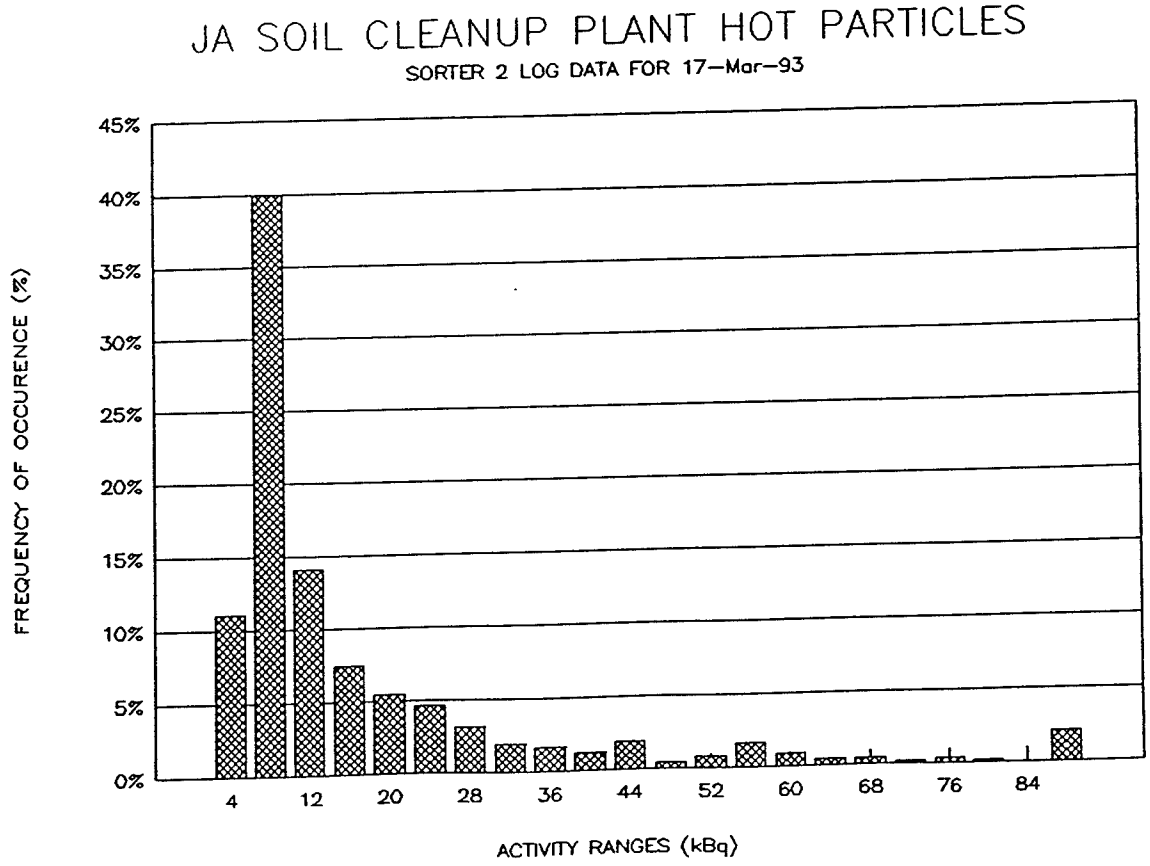
REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 17—Mar—93
NUMBER OF OCCURENCES
500
400
300
200
100
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 17—Mar—93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 16-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.72 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.57 tons	104.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.45 yd³	82.5 yd³	82.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,557 kBq		
MAXIMUM/SORT	1,647 kBq		
MINIMUM/SORT	2.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,872 kBq	(1,192)kBq	
MAXIMUM/SORT	1390 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,774 Bq/kg	(11)Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	05:16 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.84 hr
DOWN-TIME	0.66 hr
TOTAL SYSTEM PAUSE	0.72 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.29 hr
SHUT-DOWN	0.23 hr
PLANT PERFORMANCE	94.3%
PRODUCTIVITY	94.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,414	
NONPROCESS RECORDS (Test, calibration, etc)			12	
20-SEC PROCESS RECORDS			1,952	
TOTAL SORT			2	MD>0 & MND=0
NO SORT			1,589	AD=0 & MD=0 & MND>0
SOME SORT			360	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			1	
0<AD<1kBq & MD>0	2		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	1		08:26:08	05:42
AD<0 & MD	0		12:31:28	08:17
ACT_P <5 kBq	159	34.4%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,520		13:14:36	13:06
2-SEC RECORDS WITH SORTS	462	(ACT_P >0 kBq)	13:28:31	13:11
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			15:10:11	
2 DETECTORS	96	85.0%		
3 DETECTORS	14	12.4%		
4 DETECTORS	2	1.8%		
5 DETECTORS	1	0.9%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	113			
NET 2-SEC RECORDS WITH SORTS	349			
2-SEC PERIODS WITH NO SORTS	19,171			
AVG TIME BETWEEN 2-SEC SORTS	111.9 sec			

1-GATE SORTS DETECTR	SORTS	238 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	3	1.3%	-14000	1	-261
2	13	5.5%	-12000	2	-224
3	30	12.6%	-10000	3	-187
4	54	22.7%	-8000	10	-149
5	59	24.8%	-6000	57	-112
6	41	17.2%	-4000	201	-75
7	28	11.8%	-2000	399	-37
8	10	4.2%	0	527	0
TOTAL	238		2000	414	37
			4000	203	75
2-GATE SORTS		224	6000	80	112
DETECTR	SORTS	FREQ%	8000	28	149
8			10000	18	187
9	9	4.0%	12000	15	224
10	10	4.5%	14000	3	261
11	42	18.8%	16000	3	299
12	53	23.7%	18000	1	336
13	51	22.8%	20000	0	373
14	39	17.4%	22000	0	410
15	20	8.9%	24000	0	448
TOTAL	224		26000	0	485
			>28000	0	0
			TOTAL	1965	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	77	16.7%	4
8000	188	40.7%	8
12000	67	14.5%	12
16000	33	7.1%	16
20000	11	2.4%	20
24000	26	5.6%	24
28000	14	3.0%	28
32000	5	1.1%	32
36000	4	0.9%	36
40000	6	1.3%	40
44000	1	0.2%	44
48000	4	0.9%	48
52000	2	0.4%	52
56000	5	1.1%	56
60000	5	1.1%	60
64000	2	0.4%	64
68000	1	0.2%	68
72000	0	0.0%	72
76000	1	0.2%	76
80000	2	0.4%	80
84000	0	0.0%	84
>84000	8	1.7%	>84
TOTAL	462		

SUMMARY TOTALS

HOT PARTICLE EVENTS	444	SORTS BY ONE GATE ONLY	238
MULTIPARTICLE EVENTS	243	SORTS BY TWO GATES	224
DISTRIBUTED EVENTS	166		

REC CODE EXPLANATION

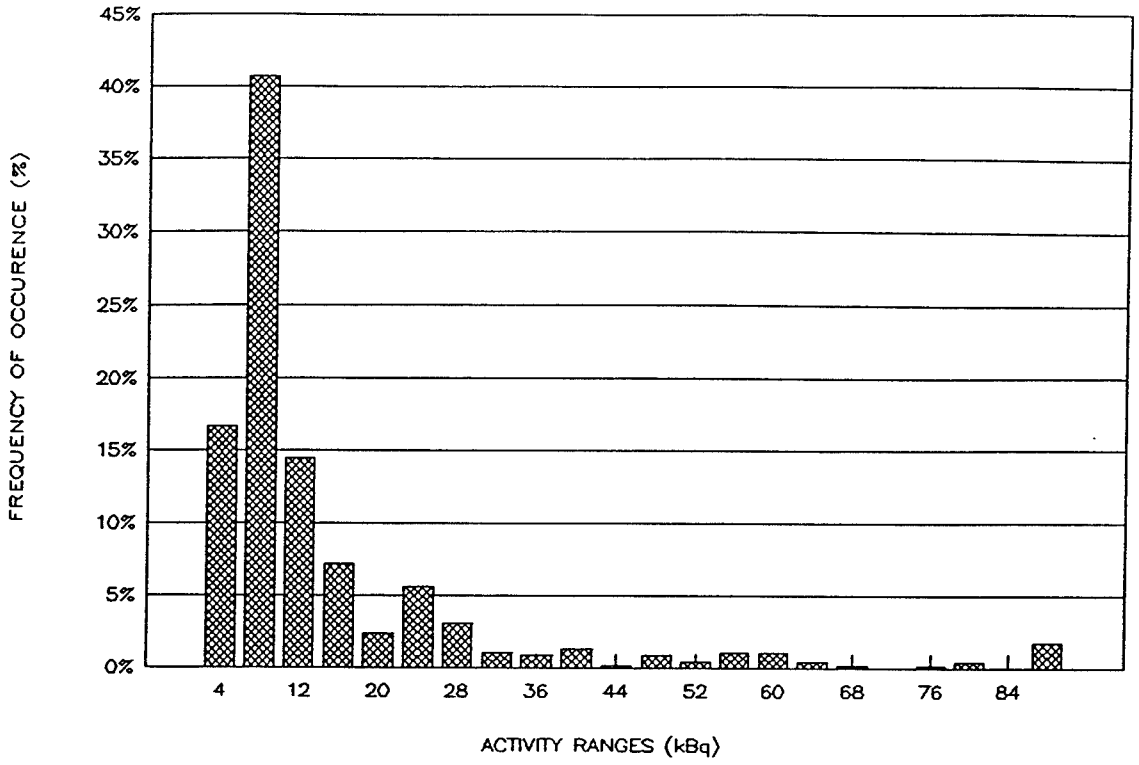
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

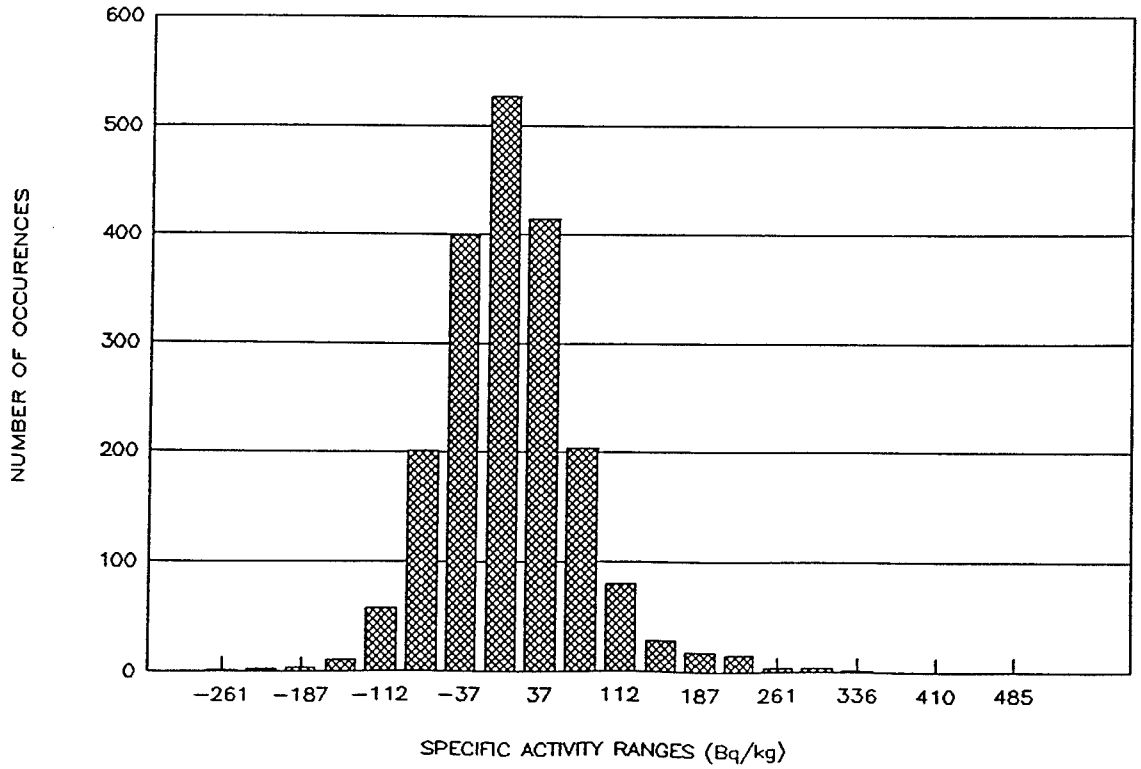
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 16–Mar–93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 16–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 16-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.93 tons	101.4 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.73 yd³	80.4 yd³	81.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,829 kBq		
MAXIMUM/SORT	545 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,616 kBq	5,176 kBq	
MAXIMUM/SORT	434 kBq	18 kBq	
MINIMUM/SORT	-2685 Bq	-7 kBq	
SPECIFIC ACTIVITY	3,903 Bq/kg	51 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:17 AM	END SOIL PROCESSING	05:17 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	10.61 hr
DOWN-TIME	0.89 hr
TOTAL SYSTEM PAUSE	1.00 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.29 hr
SHUT-DOWN	0.21 hr
PLANT PERFORMANCE	92.3%
PRODUCTIVITY	92.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,269	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,910	
TOTAL SORT		5	MD>0 & MND=0
NO SORT		1,299	AD=0 & MD=0 & MND>0
SOME SORT		606	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	2		
AD<0 & MD	1		
ACT_P <5 kBq	103	28.7%	

UNEXPLAIN TIME	PAUSE TIME
07:11:08	05:42
13:11:02	13:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	19,100		13:28:29	13:11
2-SEC RECORDS WITH SORTS	359	(ACT_P >0 kBq)	13:28:31	13:15
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				13:19
2 DETECTORS	90	85.7%		
3 DETECTORS	12	11.4%		
4 DETECTORS	3	2.9%		
5 DETECTORS	0	0.0%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	105			
NET 2-SEC RECORDS WITH SORTS	254			
2-SEC PERIODS WITH NO SORTS	18,846			
AVG TIME BETWEEN 2-SEC SORTS	150.4 sec			

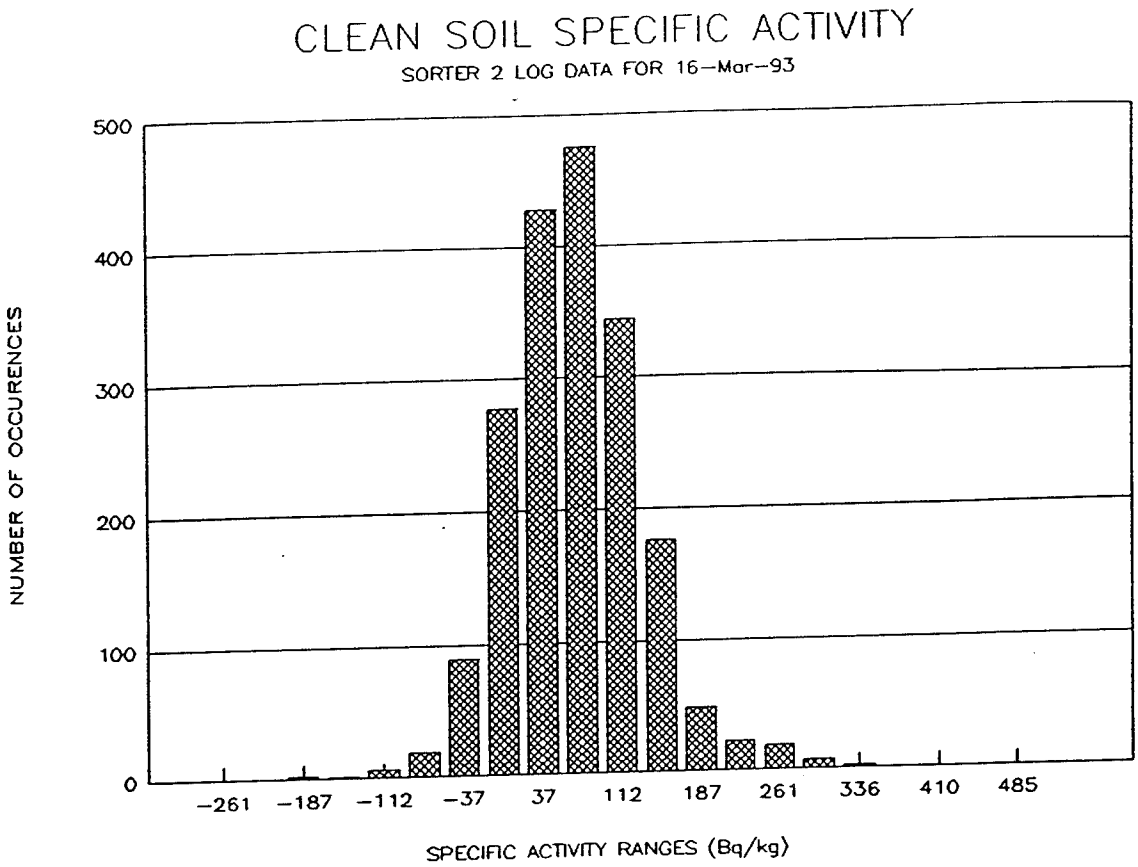
1-GATE SORTS		190	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	8	4.2%	-14000	0	-261	4000	44	12.3%	4
2	36	18.9%	-12000	0	-224	8000	147	40.9%	8
3	39	20.5%	-10000	2	-187	12000	55	15.3%	12
4	44	23.2%	-8000	1	-149	16000	29	8.1%	16
5	32	16.8%	-6000	6	-112	20000	10	2.8%	20
6	23	12.1%	-4000	18	-75	24000	12	3.3%	24
7	7	3.7%	-2000	90	-37	28000	10	2.8%	28
8	1	0.5%	0	277	0	32000	10	2.8%	32
TOTAL	190		2000	428	37	36000	7	1.9%	36
			4000	476	75	40000	4	1.1%	40
2-GATE SORTS		169	6000	343	112	44000	1	0.3%	44
DETECTR	SORTS	FREQ%	8000	176	149	48000	5	1.4%	48
8			10000	49	187	52000	3	0.8%	52
9	21	12.4%	12000	22	224	56000	1	0.3%	56
10	28	16.6%	14000	18	261	60000	4	1.1%	60
11	39	23.1%	16000	7	299	64000	5	1.4%	64
12	33	19.5%	18000	2	336	68000	1	0.3%	68
13	30	17.8%	20000	0	373	72000	0	0.0%	72
14	15	8.9%	22000	0	410	76000	0	0.0%	76
15	3	1.8%	24000	0	448	80000	0	0.0%	80
TOTAL	169		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	11	3.1%	>84
			TOTAL	1915		TOTAL	359		

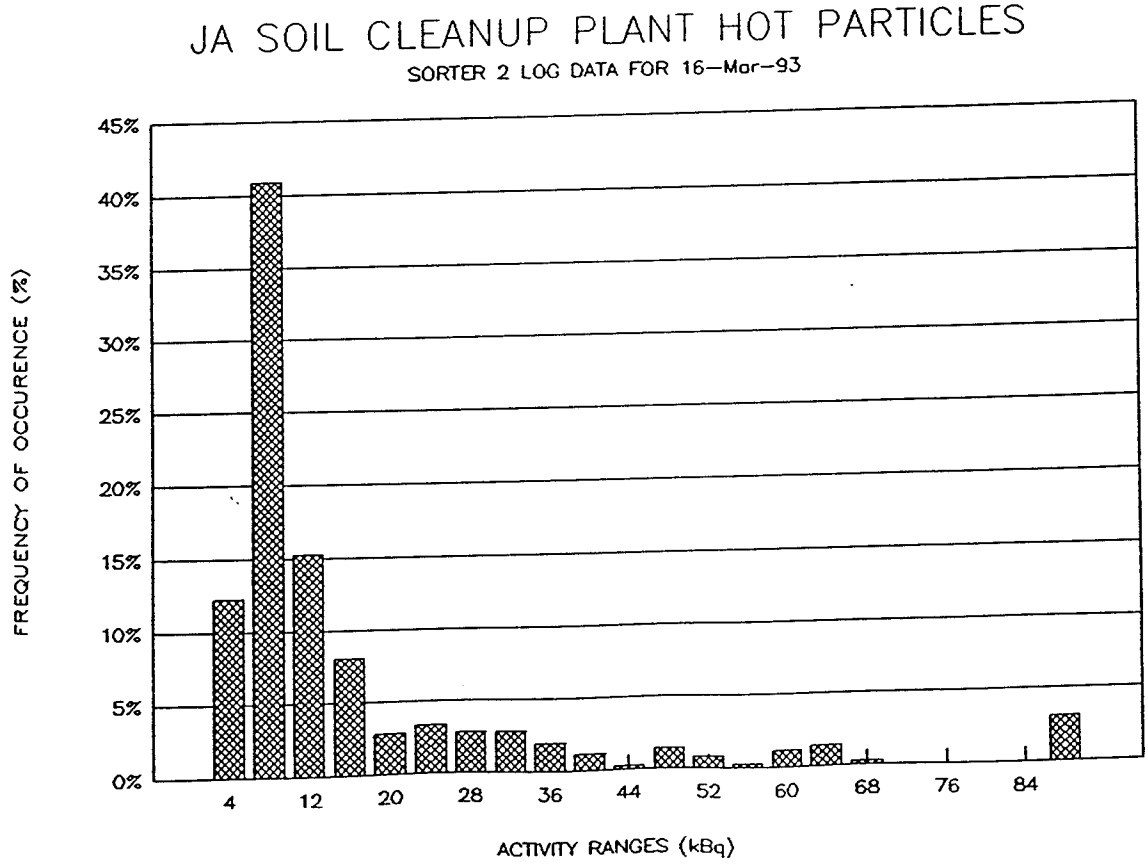
SUMMARY TOTALS

HOT PARTICLE EVENTS	358	SORTS BY ONE GATE ONLY	190
MULTIPARTICLE EVENTS	602	SORTS BY TWO GATES	169
DISTRIBUTED EVENTS	411		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 16-Mar-93
NUMBER OF OCCURENCES
500
400
300
200
100
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 16-Mar-93
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 15-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.74 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.53 tons	95.6 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.42 yd³	75.8 yd³	76.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,475 kBq		
MAXIMUM/SORT	221 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,773 kBq	(1,405)kBq	
MAXIMUM/SORT	163 kBq	12 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	5,263 Bq/kg	(15)Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:34 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.96 hr
DOWN-TIME	1.54 hr
TOTAL SYSTEM PAUSE	1.09 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.58 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	86.6%
PRODUCTIVITY	86.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,191		
NONPROCESS RECORDS (Test, calibration, etc)			26		
20-SEC PROCESS RECORDS			1,793		
TOTAL SORT			2	MD>0 & MND=0	
NO SORT			1,442	AD=0 & MD=0 & MND>0	
SOME SORT			349	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
				UNEXPLAIN TIME	PAUSE TIME
0<AD<1kBq & MD>0	1				
AD=0 & MD	2				
AD<0 & MD	0				
ACT_P <5 kBq	122	30.7%		08:41:56	05:51
				13:32:56	06:51

JA SOIL CLEANUP PLANT LOG SUMMARY

			15:20:34	08:28
2-SEC COUNT PERIODS	17,930			15:11
2-SEC RECORDS WITH SORTS	398	(ACT_P >0 kBq)		15:15
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				15:35
2 DETECTORS	90	81.1%		
3 DETECTORS	15	13.5%		
4 DETECTORS	4	3.6%		
5 DETECTORS	1	0.9%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	111			
NET 2-SEC RECORDS WITH SORTS	287			
2-SEC PERIODS WITH NO SORTS	17,643			
AVG TIME BETWEEN 2-SEC SORTS	124.9 sec			

1-GATE SORTS DETECTR	SORTS	205 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	3	1.5%	-14000	4	-261
2	15	7.3%	-12000	3	-224
3	25	12.2%	-10000	9	-187
4	47	22.9%	-8000	10	-149
5	42	20.5%	-6000	76	-112
6	34	16.6%	-4000	207	-75
7	32	15.6%	-2000	380	-37
8	7	3.4%	0	478	0
TOTAL	205		2000	323	37
			4000	179	75
2-GATE SORTS		193	6000	84	112
DETECTR	SORTS	FREQ%	8000	33	149
8			10000	24	187
9	7	3.6%	12000	8	224
10	18	9.3%	14000	1	261
11	37	19.2%	16000	0	299
12	45	23.3%	18000	0	336
13	35	18.1%	20000	0	373
14	29	15.0%	22000	0	410
15	22	11.4%	24000	0	448
TOTAL	193		26000	0	485
			>28000	0	0
			TOTAL	1819	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	61	15.3%	4
8000	163	41.0%	8
12000	52	13.1%	12
16000	21	5.3%	16
20000	16	4.0%	20
24000	18	4.5%	24
28000	7	1.8%	28
32000	8	2.0%	32
36000	5	1.3%	36
40000	8	2.0%	40
44000	1	0.3%	44
48000	6	1.5%	48
52000	7	1.8%	52
56000	4	1.0%	56
60000	5	1.3%	60
64000	1	0.3%	64
68000	3	0.8%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	2	0.5%	84
>84000	10	2.5%	>84
TOTAL	398		

SUMMARY TOTALS

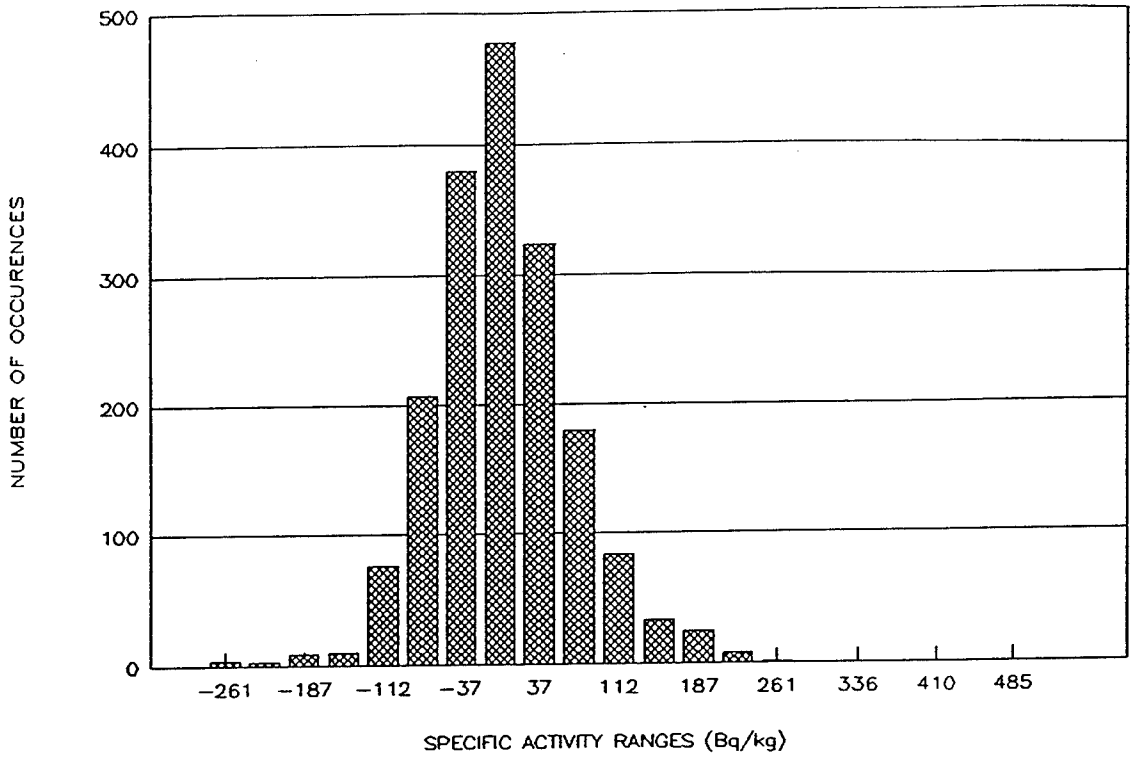
HOT PARTICLE EVENTS	384	SORTS BY ONE GATE ONLY	205
MULTIPARTICLE EVENTS	232	SORTS BY TWO GATES	193
DISTRIBUTED EVENTS	166		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

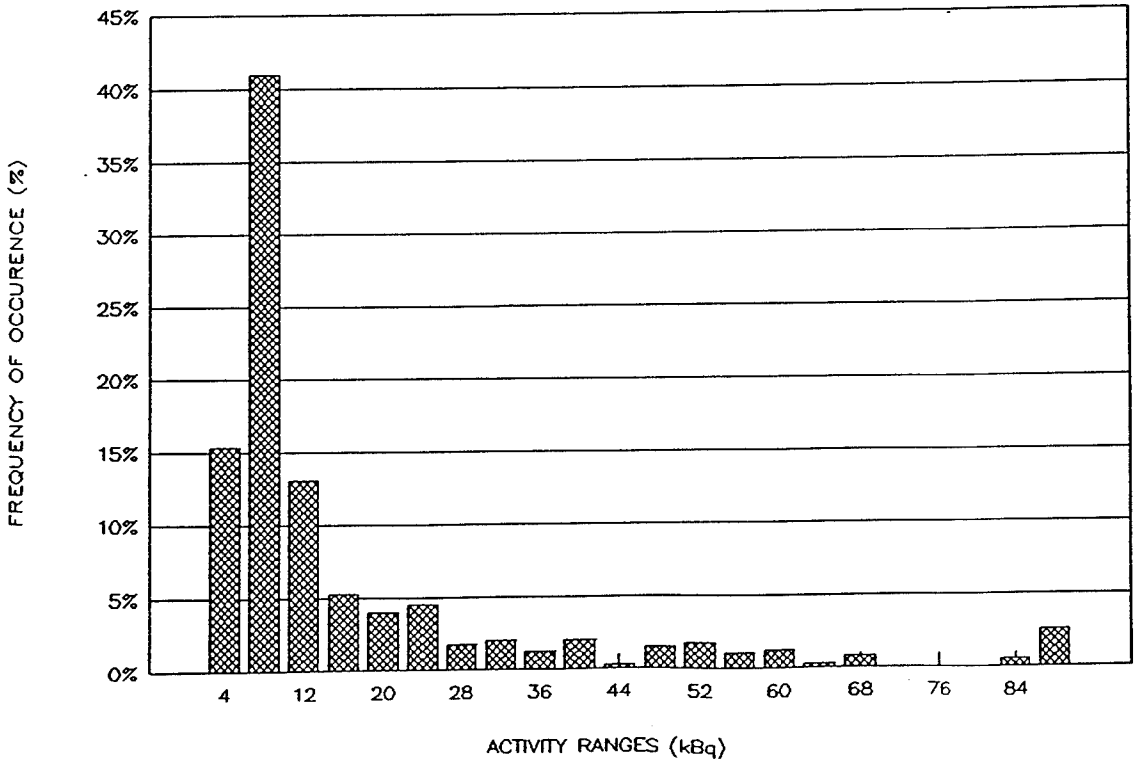
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 15–Mar–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 15–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 15-Mar-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.74 tons	89.6 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.2%
EQUIVALENT SOIL-IN-GROUND	0.58 yd³	71.0 yd³	71.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,793 kBq		
MAXIMUM/SORT	144 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,139 kBq	4,048 kBq	
MAXIMUM/SORT	122 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	4,257 Bq/kg	45 Bq/kg	

WORK HISTORY

WORK DAY START	06:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:25 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	12:00 PM	LUNCH PERIOD	0.0 hr

WORK HOURS	11.5 hr
AVAILABLE HOURS	11.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.37 hr
DOWN-TIME	2.13 hr
TOTAL SYSTEM PAUSE	1.79 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.42 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	81.4%
PRODUCTIVITY	81.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,088	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	1,686	
TOTAL SORT	2	MD>0 & MND=0
NO SORT	1,137	AD=0 & MD=0 & MND>0
SOME SORT	546	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	1	
0<AD<1kBq & MD>0	0	
AD=0 & MD	2	
AD<0 & MD	0	
ACT_P <5 kBq	103	25.6%

	UNEXPLAIN TIME	PAUSE TIME
	08:41:57	05:51
	13:27:37	08:28

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,860	
2-SEC RECORDS WITH SORTS	402	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	92	83.6%
3 DETECTORS	15	13.6%
4 DETECTORS	3	2.7%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	110	
NET 2-SEC RECORDS WITH SORTS	292	
2-SEC PERIODS WITH NO SORTS	16,568	
AVG TIME BETWEEN 2-SEC SORTS	115.5	sec

1-GATE SORTS		211	ACT_ND	NUMBER	SPEC_A		ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)		(Bq)	(#)		(kBq)
1	6	2.8%	-14000	0	-261		4000	49	12.2%	4
2	30	14.2%	-12000	2	-224		8000	167	41.5%	8
3	57	27.0%	-10000	0	-187		12000	55	13.7%	12
4	52	24.6%	-8000	2	-149		16000	33	8.2%	16
5	34	16.1%	-6000	15	-112		20000	16	4.0%	20
6	16	7.6%	-4000	37	-75		24000	18	4.5%	24
7	12	5.7%	-2000	115	-37		28000	14	3.5%	28
8	4	1.9%	0	226	0		32000	11	2.7%	32
TOTAL	211		2000	349	37		36000	9	2.2%	36
			4000	403	75		40000	3	0.7%	40
2-GATE SORTS		191	6000	309	112		44000	2	0.5%	44
DETECTR	SORTS	FREQ%	8000	160	149		48000	3	0.7%	48
8			10000	52	187		52000	1	0.2%	52
9	15	7.9%	12000	18	224		56000	4	1.0%	56
10	40	20.9%	14000	3	261		60000	6	1.5%	60
11	54	28.3%	16000	0	299		64000	1	0.2%	64
12	37	19.4%	18000	0	336		68000	2	0.5%	68
13	23	12.0%	20000	0	373		72000	1	0.2%	72
14	12	6.3%	22000	0	410		76000	0	0.0%	76
15	10	5.2%	24000	0	448		80000	0	0.0%	80
TOTAL	191		26000	0	485		84000	0	0.0%	84
			>28000	0	0		>84000	7	1.7%	>84
			TOTAL	1691			TOTAL	402		

SUMMARY TOTALS

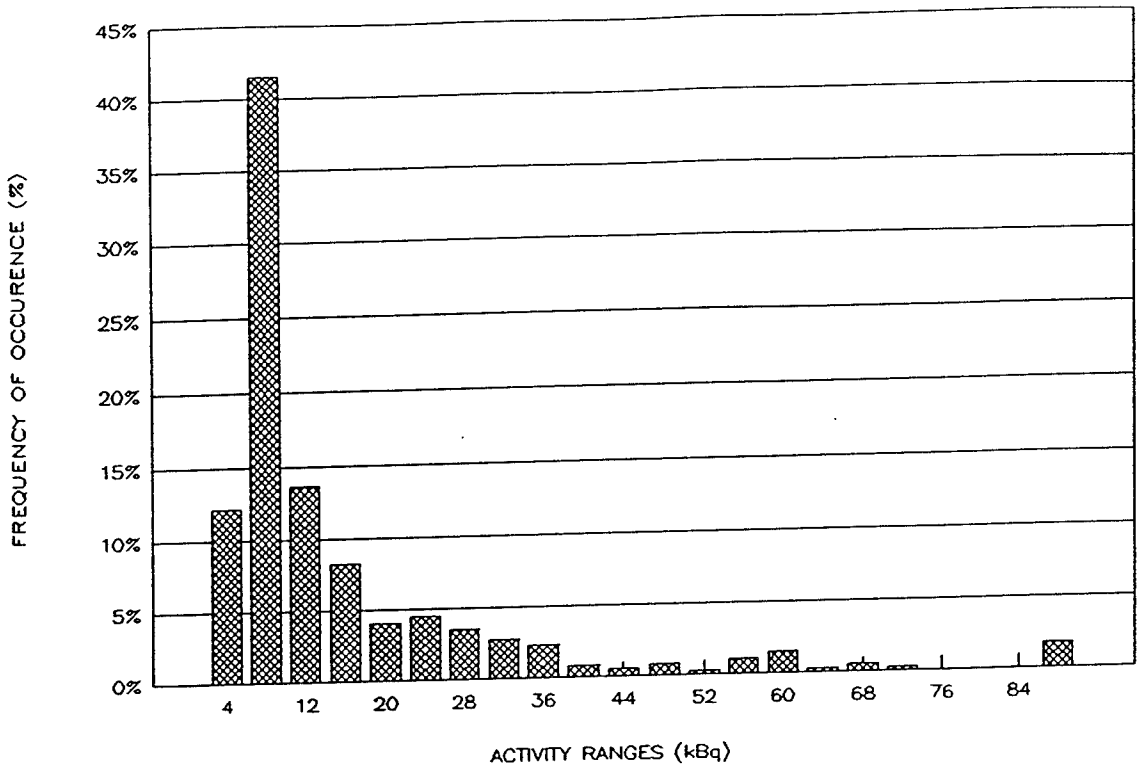
HOT PARTICLE EVENTS	392	SORTS BY ONE GATE ONLY	211
MULTIPARTICLE EVENTS	536	SORTS BY TWO GATES	191
DISTRIBUTED EVENTS	166		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

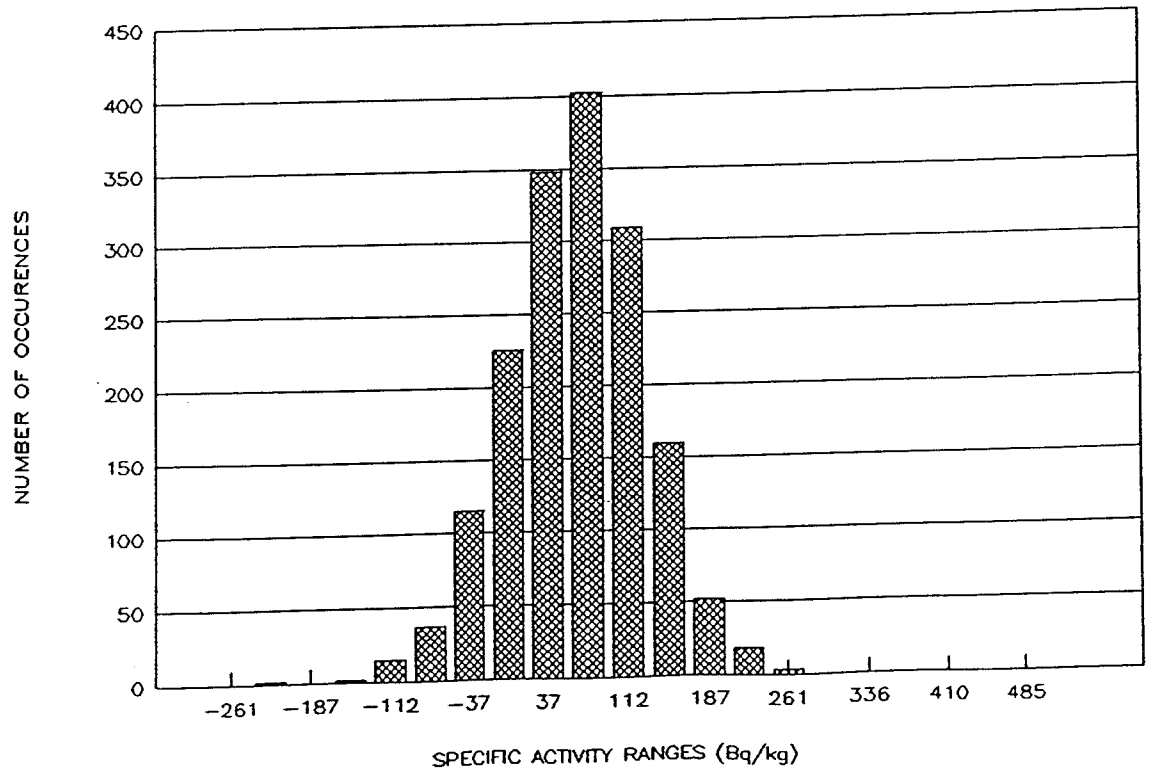
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 15–Mar–93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 15–Mar–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.31 tons	95.8 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.7%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.25 yd³	75.9 yd³	76.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,070 kBq		
MAXIMUM/SORT	655 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,445 kBq	(789)kBq	
MAXIMUM/SORT	398 kBq	12 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	7,911 Bq/kg	(8)Bq/kg	

WORK HISTORY

WORK DAY START	04:45 AM	WORK DAY END	03:30 PM
PLANT START-UP	04:45 AM	PLANT SHUT-DOWN	03:30 PM
START SOIL PROCESSING	05:16 AM	END SOIL PROCESSING	03:13 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.8 hr
AVAILABLE HOURS	10.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.96 hr
DOWN-TIME	0.79 hr
TOTAL SYSTEM PAUSE	0.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.53 hr
SHUT-DOWN	0.27 hr
PLANT PERFORMANCE	92.7%
PRODUCTIVITY	92.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,083	
NONPROCESS RECORDS (Test, calibration, etc)		13	
20-SEC PROCESS RECORDS		1,793	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,529	AD=0 & MD=0 & MND>0
SOME SORT		264	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	70	24.1%	

UNEXPLAIN TIME	PAUSE TIME
None	04:46

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	17,930	
2-SEC RECORDS WITH SORTS	290	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	78	87.6%
3 DETECTORS	8	9.0%
4 DETECTORS	3	3.4%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	89	
NET 2-SEC RECORDS WITH SORTS	201	
2-SEC PERIODS WITH NO SORTS	17,729	
AVG TIME BETWEEN 2-SEC SORTS	178.4 sec	

1-GATE SORTS DETECTR	SORTS	148 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	3	2.0%	-14000	1	-261
2	9	6.0%	-12000	1	-224
3	13	8.7%	-10000	1	-187
4	29	19.5%	-8000	5	-149
5	38	25.5%	-6000	45	-112
6	22	14.8%	-4000	173	-75
7	26	17.4%	-2000	344	-37
8	9	6.0%	0	486	0
TOTAL	149		2000	405	37
			4000	205	75
2-GATE SORTS		142	6000	85	112
DETECTR	SORTS	FREQ%	8000	30	149
8			10000	14	187
9	6	4.2%	12000	9	224
10	16	11.2%	14000	0	261
11	26	18.2%	16000	0	299
12	26	18.2%	18000	0	336
13	29	20.3%	20000	0	373
14	25	17.5%	22000	0	410
15	15	10.5%	24000	0	448
TOTAL	143		26000	0	485
			>28000	0	0
			TOTAL	1804	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	31	10.6%	4
8000	118	40.4%	8
12000	49	16.8%	12
16000	19	6.5%	16
20000	14	4.8%	20
24000	9	3.1%	24
28000	6	2.1%	28
32000	9	3.1%	32
36000	1	0.3%	36
40000	5	1.7%	40
44000	4	1.4%	44
48000	2	0.7%	48
52000	6	2.1%	52
56000	1	0.3%	56
60000	2	0.7%	60
64000	3	1.0%	64
68000	1	0.3%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	12	4.1%	>84
TOTAL	292		

SUMMARY TOTALS

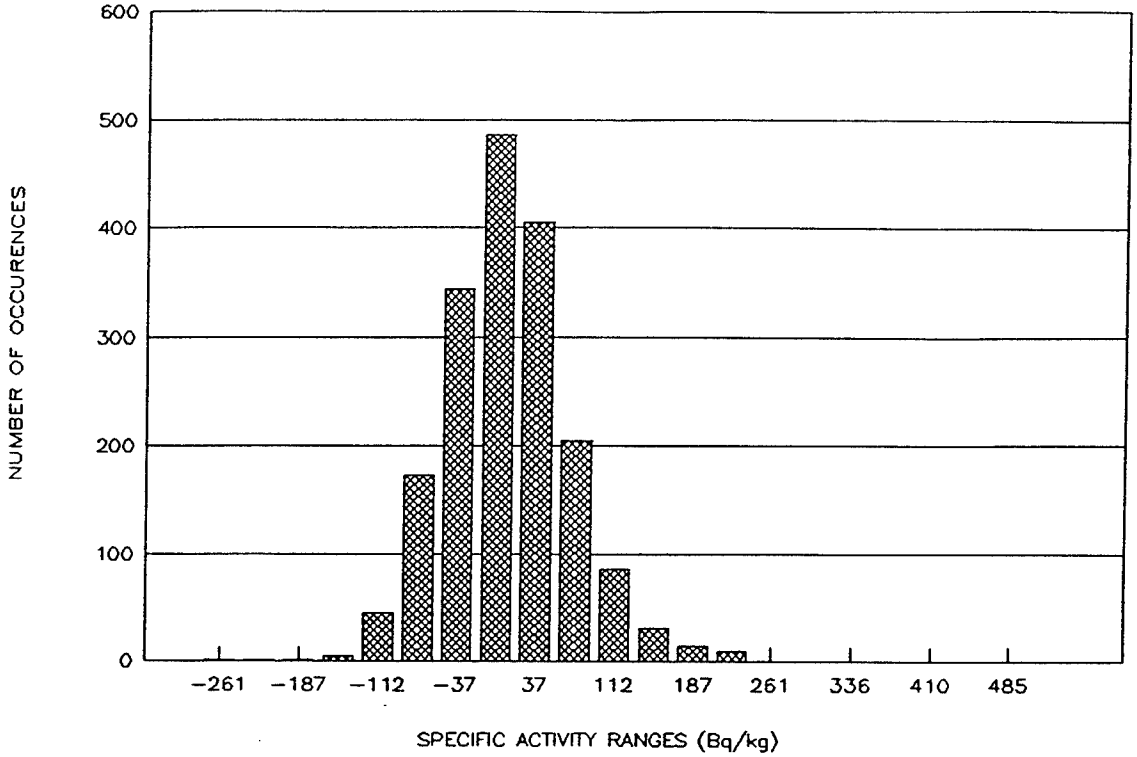
HOT PARTICLE EVENTS	276	SORTS BY ONE GATE ONLY	148
MULTIPARTICLE EVENTS	183	SORTS BY TWO GATES	142
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

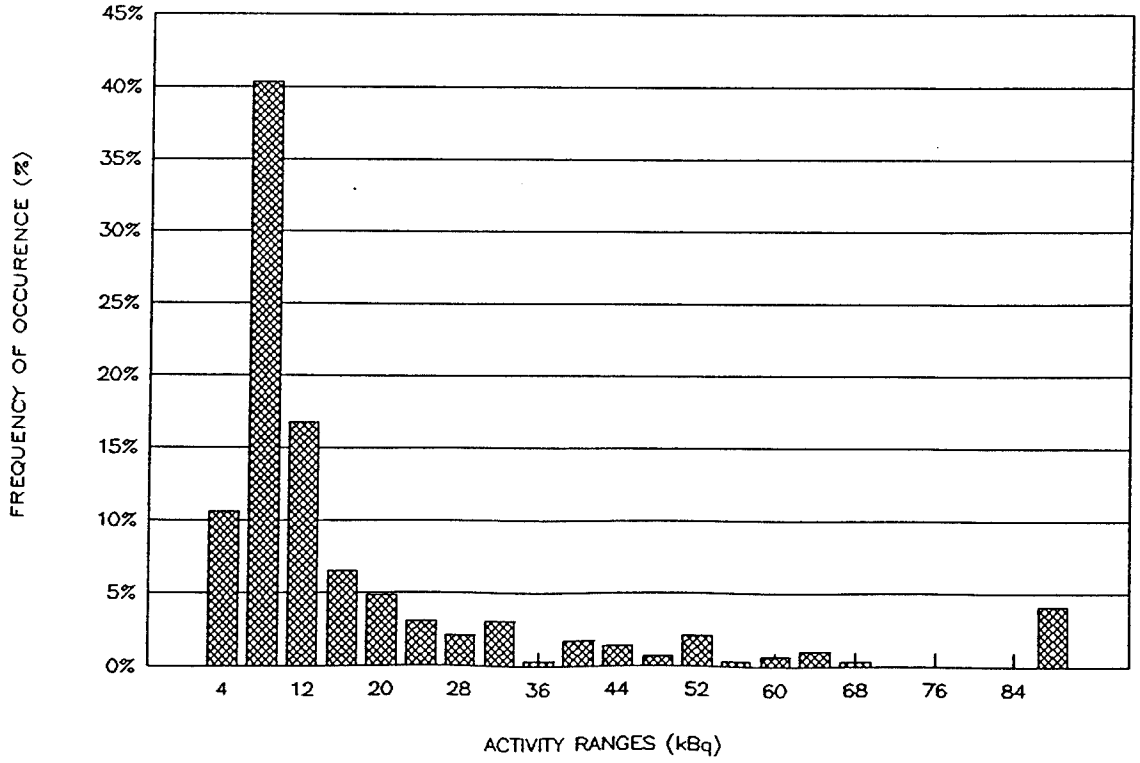
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 20-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 20-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 20-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.51 tons	62.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.2%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.41 yd³	49.9 yd³	50.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,092 kBq		
MAXIMUM/SORT	231 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,792 kBq	4,113 kBq	
MAXIMUM/SORT	179 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	3,499 Bq/kg	65 Bq/kg	

WORK HISTORY

WORK DAY START	04:45 AM	WORK DAY END	03:30 PM
PLANT START-UP	04:45 AM	PLANT SHUT-DOWN	03:30 PM
START SOIL PROCESSING	08:39 AM	END SOIL PROCESSING	03:14 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.8 hr
AVAILABLE HOURS	10.8 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.58 hr
DOWN-TIME	4.17 hr
TOTAL SYSTEM PAUSE	3.90 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	3.91 hr
SHUT-DOWN	0.25 hr
PLANT PERFORMANCE	61.2%
PRODUCTIVITY	61.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,364	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	1,184	
TOTAL SORT	3	MD>0 & MND=0
NO SORT	848	AD=0 & MD=0 & MND>0
SOME SORT	333	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	51	28.3%

UNEXPLAIN TIME	PAUSE TIME
11:43:31	04:46
15:01:11	12:40

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	11,840	
2-SEC RECORDS WITH SORTS	180	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	37	84.1%
3 DETECTORS	7	15.9%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	44	
NET 2-SEC RECORDS WITH SORTS	136	
2-SEC PERIODS WITH NO SORTS	11,704	
AVG TIME BETWEEN 2-SEC SORTS	174.1	sec

1-GATE SORTS DETECTR	SORTS	92 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	3	3.3%	-14000	0	-261	4000	24	13.3%	4
2	9	9.8%	-12000	0	-224	8000	75	41.7%	8
3	12	13.0%	-10000	0	-187	12000	31	17.2%	12
4	22	23.9%	-8000	2	-149	16000	9	5.0%	16
5	17	18.5%	-6000	2	-112	20000	4	2.2%	20
6	14	15.2%	-4000	14	-75	24000	8	4.4%	24
7	13	14.1%	-2000	39	-37	28000	3	1.7%	28
8	2	2.2%	0	112	0	32000	4	2.2%	32
TOTAL	92		2000	240	37	36000	3	1.7%	36
			4000	302	75	40000	2	1.1%	40
2-GATE SORTS		88	6000	254	112	44000	2	1.1%	44
DETECTR	SORTS	FREQ%	8000	118	149	48000	3	1.7%	48
8			10000	55	187	52000	3	1.7%	52
9	6	6.8%	12000	34	224	56000	1	0.6%	56
10	9	10.2%	14000	10	261	60000	2	1.1%	60
11	18	20.5%	16000	6	299	64000	0	0.0%	64
12	16	18.2%	18000	4	336	68000	0	0.0%	68
13	16	18.2%	20000	1	373	72000	0	0.0%	72
14	15	17.0%	22000	0	410	76000	1	0.6%	76
15	8	9.1%	24000	0	448	80000	0	0.0%	80
TOTAL	88		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	5	2.8%	>84
			TOTAL	1193		TOTAL	180		

SUMMARY TOTALS

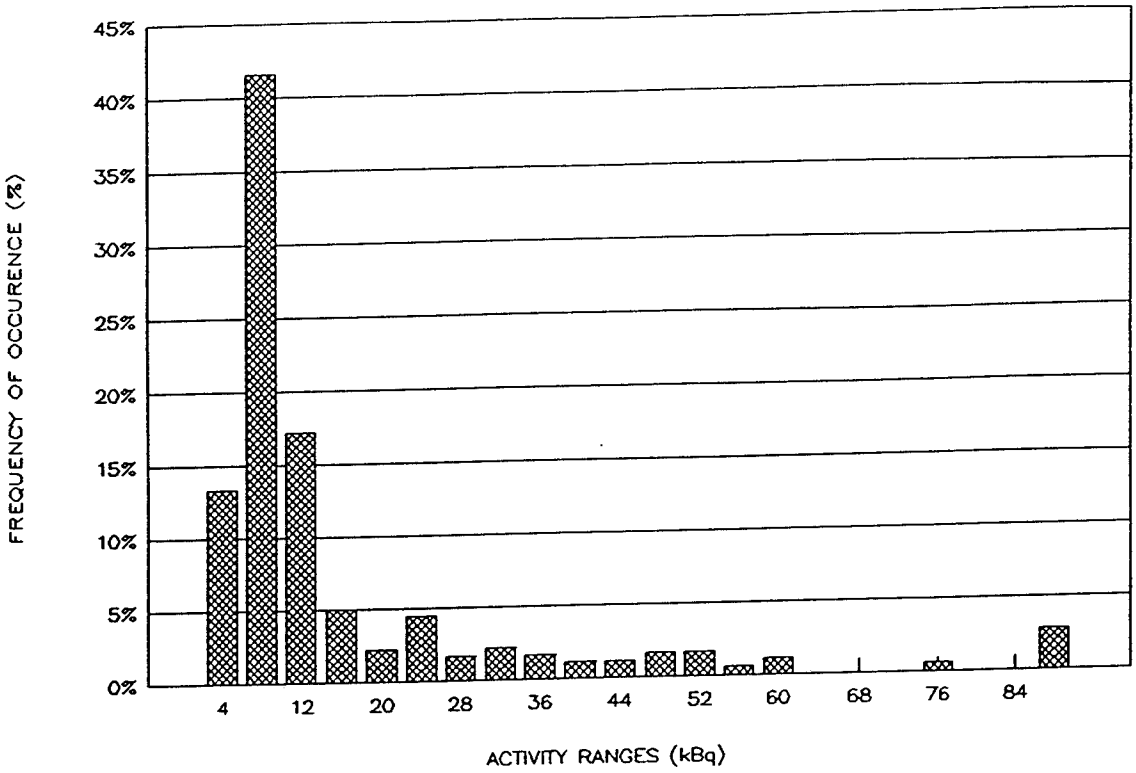
HOT PARTICLE EVENTS	180	SORTS BY ONE GATE ONLY	92
MULTIPARTICLE EVENTS	343	SORTS BY TWO GATES	88
DISTRIBUTED EVENTS	237		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

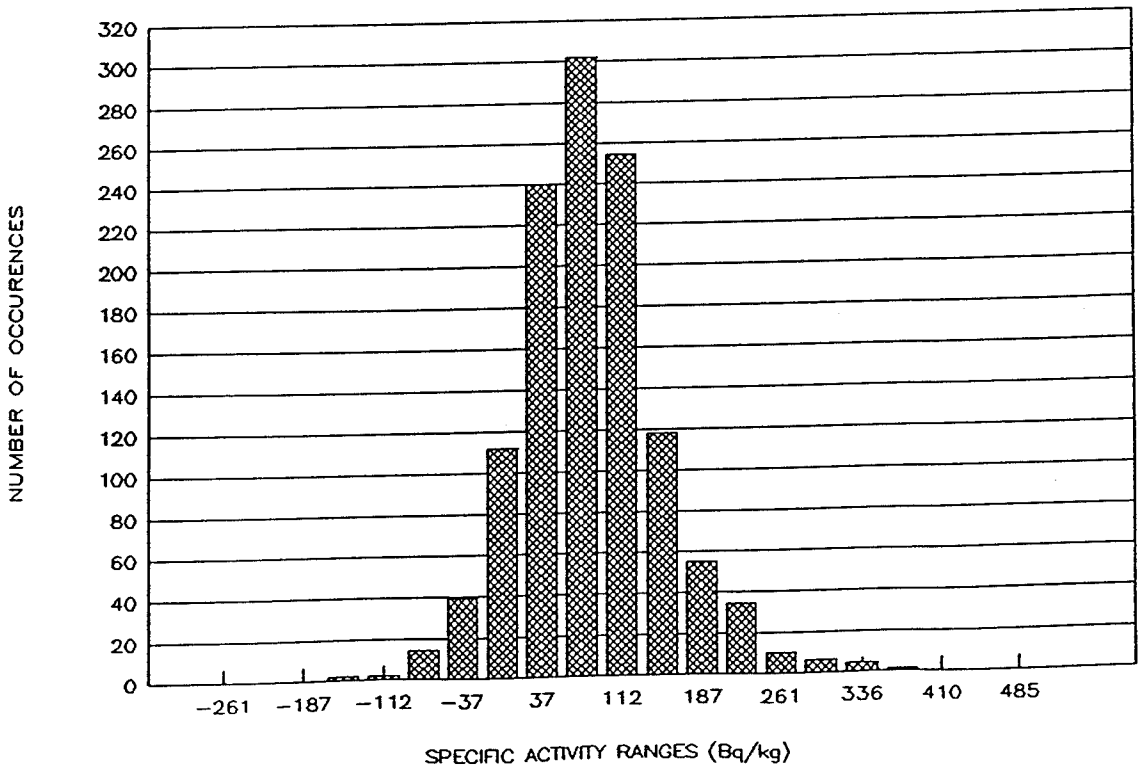
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20-Feb-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 20-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 19-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.21 tons	82.9 tons	
MAXIMUM/SORT	3.3 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.7%
EQUIVALENT SOIL-IN-GROUND	0.17 yd³	65.7 yd³	65.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	2,359 kBq		
MAXIMUM/SORT	162 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,119 kBq	(742)kBq	
MAXIMUM/SORT	85 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	5,363 Bq/kg	(9)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:20 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.62 hr
DOWN-TIME	1.38 hr
TOTAL SYSTEM PAUSE	0.69 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.34 hr
SHUT-DOWN	0.49 hr
PLANT PERFORMANCE	86.2%
PRODUCTIVITY	86.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,711		
NONPROCESS RECORDS (Test, calibration, etc)	17		
20-SEC PROCESS RECORDS	1,551		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	1,351	AD=0 & MD=0 & MND>0	
SOME SORT	200	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	60	37.5%	

UNEXPLAIN TIME	PAUSE TIME
10:51:47	07:38

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	15,510	
2-SEC RECORDS WITH SORTS	160	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	36	83.7%
3 DETECTORS	7	16.3%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	43	
NET 2-SEC RECORDS WITH SORTS	117	
2-SEC PERIODS WITH NO SORTS	15,393	
AVG TIME BETWEEN 2-SEC SORTS	265.1	sec

1-GATE SORTS		82	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	5	6.1%	-14000	1	-261
2	7	8.5%	-12000	0	-224
3	8	9.8%	-10000	1	-187
4	20	24.4%	-8000	5	-149
5	15	18.3%	-6000	46	-112
6	10	12.2%	-4000	137	-75
7	12	14.6%	-2000	315	-37
8	5	6.1%	0	436	0
TOTAL	82		2000	334	37
			4000	175	75
2-GATE SORTS		78	6000	74	112
DETECTR	SORTS	FREQ%	8000	24	149
8			10000	14	187
9	4	5.1%	12000	5	224
10	5	6.4%	14000	1	261
11	14	17.9%	16000	0	299
12	23	29.5%	18000	0	336
13	8	10.3%	20000	0	373
14	12	15.4%	22000	0	410
15	12	15.4%	24000	0	448
TOTAL	78		26000	0	485
			>28000	0	0
			TOTAL	1568	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	25	15.6%	4
8000	68	42.5%	8
12000	23	14.4%	12
16000	7	4.4%	16
20000	7	4.4%	20
24000	3	1.9%	24
28000	8	5.0%	28
32000	3	1.9%	32
36000	2	1.3%	36
40000	2	1.3%	40
44000	0	0.0%	44
48000	0	0.0%	48
52000	2	1.3%	52
56000	1	0.6%	56
60000	2	1.3%	60
64000	2	1.3%	64
68000	1	0.6%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	4	2.5%	>84
TOTAL	160		

SUMMARY TOTALS

HOT PARTICLE EVENTS	170	SORTS BY ONE GATE ONLY	82
MULTIPARTICLE EVENTS	139	SORTS BY TWO GATES	78
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

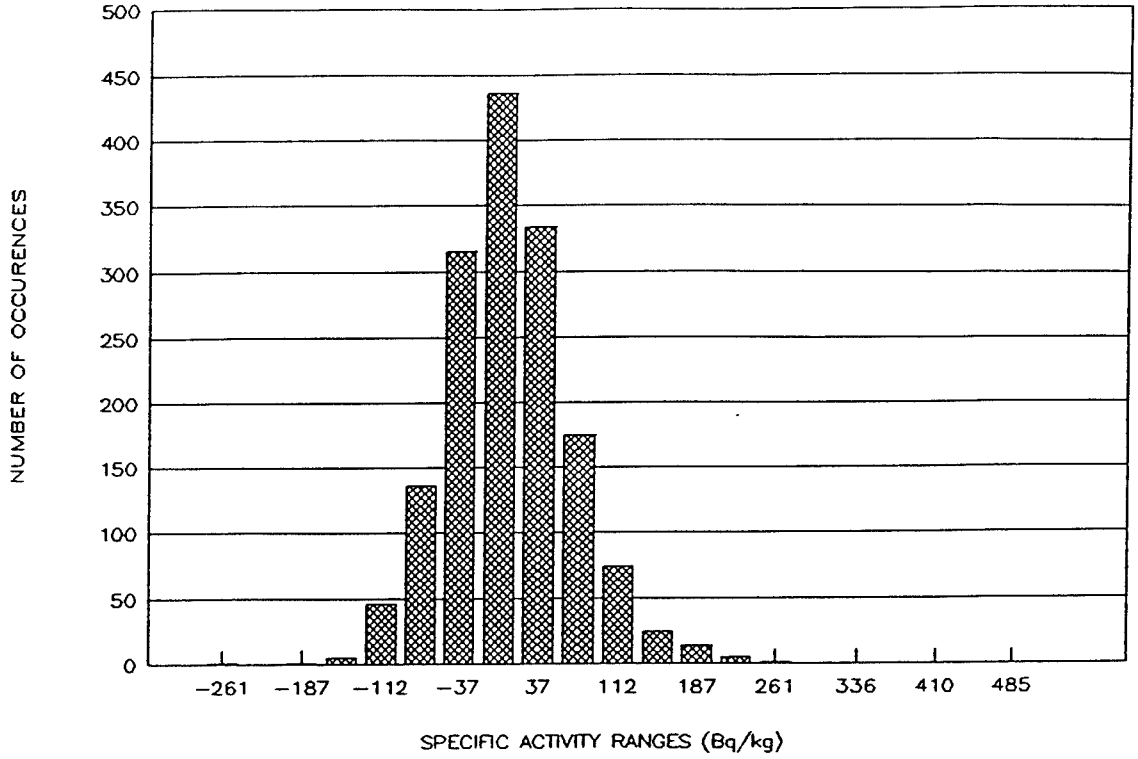
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

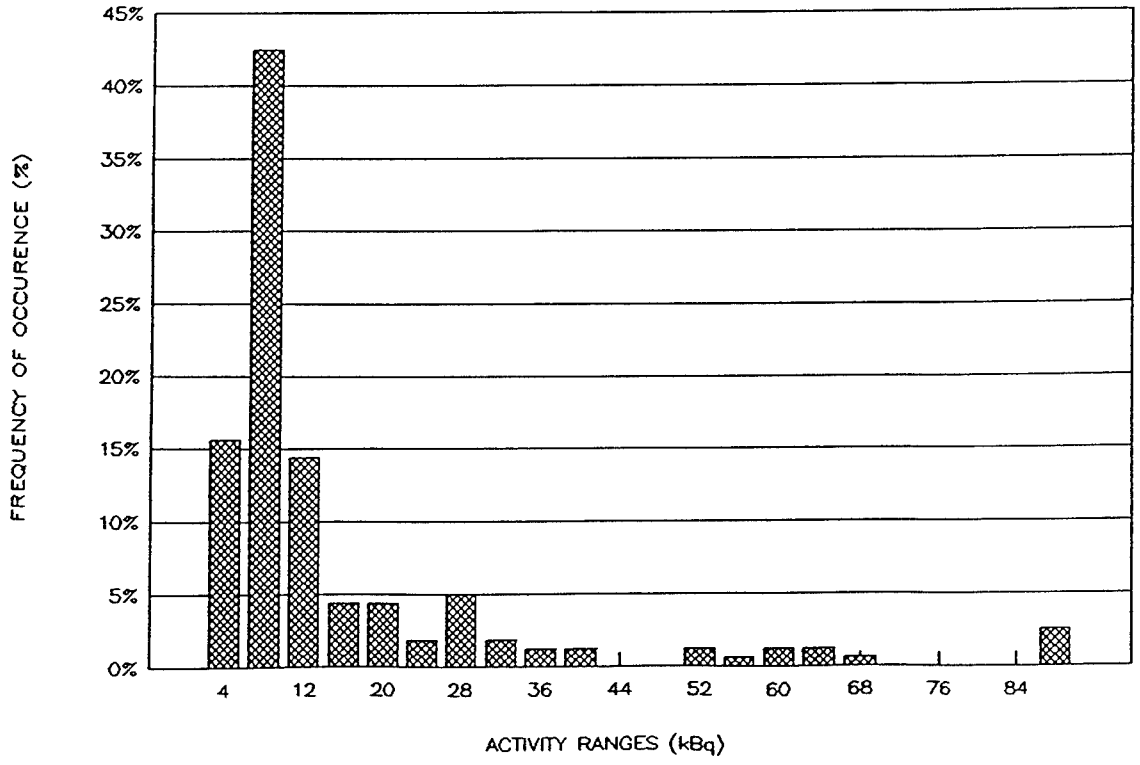
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 19-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 19-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 19-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.25 tons	60.0 tons	
MAXIMUM/SORT	3.3 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.2 kg	
			99.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.20 yd³	47.6 yd³	47.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,582 kBq		
MAXIMUM/SORT	71 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	995 kBq	3,129 kBq	
MAXIMUM/SORT	41 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	3,911 Bq/kg	52 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	10:45 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.25 hr
DOWN-TIME	3.75 hr
TOTAL SYSTEM PAUSE	3.11 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	3.75 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	62.5%
PRODUCTIVITY	62.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,243	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	1,125	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	866 AD=0 & MD=0 & MND>0	
SOME SORT	259 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	31	26.3%

UNEXPLAIN TIME	PAUSE TIME
None	07:38

2-SEC COUNT PERIODS	11,250	
2-SEC RECORDS WITH SORTS	118	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	19	90.5%
3 DETECTORS	2	9.5%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	21	
NET 2-SEC RECORDS WITH SORTS	97	
2-SEC PERIODS WITH NO SORTS	11,153	
AVG TIME BETWEEN 2-SEC SORTS	232.0	sec

1-GATE SORTS		61	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	3	4.9%	-14000	0	-261	4000	17	14.4%	4
2	15	24.6%	-12000	2	-224	8000	40	33.9%	8
3	8	13.1%	-10000	1	-187	12000	21	17.8%	12
4	12	19.7%	-8000	1	-149	16000	10	8.5%	16
5	12	19.7%	-6000	3	-112	20000	10	8.5%	20
6	5	8.2%	-4000	12	-75	24000	5	4.2%	24
7	5	8.2%	-2000	56	-37	28000	2	1.7%	28
8	1	1.6%	0	135	0	32000	2	1.7%	32
TOTAL	61		2000	248	37	36000	3	2.5%	36
			4000	282	75	40000	0	0.0%	40
2-GATE SORTS		57	6000	235	112	44000	1	0.8%	44
DETECTR	SORTS	FREQ%	8000	95	149	48000	0	0.0%	48
8			10000	51	187	52000	2	1.7%	52
9	6	10.5%	12000	9	224	56000	2	1.7%	56
10	12	21.1%	14000	2	261	60000	0	0.0%	60
11	11	19.3%	16000	0	299	64000	1	0.8%	64
12	11	19.3%	18000	0	336	68000	1	0.8%	68
13	7	12.3%	20000	0	373	72000	1	0.8%	72
14	5	8.8%	22000	0	410	76000	0	0.0%	76
15	5	8.8%	24000	0	448	80000	0	0.0%	80
TOTAL	57		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	1132		TOTAL	118		

SUMMARY TOTALS

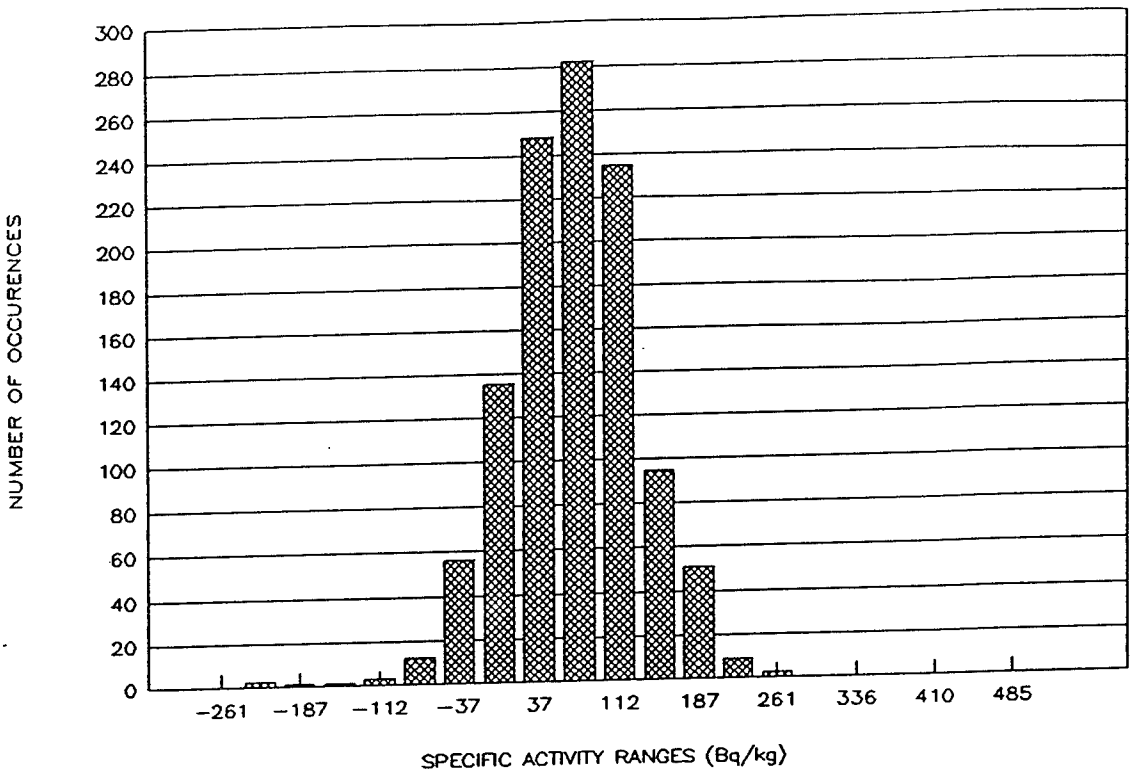
HOT PARTICLE EVENTS	122	SORTS BY ONE GATE ONLY	61
MULTIPARTICLE EVENTS	253	SORTS BY TWO GATES	57
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

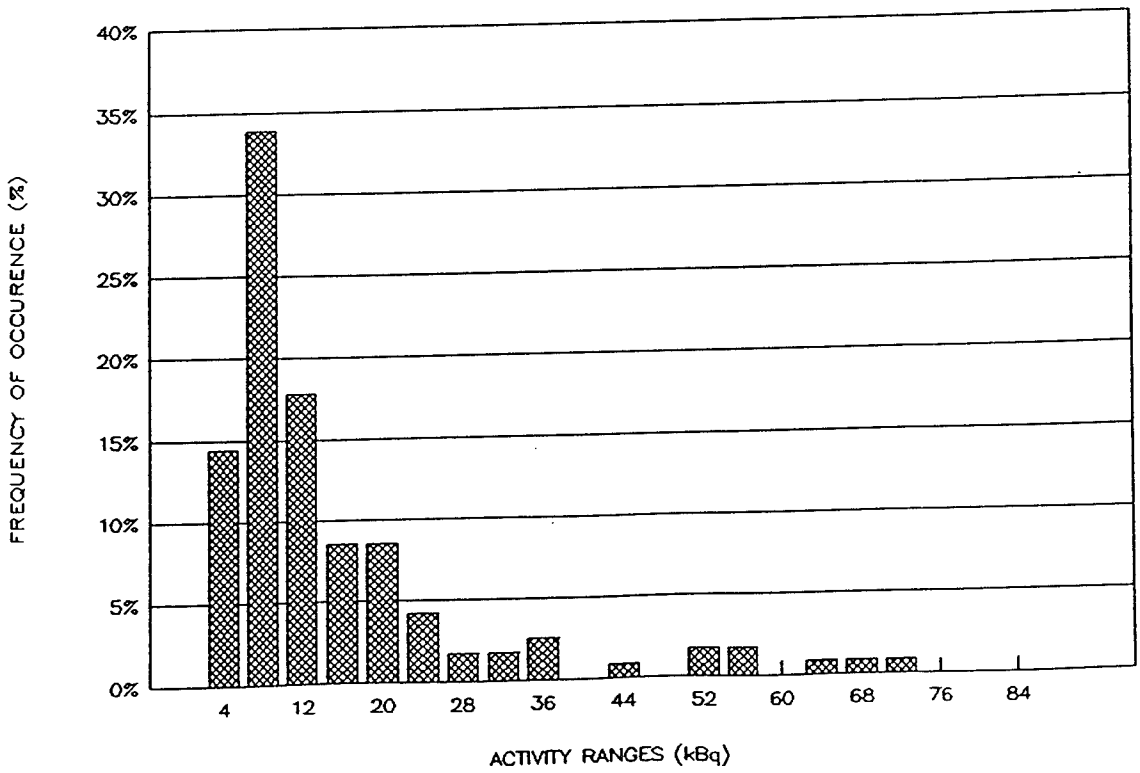
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 19–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 19–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 18-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.72 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.20 tons	83.5 tons	
MAXIMUM/SORT	3.3 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.8%
EQUIVALENT SOIL-IN-GROUND	0.16 yd³	66.2 yd³	66.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,482 kBq		
MAXIMUM/SORT	504 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,514 kBq	(972)kBq	
MAXIMUM/SORT	299 kBq	11 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	7,389 Bq/kg	(12)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:40 AM	END SOIL PROCESSING	05:20 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.68 hr
DOWN-TIME	1.32 hr
TOTAL SYSTEM PAUSE	1.67 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.67 hr
SHUT-DOWN	0.16 hr
PLANT PERFORMANCE	86.8%
PRODUCTIVITY	86.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,735	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,562	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,371	AD=0 & MD=0 & MND>0
SOME SORT		191	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	53	30.6%	

UNEXPLAIN TIME	PAUSE TIME
None	06:59

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	15,620	
2-SEC RECORDS WITH SORTS	173	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	46	82.1%
3 DETECTORS	9	16.1%
4 DETECTORS	1	1.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	56	
NET 2-SEC RECORDS WITH SORTS	117	
2-SEC PERIODS WITH NO SORTS	15,503	
AVG TIME BETWEEN 2-SEC SORTS	267.0	sec

1-GATE SORTS DETECTR	SORTS	89 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	6	6.7%	-14000	0	-261
2	10	11.2%	-12000	4	-224
3	8	9.0%	-10000	0	-187
4	23	25.8%	-8000	3	-149
5	19	21.3%	-6000	29	-112
6	11	12.4%	-4000	164	-75
7	6	6.7%	-2000	336	-37
8	6	6.7%	0	418	0
TOTAL	89		2000	324	37
			4000	188	75
2-GATE SORTS		84	6000	77	112
DETECTR	SORTS	FREQ%	8000	17	149
8			10000	9	187
9	6	7.1%	12000	3	224
10	9	10.7%	14000	0	261
11	16	19.0%	16000	0	299
12	17	20.2%	18000	0	336
13	21	25.0%	20000	0	373
14	8	9.5%	22000	0	410
15	7	8.3%	24000	0	448
TOTAL	84		26000	0	485
			>28000	0	0
			TOTAL	1572	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	22	12.7%	4
8000	72	41.6%	8
12000	22	12.7%	12
16000	15	8.7%	16
20000	7	4.0%	20
24000	4	2.3%	24
28000	6	3.5%	28
32000	2	1.2%	32
36000	2	1.2%	36
40000	2	1.2%	40
44000	1	0.6%	44
48000	1	0.6%	48
52000	1	0.6%	52
56000	2	1.2%	56
60000	2	1.2%	60
64000	3	1.7%	64
68000	3	1.7%	68
72000	0	0.0%	72
76000	1	0.6%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	5	2.9%	>84
TOTAL	173		

SUMMARY TOTALS

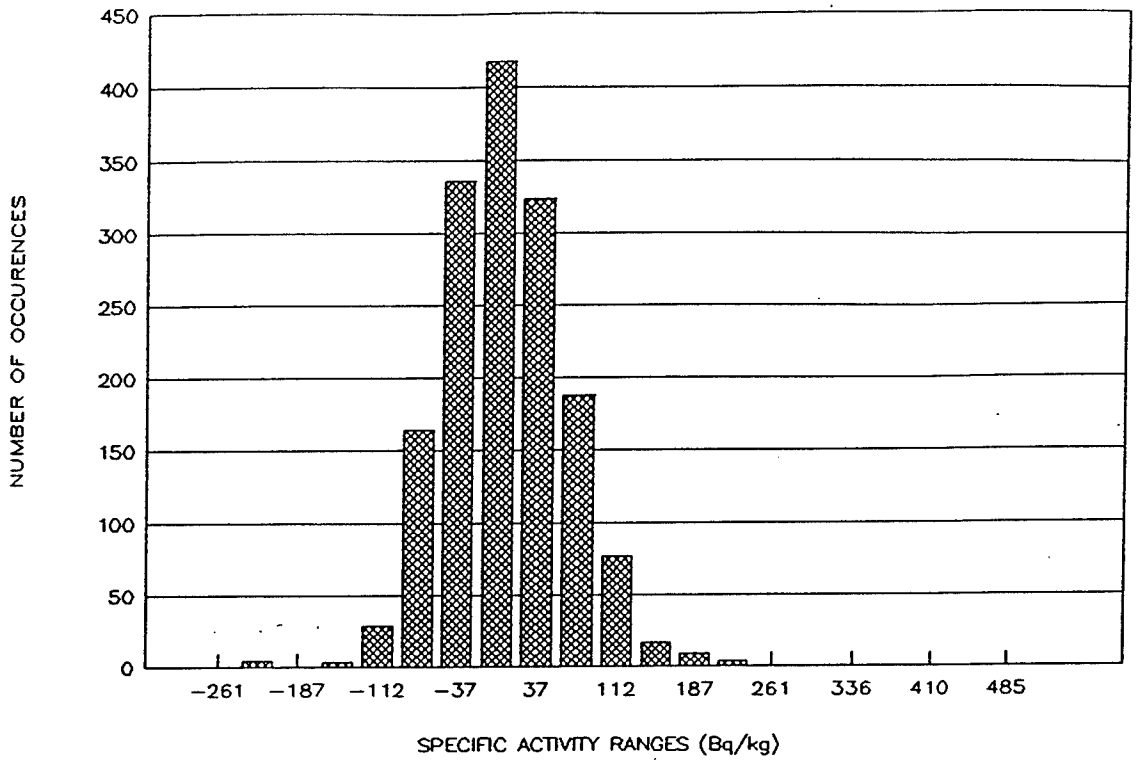
HOT PARTICLE EVENTS	165	SORTS BY ONE GATE ONLY	89
MULTIPARTICLE EVENTS	138	SORTS BY TWO GATES	84
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

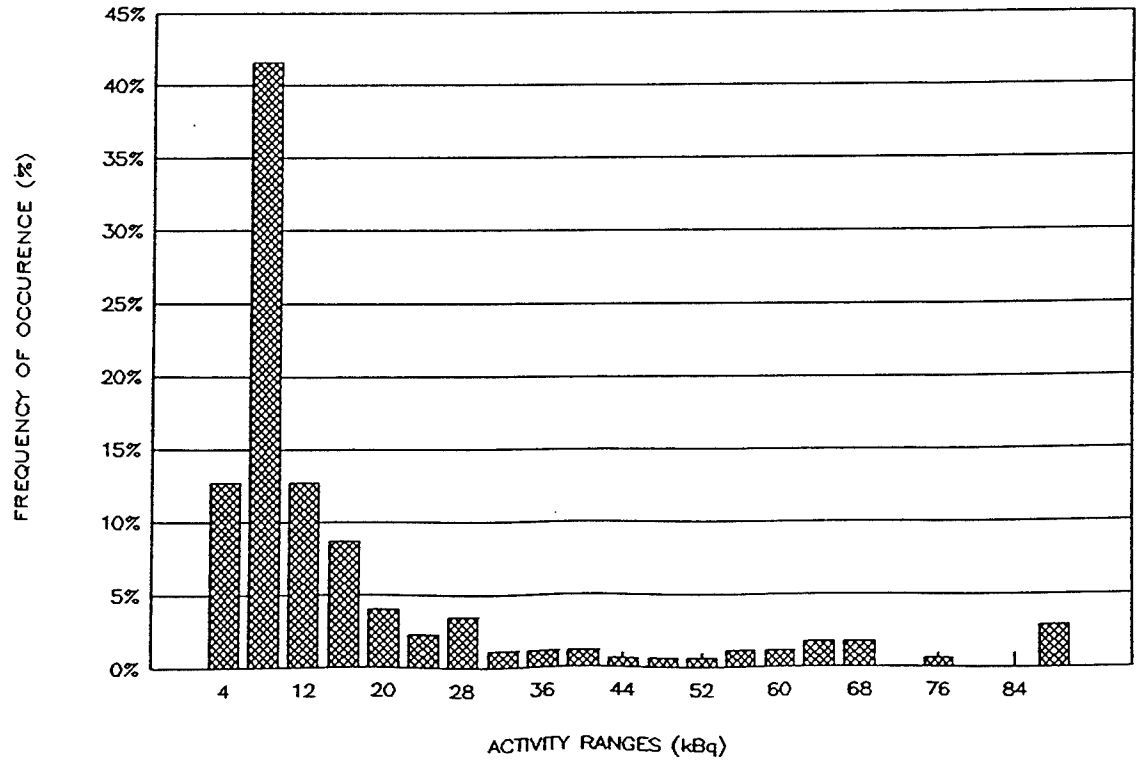
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 18-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 18-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 18-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.30 tons	58.2 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
			99.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.24 yd³	46.1 yd³	46.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,709 kBq		
MAXIMUM/SORT	126 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,173 kBq	3,083 kBq	
MAXIMUM/SORT	114 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	3,860 Bq/kg	53 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	10:47 AM	END SOIL PROCESSING	04:51 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.06 hr
DOWN-TIME	3.94 hr
TOTAL SYSTEM PAUSE	3.80 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	3.80 hr
SHUT-DOWN	0.64 hr
PLANT PERFORMANCE	60.6%
PRODUCTIVITY	60.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,213	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	1,091	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	768 AD=0 & MD=0 & MND>0	
SOME SORT	323 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	31	25.4%

UNEXPLAIN TIME	PAUSE TIME
None	06:59

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	10,910	
2-SEC RECORDS WITH SORTS	122	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	23	79.3%
3 DETECTORS	6	20.7%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	29	
NET 2-SEC RECORDS WITH SORTS	93	
2-SEC PERIODS WITH NO SORTS	10,817	
AVG TIME BETWEEN 2-SEC SORTS	234.6	sec

1-GATE SORTS		64	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	3	4.7%	-14000	0	-261	4000	11	9.0%	4
2	8	12.5%	-12000	1	-224	8000	53	43.4%	8
3	9	14.1%	-10000	2	-187	12000	24	19.7%	12
4	14	21.9%	-8000	0	-149	16000	8	6.6%	16
5	13	20.3%	-6000	2	-112	20000	6	4.9%	20
6	7	10.9%	-4000	22	-75	24000	4	3.3%	24
7	9	14.1%	-2000	78	-37	28000	1	0.8%	28
8	1	1.6%	0	141	0	32000	4	3.3%	32
TOTAL	64		2000	225	37	36000	2	1.6%	36
			4000	241	75	40000	0	0.0%	40
2-GATE SORTS		58	6000	192	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	103	149	48000	1	0.8%	48
8			10000	43	187	52000	0	0.0%	52
9	6	10.3%	12000	18	224	56000	5	4.1%	56
10	13	22.4%	14000	15	261	60000	0	0.0%	60
11	8	13.8%	16000	8	299	64000	0	0.0%	64
12	11	19.0%	18000	5	336	68000	0	0.0%	68
13	5	8.6%	20000	0	373	72000	1	0.8%	72
14	9	15.5%	22000	0	410	76000	0	0.0%	76
15	6	10.3%	24000	0	448	80000	0	0.0%	80
TOTAL	58		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	2	1.6%	>84
			TOTAL	1096		TOTAL	122		

SUMMARY TOTALS

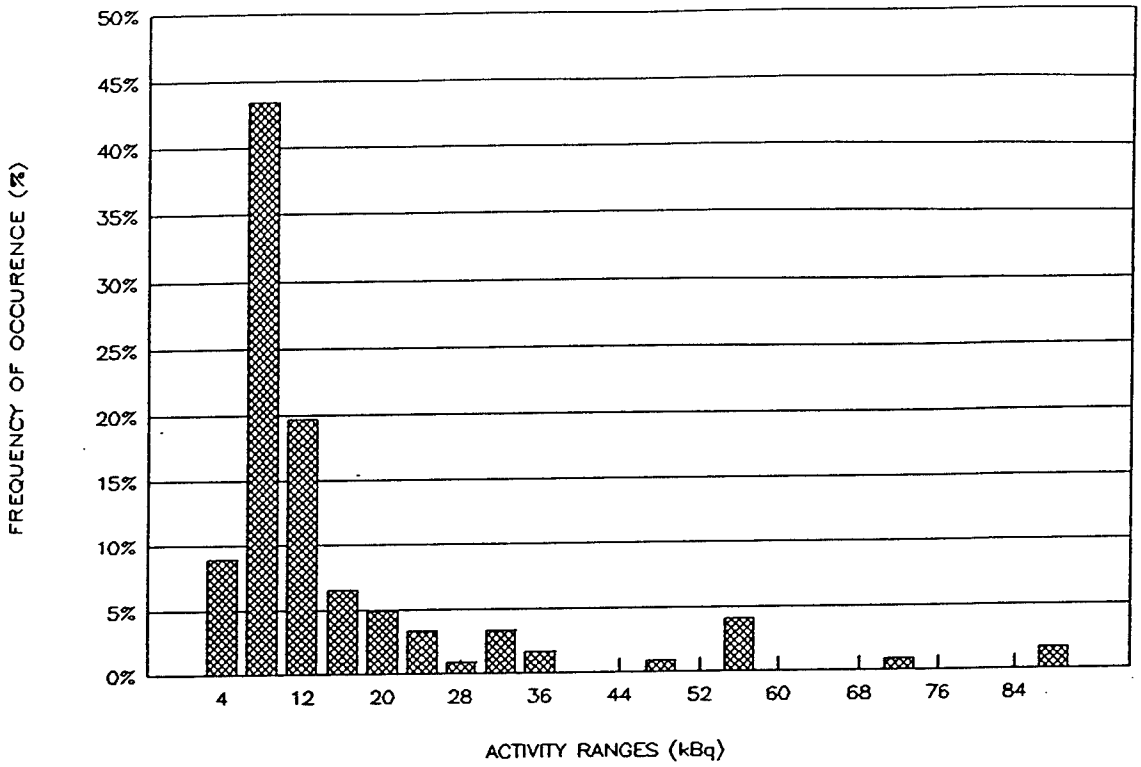
HOT PARTICLE EVENTS	122	SORTS BY ONE GATE ONLY	64
MULTIPARTICLE EVENTS	325	SORTS BY TWO GATES	58
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

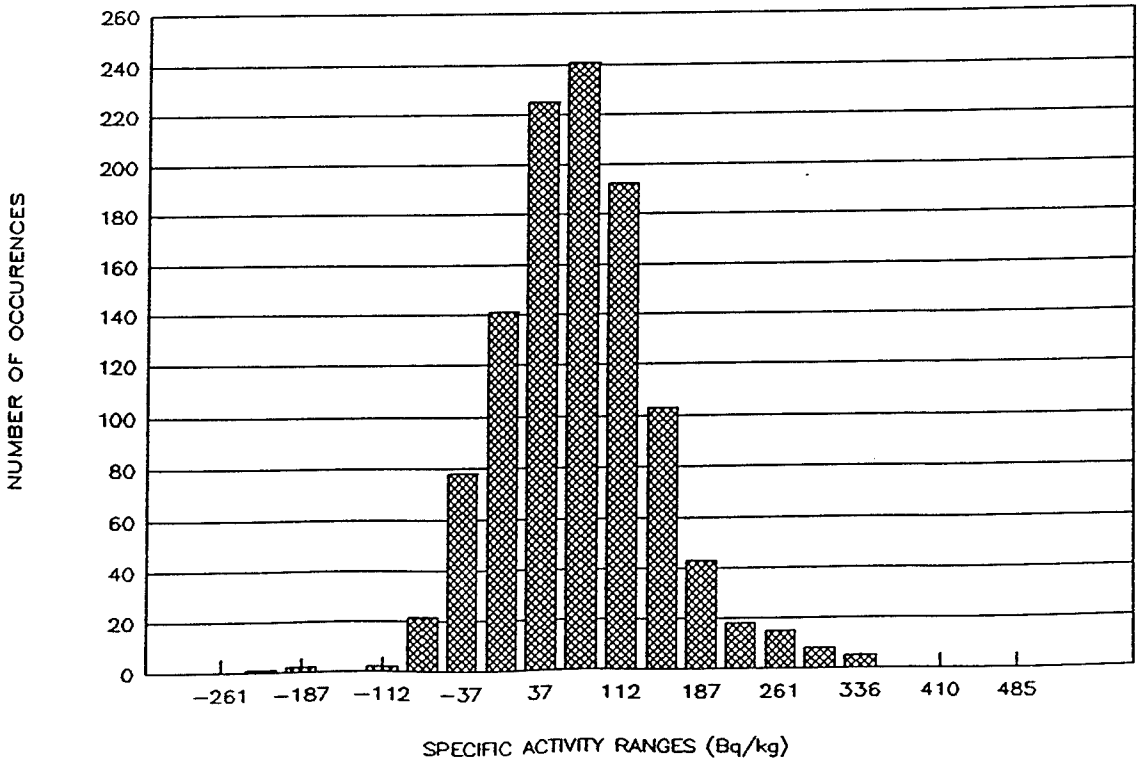
JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 18-Feb-93



CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 18-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 17-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.63 tons	93.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.3%
EQUIVALENT SOIL-IN-GROUND	0.50 yd³	74.2 yd³	74.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,732 kBq		
MAXIMUM/SORT	181 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,330 kBq	6,031 kBq	
MAXIMUM/SORT	167 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	3,715 Bq/kg	64 Bq/kg	

WORK HISTORY

WORK DAY START	06:30 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:30 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:54 AM	END SOIL PROCESSING	05:13 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.77 hr
DOWN-TIME	0.73 hr
TOTAL SYSTEM PAUSE	0.56 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.41 hr
SHUT-DOWN	0.28 hr
PLANT PERFORMANCE	93.0%
PRODUCTIVITY	93.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,996		
NONPROCESS RECORDS (Test, calibration, etc)	9		
20-SEC PROCESS RECORDS	1,758		
TOTAL SORT	2	MD>0 & MND=0	
NO SORT	1,231	AD=0 & MD=0 & MND>0	
SOME SORT	525	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	73	30.7%	

UNEXPLAIN TIME	PAUSE TIME
None	06:54

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		17,580	
2-SEC RECORDS WITH SORTS		238	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	42	87.5%
	3 DETECTORS	5	10.4%
	4 DETECTORS	1	2.1%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	48	
NET 2-SEC RECORDS WITH SORTS		190	
2-SEC PERIODS WITH NO SORTS		17,390	
AVG TIME BETWEEN 2-SEC SORTS		185.1	sec

1-GATE SORTS		127	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	5.5%	-14000	1	-261	4000	33	13.9%	4
2	19	15.0%	-12000	0	-224	8000	98	41.2%	8
3	14	11.0%	-10000	6	-187	12000	28	11.8%	12
4	30	23.6%	-8000	0	-149	16000	24	10.1%	16
5	27	21.3%	-6000	2	-112	20000	8	3.4%	20
6	13	10.2%	-4000	14	-75	24000	4	1.7%	24
7	14	11.0%	-2000	72	-37	28000	9	3.8%	28
8	3	2.4%	0	170	0	32000	6	2.5%	32
TOTAL	127		2000	333	37	36000	6	2.5%	36
			4000	424	75	40000	0	0.0%	40
2-GATE SORTS		111	6000	381	112	44000	1	0.4%	44
DETECTR	SORTS	FREQ%	8000	215	149	48000	2	0.8%	48
8			10000	96	187	52000	2	0.8%	52
9	16	14.4%	12000	37	224	56000	3	1.3%	56
10	10	9.0%	14000	11	261	60000	3	1.3%	60
11	17	15.3%	16000	2	299	64000	4	1.7%	64
12	27	24.3%	18000	3	336	68000	2	0.8%	68
13	18	16.2%	20000	0	373	72000	0	0.0%	72
14	13	11.7%	22000	0	410	76000	1	0.4%	76
15	10	9.0%	24000	0	448	80000	0	0.0%	80
TOTAL	111		26000	0	485	84000	1	0.4%	84
			>28000	0	0	>84000	3	1.3%	>84
			TOTAL	1767		TOTAL	238		

SUMMARY TOTALS

HOT PARTICLE EVENTS	241	SORTS BY ONE GATE ONLY	127
MULTIPARTICLE EVENTS	526	SORTS BY TWO GATES	111
DISTRIBUTED EVENTS	160		

REC CODE EXPLANATION

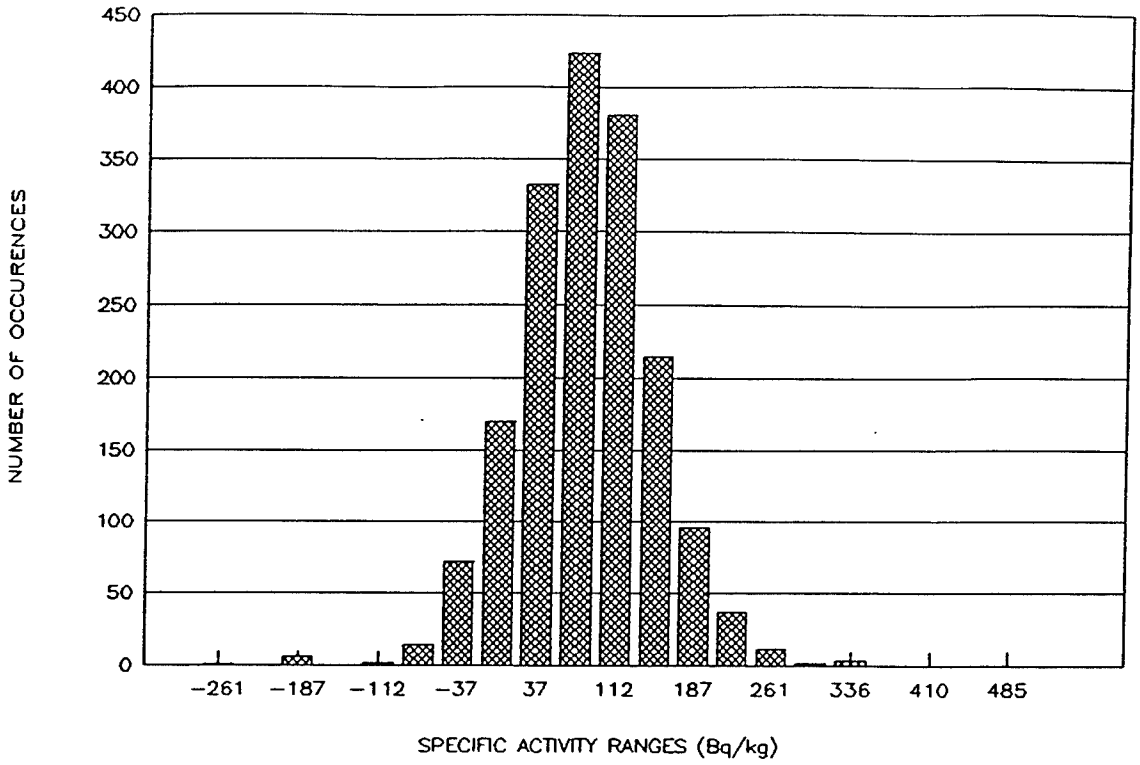
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

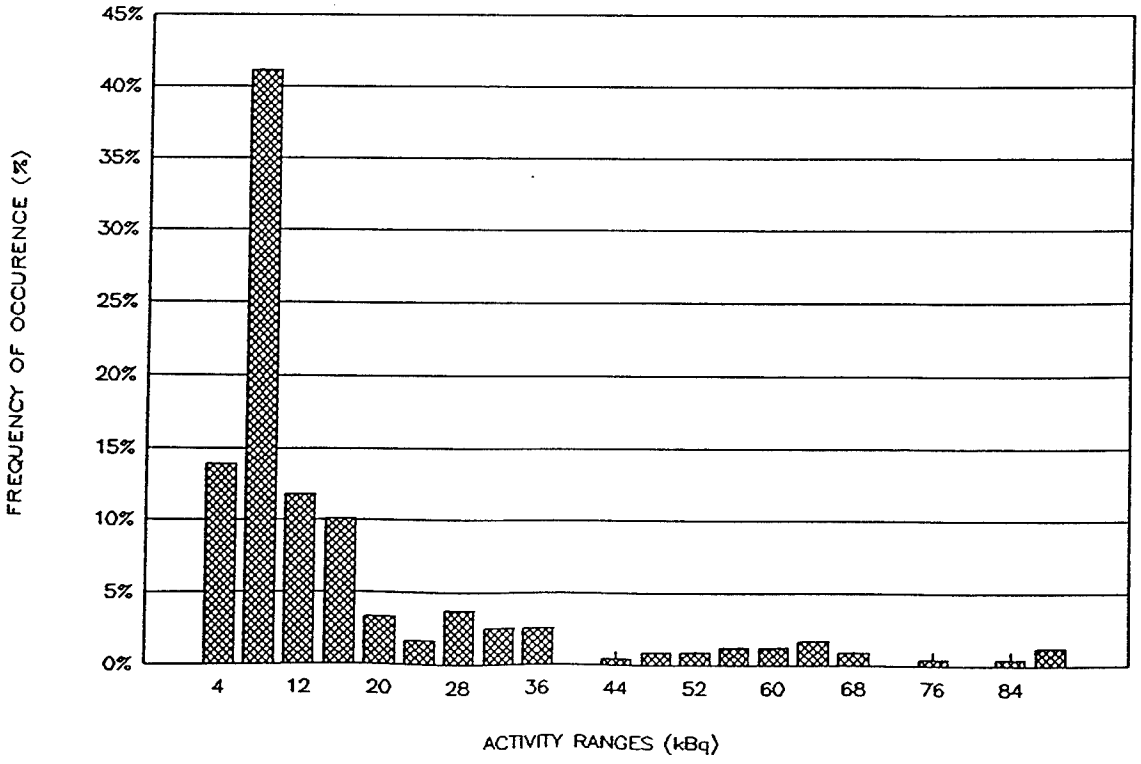
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 17-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 17-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 16-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.50 tons	93.8 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.40 yd³	74.3 yd³	74.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,750 kBq		
MAXIMUM/SORT	209 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,581 kBq	5,165 kBq	
MAXIMUM/SORT	159 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	5,143 Bq/kg	55 Bq/kg	

WORK HISTORY

WORK DAY START	06:30 AM	WORK DAY END	05:30 PM
PLANT START-UP	06:30 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	06:50 AM	END SOIL PROCESSING	05:19 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.77 hr
DOWN-TIME	0.73 hr
TOTAL SYSTEM PAUSE	0.72 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.34 hr
SHUT-DOWN	0.17 hr
PLANT PERFORMANCE	93.1%
PRODUCTIVITY	93.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,012	
NONPROCESS RECORDS (Test, calibration, etc)		9	
20-SEC PROCESS RECORDS		1,759	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,253	AD=0 & MD=0 & MND>0
SOME SORT		506	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	73	28.9%	

UNEXPLAIN TIME	PAUSE TIME
09:19:31	06:50
15:40:31	

2-SEC COUNT PERIODS		17,590	
2-SEC RECORDS WITH SORTS		253	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	58	84.1%
	3 DETECTORS	9	13.0%
	4 DETECTORS	2	2.9%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	69	
NET 2-SEC RECORDS WITH SORTS		184	
2-SEC PERIODS WITH NO SORTS		17,406	
AVG TIME BETWEEN 2-SEC SORTS		191.2	sec

1-GATE SORTS		132	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	3.0%	-14000	0	-261	4000	25	9.9%	4
2	16	12.1%	-12000	0	-224	8000	115	45.5%	8
3	13	9.8%	-10000	2	-187	12000	33	13.0%	12
4	31	23.5%	-8000	3	-149	16000	8	3.2%	16
5	28	21.2%	-6000	5	-112	20000	10	4.0%	20
6	20	15.2%	-4000	24	-75	24000	12	4.7%	24
7	15	11.4%	-2000	86	-37	28000	9	3.6%	28
8	5	3.8%	0	217	0	32000	7	2.8%	32
TOTAL	132		2000	360	37	36000	5	2.0%	36
			4000	445	75	40000	1	0.4%	40
2-GATE SORTS		121	6000	341	112	44000	2	0.8%	44
DETECTR	SORTS	FREQ%	8000	159	149	48000	1	0.4%	48
8			10000	69	187	52000	1	0.4%	52
9	7	5.8%	12000	34	224	56000	5	2.0%	56
10	13	10.7%	14000	13	261	60000	2	0.8%	60
11	20	16.5%	16000	10	299	64000	3	1.2%	64
12	28	23.1%	18000	0	336	68000	1	0.4%	68
13	28	23.1%	20000	0	373	72000	1	0.4%	72
14	17	14.0%	22000	0	410	76000	0	0.0%	76
15	8	6.6%	24000	0	448	80000	1	0.4%	80
TOTAL	121		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	11	4.3%	>84
			TOTAL	1768		TOTAL	253		

SUMMARY TOTALS

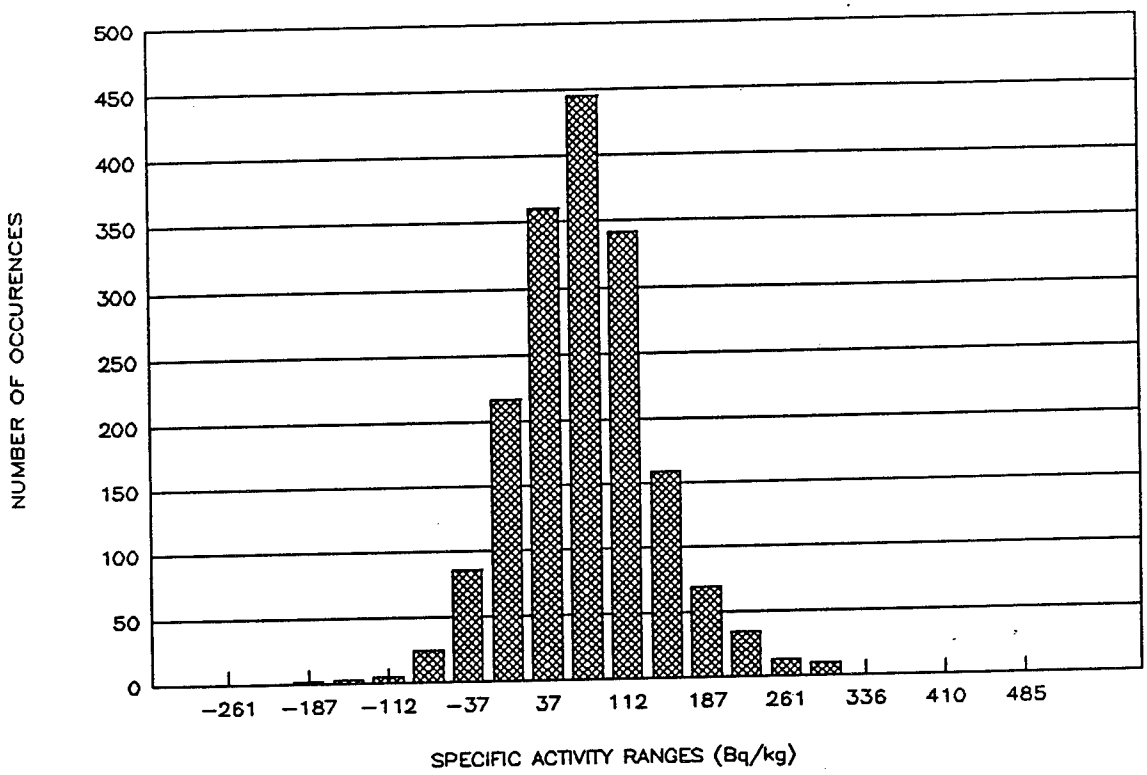
HOT PARTICLE EVENTS	252	SORTS BY ONE GATE ONLY	132
MULTIPARTICLE EVENTS	488	SORTS BY TWO GATES	121
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

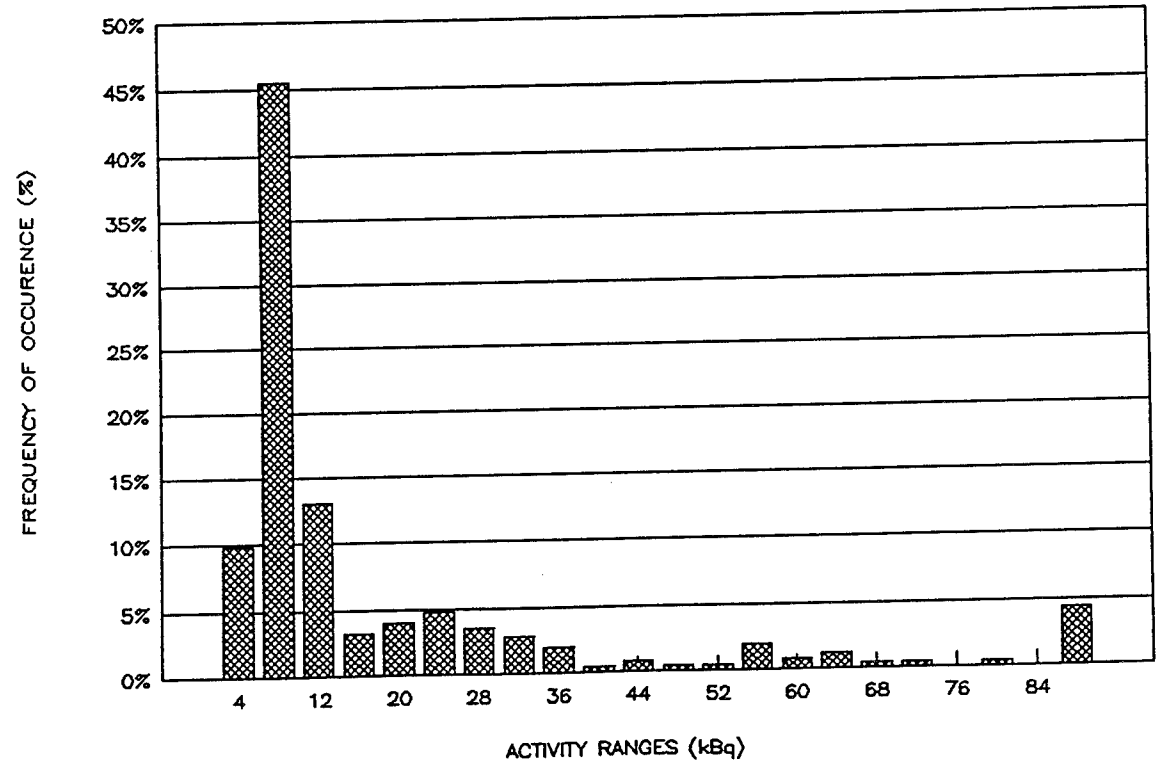
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 16–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 16–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 15-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.73 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.28 tons	72.1 tons	
MAXIMUM/SORT	3.3 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.22 yd³	57.2 yd³	57.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,055 kBq		
MAXIMUM/SORT	584 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,684 kBq	(560)kBq	
MAXIMUM/SORT	354 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	6,044 Bq/kg	(8)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	09:34 AM	END SOIL PROCESSING	05:08 PM
LUNCH START	12:00 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.51 hr
DOWN-TIME	2.99 hr
TOTAL SYSTEM PAUSE	1.33 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	2.58 hr
SHUT-DOWN	0.36 hr
PLANT PERFORMANCE	71.5%
PRODUCTIVITY	71.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,612	
NONPROCESS RECORDS (Test, calibration, etc)		24	
20-SEC PROCESS RECORDS		1,351	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		1,110	AD=0 & MD=0 & MND>0
SOME SORT		241	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	91	34.9%	

UNEXPLAIN TIME	PAUSE TIME
13:25:27	08:14

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,510	
2-SEC RECORDS WITH SORTS	261	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	56	78.9%
3 DETECTORS	13	18.3%
4 DETECTORS	2	2.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	71	
NET 2-SEC RECORDS WITH SORTS	190	
2-SEC PERIODS WITH NO SORTS	13,320	
AVG TIME BETWEEN 2-SEC SORTS	142.2 sec	

1-GATE SORTS DETECTR	SORTS	134 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	2	1.5%	-14000	2	-261	4000	52	19.9%	4
2	13	9.7%	-12000	3	-224	8000	112	42.9%	8
3	16	11.9%	-10000	7	-187	12000	23	8.8%	12
4	18	13.4%	-8000	10	-149	16000	19	7.3%	16
5	33	24.6%	-6000	50	-112	20000	7	2.7%	20
6	27	20.1%	-4000	133	-75	24000	14	5.4%	24
7	20	14.9%	-2000	297	-37	28000	9	3.4%	28
8	5	3.7%	0	300	0	32000	3	1.1%	32
TOTAL	134		2000	291	37	36000	5	1.9%	36
			4000	151	75	40000	2	0.8%	40
2-GATE SORTS		127	6000	61	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	32	149	48000	2	0.8%	48
8			10000	14	187	52000	1	0.4%	52
9	8	6.3%	12000	13	224	56000	1	0.4%	56
10	16	12.6%	14000	9	261	60000	2	0.8%	60
11	9	7.1%	16000	2	299	64000	1	0.4%	64
12	25	19.7%	18000	0	336	68000	0	0.0%	68
13	33	26.0%	20000	0	373	72000	4	1.5%	72
14	25	19.7%	22000	0	410	76000	1	0.4%	76
15	11	8.7%	24000	0	448	80000	0	0.0%	80
TOTAL	127		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	3	1.1%	>84
			TOTAL	1375		TOTAL	261		

SUMMARY TOTALS

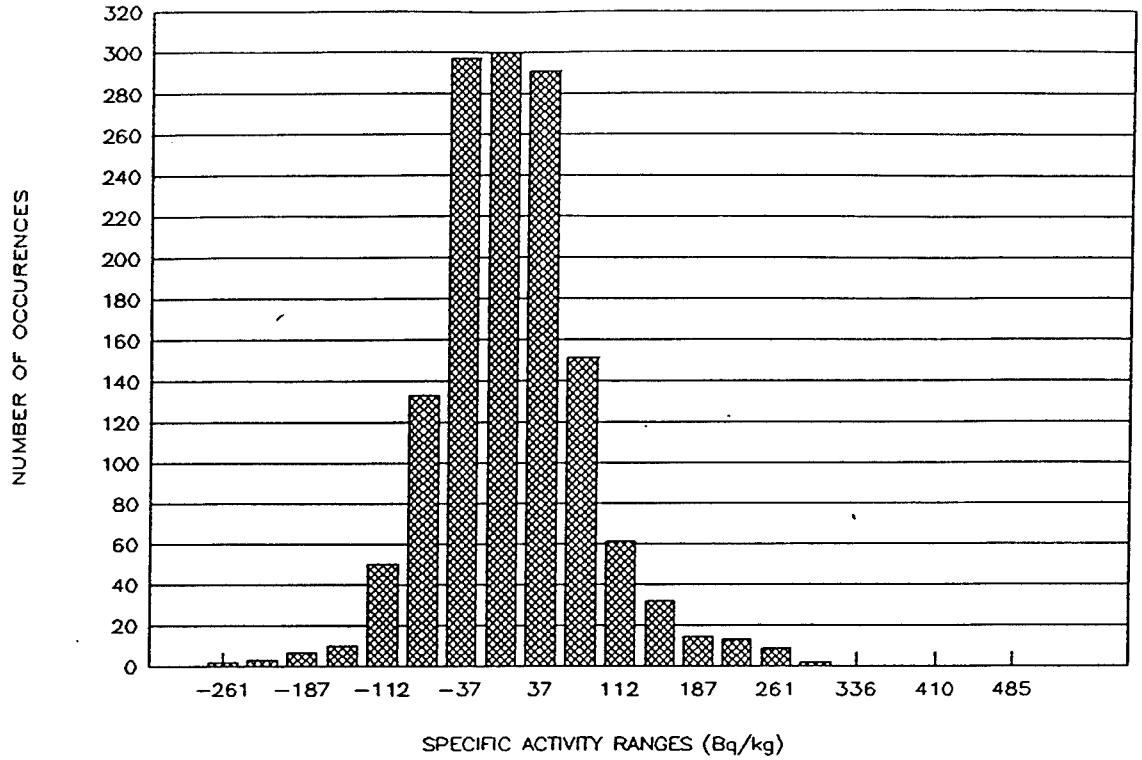
HOT PARTICLE EVENTS	259	SORTS BY ONE GATE ONLY	134
MULTIPARTICLE EVENTS	157	SORTS BY TWO GATES	127
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

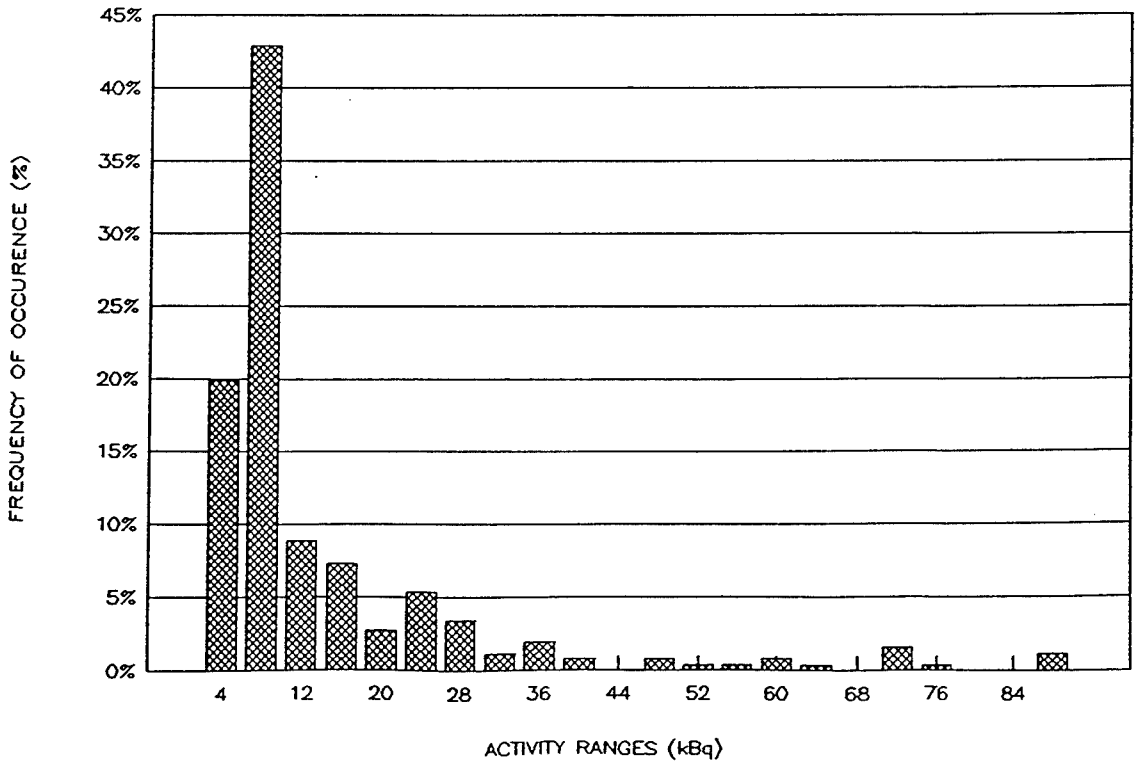
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 15-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 15-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 15-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.38 tons	71.8 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.30 yd³	56.9 yd³	57.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,372 kBq		
MAXIMUM/SORT	563 kBq		
MINIMUM/SORT	3.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,268 kBq	3,217 kBq	
MAXIMUM/SORT	444 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	6,024 Bq/kg	45 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	09:35 AM	END SOIL PROCESSING	05:09 PM
LUNCH START	12:00 AM	LUNCH PERIOD	0.0 hr
WORK HOURS		10.5 hr	
AVAILABLE HOURS		10.5 hr	
ACTUAL PROCESS HOURS (total 20-sec records)		7.48 hr	
DOWN-TIME		3.02 hr	
TOTAL SYSTEM PAUSE		1.33 hr	
NONAVAILABLE HOURS		0.0 hr	
START-UP		2.59 hr	
SHUT-DOWN		0.34 hr	
PLANT PERFORMANCE		71.3%	
PRODUCTIVITY		71.3%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,567	
NONPROCESS RECORDS (Test, calibration, etc)	29	
20-SEC PROCESS RECORDS	1,347	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	987 AD=0 & MD=0 & MND>0	
SOME SORT	360 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	55 25.0%	

UNEXPLAIN TIME	PAUSE TIME
11:00:28	08:14

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,470	
2-SEC RECORDS WITH SORTS	220	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	47	81.0%
3 DETECTORS	10	17.2%
4 DETECTORS	1	1.7%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	58	
NET 2-SEC RECORDS WITH SORTS	162	
2-SEC PERIODS WITH NO SORTS	13,308	
AVG TIME BETWEEN 2-SEC SORTS	166.3 sec	

1-GATE SORTS		118	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	5.9%	-14000	3	-261	4000	25	11.3%	4
2	16	13.6%	-12000	1	-224	8000	89	40.3%	8
3	16	13.6%	-10000	2	-187	12000	30	13.6%	12
4	26	22.0%	-8000	3	-149	16000	14	6.3%	16
5	22	18.6%	-6000	11	-112	20000	14	6.3%	20
6	18	15.3%	-4000	34	-75	24000	5	2.3%	24
7	12	10.2%	-2000	83	-37	28000	2	0.9%	28
8	1	0.8%	0	220	0	32000	5	2.3%	32
TOTAL	118		2000	280	37	36000	6	2.7%	36
			4000	321	75	40000	2	0.9%	40
2-GATE SORTS		102	6000	222	112	44000	6	2.7%	44
DETECTR	SORTS	FREQ%	8000	102	149	48000	2	0.9%	48
8			10000	56	187	52000	2	0.9%	52
9	11	10.7%	12000	21	224	56000	3	1.4%	56
10	13	12.6%	14000	9	261	60000	2	0.9%	60
11	18	17.5%	16000	6	299	64000	3	1.4%	64
12	26	25.2%	18000	1	336	68000	3	1.4%	68
13	17	16.5%	20000	0	373	72000	3	1.4%	72
14	12	11.7%	22000	0	410	76000	2	0.9%	76
15	6	5.8%	24000	0	448	80000	0	0.0%	80
TOTAL	103		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	3	1.4%	>84
			TOTAL	1375		TOTAL	221		

SUMMARY TOTALS

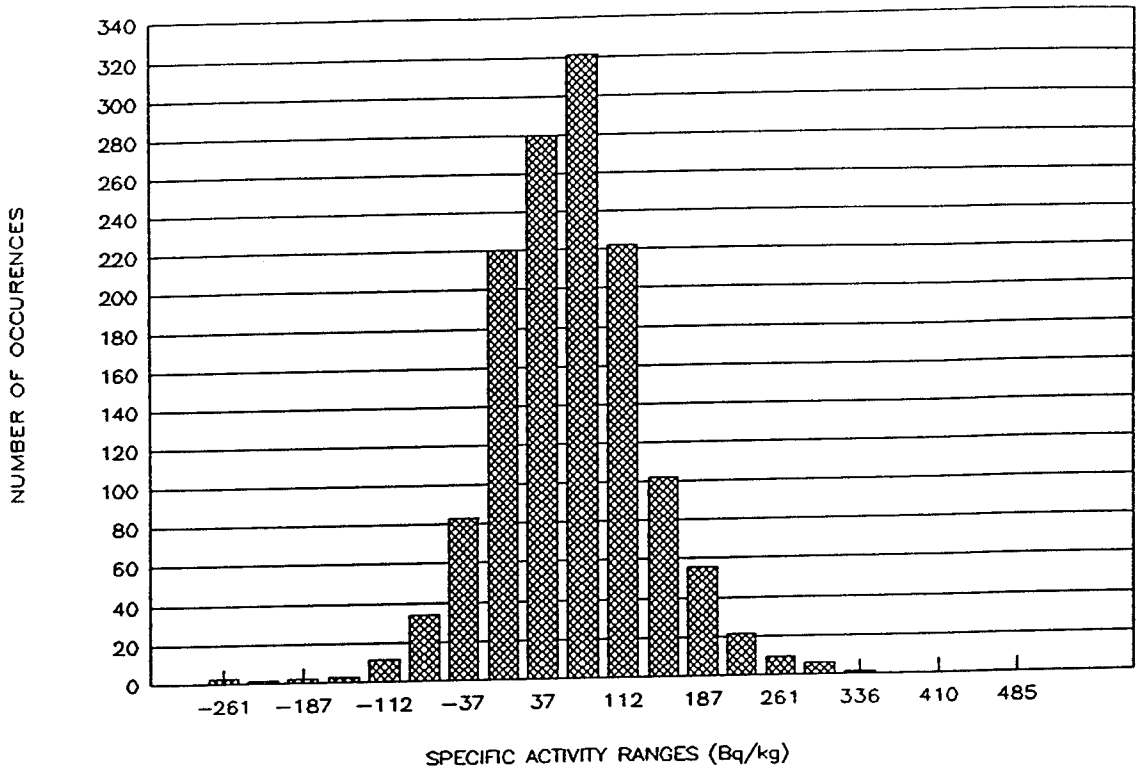
HOT PARTICLE EVENTS	215	SORTS BY ONE GATE ONLY	118
MULTIPARTICLE EVENTS	342	SORTS BY TWO GATES	102
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

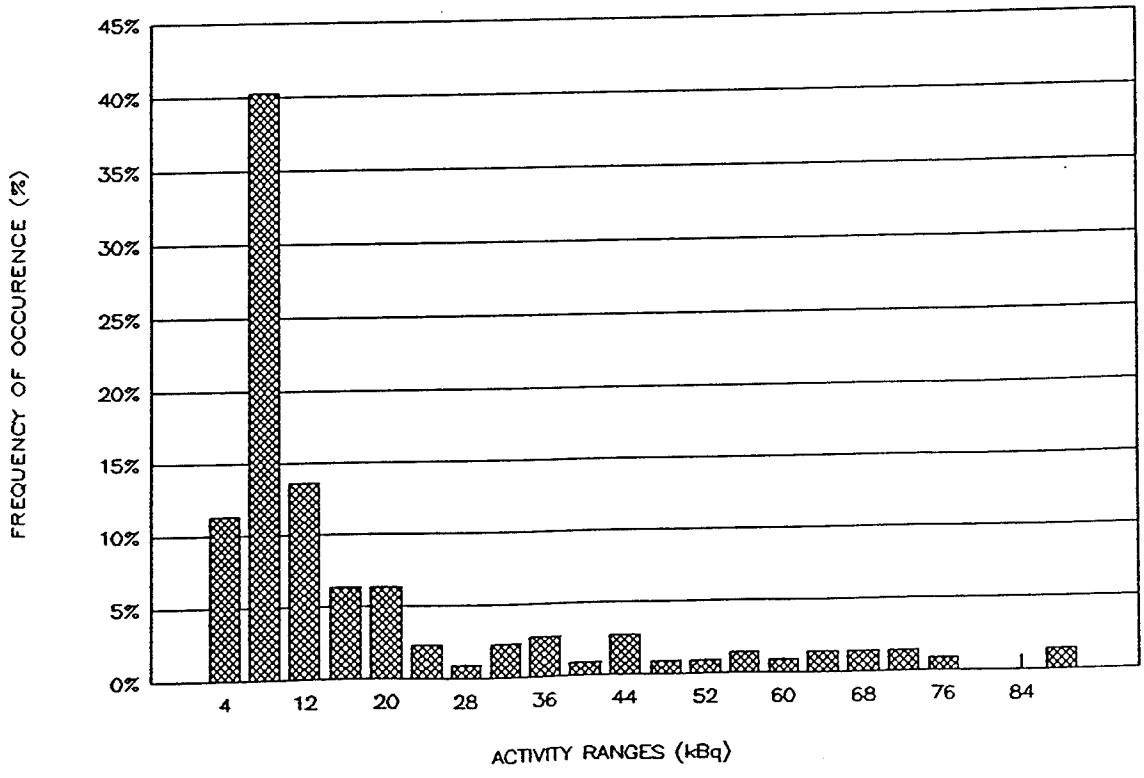
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 15-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 15-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 12-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.27 tons	15.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.3%
EQUIVALENT SOIL-IN-GROUND	0.22 yd³	12.6 yd³	12.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,832 kBq		
MAXIMUM/SORT	2,251 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,556 kBq	1,157 kBq	
MAXIMUM/SORT	1622 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	9,356 Bq/kg	73 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:04 AM	PLANT SHUT-DOWN	05:16 PM
START SOIL PROCESSING	03:34 PM	END SOIL PROCESSING	05:14 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	9.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.67 hr
DOWN-TIME	8.03 hr
TOTAL SYSTEM PAUSE	5.98 hr
NONAVAILABLE HOURS	0.3 hr
START-UP	8.52 hr
SHUT-DOWN	0.02 hr
PLANT PERFORMANCE	17.2%
PRODUCTIVITY	16.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		443	
NONPROCESS RECORDS (Test, calibration, etc)		794	
20-SEC PROCESS RECORDS		301	
TOTAL SORT		2	MD>0 & MND=0
NO SORT		188	AD=0 & MD=0 & MND>0
SOME SORT		111	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	38	26.8%	

UNEXPLAIN TIME	PAUSE TIME
None	07:04
	10:46

2-SEC COUNT PERIODS		3,010	
2-SEC RECORDS WITH SORTS		142	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	31	81.6%	
3 DETECTORS	6	15.8%	
4 DETECTORS	1	2.6%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	38		
NET 2-SEC RECORDS WITH SORTS		104	
2-SEC PERIODS WITH NO SORTS		2,906	
AVG TIME BETWEEN 2-SEC SORTS		57.9	sec

1-GATE SORTS DETECTR	SORTS	70 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	7	2.8%	-14000	2	-261
2	26	10.5%	-12000	1	-224
3	25	10.1%	-10000	2	-187
4	36	14.5%	-8000	1	-149
5	49	19.8%	-6000	3	-112
6	55	22.2%	-4000	9	-75
7	36	14.5%	-2000	30	-37
8	14	5.6%	0	90	0
TOTAL	248		2000	141	37
			4000	164	75
2-GATE SORTS		72	6000	129	112
DETECTR	SORTS	FREQ%	8000	89	149
8			10000	46	187
9	15	6.6%	12000	27	224
10	19	8.4%	14000	17	261
11	34	15.0%	16000	8	299
12	41	18.1%	18000	2	336
13	56	24.7%	20000	1	373
14	38	16.7%	22000	0	410
15	24	10.6%	24000	0	448
TOTAL	227		26000	0	485
			>28000	0	0
			TOTAL	762	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	80	16.8%	4
8000	181	38.1%	8
12000	65	13.7%	12
16000	44	9.3%	16
20000	27	5.7%	20
24000	19	4.0%	24
28000	7	1.5%	28
32000	11	2.3%	32
36000	7	1.5%	36
40000	3	0.6%	40
44000	4	0.8%	44
48000	3	0.6%	48
52000	0	0.0%	52
56000	3	0.6%	56
60000	3	0.6%	60
64000	2	0.4%	64
68000	3	0.6%	68
72000	1	0.2%	72
76000	1	0.2%	76
80000	0	0.0%	80
84000	1	0.2%	84
>84000	10	2.1%	>84
TOTAL	475		

SUMMARY TOTALS

HOT PARTICLE EVENTS	142	SORTS BY ONE GATE ONLY	70
MULTIPARTICLE EVENTS	111	SORTS BY TWO GATES	72
DISTRIBUTED EVENTS	154		

REC CODE EXPLANATION

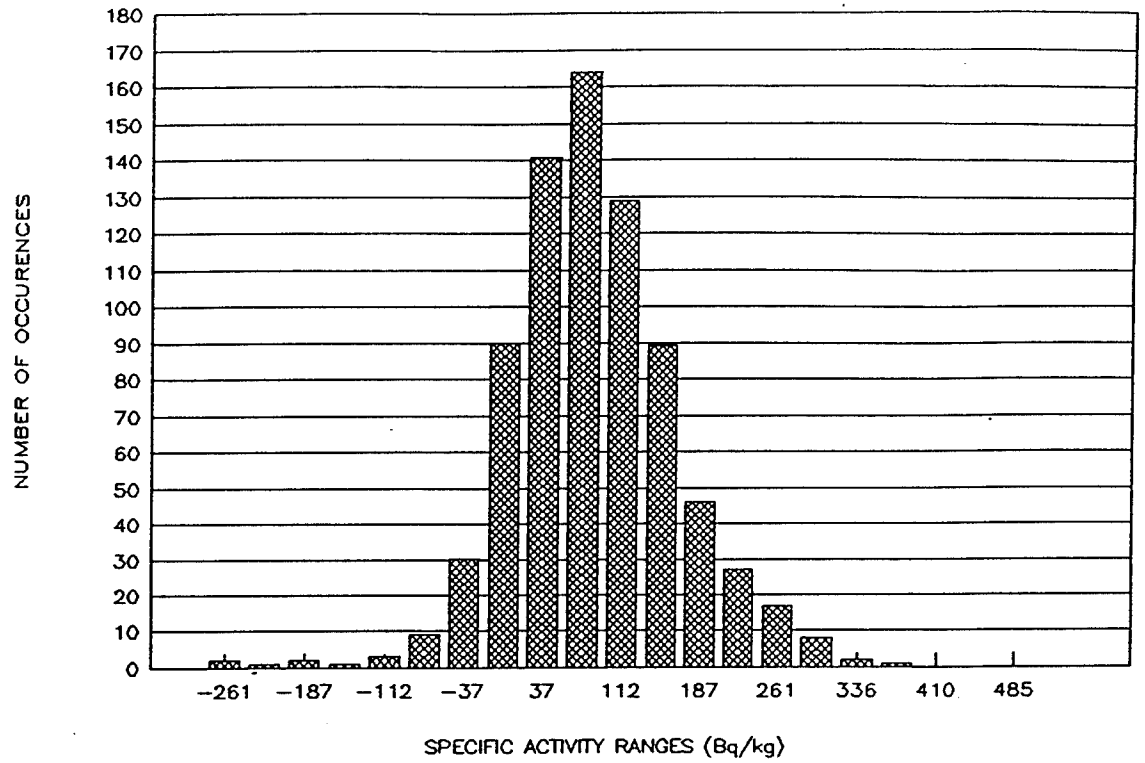
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

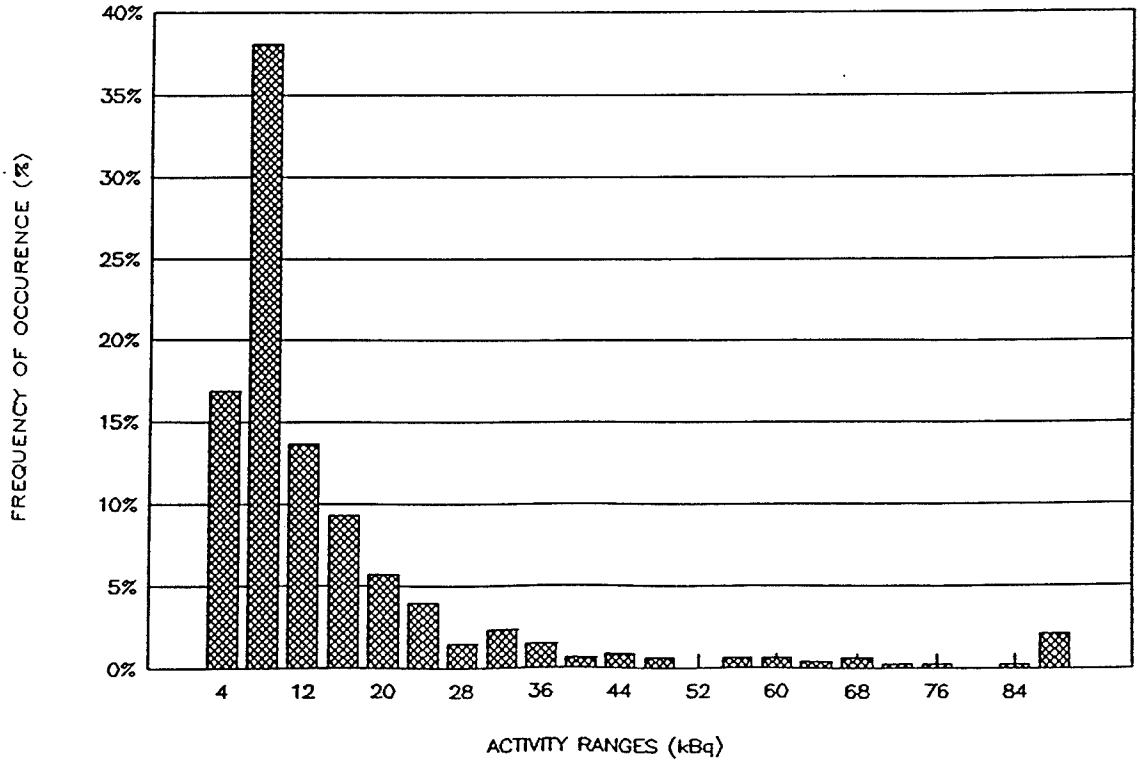
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 12-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 12-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 12-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.07 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.39 tons	15.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.6%
EQUIVALENT SOIL-IN-GROUND	0.31 yd³	12.5 yd³	12.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,772 kBq		
MAXIMUM/SORT	132 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,031 kBq	232 kBq	
MAXIMUM/SORT	105 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	2,667 Bq/kg	15 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:04 AM	PLANT SHUT-DOWN	05:16 PM
START SOIL PROCESSING	03:34 PM	END SOIL PROCESSING	05:14 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	9.7 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.68 hr
DOWN-TIME	8.02 hr
TOTAL SYSTEM PAUSE	6.07 hr
NONAVAILABLE HOURS	0.3 hr
START-UP	8.50 hr
SHUT-DOWN	0.02 hr
PLANT PERFORMANCE	17.3%
PRODUCTIVITY	16.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		438	
NONPROCESS RECORDS (Test, calibration, etc)		757	
20-SEC PROCESS RECORDS		302	
TOTAL SORT		4	MD>0 & MND=0
NO SORT		172	AD=0 & MD=0 & MND>0
SOME SORT		126	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	32	23.5%	

UNEXPLAIN TIME	PAUSE TIME
None	07:04
	10:41

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	3,020	
2-SEC RECORDS WITH SORTS	136	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	30	85.7%
3 DETECTORS	5	14.3%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	35	
NET 2-SEC RECORDS WITH SORTS	101	
2-SEC PERIODS WITH NO SORTS	2,919	
AVG TIME BETWEEN 2-SEC SORTS	59.8	sec

1-GATE SORTS		68	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	3.1%	-14000	12	-261	4000	43	9.6%	4
2	30	13.2%	-12000	7	-224	8000	169	37.6%	8
3	41	18.1%	-10000	10	-187	12000	67	14.9%	12
4	38	16.7%	-8000	28	-149	16000	40	8.9%	16
5	32	14.1%	-6000	52	-112	20000	15	3.3%	20
6	34	15.0%	-4000	100	-75	24000	20	4.5%	24
7	34	15.0%	-2000	128	-37	28000	15	3.3%	28
8	11	4.8%	0	140	0	32000	7	1.6%	32
TOTAL	227		2000	80	37	36000	3	0.7%	36
			4000	63	75	40000	10	2.2%	40
2-GATE SORTS		68	6000	42	112	44000	8	1.8%	44
DETECTR	SORTS	FREQ%	8000	29	149	48000	6	1.3%	48
8			10000	21	187	52000	9	2.0%	52
9	19	8.6%	12000	7	224	56000	6	1.3%	56
10	32	14.4%	14000	16	261	60000	2	0.4%	60
11	41	18.5%	16000	5	299	64000	9	2.0%	64
12	43	19.4%	18000	6	336	68000	1	0.2%	68
13	31	14.0%	20000	0	373	72000	1	0.2%	72
14	33	14.9%	22000	0	410	76000	0	0.0%	76
15	23	10.4%	24000	0	448	80000	1	0.2%	80
TOTAL	222		26000	0	485	84000	2	0.4%	84
			>28000	0	0	>84000	15	3.3%	>84
			TOTAL	746		TOTAL	449		

SUMMARY TOTALS

HOT PARTICLE EVENTS	138	SORTS BY ONE GATE ONLY	68
MULTIPARTICLE EVENTS	124	SORTS BY TWO GATES	68
DISTRIBUTED EVENTS	313		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 11-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.22 tons	89.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	40.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.5%
EQUIVALENT SOIL-IN-GROUND	2.55 yd³	70.6 yd³	73.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	51,709 kBq		
MAXIMUM/SORT	1,710 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	22,699 kBq	11,593 kBq	
MAXIMUM/SORT	913 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	7,057 Bq/kg	130 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:06 PM
START SOIL PROCESSING	07:31 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.57 hr
DOWN-TIME	0.53 hr
TOTAL SYSTEM PAUSE	0.52 hr
NONAVAILABLE HOURS	0.4 hr
START-UP	0.53 hr
SHUT-DOWN	0.00 hr
PLANT PERFORMANCE	94.8%
PRODUCTIVITY	91.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		4,768	
NONPROCESS RECORDS (Test, calibration, etc)		3	
20-SEC PROCESS RECORDS		1,723	
TOTAL SORT		3	MD>0 & MND=0
NO SORT		397	AD=0 & MD=0 & MND>0
SOME SORT		1,323	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	890	29.2%	

UNEXPLAIN TIME	PAUSE TIME
None	07:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		17,230	
2-SEC RECORDS WITH SORTS		3,045	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	683	78.6%
	3 DETECTORS	151	17.4%
	4 DETECTORS	28	3.2%
	5 DETECTORS	7	0.8%
	6 DETECTORS	0	0.0%
	7 DETECTORS	1	0.1%
	8 DETECTORS	1	0.1%
	TOTAL	869	
NET 2-SEC RECORDS WITH SORTS		2,176	
2-SEC PERIODS WITH NO SORTS		15,054	
AVG TIME BETWEEN 2-SEC SORTS		15.8	sec

1-GATE SORTS		1557	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	43	2.8%	-14000	0	-261	4000	464	15.2%	4
2	138	8.9%	-12000	0	-224	8000	1232	40.5%	8
3	212	13.6%	-10000	1	-187	12000	479	15.7%	12
4	243	15.6%	-8000	2	-149	16000	247	8.1%	16
5	310	19.9%	-6000	1	-112	20000	133	4.4%	20
6	256	16.4%	-4000	6	-75	24000	99	3.3%	24
7	242	15.5%	-2000	22	-37	28000	60	2.0%	28
8	113	7.3%	0	62	0	32000	49	1.6%	32
TOTAL	1557		2000	123	37	36000	37	1.2%	36
			4000	243	75	40000	32	1.1%	40
2-GATE SORTS		1488	6000	320	112	44000	23	0.8%	44
DETECTR	SORTS	FREQ%	8000	301	149	48000	22	0.7%	48
8			10000	256	187	52000	13	0.4%	52
9	77	5.2%	12000	189	224	56000	12	0.4%	56
10	175	11.8%	14000	128	261	60000	17	0.6%	60
11	229	15.4%	16000	51	299	64000	10	0.3%	64
12	264	17.7%	18000	19	336	68000	12	0.4%	68
13	315	21.2%	20000	2	373	72000	7	0.2%	72
14	230	15.5%	22000	0	410	76000	3	0.1%	76
15	198	13.3%	24000	0	448	80000	9	0.3%	80
TOTAL	1488		26000	0	485	84000	5	0.2%	84
			>28000	0	0	>84000	80	2.6%	>84
			TOTAL	1726		TOTAL	3045		

SUMMARY TOTALS

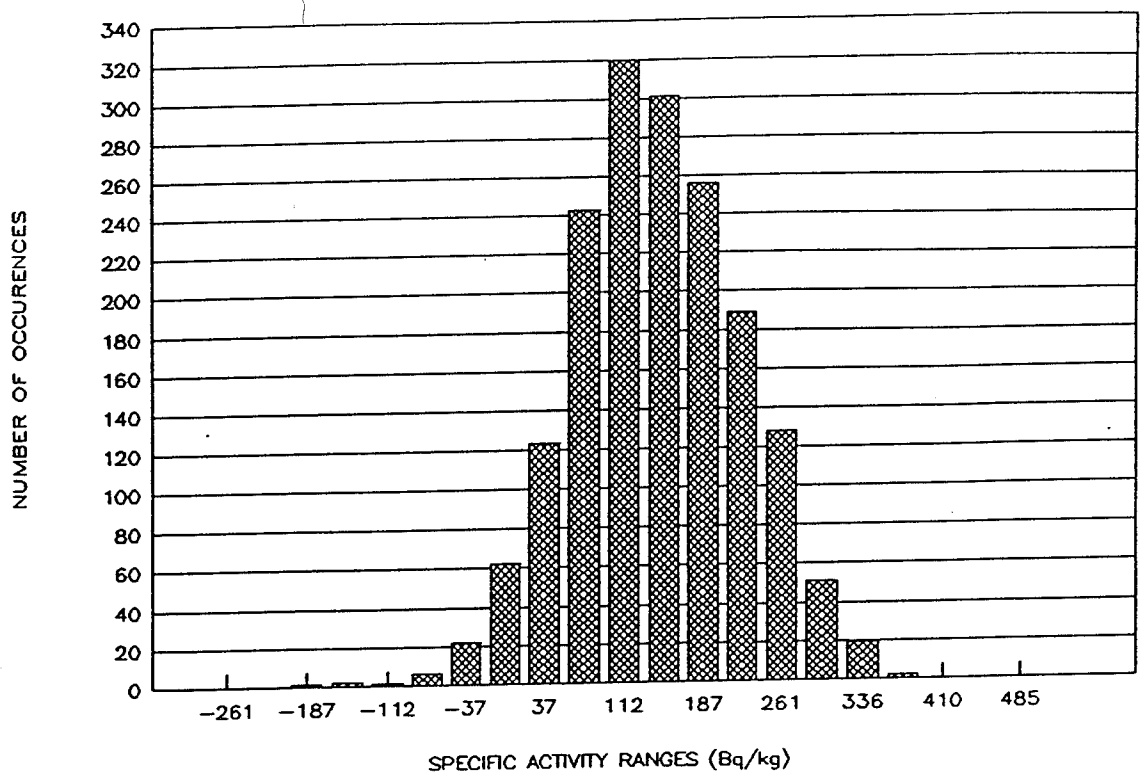
HOT PARTICLE EVENTS	2929	SORTS BY ONE GATE ONLY	1557
MULTIPARTICLE EVENTS	1662	SORTS BY TWO GATES	1488
DISTRIBUTED EVENTS	223		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

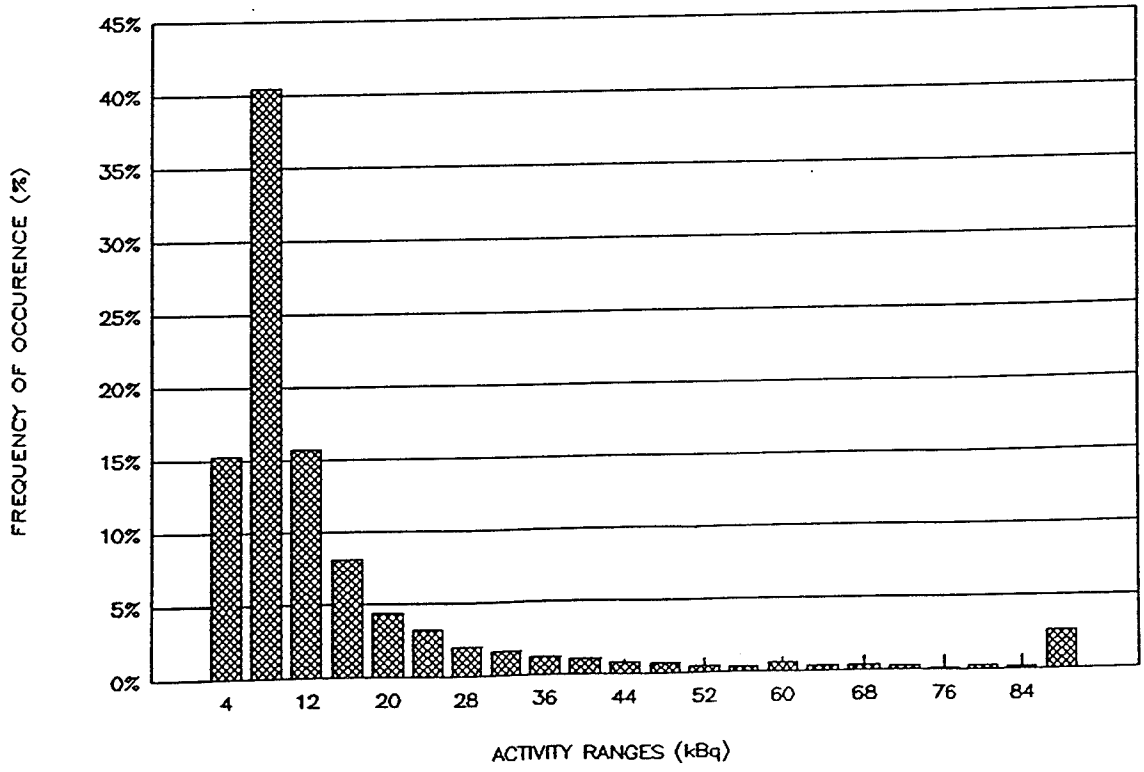
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 11-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 11-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 11-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	8.28 tons	83.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	41.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			91.0%
EQUIVALENT SOIL-IN-GROUND	6.56 yd³	66.5 yd³	73.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	92,906 kBq		
MAXIMUM/SORT	9,252 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	42,557 kBq	15,133 kBq	
MAXIMUM/SORT	6592 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	5,142 Bq/kg	180 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:06 PM
START SOIL PROCESSING	07:31 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.1 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.56 hr
DOWN-TIME	0.54 hr
TOTAL SYSTEM PAUSE	0.52 hr
NONAVAILABLE HOURS	0.4 hr
START-UP	0.53 hr
SHUT-DOWN	0.01 hr
PLANT PERFORMANCE	94.7%
PRODUCTIVITY	91.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		5,372	
NONPROCESS RECORDS (Test, calibration, etc)		5	
20-SEC PROCESS RECORDS		1,721	
TOTAL SORT		81	MD>0 & MND=0
NO SORT		208	AD=0 & MD=0 & MND>0
SOME SORT		1,432	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	885	24.2%	

UNEXPLAIN TIME	PAUSE TIME
13:37:37	07:00
15:24:37	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	17,210	
2-SEC RECORDS WITH SORTS	3,651	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	873	77.6%
3 DETECTORS	197	17.5%
4 DETECTORS	40	3.6%
5 DETECTORS	15	1.3%
6 DETECTORS	0	0.0%
7 DETECTORS	1	0.1%
8 DETECTORS	0	0.0%
TOTAL	1125	
NET 2-SEC RECORDS WITH SORTS	2,526	
2-SEC PERIODS WITH NO SORTS	14,684	
AVG TIME BETWEEN 2-SEC SORTS	13.6 sec	

1-GATE SORTS DETECTR	SORTS	1894 FREQ%
1	80	4.2%
2	277	14.6%
3	335	17.7%
4	309	16.3%
5	312	16.5%
6	313	16.5%
7	213	11.2%
8	55	2.9%
TOTAL	1894	

2-GATE SORTS DETECTR	SORTS	1757 FREQ%
8		
9	149	8.5%
10	255	14.5%
11	317	18.0%
12	322	18.3%
13	293	16.7%
14	270	15.4%
15	151	8.6%
TOTAL	1757	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	1	-261
-12000	1	-224
-10000	1	-187
-8000	2	-149
-6000	0	-112
-4000	0	-75
-2000	5	-37
0	100	0
2000	54	37
4000	110	75
6000	185	112
8000	256	149
10000	268	187
12000	288	224
14000	224	261
16000	165	299
18000	66	336
20000	0	373
22000	0	410
24000	0	448
26000	0	485
>28000	0	0
TOTAL	1726	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	377	10.3%	4
8000	1565	42.9%	8
12000	558	15.3%	12
16000	314	8.6%	16
20000	193	5.3%	20
24000	140	3.8%	24
28000	74	2.0%	28
32000	61	1.7%	32
36000	47	1.3%	36
40000	29	0.8%	40
44000	30	0.8%	44
48000	27	0.7%	48
52000	23	0.6%	52
56000	25	0.7%	56
60000	12	0.3%	60
64000	11	0.3%	64
68000	14	0.4%	68
72000	9	0.2%	72
76000	5	0.1%	76
80000	9	0.2%	80
84000	6	0.2%	84
>84000	122	3.3%	>84
TOTAL	3651		

SUMMARY TOTALS

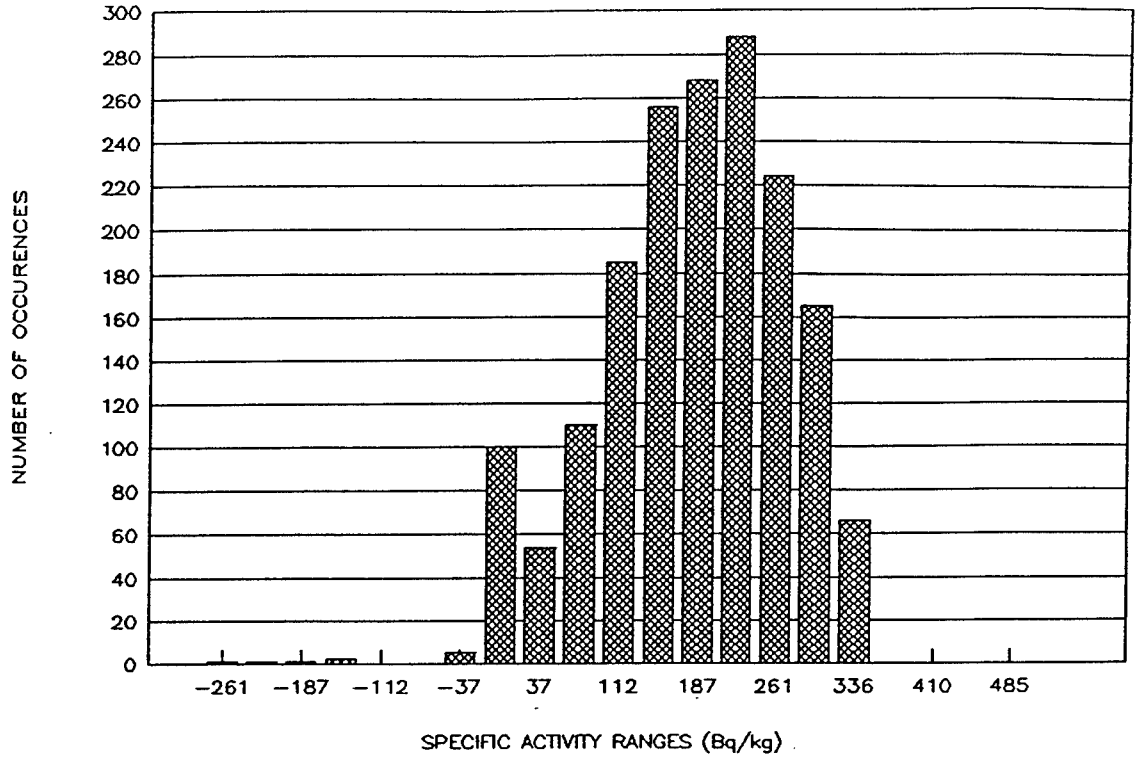
HOT PARTICLE EVENTS	3487	SORTS BY ONE GATE ONLY	1894
MULTIPARTICLE EVENTS	3016	SORTS BY TWO GATES	1757
DISTRIBUTED EVENTS	5863		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

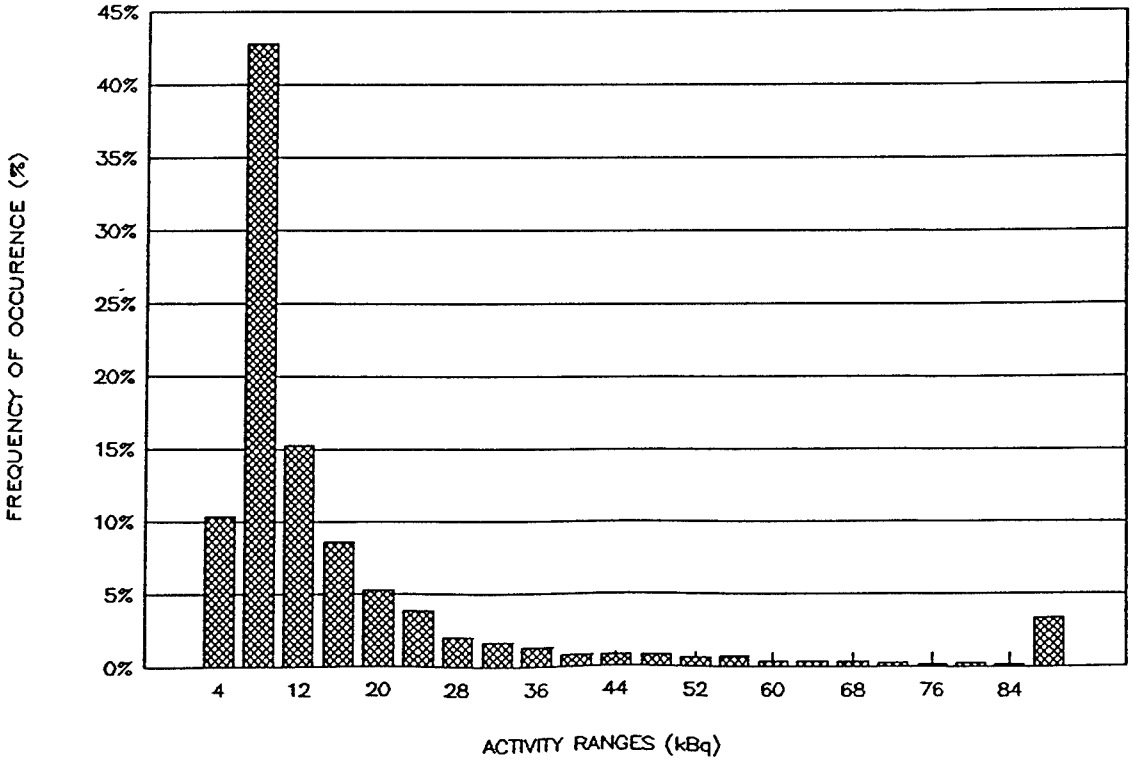
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 11–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 11–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 10-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.91 tons	79.2 tons	
MAXIMUM/SORT	11.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.2 kg	
			97.6%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	1.51 yd³	62.7 yd³	64.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	33,087 kBq		
MAXIMUM/SORT	897 kBq		
MINIMUM/SORT	2.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	14,216 kBq	4,490 kBq	
MAXIMUM/SORT	574 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	7,445 Bq/kg	57 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:35 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.41 hr
DOWN-TIME	1.59 hr
TOTAL SYSTEM PAUSE	1.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.59 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	84.1%
PRODUCTIVITY	84.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,560	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	1,513	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	718	AD=0 & MD=0 & MND>0
SOME SORT	795	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	565	27.6%

UNEXPLAIN TIME	PAUSE TIME
10:12:34	07:05
16:13:14	

2-SEC COUNT PERIODS	15,130	
2-SEC RECORDS WITH SORTS	2,047	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	502	79.8%
3 DETECTORS	105	16.7%
4 DETECTORS	16	2.5%
5 DETECTORS	6	1.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	629	
NET 2-SEC RECORDS WITH SORTS	1,418	
2-SEC PERIODS WITH NO SORTS	13,712	
AVG TIME BETWEEN 2-SEC SORTS	21.3 sec	

1-GATE SORTS DETECTR	SORTS	1031 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	19	1.8%	-14000	1	-261	4000	275	13.4%	4
2	101	9.8%	-12000	2	-224	8000	861	42.1%	8
3	151	14.6%	-10000	2	-187	12000	306	14.9%	12
4	162	15.7%	-8000	3	-149	16000	182	8.9%	16
5	186	18.0%	-6000	2	-112	20000	93	4.5%	20
6	194	18.8%	-4000	26	-75	24000	59	2.9%	24
7	166	16.1%	-2000	96	-37	28000	47	2.3%	28
8	52	5.0%	0	191	0	32000	31	1.5%	32
TOTAL	1031		2000	325	37	36000	23	1.1%	36
			4000	320	75	40000	20	1.0%	40
2-GATE SORTS		1016	6000	251	112	44000	23	1.1%	44
DETECTR	SORTS	FREQ%	8000	146	149	48000	16	0.8%	48
8			10000	97	187	52000	13	0.6%	52
9	54	5.3%	12000	38	224	56000	13	0.6%	56
10	128	12.6%	14000	18	261	60000	5	0.2%	60
11	163	16.0%	16000	3	299	64000	8	0.4%	64
12	185	18.2%	18000	1	336	68000	10	0.5%	68
13	202	19.9%	20000	0	373	72000	5	0.2%	72
14	179	17.6%	22000	0	410	76000	2	0.1%	76
15	105	10.3%	24000	0	448	80000	6	0.3%	80
TOTAL	1016		26000	0	485	84000	3	0.1%	84
			>28000	0	0	>84000	46	2.2%	>84
			TOTAL	1522		TOTAL	2047		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1948	SORTS BY ONE GATE ONLY	1031
MULTIPARTICLE EVENTS	905	SORTS BY TWO GATES	1016
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

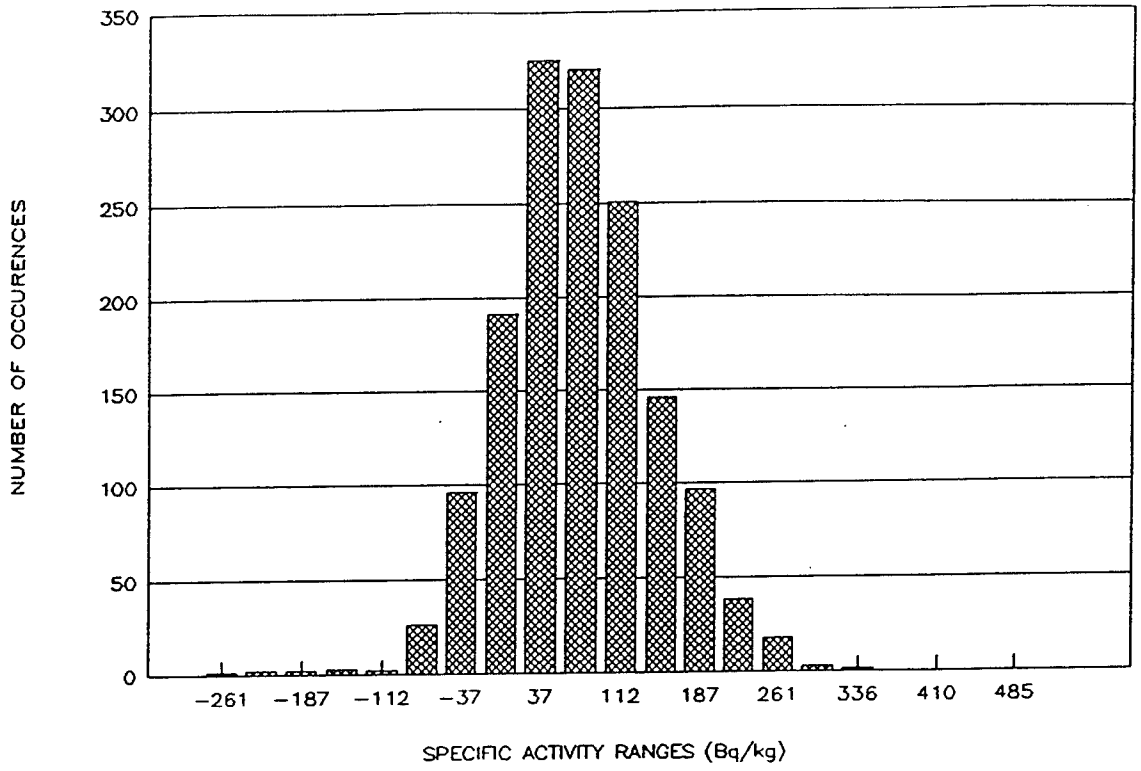
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

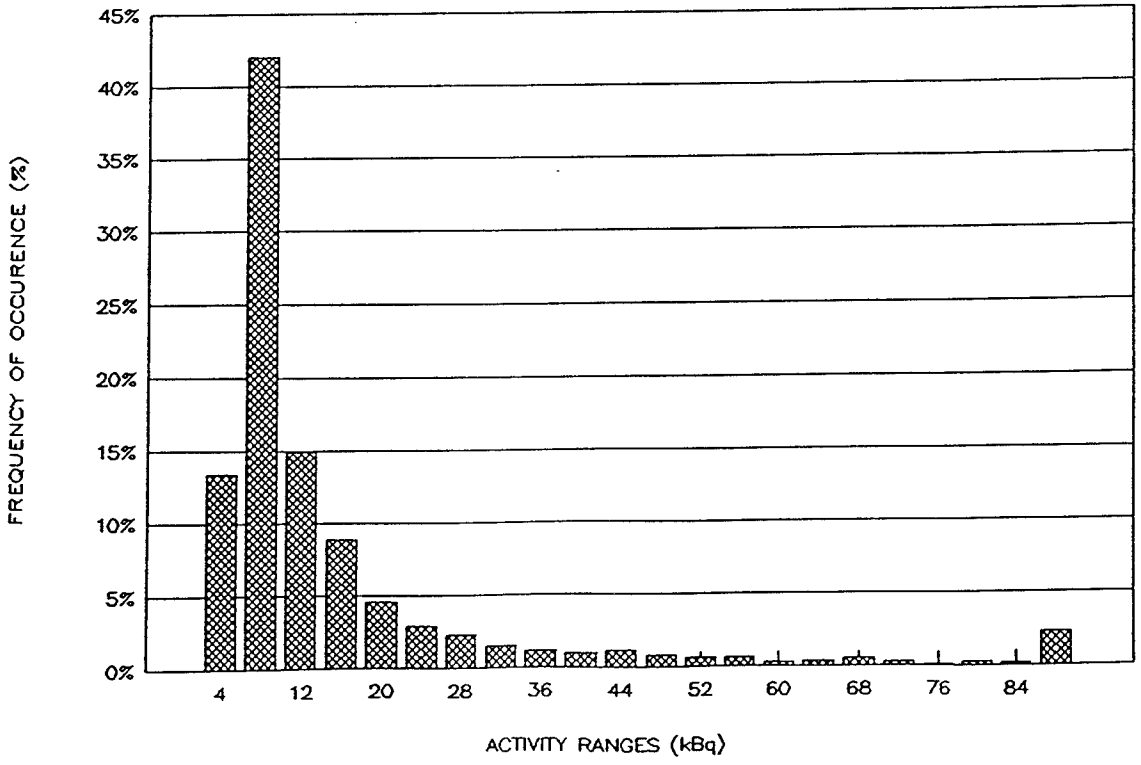
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 10-Feb-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 10-Feb-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 10-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.95 tons	78.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	38.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.4%
EQUIVALENT SOIL-IN-GROUND	2.34 yd³	61.9 yd³	64.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	43,900 kBq		
MAXIMUM/SORT	2,463 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	19,474 kBq	8,996 kBq	
MAXIMUM/SORT	1288 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,591 Bq/kg	115 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:35 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.41 hr
DOWN-TIME	1.59 hr
TOTAL SYSTEM PAUSE	1.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.59 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	84.1%
PRODUCTIVITY	84.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,752		
NONPROCESS RECORDS (Test, calibration, etc)	9		
20-SEC PROCESS RECORDS	1,513		
TOTAL SORT	11	MD>0 & MND=0	
NO SORT	540	AD=0 & MD=0 & MND>0	
SOME SORT	962	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	516	23.0%	

UNEXPLAIN TIME	PAUSE TIME
None	07:05

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		15,130	
2-SEC RECORDS WITH SORTS		2,239	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	533		76.8%
3 DETECTORS	122		17.6%
4 DETECTORS	30		4.3%
5 DETECTORS	9		1.3%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		694	
NET 2-SEC RECORDS WITH SORTS		1,545	
2-SEC PERIODS WITH NO SORTS		13,585	
AVG TIME BETWEEN 2-SEC SORTS		19.6	sec

1-GATE SORTS		1153	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	58	5.0%	-14000	0	-261	4000	226	10.1%	4
2	171	14.8%	-12000	1	-224	8000	924	41.3%	8
3	206	17.9%	-10000	3	-187	12000	387	17.3%	12
4	213	18.5%	-8000	2	-149	16000	198	8.8%	16
5	196	17.0%	-6000	2	-112	20000	118	5.3%	20
6	176	15.3%	-4000	6	-75	24000	71	3.2%	24
7	115	10.0%	-2000	17	-37	28000	45	2.0%	28
8	18	1.6%	0	70	0	32000	32	1.4%	32
TOTAL	1153		2000	147	37	36000	33	1.5%	36
			4000	273	75	40000	22	1.0%	40
2-GATE SORTS		1086	6000	274	112	44000	21	0.9%	44
DETECTR	SORTS	FREQ%	8000	286	149	48000	18	0.8%	48
8			10000	197	187	52000	16	0.7%	52
9	105	9.7%	12000	126	224	56000	13	0.6%	56
10	146	13.4%	14000	74	261	60000	9	0.4%	60
11	209	19.2%	16000	32	299	64000	10	0.4%	64
12	207	19.1%	18000	12	336	68000	5	0.2%	68
13	183	16.9%	20000	0	373	72000	6	0.3%	72
14	151	13.9%	22000	0	410	76000	5	0.2%	76
15	85	7.8%	24000	0	448	80000	1	0.0%	80
TOTAL	1086		26000	0	485	84000	8	0.4%	84
			>28000	0	0	>84000	71	3.2%	>84
			TOTAL	1522		TOTAL	2239		

SUMMARY TOTALS

HOT PARTICLE EVENTS	2125	SORTS BY ONE GATE ONLY	1153
MULTIPARTICLE EVENTS	1523	SORTS BY TWO GATES	1086
DISTRIBUTED EVENTS	764		

REC CODE EXPLANATION

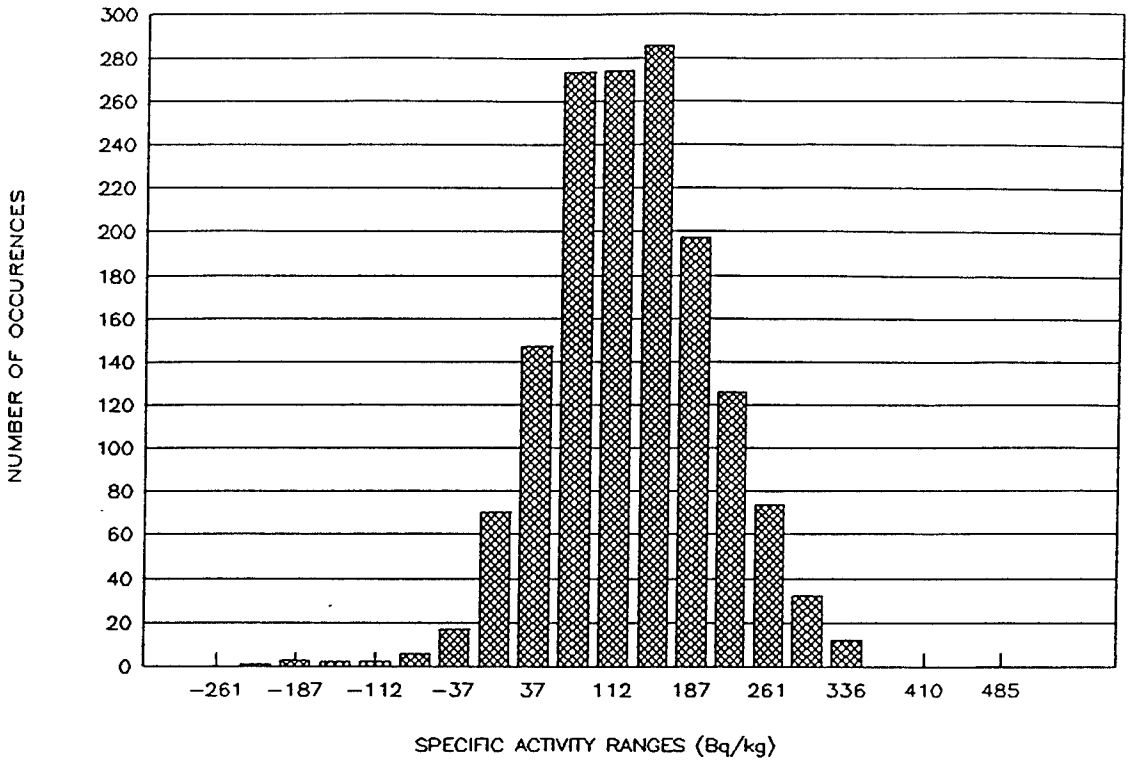
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

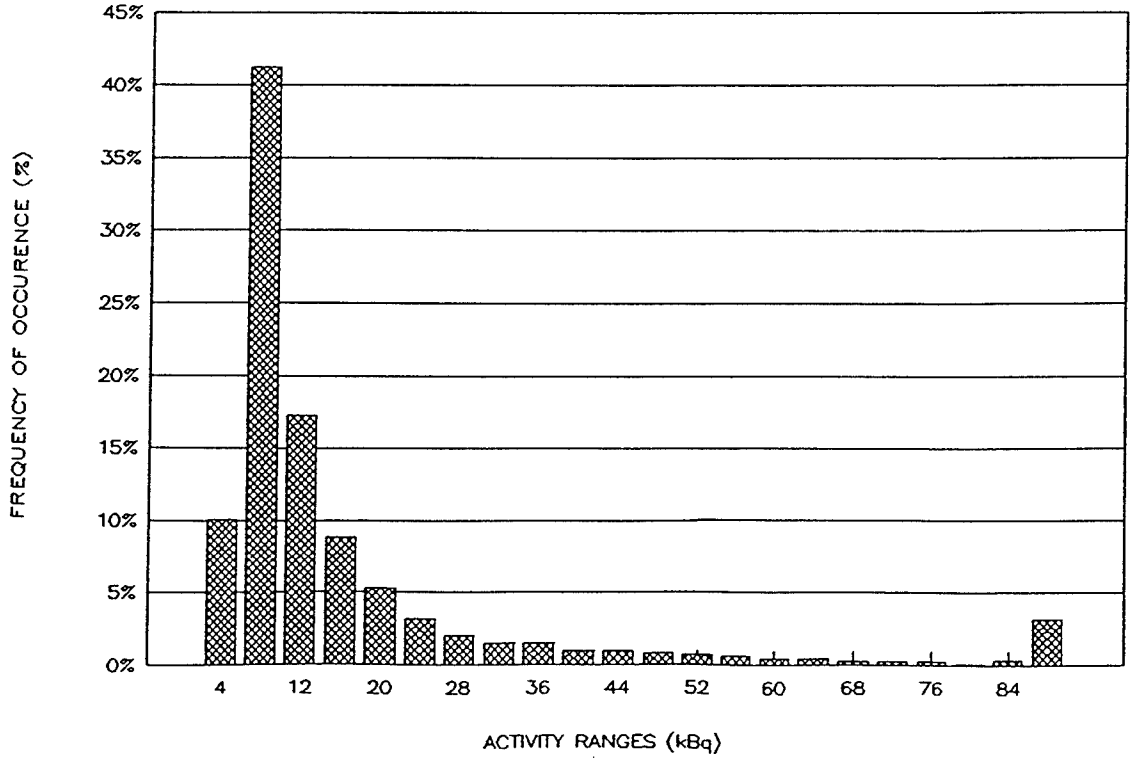
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 10–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 10–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 09-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.53 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.00 tons	0.2 tons	
MAXIMUM/SORT	0.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	52.9 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.00 yd³	0.2 yd³	0.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	0 kBq		
MAXIMUM/SORT	ERR kBq		
MINIMUM/SORT	ERR kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4 kBq	18 kBq	
MAXIMUM/SORT	3 kBq	11 kBq	
MINIMUM/SORT	0 Bq	-2 kBq	
SPECIFIC ACTIVITY	2,854 Bq/kg	85 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	09:07 AM	END SOIL PROCESSING	09:08 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	0.02 hr
DOWN-TIME	9.98 hr
TOTAL SYSTEM PAUSE	9.68 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	2.13 hr
SHUT-DOWN	8.36 hr
PLANT PERFORMANCE	0.2%
PRODUCTIVITY	0.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	4	
NONPROCESS RECORDS (Test, calibration, etc)	4	
20-SEC PROCESS RECORDS	4	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	2	AD=0 & MD=0 & MND>0
SOME SORT	2	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	0	ERR

UNEXPLAIN TIME	PAUSE TIME
None	07:06
	09:08

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	40	
2-SEC RECORDS WITH SORTS	0	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	0	ERR
3 DETECTORS	0	ERR
4 DETECTORS	0	ERR
5 DETECTORS	0	ERR
6 DETECTORS	0	ERR
7 DETECTORS	0	ERR
8 DETECTORS	0	ERR
TOTAL	0	
NET 2-SEC RECORDS WITH SORTS	0	
2-SEC PERIODS WITH NO SORTS	40	
AVG TIME BETWEEN 2-SEC SORTS	ERR	sec

1-GATE SORTS	0		ACT_ND	NUMBER	SPEC_A		ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)		(Bq)	(#)		(kBq)
1	0	ERR	-14000	0	-261		4000	0	ERR	4
2	0	ERR	-12000	0	-224		8000	0	ERR	8
3	0	ERR	-10000	0	-187		12000	0	ERR	12
4	0	ERR	-8000	0	-149		16000	0	ERR	16
5	0	ERR	-6000	0	-112		20000	0	ERR	20
6	0	ERR	-4000	0	-75		24000	0	ERR	24
7	0	ERR	-2000	0	-37		28000	0	ERR	28
8	0	ERR	0	3	0		32000	0	ERR	32
TOTAL	0		2000	1	37		36000	0	ERR	36
			4000	1	75		40000	0	ERR	40
2-GATE SORTS	0		6000	0	112		44000	0	ERR	44
DETECTR	SORTS	FREQ%	8000	1	149		48000	0	ERR	48
8			10000	1	187		52000	0	ERR	52
9	0	ERR	12000	1	224		56000	0	ERR	56
10	0	ERR	14000	0	261		60000	0	ERR	60
11	0	ERR	16000	0	299		64000	0	ERR	64
12	0	ERR	18000	0	336		68000	0	ERR	68
13	0	ERR	20000	0	373		72000	0	ERR	72
14	0	ERR	22000	0	410		76000	0	ERR	76
15	0	ERR	24000	0	448		80000	0	ERR	80
TOTAL	0		26000	0	485		84000	0	ERR	84
			>28000	0	0		>84000	0	ERR	>84
			TOTAL	8			TOTAL	0		

SUMMARY TOTALS

HOT PARTICLE EVENTS	0	SORTS BY ONE GATE ONLY	0
MULTIPARTICLE EVENTS	2	SORTS BY TWO GATES	0
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 09-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.60 ± ERR c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.06 tons	0.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	2.7 kg	50.9 kg	
			79.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.04 yd³	0.2 yd³	0.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	51 kBq		
MAXIMUM/SORT	31 kBq		
MINIMUM/SORT	7.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	42 kBq	9 kBq	
MAXIMUM/SORT	21 kBq	10 kBq	
MINIMUM/SORT	0 Bq	-2 kBq	
SPECIFIC ACTIVITY	738 Bq/kg	45 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	09:07 AM	END SOIL PROCESSING	09:08 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	0.03 hr
DOWN-TIME	9.97 hr
TOTAL SYSTEM PAUSE	2.02 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	2.13 hr
SHUT-DOWN	8.35 hr
PLANT PERFORMANCE	0.3%
PRODUCTIVITY	0.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	8	
NONPROCESS RECORDS (Test, calibration, etc)	2	
20-SEC PROCESS RECORDS	5	
TOTAL SORT	1 MD>0 & MND=0	
NO SORT	3 AD=0 & MD=0 & MND>0	
SOME SORT	1 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	0	0.0%

UNEXPLAIN TIME	PAUSE TIME
None	07:06

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	50	
2-SEC RECORDS WITH SORTS	3	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	1	*****
3 DETECTORS	0	0.0%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	1	
NET 2-SEC RECORDS WITH SORTS	2	
2-SEC PERIODS WITH NO SORTS	48	
AVG TIME BETWEEN 2-SEC SORTS	50.0	sec

1-GATE SORTS		1	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	0	0.0%	-14000	0	-261	4000	0	0.0%	4
2	0	0.0%	-12000	0	-224	8000	1	33.3%	8
3	0	0.0%	-10000	0	-187	12000	0	0.0%	12
4	1	100.0%	-8000	0	-149	16000	1	33.3%	16
5	0	0.0%	-6000	0	-112	20000	0	0.0%	20
6	0	0.0%	-4000	0	-75	24000	0	0.0%	24
7	0	0.0%	-2000	1	-37	28000	0	0.0%	28
8	0	0.0%	0	3	0	32000	1	33.3%	32
TOTAL	1		2000	0	37	36000	0	0.0%	36
			4000	1	75	40000	0	0.0%	40
2-GATE SORTS		2	6000	0	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	0	149	48000	0	0.0%	48
8			10000	1	187	52000	0	0.0%	52
9	0	0.0%	12000	1	224	56000	0	0.0%	56
10	0	0.0%	14000	0	261	60000	0	0.0%	60
11	1	50.0%	16000	0	299	64000	0	0.0%	64
12	1	50.0%	18000	0	336	68000	0	0.0%	68
13	0	0.0%	20000	0	373	72000	0	0.0%	72
14	0	0.0%	22000	0	410	76000	0	0.0%	76
15	0	0.0%	24000	0	448	80000	0	0.0%	80
TOTAL	2		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	7		TOTAL	3		

SUMMARY TOTALS

HOT PARTICLE EVENTS	4	SORTS BY ONE GATE ONLY	1
MULTIPARTICLE EVENTS	0	SORTS BY TWO GATES	2
DISTRIBUTED EVENTS	80		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 08-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.73 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		1.02 tons	86.8 tons	
MAXIMUM/SORT		8.7 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	44.9 kg	
				98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.81 yd³	68.8 yd³	69.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		21,688 kBq		
MAXIMUM/SORT		2,827 kBq		
MINIMUM/SORT		1.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		8,670 kBq	2,901 kBq	
MAXIMUM/SORT		1784 kBq	15 kBq	
MINIMUM/SORT		0 Bq	-12 kBq	
SPECIFIC ACTIVITY		8,504 Bq/kg	33 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:39 AM	END SOIL PROCESSING	04:44 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.10 hr
DOWN-TIME	0.90 hr
TOTAL SYSTEM PAUSE	0.61 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.65 hr
SHUT-DOWN	0.75 hr
PLANT PERFORMANCE	91.0%
PRODUCTIVITY	91.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,606	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,638	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		970	AD=0 & MD=0 & MND>0
SOME SORT		668	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	283	29.2%	

UNEXPLAIN TIME	PAUSE TIME
None	07:02

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,380	
2-SEC RECORDS WITH SORTS	968	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	210	81.7%
3 DETECTORS	39	15.2%
4 DETECTORS	5	1.9%
5 DETECTORS	3	1.2%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	257	
NET 2-SEC RECORDS WITH SORTS	711	
2-SEC PERIODS WITH NO SORTS	15,669	
AVG TIME BETWEEN 2-SEC SORTS	46.1	sec

1-GATE SORTS		480	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	10	2.1%	-14000	0	-261	4000	130	13.4%	4
2	38	7.9%	-12000	0	-224	8000	403	41.6%	8
3	77	16.0%	-10000	2	-187	12000	155	16.0%	12
4	74	15.4%	-8000	8	-149	16000	67	6.9%	16
5	83	17.3%	-6000	18	-112	20000	42	4.3%	20
6	88	18.3%	-4000	56	-75	24000	25	2.6%	24
7	77	16.0%	-2000	138	-37	28000	19	2.0%	28
8	33	6.9%	0	288	0	32000	15	1.5%	32
TOTAL	480		2000	376	37	36000	15	1.5%	36
			4000	353	75	40000	14	1.4%	40
2-GATE SORTS		488	6000	227	112	44000	9	0.9%	44
DETECTR	SORTS	FREQ%	8000	108	149	48000	7	0.7%	48
8			10000	45	187	52000	7	0.7%	52
9	25	5.1%	12000	14	224	56000	8	0.8%	56
10	63	12.9%	14000	10	261	60000	7	0.7%	60
11	91	18.6%	16000	1	299	64000	7	0.7%	64
12	82	16.8%	18000	0	336	68000	0	0.0%	68
13	95	19.5%	20000	0	373	72000	5	0.5%	72
14	81	16.6%	22000	0	410	76000	3	0.3%	76
15	51	10.5%	24000	0	448	80000	2	0.2%	80
TOTAL	488		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	28	2.9%	>84
			TOTAL	1644		TOTAL	968		

SUMMARY TOTALS

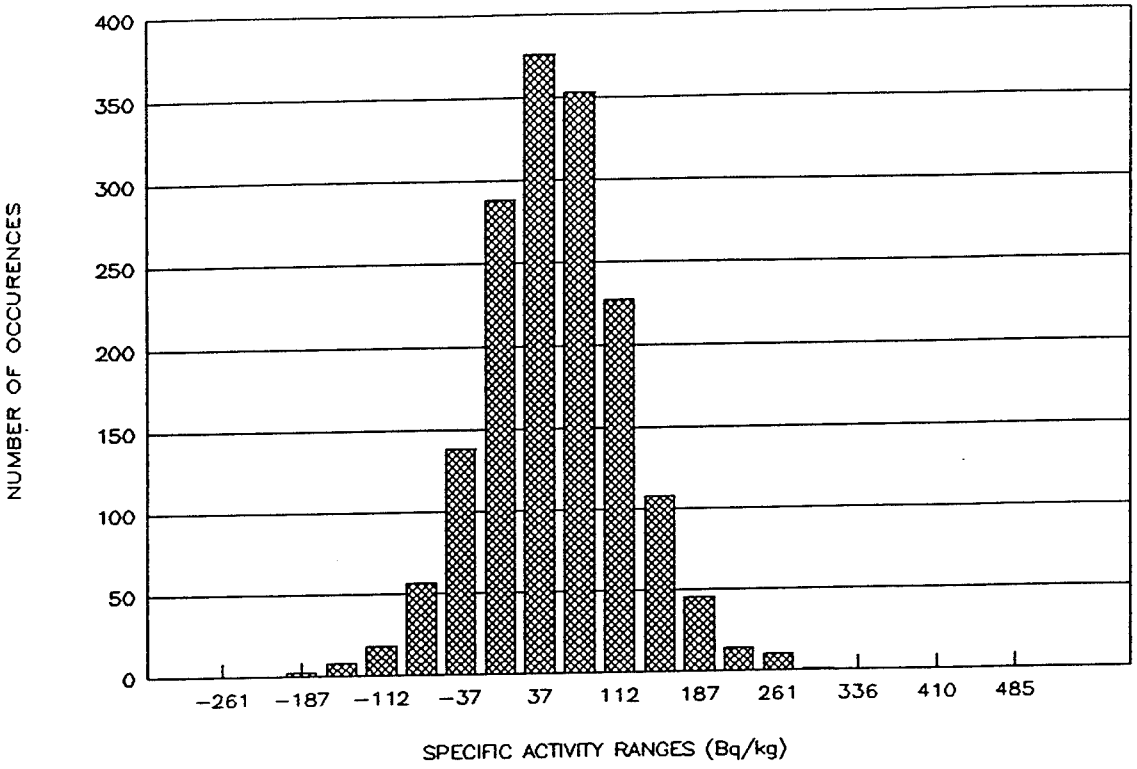
HOT PARTICLE EVENTS	979	SORTS BY ONE GATE ONLY	480
MULTIPARTICLE EVENTS	545	SORTS BY TWO GATES	488
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

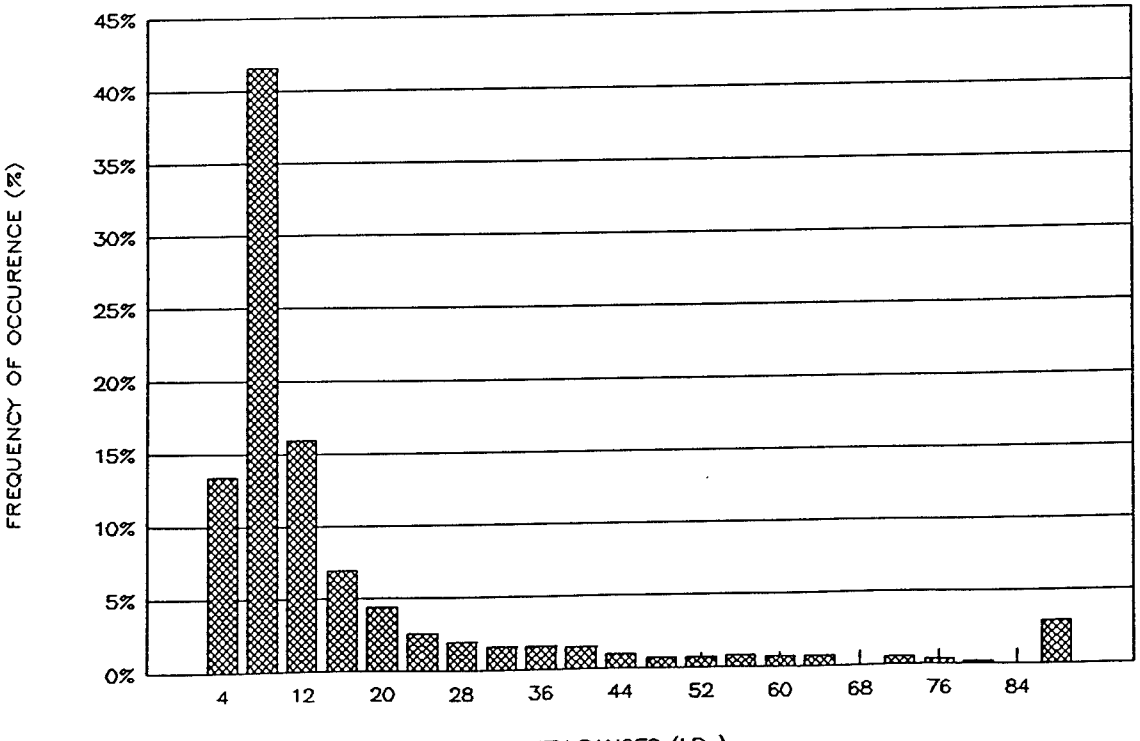
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 08–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 08–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 08-Feb-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.45 tons	86.0 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.3%
EQUIVALENT SOIL-IN-GROUND	1.15 yd³	68.2 yd³	69.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	18,619 kBq		
MAXIMUM/SORT	504 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,864 kBq	6,310 kBq	
MAXIMUM/SORT	420 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	6,108 Bq/kg	73 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:39 AM	END SOIL PROCESSING	04:42 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.07 hr
DOWN-TIME	0.93 hr
TOTAL SYSTEM PAUSE	0.61 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.65 hr
SHUT-DOWN	0.79 hr
PLANT PERFORMANCE	90.7%
PRODUCTIVITY	90.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,605	
NONPROCESS RECORDS (Test, calibration, etc)			12	
20-SEC PROCESS RECORDS			1,632	
TOTAL SORT			3	MD>0 & MND=0
NO SORT			771	AD=0 & MD=0 & MND>0
SOME SORT			857	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			1	
0<AD<1kBq & MD>0	1		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	1		08:25:48	07:02
AD<0 & MD	0		12:29:08	
ACT_P <5 kBq	222	22.8%		

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,320	
2-SEC RECORDS WITH SORTS	973	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	222	84.4%
3 DETECTORS	38	14.4%
4 DETECTORS	2	0.8%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	263	
NET 2-SEC RECORDS WITH SORTS	710	
2-SEC PERIODS WITH NO SORTS	15,610	
AVG TIME BETWEEN 2-SEC SORTS	46.0	sec

1-GATE SORTS DETECTR	SORTS	494 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	20	4.0%	-14000	0	-261
2	93	18.8%	-12000	0	-224
3	80	16.2%	-10000	2	-187
4	85	17.2%	-8000	7	-149
5	81	16.4%	-6000	8	-112
6	75	15.2%	-4000	17	-75
7	49	9.9%	-2000	59	-37
8	11	2.2%	0	145	0
TOTAL	494		2000	294	37
			4000	329	75
2-GATE SORTS		479	6000	353	112
DETECTR	SORTS	FREQ%	8000	228	149
8			10000	109	187
9	43	9.0%	12000	52	224
10	85	17.7%	14000	29	261
11	82	17.1%	16000	9	299
12	90	18.8%	18000	3	336
13	86	18.0%	20000	0	373
14	60	12.5%	22000	0	410
15	33	6.9%	24000	0	448
TOTAL	479		26000	0	485
			>28000	0	0
			TOTAL	1644	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	99	10.2%	4
8000	406	41.7%	8
12000	164	16.9%	12
16000	89	9.1%	16
20000	42	4.3%	20
24000	23	2.4%	24
28000	27	2.8%	28
32000	14	1.4%	32
36000	7	0.7%	36
40000	11	1.1%	40
44000	5	0.5%	44
48000	7	0.7%	48
52000	8	0.8%	52
56000	9	0.9%	56
60000	5	0.5%	60
64000	3	0.3%	64
68000	4	0.4%	68
72000	5	0.5%	72
76000	1	0.1%	76
80000	2	0.2%	80
84000	4	0.4%	84
>84000	38	3.9%	>84
TOTAL	973		

SUMMARY TOTALS

HOT PARTICLE EVENTS	966	SORTS BY ONE GATE ONLY	494
MULTIPARTICLE EVENTS	970	SORTS BY TWO GATES	479
DISTRIBUTED EVENTS	227		

REC CODE EXPLANATION

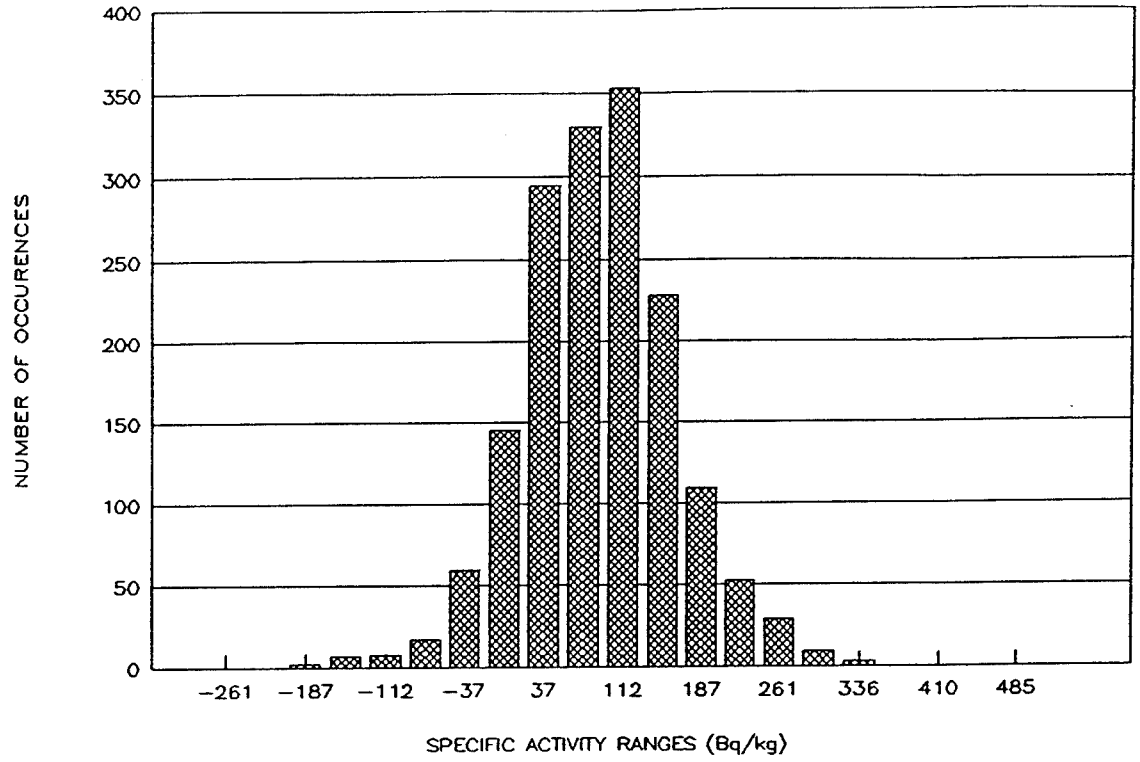
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

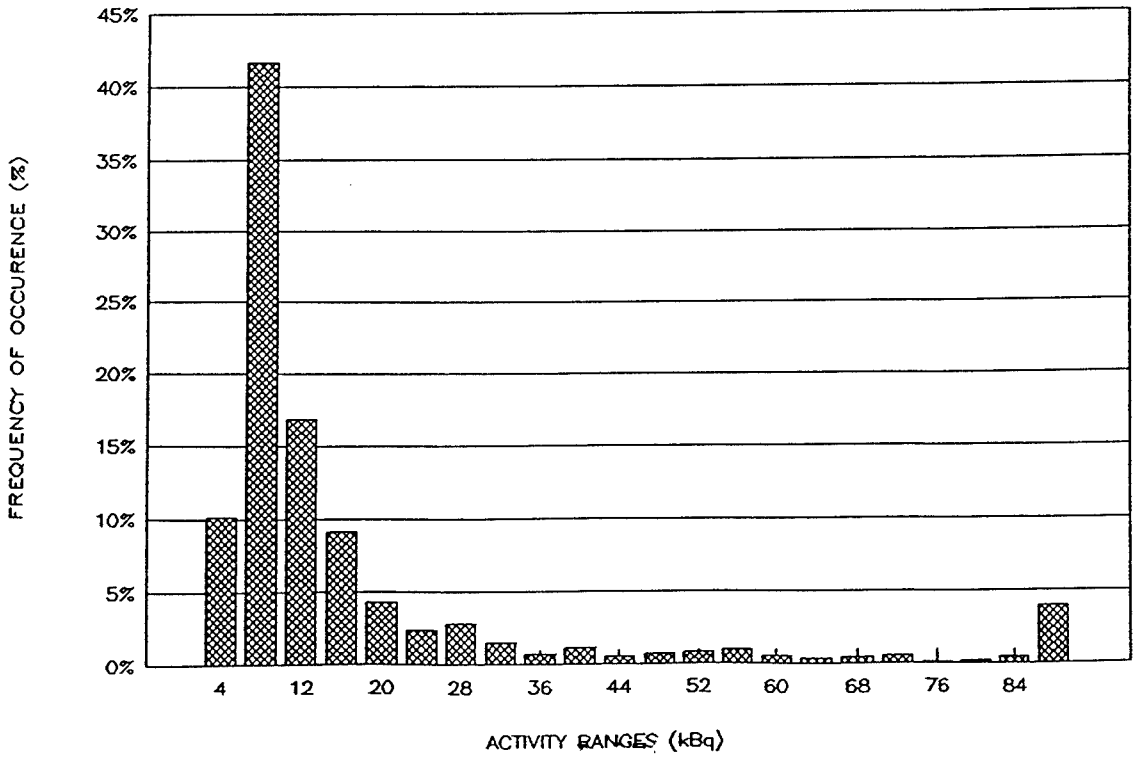
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 08–Feb–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 08–Feb–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 26-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.72 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.04 tons	87.3 tons	
MAXIMUM/SORT	8 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
			98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.83 yd³	69.2 yd³	70.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	16,003 kBq		
MAXIMUM/SORT	443 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,931 kBq	3,588 kBq	
MAXIMUM/SORT	339 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	6,647 Bq/kg	41 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:59 AM	END SOIL PROCESSING	05:08 PM
LUNCH START	~~12:00 AM~~ N/A	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.16 hr
DOWN-TIME	1.34 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.99 hr
SHUT-DOWN	0.35 hr
PLANT PERFORMANCE	87.2%
PRODUCTIVITY	87.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,682	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	1,649	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	949	AD=0 & MD=0 & MND>0
SOME SORT	700	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	326	31.6%

UNEXPLAIN TIME	PAUSE TIME
10:23:39	07:26
15:47:39	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,490	
2-SEC RECORDS WITH SORTS	1,033	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	230	83.0%
3 DETECTORS	39	14.1%
4 DETECTORS	8	2.9%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	277	
NET 2-SEC RECORDS WITH SORTS	756	
2-SEC PERIODS WITH NO SORTS	15,734	
AVG TIME BETWEEN 2-SEC SORTS	43.6	sec

1-GATE SORTS		527	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	12	2.3%	-14000	0	-261	4000	150	14.5%	4
2	57	10.8%	-12000	2	-224	8000	434	42.0%	8
3	87	16.5%	-10000	0	-187	12000	162	15.7%	12
4	93	17.6%	-8000	2	-149	16000	81	7.8%	16
5	101	19.2%	-6000	5	-112	20000	44	4.3%	20
6	90	17.1%	-4000	35	-75	24000	24	2.3%	24
7	66	12.5%	-2000	105	-37	28000	10	1.0%	28
8	21	4.0%	0	278	0	32000	17	1.6%	32
TOTAL	527		2000	411	37	36000	15	1.5%	36
			4000	353	75	40000	8	0.8%	40
2-GATE SORTS		506	6000	264	112	44000	14	1.4%	44
DETECTR	SORTS	FREQ%	8000	103	149	48000	11	1.1%	48
8			10000	69	187	52000	6	0.6%	52
9	28	5.5%	12000	14	224	56000	9	0.9%	56
10	74	14.6%	14000	10	261	60000	2	0.2%	60
11	97	19.2%	16000	1	299	64000	5	0.5%	64
12	84	16.6%	18000	0	336	68000	3	0.3%	68
13	93	18.4%	20000	0	373	72000	9	0.9%	72
14	78	15.4%	22000	0	410	76000	1	0.1%	76
15	52	10.3%	24000	0	448	80000	0	0.0%	80
TOTAL	506		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	26	2.5%	>84
			TOTAL	1652		TOTAL	1033		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1007	SORTS BY ONE GATE ONLY	527
MULTIPARTICLE EVENTS	551	SORTS BY TWO GATES	506
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

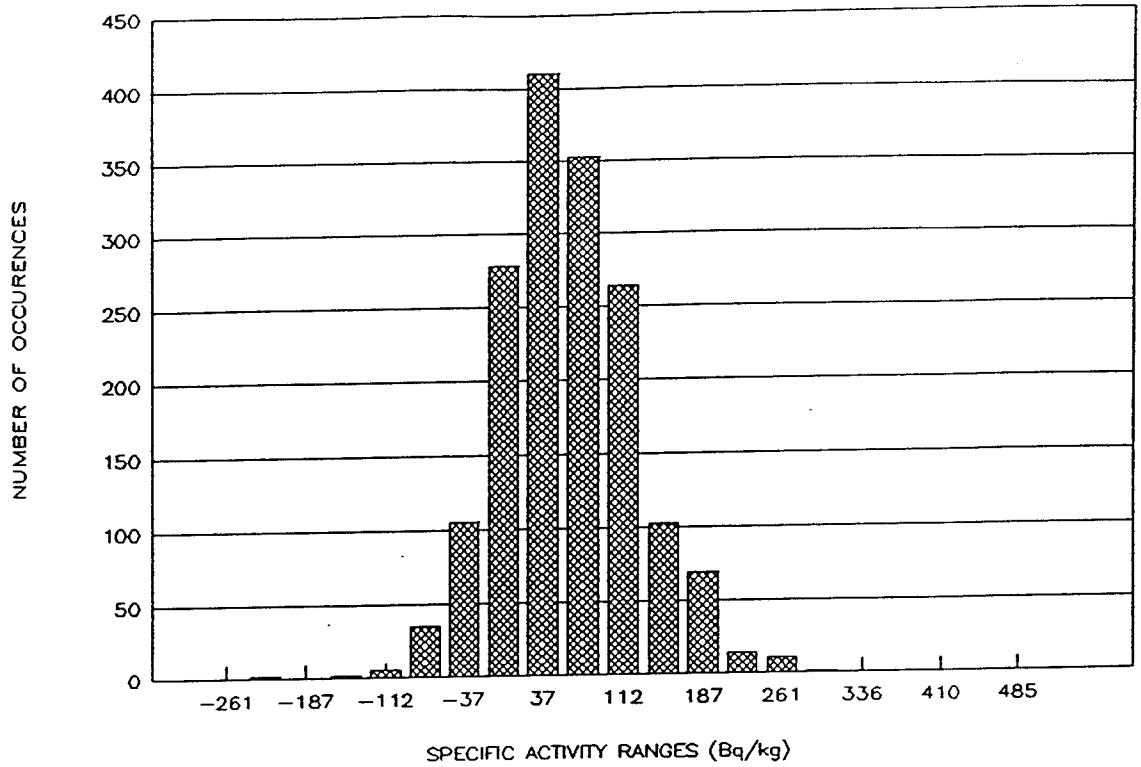
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

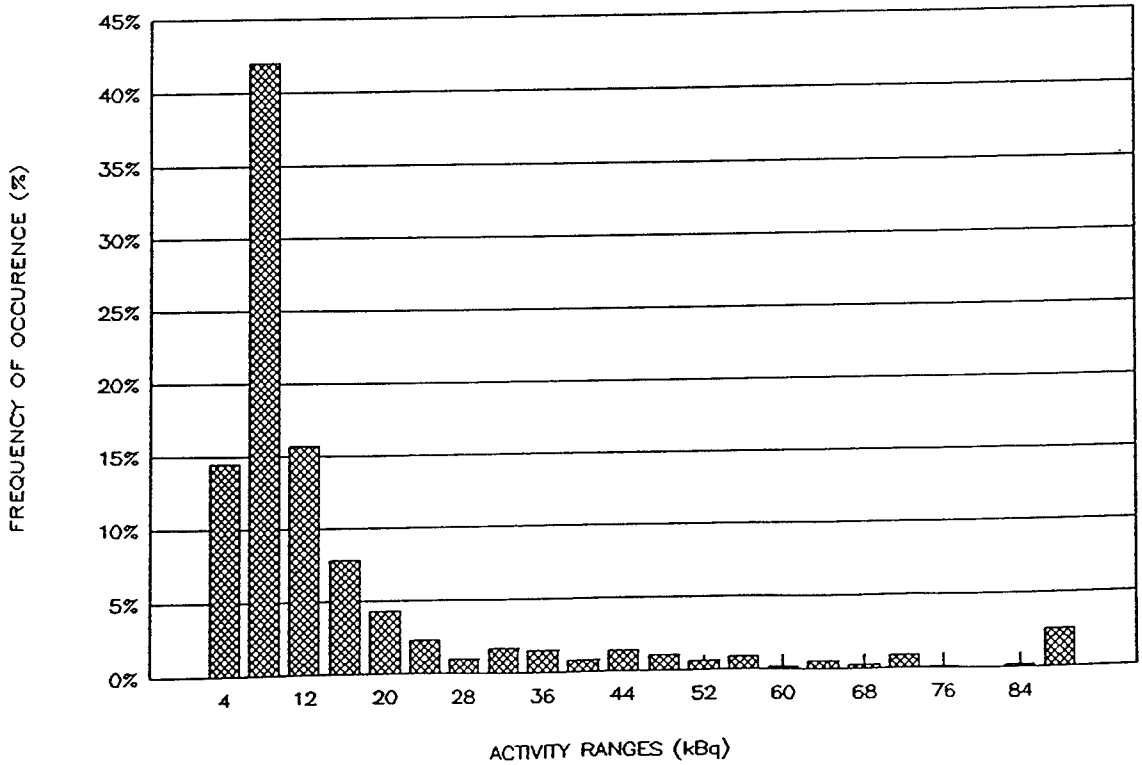
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 26-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 26-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 26-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.25 tons	87.1 tons	
MAXIMUM/SORT	6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	0.99 yd³	69.1 yd³	70.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,043 kBq		
MAXIMUM/SORT	294 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,240 kBq	6,377 kBq	
MAXIMUM/SORT	172 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-17 kBq	
SPECIFIC ACTIVITY	5,795 Bq/kg	73 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:59 AM	END SOIL PROCESSING	05:08 PM
LUNCH START	~~11:30 AM~~ N/A	LUNCH PERIOD	0.0 hr

WORK HOURS	10.5 hr
AVAILABLE HOURS	10.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	9.16 hr
DOWN-TIME	1.34 hr
TOTAL SYSTEM PAUSE	0.55 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.99 hr
SHUT-DOWN	0.35 hr
PLANT PERFORMANCE	87.2%
PRODUCTIVITY	87.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,653		
NONPROCESS RECORDS (Test, calibration, etc)			3		
20-SEC PROCESS RECORDS			1,649		
TOTAL SORT			0	MD>0 & MND=0	
NO SORT			784	AD=0 & MD=0 & MND>0	
SOME SORT			865	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	6			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			08:56:59	07:26
AD<0 & MD	0			10:00:39	
ACT_P <5 kBq	254	25.3%			

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	16,490		11:22:39
2-SEC RECORDS WITH SORTS	1,004	(ACT_P >0 kBq)	12:20:39
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			13:07:59
2 DETECTORS	218	83.8%	13:29:59
3 DETECTORS	36	13.8%	
4 DETECTORS	6	2.3%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	260		
NET 2-SEC RECORDS WITH SORTS	744		
2-SEC PERIODS WITH NO SORTS	15,746		
AVG TIME BETWEEN 2-SEC SORTS	44.3 sec		

1-GATE SORTS DETECTR	SORTS	512 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	30	5.9%	-14000	2	-261
2	103	20.1%	-12000	2	-224
3	105	20.5%	-10000	2	-187
4	104	20.3%	-8000	4	-149
5	77	15.0%	-6000	1	-112
6	54	10.5%	-4000	15	-75
7	33	6.4%	-2000	51	-37
8	6	1.2%	0	131	0
TOTAL	512		2000	286	37
			4000	391	75
2-GATE SORTS		492	6000	336	112
DETECTR	SORTS	FREQ%	8000	224	149
8			10000	126	187
9	71	14.4%	12000	51	224
10	96	19.5%	14000	17	261
11	113	23.0%	16000	9	299
12	92	18.7%	18000	2	336
13	59	12.0%	20000	2	373
14	47	9.6%	22000	0	410
15	14	2.8%	24000	0	448
TOTAL	492		26000	0	485
			>28000	0	0
			TOTAL	1652	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	98	9.8%	4
8000	465	46.3%	8
12000	163	16.2%	12
16000	70	7.0%	16
20000	48	4.8%	20
24000	32	3.2%	24
28000	23	2.3%	28
32000	10	1.0%	32
36000	12	1.2%	36
40000	7	0.7%	40
44000	11	1.1%	44
48000	5	0.5%	48
52000	3	0.3%	52
56000	10	1.0%	56
60000	2	0.2%	60
64000	6	0.6%	64
68000	3	0.3%	68
72000	6	0.6%	72
76000	3	0.3%	76
80000	2	0.2%	80
84000	0	0.0%	84
>84000	25	2.5%	>84
TOTAL	1004		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1024	SORTS BY ONE GATE ONLY	512
MULTIPARTICLE EVENTS	840	SORTS BY TWO GATES	492
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

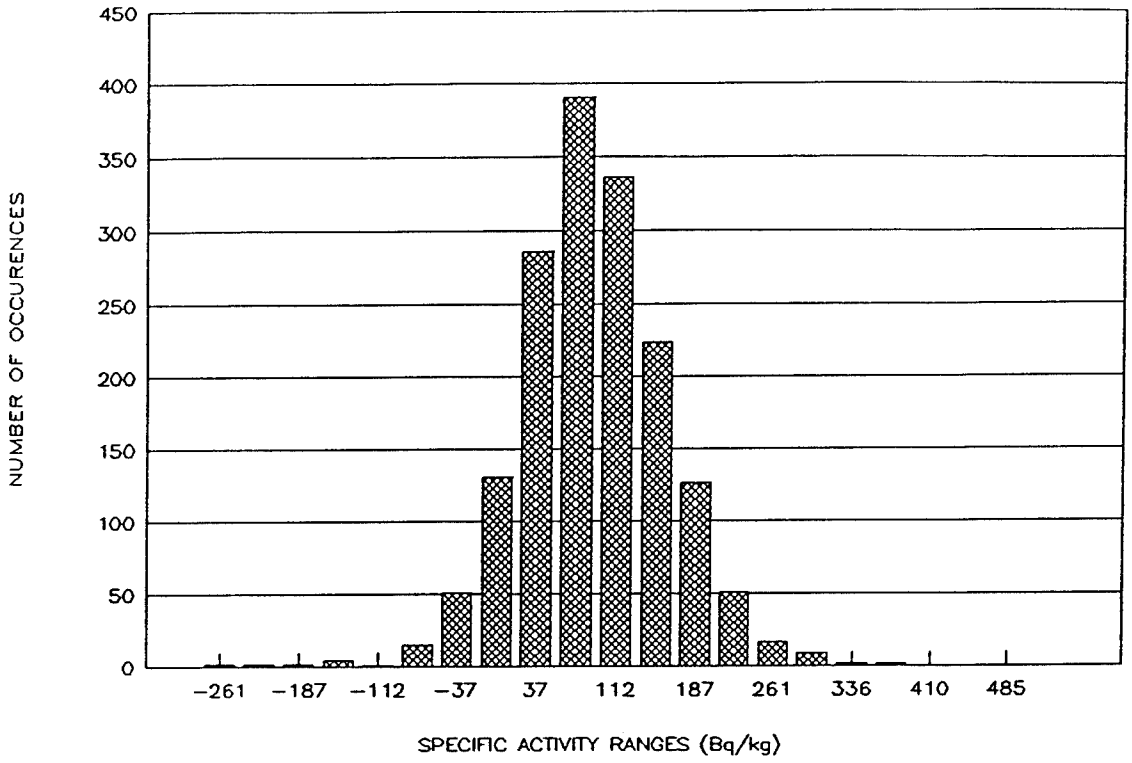
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

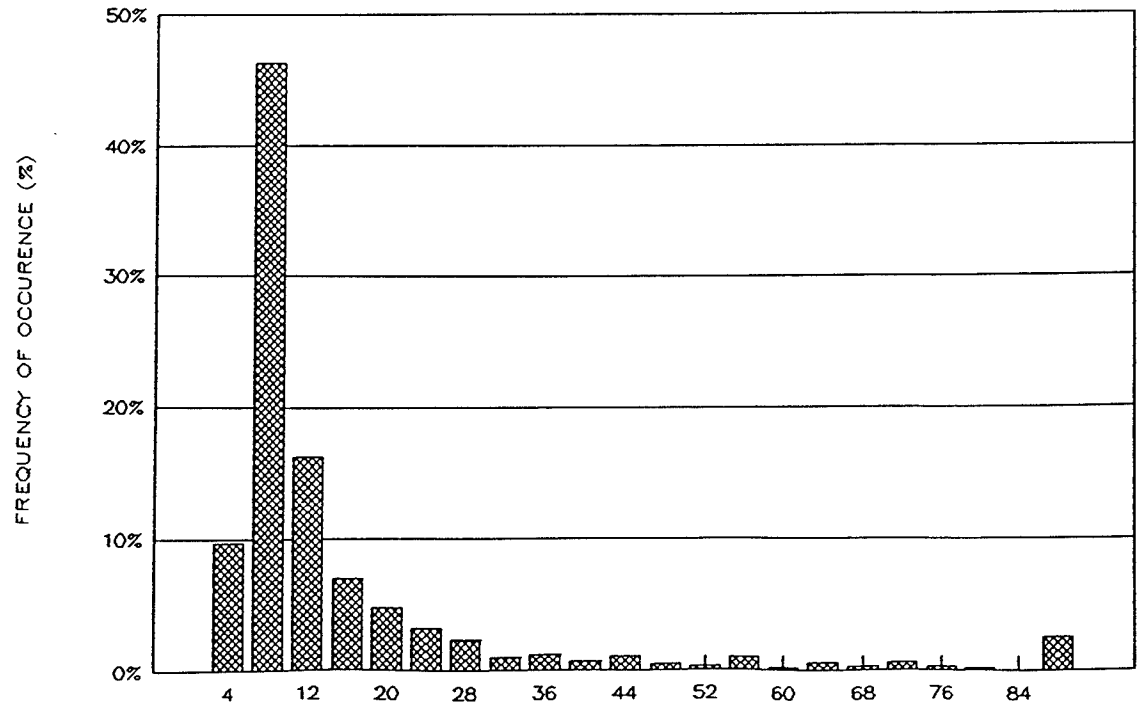
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 26-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 26-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 25-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.74 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.15 tons	77.9 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	43.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	0.92 yd³	61.8 yd³	62.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,418 kBq		
MAXIMUM/SORT	939 kBq		
MINIMUM/SORT	2.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,919 kBq	3,449 kBq	
MAXIMUM/SORT	674 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	7,725 Bq/kg	44 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:41 AM	END SOIL PROCESSING	05:06 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.20 hr
DOWN-TIME	1.80 hr
TOTAL SYSTEM PAUSE	1.89 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.69 hr
SHUT-DOWN	0.39 hr
PLANT PERFORMANCE	82.0%
PRODUCTIVITY	82.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,641	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,476	
TOTAL SORT		1	MD>0 & MND=0
NO SORT		807	AD=0 & MD=0 & MND>0
SOME SORT		668	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	3		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	326	28.0%	

UNEXPLAIN TIME	PAUSE TIME
13:14:58	07:00
13:39:58	11:11

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	14,760		16:17:58
2-SEC RECORDS WITH SORTS	1,165	(ACT_P >0 kBq)	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	287	80.8%	
3 DETECTORS	55	15.5%	
4 DETECTORS	9	2.5%	
5 DETECTORS	4	1.1%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	355		
NET 2-SEC RECORDS WITH SORTS	810		
2-SEC PERIODS WITH NO SORTS	13,950		
AVG TIME BETWEEN 2-SEC SORTS	36.4	sec	

1-GATE SORTS		580	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	12	2.1%	-14000	0	-261	4000	147	12.6%	4
2	35	6.0%	-12000	0	-224	8000	460	39.5%	8
3	88	15.2%	-10000	0	-187	12000	184	15.8%	12
4	102	17.6%	-8000	3	-149	16000	85	7.3%	16
5	107	18.4%	-6000	9	-112	20000	51	4.4%	20
6	109	18.8%	-4000	38	-75	24000	40	3.4%	24
7	99	17.1%	-2000	113	-37	28000	37	3.2%	28
8	28	4.8%	0	229	0	32000	18	1.5%	32
TOTAL	580		2000	336	37	36000	18	1.5%	36
			4000	297	75	40000	17	1.5%	40
2-GATE SORTS		585	6000	222	112	44000	15	1.3%	44
DETECTR	SORTS	FREQ%	8000	140	149	48000	12	1.0%	48
8			10000	52	187	52000	9	0.8%	52
9	24	4.1%	12000	30	224	56000	6	0.5%	56
10	52	8.9%	14000	5	261	60000	9	0.8%	60
11	106	18.1%	16000	6	299	64000	4	0.3%	64
12	108	18.5%	18000	1	336	68000	6	0.5%	68
13	119	20.3%	20000	1	373	72000	3	0.3%	72
14	110	18.8%	22000	0	410	76000	4	0.3%	76
15	66	11.3%	24000	0	448	80000	5	0.4%	80
TOTAL	585		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	35	3.0%	>84
			TOTAL	1482		TOTAL	1165		

SUMMARY TOTALS

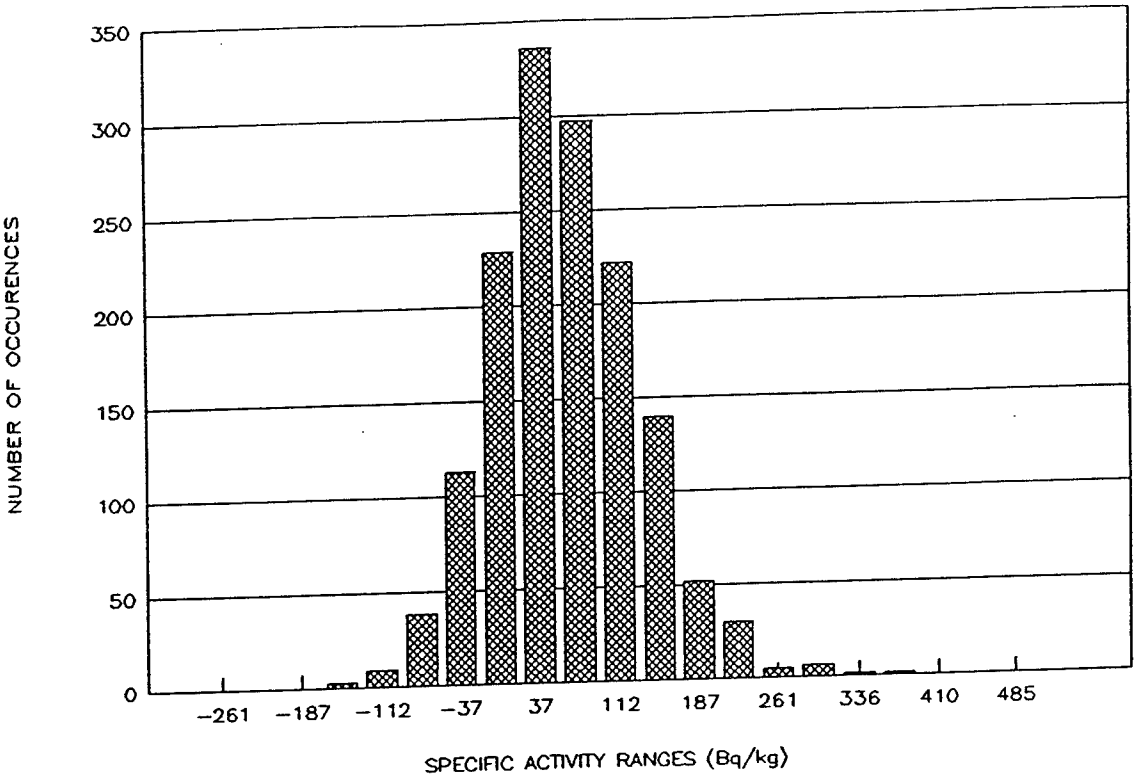
HOT PARTICLE EVENTS	1121	SORTS BY ONE GATE ONLY	580
MULTIPARTICLE EVENTS	528	SORTS BY TWO GATES	585
DISTRIBUTED EVENTS	78		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

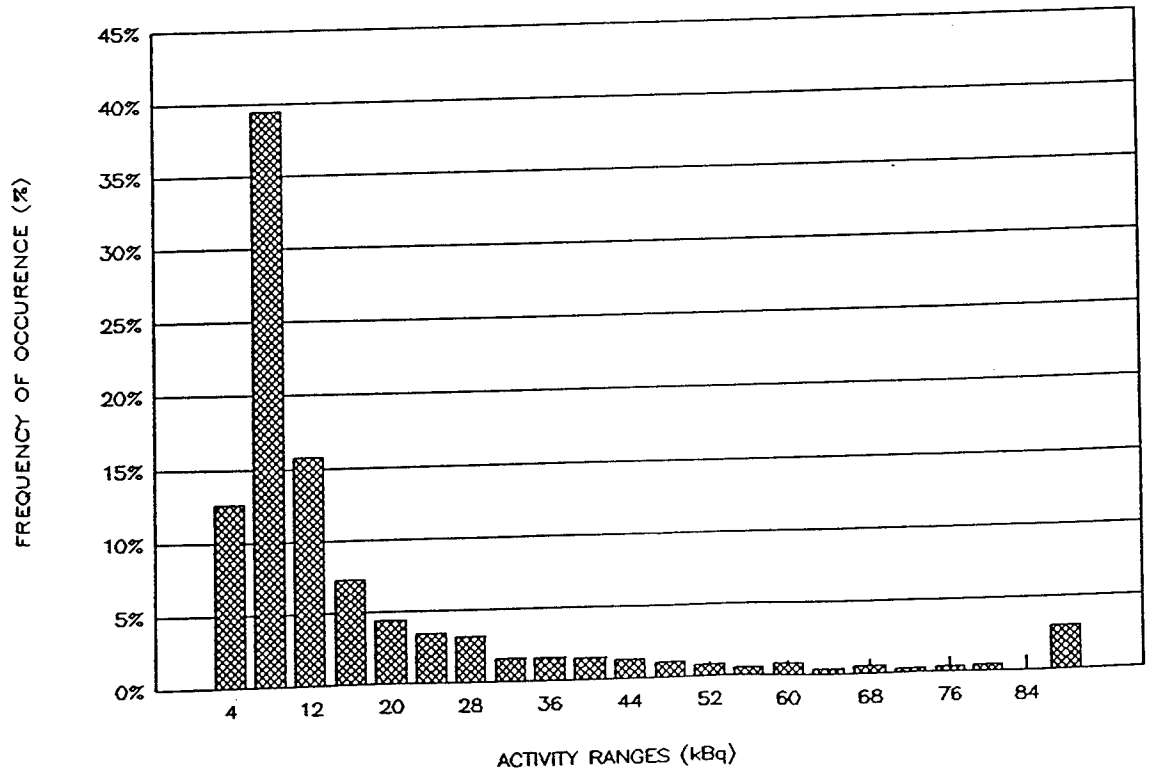
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1-LOG DATA FOR 25-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 25-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 25-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.39 tons	77.8 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.2%
EQUIVALENT SOIL-IN-GROUND	1.10 yd³	61.6 yd³	62.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	20,307 kBq		
MAXIMUM/SORT	687 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,369 kBq	6,366 kBq	
MAXIMUM/SORT	553 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,749 Bq/kg	82 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:41 AM	END SOIL PROCESSING	05:05 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	8.21 hr
DOWN-TIME	1.79 hr
TOTAL SYSTEM PAUSE	1.88 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.69 hr
SHUT-DOWN	0.40 hr
PLANT PERFORMANCE	82.1%
PRODUCTIVITY	82.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,654	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,477	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		639	AD=0 & MD=0 & MND>0
SOME SORT		838	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	291	24.7%	

UNEXPLAIN TIME	PAUSE TIME
10:25:19	07:00
	11:11

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		14,770	
2-SEC RECORDS WITH SORTS		1,177	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	260		80.7%
3 DETECTORS	54		16.8%
4 DETECTORS	8		2.5%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		322	
NET 2-SEC RECORDS WITH SORTS		855	
2-SEC PERIODS WITH NO SORTS		13,915	
AVG TIME BETWEEN 2-SEC SORTS		34.5	sec

1-GATE SORTS DETECTR	SORTS	599 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	31	5.2%	-14000	0	-261
2	118	19.7%	-12000	0	-224
3	127	21.2%	-10000	1	-187
4	126	21.0%	-8000	2	-149
5	108	18.0%	-6000	2	-112
6	61	10.2%	-4000	10	-75
7	15	2.5%	-2000	41	-37
8	13	2.2%	0	125	0
TOTAL	599		2000	247	37
			4000	301	75
2-GATE SORTS		578	6000	282	112
DETECTR	SORTS	FREQ%	8000	224	149
8			10000	141	187
9	80	13.8%	12000	66	224
10	108	18.7%	14000	25	261
11	133	23.0%	16000	12	299
12	120	20.8%	18000	3	336
13	86	14.9%	20000	1	373
14	34	5.9%	22000	0	410
15	17	2.9%	24000	0	448
TOTAL	578		26000	0	485
			>28000	0	0
			TOTAL	1483	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	122	10.4%	4
8000	514	43.7%	8
12000	173	14.7%	12
16000	94	8.0%	16
20000	53	4.5%	20
24000	49	4.2%	24
28000	23	2.0%	28
32000	20	1.7%	32
36000	29	2.5%	36
40000	11	0.9%	40
44000	10	0.8%	44
48000	8	0.7%	48
52000	5	0.4%	52
56000	7	0.6%	56
60000	9	0.8%	60
64000	5	0.4%	64
68000	3	0.3%	68
72000	5	0.4%	72
76000	3	0.3%	76
80000	4	0.3%	80
84000	3	0.3%	84
>84000	27	2.3%	>84
TOTAL	1177		

SUMMARY TOTALS

HOT PARTICLE EVENTS	1165	SORTS BY ONE GATE ONLY	599
MULTIPARTICLE EVENTS	909	SORTS BY TWO GATES	578
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

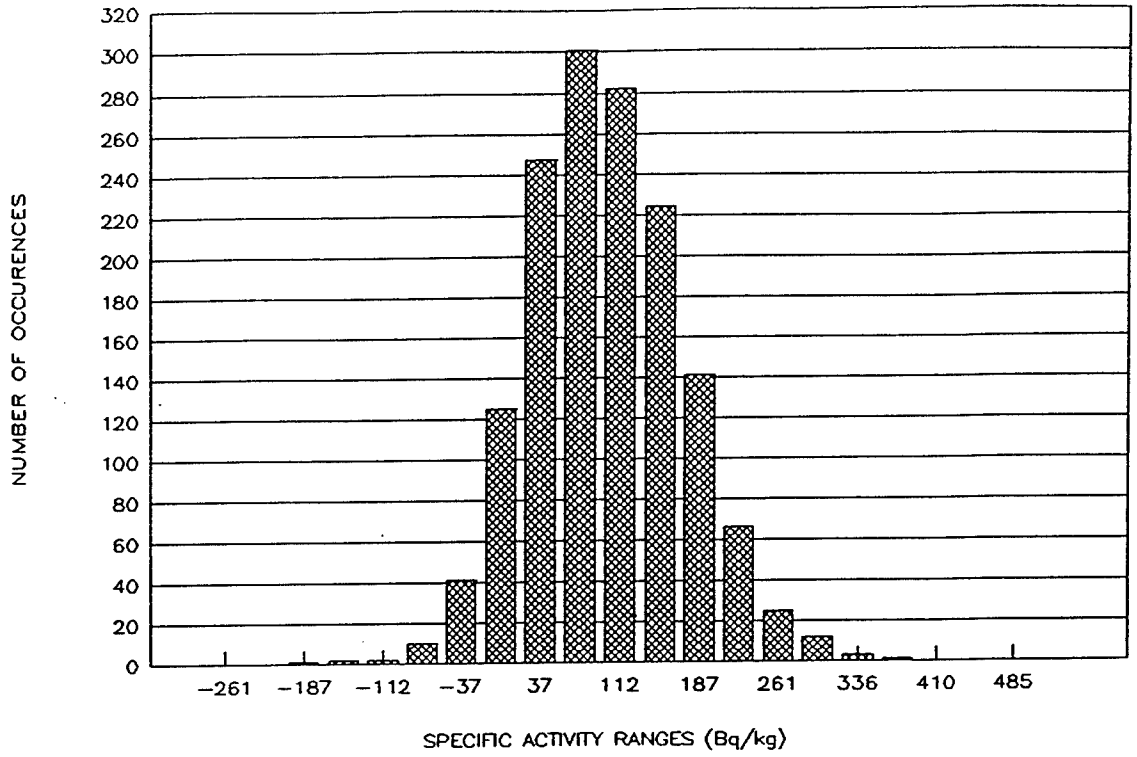
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

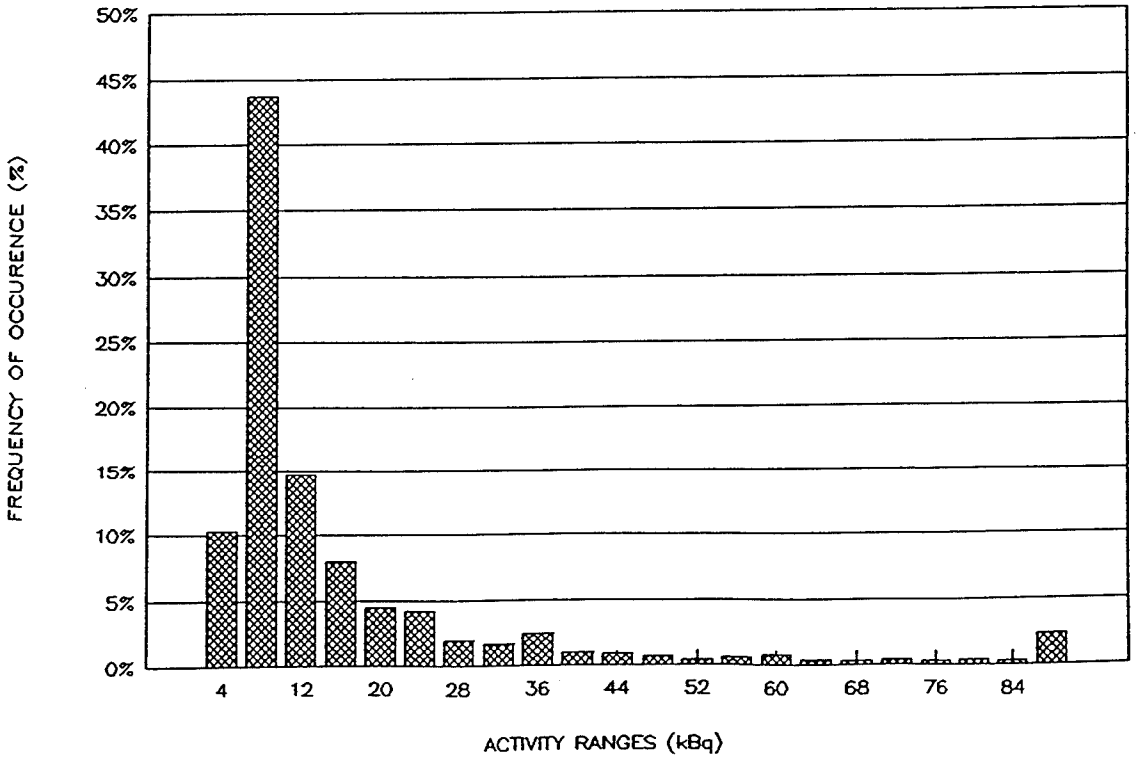
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 25–Jan–93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 25–Jan–93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 23-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.74 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.10 tons	55.0 tons	
MAXIMUM/SORT	8.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.0%
EQUIVALENT SOIL-IN-GROUND	0.87 yd³	43.6 yd³	44.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	20,155 kBq		
MAXIMUM/SORT	646 kBq		
MINIMUM/SORT	2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,451 kBq	3,536 kBq	
MAXIMUM/SORT	463 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	7,701 Bq/kg	64 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:08 AM	END SOIL PROCESSING	04:27 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.82 hr
DOWN-TIME	4.18 hr
TOTAL SYSTEM PAUSE	3.92 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.14 hr
SHUT-DOWN	1.04 hr
PLANT PERFORMANCE	58.2%
PRODUCTIVITY	58.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,244	
NONPROCESS RECORDS (Test, calibration, etc)	14	
20-SEC PROCESS RECORDS	1,047	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	457	AD=0 & MD=0 & MND>0
SOME SORT	590	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	362	30.2%

UNEXPLAIN TIME	PAUSE TIME
None	07:05
	11:12

JA SOIL CLEANUP PLANT LOG SUMMARY

12:22
16:30

2-SEC COUNT PERIODS	10,470	
2-SEC RECORDS WITH SORTS	1,197 (ACT_P >0 kBq)	
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	271	77.4%
3 DETECTORS	62	17.7%
4 DETECTORS	12	3.4%
5 DETECTORS	5	1.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	350	
NET 2-SEC RECORDS WITH SORTS	847	
2-SEC PERIODS WITH NO SORTS	9,623	
AVG TIME BETWEEN 2-SEC SORTS	24.7 sec	

1-GATE SORTS DETECTR	SORTS	599 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	12	2.0%	-14000	0	-261	4000	188	15.7%	4
2	45	7.5%	-12000	4	-224	8000	461	38.5%	8
3	70	11.7%	-10000	4	-187	12000	175	14.6%	12
4	105	17.5%	-8000	3	-149	16000	92	7.7%	16
5	124	20.7%	-6000	4	-112	20000	57	4.8%	20
6	100	16.7%	-4000	19	-75	24000	47	3.9%	24
7	107	17.9%	-2000	53	-37	28000	38	3.2%	28
8	36	6.0%	0	109	0	32000	24	2.0%	32
TOTAL	599		2000	200	37	36000	13	1.1%	36
			4000	218	75	40000	12	1.0%	40
2-GATE SORTS		598	6000	201	112	44000	11	0.9%	44
DETECTR	SORTS	FREQ%	8000	118	149	48000	6	0.5%	48
8			10000	78	187	52000	10	0.8%	52
9	27	4.5%	12000	36	224	56000	8	0.7%	56
10	57	9.5%	14000	12	261	60000	7	0.6%	60
11	88	14.7%	16000	1	299	64000	5	0.4%	64
12	124	20.7%	18000	1	336	68000	2	0.2%	68
13	120	20.1%	20000	0	373	72000	1	0.1%	72
14	100	16.7%	22000	0	410	76000	6	0.5%	76
15	82	13.7%	24000	0	448	80000	4	0.3%	80
TOTAL	598		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	28	2.3%	>84
			TOTAL	1061		TOTAL	1197		

SUMMARY TOTALS

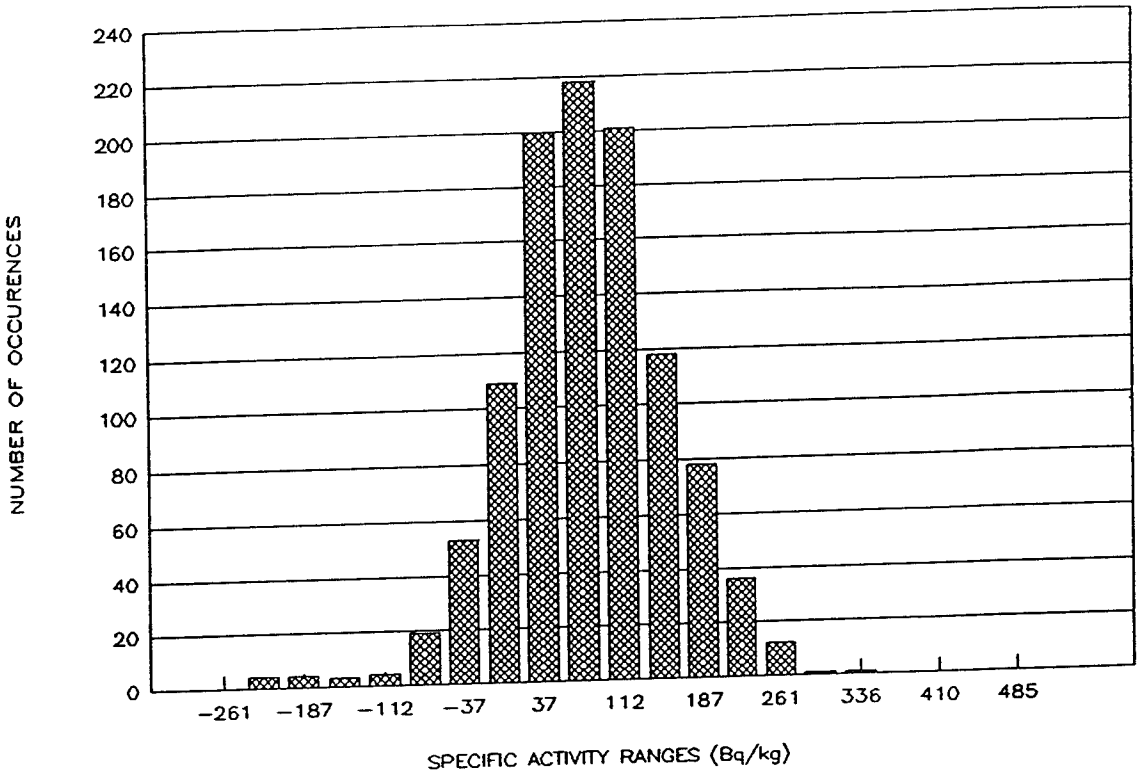
HOT PARTICLE EVENTS	1160	SORTS BY ONE GATE ONLY	599
MULTIPARTICLE EVENTS	484	SORTS BY TWO GATES	598
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

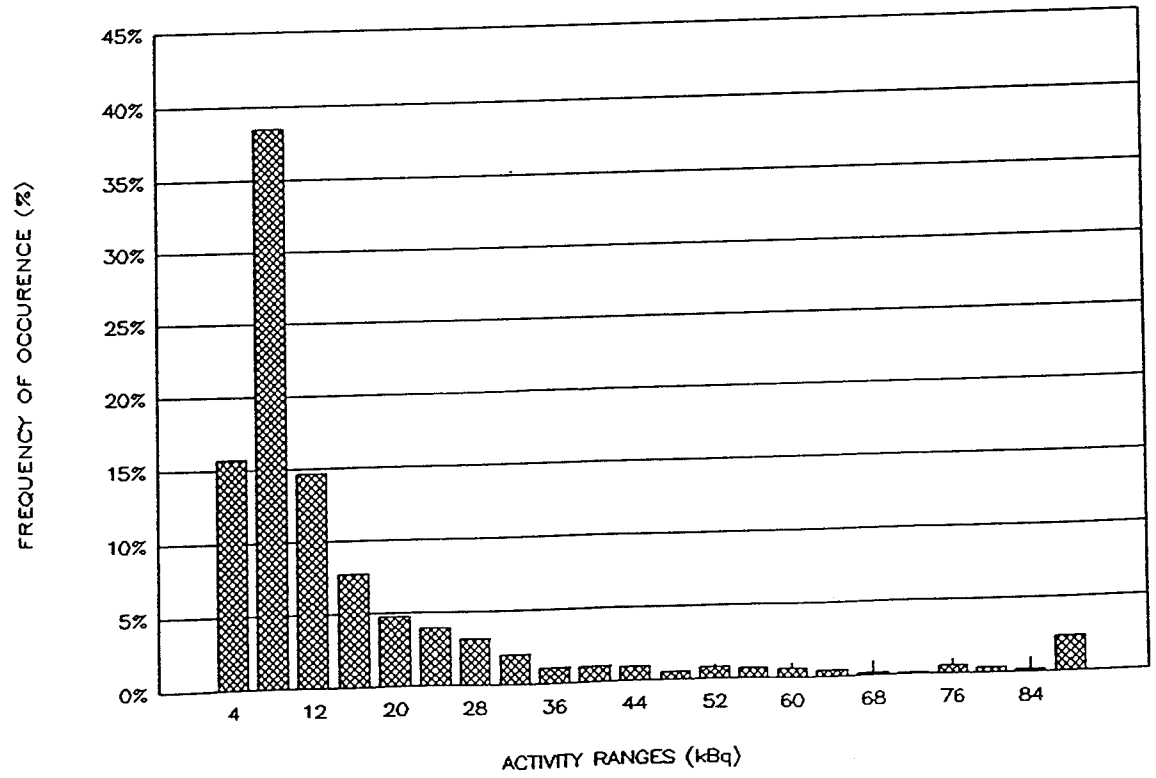
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 23-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 23-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 23-Jan-93

not correct - data missing

AVERAGE BACKGROUND COUNT RATE	0.61 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
		~~CONTAMINATED~~	~~CLEAN~~
MASS TOTAL		0.13 tons	1.2 tons
MAXIMUM/SORT		53.6 kg	53.6 kg
MINIMUM/SORT		0.7 kg	50.9 kg
WEIGHT RECOVERY OR VOLUME RECOVERY			90.0%
EQUIVALENT SOIL-IN-GROUND		0.10 yd³	0.9 yd³ 1.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL		19,123 kBq	
MAXIMUM/SORT		994 kBq	
MINIMUM/SORT		2.6 kBq	
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		120 kBq	259 kBq
MAXIMUM/SORT		29 kBq	19 kBq
MINIMUM/SORT		0 Bq	-11 kBq
SPECIFIC ACTIVITY		934 Bq/kg	223 Bq/kg

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:08 AM	END SOIL PROCESSING	04:28 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	0.13 hr
DOWN-TIME	9.87 hr
TOTAL SYSTEM PAUSE	8.49 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.14 hr
SHUT-DOWN	1.03 hr
PLANT PERFORMANCE	1.3%
PRODUCTIVITY	1.3%

not correct file corrupted, records did not import

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,082	
NONPROCESS RECORDS (Test, calibration, etc)	2	
20-SEC PROCESS RECORDS	24	
TOTAL SORT	2	MD>0 & MND=0
NO SORT	10	AD=0 & MD=0 & MND>0
SOME SORT	12	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	254	24.0%

UNEXPLAIN TIME	PAUSE TIME
None	07:05
	08:15

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		240	08:19
2-SEC RECORDS WITH SORTS		1,058 (ACT_P >0 kBq)	08:22
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			08:24
2 DETECTORS	216	80.3%	08:24
3 DETECTORS	46	17.1%	08:26
4 DETECTORS	7	2.6%	08:26
5 DETECTORS	0	0.0%	08:28
6 DETECTORS	0	0.0%	08:28
7 DETECTORS	0	0.0%	08:29
8 DETECTORS	0	0.0%	08:30
TOTAL	269		08:31
NET 2-SEC RECORDS WITH SORTS	789		08:32
2-SEC PERIODS WITH NO SORTS	(549)		08:34
AVG TIME BETWEEN 2-SEC SORTS	0.6 sec		More

1-GATE SORTS		531	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	25	4.7%	-14000	0	-261
2	60	11.3%	-12000	0	-224
3	105	19.8%	-10000	1	-187
4	95	17.9%	-8000	0	-149
5	100	18.8%	-6000	2	-112
6	82	15.4%	-4000	0	-75
7	53	10.0%	-2000	0	-37
8	11	2.1%	0	3	0
TOTAL	531		2000	0	37
			4000	1	75
2-GATE SORTS		527	6000	0	112
DETECTR	SORTS	FREQ%	8000	0	149
8			10000	1	187
9	52	9.9%	12000	3	224
10	69	13.1%	14000	3	261
11	102	19.4%	16000	4	299
12	106	20.1%	18000	4	336
13	94	17.8%	20000	4	373
14	77	14.6%	22000	0	410
15	27	5.1%	24000	0	448
TOTAL	527		26000	0	485
			>28000	0	0
			TOTAL	26	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	98	9.3%	4
8000	479	45.3%	8
12000	161	15.2%	12
16000	93	8.8%	16
20000	53	5.0%	20
24000	19	1.8%	24
28000	22	2.1%	28
32000	23	2.2%	32
36000	12	1.1%	36
40000	18	1.7%	40
44000	8	0.8%	44
48000	8	0.8%	48
52000	6	0.6%	52
56000	6	0.6%	56
60000	8	0.8%	60
64000	5	0.5%	64
68000	1	0.1%	68
72000	3	0.3%	72
76000	2	0.2%	76
80000	3	0.3%	80
84000	2	0.2%	84
>84000	28	2.6%	>84
TOTAL	1058		

SUMMARY TOTALS

HOT PARTICLE EVENTS	14	SORTS BY ONE GATE ONLY	531
MULTIPARTICLE EVENTS	19	SORTS BY TWO GATES	527
DISTRIBUTED EVENTS	158		

REC CODE EXPLANATION

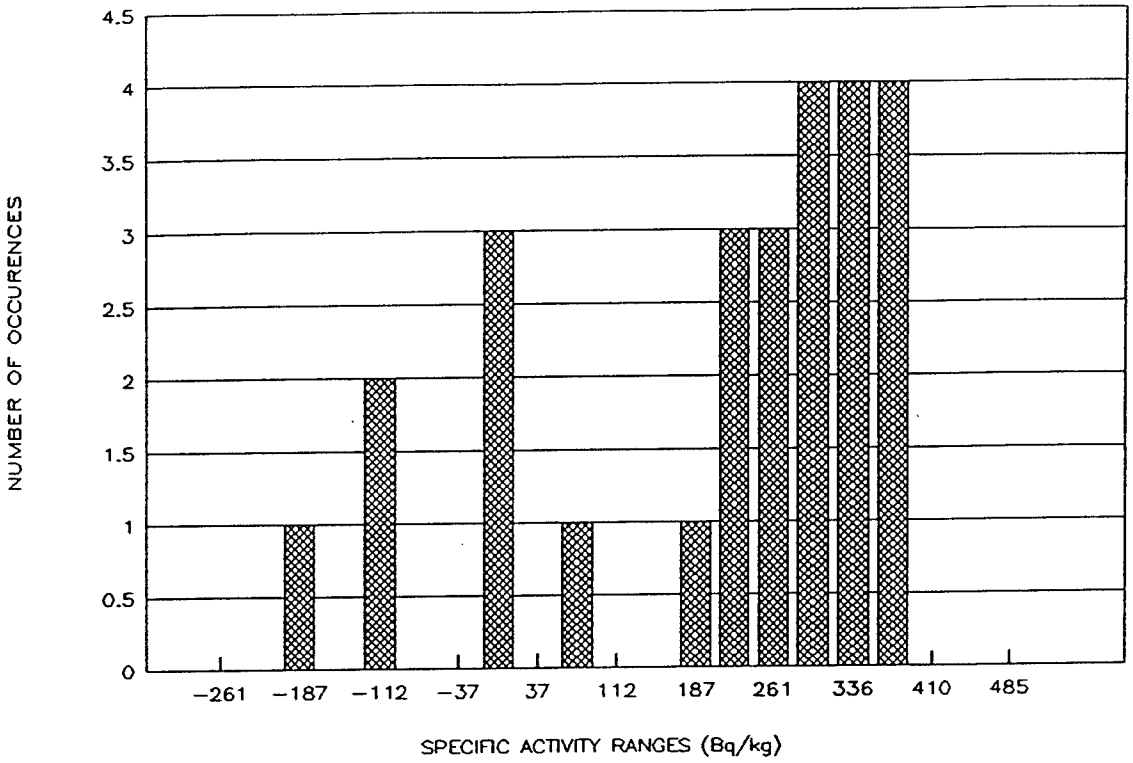
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

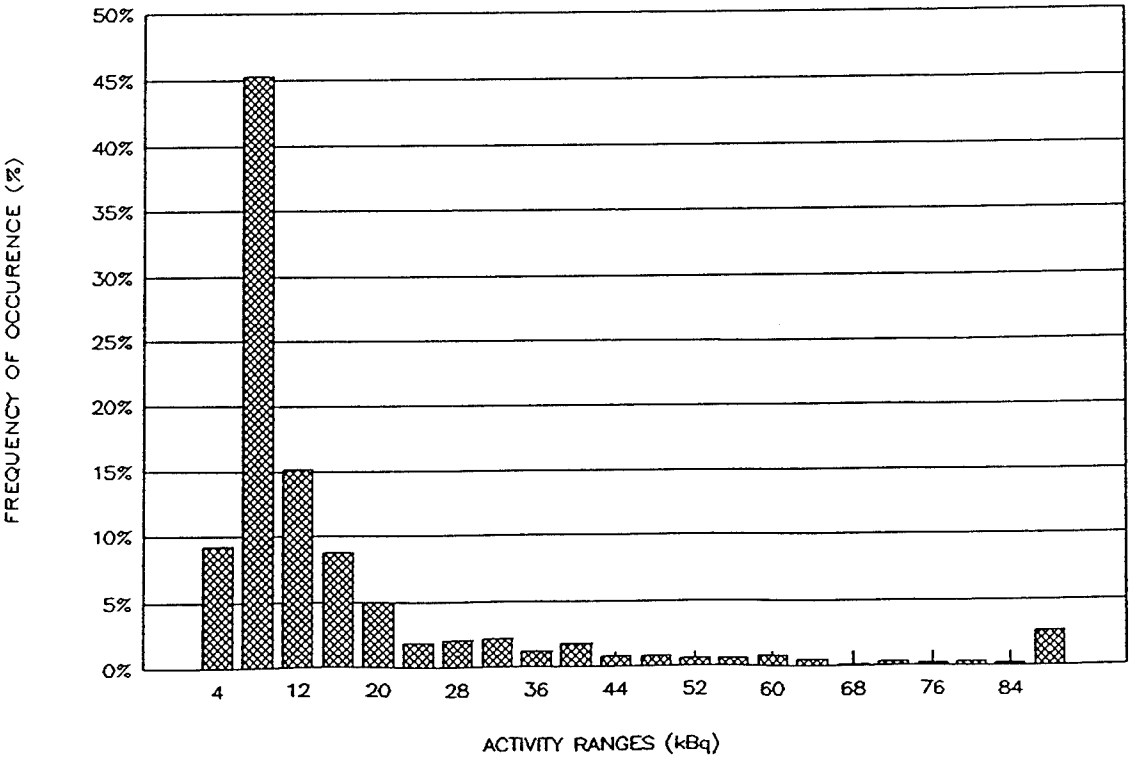
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 23-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 23-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 22-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.75 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.65 tons	69.4 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
			96.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	2.10 yd³	55.0 yd³	57.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	56,145 kBq		
MAXIMUM/SORT	7,864 kBq		
MINIMUM/SORT	2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	22,575 kBq	10,160 kBq	
MAXIMUM/SORT	5976 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	8,534 Bq/kg	146 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:03 AM	END SOIL PROCESSING	05:00 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.47 hr
DOWN-TIME	2.53 hr
TOTAL SYSTEM PAUSE	2.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.06 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	74.7%
PRODUCTIVITY	74.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		3,238	
NONPROCESS RECORDS (Test, calibration, etc)		10	
20-SEC PROCESS RECORDS		1,344	
TOTAL SORT		14	MD>0 & MND=0
NO SORT		382	AD=0 & MD=0 & MND>0
SOME SORT		948	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	577	30.5%	

UNEXPLAIN TIME	PAUSE TIME
None	06:54
	11:00

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,440	
2-SEC RECORDS WITH SORTS	1,894	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	434	78.5%
3 DETECTORS	90	16.3%
4 DETECTORS	24	4.3%
5 DETECTORS	5	0.9%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	553	
NET 2-SEC RECORDS WITH SORTS	1,341	
2-SEC PERIODS WITH NO SORTS	12,099	
AVG TIME BETWEEN 2-SEC SORTS	20.0 sec	

1-GATE SORTS		963	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	56	5.8%	-14000	0	-261	4000	293	15.5%	4
2	116	12.0%	-12000	2	-224	8000	743	39.2%	8
3	151	15.7%	-10000	1	-187	12000	264	13.9%	12
4	151	15.7%	-8000	6	-149	16000	150	7.9%	16
5	180	18.7%	-6000	9	-112	20000	96	5.1%	20
6	154	16.0%	-4000	17	-75	24000	48	2.5%	24
7	118	12.3%	-2000	23	-37	28000	45	2.4%	28
8	37	3.8%	0	74	0	32000	42	2.2%	32
TOTAL	963		2000	87	37	36000	32	1.7%	36
			4000	110	75	40000	26	1.4%	40
2-GATE SORTS		931	6000	159	112	44000	10	0.5%	44
DETECTR	SORTS	FREQ%	8000	188	149	48000	17	0.9%	48
8			10000	210	187	52000	11	0.6%	52
9	95	10.2%	12000	195	224	56000	12	0.6%	56
10	128	13.7%	14000	137	261	60000	12	0.6%	60
11	167	17.9%	16000	87	299	64000	9	0.5%	64
12	162	17.4%	18000	43	336	68000	7	0.4%	68
13	162	17.4%	20000	6	373	72000	12	0.6%	72
14	128	13.7%	22000	0	410	76000	2	0.1%	76
15	89	9.6%	24000	0	448	80000	2	0.1%	80
TOTAL	931		26000	0	485	84000	4	0.2%	84
			>28000	0	0	>84000	57	3.0%	>84
			TOTAL	1354		TOTAL	1894		

SUMMARY TOTALS

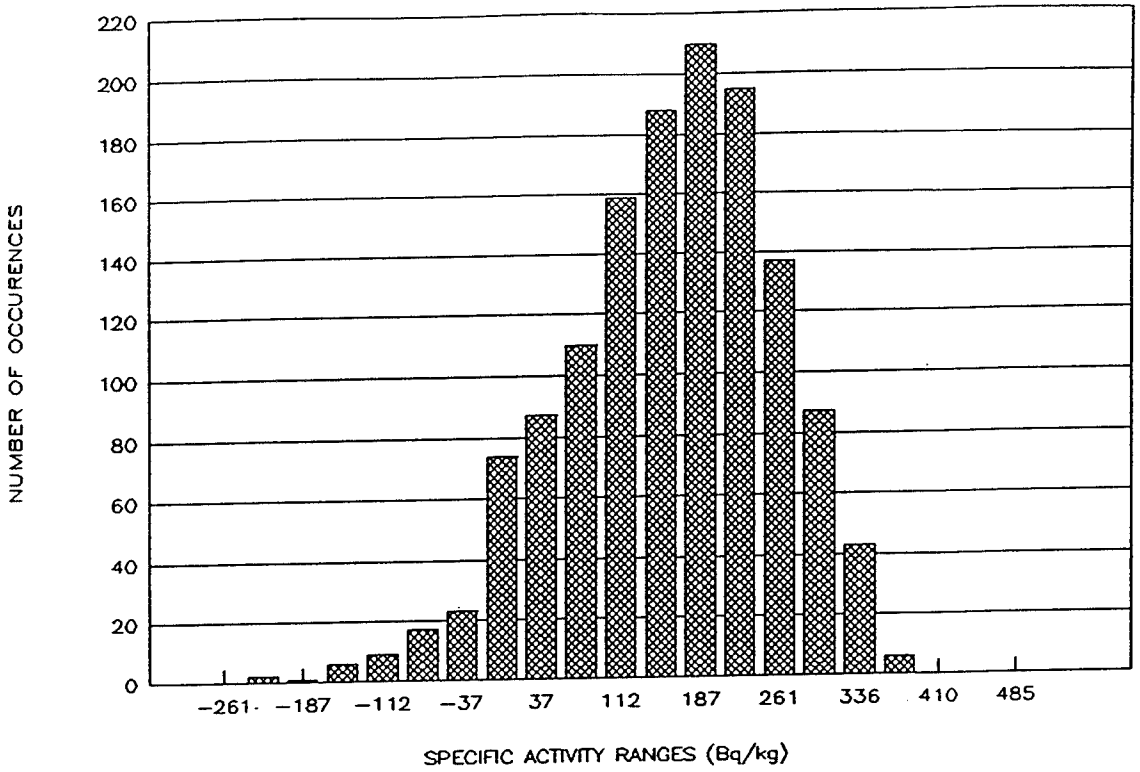
HOT PARTICLE EVENTS	1833	SORTS BY ONE GATE ONLY	963
MULTIPARTICLE EVENTS	1054	SORTS BY TWO GATES	931
DISTRIBUTED EVENTS	1070		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

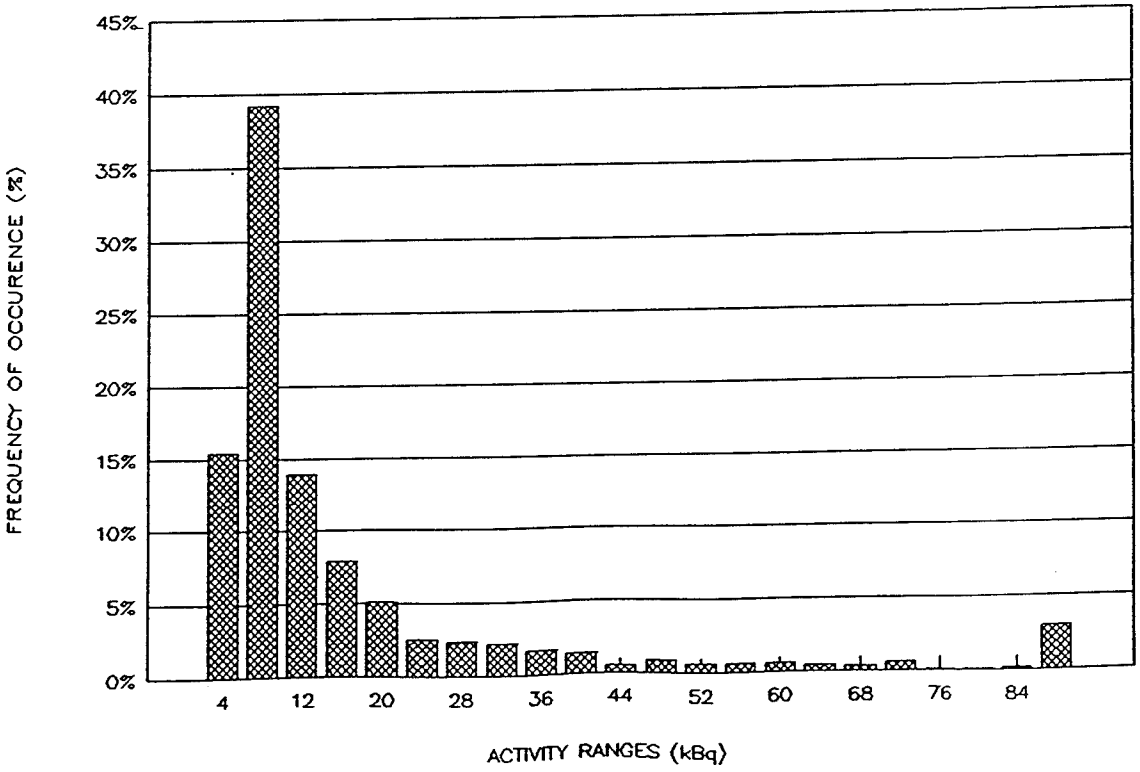
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 22-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 22-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 22-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.89 tons	67.5 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			94.5%
EQUIVALENT SOIL-IN-GROUND	3.09 yd³	53.5 yd³	56.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	30,976 kBq		
MAXIMUM/SORT	544 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	15,776 kBq	11,446 kBq	
MAXIMUM/SORT	439 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	4,051 Bq/kg	170 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:03 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.41 hr
DOWN-TIME	2.59 hr
TOTAL SYSTEM PAUSE	2.60 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.06 hr
SHUT-DOWN	0.55 hr
PLANT PERFORMANCE	74.1%
PRODUCTIVITY	74.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			3,244	
NONPROCESS RECORDS (Test, calibration, etc)			12	
20-SEC PROCESS RECORDS			1,333	
TOTAL SORT			25	MD>0 & MND=0
NO SORT			231	AD=0 & MD=0 & MND>0
SOME SORT			1,077	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	3			
AD=0 & MD	0			
AD<0 & MD	0			
ACT_P <5 kBq	531	27.8%		

UNEXPLAIN TIME	PAUSE TIME
09:43:05	06:54
14:46:45	11:00

JA SOIL CLEANUP PLANT LOG SUMMARY

15:23:25

2-SEC COUNT PERIODS	13,330	
2-SEC RECORDS WITH SORTS	1,911	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	450	81.4%
3 DETECTORS	89	16.1%
4 DETECTORS	12	2.2%
5 DETECTORS	2	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	553	
NET 2-SEC RECORDS WITH SORTS	1,358	
2-SEC PERIODS WITH NO SORTS	11,972	
AVG TIME BETWEEN 2-SEC SORTS	19.6 sec	

1-GATE SORTS DETECTR	SORTS	957 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	20	2.1%	-14000	6	-261
2	105	11.0%	-12000	2	-224
3	162	16.9%	-10000	1	-187
4	183	19.1%	-8000	1	-149
5	177	18.5%	-6000	0	-112
6	162	16.9%	-4000	1	-75
7	127	13.3%	-2000	6	-37
8	21	2.2%	0	52	0
TOTAL	957		2000	47	37
			4000	104	75
2-GATE SORTS		954	6000	154	112
DETECTR	SORTS	FREQ%	8000	231	149
8			10000	233	187
9	52	5.5%	12000	189	224
10	104	10.9%	14000	164	261
11	193	20.2%	16000	101	299
12	192	20.1%	18000	51	336
13	171	17.9%	20000	2	373
14	162	17.0%	22000	0	410
15	80	8.4%	24000	0	448
TOTAL	954		26000	0	485
			>28000	0	0
			TOTAL	1345	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	246	12.9%	4
8000	835	43.7%	8
12000	273	14.3%	12
16000	150	7.8%	16
20000	76	4.0%	20
24000	70	3.7%	24
28000	39	2.0%	28
32000	25	1.3%	32
36000	22	1.2%	36
40000	23	1.2%	40
44000	24	1.3%	44
48000	11	0.6%	48
52000	20	1.0%	52
56000	13	0.7%	56
60000	7	0.4%	60
64000	7	0.4%	64
68000	5	0.3%	68
72000	4	0.2%	72
76000	4	0.2%	76
80000	4	0.2%	80
84000	3	0.2%	84
>84000	50	2.6%	>84
TOTAL	1911		

SUMMARY TOTALS

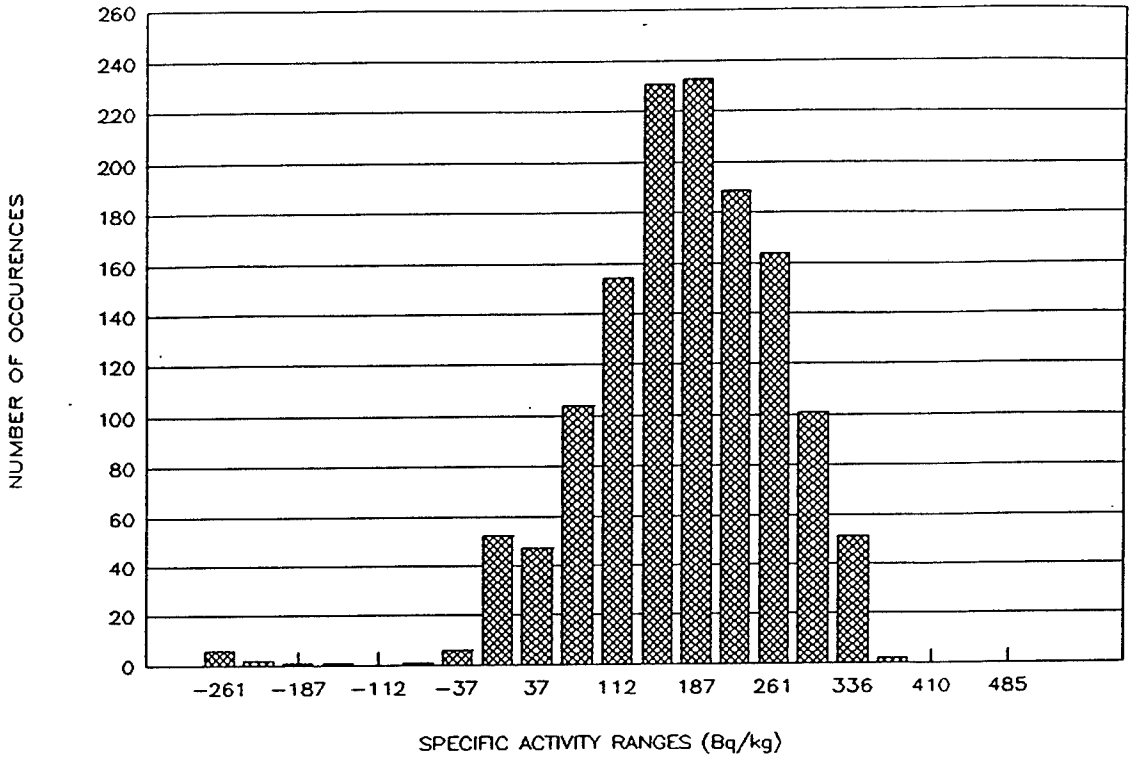
HOT PARTICLE EVENTS	1907	SORTS BY ONE GATE ONLY	957
MULTIPARTICLE EVENTS	2027	SORTS BY TWO GATES	954
DISTRIBUTED EVENTS	1890		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

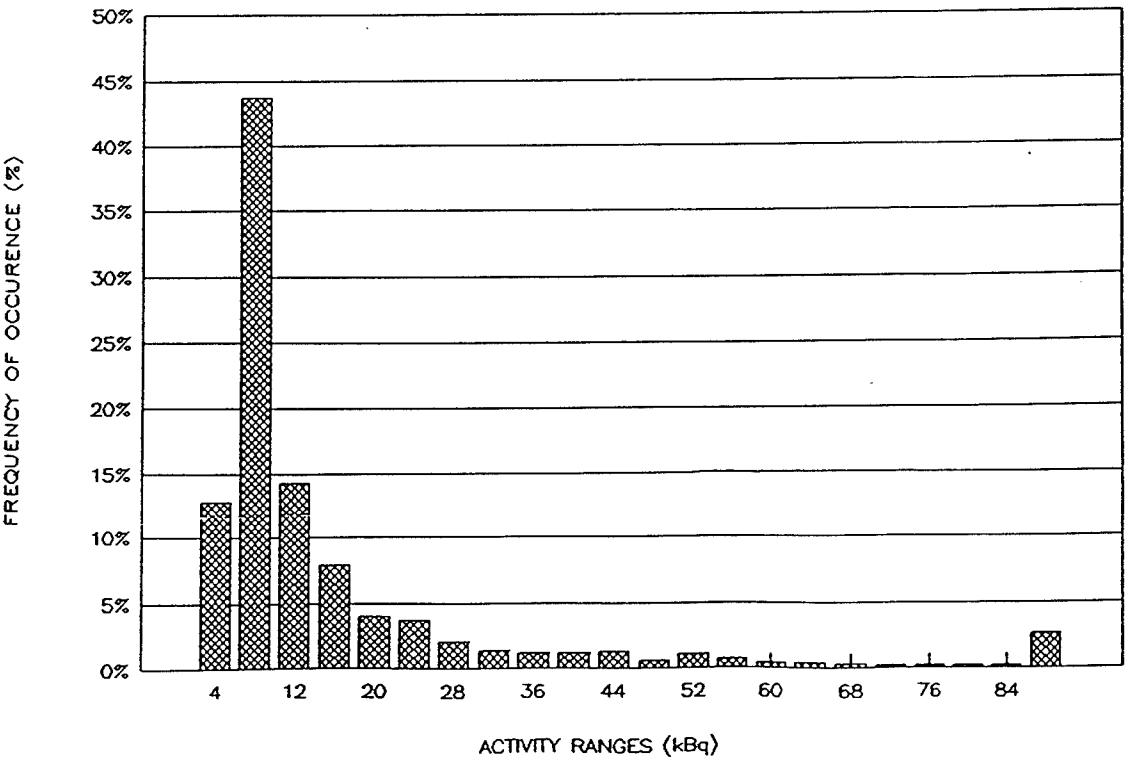
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 22-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 22-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.72 ± 0.06 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.92 tons	27.3 tons	
MAXIMUM/SORT		53.6 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	46.9 kg	
				96.8%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.73 yd³	21.6 yd³	22.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		12,791 kBq		
MAXIMUM/SORT		1,138 kBq		
MINIMUM/SORT		2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		5,690 kBq	4,682 kBq	
MAXIMUM/SORT		765 kBq	19 kBq	
MINIMUM/SORT		0 Bq	-15 kBq	
SPECIFIC ACTIVITY		6,215 Bq/kg	172 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	11:30 AM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	11:02 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	4.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	2.92 hr
DOWN-TIME	1.58 hr
TOTAL SYSTEM PAUSE	1.21 hr
NONAVAILABLE HOURS	5.5 hr
START-UP	1.12 hr
SHUT-DOWN	0.47 hr
PLANT PERFORMANCE	64.9%
PRODUCTIVITY	29.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,296	
NONPROCESS RECORDS (Test, calibration, etc)		8	
20-SEC PROCESS RECORDS		526	
TOTAL SORT		2	MD>0 & MND=0
NO SORT		150	AD=0 & MD=0 & MND>0
SOME SORT		374	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	259	33.6%	

UNEXPLAIN TIME	PAUSE TIME
None	06:53
	07:26

JA SOIL CLEANUP PLANT LOG SUMMARY

07:55

2-SEC COUNT PERIODS	5,260	
2-SEC RECORDS WITH SORTS	770	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	184	82.1%
3 DETECTORS	32	14.3%
4 DETECTORS	6	2.7%
5 DETECTORS	2	0.9%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	224	
NET 2-SEC RECORDS WITH SORTS	546	
2-SEC PERIODS WITH NO SORTS	4,714	
AVG TIME BETWEEN 2-SEC SORTS	19.3	sec

1-GATE SORTS		373	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	18	4.8%	-14000	1	-261	4000	112	14.5%	4
2	41	11.0%	-12000	0	-224	8000	337	43.8%	8
3	61	16.4%	-10000	0	-187	12000	100	13.0%	12
4	55	14.7%	-8000	0	-149	16000	52	6.8%	16
5	55	14.7%	-6000	1	-112	20000	35	4.5%	20
6	66	17.7%	-4000	0	-75	24000	24	3.1%	24
7	61	16.4%	-2000	0	-37	28000	19	2.5%	28
8	16	4.3%	0	11	0	32000	17	2.2%	32
TOTAL	373		2000	17	37	36000	11	1.4%	36
			4000	35	75	40000	3	0.4%	40
2-GATE SORTS		397	6000	63	112	44000	7	0.9%	44
DETECTR	SORTS	FREQ%	8000	97	149	48000	12	1.6%	48
8			10000	96	187	52000	3	0.4%	52
9	34	8.6%	12000	100	224	56000	1	0.1%	56
10	57	14.4%	14000	55	261	60000	8	1.0%	60
11	64	16.1%	16000	36	299	64000	3	0.4%	64
12	56	14.1%	18000	19	336	68000	5	0.6%	68
13	67	16.9%	20000	3	373	72000	2	0.3%	72
14	72	18.1%	22000	0	410	76000	2	0.3%	76
15	47	11.8%	24000	0	448	80000	2	0.3%	80
TOTAL	397		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	14	1.8%	>84
			TOTAL	534		TOTAL	770		

SUMMARY TOTALS

HOT PARTICLE EVENTS	773	SORTS BY ONE GATE ONLY	373
MULTIPARTICLE EVENTS	441	SORTS BY TWO GATES	397
DISTRIBUTED EVENTS	156		

REC CODE EXPLANATION

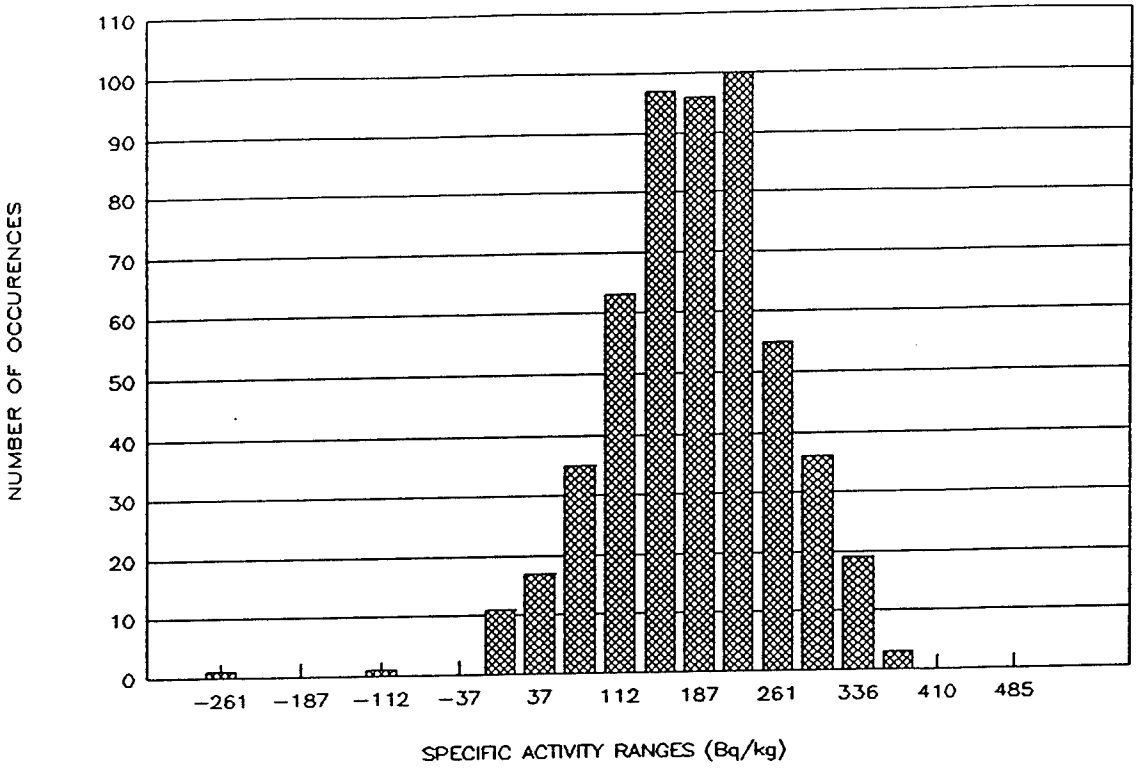
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

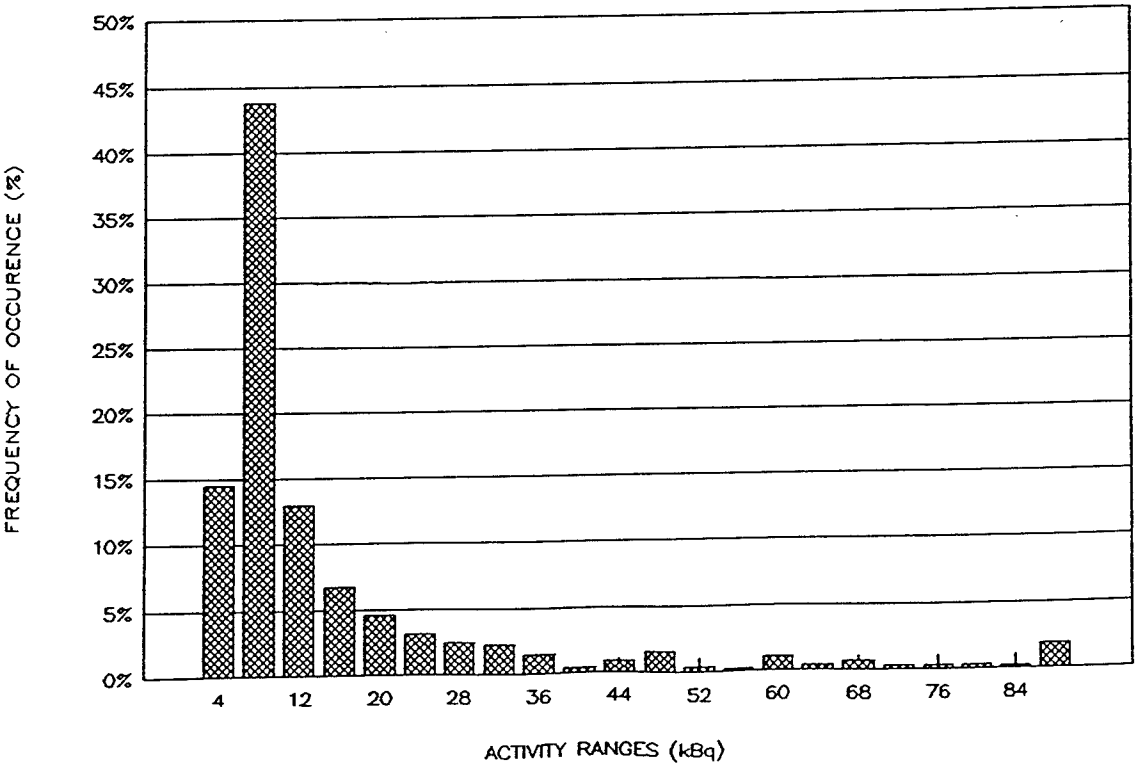
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1-LOG DATA FOR 20-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 20-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 20-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.53 tons	26.5 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	41.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			94.5%
EQUIVALENT SOIL-IN-GROUND	1.21 yd³	21.0 yd³	22.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,291 kBq		
MAXIMUM/SORT	456 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,009 kBq	4,334 kBq	
MAXIMUM/SORT	364 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	5,236 Bq/kg	164 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	11:30 AM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	11:01 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	4.5 hr
ACTUAL PROCESS HOURS (total 20-sec records)	2.91 hr
DOWN-TIME	1.59 hr
TOTAL SYSTEM PAUSE	1.21 hr
NONAVAILABLE HOURS	5.5 hr
START-UP	1.12 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	64.6%
PRODUCTIVITY	29.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,284	
NONPROCESS RECORDS (Test, calibration, etc)		13	
20-SEC PROCESS RECORDS		523	
TOTAL SORT		7	MD>0 & MND=0
NO SORT		76	AD=0 & MD=0 & MND>0
SOME SORT		440	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	211	27.7%	

UNEXPLAIN TIME	PAUSE TIME
None	06:53
	07:26

2-SEC COUNT PERIODS	5,230	
2-SEC RECORDS WITH SORTS	761	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	166	79.0%
3 DETECTORS	31	14.8%
4 DETECTORS	8	3.8%
5 DETECTORS	5	2.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	210	
NET 2-SEC RECORDS WITH SORTS	551	
2-SEC PERIODS WITH NO SORTS	4,679	
AVG TIME BETWEEN 2-SEC SORTS	19.0 sec	

1-GATE SORTS DETECTR	SORTS	395 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	15	3.8%	-14000	0	-261
2	28	7.1%	-12000	0	-224
3	63	15.9%	-10000	3	-187
4	94	23.8%	-8000	0	-149
5	104	26.3%	-6000	2	-112
6	57	14.4%	-4000	2	-75
7	31	7.8%	-2000	1	-37
8	3	0.8%	0	20	0
TOTAL	395		2000	20	37
			4000	50	75
2-GATE SORTS		366	6000	52	112
DETECTR	SORTS	FREQ%	8000	94	149
8			10000	105	187
9	20	5.5%	12000	92	224
10	42	11.5%	14000	59	261
11	83	22.7%	16000	27	299
12	89	24.3%	18000	9	336
13	68	18.6%	20000	0	373
14	46	12.6%	22000	0	410
15	18	4.9%	24000	0	448
TOTAL	366		26000	0	485
			>28000	0	0
			TOTAL	536	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	93	12.2%	4
8000	342	44.9%	8
12000	107	14.1%	12
16000	64	8.4%	16
20000	37	4.9%	20
24000	23	3.0%	24
28000	13	1.7%	28
32000	11	1.4%	32
36000	7	0.9%	36
40000	5	0.7%	40
44000	2	0.3%	44
48000	4	0.5%	48
52000	9	1.2%	52
56000	4	0.5%	56
60000	2	0.3%	60
64000	5	0.7%	64
68000	4	0.5%	68
72000	3	0.4%	72
76000	1	0.1%	76
80000	1	0.1%	80
84000	0	0.0%	84
>84000	24	3.2%	>84
TOTAL	761		

SUMMARY TOTALS

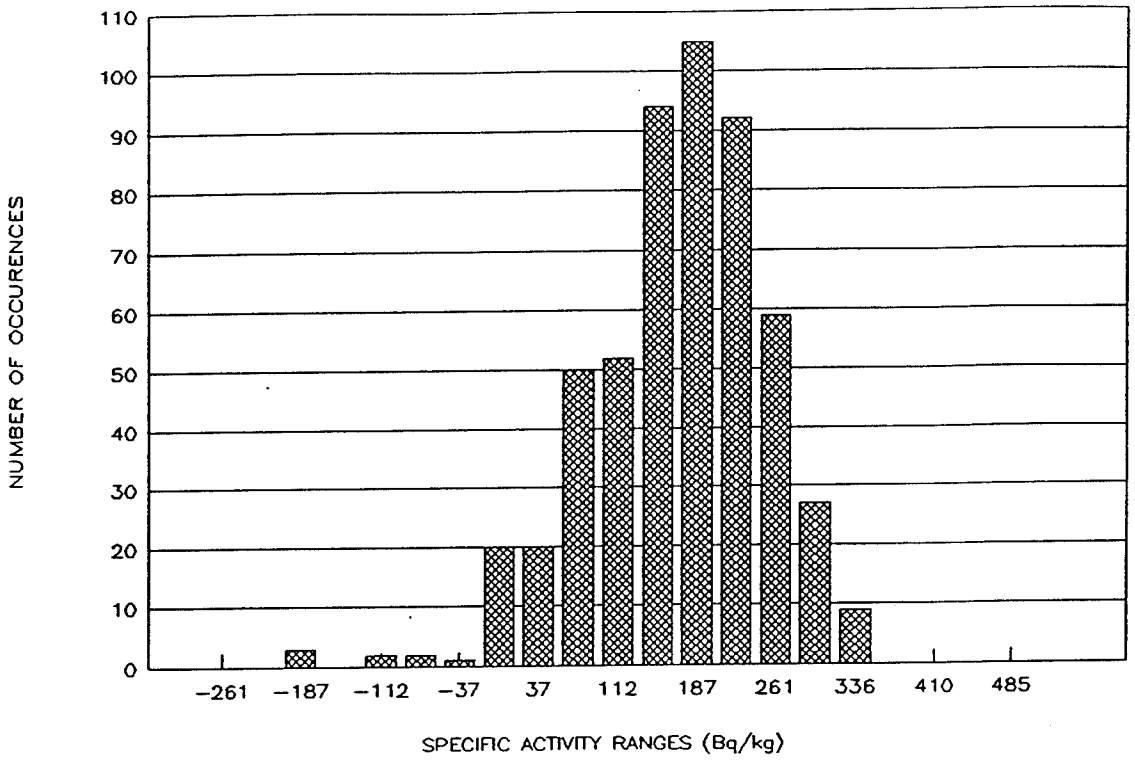
HOT PARTICLE EVENTS	754	SORTS BY ONE GATE ONLY	395
MULTIPARTICLE EVENTS	1005	SORTS BY TWO GATES	366
DISTRIBUTED EVENTS	528		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

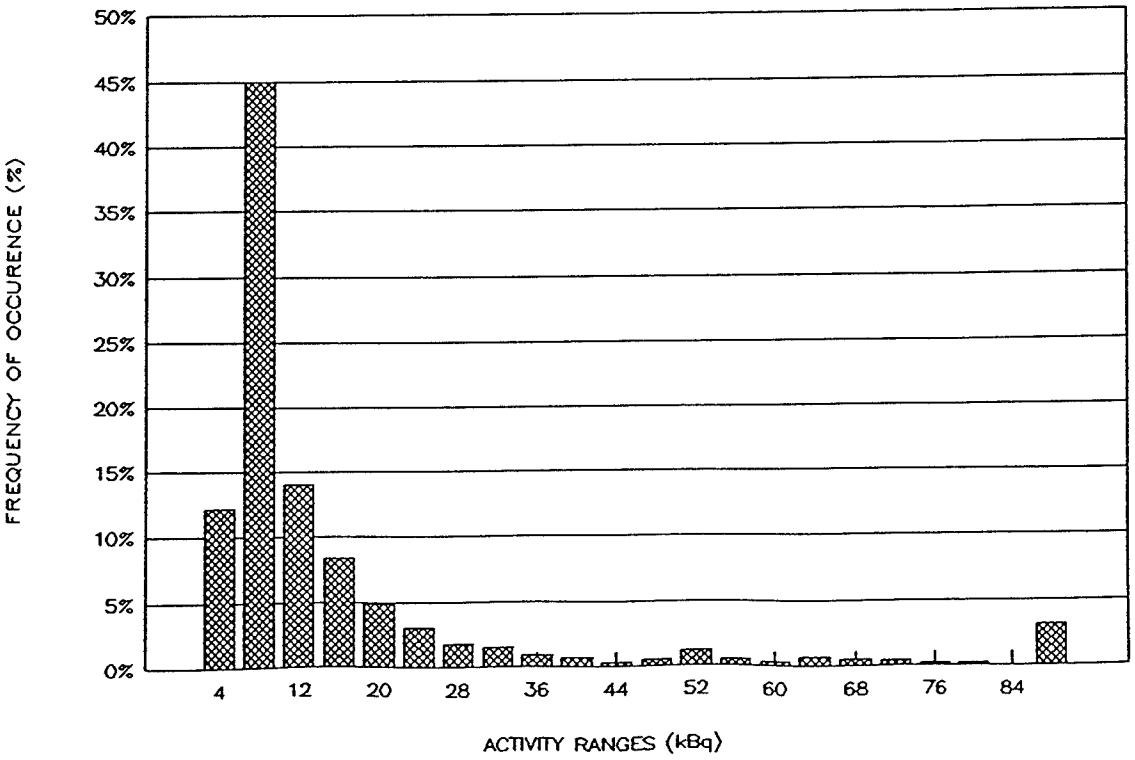
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 20-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 19-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.58 tons	68.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	43.5 kg	
			95.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	2.84 yd³	54.0 yd³	56.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	27,137 kBq		
MAXIMUM/SORT	568 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	13,083 kBq	12,522 kBq	
MAXIMUM/SORT	442 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-3 kBq	
SPECIFIC ACTIVITY	3,655 Bq/kg	184 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:38 AM	END SOIL PROCESSING	05:02 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr	
AVAILABLE HOURS	10.0 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	7.44 hr	
DOWN-TIME	2.56 hr	
TOTAL SYSTEM PAUSE	2.57 hr	
NONAVAILABLE HOURS	0.0 hr	
START-UP	0.65 hr	
SHUT-DOWN	0.45 hr	
PLANT PERFORMANCE	74.4%	
PRODUCTIVITY	74.4%	
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,179	
NONPROCESS RECORDS (Test, calibration, etc)	4	
20-SEC PROCESS RECORDS	1,339	
TOTAL SORT	31 MD>0 & MND=0	
NO SORT	359 AD=0 & MD=0 & MND>0	
SOME SORT	949 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	592	32.2%

UNEXPLAIN TIME	PAUSE TIME
None	07:02
	10:15

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,390	
2-SEC RECORDS WITH SORTS	1,840	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	433	82.5%
3 DETECTORS	76	14.5%
4 DETECTORS	13	2.5%
5 DETECTORS	3	0.6%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	525	
NET 2-SEC RECORDS WITH SORTS	1,315	
2-SEC PERIODS WITH NO SORTS	12,075	
AVG TIME BETWEEN 2-SEC SORTS	20.4	sec

1-GATE SORTS		936	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	24	2.6%	-14000	0	-261	4000	296	16.1%	4
2	92	9.8%	-12000	0	-224	8000	731	39.7%	8
3	111	11.9%	-10000	1	-187	12000	285	15.5%	12
4	132	14.1%	-8000	0	-149	16000	138	7.5%	16
5	180	19.2%	-6000	1	-112	20000	85	4.6%	20
6	182	19.4%	-4000	0	-75	24000	56	3.0%	24
7	154	16.5%	-2000	2	-37	28000	52	2.8%	28
8	61	6.5%	0	41	0	32000	30	1.6%	32
TOTAL	936		2000	26	37	36000	24	1.3%	36
			4000	64	75	40000	16	0.9%	40
2-GATE SORTS		904	6000	128	112	44000	17	0.9%	44
DETECTR	SORTS	FREQ%	8000	201	149	48000	16	0.9%	48
8			10000	300	187	52000	12	0.7%	52
9	57	6.3%	12000	227	224	56000	14	0.8%	56
10	108	11.9%	14000	174	261	60000	7	0.4%	60
11	122	13.5%	16000	114	299	64000	6	0.3%	64
12	143	15.8%	18000	49	336	68000	3	0.2%	68
13	201	22.2%	20000	15	373	72000	7	0.4%	72
14	148	16.4%	22000	0	410	76000	4	0.2%	76
15	125	13.8%	24000	0	448	80000	3	0.2%	80
TOTAL	904		26000	0	485	84000	5	0.3%	84
			>28000	0	0	>84000	33	1.8%	>84
			TOTAL	1343		TOTAL	1840		

SUMMARY TOTALS

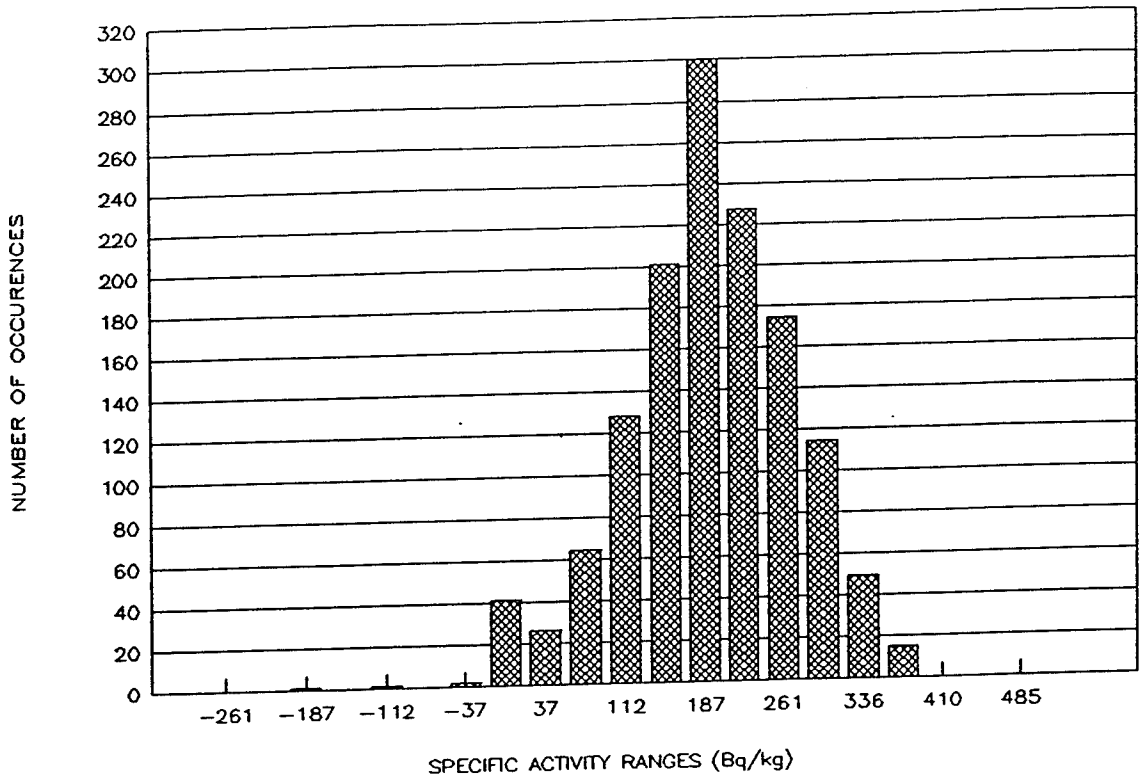
HOT PARTICLE EVENTS	1807	SORTS BY ONE GATE ONLY	936
MULTIPARTICLE EVENTS	1220	SORTS BY TWO GATES	904
DISTRIBUTED EVENTS	2324		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

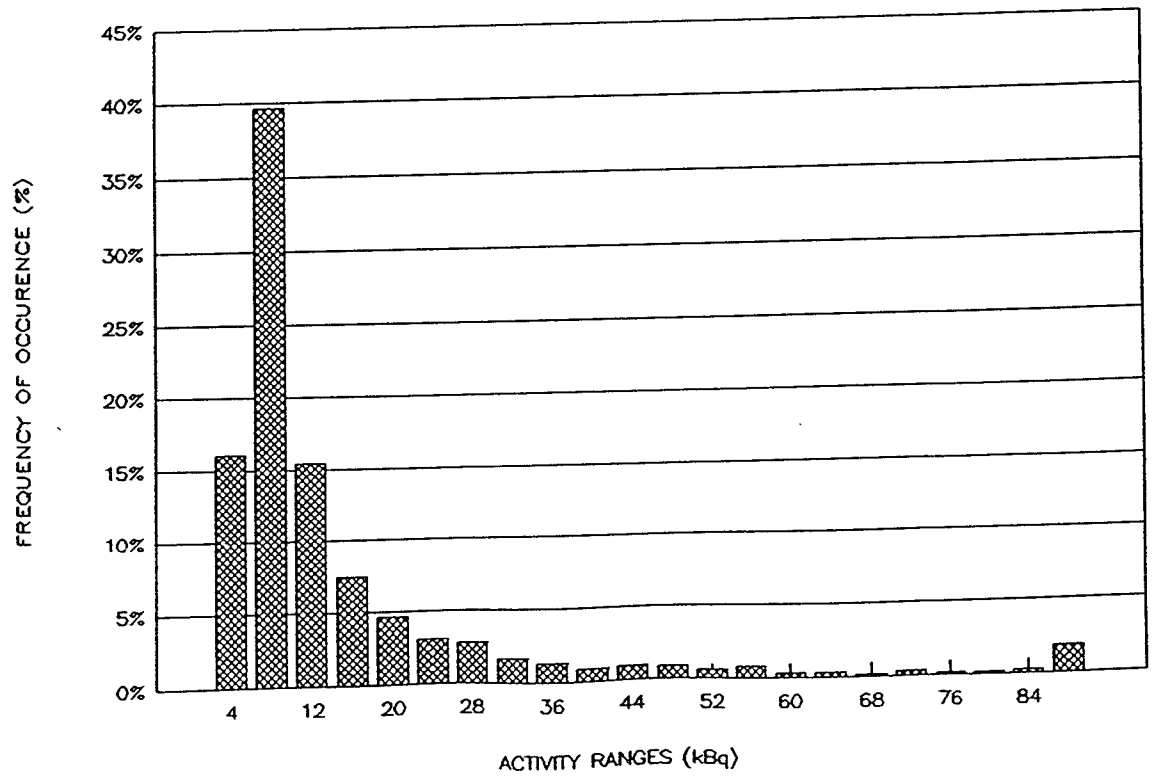
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 19-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 19-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 19-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	3.95 tons	67.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			94.5%
EQUIVALENT SOIL-IN-GROUND	3.13 yd³	53.7 yd³	56.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	30,272 kBq		
MAXIMUM/SORT	785 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	15,274 kBq	10,170 kBq	
MAXIMUM/SORT	513 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	3,863 Bq/kg	150 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:38 AM	END SOIL PROCESSING	05:03 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.44 hr
DOWN-TIME	2.56 hr
TOTAL SYSTEM PAUSE	2.58 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.65 hr
SHUT-DOWN	0.45 hr
PLANT PERFORMANCE	74.4%
PRODUCTIVITY	74.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,190		
NONPROCESS RECORDS (Test, calibration, etc)	3		
20-SEC PROCESS RECORDS	1,339		
TOTAL SORT	32	MD>0 & MND=0	
NO SORT	308	AD=0 & MD=0 & MND>0	
SOME SORT	999	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	2	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	13:49:12	07:02
AD<0 & MD	0	14:22:52	10:15
ACT_P <5 kBq	544 29.4%		

2-SEC COUNT PERIODS		13,390	
2-SEC RECORDS WITH SORTS		1,851	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	417		78.4%
3 DETECTORS	93		17.5%
4 DETECTORS	19		3.6%
5 DETECTORS	3		0.6%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		532	
NET 2-SEC RECORDS WITH SORTS		1,319	
2-SEC PERIODS WITH NO SORTS		12,071	
AVG TIME BETWEEN 2-SEC SORTS		20.3 sec	

1-GATE SORTS DETECTR	SORTS	927 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	36	3.9%	-14000	0	-261
2	129	13.9%	-12000	0	-224
3	127	13.7%	-10000	1	-187
4	170	18.3%	-8000	0	-149
5	165	17.8%	-6000	2	-112
6	167	18.0%	-4000	1	-75
7	110	11.9%	-2000	6	-37
8	23	2.5%	0	59	0
TOTAL	927		2000	82	37
			4000	123	75
2-GATE SORTS		924	6000	191	112
DETECTR	SORTS	FREQ%	8000	270	149
8			10000	225	187
9	87	9.4%	12000	179	224
10	106	11.5%	14000	98	261
11	163	17.6%	16000	60	299
12	172	18.6%	18000	37	336
13	176	19.0%	20000	8	373
14	152	16.5%	22000	0	410
15	68	7.4%	24000	0	448
TOTAL	924		26000	0	485
			>28000	0	0
			TOTAL	1342	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	248	13.4%	4
8000	790	42.7%	8
12000	297	16.0%	12
16000	145	7.8%	16
20000	70	3.8%	20
24000	51	2.8%	24
28000	28	1.5%	28
32000	29	1.6%	32
36000	35	1.9%	36
40000	15	0.8%	40
44000	12	0.6%	44
48000	17	0.9%	48
52000	6	0.3%	52
56000	12	0.6%	56
60000	13	0.7%	60
64000	5	0.3%	64
68000	9	0.5%	68
72000	3	0.2%	72
76000	7	0.4%	76
80000	5	0.3%	80
84000	2	0.1%	84
>84000	52	2.8%	>84
TOTAL	1851		

SUMMARY TOTALS

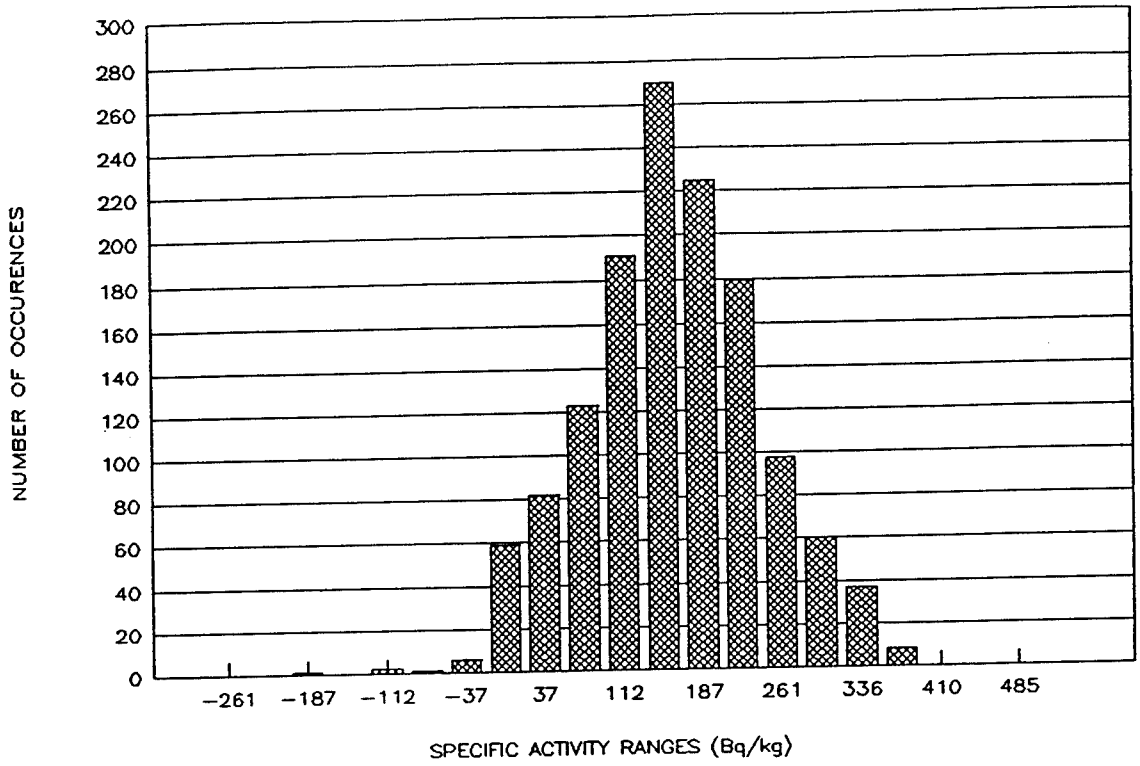
HOT PARTICLE EVENTS	1821	SORTS BY ONE GATE ONLY	927
MULTIPARTICLE EVENTS	1700	SORTS BY TWO GATES	924
DISTRIBUTED EVENTS	2390		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

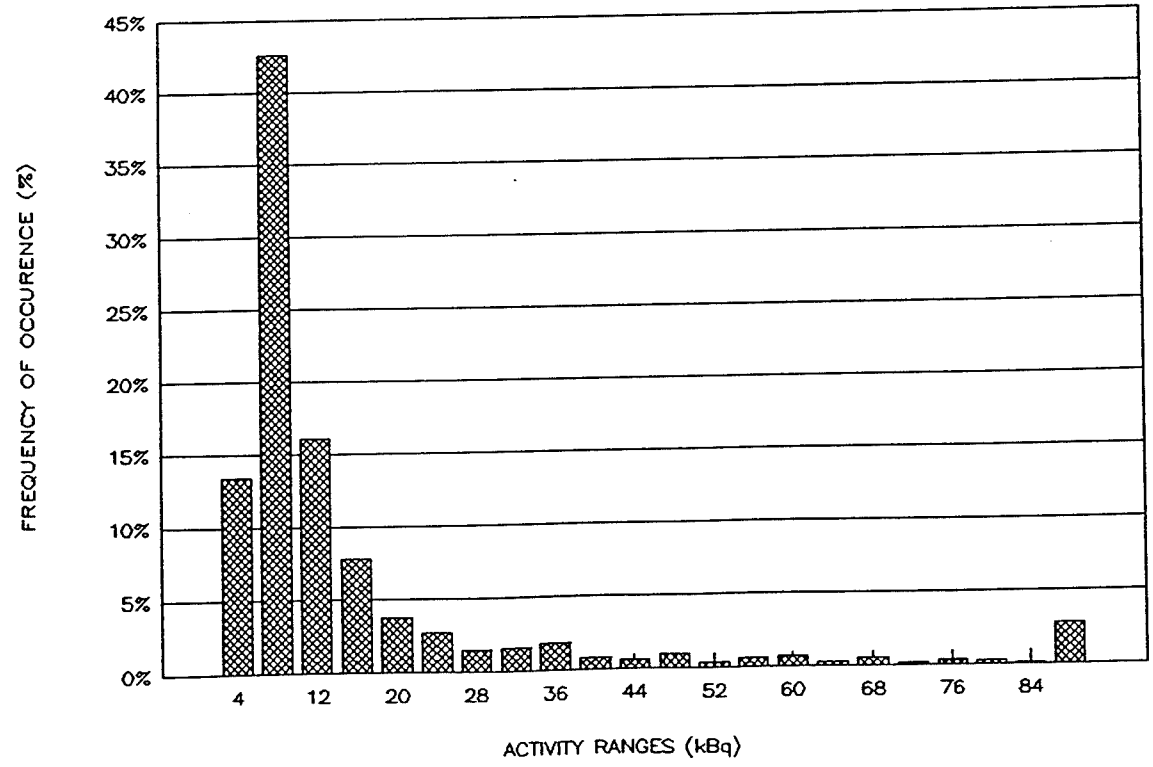
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 19-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 19-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 18-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m«		
GROUND SOIL DENSITY	1.65 tons/m«		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.14 tons	35.1 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.6%
EQUIVALENT SOIL-IN-GROUND	0.11 yd«	27.8 yd«	28.0 yd«/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,321 kBq		
MAXIMUM/SORT	60 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	675 kBq	1,153 kBq	
MAXIMUM/SORT	48 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	4,802 Bq/kg	33 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	01:16 PM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.66 hr
DOWN-TIME	6.34 hr
TOTAL SYSTEM PAUSE	5.89 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	6.28 hr
SHUT-DOWN	0.50 hr
PLANT PERFORMANCE	36.6%
PRODUCTIVITY	36.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		764	
NONPROCESS RECORDS (Test, calibration, etc)		24	
20-SEC PROCESS RECORDS		658	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		527	AD=0 & MD=0 & MND>0
SOME SORT		131	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	28	26.4%	

UNEXPLAIN TIME	PAUSE TIME
None	07:24
	08:42

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	6,580		08:51
2-SEC RECORDS WITH SORTS	106	(ACT_P >0 kBq)	08:57
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			09:31
2 DETECTORS	23	88.5%	16:04
3 DETECTORS	3	11.5%	
4 DETECTORS	0	0.0%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	26		
NET 2-SEC RECORDS WITH SORTS	80		
2-SEC PERIODS WITH NO SORTS	6,500		
AVG TIME BETWEEN 2-SEC SORTS	164.5 sec		

1-GATE SORTS		56	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	3	5.3%	-14000	0	-261	4000	14	13.1%	4
2	4	7.0%	-12000	0	-224	8000	43	40.2%	8
3	9	15.8%	-10000	2	-187	12000	18	16.8%	12
4	8	14.0%	-8000	0	-149	16000	10	9.3%	16
5	16	28.1%	-6000	3	-112	20000	5	4.7%	20
6	8	14.0%	-4000	22	-75	24000	4	3.7%	24
7	8	14.0%	-2000	45	-37	28000	1	0.9%	28
8	1	1.8%	0	149	0	32000	2	1.9%	32
TOTAL	57		2000	175	37	36000	2	1.9%	36
			4000	141	75	40000	0	0.0%	40
2-GATE SORTS		50	6000	75	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	35	149	48000	1	0.9%	48
8			10000	17	187	52000	2	1.9%	52
9	3	6.0%	12000	7	224	56000	2	1.9%	56
10	5	10.0%	14000	5	261	60000	1	0.9%	60
11	6	12.0%	16000	1	299	64000	1	0.9%	64
12	14	28.0%	18000	4	336	68000	0	0.0%	68
13	11	22.0%	20000	0	373	72000	0	0.0%	72
14	8	16.0%	22000	0	410	76000	0	0.0%	76
15	3	6.0%	24000	0	448	80000	0	0.0%	80
TOTAL	50		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	1	0.9%	>84
			TOTAL	681		TOTAL	107		

SUMMARY TOTALS

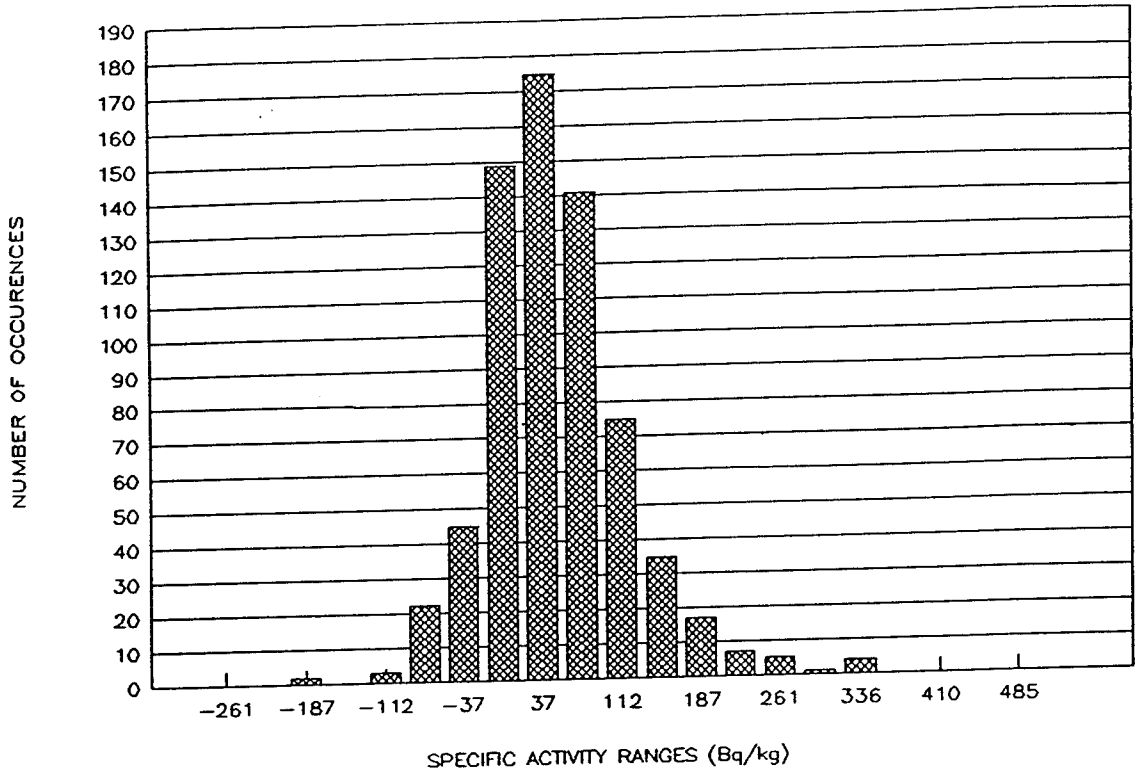
HOT PARTICLE EVENTS	107	SORTS BY ONE GATE ONLY	56
MULTIPARTICLE EVENTS	101	SORTS BY TWO GATES	50
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

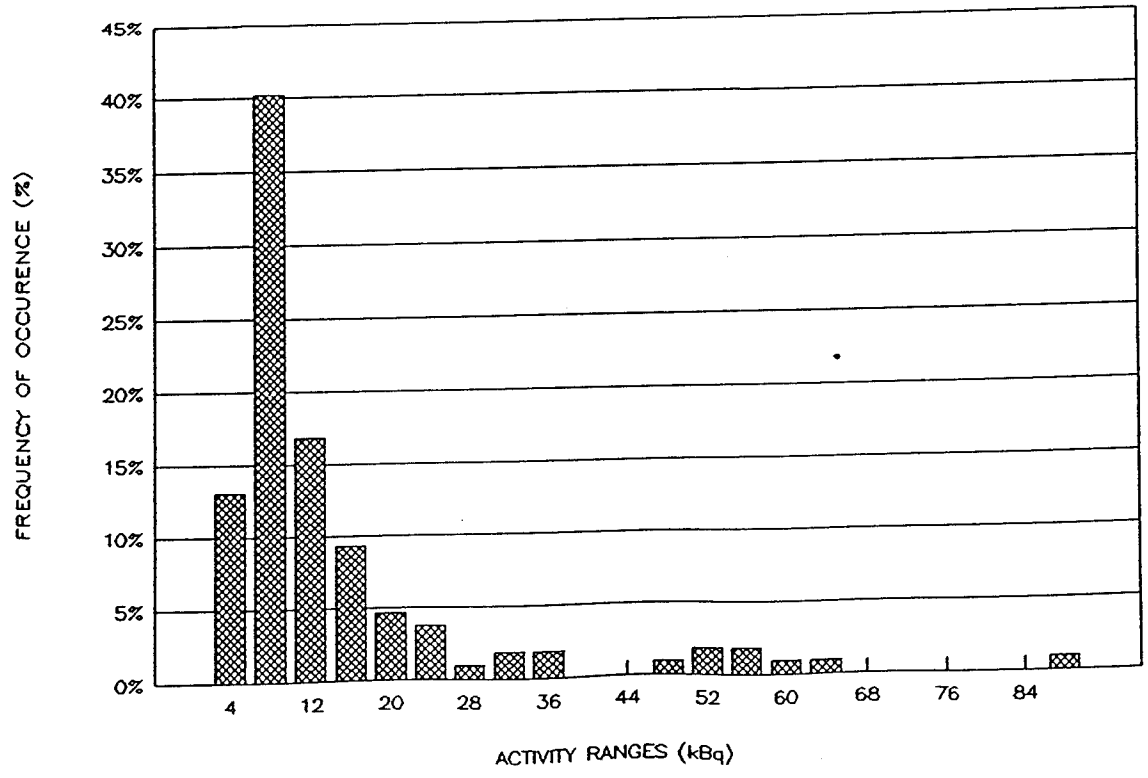
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 18-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 18-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 18-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m«		
GROUND SOIL DENSITY	1.65 tons/m«		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.18 tons	34.7 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.14 yd«	27.5 yd«	27.7 yd«/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,431 kBq		
MAXIMUM/SORT	65 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	809 kBq	1,313 kBq	
MAXIMUM/SORT	51 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	4,443 Bq/kg	38 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	01:16 PM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.62 hr
DOWN-TIME	6.38 hr
TOTAL SYSTEM PAUSE	5.92 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	6.28 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	36.2%
PRODUCTIVITY	36.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		759	
NONPROCESS RECORDS (Test, calibration, etc)		23	
20-SEC PROCESS RECORDS		651	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		484	AD=0 & MD=0 & MND>0
SOME SORT		167	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	27	25.0%	

UNEXPLAIN TIME	PAUSE TIME
None	07:24
	08:42

JA SOIL CLEANUP PLANT LOG SUMMARY

08:51
08:57
16:03

2-SEC COUNT PERIODS		6,510	
2-SEC RECORDS WITH SORTS		108	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	27	84.4%	
3 DETECTORS	4	12.5%	
4 DETECTORS	1	3.1%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	32		
NET 2-SEC RECORDS WITH SORTS		76	
2-SEC PERIODS WITH NO SORTS		6,434	
AVG TIME BETWEEN 2-SEC SORTS		171.3	sec

1-GATE SORTS DETECTR	SORTS	55 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	1	1.8%	-14000	0	-261
2	9	16.4%	-12000	1	-224
3	9	16.4%	-10000	3	-187
4	8	14.5%	-8000	0	-149
5	11	20.0%	-6000	2	-112
6	12	21.8%	-4000	10	-75
7	4	7.3%	-2000	56	-37
8	1	1.8%	0	142	0
TOTAL	55		2000	151	37
			4000	131	75
2-GATE SORTS		53	6000	95	112
DETECTR	SORTS	FREQ%	8000	58	149
8			10000	17	187
9	2	3.8%	12000	5	224
10	9	17.0%	14000	3	261
11	8	15.1%	16000	0	299
12	11	20.8%	18000	0	336
13	14	26.4%	20000	0	373
14	5	9.4%	22000	0	410
15	4	7.5%	24000	0	448
TOTAL	53		26000	0	485
			>28000	0	0
			TOTAL	674	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	15	13.9%	4
8000	43	39.8%	8
12000	12	11.1%	12
16000	14	13.0%	16
20000	6	5.6%	20
24000	4	3.7%	24
28000	0	0.0%	28
32000	2	1.9%	32
36000	2	1.9%	36
40000	1	0.9%	40
44000	2	1.9%	44
48000	2	1.9%	48
52000	1	0.9%	52
56000	0	0.0%	56
60000	2	1.9%	60
64000	1	0.9%	64
68000	1	0.9%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	0	0.0%	>84
TOTAL	108		

SUMMARY TOTALS

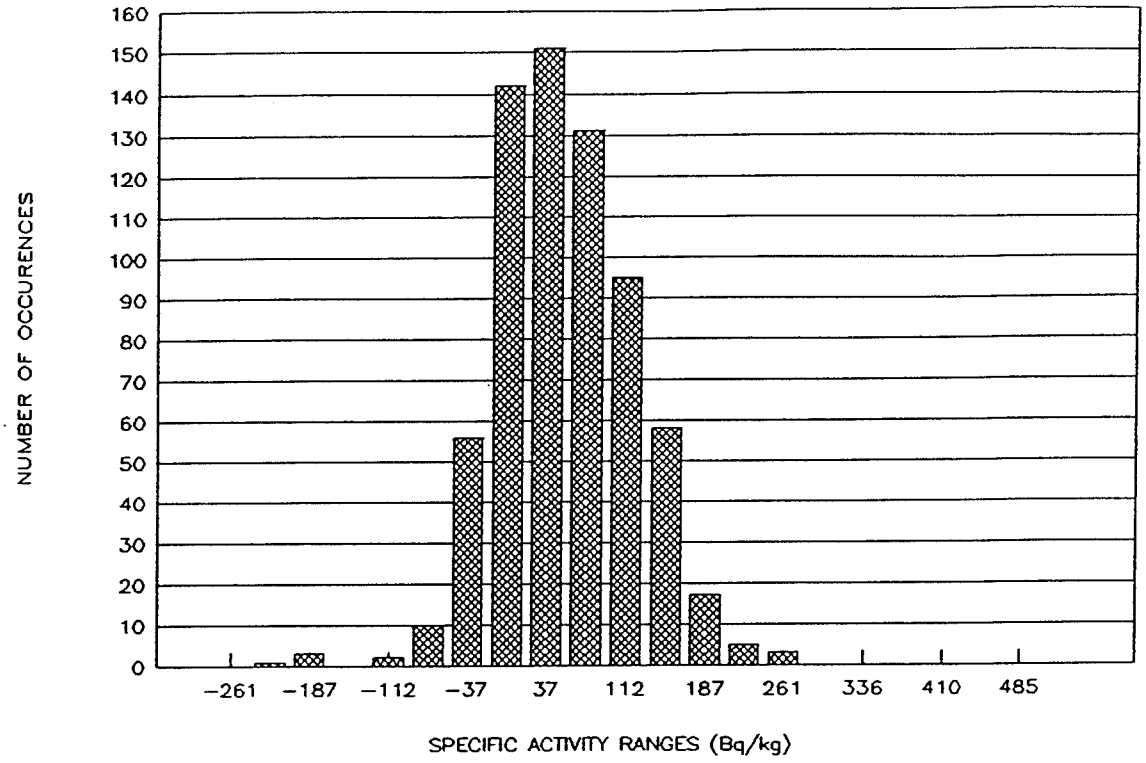
HOT PARTICLE EVENTS	112	SORTS BY ONE GATE ONLY	55
MULTIPARTICLE EVENTS	157	SORTS BY TWO GATES	53
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

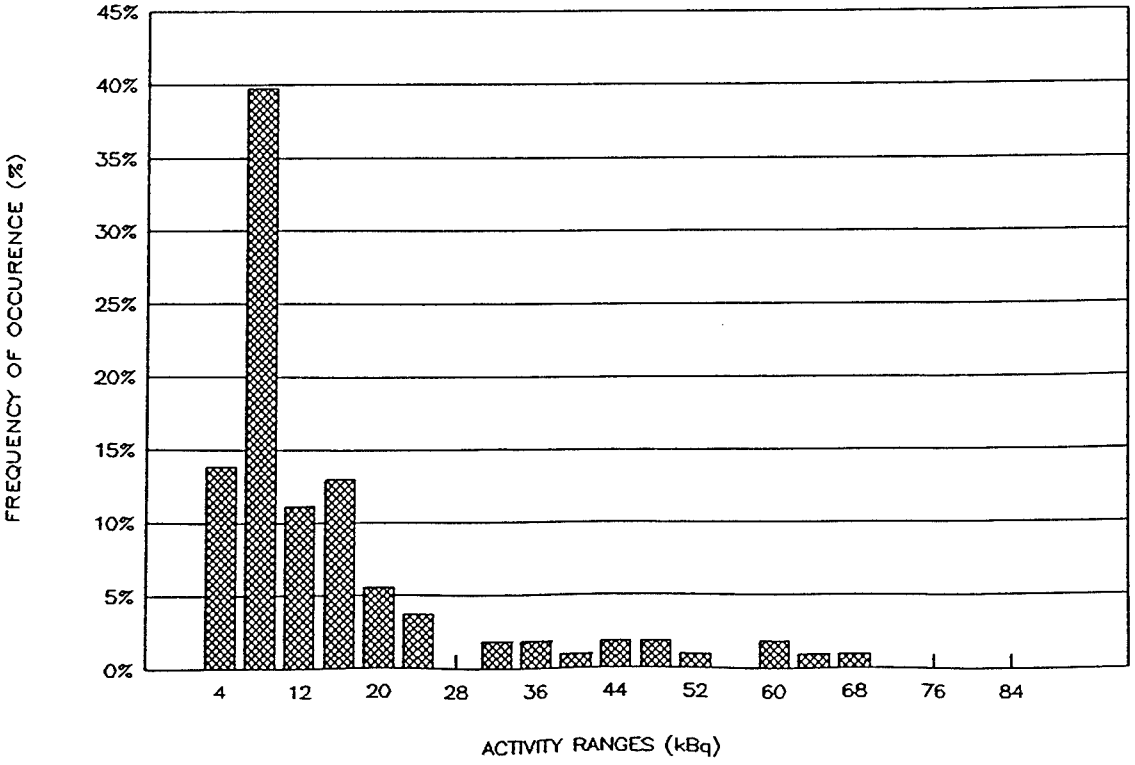
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 18-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 18-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 08-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.54 tons	56.8 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.43 yd³	45.0 yd³	45.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	7,380 kBq		
MAXIMUM/SORT	293 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,301 kBq	4,160 kBq	
MAXIMUM/SORT	243 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,157 Bq/kg	73 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:03 AM	END SOIL PROCESSING	03:19 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.94 hr
DOWN-TIME	4.06 hr
TOTAL SYSTEM PAUSE	1.76 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.06 hr
SHUT-DOWN	2.18 hr
PLANT PERFORMANCE	59.4%
PRODUCTIVITY	59.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,575	
NONPROCESS RECORDS (Test, calibration, etc)		9	
20-SEC PROCESS RECORDS		1,070	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		694	AD=0 & MD=0 & MND>0
SOME SORT		376	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	128	25.3%	

UNEXPLAIN TIME	PAUSE TIME
None	07:35
	11:07

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	10,700	
2-SEC RECORDS WITH SORTS	505	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	117	82.4%
3 DETECTORS	17	12.0%
4 DETECTORS	7	4.9%
5 DETECTORS	1	0.7%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	142	
NET 2-SEC RECORDS WITH SORTS	363	
2-SEC PERIODS WITH NO SORTS	10,337	
AVG TIME BETWEEN 2-SEC SORTS	59.0	sec

1-GATE SORTS DETECTR	SORTS	250 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	16	6.4%	-14000	0	-261	4000	49	9.7%	4
2	29	11.6%	-12000	1	-224	8000	220	43.6%	8
3	36	14.4%	-10000	3	-187	12000	73	14.5%	12
4	49	19.6%	-8000	2	-149	16000	48	9.5%	16
5	38	15.2%	-6000	3	-112	20000	26	5.1%	20
6	41	16.4%	-4000	4	-75	24000	18	3.6%	24
7	32	12.8%	-2000	8	-37	28000	10	2.0%	28
8	9	3.6%	0	85	0	32000	9	1.8%	32
TOTAL	250		2000	190	37	36000	9	1.8%	36
			4000	277	75	40000	5	1.0%	40
2-GATE SORTS		255	6000	256	112	44000	3	0.6%	44
DETECTR	SORTS	FREQ%	8000	152	149	48000	9	1.8%	48
8			10000	70	187	52000	5	1.0%	52
9	24	9.4%	12000	21	224	56000	5	1.0%	56
10	34	13.3%	14000	6	261	60000	2	0.4%	60
11	48	18.8%	16000	1	299	64000	1	0.2%	64
12	44	17.3%	18000	0	336	68000	2	0.4%	68
13	42	16.5%	20000	0	373	72000	1	0.2%	72
14	43	16.9%	22000	0	410	76000	2	0.4%	76
15	20	7.8%	24000	0	448	80000	1	0.2%	80
TOTAL	255		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	7	1.4%	>84
			TOTAL	1079		TOTAL	505		

SUMMARY TOTALS

HOT PARTICLE EVENTS	493	SORTS BY ONE GATE ONLY	250
MULTIPARTICLE EVENTS	308	SORTS BY TWO GATES	255
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

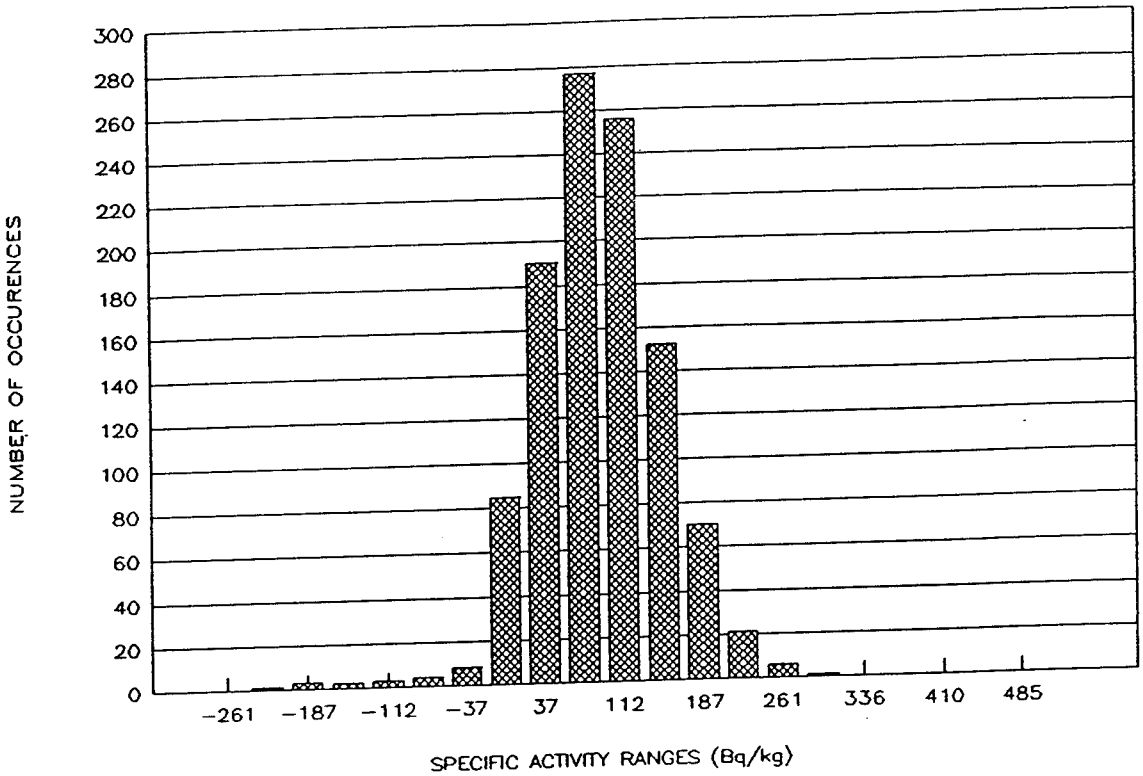
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

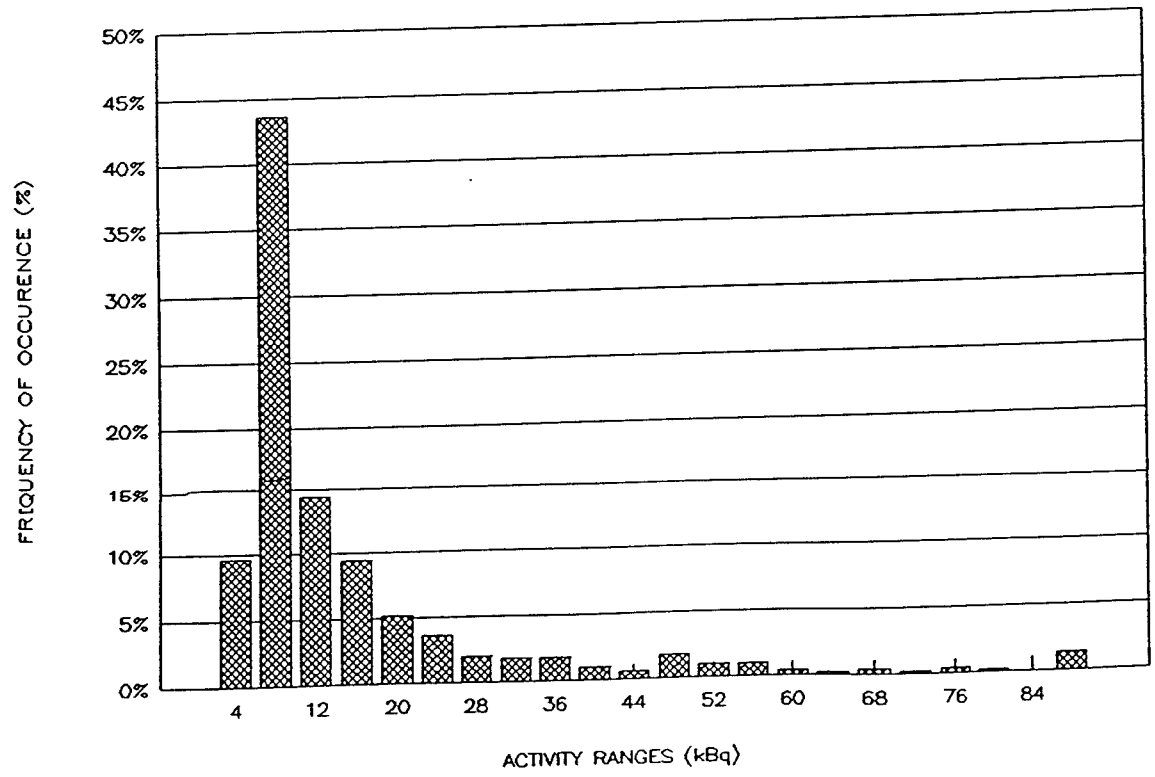
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 08-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 08-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 08-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.54 tons	57.0 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.1%
EQUIVALENT SOIL-IN-GROUND	0.43 yd³	45.2 yd³	45.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,593 kBq		
MAXIMUM/SORT	509 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,848 kBq	429 kBq	
MAXIMUM/SORT	408 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	7,120 Bq/kg	8 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:03 AM	END SOIL PROCESSING	03:19 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.96 hr
DOWN-TIME	4.04 hr
TOTAL SYSTEM PAUSE	1.76 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.06 hr
SHUT-DOWN	2.18 hr
PLANT PERFORMANCE	59.6%
PRODUCTIVITY	59.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			1,576
NONPROCESS RECORDS (Test, calibration, etc)			6
20-SEC PROCESS RECORDS			1,073
TOTAL SORT			0 MD>0 & MND=0
NO SORT			672 AD=0 & MD=0 & MND>0
SOME SORT			401 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0
0<AD<1kBq & MD>0	2		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	115	22.9%	

UNEXPLAIN TIME	PAUSE TIME
10:57:32	07:35
13:37:52	11:07

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		10,730	
2-SEC RECORDS WITH SORTS		503	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	118	77.6%
	3 DETECTORS	29	19.1%
	4 DETECTORS	5	3.3%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	152	
NET 2-SEC RECORDS WITH SORTS		351	
2-SEC PERIODS WITH NO SORTS		10,379	
AVG TIME BETWEEN 2-SEC SORTS		61.1	sec

1-GATE SORTS		258
DETECTR	SORTS	FREQ%
1	10	3.9%
2	35	13.6%
3	39	15.1%
4	45	17.4%
5	55	21.3%
6	37	14.3%
7	31	12.0%
8	6	2.3%
TOTAL	258	

2-GATE SORTS		245
DETECTR	SORTS	FREQ%
8		
9	24	9.8%
10	39	15.9%
11	38	15.5%
12	43	17.6%
13	49	20.0%
14	28	11.4%
15	24	9.8%
TOTAL	245	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	1	-261
-12000	0	-224
-10000	2	-187
-8000	6	-149
-6000	42	-112
-4000	106	-75
-2000	147	-37
0	213	0
2000	224	37
4000	138	75
6000	105	112
8000	61	149
10000	20	187
12000	7	224
14000	4	261
16000	3	299
18000	0	336
20000	0	373
22000	0	410
24000	0	448
26000	0	485
>28000	0	0
TOTAL	1079	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	44	8.7%	4
8000	218	43.3%	8
12000	80	15.9%	12
16000	52	10.3%	16
20000	27	5.4%	20
24000	18	3.6%	24
28000	8	1.6%	28
32000	8	1.6%	32
36000	5	1.0%	36
40000	5	1.0%	40
44000	3	0.6%	44
48000	6	1.2%	48
52000	7	1.4%	52
56000	4	0.8%	56
60000	2	0.4%	60
64000	0	0.0%	64
68000	5	1.0%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	11	2.2%	>84
TOTAL	503		

SUMMARY TOTALS

HOT PARTICLE EVENTS	486	SORTS BY ONE GATE ONLY	258
MULTIPARTICLE EVENTS	320	SORTS BY TWO GATES	245
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

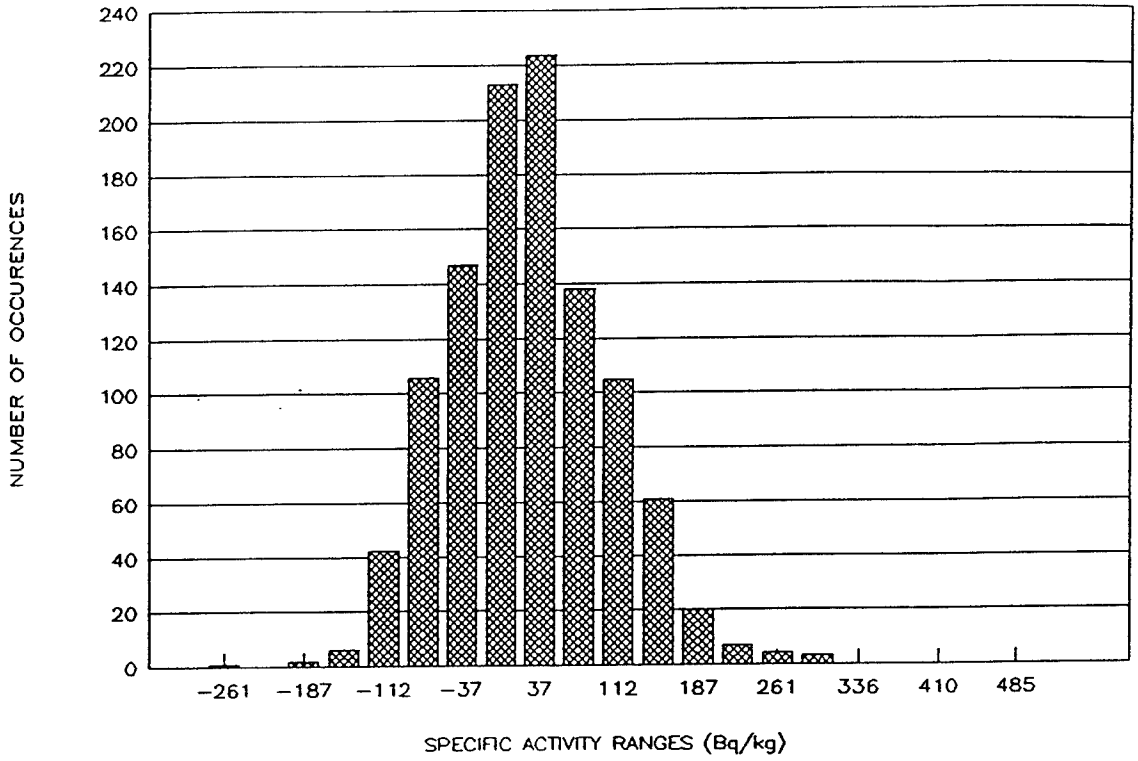
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

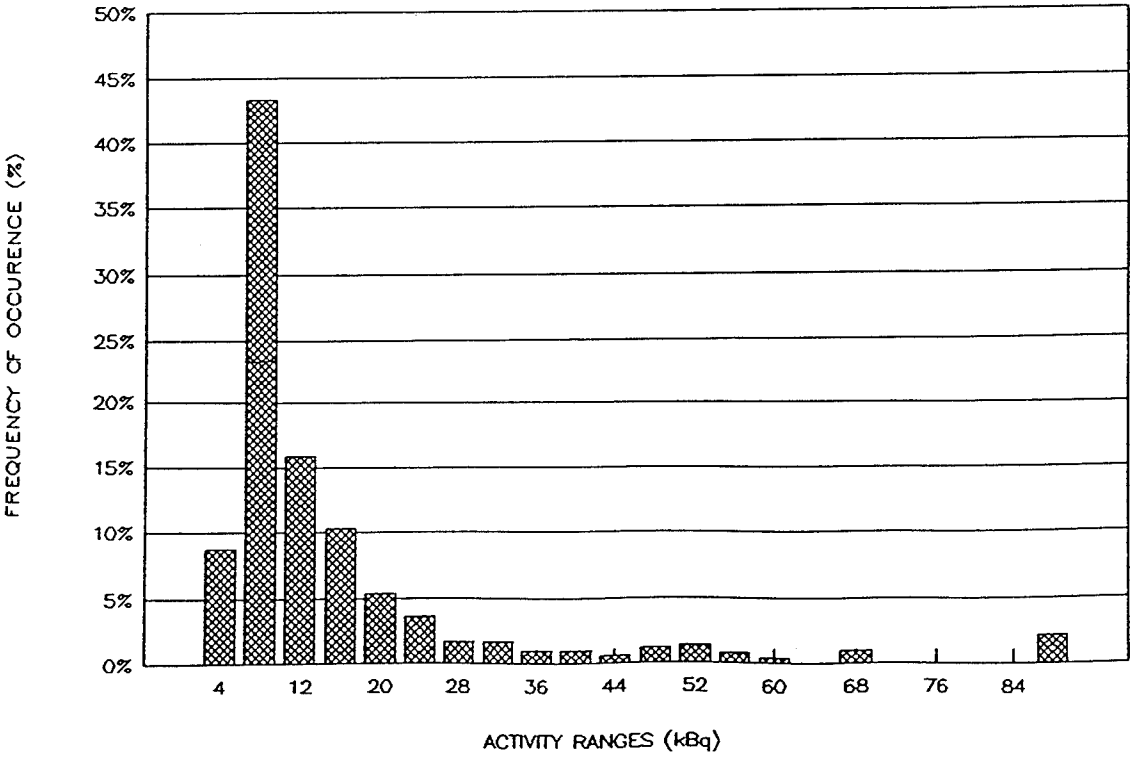
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 08-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 08-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 07-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.55 tons	75.5 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.43 yd³	59.9 yd³	60.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,161 kBq		
MAXIMUM/SORT	1,456 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,498 kBq	5,056 kBq	
MAXIMUM/SORT	1056 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	8,202 Bq/kg	67 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr		
AVAILABLE HOURS	10.0 hr		
ACTUAL PROCESS HOURS (total 20-sec records)	7.89 hr		
DOWN-TIME	2.11 hr		
TOTAL SYSTEM PAUSE	1.80 hr		
NONAVAILABLE HOURS	0.0 hr		
START-UP	1.13 hr		
SHUT-DOWN	0.47 hr		
PLANT PERFORMANCE	78.9%		
PRODUCTIVITY	78.9%		
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,919		
NONPROCESS RECORDS (Test, calibration, etc)	9		
20-SEC PROCESS RECORDS	1,420		
TOTAL SORT	0	MD>0 & MND=0	
NO SORT	1,000	AD=0 & MD=0 & MND>0	
SOME SORT	420	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0		
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	141	28.3%	

UNEXPLAIN TIME	PAUSE TIME
15:26:47	07:20
	11:08

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	14,200	
2-SEC RECORDS WITH SORTS	499	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	115	83.9%
3 DETECTORS	16	11.7%
4 DETECTORS	5	3.6%
5 DETECTORS	1	0.7%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	137	
NET 2-SEC RECORDS WITH SORTS	362	
2-SEC PERIODS WITH NO SORTS	13,838	
AVG TIME BETWEEN 2-SEC SORTS	78.5	sec

1-GATE SORTS		246	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	9	3.7%	-14000	0	-261	4000	51	10.2%	4
2	26	10.6%	-12000	0	-224	8000	227	45.5%	8
3	55	22.4%	-10000	1	-187	12000	82	16.4%	12
4	37	15.0%	-8000	3	-149	16000	44	8.8%	16
5	43	17.5%	-6000	4	-112	20000	22	4.4%	20
6	31	12.6%	-4000	11	-75	24000	8	1.6%	24
7	29	11.8%	-2000	31	-37	28000	8	1.6%	28
8	16	6.5%	0	155	0	32000	4	0.8%	32
TOTAL	246		2000	263	37	36000	8	1.6%	36
			4000	384	75	40000	7	1.4%	40
2-GATE SORTS		253	6000	282	112	44000	2	0.4%	44
DETECTR	SORTS	FREQ%	8000	150	149	48000	8	1.6%	48
8			10000	82	187	52000	6	1.2%	52
9	16	6.3%	12000	45	224	56000	4	0.8%	56
10	48	19.0%	14000	17	261	60000	1	0.2%	60
11	43	17.0%	16000	1	299	64000	3	0.6%	64
12	49	19.4%	18000	0	336	68000	2	0.4%	68
13	39	15.4%	20000	0	373	72000	1	0.2%	72
14	26	10.3%	22000	0	410	76000	0	0.0%	76
15	32	12.6%	24000	0	448	80000	0	0.0%	80
TOTAL	253		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	11	2.2%	>84
			TOTAL	1429		TOTAL	499		

SUMMARY TOTALS

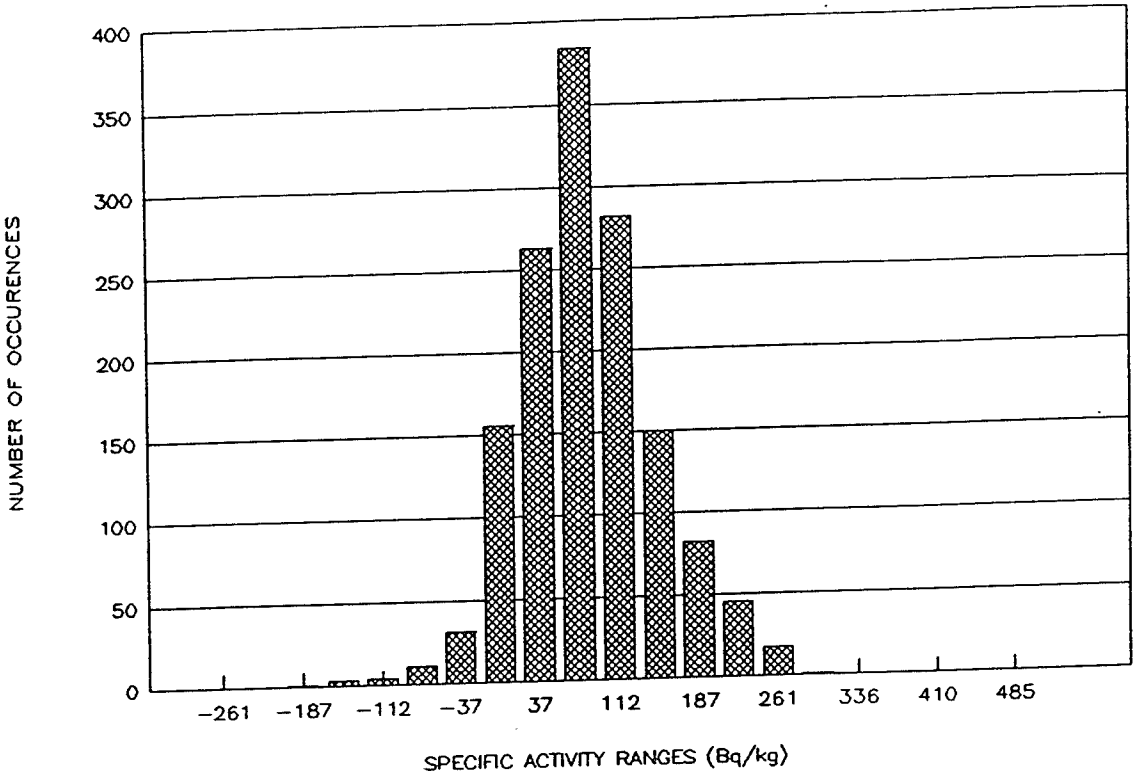
HOT PARTICLE EVENTS	503	SORTS BY ONE GATE ONLY	246
MULTIPARTICLE EVENTS	316	SORTS BY TWO GATES	253
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

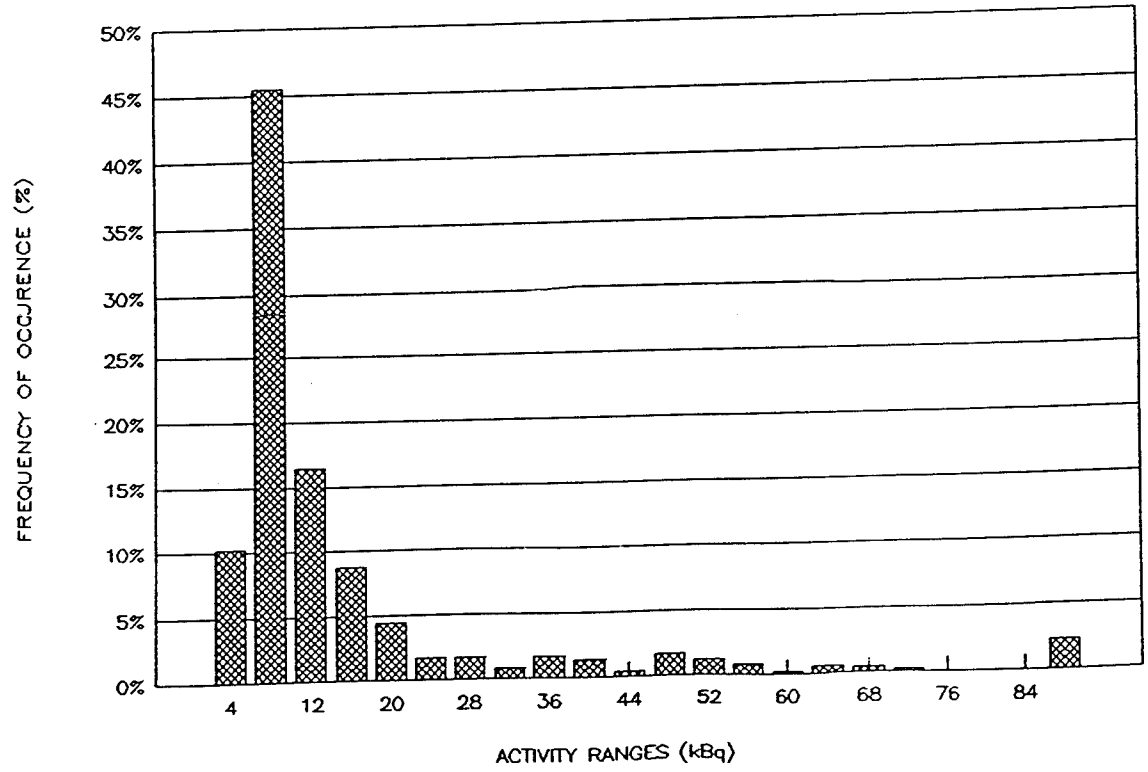
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 07-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 07-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 07-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.38 tons	52.4 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
			99.3%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.30 yd³	41.5 yd³	41.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,080 kBq		
MAXIMUM/SORT	327 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,749 kBq	9 kBq	
MAXIMUM/SORT	230 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-15 kBq	
SPECIFIC ACTIVITY	7,297 Bq/kg	0 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	05:01 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	5.47 hr
DOWN-TIME	4.53 hr
TOTAL SYSTEM PAUSE	4.20 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.13 hr
SHUT-DOWN	0.48 hr
PLANT PERFORMANCE	54.7%
PRODUCTIVITY	54.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,308	
NONPROCESS RECORDS (Test, calibration, etc)		12	
20-SEC PROCESS RECORDS		985	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		690	AD=0 & MD=0 & MND>0
SOME SORT		295	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	71	22.0%	

UNEXPLAIN TIME	PAUSE TIME
None	07:20
	11:08

2-SEC COUNT PERIODS		9,850	
2-SEC RECORDS WITH SORTS		323	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	72	81.8%
	3 DETECTORS	14	15.9%
	4 DETECTORS	2	2.3%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	88	
NET 2-SEC RECORDS WITH SORTS		235	
2-SEC PERIODS WITH NO SORTS		9,615	
AVG TIME BETWEEN 2-SEC SORTS		83.8	sec

1-GATE SORTS DETECTR	SORTS	156 FREQ%
1	11	7.1%
2	20	12.8%
3	20	12.8%
4	35	22.4%
5	25	16.0%
6	25	16.0%
7	16	10.3%
8	4	2.6%
TOTAL	156	

2-GATE SORTS DETECTR	SORTS	167 FREQ%
8		
9	17	10.2%
10	14	8.4%
11	32	19.2%
12	34	20.4%
13	29	17.4%
14	29	17.4%
15	12	7.2%
TOTAL	167	

ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	4	-261
-12000	4	-224
-10000	0	-187
-8000	11	-149
-6000	54	-112
-4000	105	-75
-2000	189	-37
0	198	0
2000	152	37
4000	96	75
6000	86	112
8000	44	149
10000	26	187
12000	15	224
14000	8	261
16000	5	299
18000	0	336
20000	0	373
22000	0	410
24000	0	448
26000	0	485
>28000	0	0
TOTAL	997	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	24	7.4%	4
8000	134	41.5%	8
12000	49	15.2%	12
16000	32	9.9%	16
20000	19	5.9%	20
24000	13	4.0%	24
28000	10	3.1%	28
32000	4	1.2%	32
36000	4	1.2%	36
40000	2	0.6%	40
44000	2	0.6%	44
48000	5	1.5%	48
52000	3	0.9%	52
56000	2	0.6%	56
60000	3	0.9%	60
64000	2	0.6%	64
68000	3	0.9%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	1	0.3%	80
84000	0	0.0%	84
>84000	11	3.4%	>84
TOTAL	323		

SUMMARY TOTALS

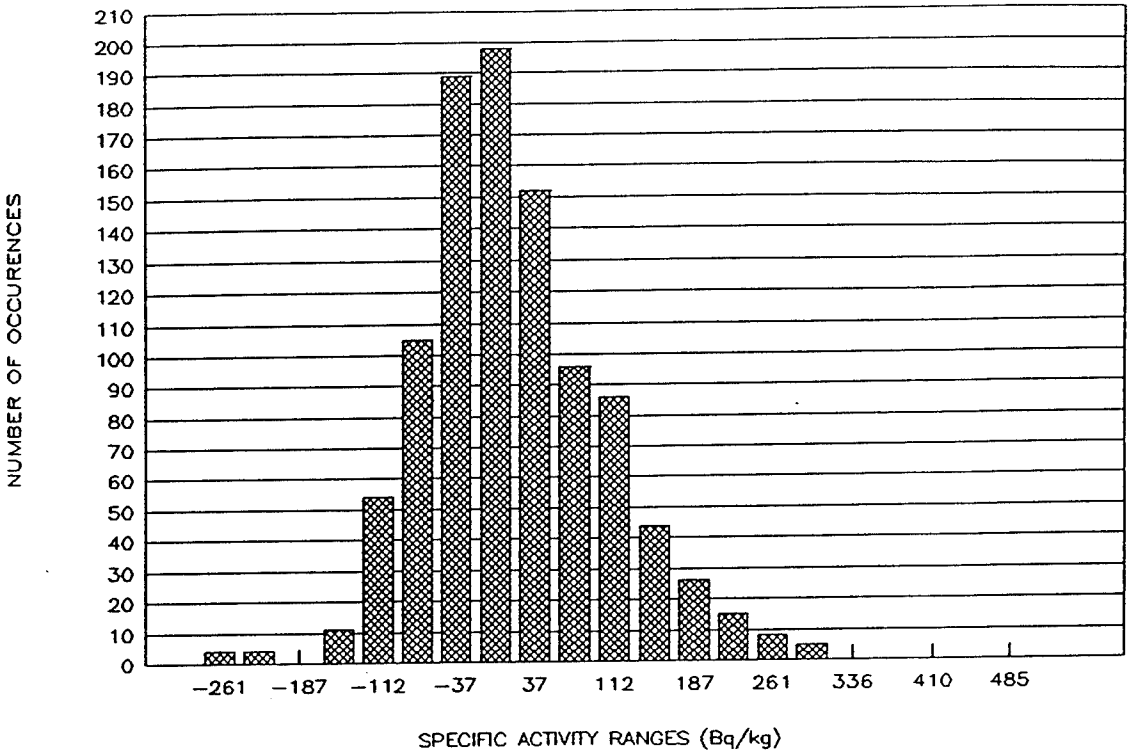
HOT PARTICLE EVENTS	326	SORTS BY ONE GATE ONLY	156
MULTIPARTICLE EVENTS	236	SORTS BY TWO GATES	167
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

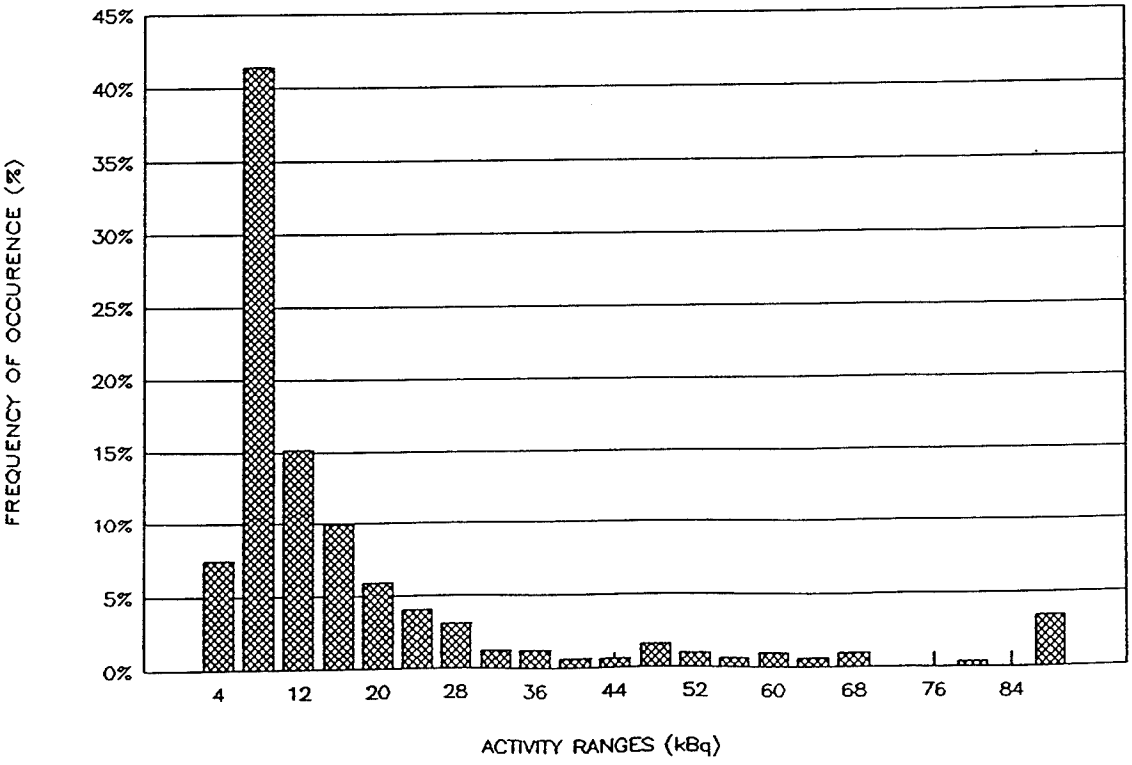
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 07-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 07-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 06-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.03 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.87 tons	64.1 tons	
MAXIMUM/SORT		11.4 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	42.2 kg	
				98.7%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.69 yd³	50.8 yd³	51.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		14,142 kBq		
MAXIMUM/SORT		854 kBq		
MINIMUM/SORT		2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		6,049 kBq	5,775 kBq	
MAXIMUM/SORT		525 kBq	18 kBq	
MINIMUM/SORT		0 Bq	-10 kBq	
SPECIFIC ACTIVITY		6,955 Bq/kg	90 Bq/kg	

WORK HISTORY			
WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:55 AM	END SOIL PROCESSING	03:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.74 hr
DOWN-TIME	3.26 hr
TOTAL SYSTEM PAUSE	1.97 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.93 hr
SHUT-DOWN	1.54 hr
PLANT PERFORMANCE	67.4%
PRODUCTIVITY	67.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,036	
NONPROCESS RECORDS (Test, calibration, etc)	5	
20-SEC PROCESS RECORDS	1,213	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	664	AD=0 & MD=0 & MND>0
SOME SORT	547	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	2	
0<AD<1kBq & MD>0	0	
AD=0 & MD	1	
AD<0 & MD	0	
ACT_P <5 kBq	238	28.9%

UNEXPLAIN TIME	PAUSE TIME
10:47:35	07:16
	09:59

10:07
11:09

2-SEC COUNT PERIODS		12,130	
2-SEC RECORDS WITH SORTS		823	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	187	79.2%	
3 DETECTORS	42	17.8%	
4 DETECTORS	6	2.5%	
5 DETECTORS	1	0.4%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		236	
NET 2-SEC RECORDS WITH SORTS		587	
2-SEC PERIODS WITH NO SORTS		11,543	
AVG TIME BETWEEN 2-SEC SORTS		41.3	sec

1-GATE SORTS		411	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	16	3.9%	-14000	0	-261	4000	109	13.2%	4
2	57	13.9%	-12000	0	-224	8000	350	42.5%	8
3	62	15.1%	-10000	1	-187	12000	123	14.9%	12
4	63	15.3%	-8000	3	-149	16000	59	7.2%	16
5	75	18.2%	-6000	3	-112	20000	44	5.3%	20
6	70	17.0%	-4000	6	-75	24000	23	2.8%	24
7	57	13.9%	-2000	19	-37	28000	26	3.2%	28
8	11	2.7%	0	51	0	32000	5	0.6%	32
TOTAL	411		2000	152	37	36000	7	0.9%	36
			4000	267	75	40000	9	1.1%	40
2-GATE SORTS		412	6000	300	112	44000	10	1.2%	44
DETECTR	SORTS	FREQ%	8000	227	149	48000	6	0.7%	48
8			10000	111	187	52000	4	0.5%	52
9	40	9.7%	12000	54	224	56000	6	0.7%	56
10	62	15.0%	14000	15	261	60000	4	0.5%	60
11	62	15.0%	16000	6	299	64000	4	0.5%	64
12	64	15.5%	18000	3	336	68000	1	0.1%	68
13	78	18.9%	20000	0	373	72000	6	0.7%	72
14	74	18.0%	22000	0	410	76000	3	0.4%	76
15	32	7.8%	24000	0	448	80000	4	0.5%	80
TOTAL	412		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	20	2.4%	>84
			TOTAL	1218		TOTAL	823		

SUMMARY TOTALS

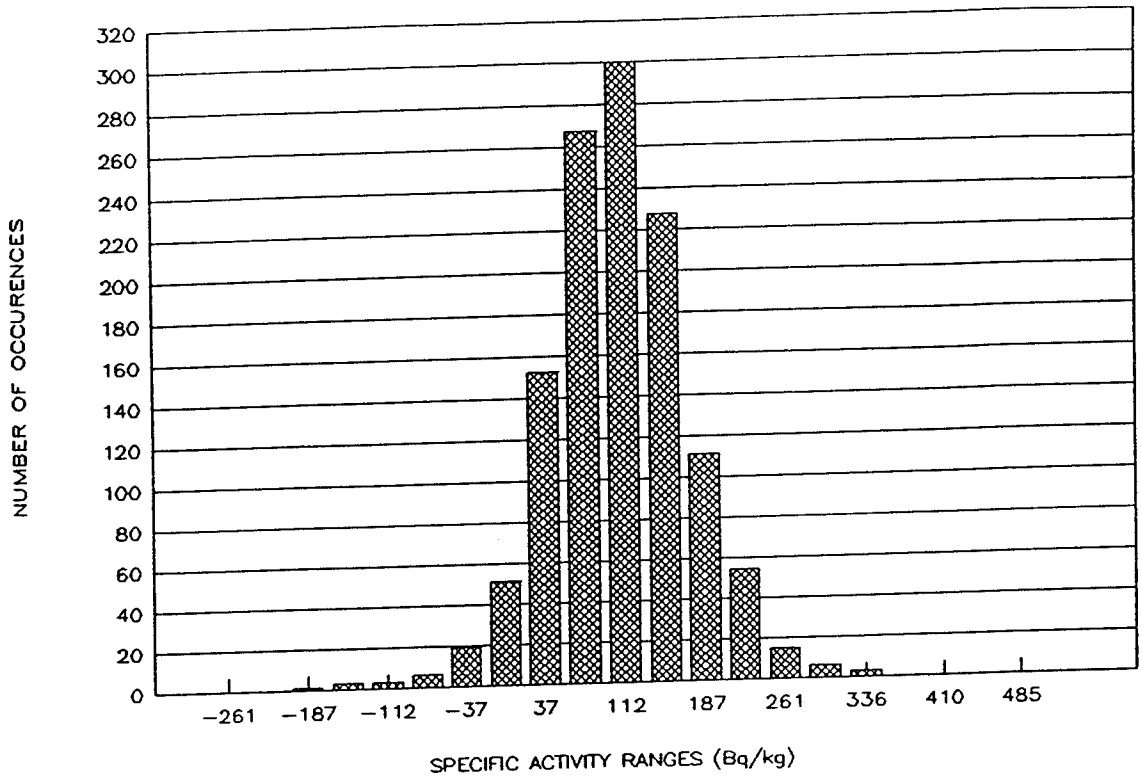
HOT PARTICLE EVENTS	809	SORTS BY ONE GATE ONLY	411
MULTIPARTICLE EVENTS	493	SORTS BY TWO GATES	412
DISTRIBUTED EVENTS	78		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

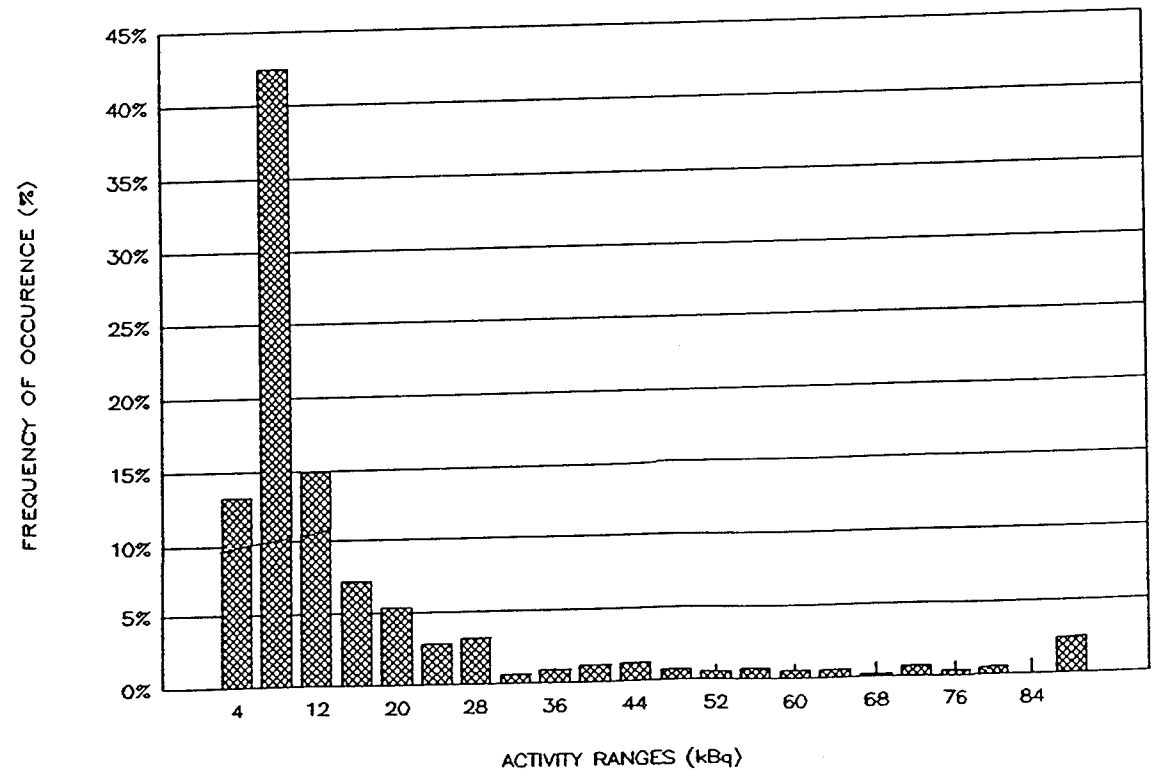
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1_LOG DATA FOR 06-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 06-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 06-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.81 tons	64.1 tons	
MAXIMUM/SORT		8.7 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				98.8%
EQUIVALENT SOIL-IN-GROUND		0.64 yd³	50.8 yd³	51.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		12,350 kBq		
MAXIMUM/SORT		1,047 kBq		
MINIMUM/SORT		2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		5,637 kBq	186 kBq	
MAXIMUM/SORT		825 kBq	11 kBq	
MINIMUM/SORT		0 Bq	-19 kBq	
SPECIFIC ACTIVITY		6,999 Bq/kg	3 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:55 AM	END SOIL PROCESSING	03:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.73 hr
DOWN-TIME	3.27 hr
TOTAL SYSTEM PAUSE	1.97 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.93 hr
SHUT-DOWN	1.55 hr
PLANT PERFORMANCE	67.3%
PRODUCTIVITY	67.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,973	
NONPROCESS RECORDS (Test, calibration, etc)		6	
20-SEC PROCESS RECORDS		1,212	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		696	AD=0 & MD=0 & MND>0
SOME SORT		516	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	172	22.6%	

UNEXPLAIN TIME	PAUSE TIME
09:37:56	07:16
	09:59

JA SOIL CLEANUP PLANT LOG SUMMARY

10:07
11:09

2-SEC COUNT PERIODS	12,120	
2-SEC RECORDS WITH SORTS	761	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	183	79.9%
3 DETECTORS	36	15.7%
4 DETECTORS	8	3.5%
5 DETECTORS	2	0.9%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	229	
NET 2-SEC RECORDS WITH SORTS	532	
2-SEC PERIODS WITH NO SORTS	11,588	
AVG TIME BETWEEN 2-SEC SORTS	45.6 sec	

1-GATE SORTS DETECTR	SORTS	388 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	25	6.4%	-14000	12	-261
2	63	16.2%	-12000	4	-224
3	57	14.7%	-10000	5	-187
4	70	18.0%	-8000	12	-149
5	71	18.3%	-6000	22	-112
6	63	16.2%	-4000	103	-75
7	36	9.3%	-2000	168	-37
8	3	0.8%	0	247	0
TOTAL	388		2000	266	37
			4000	196	75
2-GATE SORTS		373	6000	102	112
DETECTR	SORTS	FREQ%	8000	48	149
8			10000	26	187
9	47	12.6%	12000	7	224
10	51	13.7%	14000	0	261
11	60	16.1%	16000	0	299
12	63	16.9%	18000	0	336
13	75	20.1%	20000	0	373
14	58	15.5%	22000	0	410
15	19	5.1%	24000	0	448
TOTAL	373		26000	0	485
			>28000	0	0
			TOTAL	1218	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	72	9.5%	4
8000	325	42.7%	8
12000	120	15.8%	12
16000	83	10.9%	16
20000	27	3.5%	20
24000	18	2.4%	24
28000	20	2.6%	28
32000	19	2.5%	32
36000	14	1.8%	36
40000	6	0.8%	40
44000	9	1.2%	44
48000	5	0.7%	48
52000	7	0.9%	52
56000	6	0.8%	56
60000	8	1.1%	60
64000	5	0.7%	64
68000	4	0.5%	68
72000	1	0.1%	72
76000	2	0.3%	76
80000	1	0.1%	80
84000	0	0.0%	84
>84000	9	1.2%	>84
TOTAL	761		

SUMMARY TOTALS

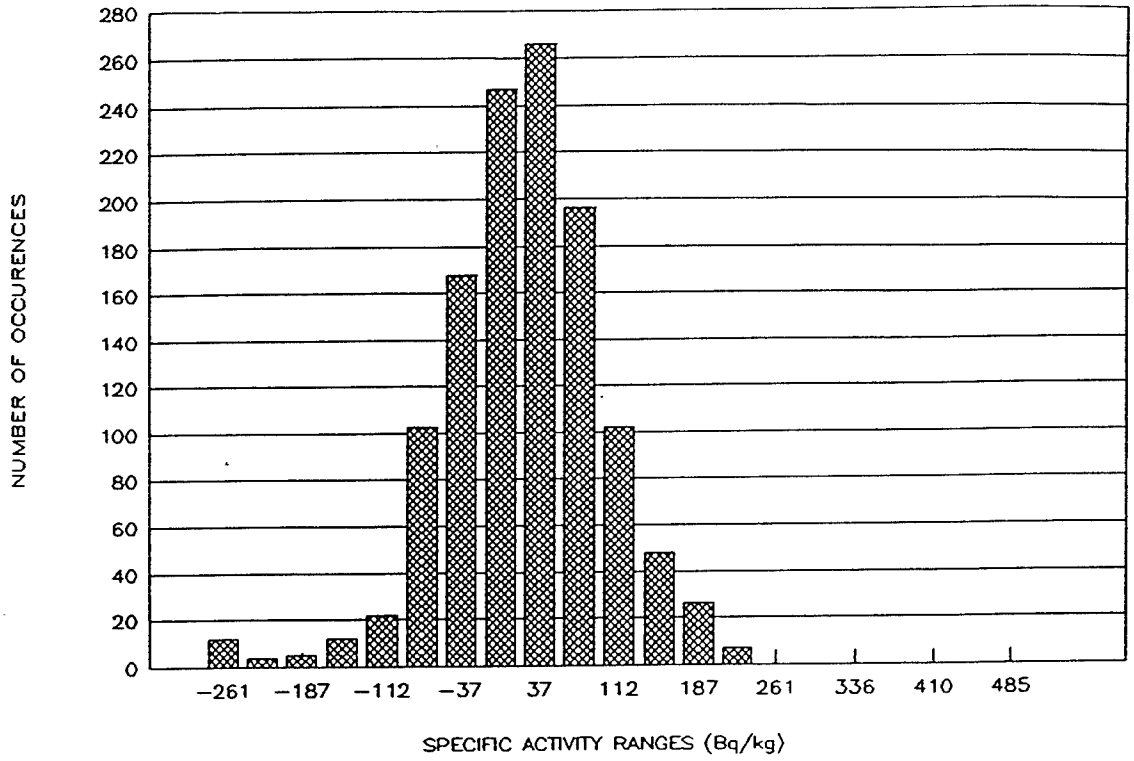
HOT PARTICLE EVENTS	752	SORTS BY ONE GATE ONLY	388
MULTIPARTICLE EVENTS	452	SORTS BY TWO GATES	373
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

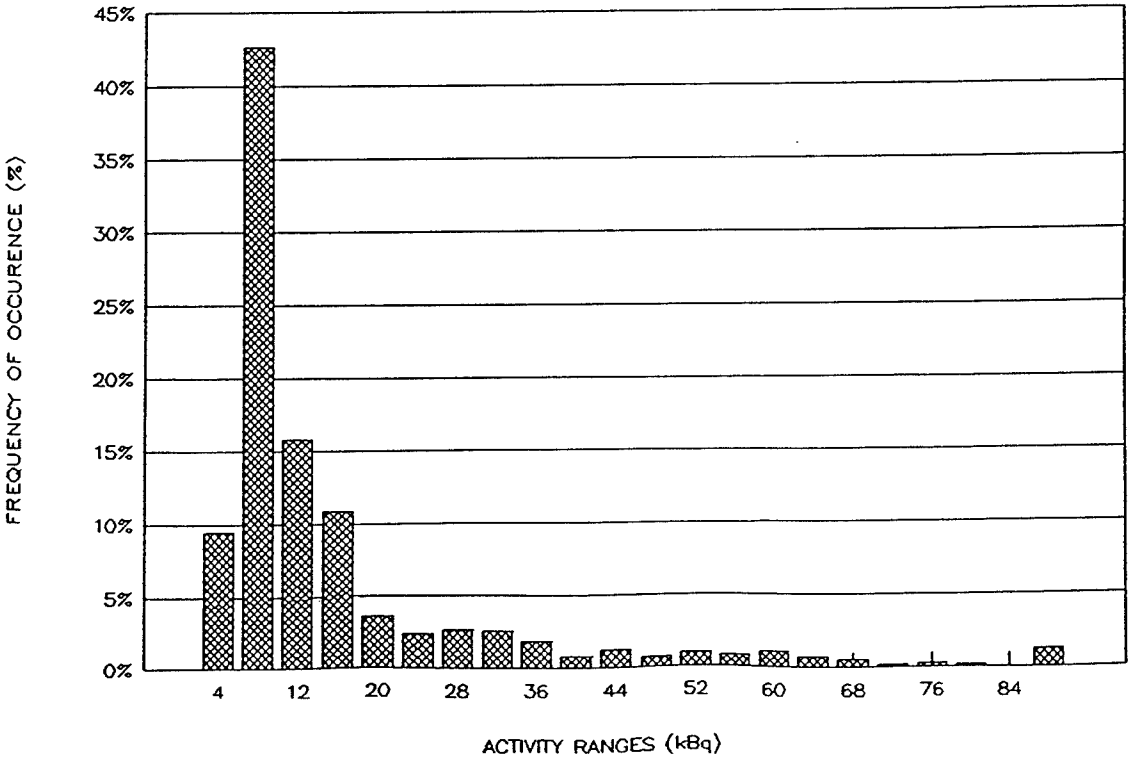
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 06-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 06-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 05-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.60 tons	70.0 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.48 yd³	55.5 yd³	55.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	7,850 kBq		
MAXIMUM/SORT	202 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,577 kBq	4,760 kBq	
MAXIMUM/SORT	186 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	5,924 Bq/kg	68 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.32 hr
DOWN-TIME	2.68 hr
TOTAL SYSTEM PAUSE	2.87 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.12 hr
SHUT-DOWN	0.55 hr
PLANT PERFORMANCE	73.2%
PRODUCTIVITY	73.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,847	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	1,317	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	876	AD=0 & MD=0 & MND>0
SOME SORT	441	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	

			UNEXPLAIN TIME	PAUSE TIME
0<AD<1kBq & MD>0	0		None	07:02
AD=0 & MD	0			11:06
AD<0 & MD	0			
ACT_P <5 kBq	132	24.9%		

16:57

2-SEC COUNT PERIODS	13,170	
2-SEC RECORDS WITH SORTS	530	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	120	80.5%
3 DETECTORS	27	18.1%
4 DETECTORS	2	1.3%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	149	
NET 2-SEC RECORDS WITH SORTS	381	
2-SEC PERIODS WITH NO SORTS	12,789	
AVG TIME BETWEEN 2-SEC SORTS	69.1	sec

1-GATE SORTS		269	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	14	5.2%	-14000	0	-261	4000	70	13.2%	4
2	41	15.2%	-12000	0	-224	8000	195	36.8%	8
3	42	15.6%	-10000	2	-187	12000	95	17.9%	12
4	45	16.7%	-8000	1	-149	16000	44	8.3%	16
5	51	19.0%	-6000	2	-112	20000	23	4.3%	20
6	38	14.1%	-4000	9	-75	24000	28	5.3%	24
7	29	10.8%	-2000	36	-37	28000	13	2.5%	28
8	9	3.3%	0	120	0	32000	7	1.3%	32
TOTAL	269		2000	261	37	36000	8	1.5%	36
			4000	343	75	40000	5	0.9%	40
2-GATE SORTS		261	6000	267	112	44000	6	1.1%	44
DETECTR	SORTS	FREQ%	8000	170	149	48000	6	1.1%	48
8			10000	59	187	52000	6	1.1%	52
9	22	8.4%	12000	35	224	56000	2	0.4%	56
10	40	15.3%	14000	15	261	60000	2	0.4%	60
11	53	20.3%	16000	4	299	64000	4	0.8%	64
12	49	18.8%	18000	1	336	68000	3	0.6%	68
13	41	15.7%	20000	1	373	72000	4	0.8%	72
14	33	12.6%	22000	0	410	76000	0	0.0%	76
15	23	8.8%	24000	0	448	80000	0	0.0%	80
TOTAL	261		26000	0	485	84000	1	0.2%	84
			>28000	0	0	>84000	8	1.5%	>84
			TOTAL	1326		TOTAL	530		

SUMMARY TOTALS

HOT PARTICLE EVENTS	520	SORTS BY ONE GATE ONLY	269
MULTIPARTICLE EVENTS	382	SORTS BY TWO GATES	261
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

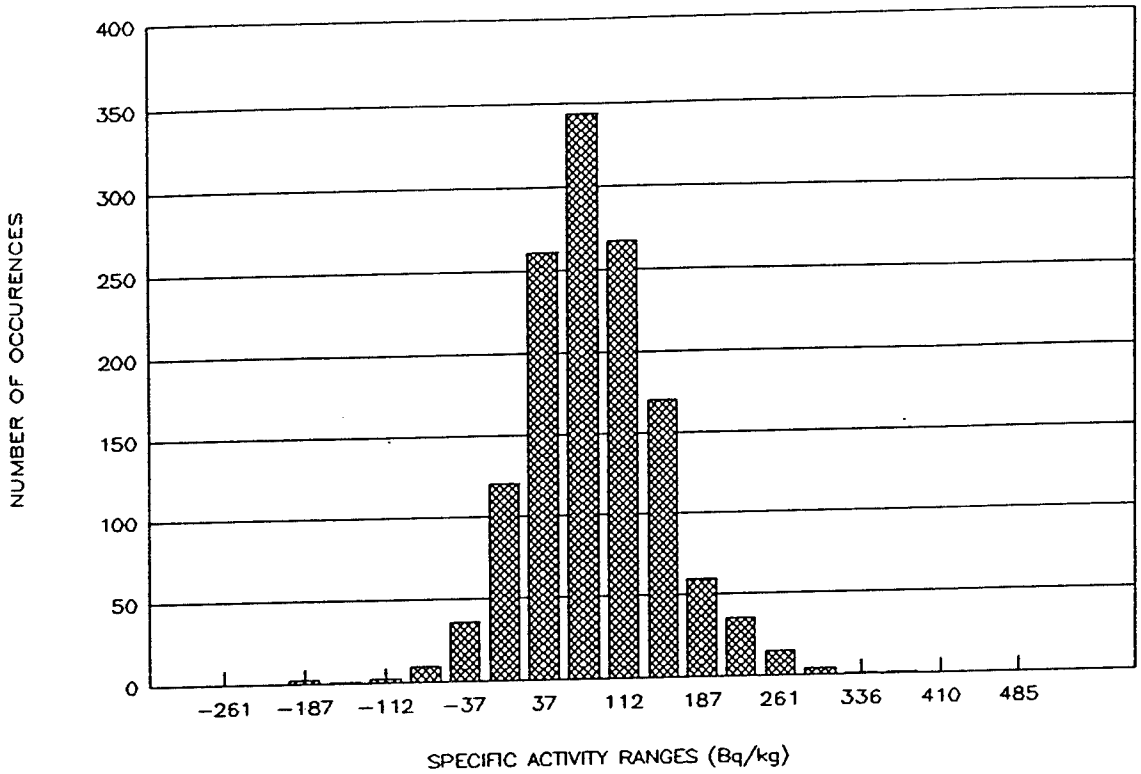
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

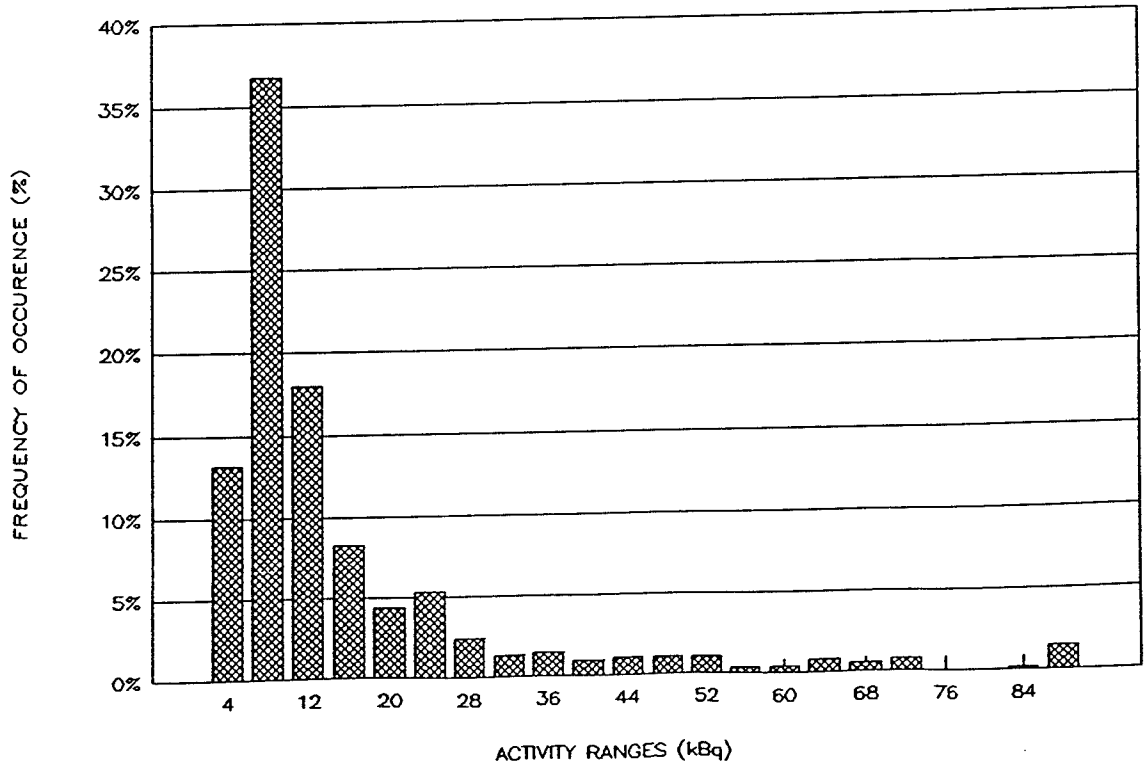
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1-LOG DATA FOR 05-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 05-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 05-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.63 tons	69.7 tons	
MAXIMUM/SORT	8 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.1%
EQUIVALENT SOIL-IN-GROUND	0.50 yd³	55.2 yd³	55.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,406 kBq		
MAXIMUM/SORT	205 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,951 kBq	(197)kBq	
MAXIMUM/SORT	154 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	6,249 Bq/kg	(3)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.29 hr
DOWN-TIME	2.71 hr
TOTAL SYSTEM PAUSE	2.90 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.12 hr
SHUT-DOWN	0.56 hr
PLANT PERFORMANCE	72.9%
PRODUCTIVITY	72.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,841	
NONPROCESS RECORDS (Test, calibration, etc)		9	
20-SEC PROCESS RECORDS		1,312	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		838	AD=0 & MD=0 & MND>0
SOME SORT		474	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1	UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0	09:09:05	07:02
AD<0 & MD	0		11:04
ACT_P <5 kBq	146 27.6%		

2-SEC COUNT PERIODS		13,120	
2-SEC RECORDS WITH SORTS		529	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	116	78.9%
	3 DETECTORS	24	16.3%
	4 DETECTORS	6	4.1%
	5 DETECTORS	1	0.7%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	147	
NET 2-SEC RECORDS WITH SORTS		382	
2-SEC PERIODS WITH NO SORTS		12,738	
AVG TIME BETWEEN 2-SEC SORTS		68.7	sec

1-GATE SORTS DETECTR	SORTS	264 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	21	8.0%	-14000	3	-261
2	43	16.3%	-12000	1	-224
3	44	16.7%	-10000	3	-187
4	48	18.2%	-8000	6	-149
5	43	16.3%	-6000	46	-112
6	34	12.9%	-4000	128	-75
7	25	9.5%	-2000	224	-37
8	6	2.3%	0	297	0
TOTAL	264		2000	273	37
			4000	174	75
2-GATE SORTS		265	6000	98	112
DETECTR	SORTS	FREQ%	8000	39	149
8			10000	19	187
9	39	14.7%	12000	6	224
10	37	14.0%	14000	3	261
11	59	22.3%	16000	1	299
12	37	14.0%	18000	0	336
13	34	12.8%	20000	0	373
14	39	14.7%	22000	0	410
15	20	7.5%	24000	0	448
TOTAL	265		26000	0	485
			>28000	0	0
			TOTAL	1321	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	57	10.8%	4
8000	232	43.9%	8
12000	78	14.7%	12
16000	36	6.8%	16
20000	25	4.7%	20
24000	12	2.3%	24
28000	17	3.2%	28
32000	11	2.1%	32
36000	7	1.3%	36
40000	5	0.9%	40
44000	7	1.3%	44
48000	4	0.8%	48
52000	4	0.8%	52
56000	8	1.5%	56
60000	2	0.4%	60
64000	2	0.4%	64
68000	3	0.6%	68
72000	1	0.2%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	2	0.4%	84
>84000	16	3.0%	>84
TOTAL	529		

SUMMARY TOTALS

HOT PARTICLE EVENTS	530	SORTS BY ONE GATE ONLY	264
MULTIPARTICLE EVENTS	413	SORTS BY TWO GATES	265
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

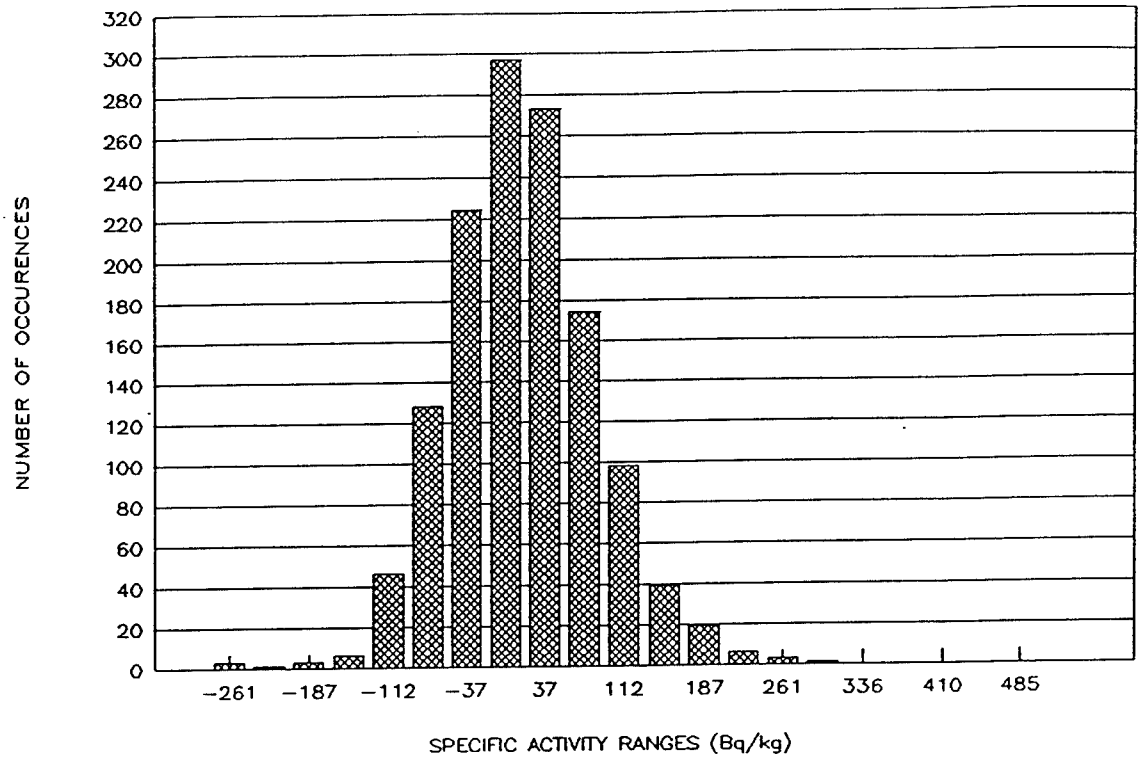
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

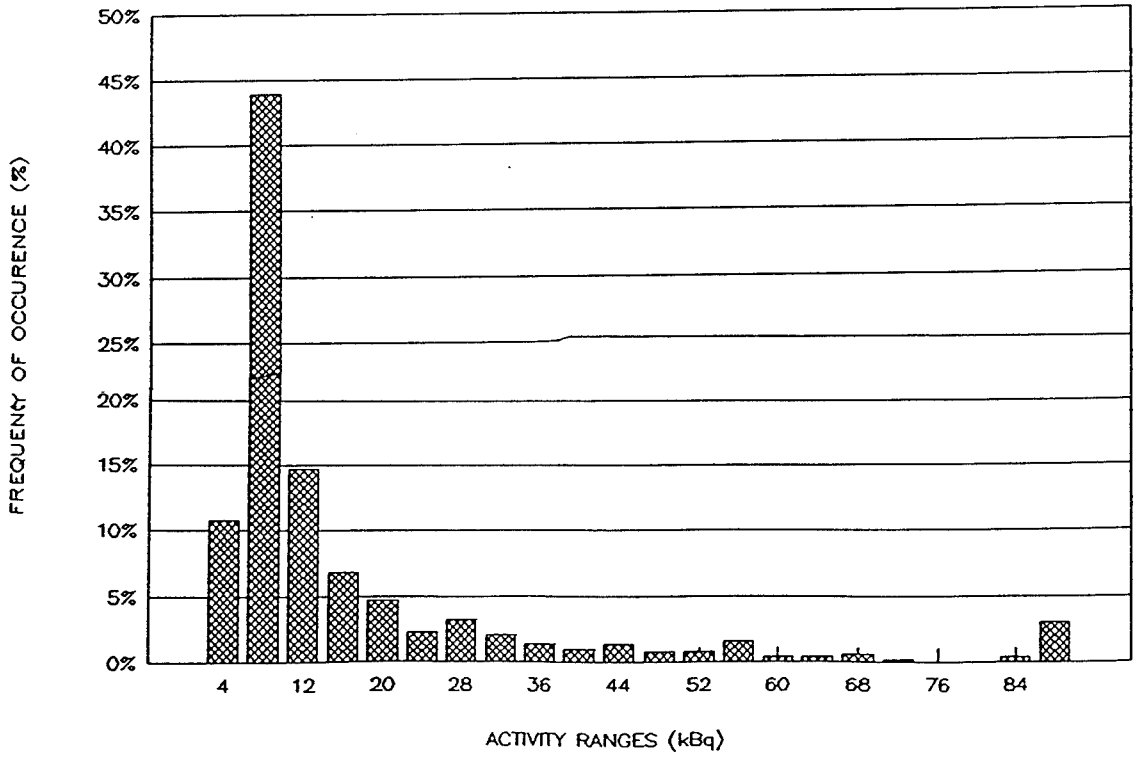
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 05-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 05-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 04-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.71 ± 0.04 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.90 tons	73.2 tons	
MAXIMUM/SORT		9.4 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	44.2 kg	
				98.8%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.71 yd³	58.0 yd³	58.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		13,227 kBq		
MAXIMUM/SORT		329 kBq		
MINIMUM/SORT		2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		5,821 kBq	4,952 kBq	
MAXIMUM/SORT		272 kBq	16 kBq	
MINIMUM/SORT		0 Bq	-7 kBq	
SPECIFIC ACTIVITY		6,482 Bq/kg	68 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:08 AM	END SOIL PROCESSING	04:58 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.68 hr
DOWN-TIME	2.32 hr
TOTAL SYSTEM PAUSE	2.21 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.14 hr
SHUT-DOWN	0.53 hr
PLANT PERFORMANCE	76.8%
PRODUCTIVITY	76.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,255	
NONPROCESS RECORDS (Test, calibration, etc)	6	
20-SEC PROCESS RECORDS	1,382	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	843	AD=0 & MD=0 & MND>0
SOME SORT	539	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	253	29.0%

UNEXPLAIN TIME	PAUSE TIME
None	07:04
	11:10

JA SOIL CLEANUP PLANT LOG SUMMARY

12:09

2-SEC COUNT PERIODS	13,820	
2-SEC RECORDS WITH SORTS	873	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	196	81.0%
3 DETECTORS	40	16.5%
4 DETECTORS	5	2.1%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	242	
NET 2-SEC RECORDS WITH SORTS	631	
2-SEC PERIODS WITH NO SORTS	13,189	
AVG TIME BETWEEN 2-SEC SORTS	43.8	sec

1-GATE SORTS		446	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	18	4.0%	-14000	0	-261	4000	119	13.6%	4
2	49	11.0%	-12000	0	-224	8000	363	41.6%	8
3	67	15.0%	-10000	1	-187	12000	162	18.6%	12
4	86	19.3%	-8000	1	-149	16000	68	7.8%	16
5	78	17.5%	-6000	3	-112	20000	32	3.7%	20
6	66	14.8%	-4000	11	-75	24000	21	2.4%	24
7	57	12.8%	-2000	44	-37	28000	20	2.3%	28
8	25	5.6%	0	142	0	32000	10	1.1%	32
TOTAL	446		2000	274	37	36000	12	1.4%	36
			4000	328	75	40000	9	1.0%	40
2-GATE SORTS		427	6000	267	112	44000	5	0.6%	44
DETECTR	SORTS	FREQ%	8000	166	149	48000	3	0.3%	48
8			10000	92	187	52000	6	0.7%	52
9	38	8.9%	12000	37	224	56000	4	0.5%	56
10	52	12.2%	14000	18	261	60000	4	0.5%	60
11	82	19.2%	16000	3	299	64000	3	0.3%	64
12	83	19.4%	18000	1	336	68000	4	0.5%	68
13	76	17.8%	20000	0	373	72000	3	0.3%	72
14	55	12.9%	22000	0	410	76000	0	0.0%	76
15	41	9.6%	24000	0	448	80000	1	0.1%	80
TOTAL	427		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	24	2.7%	>84
			TOTAL	1388		TOTAL	873		

SUMMARY TOTALS

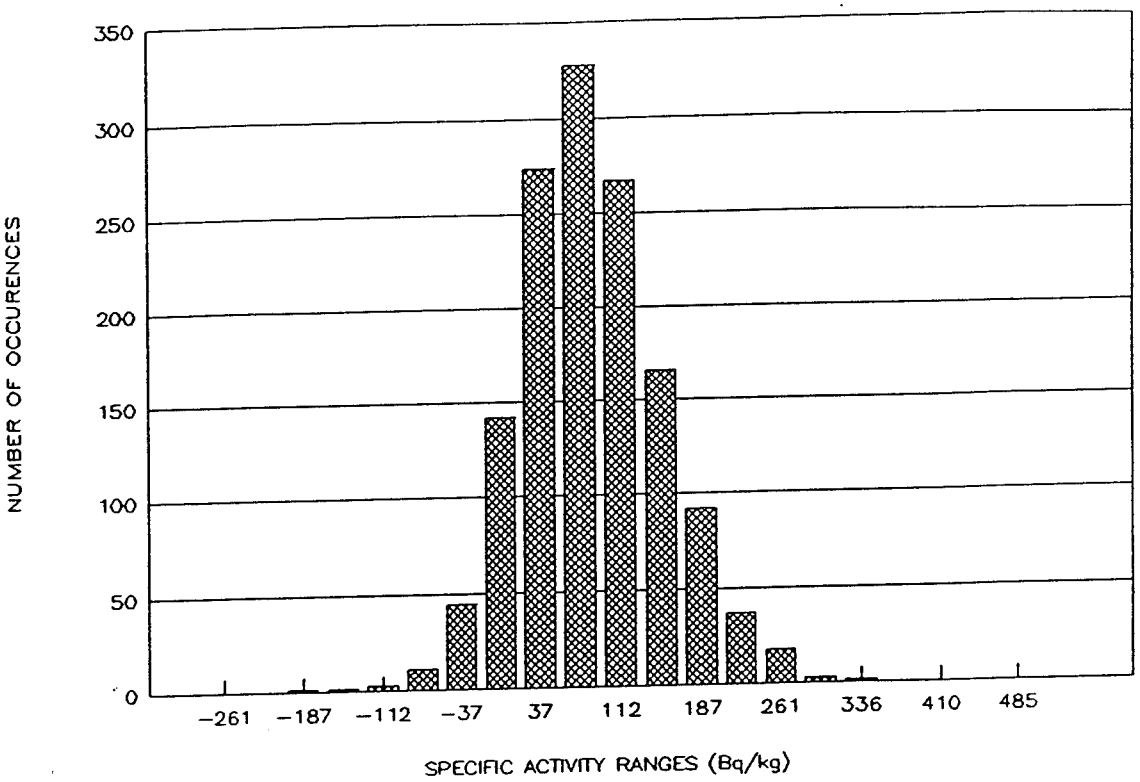
HOT PARTICLE EVENTS	851	SORTS BY ONE GATE ONLY	446
MULTIPARTICLE EVENTS	490	SORTS BY TWO GATES	427
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

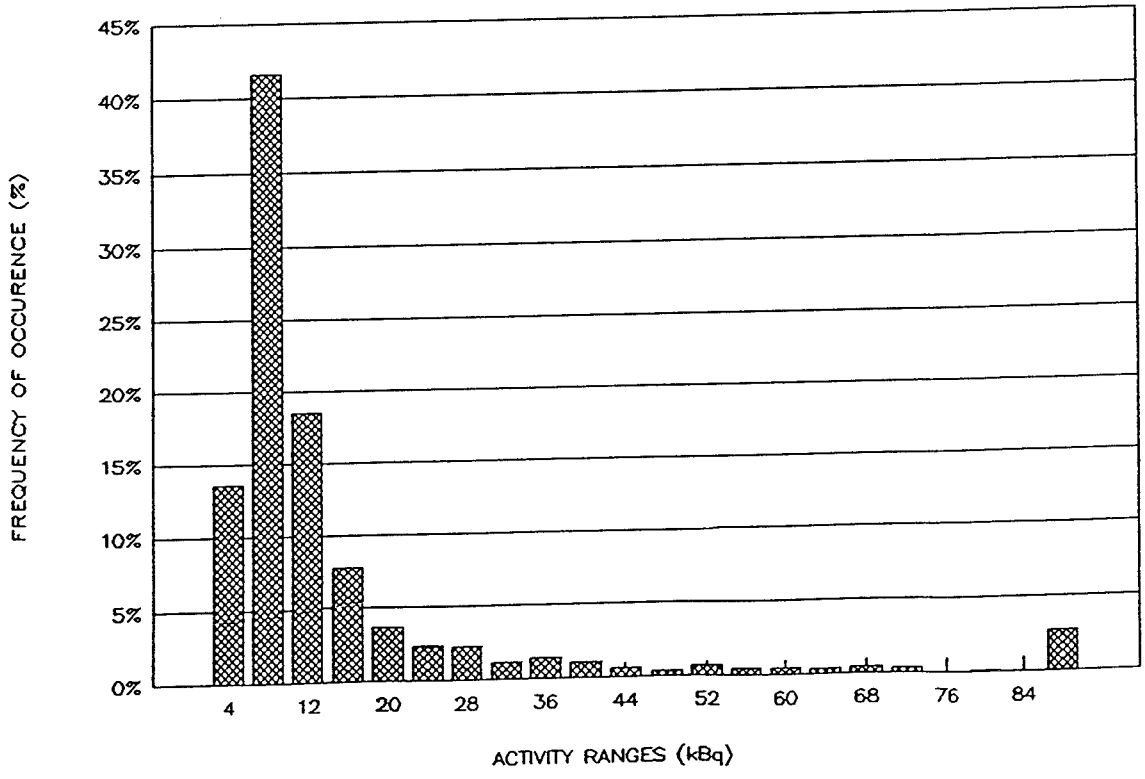
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1-LOG DATA FOR 04-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 04-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 04-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.83 tons	72.7 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.9%
EQUIVALENT SOIL-IN-GROUND	0.66 yd³	57.7 yd³	58.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	14,692 kBq		
MAXIMUM/SORT	324 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	6,443 kBq	(1,199)kBq	
MAXIMUM/SORT	277 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	7,730 Bq/kg	(16)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:08 AM	END SOIL PROCESSING	04:57 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.63 hr
DOWN-TIME	2.37 hr
TOTAL SYSTEM PAUSE	2.22 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.14 hr
SHUT-DOWN	0.55 hr
PLANT PERFORMANCE	76.3%
PRODUCTIVITY	76.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,222	
NONPROCESS RECORDS (Test, calibration, etc)		12	
20-SEC PROCESS RECORDS		1,373	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		876	AD=0 & MD=0 & MND>0
SOME SORT		497	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	199	23.4%	

UNEXPLAIN TIME	PAUSE TIME
None	07:04
	11:09

2-SEC COUNT PERIODS	13,730	
2-SEC RECORDS WITH SORTS	849	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	234	80.4%
3 DETECTORS	52	17.9%
4 DETECTORS	4	1.4%
5 DETECTORS	1	0.3%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	291	
NET 2-SEC RECORDS WITH SORTS	558	
2-SEC PERIODS WITH NO SORTS	13,172	
AVG TIME BETWEEN 2-SEC SORTS	49.2	sec

1-GATE SORTS DETECTR	SORTS	424 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	27	6.4%	-14000	2	-261
2	70	16.5%	-12000	1	-224
3	91	21.5%	-10000	5	-187
4	89	21.0%	-8000	16	-149
5	81	19.1%	-6000	91	-112
6	48	11.3%	-4000	164	-75
7	16	3.8%	-2000	268	-37
8	2	0.5%	0	313	0
TOTAL	424		2000	232	37
			4000	171	75
2-GATE SORTS		425	6000	66	112
DETECTR	SORTS	FREQ%	8000	33	149
8			10000	11	187
9	49	11.5%	12000	9	224
10	65	15.3%	14000	3	261
11	107	25.2%	16000	0	299
12	90	21.2%	18000	0	336
13	63	14.8%	20000	0	373
14	40	9.4%	22000	0	410
15	11	2.6%	24000	0	448
TOTAL	425		26000	0	485
			>28000	0	0
			TOTAL	1385	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	86	10.1%	4
8000	333	39.2%	8
12000	120	14.1%	12
16000	82	9.7%	16
20000	48	5.7%	20
24000	35	4.1%	24
28000	28	3.3%	28
32000	17	2.0%	32
36000	17	2.0%	36
40000	10	1.2%	40
44000	10	1.2%	44
48000	5	0.6%	48
52000	1	0.1%	52
56000	5	0.6%	56
60000	8	0.9%	60
64000	7	0.8%	64
68000	8	0.9%	68
72000	0	0.0%	72
76000	2	0.2%	76
80000	0	0.0%	80
84000	1	0.1%	84
>84000	26	3.1%	>84
TOTAL	849		

SUMMARY TOTALS

HOT PARTICLE EVENTS	809	SORTS BY ONE GATE ONLY	424
MULTIPARTICLE EVENTS	437	SORTS BY TWO GATES	425
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

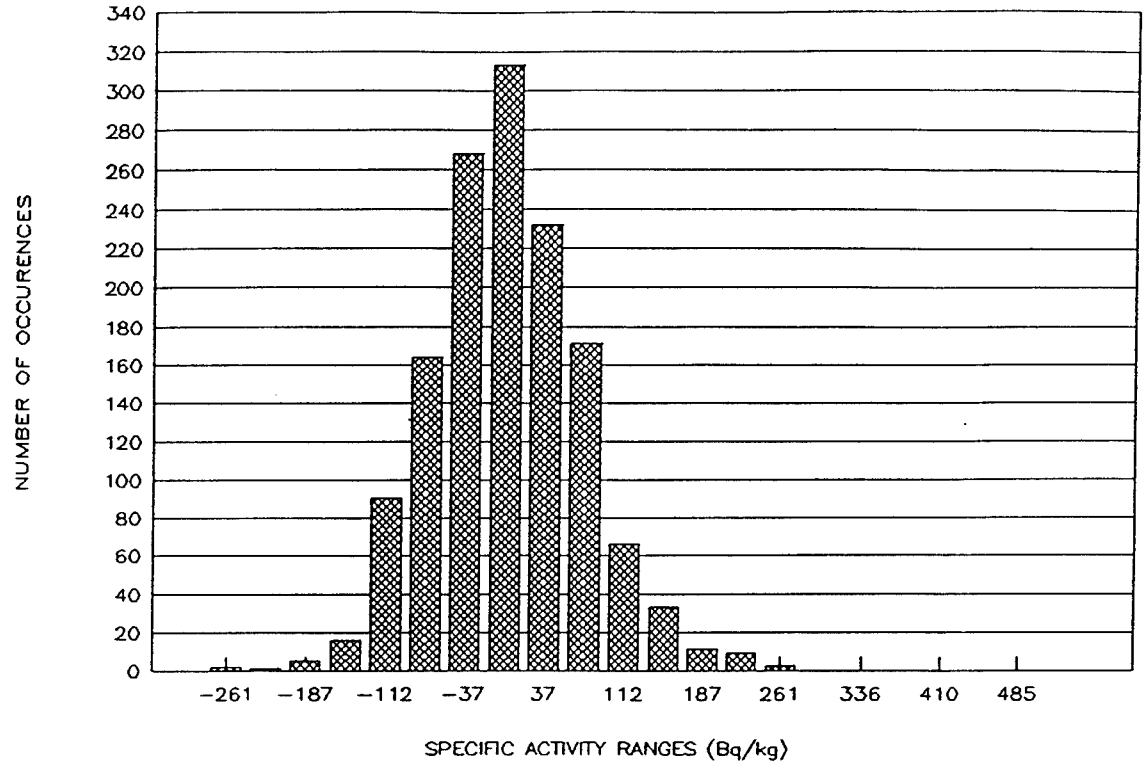
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

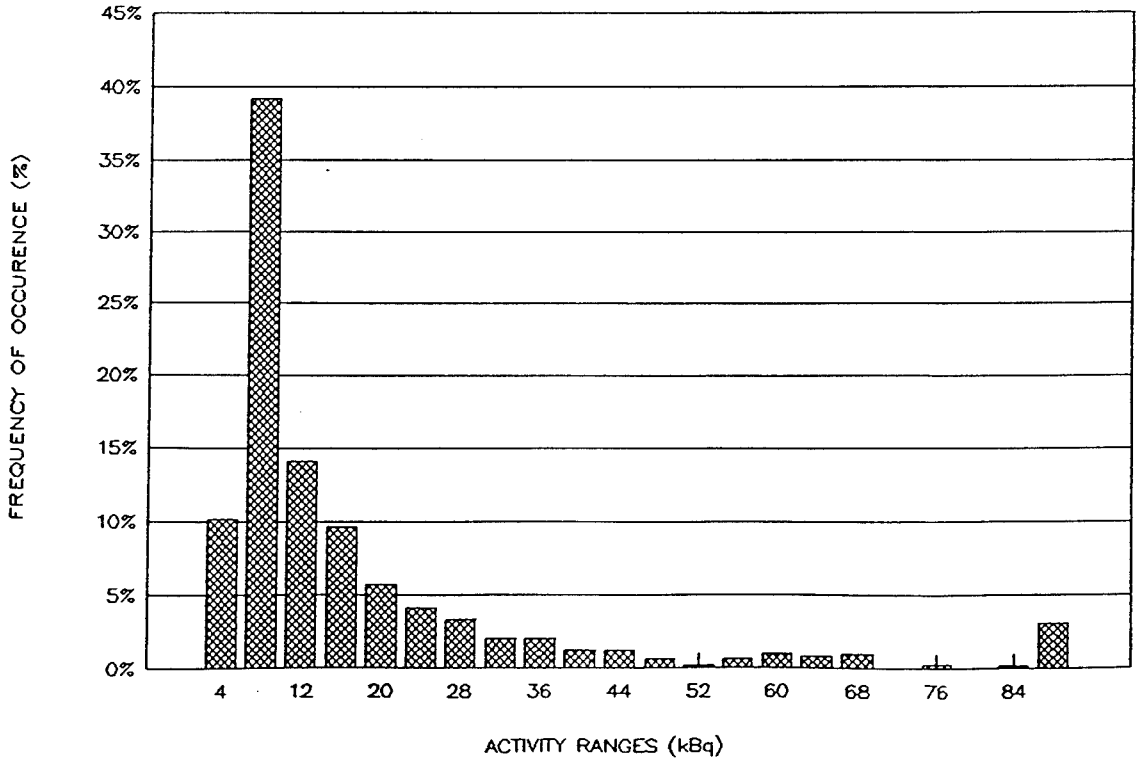
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 04-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 04-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 02-Jan-93

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.62 tons	19.5 tons	
MAXIMUM/SORT	11.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.2 kg	
			96.9%
WEIGHT RECOVERY OR VOLUME RECOVERY			15.9 yd³/day
EQUIVALENT SOIL-IN-GROUND	0.49 yd³	15.4 yd³	
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,310 kBq		
MAXIMUM/SORT	180 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,048 kBq	2,005 kBq	
MAXIMUM/SORT	193 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	6,497 Bq/kg	103 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:24 AM	END SOIL PROCESSING	09:29 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr	
AVAILABLE HOURS	10.0 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	2.08 hr	
DOWN-TIME	7.92 hr	
TOTAL SYSTEM PAUSE	0.50 hr	
NONAVAILABLE HOURS	0.0 hr	
START-UP	0.40 hr	
SHUT-DOWN	8.01 hr	
PLANT PERFORMANCE	20.8%	
PRODUCTIVITY	20.8%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,050	
NONPROCESS RECORDS (Test, calibration, etc)		7	
20-SEC PROCESS RECORDS		375	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		114	AD=0 & MD=0 & MND>0
SOME SORT		261	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	200	29.6%	

UNEXPLAIN TIME	PAUSE TIME
09:23:37	06:54
	09:29

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	3,750	
2-SEC RECORDS WITH SORTS	675	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	169	80.9%
3 DETECTORS	30	14.4%
4 DETECTORS	9	4.3%
5 DETECTORS	1	0.5%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	209	
NET 2-SEC RECORDS WITH SORTS	466	
2-SEC PERIODS WITH NO SORTS	3,284	
AVG TIME BETWEEN 2-SEC SORTS	16.1	sec

1-GATE SORTS		356	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	12	3.4%	-14000	0	-261	4000	105	15.6%	4
2	54	15.2%	-12000	1	-224	8000	246	36.4%	8
3	61	17.1%	-10000	0	-187	12000	114	16.9%	12
4	44	12.4%	-8000	1	-149	16000	50	7.4%	16
5	68	19.1%	-6000	1	-112	20000	45	6.7%	20
6	43	12.1%	-4000	2	-75	24000	20	3.0%	24
7	53	14.9%	-2000	5	-37	28000	20	3.0%	28
8	21	5.9%	0	16	0	32000	11	1.6%	32
TOTAL	356		2000	46	37	36000	10	1.5%	36
			4000	71	75	40000	10	1.5%	40
2-GATE SORTS		319	6000	87	112	44000	8	1.2%	44
DETECTR	SORTS	FREQ%	8000	66	149	48000	4	0.6%	48
8			10000	46	187	52000	2	0.3%	52
9	31	9.7%	12000	26	224	56000	4	0.6%	56
10	59	18.5%	14000	11	261	60000	4	0.6%	60
11	42	13.2%	16000	2	299	64000	4	0.6%	64
12	55	17.2%	18000	1	336	68000	3	0.4%	68
13	43	13.5%	20000	0	373	72000	2	0.3%	72
14	50	15.7%	22000	0	410	76000	4	0.6%	76
15	39	12.2%	24000	0	448	80000	1	0.1%	80
TOTAL	319		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	7	1.0%	>84
			TOTAL	382		TOTAL	675		

SUMMARY TOTALS

HOT PARTICLE EVENTS	623	SORTS BY ONE GATE ONLY	356
MULTIPARTICLE EVENTS	308	SORTS BY TWO GATES	319
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

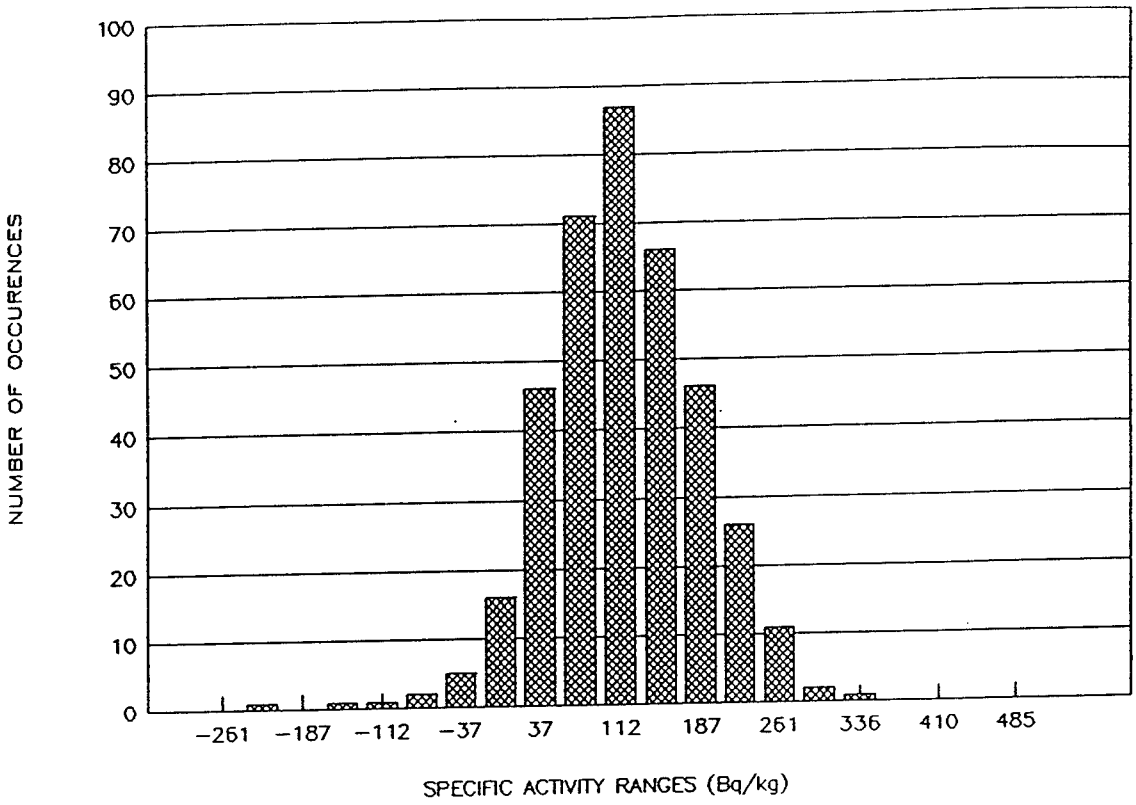
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

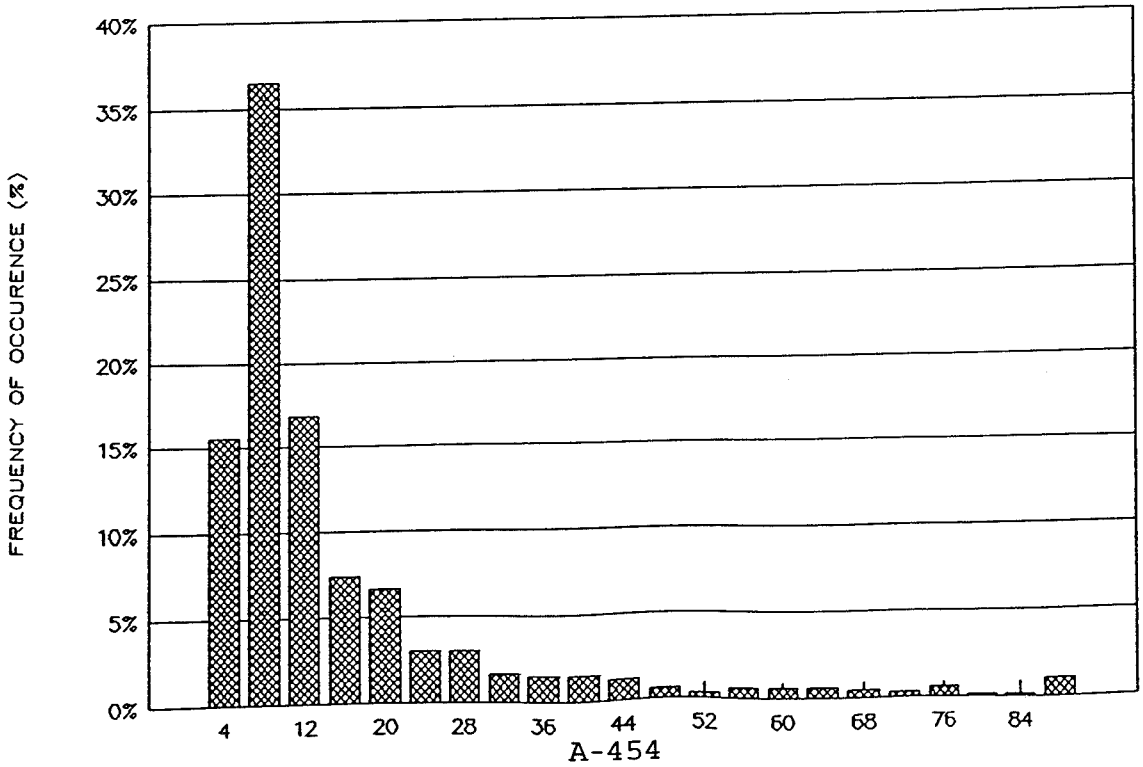
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 02-Jan-93



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 02-Jan-93



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 31-Dec-92

AVERAGE BACKGROUND COUNT RATE	0.69 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.86 tons	74.9 tons	
MAXIMUM/SORT	9.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.9%
EQUIVALENT SOIL-IN-GROUND	0.68 yd³	59.4 yd³	60.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,804 kBq		
MAXIMUM/SORT	361 kBq		
MINIMUM/SORT	2.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,296 kBq	6,327 kBq	
MAXIMUM/SORT	246 kBq	16 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,164 Bq/kg	84 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:07 AM	END SOIL PROCESSING	04:53 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.86 hr
DOWN-TIME	2.14 hr
TOTAL SYSTEM PAUSE	1.38 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.13 hr
SHUT-DOWN	0.61 hr
PLANT PERFORMANCE	78.6%
PRODUCTIVITY	78.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,212		
NONPROCESS RECORDS (Test, calibration, etc)			53		
20-SEC PROCESS RECORDS			1,414		
TOTAL SORT			0	MD>0 & MND=0	
NO SORT			874	AD=0 & MD=0 & MND>0	
SOME SORT			540	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	3			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			12:35:23	07:34
AD<0 & MD	0			16:25:23	08:04
ACT_P <5 kBq	237	29.7%			

16:26:43 11:09
11:57

2-SEC COUNT PERIODS		14,140	
2-SEC RECORDS WITH SORTS		798	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	182	83.9%	
3 DETECTORS	31	14.3%	
4 DETECTORS	3	1.4%	
5 DETECTORS	1	0.5%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	217		
NET 2-SEC RECORDS WITH SORTS		581	
2-SEC PERIODS WITH NO SORTS		13,559	
AVG TIME BETWEEN 2-SEC SORTS		48.7 sec	

1-GATE SORTS DETECTR	SORTS	409 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
1	26	6.2%	-14000	0	-261
2	59	14.0%	-12000	0	-224
3	71	16.9%	-10000	1	-187
4	59	14.0%	-8000	3	-149
5	68	16.2%	-6000	0	-112
6	64	15.2%	-4000	11	-75
7	55	13.1%	-2000	36	-37
8	19	4.5%	0	93	0
TOTAL	421		2000	208	37
			4000	321	75
2-GATE SORTS		389	6000	310	112
DETECTR	SORTS	FREQ%	8000	233	149
8			10000	124	187
9	39	9.6%	12000	72	224
10	58	14.3%	14000	23	261
11	80	19.8%	16000	3	299
12	61	15.1%	18000	1	336
13	63	15.6%	20000	0	373
14	61	15.1%	22000	0	410
15	43	10.6%	24000	0	448
TOTAL	405		26000	0	485
			>28000	0	0
			TOTAL	1439	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	116	14.0%	4
8000	330	40.0%	8
12000	147	17.8%	12
16000	63	7.6%	16
20000	28	3.4%	20
24000	27	3.3%	24
28000	18	2.2%	28
32000	16	1.9%	32
36000	10	1.2%	36
40000	10	1.2%	40
44000	6	0.7%	44
48000	4	0.5%	48
52000	8	1.0%	52
56000	6	0.7%	56
60000	9	1.1%	60
64000	1	0.1%	64
68000	1	0.1%	68
72000	2	0.2%	72
76000	1	0.1%	76
80000	2	0.2%	80
84000	0	0.0%	84
>84000	21	2.5%	>84
TOTAL	826		

SUMMARY TOTALS

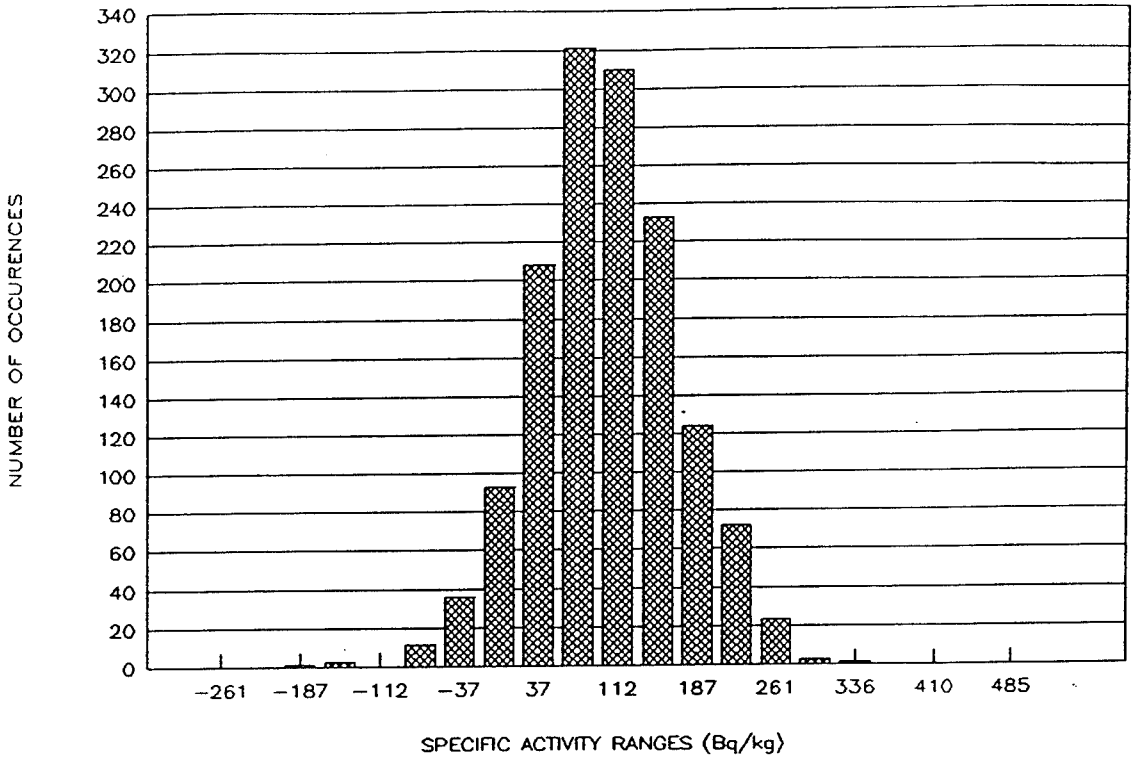
HOT PARTICLE EVENTS	780	SORTS BY ONE GATE ONLY	409
MULTIPARTICLE EVENTS	502	SORTS BY TWO GATES	389
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

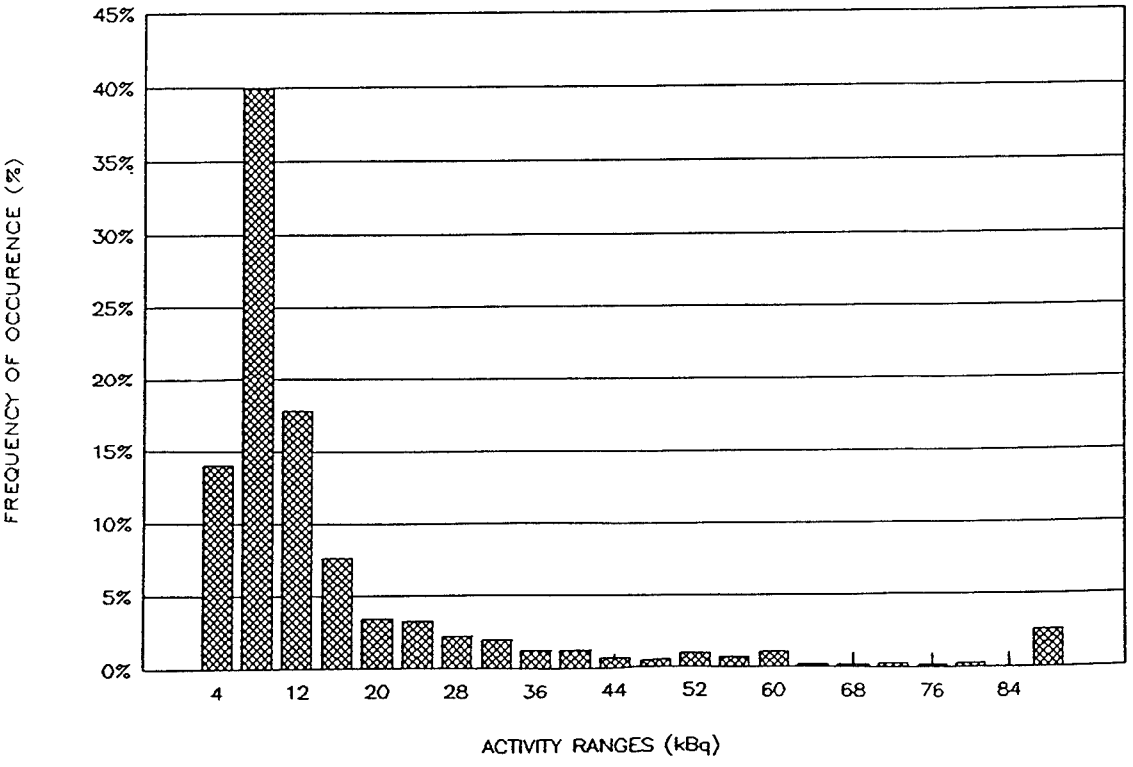
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1_LOG DATA FOR 31–Dec–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 31–Dec–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 30-Dec-92

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.69 tons	75.5 tons	
MAXIMUM/SORT	6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.1%
EQUIVALENT SOIL-IN-GROUND	0.55 yd³	59.9 yd³	60.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,518 kBq		
MAXIMUM/SORT	418 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,609 kBq	2,017 kBq	
MAXIMUM/SORT	275 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	8,087 Bq/kg	27 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:55 AM	END SOIL PROCESSING	04:59 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.90 hr
DOWN-TIME	2.10 hr
TOTAL SYSTEM PAUSE	1.58 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.93 hr
SHUT-DOWN	0.51 hr
PLANT PERFORMANCE	79.0%
PRODUCTIVITY	79.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,112	
NONPROCESS RECORDS (Test, calibration, etc)		11	
20-SEC PROCESS RECORDS		1,422	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		927	AD=0 & MD=0 & MND>0
SOME SORT		495	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	173	25.1%	

UNEXPLAIN TIME	PAUSE TIME
12:26:11	07:30
	07:58

2-SEC COUNT PERIODS	14,220		11:12
2-SEC RECORDS WITH SORTS	690	(ACT_P >0 kBq)	12:10
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	166	78.3%	
3 DETECTORS	42	19.8%	
4 DETECTORS	4	1.9%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	212		
NET 2-SEC RECORDS WITH SORTS	478		
2-SEC PERIODS WITH NO SORTS	13,742		
AVG TIME BETWEEN 2-SEC SORTS	59.5 sec		

1-GATE SORTS		362	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	17	4.7%	-14000	0	-261	4000	88	12.8%	4
2	47	13.0%	-12000	0	-224	8000	265	38.4%	8
3	54	14.9%	-10000	2	-187	12000	102	14.8%	12
4	70	19.3%	-8000	4	-149	16000	64	9.3%	16
5	54	14.9%	-6000	12	-112	20000	32	4.6%	20
6	56	15.5%	-4000	48	-75	24000	25	3.6%	24
7	50	13.8%	-2000	131	-37	28000	14	2.0%	28
8	14	3.9%	0	295	0	32000	11	1.6%	32
TOTAL	362		2000	348	37	36000	13	1.9%	36
			4000	309	75	40000	7	1.0%	40
2-GATE SORTS		328	6000	169	112	44000	5	0.7%	44
DETECTR	SORTS	FREQ%	8000	71	149	48000	9	1.3%	48
8			10000	29	187	52000	5	0.7%	52
9	30	9.1%	12000	12	224	56000	4	0.6%	56
10	45	13.7%	14000	3	261	60000	8	1.2%	60
11	63	19.2%	16000	0	299	64000	5	0.7%	64
12	59	18.0%	18000	0	336	68000	0	0.0%	68
13	57	17.4%	20000	0	373	72000	2	0.3%	72
14	42	12.8%	22000	0	410	76000	1	0.1%	76
15	32	9.8%	24000	0	448	80000	4	0.6%	80
TOTAL	328		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	26	3.8%	>84
			TOTAL	1433		TOTAL	690		

SUMMARY TOTALS

HOT PARTICLE EVENTS	662	SORTS BY ONE GATE ONLY	362
MULTIPARTICLE EVENTS	374	SORTS BY TWO GATES	328
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

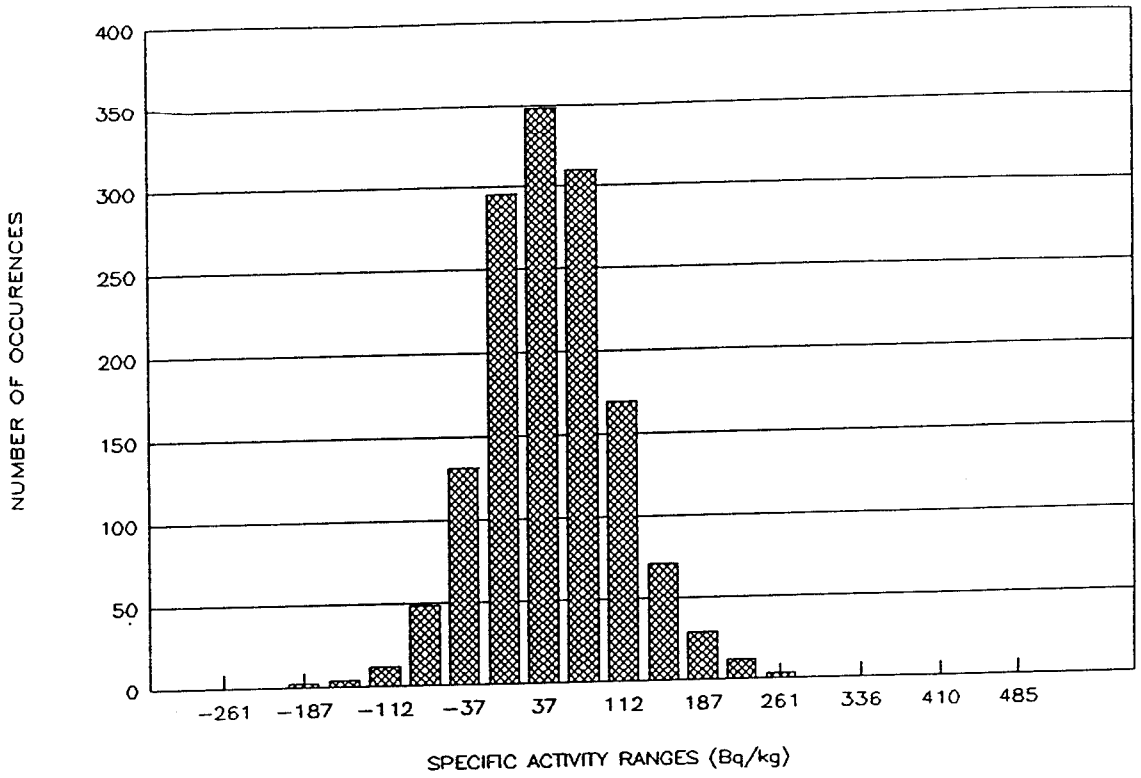
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

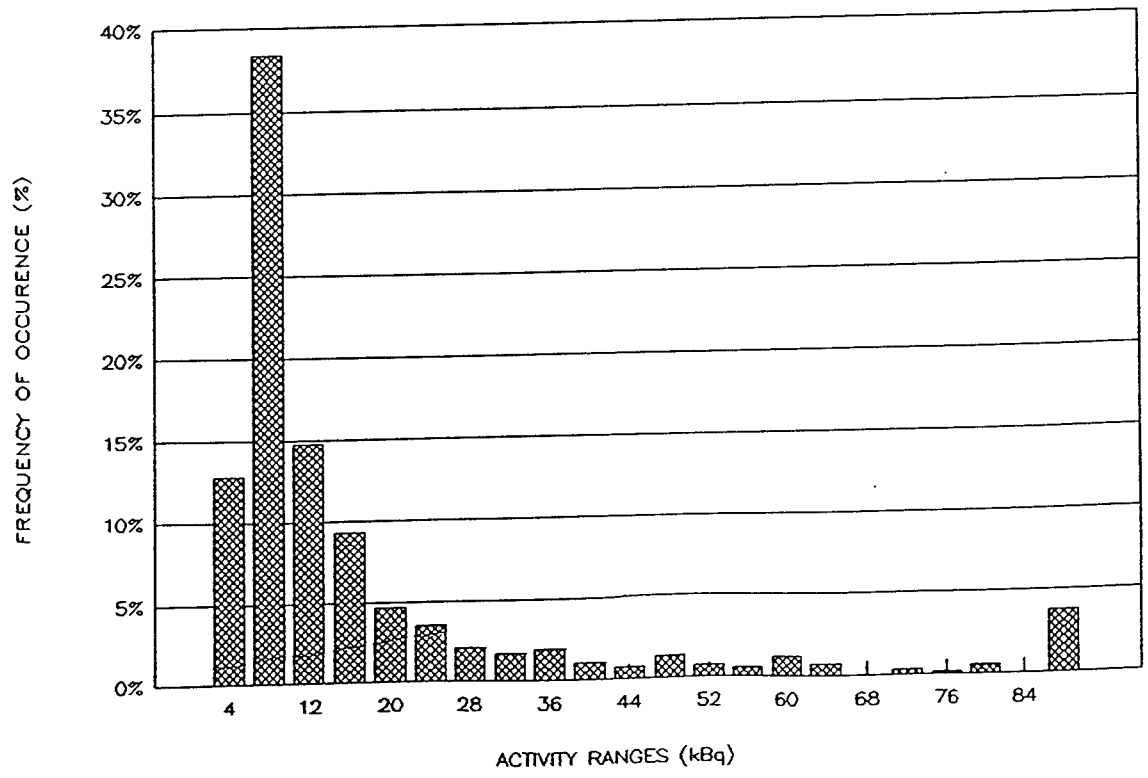
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 30-Dec-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 30-Dec-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 29-Dec-92

AVERAGE BACKGROUND COUNT RATE	0.70 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.11 tons	74.8 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	0.88 yd³	59.3 yd³	60.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	19,110 kBq		
MAXIMUM/SORT	1,018 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,794 kBq	759 kBq	
MAXIMUM/SORT	669 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	7,042 Bq/kg	10 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	07:34 AM	END SOIL PROCESSING	04:53 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	7.87 hr
DOWN-TIME	2.13 hr
TOTAL SYSTEM PAUSE	1.79 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	0.58 hr
SHUT-DOWN	0.61 hr
PLANT PERFORMANCE	78.7%
PRODUCTIVITY	78.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,300		
NONPROCESS RECORDS (Test, calibration, etc)			13		
20-SEC PROCESS RECORDS			1,417		
TOTAL SORT			3	MD>0 & MND=0	
NO SORT			889	AD=0 & MD=0 & MND>0	
SOME SORT			525	AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS			0		
0<AD<1kBq & MD>0	3			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			09:30:27	07:13
AD<0 & MD	0			13:11:52	07:42
ACT_P <5 kBq	249	28.2%			

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	14,170		15:47:37	07:54
2-SEC RECORDS WITH SORTS	883 (ACT_P >0 kBq)			11:05
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				11:59
2 DETECTORS	227	81.7%		14:24
3 DETECTORS	41	14.7%		14:26
4 DETECTORS	9	3.2%		14:28
5 DETECTORS	1	0.4%		
6 DETECTORS	0	0.0%		
7 DETECTORS	0	0.0%		
8 DETECTORS	0	0.0%		
TOTAL	278			
NET 2-SEC RECORDS WITH SORTS	605			
2-SEC PERIODS WITH NO SORTS	13,565			
AVG TIME BETWEEN 2-SEC SORTS	46.8 sec			

1-GATE SORTS		444	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	1.6%	-14000	0	-261	4000	124	14.0%	4
2	44	9.9%	-12000	1	-224	8000	333	37.7%	8
3	74	16.7%	-10000	3	-187	12000	130	14.7%	12
4	78	17.6%	-8000	10	-149	16000	64	7.2%	16
5	91	20.5%	-6000	22	-112	20000	46	5.2%	20
6	82	18.5%	-4000	94	-75	24000	35	4.0%	24
7	56	12.6%	-2000	206	-37	28000	21	2.4%	28
8	12	2.7%	0	339	0	32000	12	1.4%	32
TOTAL	444		2000	315	37	36000	15	1.7%	36
			4000	218	75	40000	9	1.0%	40
2-GATE SORTS		439	6000	116	112	44000	13	1.5%	44
DETECTR	SORTS	FREQ%	8000	57	149	48000	9	1.0%	48
8			10000	29	187	52000	5	0.6%	52
9	29	6.6%	12000	16	224	56000	5	0.6%	56
10	57	13.0%	14000	3	261	60000	4	0.5%	60
11	81	18.5%	16000	1	299	64000	4	0.5%	64
12	87	19.8%	18000	0	336	68000	3	0.3%	68
13	89	20.3%	20000	0	373	72000	5	0.6%	72
14	61	13.9%	22000	0	410	76000	2	0.2%	76
15	35	8.0%	24000	0	448	80000	4	0.5%	80
TOTAL	439		26000	0	485	84000	3	0.3%	84
			>28000	0	0	>84000	37	4.2%	>84
			TOTAL	1430		TOTAL	883		

SUMMARY TOTALS

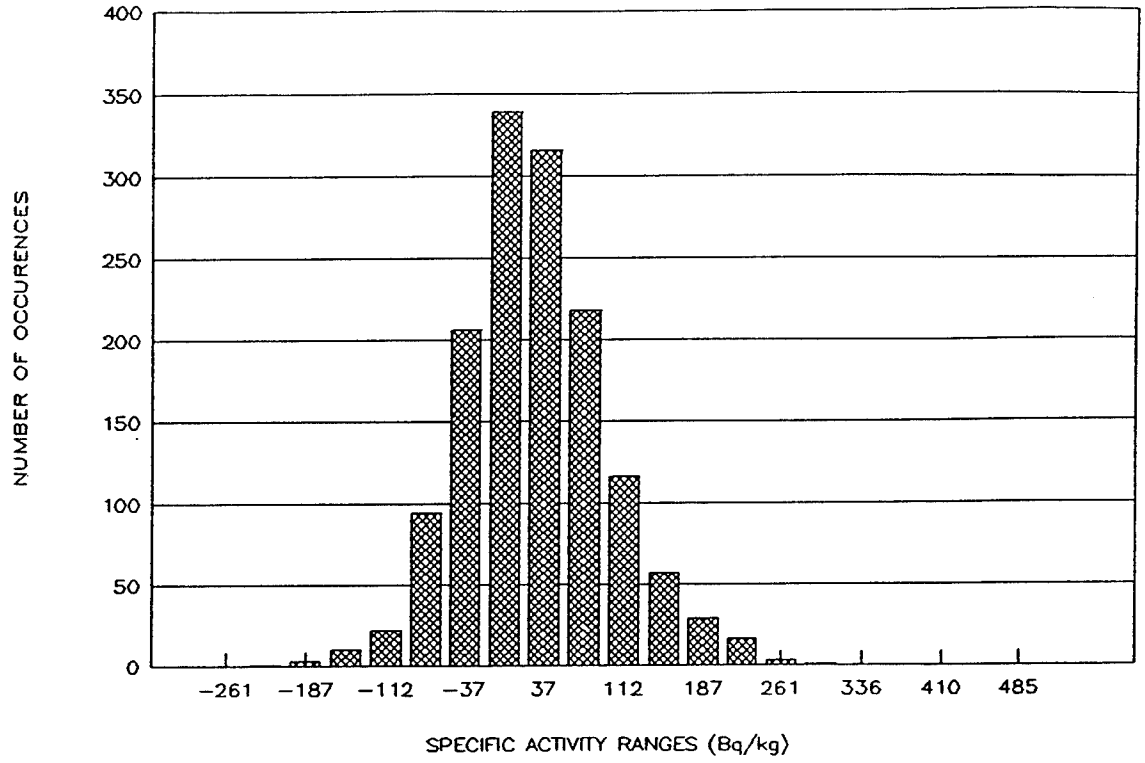
HOT PARTICLE EVENTS	845	SORTS BY ONE GATE ONLY	444
MULTIPARTICLE EVENTS	570	SORTS BY TWO GATES	439
DISTRIBUTED EVENTS	236		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

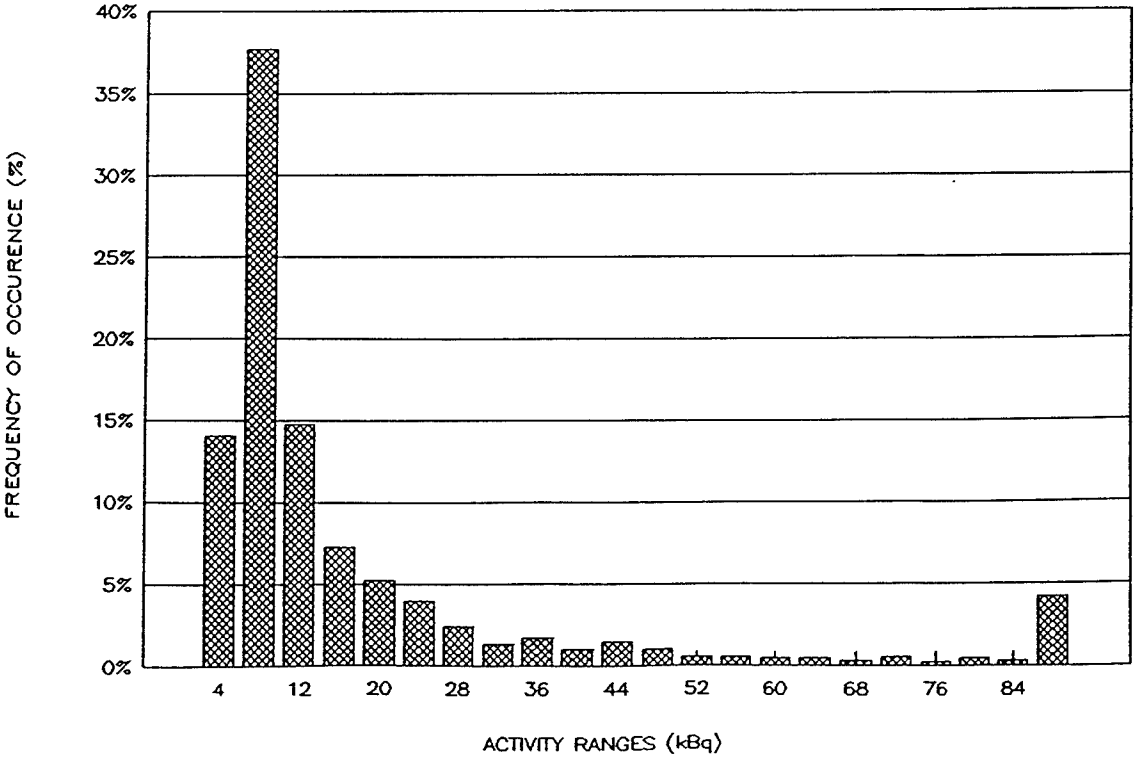
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 29-Dec-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 29-Dec-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 28-Dec-92

AVERAGE BACKGROUND COUNT RATE	0.68 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m«		
GROUND SOIL DENSITY	1.65 tons/m«		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.10 tons	16.8 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			99.4%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.08 yd«	13.3 yd«	13.4 yd«/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,124 kBq		
MAXIMUM/SORT	67 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	492 kBq	329 kBq	
MAXIMUM/SORT	84 kBq	12 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,165 Bq/kg	20 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:18 AM	END SOIL PROCESSING	04:56 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.75 hr
DOWN-TIME	8.25 hr
TOTAL SYSTEM PAUSE	8.19 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.30 hr
SHUT-DOWN	0.56 hr
PLANT PERFORMANCE	17.5%
PRODUCTIVITY	17.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	406	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	315	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	241 AD=0 & MD=0 & MND>0	
SOME SORT	74 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	24	26.4%

UNEXPLAIN TIME	PAUSE TIME
None	07:02
	09:12

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		ERR	15:26
2-SEC RECORDS WITH SORTS		91 (ACT_P >0 kBq)	16:57
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	23	85.2%	
3 DETECTORS	4	14.8%	
4 DETECTORS	0	0.0%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	27		
NET 2-SEC RECORDS WITH SORTS	64		
2-SEC PERIODS WITH NO SORTS	ERR		
AVG TIME BETWEEN 2-SEC SORTS	ERR sec		

1-GATE SORTS		43	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	0	0.0%	-14000	0	-261	4000	11	12.1%	4
2	3	7.0%	-12000	0	-224	8000	39	42.9%	8
3	4	9.3%	-10000	1	-187	12000	15	16.5%	12
4	6	14.0%	-8000	2	-149	16000	8	8.8%	16
5	10	23.3%	-6000	2	-112	20000	5	5.5%	20
6	10	23.3%	-4000	16	-75	24000	1	1.1%	24
7	9	20.9%	-2000	47	-37	28000	3	3.3%	28
8	1	2.3%	0	67	0	32000	1	1.1%	32
TOTAL	43		2000	74	37	36000	0	0.0%	36
			4000	57	75	40000	3	3.3%	40
2-GATE SORTS		48	6000	33	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	15	149	48000	1	1.1%	48
8			10000	8	187	52000	1	1.1%	52
9	1	2.1%	12000	2	224	56000	1	1.1%	56
10	5	10.4%	14000	0	261	60000	0	0.0%	60
11	6	12.5%	16000	0	299	64000	1	1.1%	64
12	11	22.9%	18000	0	336	68000	1	1.1%	68
13	12	25.0%	20000	0	373	72000	0	0.0%	72
14	9	18.8%	22000	0	410	76000	0	0.0%	76
15	4	8.3%	24000	0	448	80000	0	0.0%	80
TOTAL	48		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	324		TOTAL	91		

SUMMARY TOTALS

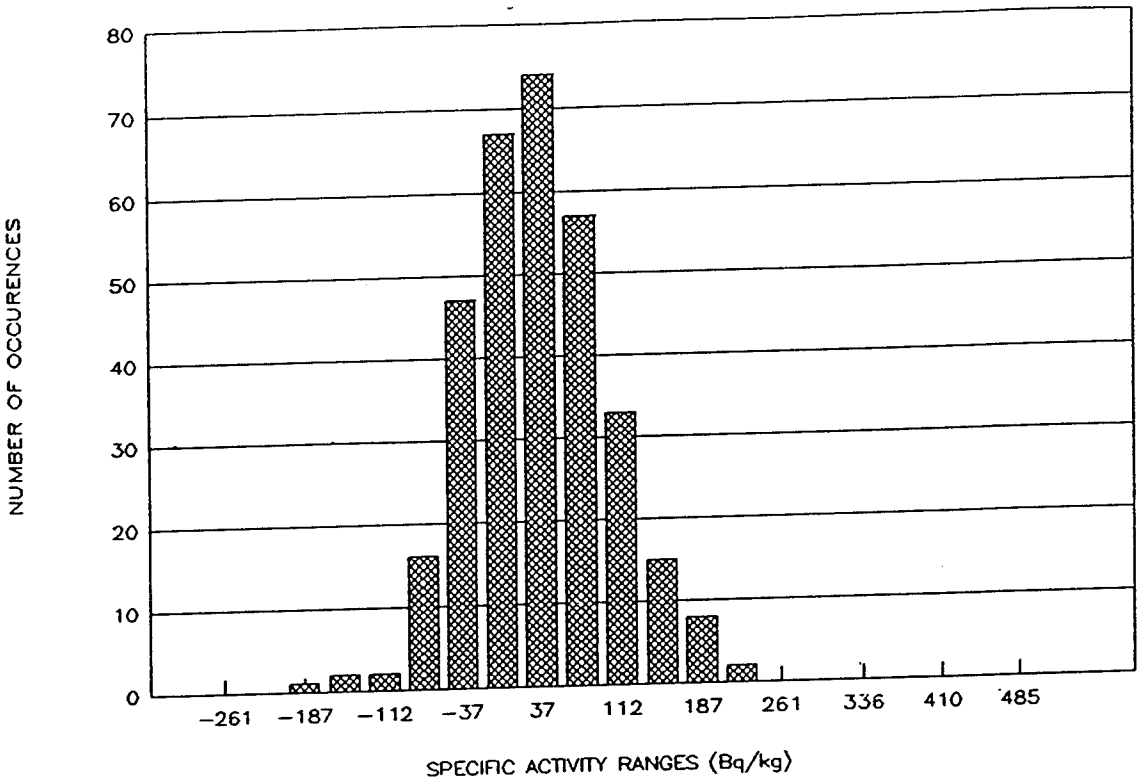
HOT PARTICLE EVENTS	93	SORTS BY ONE GATE ONLY	43
MULTIPARTICLE EVENTS	49	SORTS BY TWO GATES	48
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

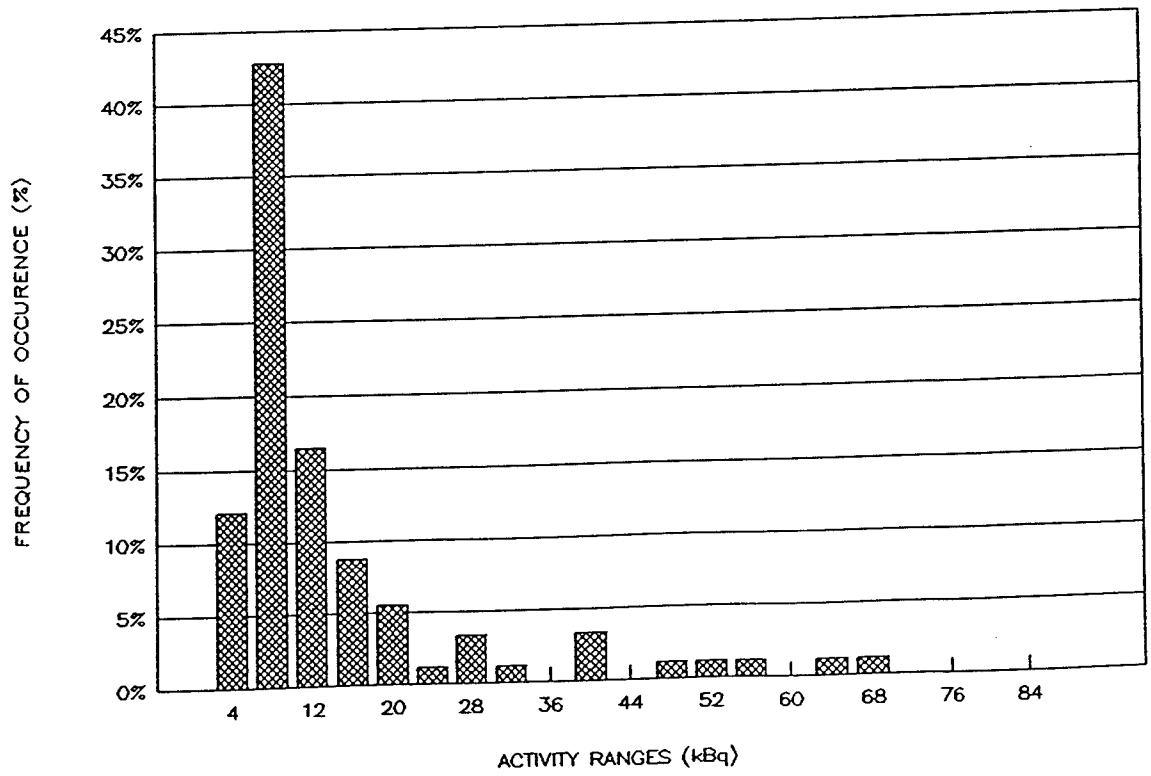
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 28–Dec–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 28–Dec–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 26-Dec-92

AVERAGE BACKGROUND COUNT RATE	0.69 p 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.09 tons	32.0 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.7%
EQUIVALENT SOIL-IN-GROUND	0.07 ydU	25.4 ydU	25.4 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,863 kBq		
MAXIMUM/SORT	188 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	736 kBq	(289)kBq	
MAXIMUM/SORT	107 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	7,937 Bq/kg	(9)Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	01:34 PM	END SOIL PROCESSING	04:53 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	3.33 hr
DOWN-TIME	6.67 hr
TOTAL SYSTEM PAUSE	0.86 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	6.57 hr
SHUT-DOWN	0.61 hr
PLANT PERFORMANCE	33.3%
PRODUCTIVITY	33.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			686	
NONPROCESS RECORDS (Test, calibration, etc)			10	
20-SEC PROCESS RECORDS			599	
TOTAL SORT			0	MD>0 & MND=0
NO SORT			526	AD=0 & MD=0 & MND>0
SOME SORT			73	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	0			
AD=0 & MD	0			
AD<0 & MD	0			
ACT_P <5 kBq	23	26.4%		

UNEXPLAIN TIME	PAUSE TIME
None	12:54
	16:55

2-SEC COUNT PERIODS			ERR
2-SEC RECORDS WITH SORTS			87 (ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	23	74.2%
	3 DETECTORS	7	22.6%
	4 DETECTORS	1	3.2%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	31	
NET 2-SEC RECORDS WITH SORTS		56	
2-SEC PERIODS WITH NO SORTS		ERR	
AVG TIME BETWEEN 2-SEC SORTS		ERR sec	

1-GATE SORTS		45	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	3	6.7%	-14000	0	-261
2	10	22.2%	-12000	2	-224
3	4	8.9%	-10000	1	-187
4	3	6.7%	-8000	7	-149
5	12	26.7%	-6000	11	-112
6	6	13.3%	-4000	63	-75
7	5	11.1%	-2000	121	-37
8	2	4.4%	0	159	0
TOTAL	45		2000	128	37
			4000	73	75
2-GATE SORTS		42	6000	20	112
DETECTR	SORTS	FREQ%	8000	12	149
8			10000	9	187
9	5	11.9%	12000	1	224
10	7	16.7%	14000	2	261
11	6	14.3%	16000	0	299
12	7	16.7%	18000	0	336
13	9	21.4%	20000	0	373
14	4	9.5%	22000	0	410
15	4	9.5%	24000	0	448
TOTAL	42		26000	0	485
			>28000	0	0
			TOTAL	609	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	13	14.9%	4
8000	30	34.5%	8
12000	17	19.5%	12
16000	7	8.0%	16
20000	5	5.7%	20
24000	1	1.1%	24
28000	2	2.3%	28
32000	2	2.3%	32
36000	0	0.0%	36
40000	0	0.0%	40
44000	1	1.1%	44
48000	0	0.0%	48
52000	1	1.1%	52
56000	0	0.0%	56
60000	0	0.0%	60
64000	0	0.0%	64
68000	0	0.0%	68
72000	0	0.0%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	0	0.0%	84
>84000	8	9.2%	>84
TOTAL	87		

SUMMARY TOTALS

HOT PARTICLE EVENTS	80	SORTS BY ONE GATE ONLY	45
MULTIPARTICLE EVENTS	58	SORTS BY TWO GATES	42
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

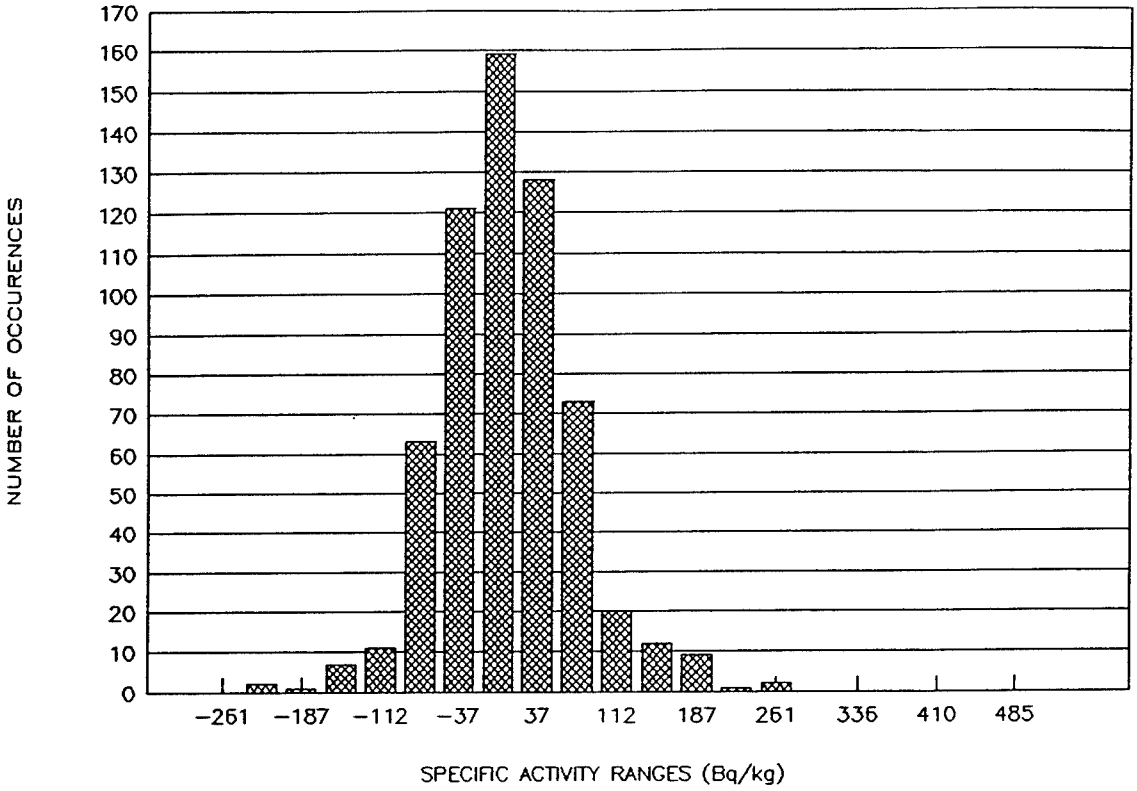
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

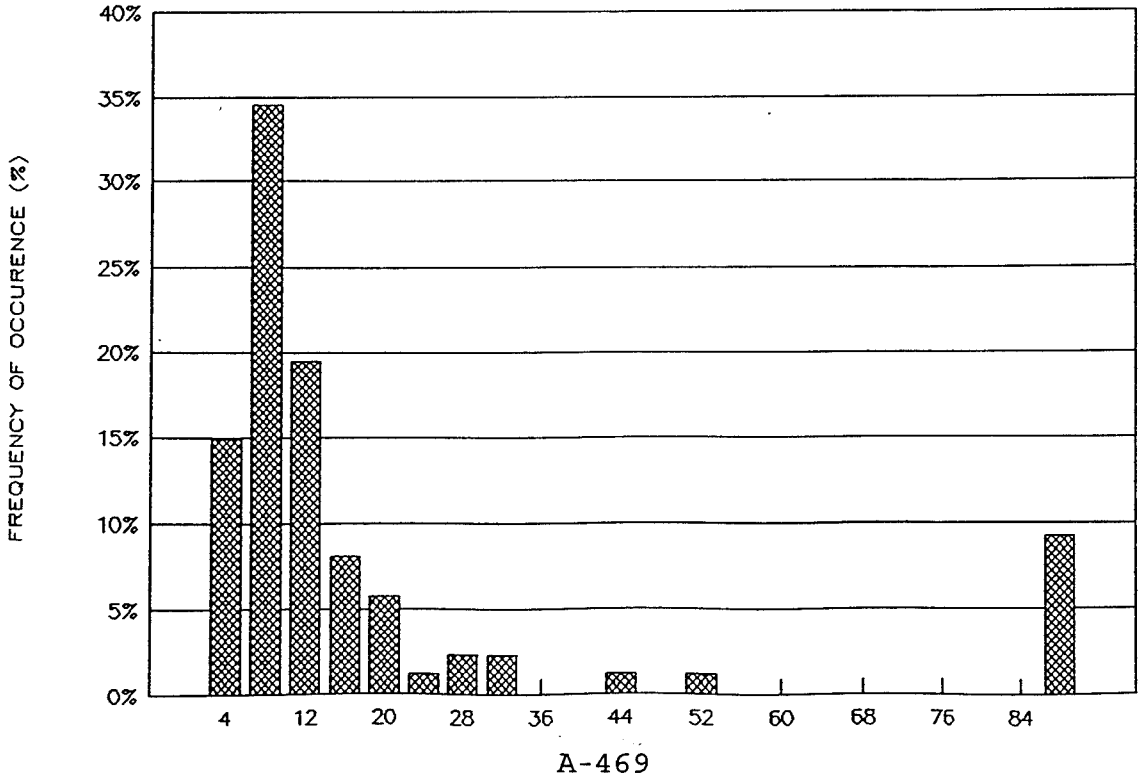
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1-LOG DATA FOR 26-Dec-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 26-Dec-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 21-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.70 p 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.14 tons	7.6 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
			98.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.11 ydU	6.0 ydU	6.1 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	2,834 kBq		
MAXIMUM/SORT	395 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,015 kBq	1,198 kBq	
MAXIMUM/SORT	224 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-7 kBq	
SPECIFIC ACTIVITY	7,042 Bq/kg	158 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:22 AM	END SOIL PROCESSING	09:09 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr	
AVAILABLE HOURS	10.0 hr	
ACTUAL PROCESS HOURS (total 20-sec records)	0.80 hr	
DOWN-TIME	9.20 hr	
TOTAL SYSTEM PAUSE	8.39 hr	
NONAVAILABLE HOURS	0.0 hr	
START-UP	1.37 hr	
SHUT-DOWN	8.33 hr	
PLANT PERFORMANCE	8.0%	
PRODUCTIVITY	8.0%	
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	271	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	144	
TOTAL SORT	0 MD>0 & MND=0	
NO SORT	58 AD=0 & MD=0 & MND>0	
SOME SORT	86 AD>0&0<MD<MNDmax&MND<MNDmax	
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	
ACT_P <5 kBq	18	14.2%

UNEXPLAIN TIME	PAUSE TIME
None	07:00
	09:10

2-SEC COUNT PERIODS		ERR	
2-SEC RECORDS WITH SORTS		127	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	26	72.2%	
3 DETECTORS	8	22.2%	
4 DETECTORS	2	5.6%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		36	
NET 2-SEC RECORDS WITH SORTS		91	
2-SEC PERIODS WITH NO SORTS		ERR	
AVG TIME BETWEEN 2-SEC SORTS		ERR sec	

1-GATE SORTS		67	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	1	1.5%	-14000	0	-261	4000	2	1.6%	4
2	7	10.4%	-12000	0	-224	8000	57	44.9%	8
3	6	9.0%	-10000	0	-187	12000	28	22.0%	12
4	10	14.9%	-8000	1	-149	16000	13	10.2%	16
5	13	19.4%	-6000	2	-112	20000	7	5.5%	20
6	14	20.9%	-4000	3	-75	24000	2	1.6%	24
7	10	14.9%	-2000	1	-37	28000	0	0.0%	28
8	6	9.0%	0	5	0	32000	2	1.6%	32
TOTAL	67		2000	2	37	36000	2	1.6%	36
			4000	12	75	40000	2	1.6%	40
2-GATE SORTS		60	6000	18	112	44000	1	0.8%	44
DETECTR	SORTS	FREQ%	8000	36	149	48000	0	0.0%	48
8			10000	31	187	52000	1	0.8%	52
9	5	8.3%	12000	17	224	56000	0	0.0%	56
10	6	10.0%	14000	14	261	60000	2	1.6%	60
11	7	11.7%	16000	8	299	64000	0	0.0%	64
12	12	20.0%	18000	3	336	68000	0	0.0%	68
13	12	20.0%	20000	1	373	72000	0	0.0%	72
14	12	20.0%	22000	0	410	76000	0	0.0%	76
15	6	10.0%	24000	0	448	80000	0	0.0%	80
TOTAL	60		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	8	6.3%	>84
			TOTAL	154		TOTAL	127		

SUMMARY TOTALS

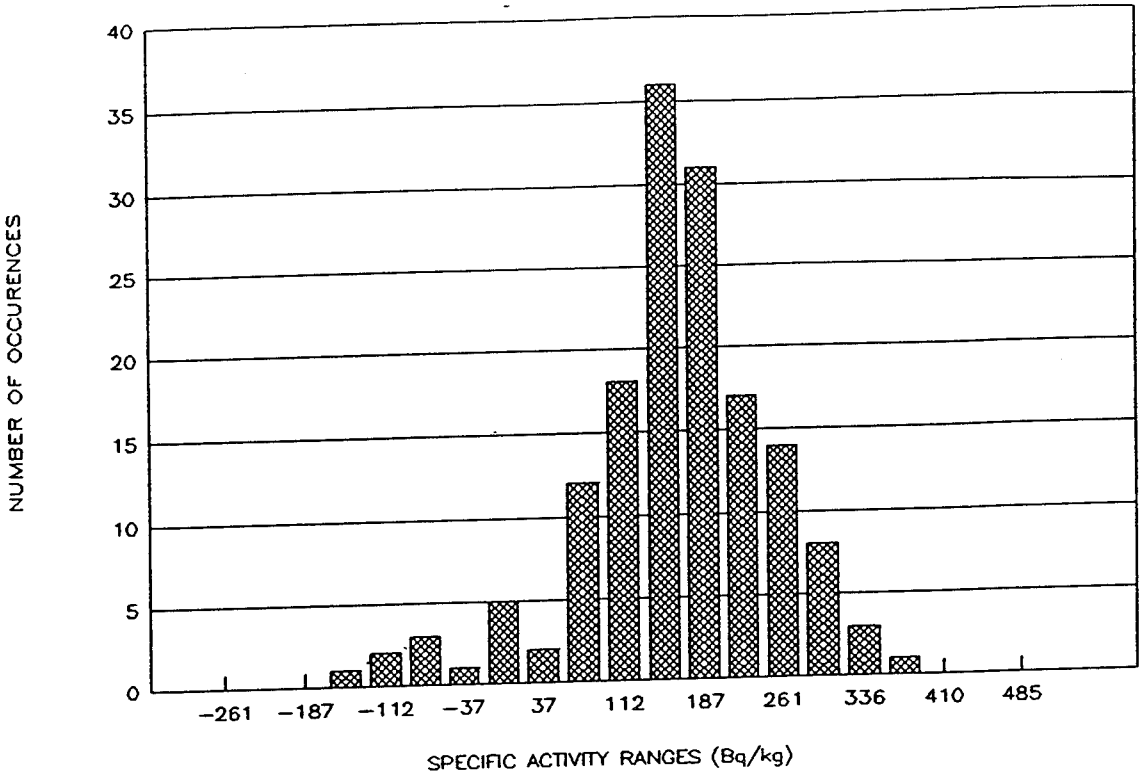
HOT PARTICLE EVENTS	125	SORTS BY ONE GATE ONLY	67
MULTIPARTICLE EVENTS	91	SORTS BY TWO GATES	60
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

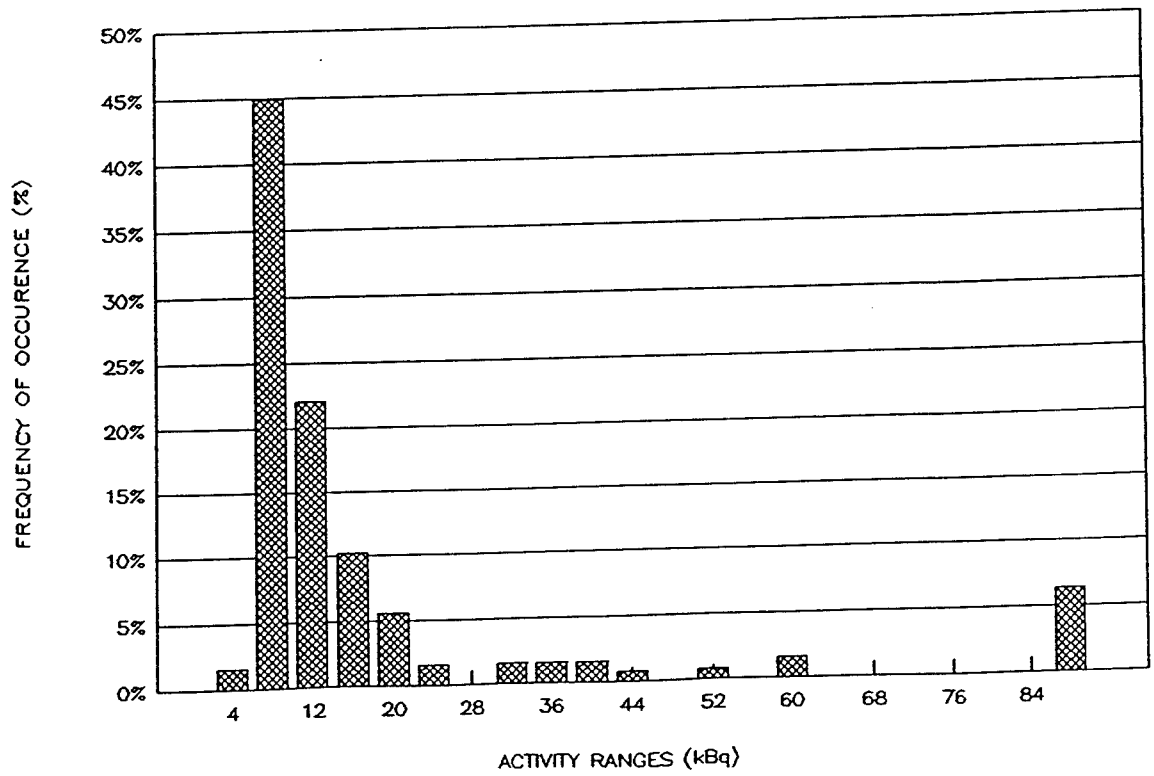
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 21-Nov-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 21-Nov-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 21-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.74 p 0.07 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.67 tons	7.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			91.4%
EQUIVALENT SOIL-IN-GROUND	0.53 ydU	5.7 ydU	6.2 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,722 kBq		
MAXIMUM/SORT	209 kBq		
MINIMUM/SORT	3.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,694 kBq	1,542 kBq	
MAXIMUM/SORT	140 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-3 kBq	
SPECIFIC ACTIVITY	2,530 Bq/kg	216 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:22 AM	END SOIL PROCESSING	09:10 AM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	0.81 hr
DOWN-TIME	9.19 hr
TOTAL SYSTEM PAUSE	8.39 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.37 hr
SHUT-DOWN	8.32 hr
PLANT PERFORMANCE	8.1%
PRODUCTIVITY	8.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		330	
NONPROCESS RECORDS (Test, calibration, etc)		8	
20-SEC PROCESS RECORDS		146	
TOTAL SORT		9	MD>0 & MND=0
NO SORT		44	AD=0 & MD=0 & MND>0
SOME SORT		93	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	23	12.5%	

UNEXPLAIN TIME	PAUSE TIME
None	07:00
	09:10

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS			ERR
2-SEC RECORDS WITH SORTS			184 (ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	49	76.6%
	3 DETECTORS	12	18.8%
	4 DETECTORS	2	3.1%
	5 DETECTORS	1	1.6%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	64	
NET 2-SEC RECORDS WITH SORTS			120
2-SEC PERIODS WITH NO SORTS			ERR
AVG TIME BETWEEN 2-SEC SORTS			ERR sec

1-GATE SORTS		97	ACT_ND	NUMBER	SPEC_A
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	9	9.3%	-14000	0	-261
2	21	21.6%	-12000	0	-224
3	18	18.6%	-10000	0	-187
4	16	16.5%	-8000	1	-149
5	12	12.4%	-6000	0	-112
6	13	13.4%	-4000	1	-75
7	7	7.2%	-2000	1	-37
8	1	1.0%	0	16	0
TOTAL	97		2000	3	37
			4000	3	75
2-GATE SORTS		87	6000	5	112
DETECTR	SORTS	FREQ%	8000	14	149
8			10000	15	187
9	15	17.2%	12000	30	224
10	15	17.2%	14000	29	261
11	19	21.8%	16000	20	299
12	15	17.2%	18000	10	336
13	11	12.6%	20000	6	373
14	9	10.3%	22000	0	410
15	3	3.4%	24000	0	448
TOTAL	87		26000	0	485
			>28000	0	0
			TOTAL	154	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	3	1.6%	4
8000	74	40.2%	8
12000	30	16.3%	12
16000	24	13.0%	16
20000	7	3.8%	20
24000	5	2.7%	24
28000	8	4.3%	28
32000	3	1.6%	32
36000	6	3.3%	36
40000	2	1.1%	40
44000	1	0.5%	44
48000	1	0.5%	48
52000	2	1.1%	52
56000	2	1.1%	56
60000	3	1.6%	60
64000	1	0.5%	64
68000	1	0.5%	68
72000	0	0.0%	72
76000	1	0.5%	76
80000	1	0.5%	80
84000	0	0.0%	84
>84000	9	4.9%	>84
TOTAL	184		

SUMMARY TOTALS

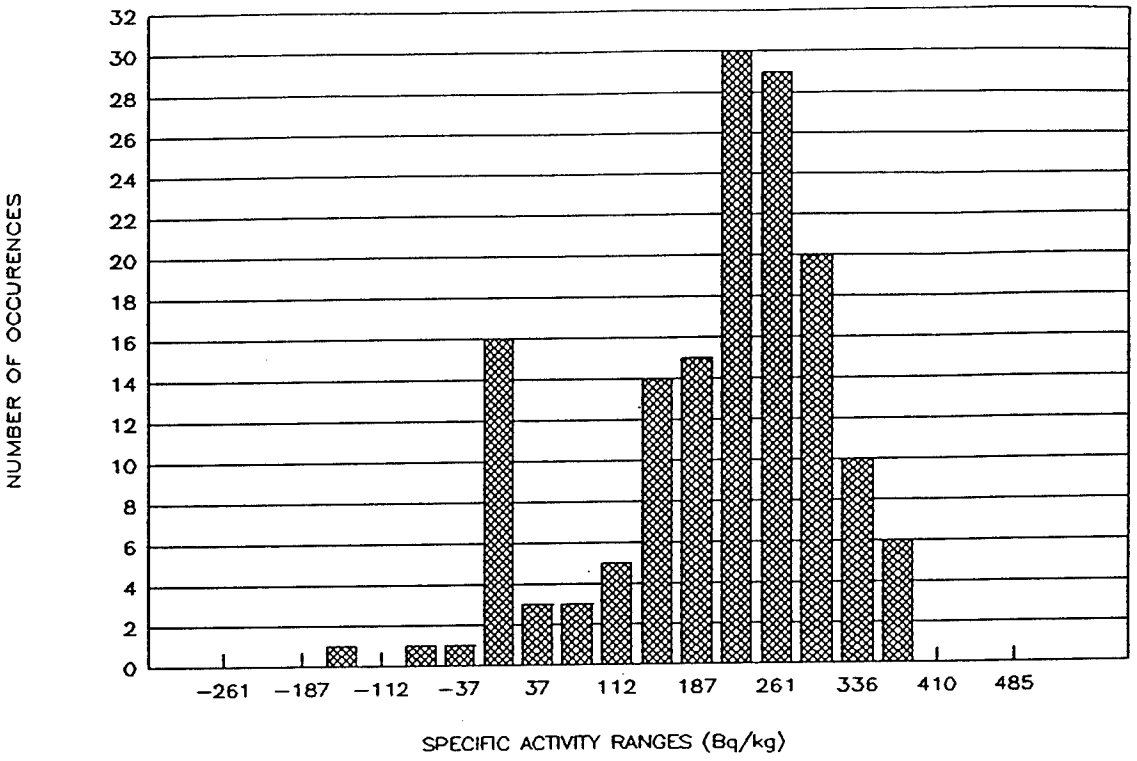
HOT PARTICLE EVENTS	167	SORTS BY ONE GATE ONLY	97
MULTIPARTICLE EVENTS	140	SORTS BY TWO GATES	87
DISTRIBUTED EVENTS	693		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

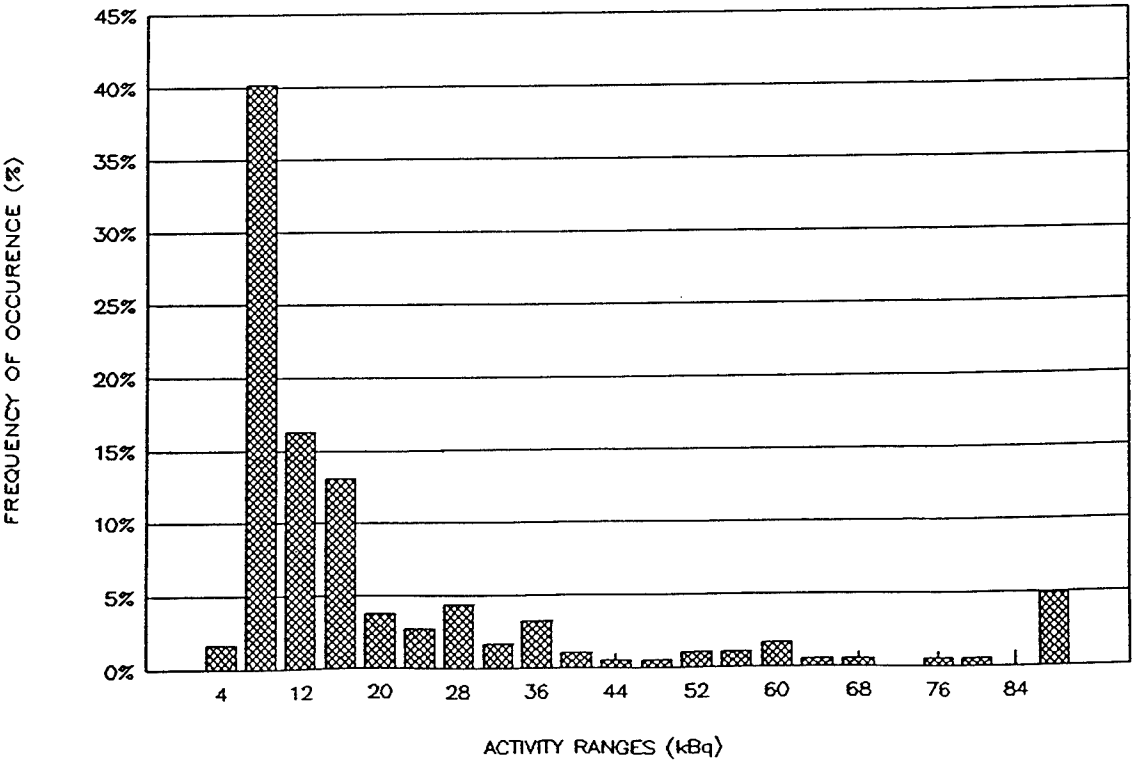
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 21-Nov-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 21-Nov-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.72 p 0.08 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.28 tons	14.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
			98.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.22 ydU	11.5 ydU	11.8 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	2,668 kBq		
MAXIMUM/SORT	647 kBq		
MINIMUM/SORT	3.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,007 kBq	1,970 kBq	
MAXIMUM/SORT	316 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	3,555 Bq/kg	135 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	10:40 AM	END SOIL PROCESSING	04:07 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.54 hr
DOWN-TIME	8.46 hr
TOTAL SYSTEM PAUSE	7.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	3.68 hr
SHUT-DOWN	1.37 hr
PLANT PERFORMANCE	15.4%
PRODUCTIVITY	15.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		421	
NONPROCESS RECORDS (Test, calibration, etc)		16	
20-SEC PROCESS RECORDS		277	
TOTAL SORT		2	MD>0 & MND=0
NO SORT		145	AD=0 & MD=0 & MND>0
SOME SORT		130	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	0		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	26	18.1%	

UNEXPLAIN TIME	PAUSE TIME
None	07:04
	11:30

2-SEC COUNT PERIODS		ERR	
2-SEC RECORDS WITH SORTS		144	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	33	84.6%	
3 DETECTORS	6	15.4%	
4 DETECTORS	0	0.0%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		39	
NET 2-SEC RECORDS WITH SORTS		105	
2-SEC PERIODS WITH NO SORTS		ERR	
AVG TIME BETWEEN 2-SEC SORTS		ERR sec	

1-GATE SORTS		69	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	5.8%	-14000	0	-261	4000	3	2.1%	4
2	11	15.9%	-12000	1	-224	8000	75	52.1%	8
3	9	13.0%	-10000	1	-187	12000	31	21.5%	12
4	11	15.9%	-8000	2	-149	16000	10	6.9%	16
5	8	11.6%	-6000	3	-112	20000	4	2.8%	20
6	11	15.9%	-4000	2	-75	24000	7	4.9%	24
7	10	14.5%	-2000	3	-37	28000	3	2.1%	28
8	5	7.2%	0	27	0	32000	2	1.4%	32
TOTAL	69		2000	25	37	36000	5	3.5%	36
			4000	35	75	40000	0	0.0%	40
2-GATE SORTS		75	6000	34	112	44000	0	0.0%	44
DETECTR	SORTS	FREQ%	8000	37	149	48000	0	0.0%	48
8			10000	34	187	52000	1	0.7%	52
9	10	13.3%	12000	33	224	56000	0	0.0%	56
10	15	20.0%	14000	32	261	60000	0	0.0%	60
11	11	14.7%	16000	13	299	64000	0	0.0%	64
12	13	17.3%	18000	8	336	68000	0	0.0%	68
13	7	9.3%	20000	3	373	72000	0	0.0%	72
14	10	13.3%	22000	0	410	76000	0	0.0%	76
15	9	12.0%	24000	0	448	80000	0	0.0%	80
TOTAL	75		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	3	2.1%	>84
			TOTAL	293		TOTAL	144		

SUMMARY TOTALS

HOT PARTICLE EVENTS	149	SORTS BY ONE GATE ONLY	69
MULTIPARTICLE EVENTS	115	SORTS BY TWO GATES	75
DISTRIBUTED EVENTS	159		

REC CODE EXPLANATION

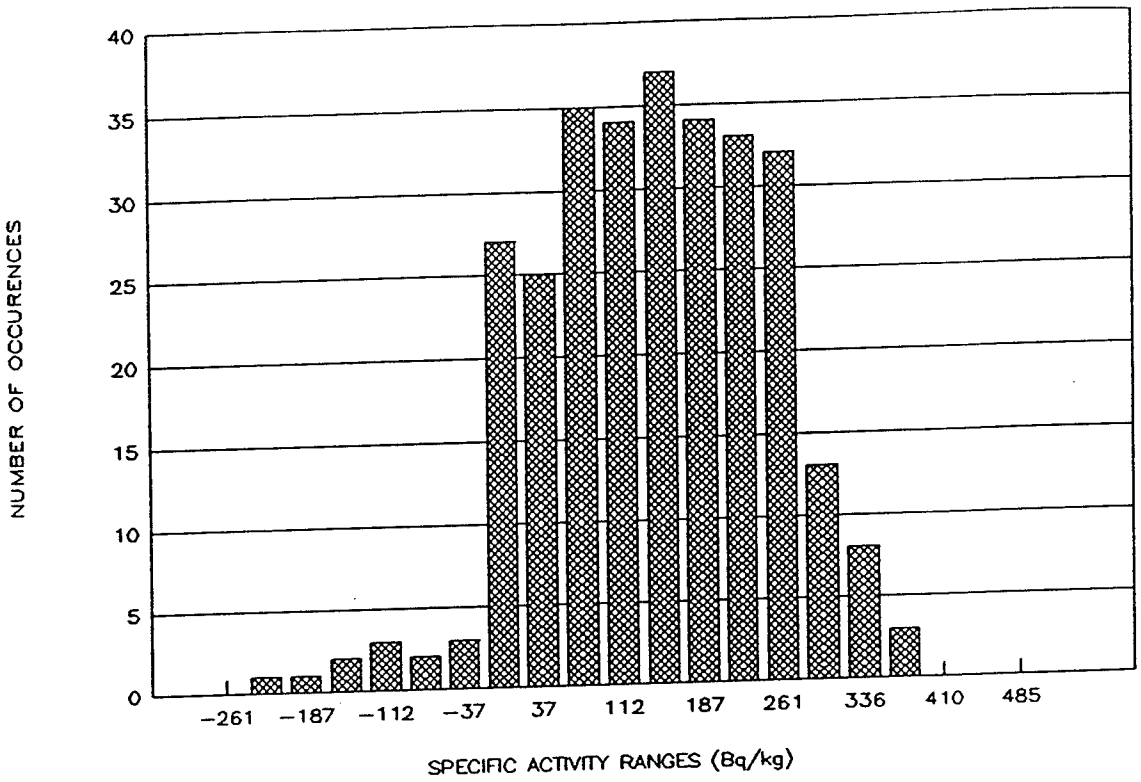
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

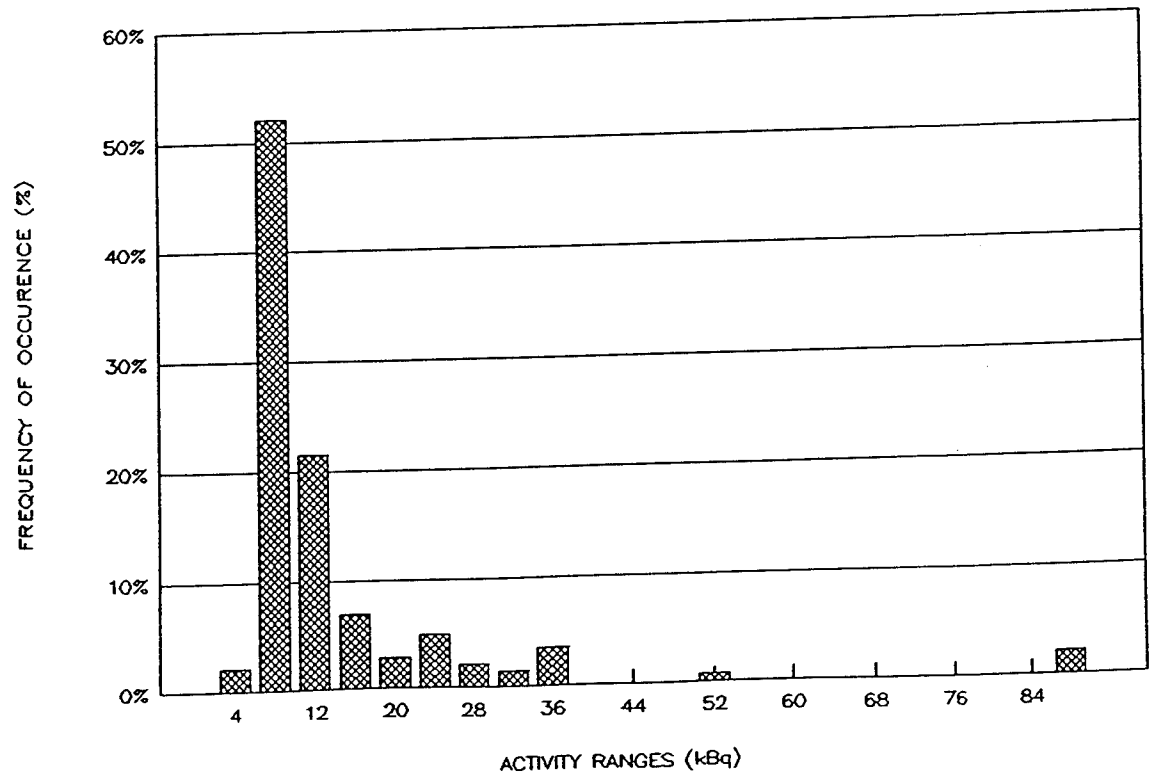
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 20–Nov–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 20–Nov–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 20-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.75 p 0.07 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.59 tons	13.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			95.9%
EQUIVALENT SOIL-IN-GROUND	0.47 ydU	10.9 ydU	11.4 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,376 kBq		
MAXIMUM/SORT	503 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,576 kBq	2,329 kBq	
MAXIMUM/SORT	316 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	2,673 Bq/kg	169 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	10:40 AM	END SOIL PROCESSING	04:06 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	1.49 hr
DOWN-TIME	8.51 hr
TOTAL SYSTEM PAUSE	7.50 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	3.68 hr
SHUT-DOWN	1.40 hr
PLANT PERFORMANCE	14.9%
PRODUCTIVITY	14.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			437	
NONPROCESS RECORDS (Test, calibration, etc)			19	
20-SEC PROCESS RECORDS			268	
TOTAL SORT			7	MD>0 & MND=0
NO SORT			121	AD=0 & MD=0 & MND>0
SOME SORT			140	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			0	
0<AD<1kBq & MD>0	0		UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0		None	07:04
AD<0 & MD	0			11:30
ACT_P <5 kBq	22	13.0%		

2-SEC COUNT PERIODS		ERR	
2-SEC RECORDS WITH SORTS		169	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	38	77.6%	
3 DETECTORS	10	20.4%	
4 DETECTORS	1	2.0%	
5 DETECTORS	0	0.0%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		49	
NET 2-SEC RECORDS WITH SORTS		120	
2-SEC PERIODS WITH NO SORTS		ERR	
AVG TIME BETWEEN 2-SEC SORTS		ERR sec	

1-GATE SORTS DETECTR	SORTS	85 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	5	5.9%	-14000	0	-261	4000	5	3.0%	4
2	11	12.9%	-12000	4	-224	8000	75	44.4%	8
3	12	14.1%	-10000	3	-187	12000	37	21.9%	12
4	19	22.4%	-8000	2	-149	16000	16	9.5%	16
5	14	16.5%	-6000	6	-112	20000	10	5.9%	20
6	11	12.9%	-4000	1	-75	24000	5	3.0%	24
7	10	11.8%	-2000	2	-37	28000	6	3.6%	28
8	3	3.5%	0	13	0	32000	4	2.4%	32
TOTAL	85		2000	17	37	36000	0	0.0%	36
			4000	21	75	40000	0	0.0%	40
2-GATE SORTS		84	6000	31	112	44000	1	0.6%	44
DETECTR	SORTS	FREQ%	8000	39	149	48000	0	0.0%	48
8			10000	33	187	52000	0	0.0%	52
9	10	11.9%	12000	41	224	56000	0	0.0%	56
10	10	11.9%	14000	26	261	60000	0	0.0%	60
11	18	21.4%	16000	33	299	64000	0	0.0%	64
12	17	20.2%	18000	7	336	68000	1	0.6%	68
13	12	14.3%	20000	8	373	72000	1	0.6%	72
14	10	11.9%	22000	0	410	76000	2	1.2%	76
15	7	8.3%	24000	0	448	80000	0	0.0%	80
TOTAL	84		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	6	3.6%	>84
			TOTAL	287		TOTAL	169		

SUMMARY TOTALS

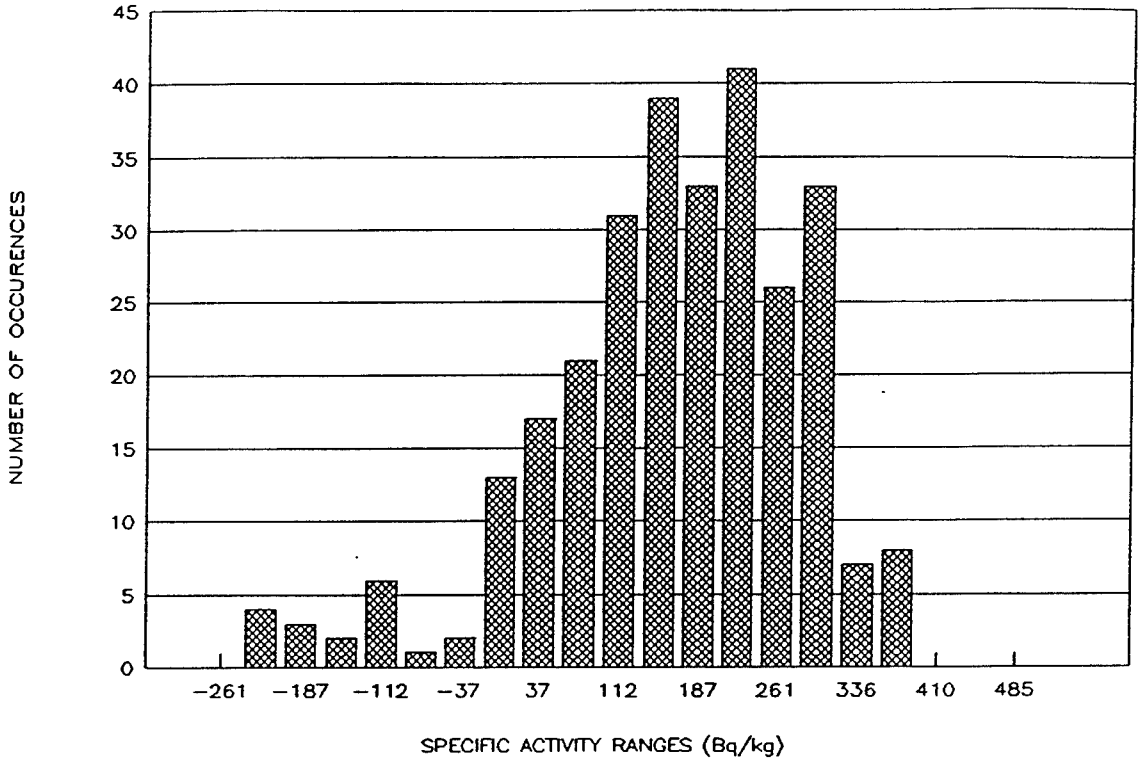
HOT PARTICLE EVENTS	170	SORTS BY ONE GATE ONLY	85
MULTIPARTICLE EVENTS	169	SORTS BY TWO GATES	84
DISTRIBUTED EVENTS	541		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

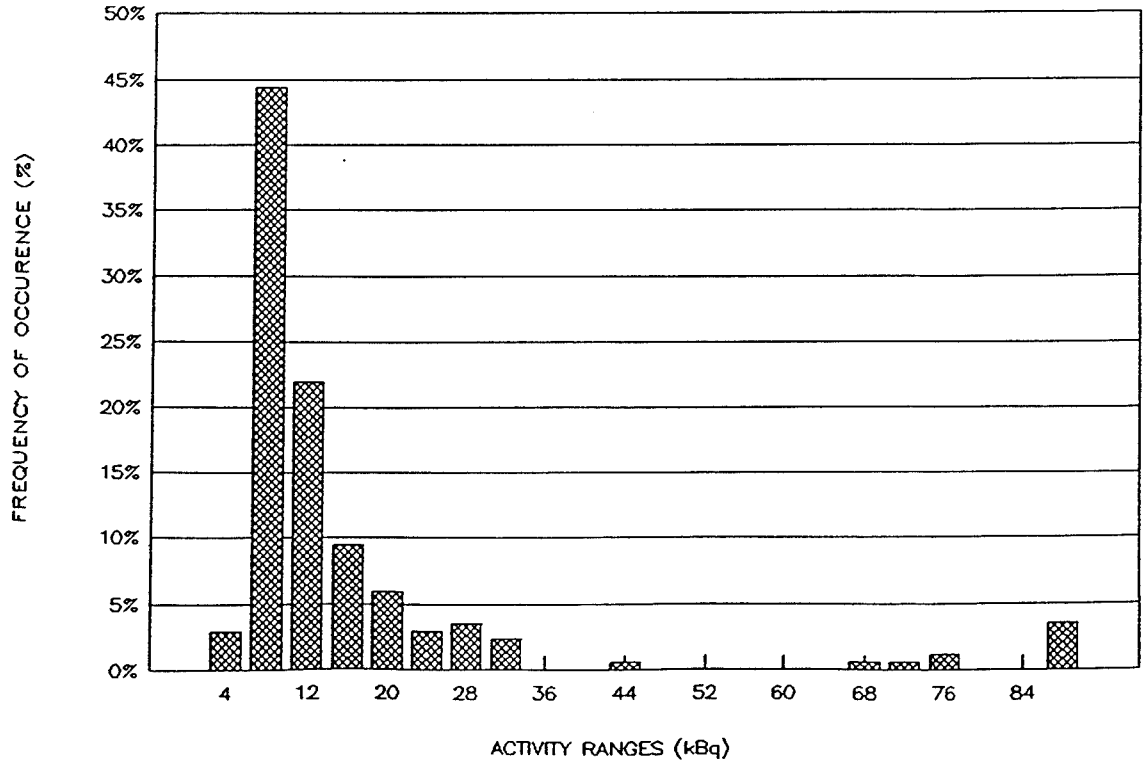
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 20–Nov–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20–Nov–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 16-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.78 p 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.50 tons	58.0 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.1%
EQUIVALENT SOIL-IN-GROUND	0.40 ydU	46.0 ydU	46.4 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,335 kBq		
MAXIMUM/SORT	478 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,748 kBq	1,764 kBq	
MAXIMUM/SORT	329 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	7,495 Bq/kg	30 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:14 AM	END SOIL PROCESSING	03:38 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.07 hr
DOWN-TIME	3.93 hr
TOTAL SYSTEM PAUSE	1.65 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.25 hr
SHUT-DOWN	1.85 hr
PLANT PERFORMANCE	60.7%
PRODUCTIVITY	60.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,600	
NONPROCESS RECORDS (Test, calibration, etc)		20	
20-SEC PROCESS RECORDS		1,092	
TOTAL SORT		0	MD>0 & MND=0
NO SORT		729	AD=0 & MD=0 & MND>0
SOME SORT		363	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0	
0<AD<1kBq & MD>0	1		
AD=0 & MD	0		
AD<0 & MD	0		
ACT_P <5 kBq	60	11.8%	

UNEXPLAIN TIME	PAUSE TIME
15:06:22	07:56
	07:57

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		ERR	11:13
2-SEC RECORDS WITH SORTS		508 (ACT_P >0 kBq)	12:23
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			15:41
2 DETECTORS	118	72.8%	
3 DETECTORS	34	21.0%	
4 DETECTORS	9	5.6%	
5 DETECTORS	1	0.6%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL		162	
NET 2-SEC RECORDS WITH SORTS		346	
2-SEC PERIODS WITH NO SORTS		ERR	
AVG TIME BETWEEN 2-SEC SORTS		ERR sec	

1-GATE SORTS		252	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	2	0.8%	-14000	0	-261	4000	17	3.3%	4
2	16	6.3%	-12000	1	-224	8000	213	41.9%	8
3	37	14.7%	-10000	4	-187	12000	84	16.5%	12
4	49	19.4%	-8000	7	-149	16000	41	8.1%	16
5	56	22.2%	-6000	18	-112	20000	30	5.9%	20
6	48	19.0%	-4000	38	-75	24000	16	3.1%	24
7	34	13.5%	-2000	113	-37	28000	16	3.1%	28
8	10	4.0%	0	199	0	32000	11	2.2%	32
TOTAL	252		2000	233	37	36000	5	1.0%	36
			4000	215	75	40000	9	1.8%	40
2-GATE SORTS		256	6000	167	112	44000	12	2.4%	44
DETECTR	SORTS	FREQ%	8000	69	149	48000	7	1.4%	48
8			10000	29	187	52000	4	0.8%	52
9	6	2.3%	12000	14	224	56000	3	0.6%	56
10	25	9.8%	14000	5	261	60000	4	0.8%	60
11	42	16.4%	16000	0	299	64000	2	0.4%	64
12	51	19.9%	18000	0	336	68000	4	0.8%	68
13	59	23.0%	20000	0	373	72000	3	0.6%	72
14	46	18.0%	22000	0	410	76000	4	0.8%	76
15	27	10.5%	24000	0	448	80000	1	0.2%	80
TOTAL	256		26000	0	485	84000	3	0.6%	84
			>28000	0	0	>84000	19	3.7%	>84
			TOTAL	1112		TOTAL	508		

SUMMARY TOTALS

HOT PARTICLE EVENTS	492	SORTS BY ONE GATE ONLY	252
MULTIPARTICLE EVENTS	256	SORTS BY TWO GATES	256
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

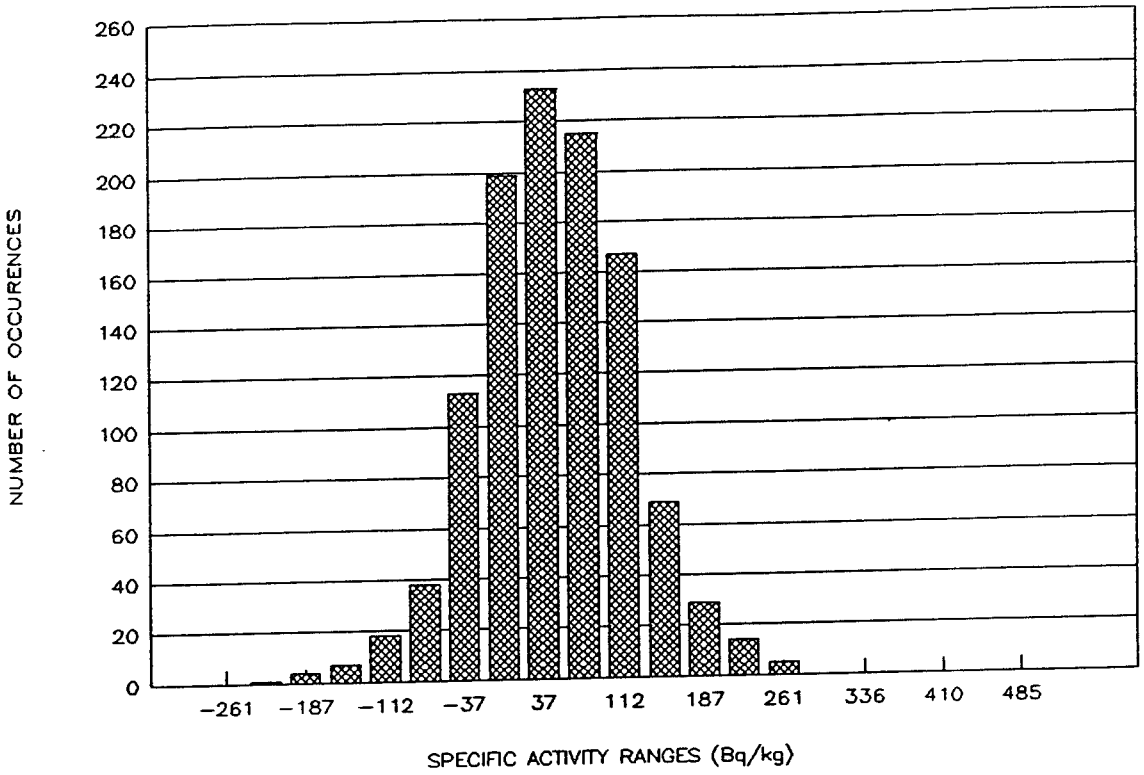
1.00 Source check (Soil on belt)

2.00 Empty belt

3.00 Test (No process soil)

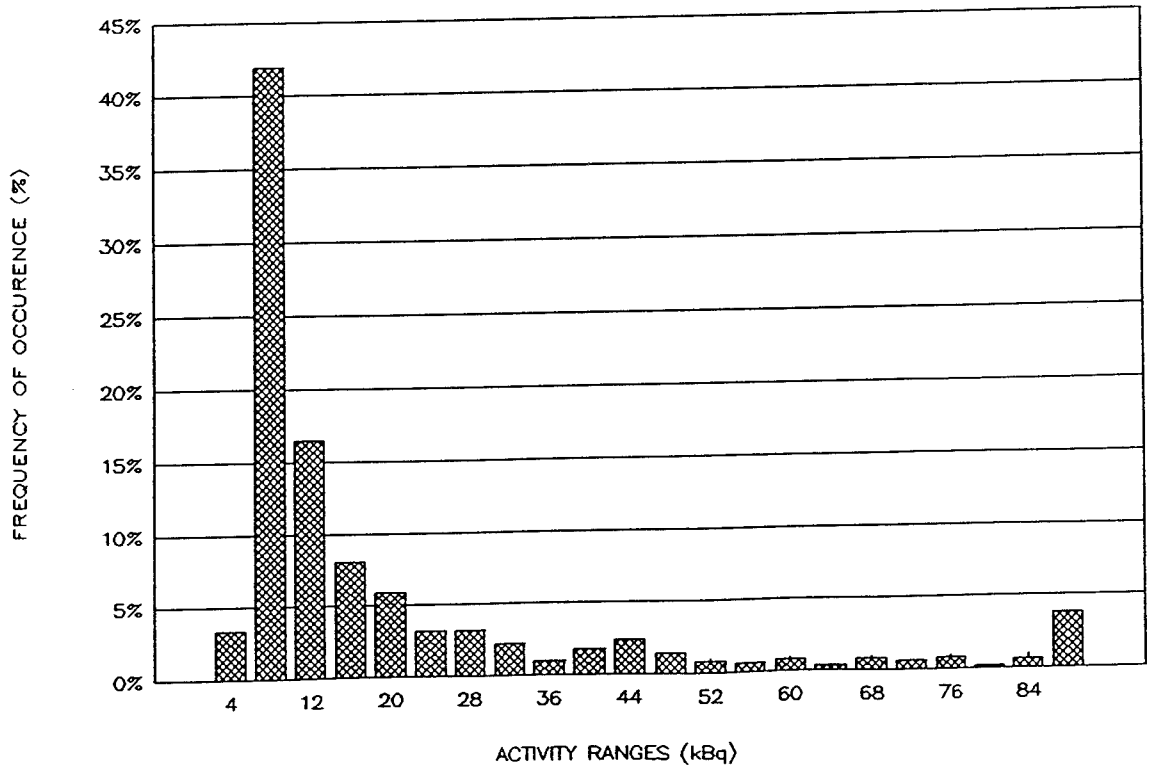
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 1 LOG DATA FOR 16-Nov-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 1 LOG DATA FOR 16-Nov-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 16-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.81 p 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/mU		
GROUND SOIL DENSITY	1.65 tons/mU		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.45 tons	58.3 tons	
MAXIMUM/SORT	4.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.2%
EQUIVALENT SOIL-IN-GROUND	0.36 ydU	46.2 ydU	46.6 ydU/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,255 kBq		
MAXIMUM/SORT	233 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,591 kBq	3,503 kBq	
MAXIMUM/SORT	151 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,701 Bq/kg	60 Bq/kg	

WORK HISTORY

WORK DAY START	07:00 AM	WORK DAY END	05:30 PM
PLANT START-UP	07:00 AM	PLANT SHUT-DOWN	05:30 PM
START SOIL PROCESSING	08:14 AM	END SOIL PROCESSING	03:39 PM
LUNCH START	11:30 AM	LUNCH PERIOD	0.5 hr

WORK HOURS	10.0 hr
AVAILABLE HOURS	10.0 hr
ACTUAL PROCESS HOURS (total 20-sec records)	6.09 hr
DOWN-TIME	3.91 hr
TOTAL SYSTEM PAUSE	3.22 hr
NONAVAILABLE HOURS	0.0 hr
START-UP	1.25 hr
SHUT-DOWN	1.84 hr
PLANT PERFORMANCE	60.9%
PRODUCTIVITY	60.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)				1,480	
NONPROCESS RECORDS (Test, calibration, etc)				18	
20-SEC PROCESS RECORDS				1,097	
TOTAL SORT				0	MD>0 & MND=0
NO SORT				751	AD=0 & MD=0 & MND>0
SOME SORT				346	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS				0	
0<AD<1kBq & MD>0	1			UNEXPLAIN TIME	PAUSE TIME
AD=0 & MD	0			15:15:43	07:22
AD<0 & MD	0				07:56
ACT_P <5 kBq	48	12.5%			

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS			ERR	07:57
2-SEC RECORDS WITH SORTS			383 (ACT_P >0 kBq)	09:13
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR				11:13
	2 DETECTORS	91	84.3%	12:23
	3 DETECTORS	17	15.7%	15:41
	4 DETECTORS	0	0.0%	
	5 DETECTORS	0	0.0%	
	6 DETECTORS	0	0.0%	
	7 DETECTORS	0	0.0%	
	8 DETECTORS	0	0.0%	
	TOTAL		108	
NET 2-SEC RECORDS WITH SORTS			275	
2-SEC PERIODS WITH NO SORTS			ERR	
AVG TIME BETWEEN 2-SEC SORTS			ERR sec	

1-GATE SORTS		196	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	5	2.6%	-14000	1	-261	4000	12	3.1%	4
2	21	10.7%	-12000	2	-224	8000	157	41.0%	8
3	42	21.4%	-10000	1	-187	12000	74	19.3%	12
4	54	27.6%	-8000	5	-149	16000	34	8.9%	16
5	38	19.4%	-6000	7	-112	20000	21	5.5%	20
6	22	11.2%	-4000	23	-75	24000	20	5.2%	24
7	12	6.1%	-2000	77	-37	28000	12	3.1%	28
8	2	1.0%	0	126	0	32000	4	1.0%	32
TOTAL	196		2000	201	37	36000	3	0.8%	36
			4000	216	75	40000	10	2.6%	40
2-GATE SORTS		187	6000	186	112	44000	6	1.6%	44
DETECTR	SORTS	FREQ%	8000	150	149	48000	5	1.3%	48
8			10000	73	187	52000	2	0.5%	52
9	8	4.3%	12000	32	224	56000	3	0.8%	56
10	26	13.9%	14000	11	261	60000	4	1.0%	60
11	50	26.7%	16000	4	299	64000	1	0.3%	64
12	47	25.1%	18000	0	336	68000	2	0.5%	68
13	35	18.7%	20000	0	373	72000	4	1.0%	72
14	15	8.0%	22000	0	410	76000	3	0.8%	76
15	6	3.2%	24000	0	448	80000	2	0.5%	80
TOTAL	187		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	4	1.0%	>84
			TOTAL	1115		TOTAL	383		

SUMMARY TOTALS

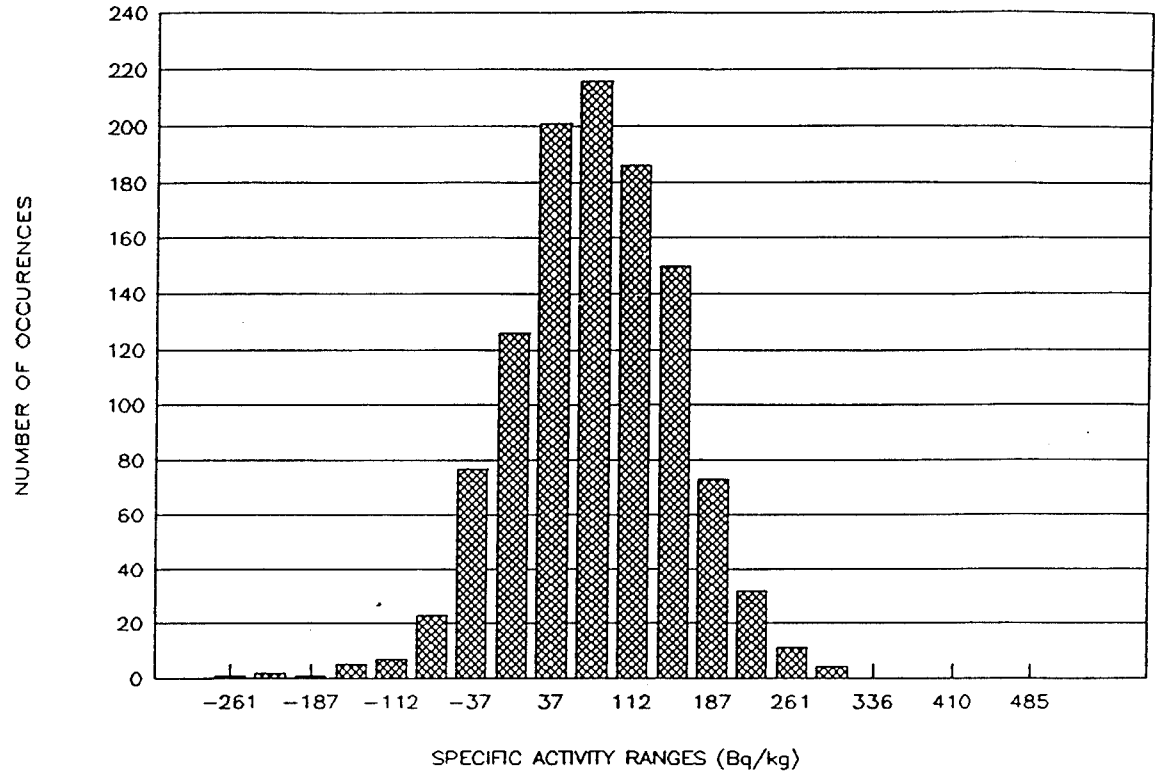
HOT PARTICLE EVENTS	372	SORTS BY ONE GATE ONLY	196
MULTIPARTICLE EVENTS	305	SORTS BY TWO GATES	187
DISTRIBUTED EVENTS	0		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)
2.00 Empty belt
3.00 Test (No process soil)

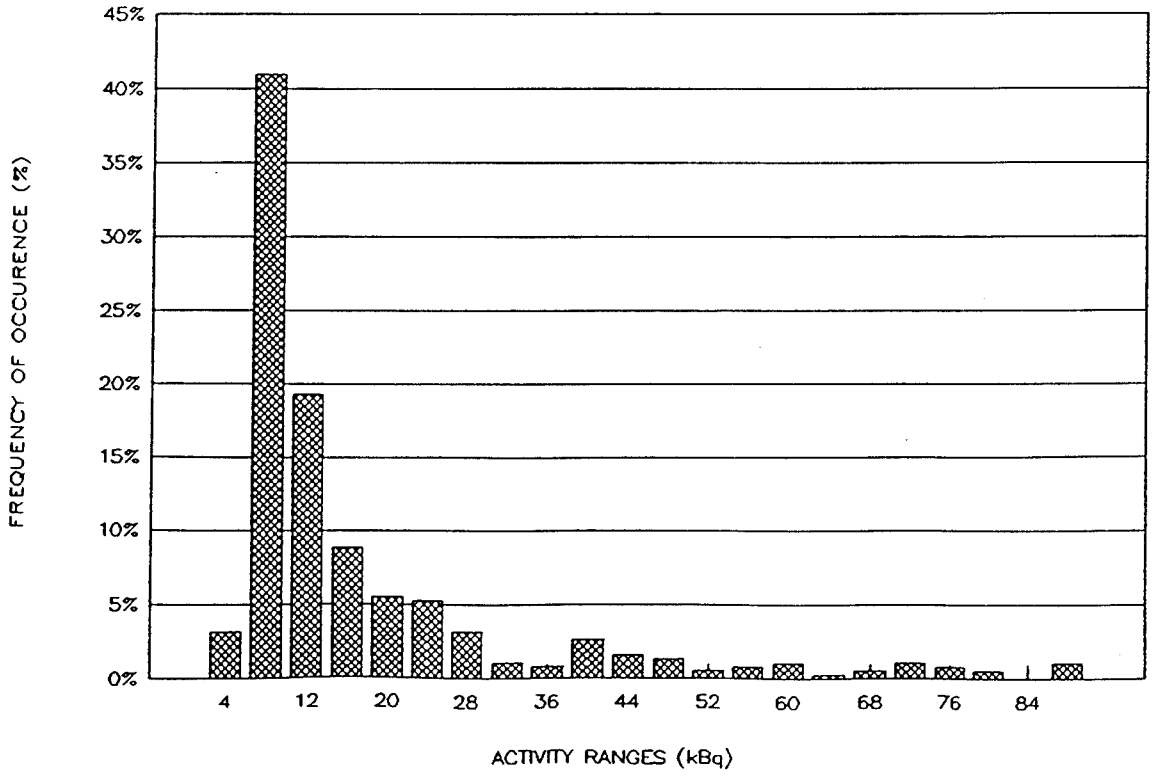
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2_LOG DATA FOR 16-Nov-92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 16-Nov-92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 14-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.80 tons	65.0 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.63 yd³	51.5 yd³	52.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,986 kBq		
MAXIMUM/SORT	325 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,383 kBq	5,574 kBq	
MAXIMUM/SORT	163 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	5,491 Bq/kg	86 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:43 AM	
PLANT STARTUP TIME		0.72 hr
PROCESSING END	04:25 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		1.09 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.70 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.82 hr
TOTAL SYSTEM PAUSE TIME		0.57 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.88 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		68.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,861
NONPROCESS RECORDS (Test, calibration, etc)		9
20-SEC PROCESS RECORDS		1,227
TOTAL SORT		1 MD>0 & MND=0
NO SORT		716 AD=0 & MD=0 & MND>0
SOME SORT		510 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	3	
AD=0 & MD	0	
AD<0 & MD	0	

ACT_P <5 kBq	88	13.9%
2-SEC COUNT PERIODS	12,270	
2-SEC RECORDS WITH SORTS	634	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	150	77.3%
3 DETECTORS	40	20.6%
4 DETECTORS	4	2.1%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	194	
NET 2-SEC RECORDS WITH SORTS	440	
2-SEC PERIODS WITH NO SORTS	11,830	
AVG TIME BETWEEN 2-SEC SORTS	55.8	sec

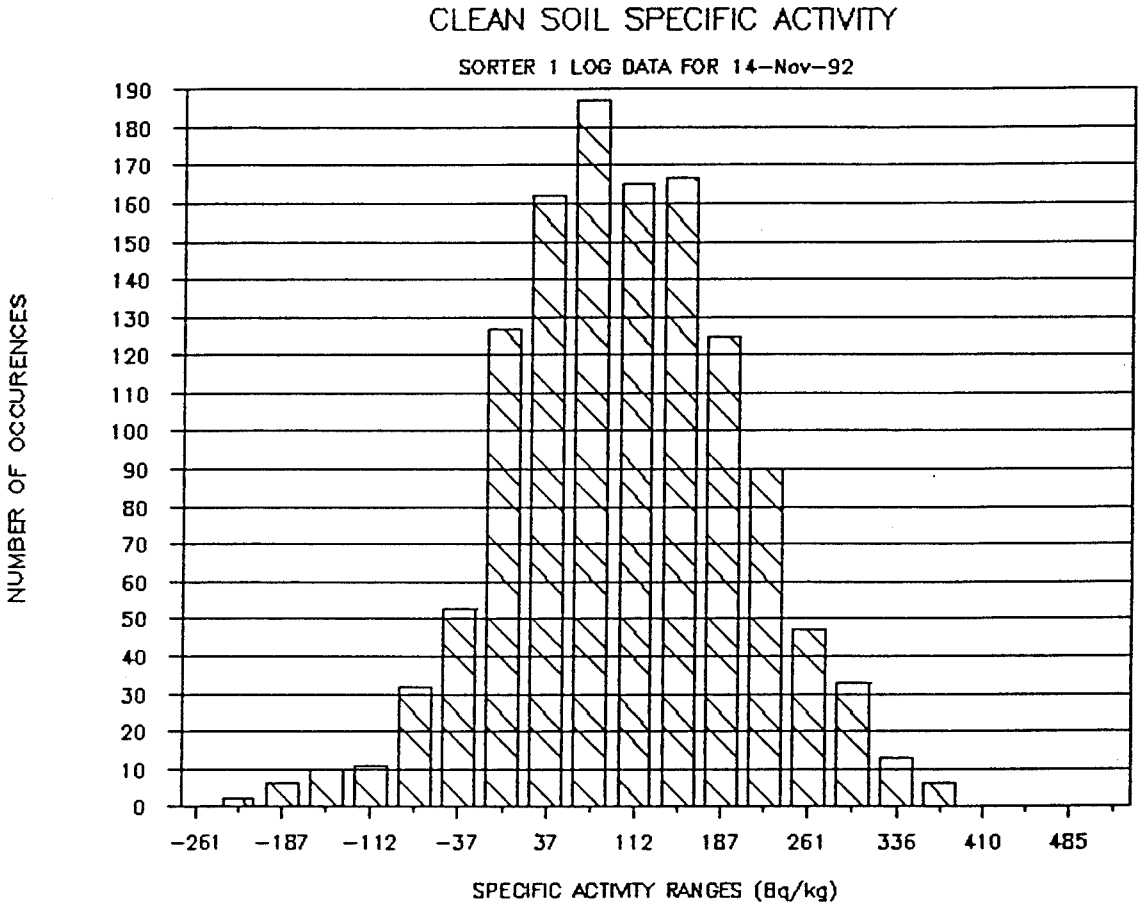
1-GATE SORTS		318	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTR	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	8	2.5%	-14000	0	-261	4000	23	3.6%	4
2	27	8.5%	-12000	2	-224	8000	256	40.4%	8
3	52	16.4%	-10000	6	-187	12000	119	18.8%	12
4	61	19.2%	-8000	10	-149	16000	57	9.0%	16
5	56	17.6%	-6000	11	-112	20000	39	6.2%	20
6	65	20.4%	-4000	32	-75	24000	22	3.5%	24
7	40	12.6%	-2000	53	-37	28000	15	2.4%	28
8	9	2.8%	0	127	0	32000	15	2.4%	32
TOTAL	318		2000	162	37	36000	13	2.1%	36
			4000	187	75	40000	10	1.6%	40
2-GATE SORTS		316	6000	165	112	44000	6	0.9%	44
DETECTR	SORTS	FREQ%	8000	167	149	48000	7	1.1%	48
8			10000	125	187	52000	3	0.5%	52
9	12	3.8%	12000	90	224	56000	2	0.3%	56
10	41	13.0%	14000	47	261	60000	4	0.6%	60
11	60	19.0%	16000	33	299	64000	5	0.8%	64
12	56	17.7%	18000	13	336	68000	4	0.6%	68
13	64	20.3%	20000	6	373	72000	6	0.9%	72
14	52	16.5%	22000	0	410	76000	1	0.2%	76
15	31	9.8%	24000	0	448	80000	2	0.3%	80
TOTAL	316		26000	0	485	84000	3	0.5%	84
			>28000	0	0	>84000	22	3.5%	>84
			TOTAL	1236		TOTAL	634		

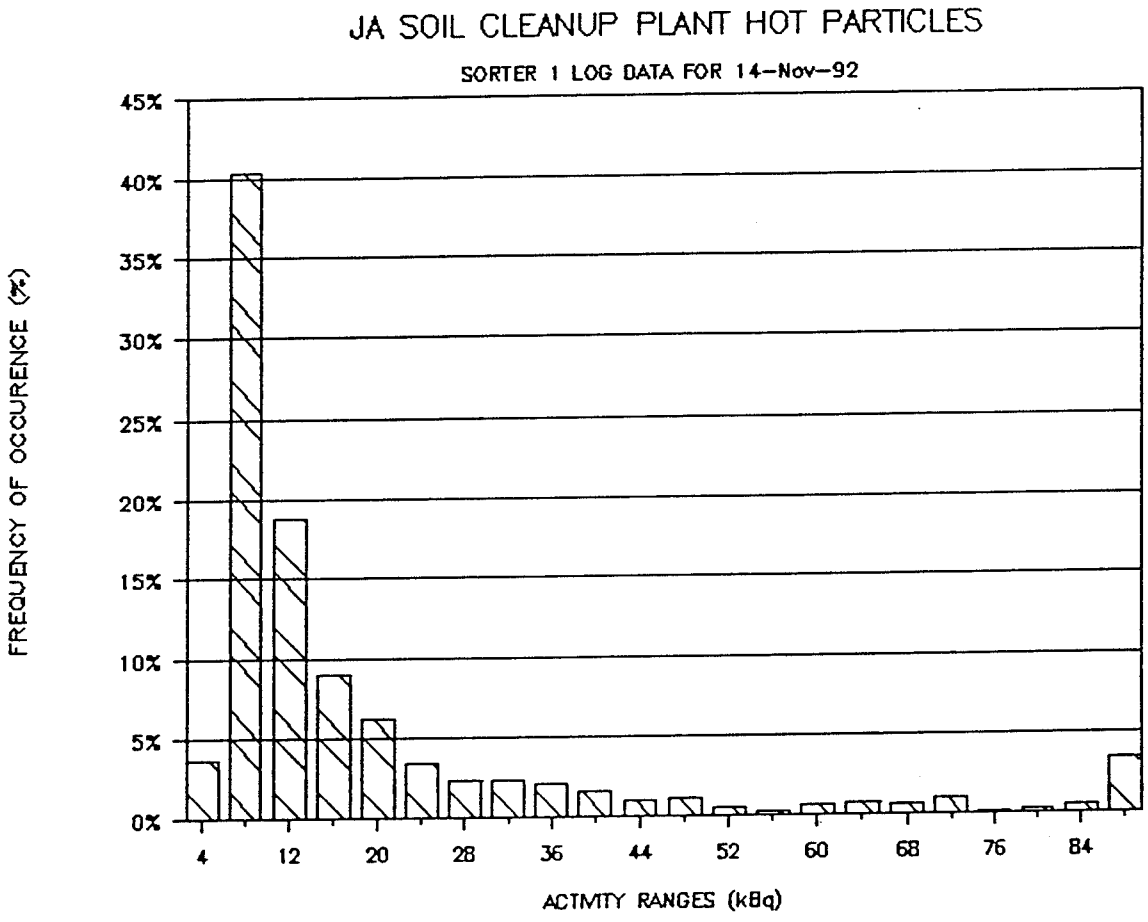
HPE	622	GATE1	634
MPE	486	GATE2	316
DISE	83		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 14-Nov-92
NUMBER OF OCCURENCES
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 14-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 14-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.16 tons	64.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.2%
EQUIVALENT SOIL-IN-GROUND	0.92 yd³	50.9 yd³	51.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,954 kBq		
MAXIMUM/SORT	196 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,056 kBq	6,355 kBq	
MAXIMUM/SORT	131 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-16 kBq	
SPECIFIC ACTIVITY	3,508 Bq/kg	99 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:43 AM		
PLANT STARTUP TIME		0.72 hr	
PROCESSING END	04:25 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		1.09 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		8.70 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.78 hr	
TOTAL SYSTEM PAUSE TIME		0.56 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.92 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		67.7%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,790	
NONPROCESS RECORDS (Test, calibration, etc)	11	
20-SEC PROCESS RECORDS	1,220	
TOTAL SORT	8	MD>0 & MND=0
NO SORT	677	AD=0 & MD=0 & MND>0
SOME SORT	536	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	(1)	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

ACT_P <5 kBq	80	14.0%	
2-SEC COUNT PERIODS		12,200	
2-SEC RECORDS WITH SORTS		570	(ACT_P >0 kBq)
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	125	82.2%	
3 DETECTORS	23	15.1%	
4 DETECTORS	3	2.0%	
5 DETECTORS	1	0.7%	
6 DETECTORS	0	0.0%	
7 DETECTORS	0	0.0%	
8 DETECTORS	0	0.0%	
TOTAL	152		
NET 2-SEC RECORDS WITH SORTS		418	
2-SEC PERIODS WITH NO SORTS		11,782	
AVG TIME BETWEEN 2-SEC SORTS		58.4	sec

1-GATE SORTS	298	ACT_ND	NUMBER	SPEC_A
DETECTR SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1 11	3.7%	-14000	2	-261
2 40	13.4%	-12000	2	-224
3 55	18.5%	-10000	5	-187
4 57	19.1%	-8000	8	-149
5 67	22.5%	-6000	7	-112
6 39	13.1%	-4000	12	-75
7 24	8.1%	-2000	37	-37
8 5	1.7%	0	100	0
TOTAL 298		2000	157	37
		4000	189	75
2-GATE SORTS	272	6000	201	112
DETECTR SORTS	FREQ%	8000	173	149
8		10000	122	187
9 17	6.3%	12000	99	224
10 38	14.0%	14000	61	261
11 67	24.6%	16000	34	299
12 50	18.4%	18000	18	336
13 59	21.7%	20000	4	373
14 26	9.6%	22000	0	410
15 15	5.5%	24000	0	448
TOTAL 272		26000	0	485
		>28000	0	0
		TOTAL	1231	

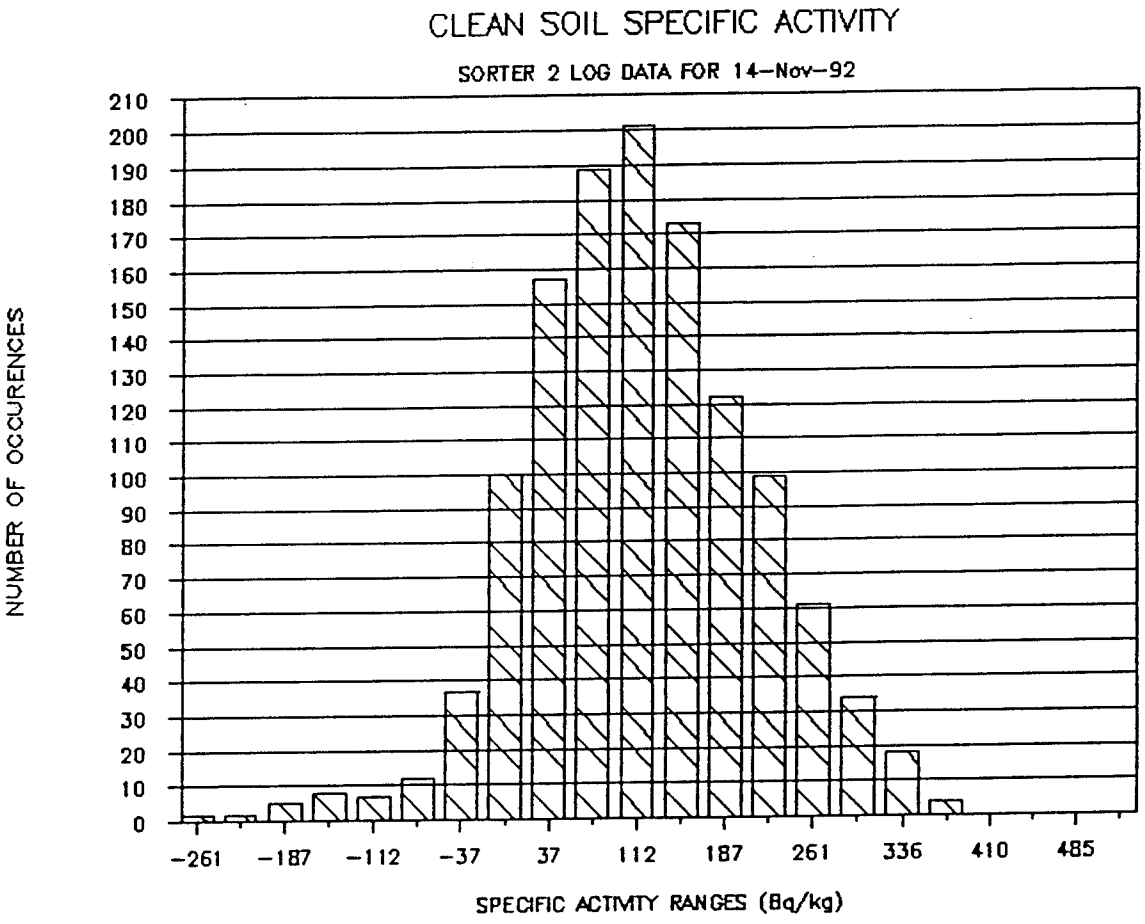
ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	18	3.2%	4
8000	254	44.6%	8
12000	96	16.8%	12
16000	61	10.7%	16
20000	38	6.7%	20
24000	18	3.2%	24
28000	15	2.6%	28
32000	13	2.3%	32
36000	11	1.9%	36
40000	7	1.2%	40
44000	2	0.4%	44
48000	5	0.9%	48
52000	3	0.5%	52
56000	2	0.4%	56
60000	3	0.5%	60
64000	2	0.4%	64
68000	1	0.2%	68
72000	5	0.9%	72
76000	1	0.2%	76
80000	0	0.0%	80
84000	3	0.5%	84
>84000	12	2.1%	>84
TOTAL	570		

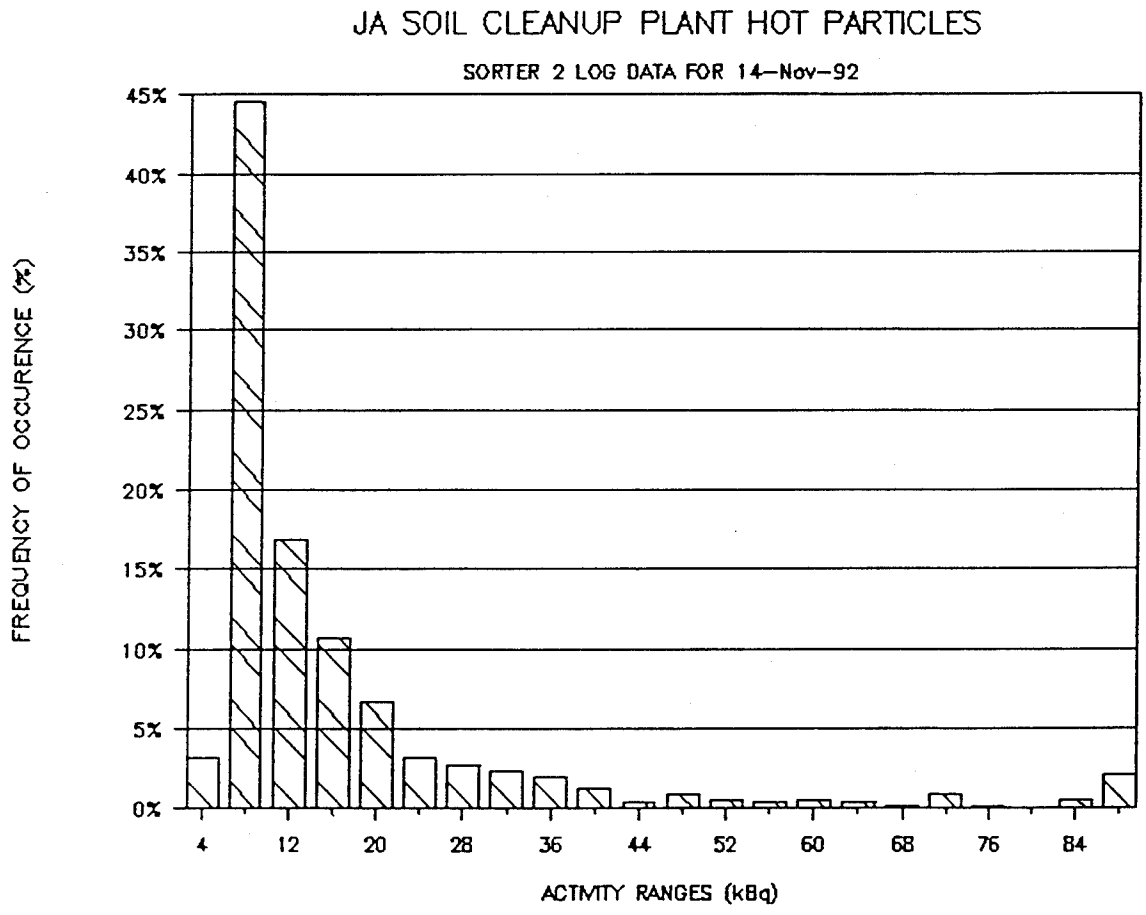
HPE	554	GATE1	570
MPE	543	GATE2	272
DISE	628		

REC CODE EXPLANATION

1.00 Source check (Soil on belt)

2.00 Empty belt
3.00 Test (No process soil)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 14-Nov-92
NUMBER OF OCCURENCES
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 14-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 07-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.41 tons	71.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.7%
EQUIVALENT SOIL-IN-GROUND	1.91 yd³	56.4 yd³	58.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	35,918 kBq		
MAXIMUM/SORT	2,358 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	13,034 kBq	8,862 kBq	
MAXIMUM/SORT	1245 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-15 kBq	
SPECIFIC ACTIVITY	5,411 Bq/kg	125 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:48 AM	
PLANT STARTUP TIME		0.82 hr
PROCESSING END	04:25 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		1.09 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.61 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.63 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		0.98 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		76.2%

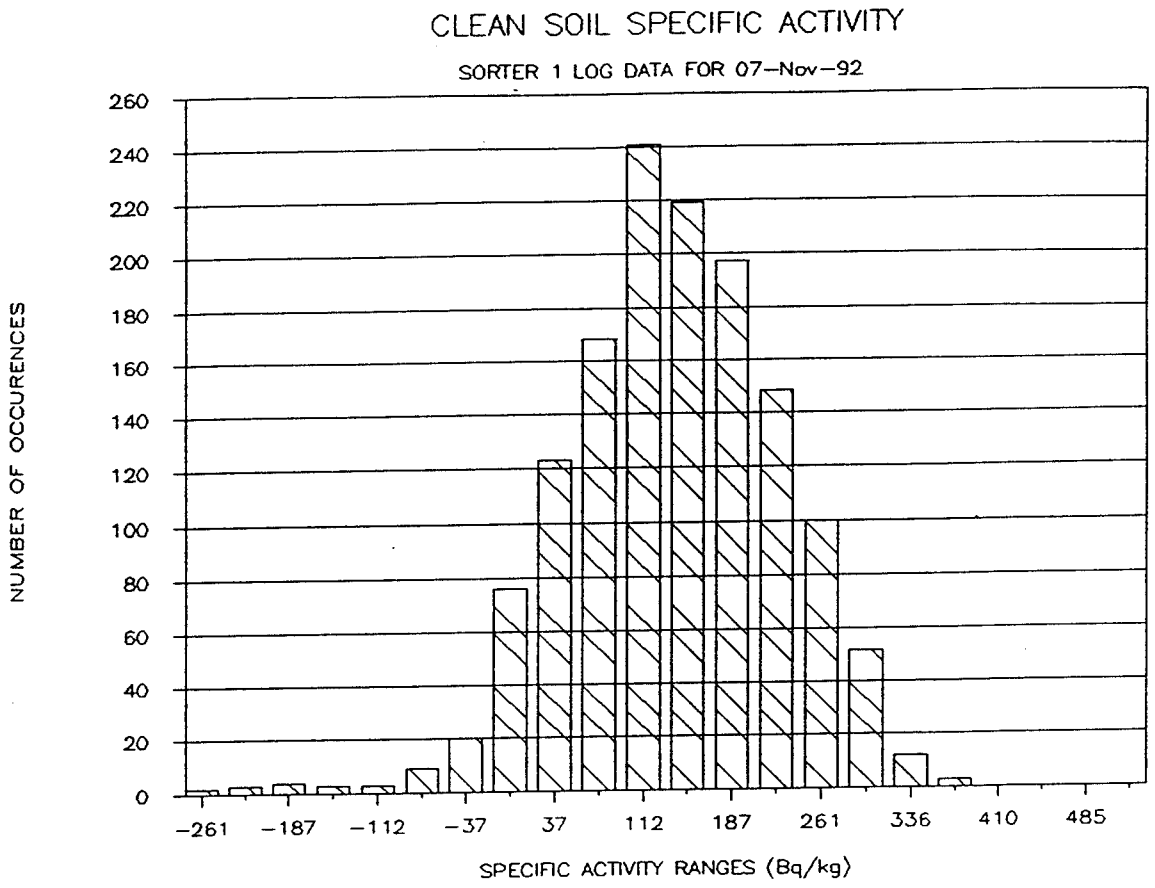
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	3,251	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	1,373	
TOTAL SORT	10	MD>0 & MND=0
NO SORT	440	AD=0 & MD=0 & MND>0
SOME SORT	922	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	1	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

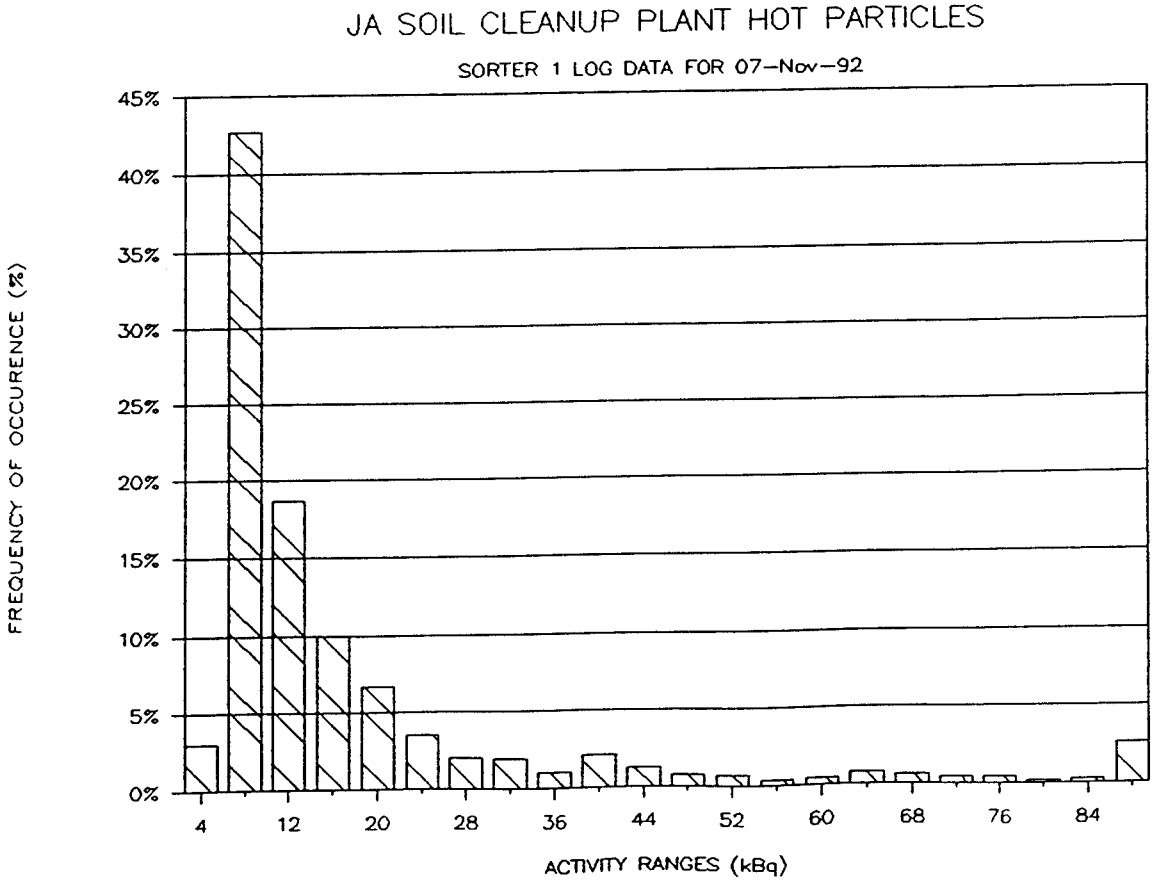
2-SEC COUNT PERIODS	13,730	
2-SEC RECORDS WITH SORTS	1,878	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	431	82.6%
3 DETECTORS	80	15.3%
4 DETECTORS	9	1.7%
5 DETECTORS	2	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	522	
NET 2-SEC RECORDS WITH SORTS	1,356	
2-SEC PERIODS WITH NO SORTS	12,374	
AVG TIME BETWEEN 2-SEC SORTS	20.3	sec

1-GATE SORTS		932	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	17	1.8%	-14000	2	-261	4000	56	3.0%	4
2	62	6.7%	-12000	3	-224	8000	802	42.7%	8
3	126	13.5%	-10000	4	-187	12000	351	18.7%	12
4	149	16.0%	-8000	3	-149	16000	188	10.0%	16
5	168	18.0%	-6000	3	-112	20000	125	6.7%	20
6	174	18.7%	-4000	9	-75	24000	65	3.5%	24
7	166	17.8%	-2000	20	-37	28000	38	2.0%	28
8	70	7.5%	0	76	0	32000	35	1.9%	32
TOTAL	932		2000	123	37	36000	19	1.0%	36
			4000	168	75	40000	39	2.1%	40
2-GATE SORTS		946	6000	241	112	44000	24	1.3%	44
DETECTO	SORTS	FREQ%	8000	219	149	48000	14	0.7%	48
8			10000	197	187	52000	13	0.7%	52
9	32	3.4%	12000	148	224	56000	6	0.3%	56
10	99	10.5%	14000	100	261	60000	8	0.4%	60
11	153	16.2%	16000	52	299	64000	14	0.7%	64
12	177	18.7%	18000	12	336	68000	11	0.6%	68
13	171	18.1%	20000	3	373	72000	7	0.4%	72
14	175	18.5%	22000	0	410	76000	8	0.4%	76
15	139	14.7%	24000	0	448	80000	3	0.2%	80
TOTAL	946		26000	0	485	84000	4	0.2%	84
			>28000	0	0	>84000	48	2.6%	>84
			TOTAL	1383		TOTAL	1878		

HPE	1852	GATE1	1878
MPE	1069	GATE2	946
DISE	762		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 07-Nov-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 07-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 07-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.83 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	4.94 tons	67.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			93.2%
EQUIVALENT SOIL-IN-GROUND	3.91 yd³	53.6 yd³	57.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	62,966 kBq		
MAXIMUM/SORT	11,721 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	26,683 kBq	13,175 kBq	
MAXIMUM/SORT	12538 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	5,406 Bq/kg	195 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:49 AM	
PLANT STARTUP TIME		0.82 hr
PROCESSING END	04:23 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		1.12 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.57 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.52 hr
TOTAL SYSTEM PAUSE TIME		0.06 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.05 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		75.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,916	
NONPROCESS RECORDS (Test, calibration, etc)	19	
20-SEC PROCESS RECORDS	1,354	
TOTAL SORT	60	MD>0 & MND=0
NO SORT	418	AD=0 & MD=0 & MND>0
SOME SORT	877	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	(1)	
0<AD<1kBq & MD>0	1	
AD=0 & MD	1	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	13,540	
2-SEC RECORDS WITH SORTS	1,562	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	369	76.4%
3 DETECTORS	91	18.8%
4 DETECTORS	16	3.3%
5 DETECTORS	3	0.6%
6 DETECTORS	1	0.2%
7 DETECTORS	1	0.2%
8 DETECTORS	1	0.2%
TOTAL	483	
NET 2-SEC RECORDS WITH SORTS	1,079	
2-SEC PERIODS WITH NO SORTS	12,461	
AVG TIME BETWEEN 2-SEC SORTS	25.1	sec

1-GATE SORTS		792	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	33	4.2%	-14000	0	-261
2	134	16.9%	-12000	0	-224
3	177	22.3%	-10000	1	-187
4	164	20.7%	-8000	2	-149
5	123	15.5%	-6000	4	-112
6	95	12.0%	-4000	6	-75
7	53	6.7%	-2000	11	-37
8	13	1.6%	0	70	0
TOTAL	792		2000	19	37
			4000	41	75
2-GATE SORTS		770	6000	129	112
DETECTO	SORTS	FREQ%	8000	179	149
8			10000	246	187
9	81	10.5%	12000	233	224
10	144	18.7%	14000	169	261
11	188	24.4%	16000	142	299
12	140	18.2%	18000	96	336
13	98	12.7%	20000	25	373
14	86	11.2%	22000	0	410
15	33	4.3%	24000	0	448
TOTAL	770		26000	0	485
			>28000	0	0
			TOTAL	1373	

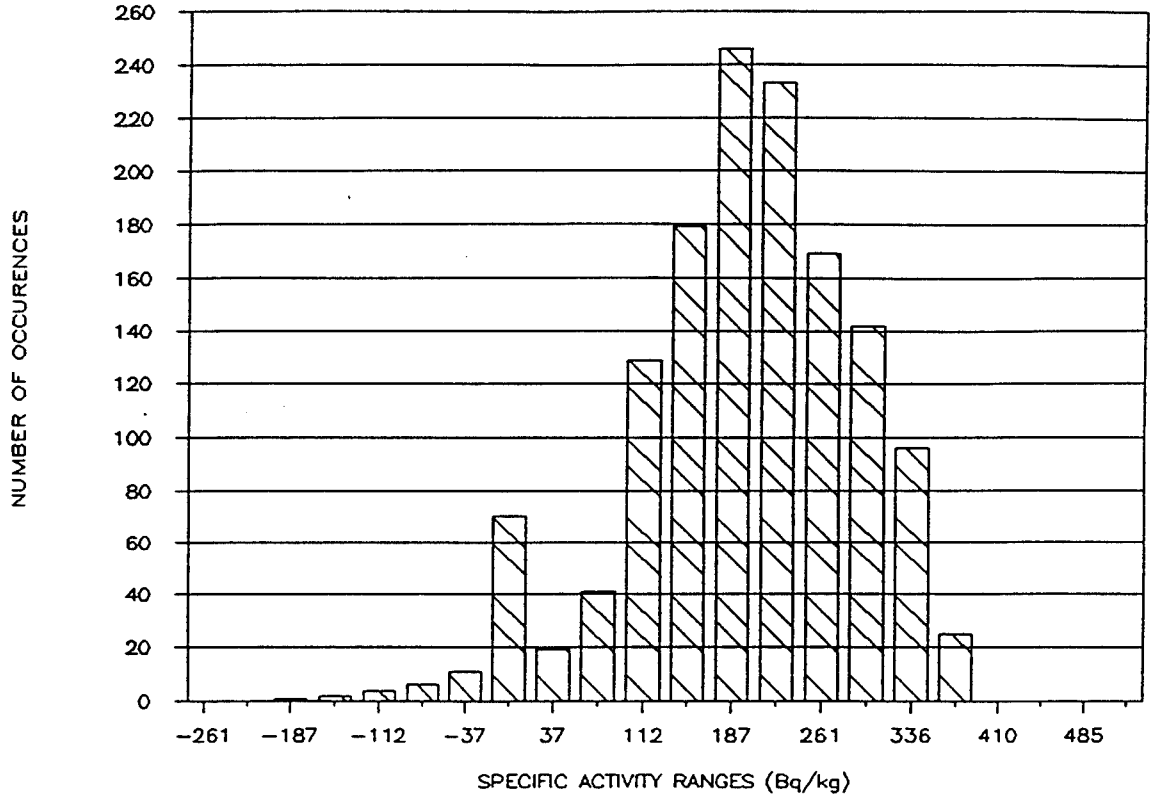
ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	48	3.1%	4
8000	667	42.7%	8
12000	268	17.2%	12
16000	146	9.3%	16
20000	99	6.3%	20
24000	60	3.8%	24
28000	34	2.2%	28
32000	32	2.0%	32
36000	23	1.5%	36
40000	16	1.0%	40
44000	19	1.2%	44
48000	12	0.8%	48
52000	24	1.5%	52
56000	7	0.4%	56
60000	5	0.3%	60
64000	5	0.3%	64
68000	5	0.3%	68
72000	6	0.4%	72
76000	7	0.4%	76
80000	6	0.4%	80
84000	3	0.2%	84
>84000	70	4.5%	>84
TOTAL	1562		

HPE	1497	GATE1	1562
MPE	1306	GATE2	770
DISE	4569		

REC CODE EXPLANATION

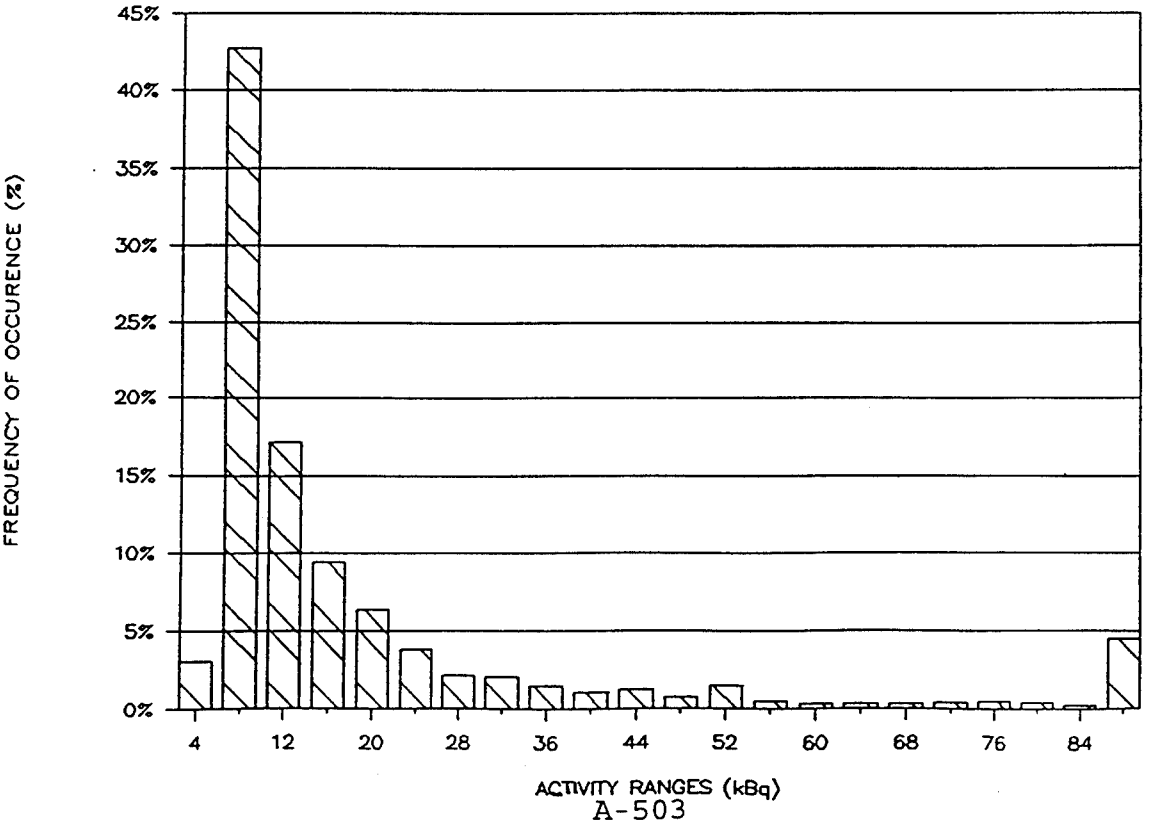
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 07–Nov–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 07–Nov–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 06-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.64 tons	64.4 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	43.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.1%
EQUIVALENT SOIL-IN-GROUND	2.10 yd³	51.1 yd³	53.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,672 kBq		
MAXIMUM/SORT	1,658 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,315 kBq	4,949 kBq	
MAXIMUM/SORT	1016 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	3,145 Bq/kg	77 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	09:56 AM	
PLANT STARTUP TIME		2.94 hr
PROCESSING END	04:53 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.62 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		6.95 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.96 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		-0.01 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		69.5%

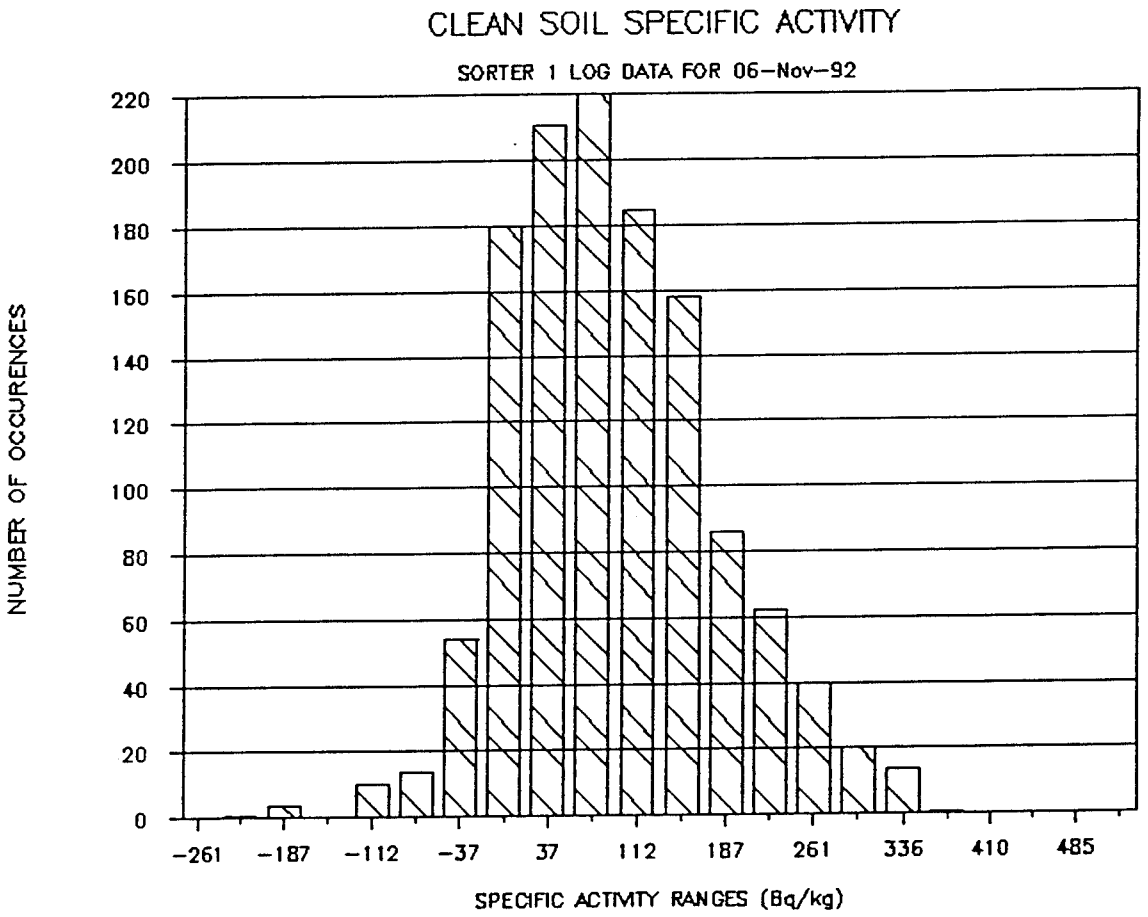
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,174
NONPROCESS RECORDS (Test, calibration, etc)		8
20-SEC PROCESS RECORDS		1,252
TOTAL SORT		34 MD>0 & MND=0
NO SORT		714 AD=0 & MD=0 & MND>0
SOME SORT		504 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

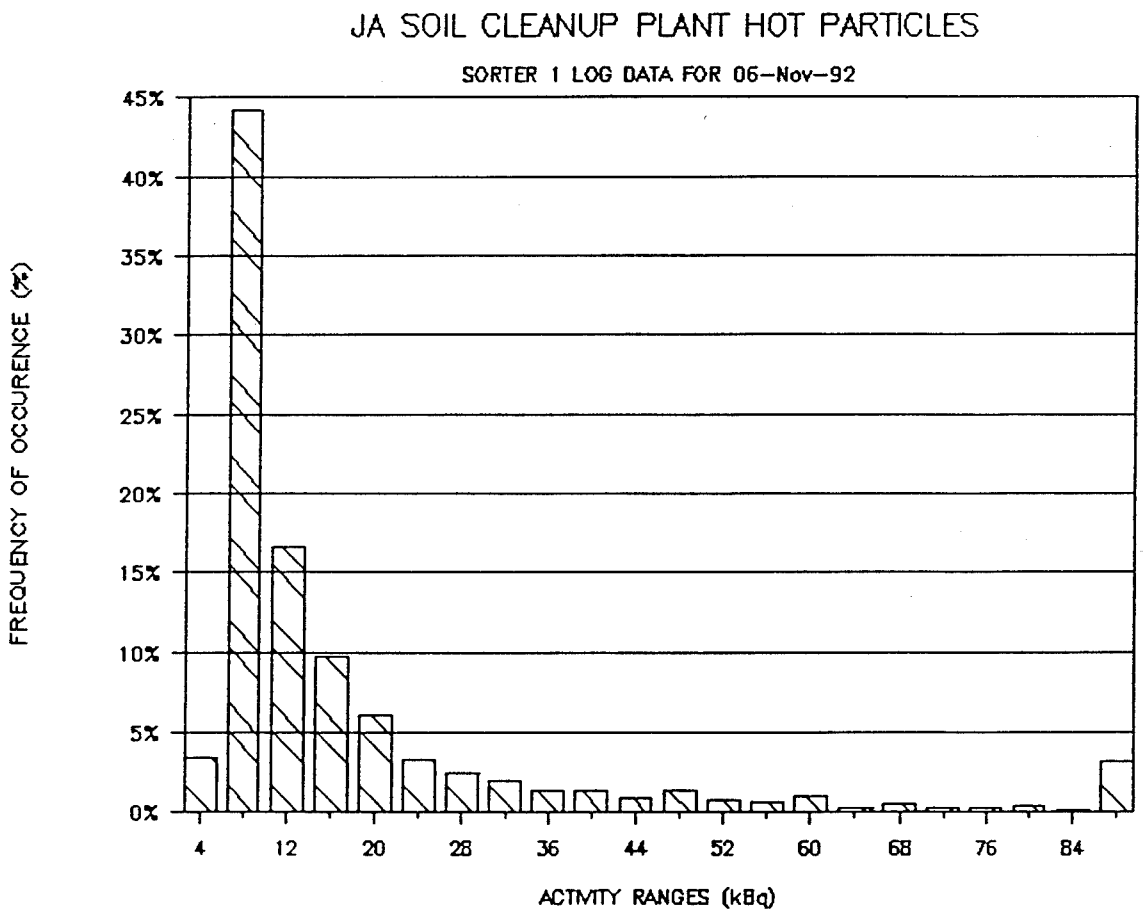
2-SEC COUNT PERIODS	12,520	
2-SEC RECORDS WITH SORTS	922	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	225	83.0%
3 DETECTORS	41	15.1%
4 DETECTORS	5	1.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	271	
NET 2-SEC RECORDS WITH SORTS	651	
2-SEC PERIODS WITH NO SORTS	11,869	
AVG TIME BETWEEN 2-SEC SORTS	38.5 sec	

1-GATE SORTS		448	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	1.6%	-14000	0	-261	4000	31	3.4%	4
2	27	6.0%	-12000	1	-224	8000	408	44.3%	8
3	56	12.5%	-10000	4	-187	12000	153	16.6%	12
4	76	17.0%	-8000	0	-149	16000	89	9.7%	16
5	79	17.6%	-6000	10	-112	20000	56	6.1%	20
6	76	17.0%	-4000	14	-75	24000	30	3.3%	24
7	95	21.2%	-2000	54	-37	28000	23	2.5%	28
8	32	7.1%	0	180	0	32000	18	2.0%	32
TOTAL	448		2000	211	37	36000	13	1.4%	36
			4000	220	75	40000	12	1.3%	40
2-GATE SORTS		474	6000	185	112	44000	8	0.9%	44
DETECTO	SORTS	FREQ%	8000	158	149	48000	13	1.4%	48
8			10000	86	187	52000	7	0.8%	52
9	19	4.0%	12000	62	224	56000	6	0.7%	56
10	47	9.9%	14000	40	261	60000	9	1.0%	60
11	71	15.0%	16000	20	299	64000	2	0.2%	64
12	79	16.7%	18000	14	336	68000	5	0.5%	68
13	80	16.9%	20000	1	373	72000	3	0.3%	72
14	114	24.1%	22000	0	410	76000	2	0.2%	76
15	64	13.5%	24000	0	448	80000	4	0.4%	80
TOTAL	474		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	29	3.1%	>84
			TOTAL	1260		TOTAL	922		

HPE	913	GATE1	922
MPE	643	GATE2	474
DISE	2391		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 06-Nov-92
NUMBER OF OCCURENCES
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 06-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 06-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.60 ± 0.00 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.06 tons	0.7 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	51.6 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			92.6%
EQUIVALENT SOIL-IN-GROUND	0.05 yd³	0.6 yd³	0.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	25 kBq		
MAXIMUM/SORT	7 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	42 kBq	145 kBq	
MAXIMUM/SORT	22 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-0 kBq	
SPECIFIC ACTIVITY	697 Bq/kg	194 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	04:10 PM		
PLANT STARTUP TIME		9.17 hr	
PROCESSING END	04:14 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		1.26 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		0.08 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		0.08 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		-0.01 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		0.8%	

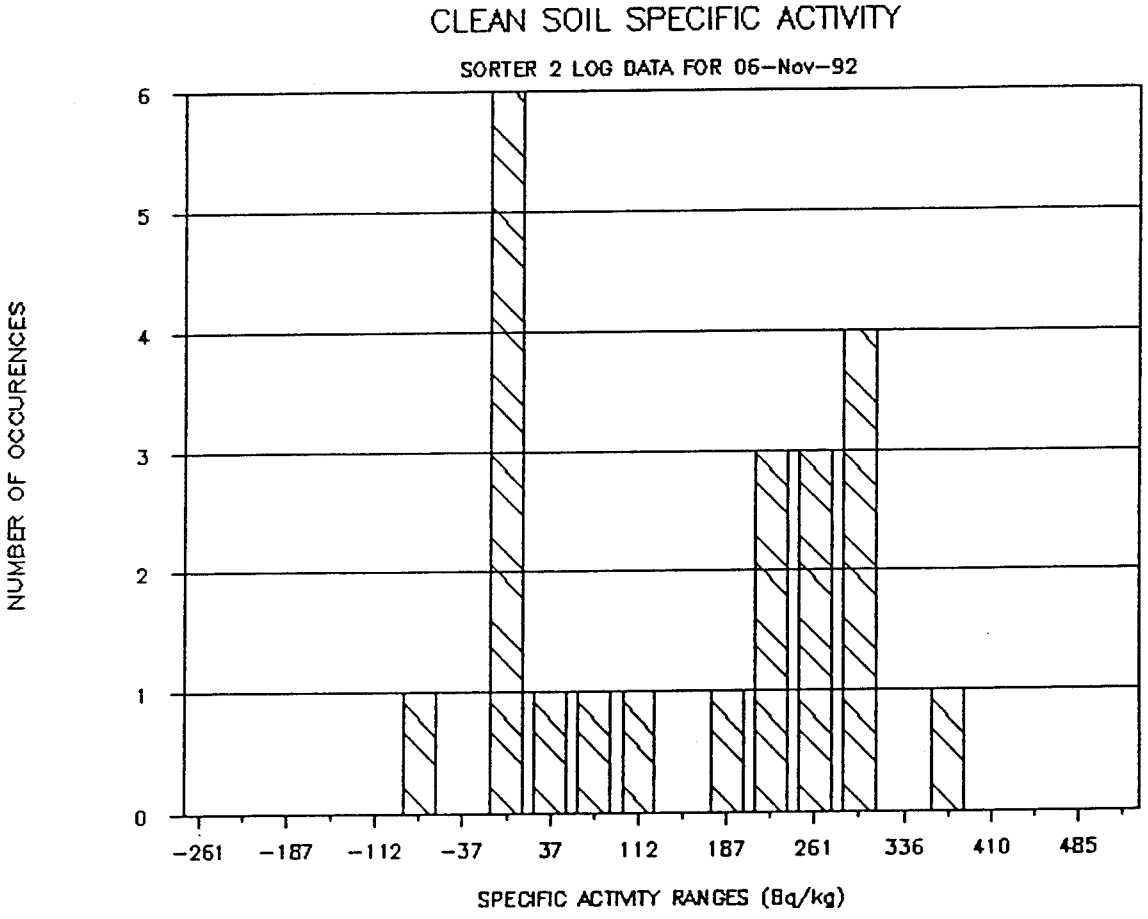
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	20	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	15	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	9	AD=0 & MD=0 & MND>0
SOME SORT	5	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

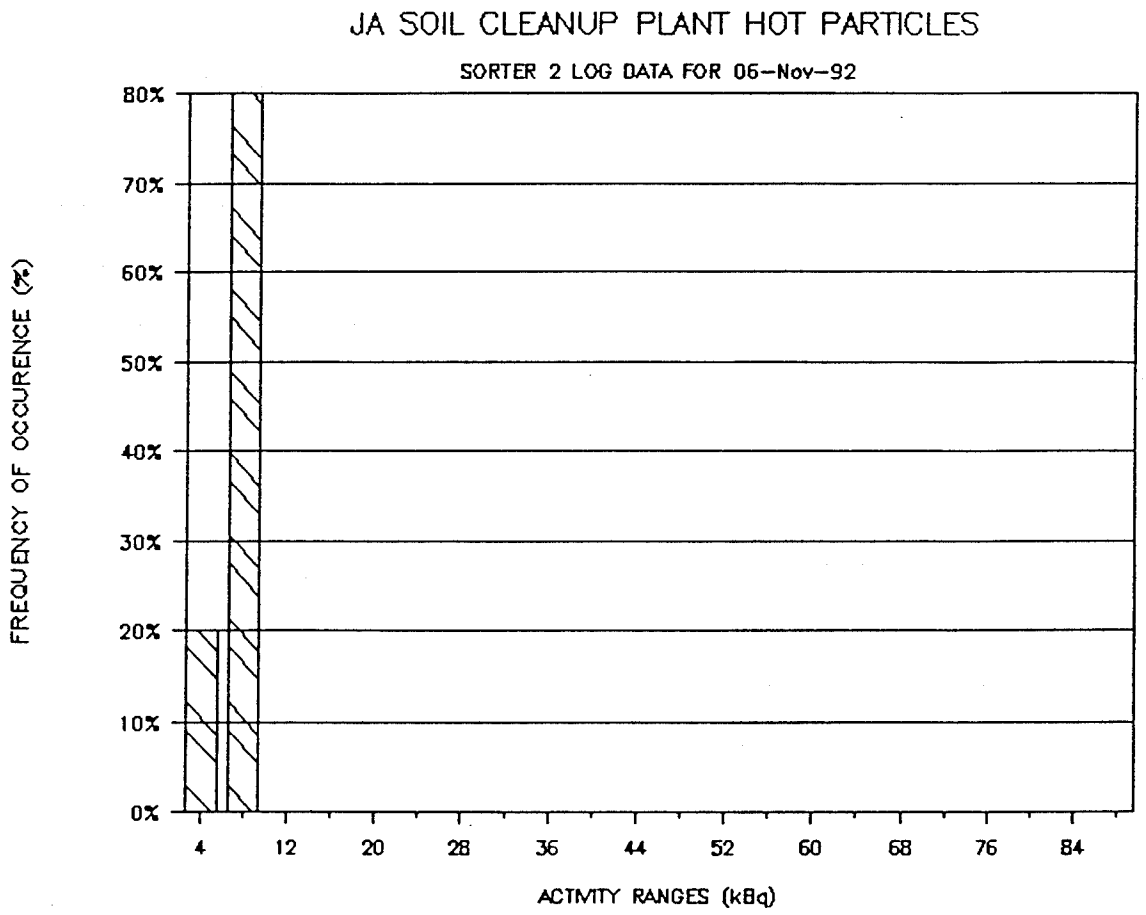
2-SEC COUNT PERIODS	150	
2-SEC RECORDS WITH SORTS	5	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	2	66.7%
3 DETECTORS	1	33.3%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	3	
NET 2-SEC RECORDS WITH SORTS	2	
2-SEC PERIODS WITH NO SORTS	148	
AVG TIME BETWEEN 2-SEC SORTS	150.0 sec	

1-GATE SORTS		3	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	0	0.0%	-14000	0	-261	4000	1	20.0%	4
2	1	33.3%	-12000	0	-224	8000	4	80.0%	8
3	0	0.0%	-10000	0	-187	12000	0	0.0%	12
4	2	66.7%	-8000	0	-149	16000	0	0.0%	16
5	0	0.0%	-6000	0	-112	20000	0	0.0%	20
6	0	0.0%	-4000	1	-75	24000	0	0.0%	24
7	0	0.0%	-2000	0	-37	28000	0	0.0%	28
8	0	0.0%	0	6	0	32000	0	0.0%	32
TOTAL	3		2000	1	37	36000	0	0.0%	36
			4000	1	75	40000	0	0.0%	40
2-GATE SORTS		2	6000	1	112	44000	0	0.0%	44
DETECTO	SORTS	FREQ%	8000	0	149	48000	0	0.0%	48
8			10000	1	187	52000	0	0.0%	52
9	0	0.0%	12000	3	224	56000	0	0.0%	56
10	0	0.0%	14000	3	261	60000	0	0.0%	60
11	1	50.0%	16000	4	299	64000	0	0.0%	64
12	1	50.0%	18000	0	336	68000	0	0.0%	68
13	0	0.0%	20000	1	373	72000	0	0.0%	72
14	0	0.0%	22000	0	410	76000	0	0.0%	76
15	0	0.0%	24000	0	448	80000	0	0.0%	80
TOTAL	2		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	22		TOTAL	5		

HPE	5	GATE1	5
MPE	5	GATE2	2
DISE	79		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 06-Nov-92
NUMBER OF OCCURENCES
0
1
2
3
4
5
6
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 06-Nov-92
FREQUENCY OF OCCURENCE (%)
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 05-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	5.38 tons	71.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			93.0%
EQUIVALENT SOIL-IN-GROUND	4.27 yd³	56.9 yd³	61.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	22,269 kBq		
MAXIMUM/SORT	415 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	10,574 kBq	8,226 kBq	
MAXIMUM/SORT	266 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	1,964 Bq/kg	115 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:43 AM		
PLANT STARTUP TIME		0.72 hr	
PROCESSING END	04:56 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.56 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.23 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.01 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.22 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		80.0%	

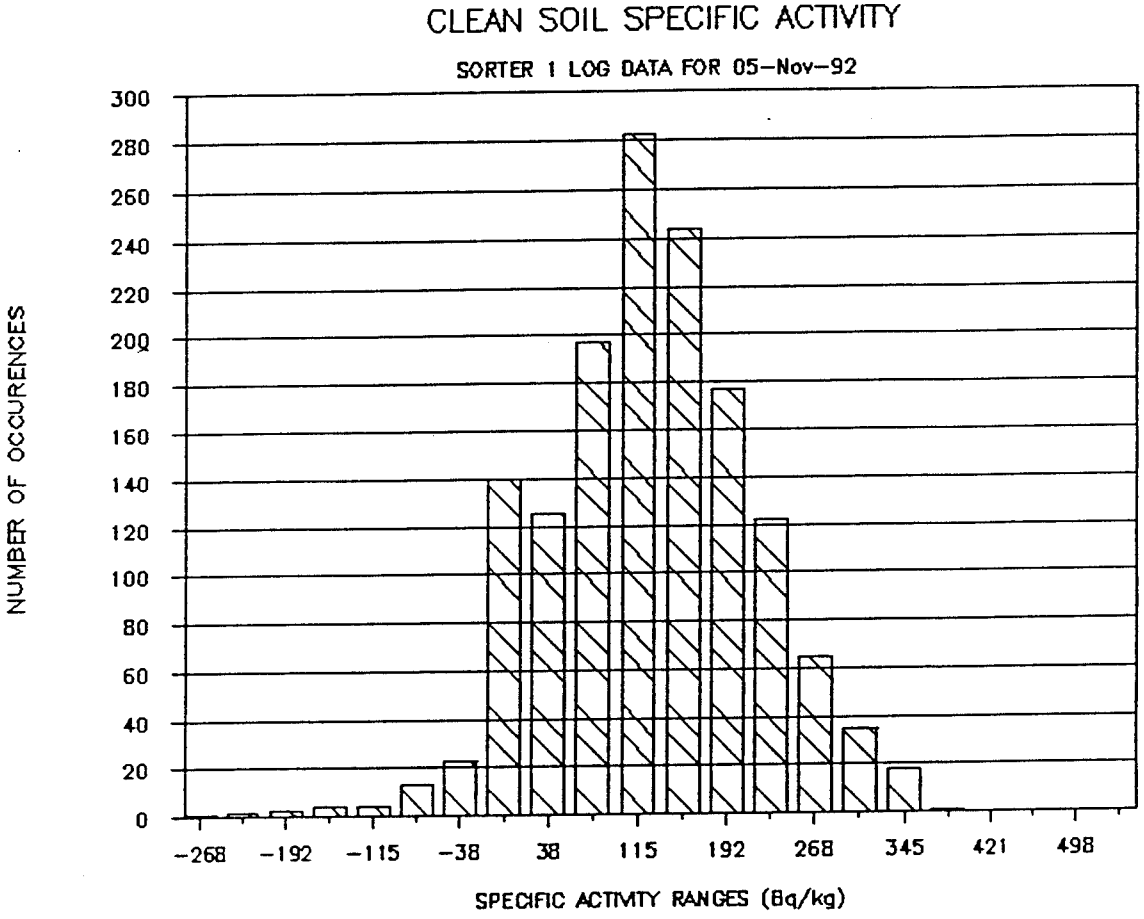
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,803	
NONPROCESS RECORDS (Test, calibration, etc)		16	
20-SEC PROCESS RECORDS		1,441	
TOTAL SORT		78	MD>0 & MND=0
NO SORT		650	AD=0 & MD=0 & MND>0
SOME SORT		712	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		1	
0<AD<1kBq & MD>0	1	10:36:30	
AD=0 & MD	0		
AD<0 & MD	0		

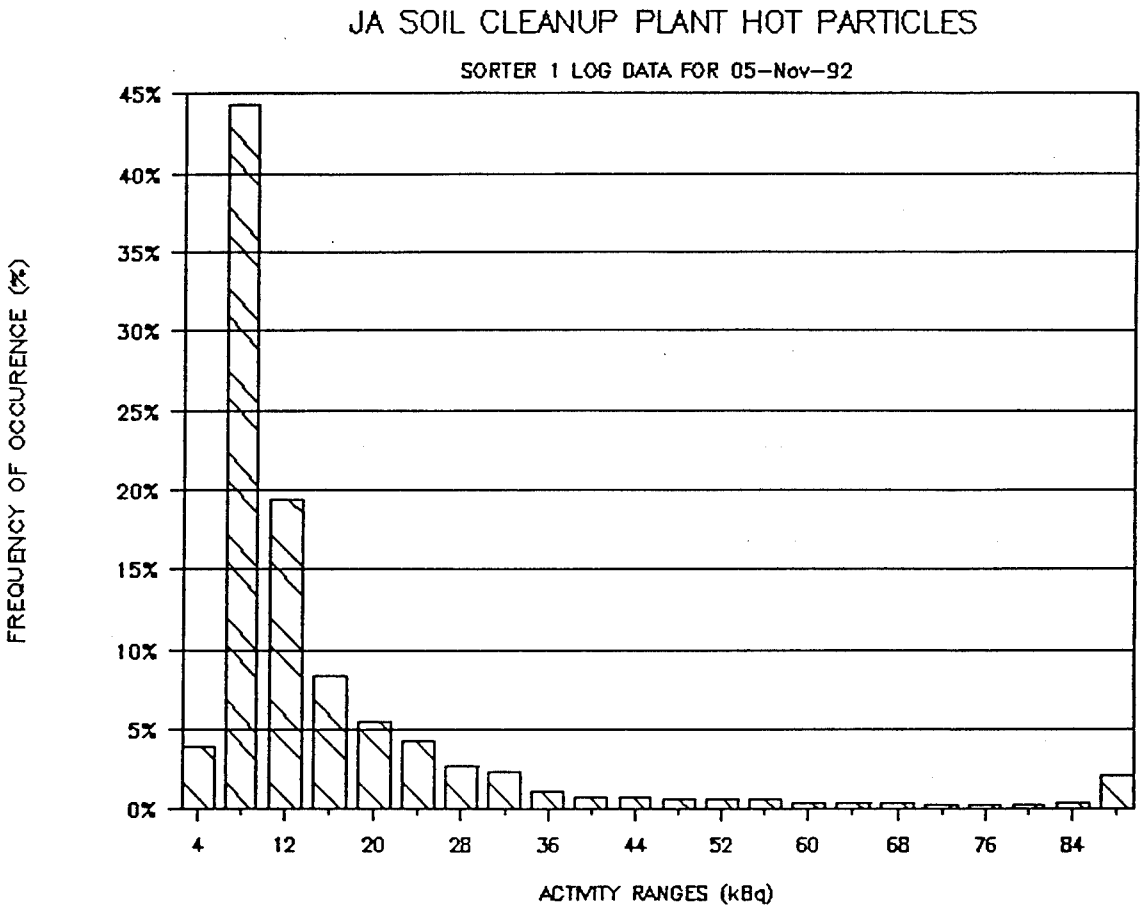
2-SEC COUNT PERIODS	14,410	
2-SEC RECORDS WITH SORTS	1,362	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	322	80.5%
3 DETECTORS	61	15.3%
4 DETECTORS	15	3.8%
5 DETECTORS	2	0.5%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	400	
NET 2-SEC RECORDS WITH SORTS	962	
2-SEC PERIODS WITH NO SORTS	13,448	
AVG TIME BETWEEN 2-SEC SORTS	30.0	sec

1-GATE SORTS		690	ACT_ND	NUMBER	SPEC_A		ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)		(Bq)	(#)		(kBq)
1	29	4.2%	-14000	1	-261		4000	53	3.9%	4
2	87	12.6%	-12000	2	-224		8000	604	44.3%	8
3	115	16.7%	-10000	3	-187		12000	265	19.5%	12
4	111	16.1%	-8000	4	-149		16000	114	8.4%	16
5	123	17.8%	-6000	4	-112		20000	75	5.5%	20
6	112	16.2%	-4000	13	-75		24000	58	4.3%	24
7	90	13.0%	-2000	23	-37		28000	37	2.7%	28
8	23	3.3%	0	140	0		32000	32	2.3%	32
TOTAL	690		2000	125	37		36000	15	1.1%	36
			4000	197	75		40000	11	0.8%	40
2-GATE SORTS		672	6000	283	112		44000	11	0.8%	44
DETECTO	SORTS	FREQ%	8000	244	149		48000	9	0.7%	48
8			10000	177	187		52000	8	0.6%	52
9	55	8.2%	12000	122	224		56000	9	0.7%	56
10	90	13.4%	14000	65	261		60000	6	0.4%	60
11	123	18.3%	16000	35	299		64000	6	0.4%	64
12	122	18.2%	18000	18	336		68000	6	0.4%	68
13	108	16.1%	20000	1	373		72000	4	0.3%	72
14	123	18.3%	22000	0	410		76000	3	0.2%	76
15	51	7.6%	24000	0	448		80000	3	0.2%	80
TOTAL	672		26000	0	485		84000	5	0.4%	84
			>28000	0	0		>84000	28	2.1%	>84
			TOTAL	1457			TOTAL	1362		

HPE	1336	GATE1	1362
MPE	1187	GATE2	672
DISE	5595		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 05-Nov-92
NUMBER OF OCCURENCES
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-268
-192
-115
-38
38
115
192
268
345
421
498
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 05-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 05-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	4.35 tons	56.7 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			92.9%
EQUIVALENT SOIL-IN-GROUND	3.45 yd³	45.0 yd³	48.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,957 kBq		
MAXIMUM/SORT	780 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,650 kBq	9,461 kBq	
MAXIMUM/SORT	432 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	2,216 Bq/kg	167 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:43 AM		
PLANT STARTUP TIME		0.72 hr	
PROCESSING END	04:57 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.55 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.24 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.33 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		2.90 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		63.3%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,996	
NONPROCESS RECORDS (Test, calibration, etc)	18	
20-SEC PROCESS RECORDS	1,140	
TOTAL SORT	60	MD>0 & MND=0
NO SORT	428	AD=0 & MD=0 & MND>0
SOME SORT	652	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

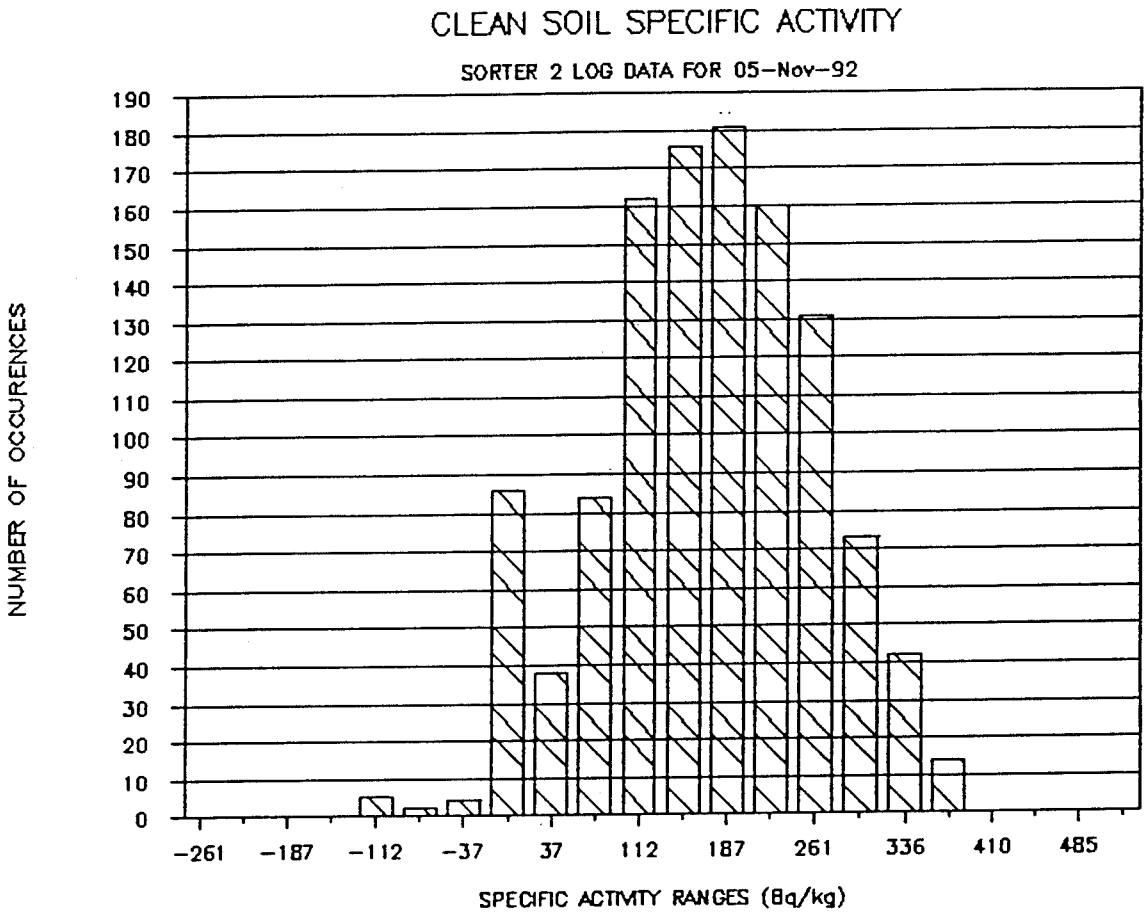
2-SEC COUNT PERIODS	11,400	
2-SEC RECORDS WITH SORTS	856	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	206	77.7%
3 DETECTORS	45	17.0%
4 DETECTORS	12	4.5%
5 DETECTORS	2	0.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	265	
NET 2-SEC RECORDS WITH SORTS	591	
2-SEC PERIODS WITH NO SORTS	10,809	
AVG TIME BETWEEN 2-SEC SORTS	38.6 sec	

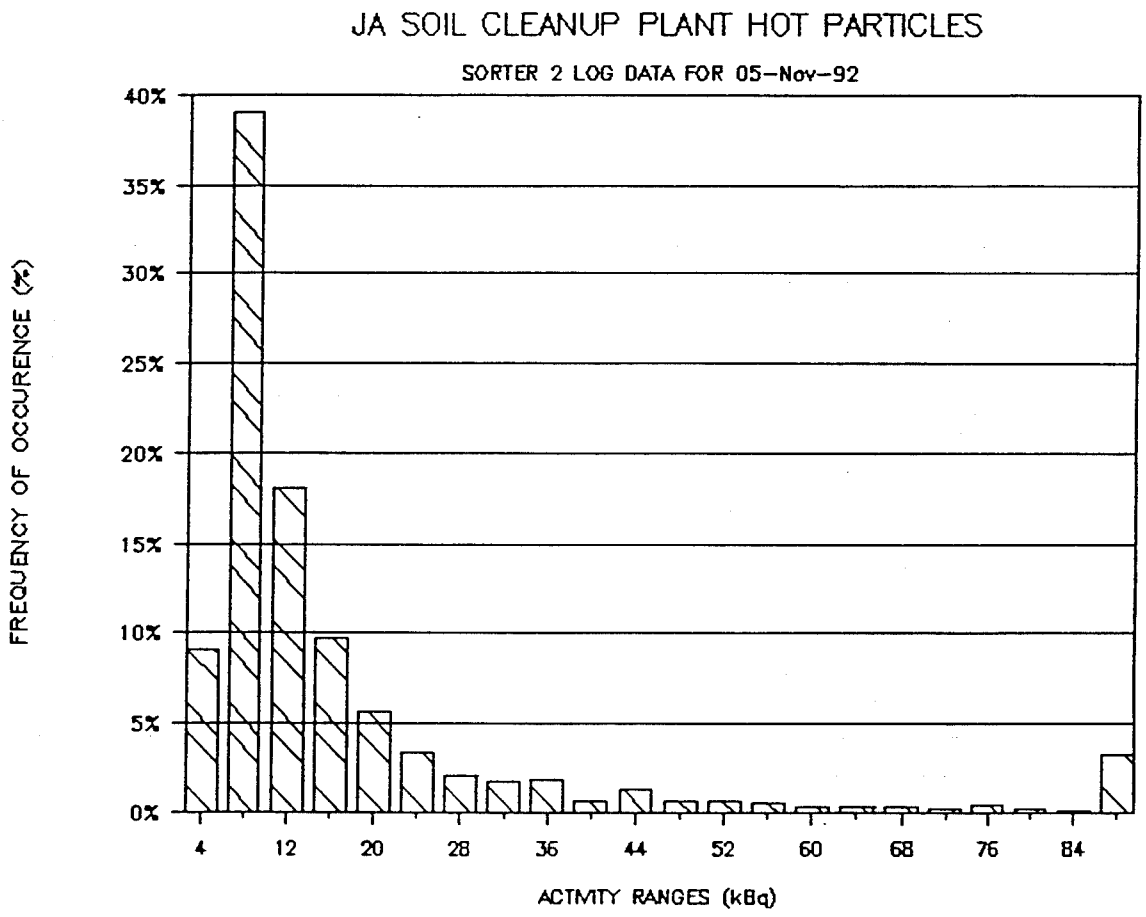
1-GATE SORTS		457	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	21	4.6%	-14000	0	-261
2	70	15.3%	-12000	0	-224
3	98	21.4%	-10000	0	-187
4	91	19.9%	-8000	0	-149
5	65	14.2%	-6000	5	-112
6	66	14.4%	-4000	2	-75
7	40	8.8%	-2000	4	-37
8	6	1.3%	0	86	0
TOTAL	457		2000	38	37
			4000	84	75
2-GATE SORTS		399	6000	162	112
DETECTO	SORTS	FREQ%	8000	176	149
8			10000	181	187
9	36	9.0%	12000	160	224
10	69	17.3%	14000	131	261
11	94	23.5%	16000	73	299
12	79	19.8%	18000	42	336
13	63	15.8%	20000	14	373
14	52	13.0%	22000	0	410
15	7	1.8%	24000	0	448
TOTAL	400		26000	0	485
			>28000	0	0
			TOTAL	1158	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	78	9.1%	4
8000	335	39.1%	8
12000	155	18.1%	12
16000	83	9.7%	16
20000	48	5.6%	20
24000	29	3.4%	24
28000	18	2.1%	28
32000	15	1.8%	32
36000	16	1.9%	36
40000	6	0.7%	40
44000	11	1.3%	44
48000	6	0.7%	48
52000	6	0.7%	52
56000	5	0.6%	56
60000	3	0.4%	60
64000	3	0.4%	64
68000	3	0.4%	68
72000	2	0.2%	72
76000	4	0.5%	76
80000	2	0.2%	80
84000	1	0.1%	84
>84000	28	3.3%	>84
TOTAL	857		

HPE	821	GATE1	856
MPE	1301	GATE2	399
DISE	4377		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 05-Nov-92
NUMBER OF OCCURENCES
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 05-Nov-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 04-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.82 tons	77.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.7%
EQUIVALENT SOIL-IN-GROUND	1.44 yd³	61.6 yd³	63.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	24,773 kBq		
MAXIMUM/SORT	2,421 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,773 kBq	6,004 kBq	
MAXIMUM/SORT	1440 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	4,833 Bq/kg	77 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:30 AM		
PLANT STARTUP TIME		0.50 hr	
PROCESSING END	04:51 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.65 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.35 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.24 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.11 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		82.3%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,579	
NONPROCESS RECORDS (Test, calibration, etc)	29	
20-SEC PROCESS RECORDS	1,483	
TOTAL SORT	12	MD>0 & MND=0
NO SORT	765	AD=0 & MD=0 & MND>0
SOME SORT	706	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

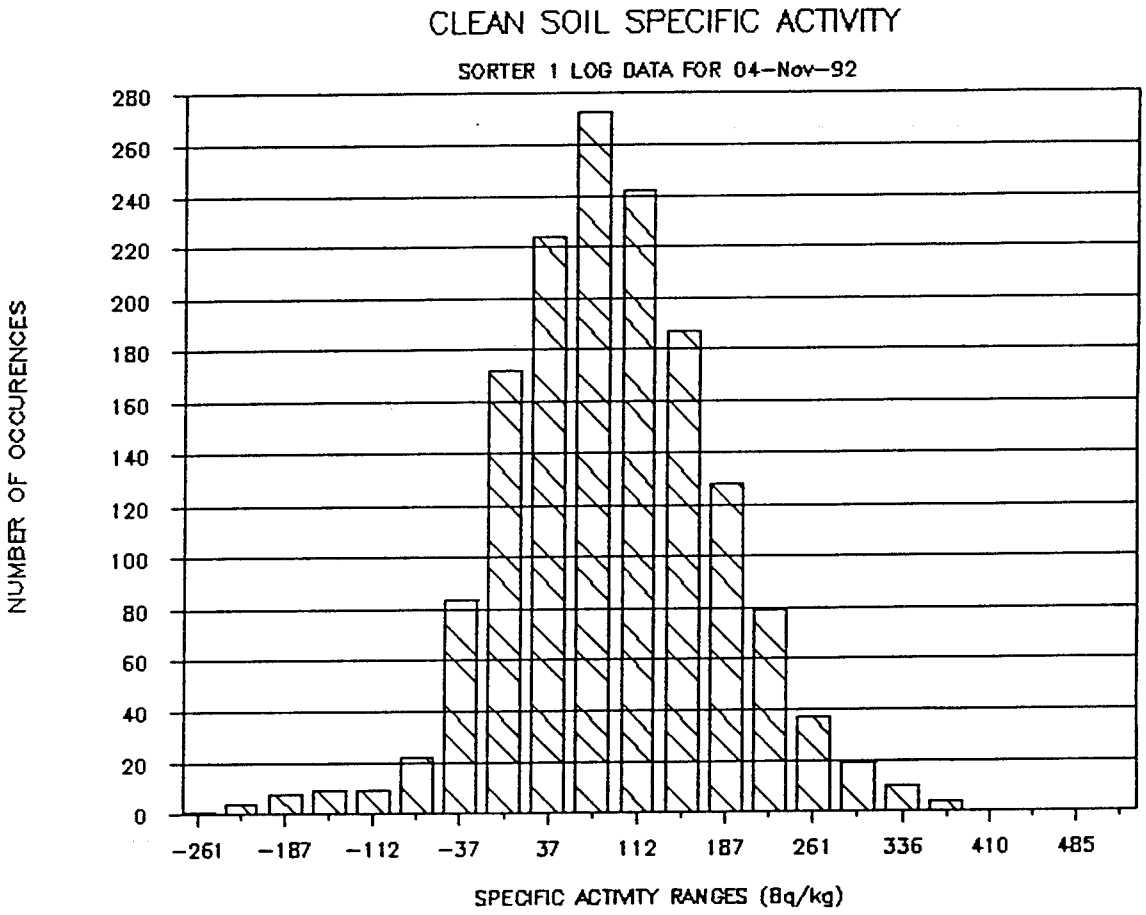
JA SOIL CLEANUP PLANT LOG SUMMARY

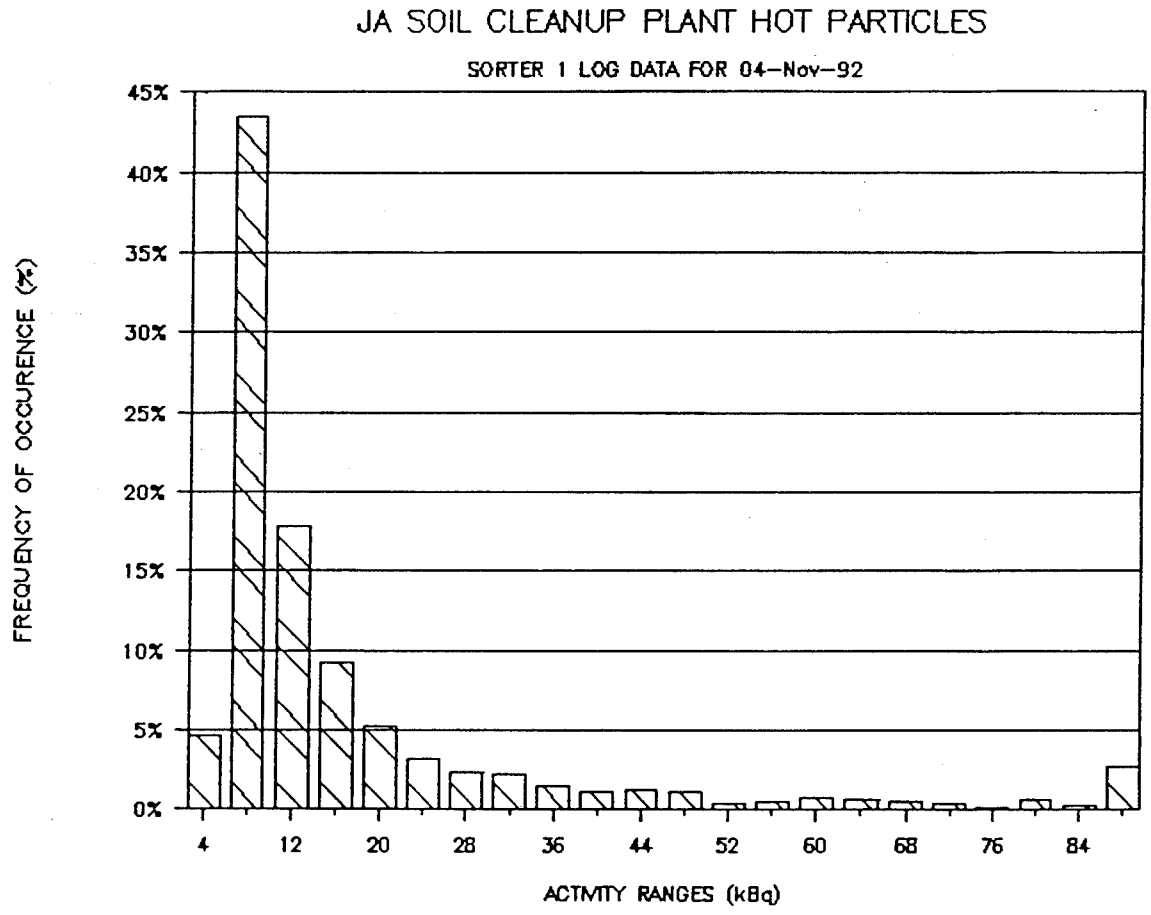
2-SEC COUNT PERIODS	14,830	
2-SEC RECORDS WITH SORTS	1,096	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	245	79.0%
3 DETECTORS	53	17.1%
4 DETECTORS	8	2.6%
5 DETECTORS	2	0.6%
6 DETECTORS	1	0.3%
7 DETECTORS	1	0.3%
8 DETECTORS	0	0.0%
TOTAL	310	
NET 2-SEC RECORDS WITH SORTS	786	
2-SEC PERIODS WITH NO SORTS	14,044	
AVG TIME BETWEEN 2-SEC SORTS	37.7 sec	

1-GATE SORTS		534	ACT_ND	NUMBER	SPEC_A		ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)		(Bq)	(#)		(kBq)
1	22	4.1%	-14000	1	-261		4000	50	4.6%	4
2	41	7.7%	-12000	4	-224		8000	477	43.5%	8
3	86	16.1%	-10000	8	-187		12000	196	17.9%	12
4	97	18.2%	-8000	9	-149		16000	101	9.2%	16
5	105	19.7%	-6000	9	-112		20000	58	5.3%	20
6	100	18.7%	-4000	22	-75		24000	35	3.2%	24
7	65	12.2%	-2000	84	-37		28000	26	2.4%	28
8	18	3.4%	0	172	0		32000	24	2.2%	32
TOTAL	534		2000	224	37		36000	16	1.5%	36
			4000	273	75		40000	12	1.1%	40
2-GATE SORTS		562	6000	242	112		44000	14	1.3%	44
DETECTO	SORTS	FREQ%	8000	187	149		48000	12	1.1%	48
8			10000	128	187		52000	4	0.4%	52
9	36	6.4%	12000	79	224		56000	5	0.5%	56
10	71	12.6%	14000	37	261		60000	8	0.7%	60
11	95	16.9%	16000	19	299		64000	7	0.6%	64
12	109	19.4%	18000	10	336		68000	5	0.5%	68
13	125	22.2%	20000	4	373		72000	4	0.4%	72
14	89	15.8%	22000	0	410		76000	2	0.2%	76
15	37	6.6%	24000	0	448		80000	7	0.6%	80
TOTAL	562		26000	0	485		84000	3	0.3%	84
			>28000	0	0		>84000	30	2.7%	>84
			TOTAL	1512			TOTAL	1096		

HPE	1095	GATE1	1096
MPE	735	GATE2	562
DISE	882		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 04-Nov-92
NUMBER OF OCCURENCES
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 04-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 04-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.17 tons	77.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.3%
EQUIVALENT SOIL-IN-GROUND	1.72 yd³	61.7 yd³	63.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,832 kBq		
MAXIMUM/SORT	336 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,328 kBq	9,785 kBq	
MAXIMUM/SORT	236 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	3,374 Bq/kg	126 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:30 AM		
PLANT STARTUP TIME		0.50 hr	
PROCESSING END	04:51 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.66 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.35 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.29 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.05 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		82.9%	

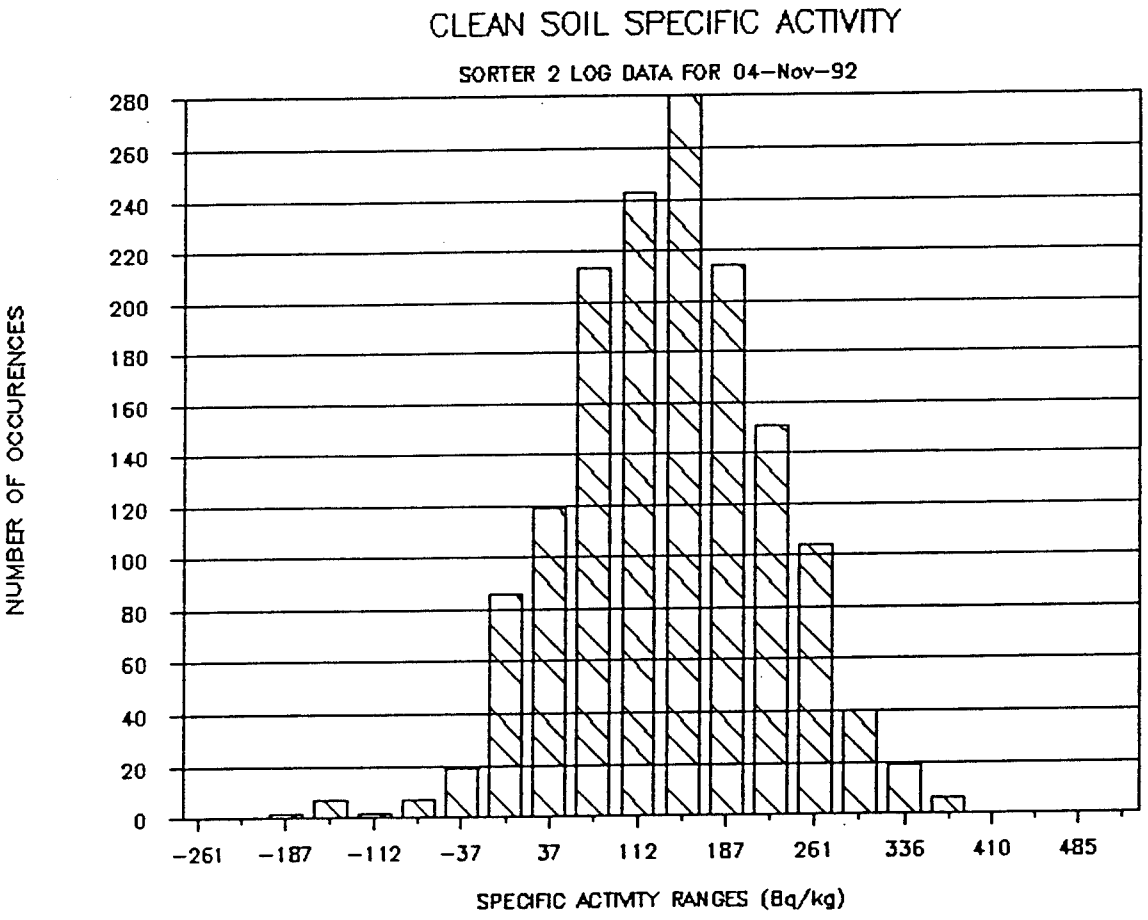
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,373	
NONPROCESS RECORDS (Test, calibration, etc)	19	
20-SEC PROCESS RECORDS	1,493	
TOTAL SORT	17	MD>0 & MND=0
NO SORT	681	AD=0 & MD=0 & MND>0
SOME SORT	795	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

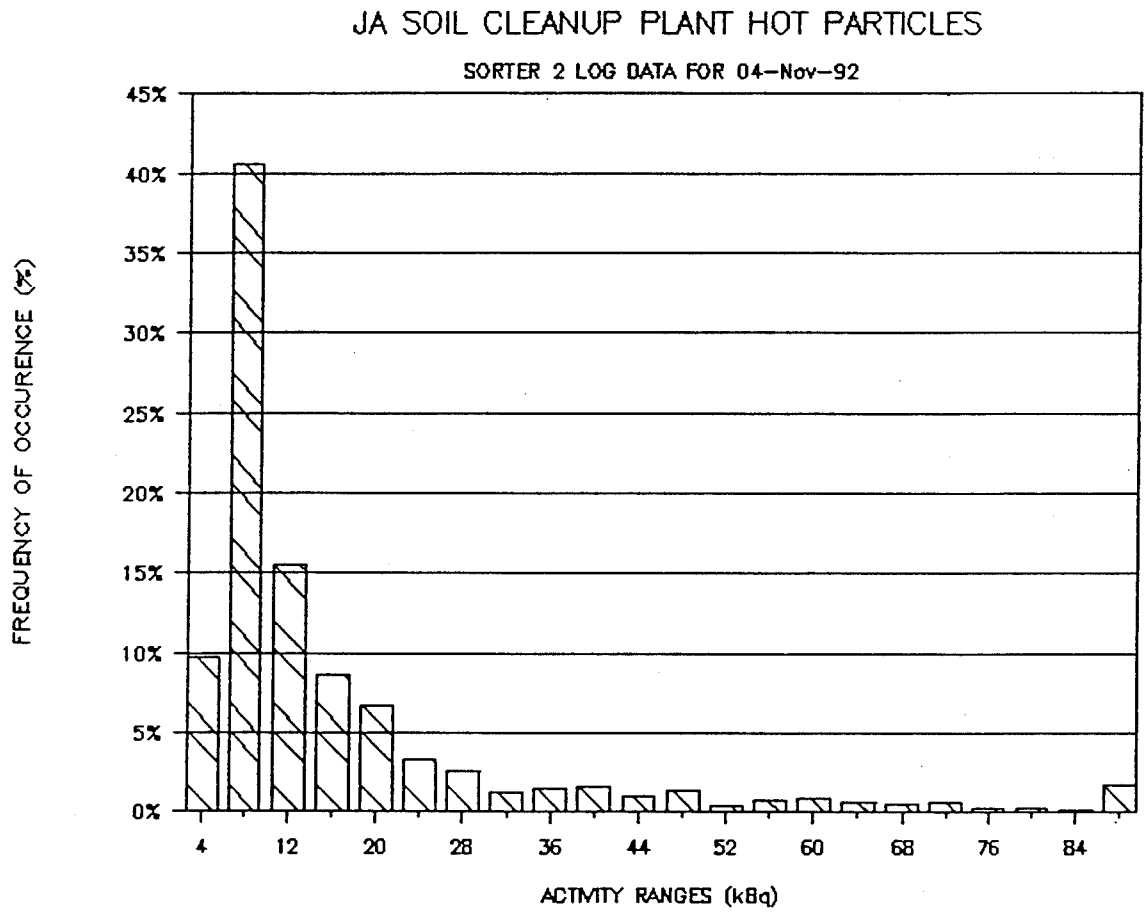
2-SEC COUNT PERIODS	14,930	
2-SEC RECORDS WITH SORTS	880	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	195	76.8%
3 DETECTORS	47	18.5%
4 DETECTORS	9	3.5%
5 DETECTORS	2	0.8%
6 DETECTORS	1	0.4%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	254	
NET 2-SEC RECORDS WITH SORTS	626	
2-SEC PERIODS WITH NO SORTS	14,304	
AVG TIME BETWEEN 2-SEC SORTS	47.7	sec

1-GATE SORTS		444	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	23	5.2%	-14000	0	-261	4000	85	9.7%	4
2	93	20.9%	-12000	0	-224	8000	357	40.6%	8
3	94	21.2%	-10000	2	-187	12000	137	15.6%	12
4	99	22.3%	-8000	7	-149	16000	76	8.6%	16
5	70	15.8%	-6000	2	-112	20000	59	6.7%	20
6	36	8.1%	-4000	7	-75	24000	29	3.3%	24
7	24	5.4%	-2000	19	-37	28000	23	2.6%	28
8	5	1.1%	0	86	0	32000	11	1.3%	32
TOTAL	444		2000	119	37	36000	13	1.5%	36
			4000	213	75	40000	14	1.6%	40
2-GATE SORTS		436	6000	243	112	44000	9	1.0%	44
DETECTO	SORTS	FREQ%	8000	280	149	48000	12	1.4%	48
8			10000	214	187	52000	3	0.3%	52
9	62	14.2%	12000	151	224	56000	7	0.8%	56
10	76	17.4%	14000	104	261	60000	8	0.9%	60
11	111	25.5%	16000	40	299	64000	6	0.7%	64
12	86	19.7%	18000	19	336	68000	5	0.6%	68
13	58	13.3%	20000	6	373	72000	6	0.7%	72
14	36	8.3%	22000	0	410	76000	2	0.2%	76
15	7	1.6%	24000	0	448	80000	2	0.2%	80
TOTAL	436		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	15	1.7%	>84
			TOTAL	1512		TOTAL	880		

HPE	882	GATE1	880
MPE	1100	GATE2	436
DISE	1262		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 04-Nov-92
NUMBER OF OCCURENCES
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 04-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 03-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.88 tons	75.4 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.6%
EQUIVALENT SOIL-IN-GROUND	1.49 yd³	59.8 yd³	61.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	20,038 kBq		
MAXIMUM/SORT	511 kBq		
MINIMUM/SORT	2.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,683 kBq	5,347 kBq	
MAXIMUM/SORT	299 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	4,092 Bq/kg	71 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:51 AM		
PLANT STARTUP TIME		0.85 hr	
PROCESSING END	05:00 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.51 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.15 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.02 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.13 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		80.1%	

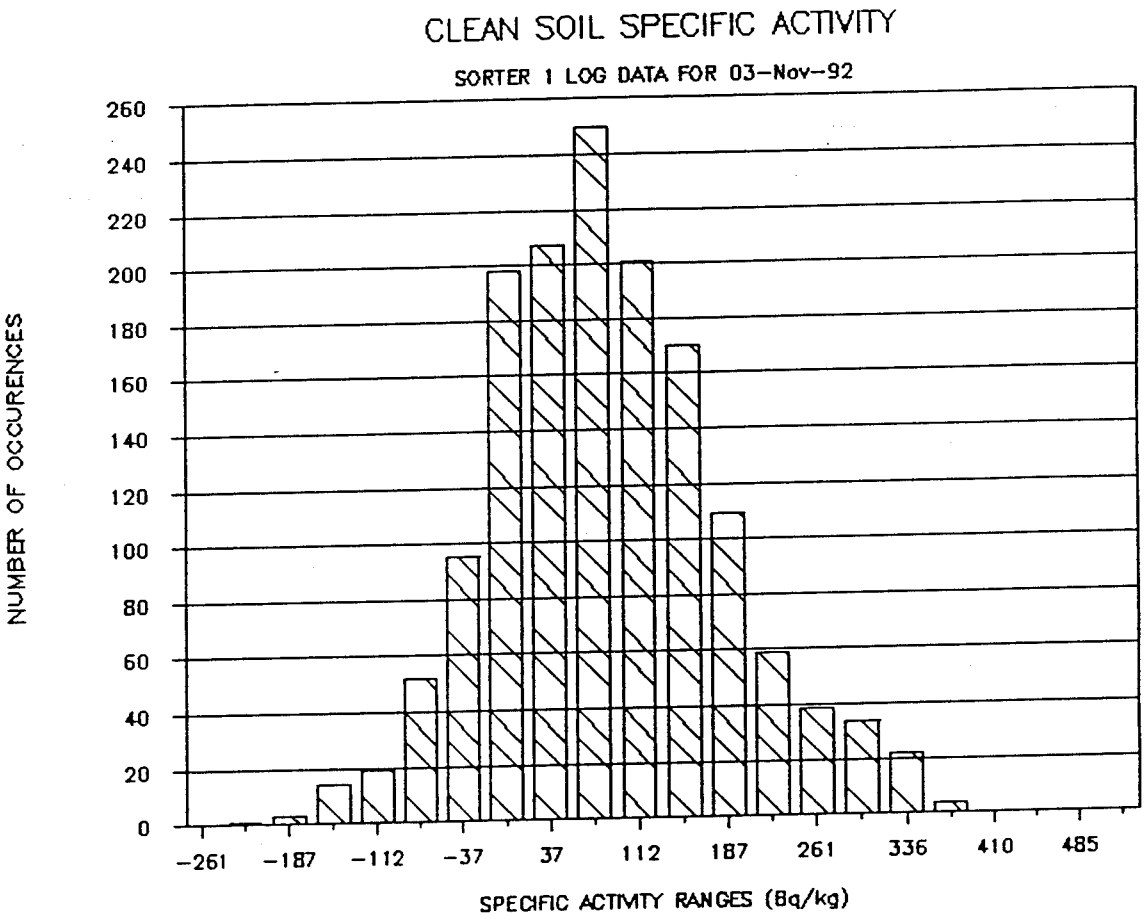
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,627	
NONPROCESS RECORDS (Test, calibration, etc)	57	
20-SEC PROCESS RECORDS	1,443	
TOTAL SORT	11	MD>0 & MND=0
NO SORT	697	AD=0 & MD=0 & MND>0
SOME SORT	735	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

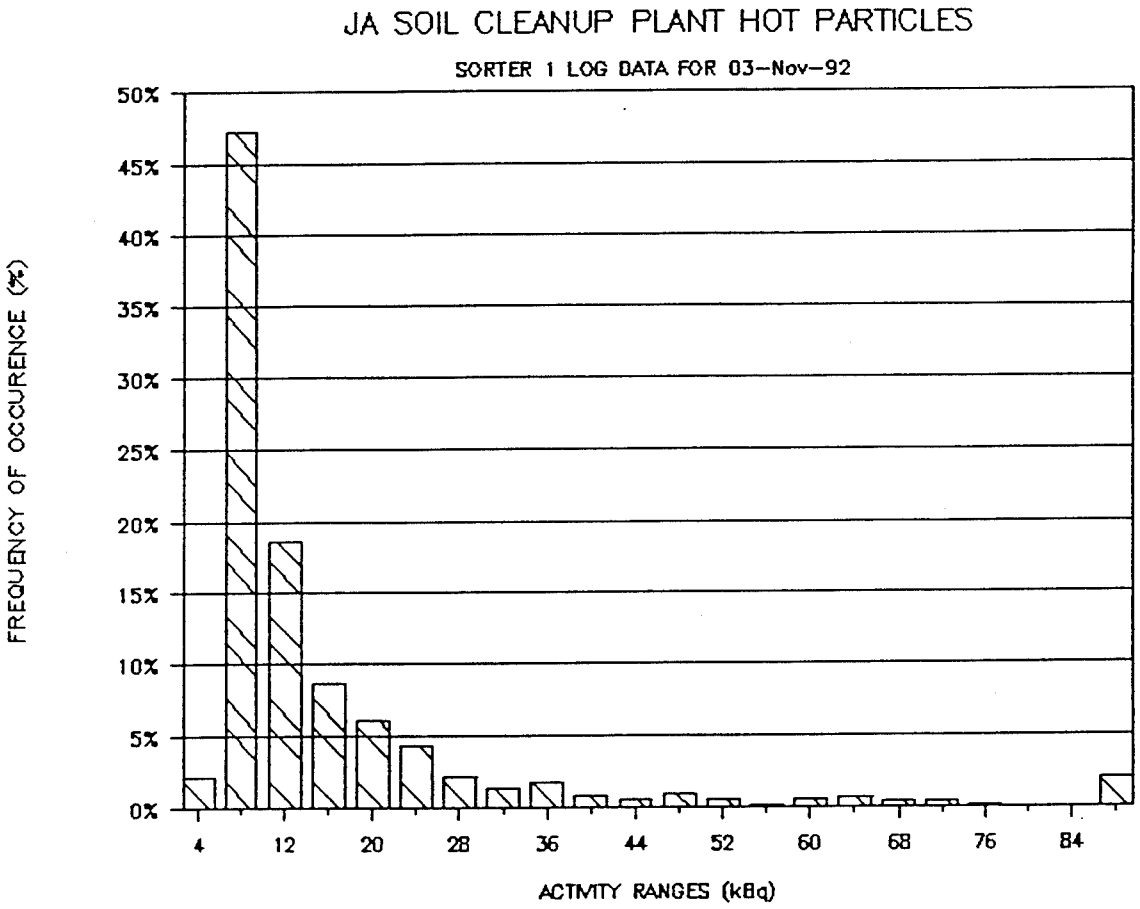
2-SEC COUNT PERIODS	14,430	
2-SEC RECORDS WITH SORTS	1,184	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	251	83.1%
3 DETECTORS	43	14.2%
4 DETECTORS	8	2.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	302	
NET 2-SEC RECORDS WITH SORTS	882	
2-SEC PERIODS WITH NO SORTS	13,548	
AVG TIME BETWEEN 2-SEC SORTS	32.7 sec	

1-GATE SORTS		596	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	15	2.5%	-14000	0	-261	4000	27	2.2%	4
2	61	10.0%	-12000	1	-224	8000	570	47.2%	8
3	88	14.5%	-10000	3	-187	12000	224	18.6%	12
4	105	17.3%	-8000	14	-149	16000	105	8.7%	16
5	117	19.2%	-6000	19	-112	20000	73	6.0%	20
6	122	20.1%	-4000	52	-75	24000	52	4.3%	24
7	78	12.8%	-2000	95	-37	28000	27	2.2%	28
8	22	3.6%	0	198	0	32000	17	1.4%	32
TOTAL	608		2000	207	37	36000	22	1.8%	36
			4000	250	75	40000	10	0.8%	40
2-GATE SORTS		588	6000	201	112	44000	7	0.6%	44
DETECTO	SORTS	FREQ%	8000	170	149	48000	12	1.0%	48
8			10000	109	187	52000	7	0.6%	52
9	36	6.0%	12000	59	224	56000	2	0.2%	56
10	81	13.5%	14000	39	261	60000	7	0.6%	60
11	102	17.0%	16000	34	299	64000	8	0.7%	64
12	107	17.9%	18000	22	336	68000	5	0.4%	68
13	121	20.2%	20000	4	373	72000	5	0.4%	72
14	101	16.9%	22000	0	410	76000	2	0.2%	76
15	51	8.5%	24000	0	448	80000	0	0.0%	80
TOTAL	599		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	24	2.0%	>84
			TOTAL	1477		TOTAL	1207		

HPE	1196	GATE1	1184
MPE	791	GATE2	588
DISE	820		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 03-Nov-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 03-Nov-92
FREQUENCY OF OCCURENCE (%)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 03-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.73 tons	75.0 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.5%
EQUIVALENT SOIL-IN-GROUND	2.16 yd³	59.4 yd³	61.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	27,236 kBq		
MAXIMUM/SORT	2,044 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	11,910 kBq	7,257 kBq	
MAXIMUM/SORT	1400 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	4,370 Bq/kg	97 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:51 AM	
PLANT STARTUP TIME		0.85 hr
PROCESSING END	05:04 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.43 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.23 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.06 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.17 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		80.5%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,619
NONPROCESS RECORDS (Test, calibration, etc)		30
20-SEC PROCESS RECORDS		1,450
TOTAL SORT		23 MD>0 & MND=0
NO SORT		601 AD=0 & MD=0 & MND>0
SOME SORT		826 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

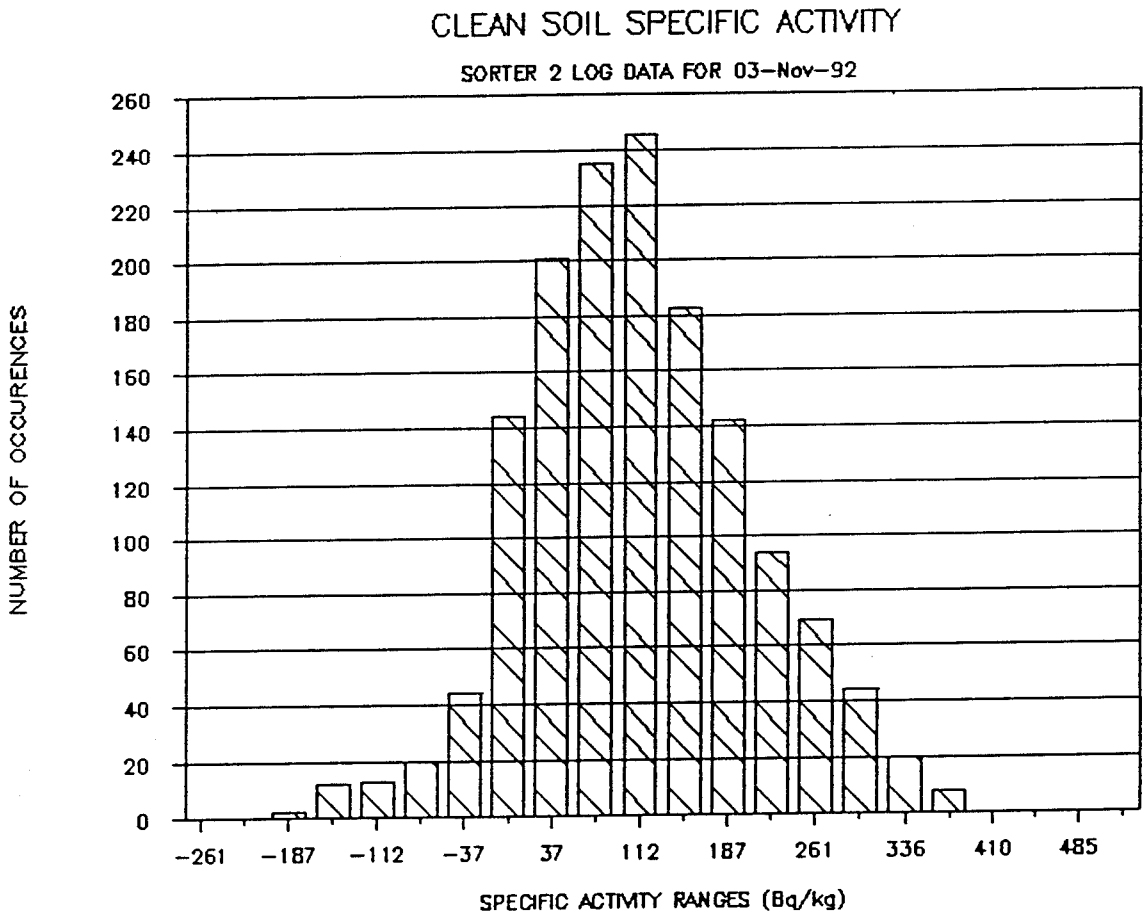
JA SOIL CLEANUP PLANT LOG SUMMARY

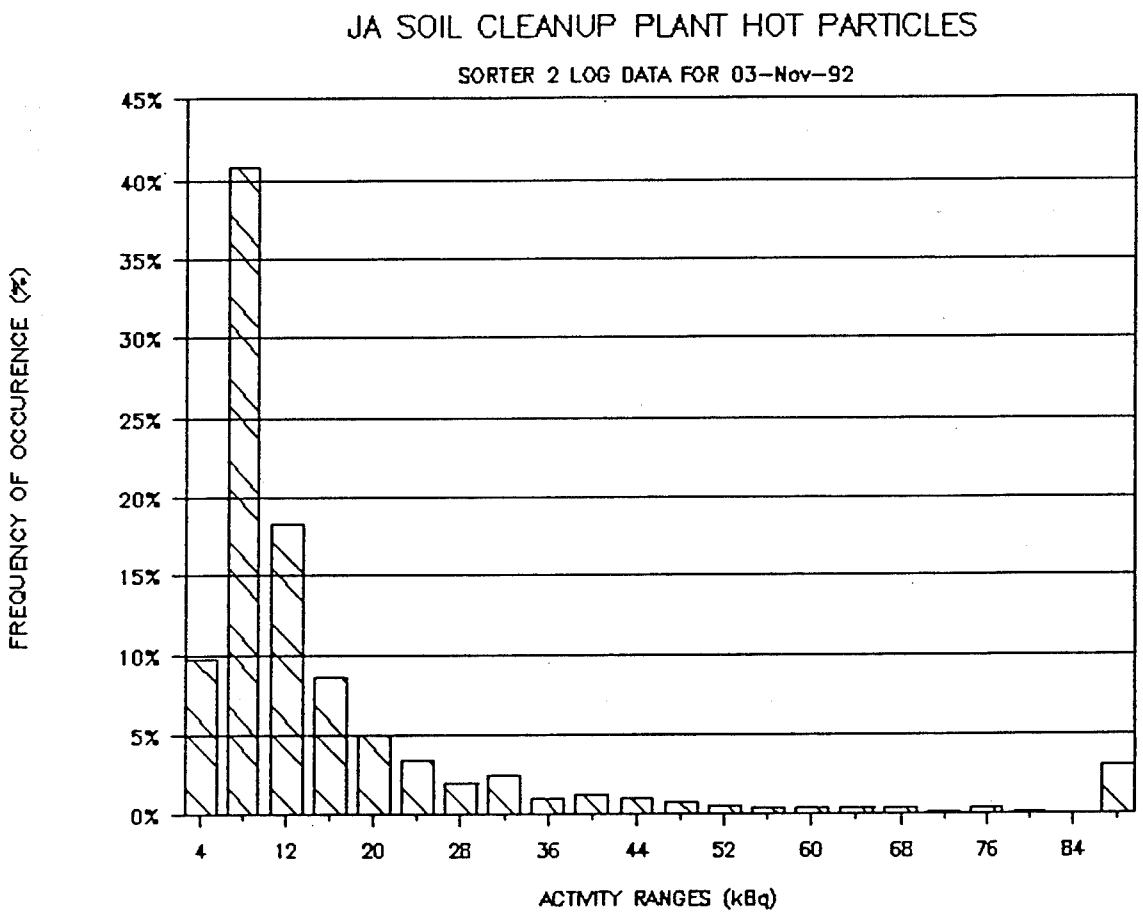
2-SEC COUNT PERIODS	14,500	
2-SEC RECORDS WITH SORTS	1,169	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	255	75.9%
3 DETECTORS	58	17.3%
4 DETECTORS	15	4.5%
5 DETECTORS	5	1.5%
6 DETECTORS	3	0.9%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	336	
NET 2-SEC RECORDS WITH SORTS	833	
2-SEC PERIODS WITH NO SORTS	13,667	
AVG TIME BETWEEN 2-SEC SORTS	34.8 sec	

1-GATE SORTS		606	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	28	4.6%	-14000	0	-261	4000	114	9.7%	4
2	98	16.1%	-12000	0	-224	8000	478	40.8%	8
3	119	19.6%	-10000	2	-187	12000	214	18.3%	12
4	124	20.4%	-8000	12	-149	16000	101	8.6%	16
5	95	15.6%	-6000	13	-112	20000	58	4.9%	20
6	86	14.1%	-4000	20	-75	24000	40	3.4%	24
7	42	6.9%	-2000	44	-37	28000	23	2.0%	28
8	16	2.6%	0	144	0	32000	29	2.5%	32
TOTAL	608		2000	201	37	36000	11	0.9%	36
			4000	235	75	40000	15	1.3%	40
2-GATE SORTS		563	6000	246	112	44000	12	1.0%	44
DETECTO	SORTS	FREQ%	8000	183	149	48000	9	0.8%	48
8			10000	142	187	52000	6	0.5%	52
9	55	9.8%	12000	94	224	56000	5	0.4%	56
10	99	17.6%	14000	69	261	60000	4	0.3%	60
11	130	23.0%	16000	44	299	64000	5	0.4%	64
12	104	18.4%	18000	20	336	68000	4	0.3%	68
13	79	14.0%	20000	8	373	72000	2	0.2%	72
14	77	13.7%	22000	0	410	76000	4	0.3%	76
15	20	3.5%	24000	0	448	80000	2	0.2%	80
TOTAL	564		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	36	3.1%	>84
			TOTAL	1477		TOTAL	1172		

HPE	1148	GATE1	1169
MPE	1192	GATE2	563
DISE	1730		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 03-Nov-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 03-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 02-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.83 tons	76.5 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			97.7%
EQUIVALENT SOIL-IN-GROUND	1.45 yd³	60.6 yd³	62.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	24,309 kBq		
MAXIMUM/SORT	893 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,755 kBq	5,057 kBq	
MAXIMUM/SORT	564 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	4,775 Bq/kg	66 Bq/kg	

WORK DAY

WORK DAY START	07:00 AM	
PROCESSING START	07:37 AM	
PLANT STARTUP TIME		0.62 hr
PROCESSING END	04:54 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.60 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.29 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.12 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.17 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		81.2%

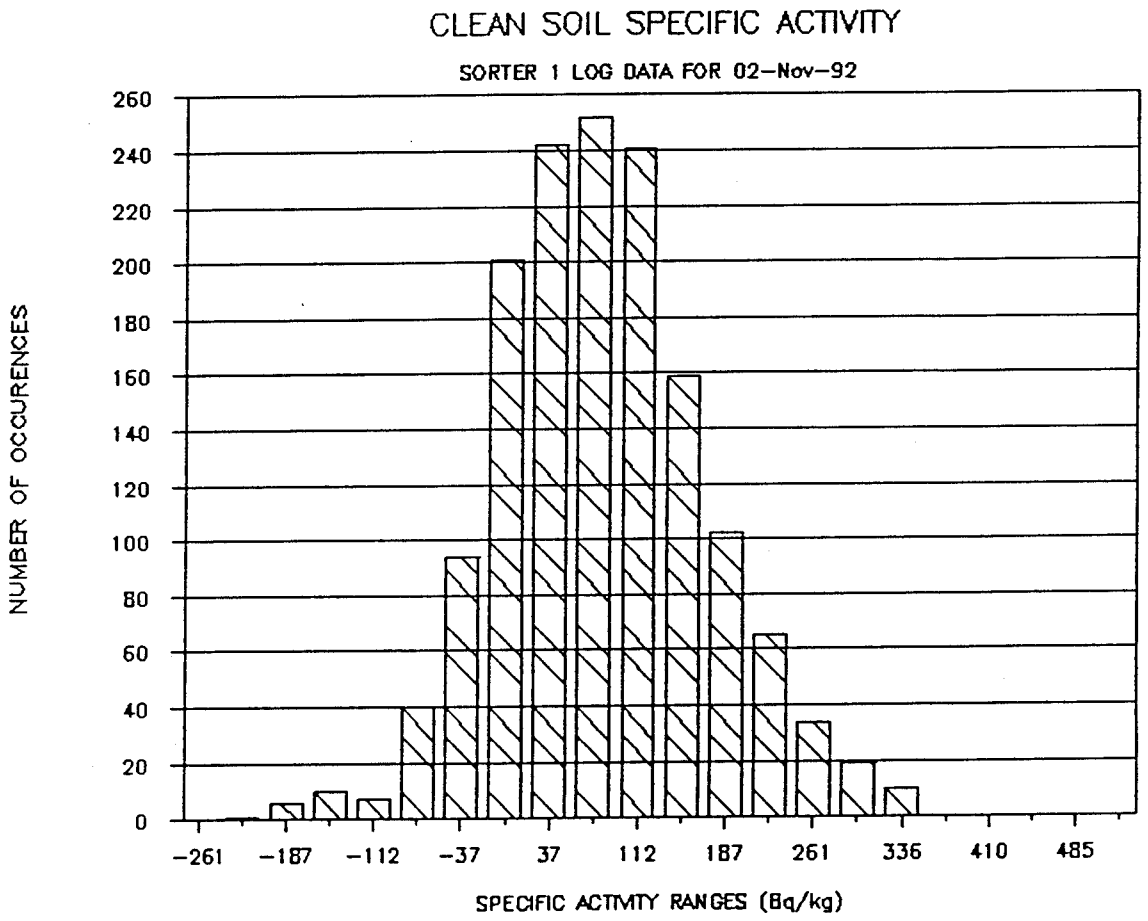
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,727
NONPROCESS RECORDS (Test, calibration, etc)		21
20-SEC PROCESS RECORDS		1,462
TOTAL SORT		9 MD>0 & MND=0
NO SORT		676 AD=0 & MD=0 & MND>0
SOME SORT		777 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

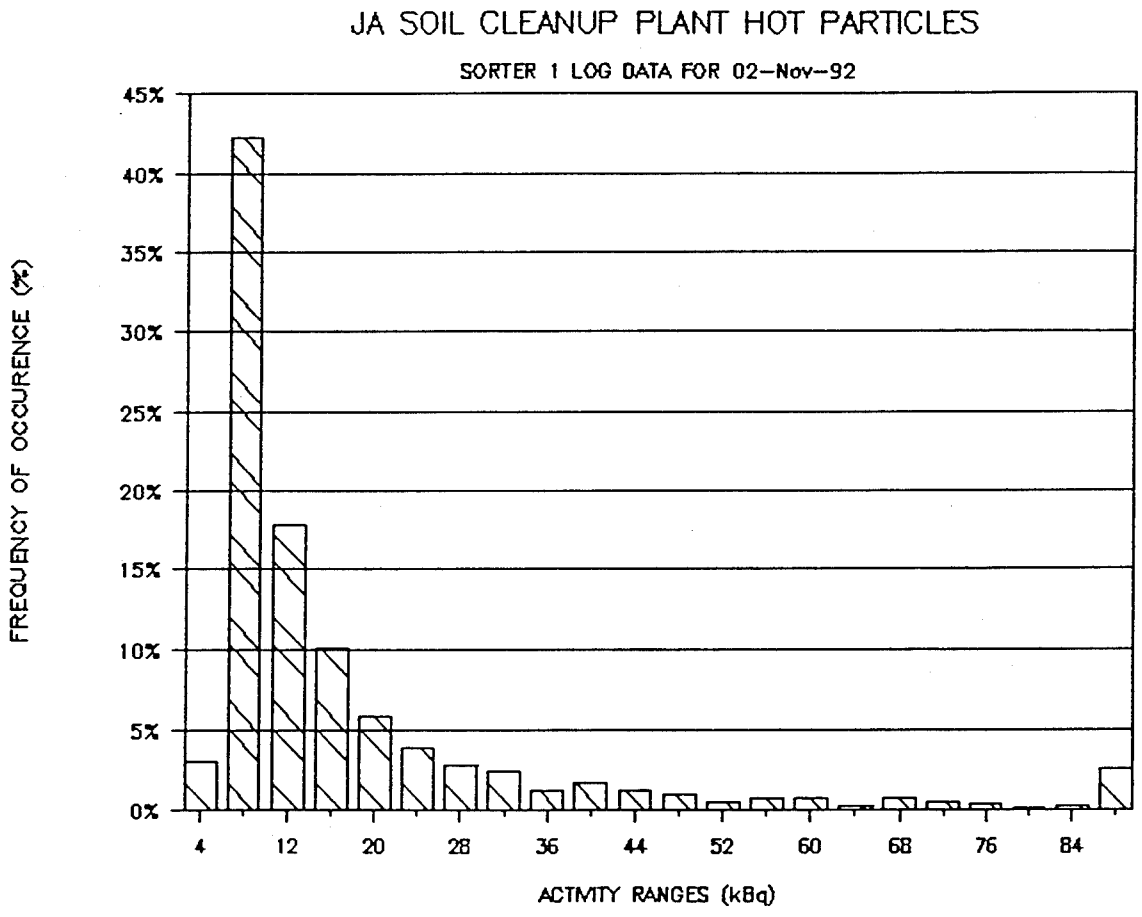
2-SEC COUNT PERIODS		14,620	
2-SEC RECORDS WITH SORTS		1,265	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	283	84.2%
	3 DETECTORS	46	13.7%
	4 DETECTORS	7	2.1%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	336	
NET 2-SEC RECORDS WITH SORTS		929	
2-SEC PERIODS WITH NO SORTS		13,691	
AVG TIME BETWEEN 2-SEC SORTS		31.5	sec

1-GATE SORTS		620	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	20	3.2%	-14000	0	-261	4000	39	3.1%	4
2	65	10.5%	-12000	1	-224	8000	534	42.2%	8
3	103	16.6%	-10000	6	-187	12000	225	17.8%	12
4	103	16.6%	-8000	10	-149	16000	128	10.1%	16
5	112	18.1%	-6000	7	-112	20000	74	5.8%	20
6	109	17.6%	-4000	40	-75	24000	49	3.9%	24
7	89	14.4%	-2000	94	-37	28000	35	2.8%	28
8	19	3.1%	0	201	0	32000	31	2.5%	32
TOTAL	620		2000	242	37	36000	15	1.2%	36
			4000	252	75	40000	21	1.7%	40
2-GATE SORTS		645	6000	241	112	44000	16	1.3%	44
DETECTO	SORTS	FREQ%	8000	159	149	48000	12	0.9%	48
8			10000	102	187	52000	6	0.5%	52
9	49	7.6%	12000	65	224	56000	9	0.7%	56
10	82	12.7%	14000	34	261	60000	10	0.8%	60
11	116	18.0%	16000	19	299	64000	4	0.3%	64
12	112	17.4%	18000	10	336	68000	9	0.7%	68
13	127	19.7%	20000	0	373	72000	6	0.5%	72
14	107	16.6%	22000	0	410	76000	5	0.4%	76
15	52	8.1%	24000	0	448	80000	2	0.2%	80
TOTAL	645		26000	0	485	84000	3	0.2%	84
			>28000	0	0	>84000	32	2.5%	>84
			TOTAL	1483		TOTAL	1265		

HPE	1265	GATE1	1265
MPE	802	GATE2	645
DISE	673		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 02-Nov-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 02-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 02-Nov-92

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.81 tons	75.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	42.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			96.4%
EQUIVALENT SOIL-IN-GROUND	2.22 yd³	60.0 yd³	62.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	22,558 kBq		
MAXIMUM/SORT	944 kBq		
MINIMUM/SORT	2.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	12,980 kBq	7,099 kBq	
MAXIMUM/SORT	590 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	4,627 Bq/kg	94 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:37 AM	
PLANT STARTUP TIME		0.62 hr
PROCESSING END	04:56 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.57 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.31 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.13 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.18 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		81.3%

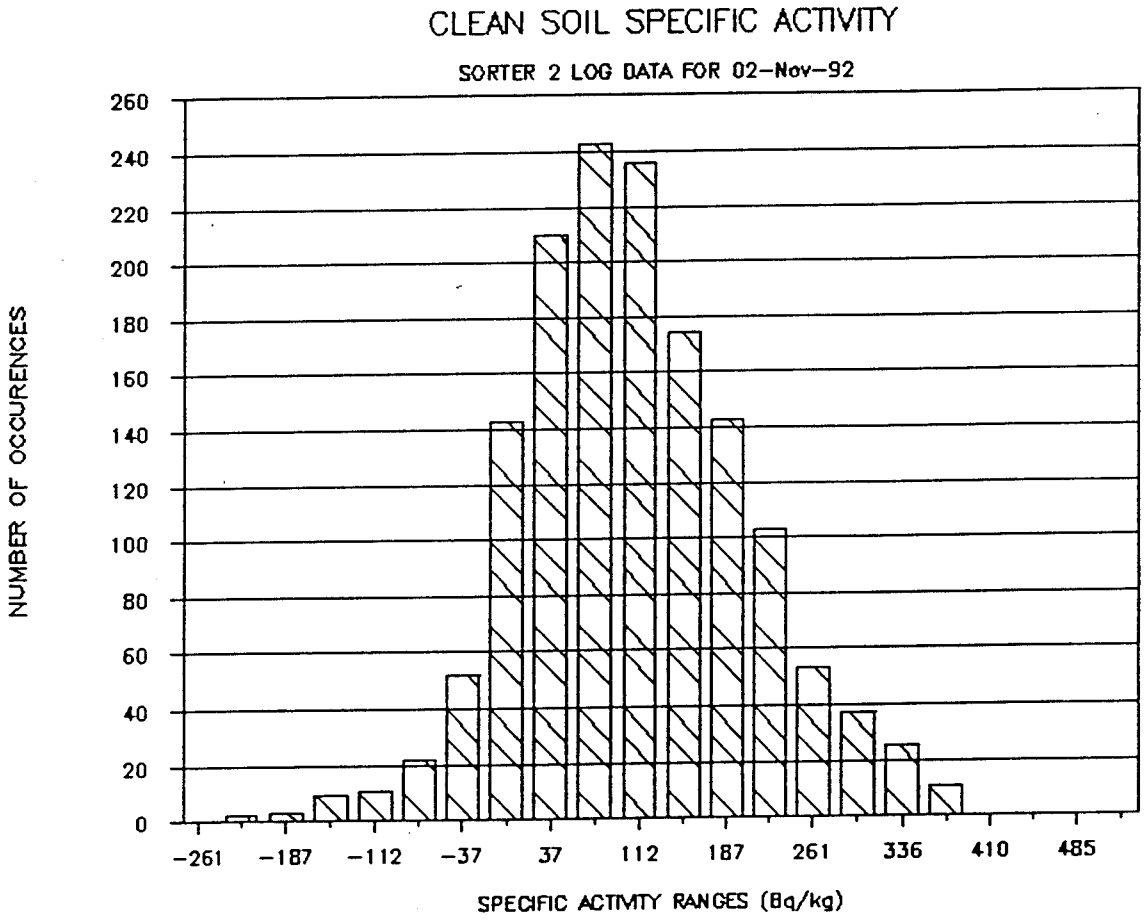
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,559	
NONPROCESS RECORDS (Test, calibration, etc)	13	
20-SEC PROCESS RECORDS	1,464	
TOTAL SORT	13	MD>0 & MND=0
NO SORT	531	AD=0 & MD=0 & MND>0
SOME SORT	920	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

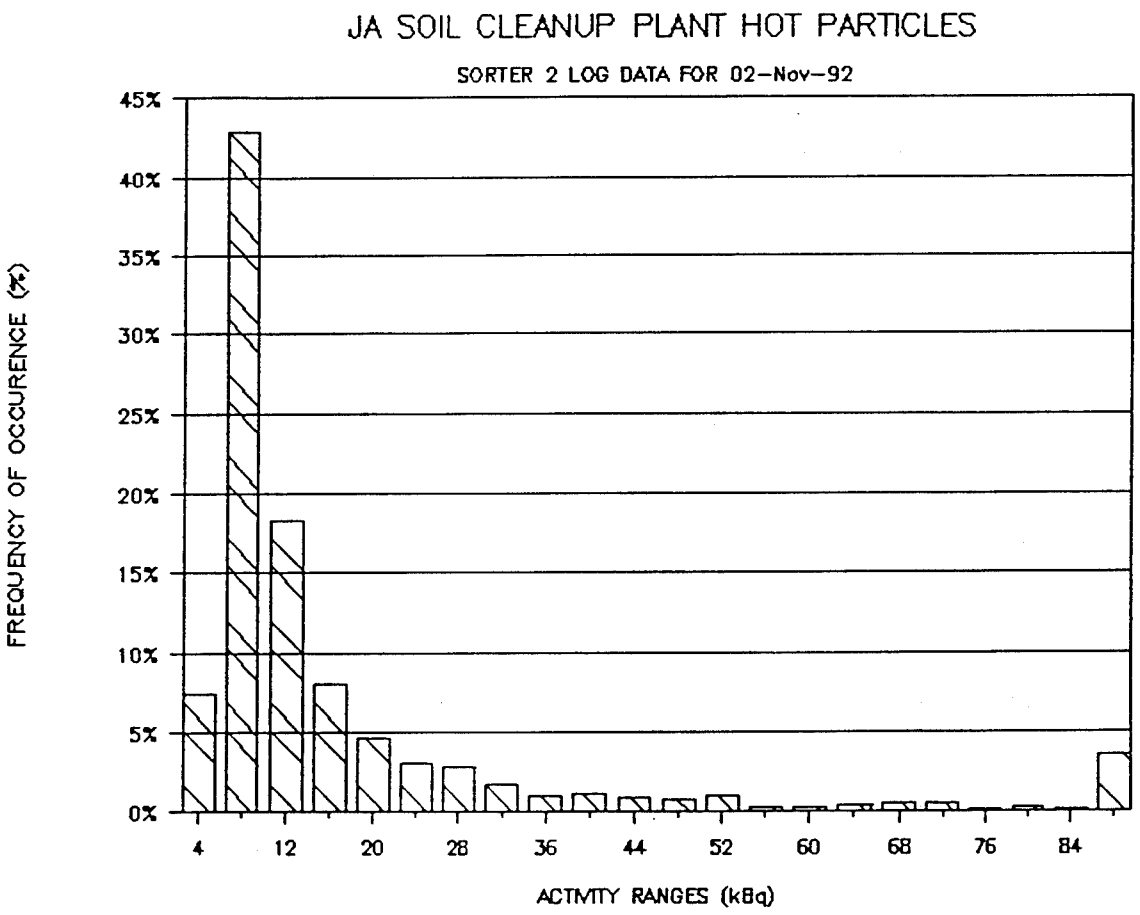
2-SEC COUNT PERIODS		14,640	
2-SEC RECORDS WITH SORTS		1,095	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	257	75.6%
	3 DETECTORS	66	19.4%
	4 DETECTORS	15	4.4%
	5 DETECTORS	1	0.3%
	6 DETECTORS	1	0.3%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	340	
NET 2-SEC RECORDS WITH SORTS		755	
2-SEC PERIODS WITH NO SORTS		13,885	
AVG TIME BETWEEN 2-SEC SORTS		38.8	sec

1-GATE SORTS		570	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	30	5.3%	-14000	0	-261	4000	81	7.4%	4
2	112	19.6%	-12000	2	-224	8000	470	42.9%	8
3	123	21.6%	-10000	3	-187	12000	201	18.4%	12
4	106	18.6%	-8000	9	-149	16000	88	8.0%	16
5	86	15.1%	-6000	11	-112	20000	51	4.7%	20
6	74	13.0%	-4000	22	-75	24000	34	3.1%	24
7	34	6.0%	-2000	52	-37	28000	31	2.8%	28
8	5	0.9%	0	143	0	32000	19	1.7%	32
TOTAL	570		2000	210	37	36000	11	1.0%	36
			4000	243	75	40000	12	1.1%	40
2-GATE SORTS		525	6000	236	112	44000	10	0.9%	44
DETECTO	SORTS	FREQ%	8000	174	149	48000	9	0.8%	48
8			10000	143	187	52000	11	1.0%	52
9	67	12.8%	12000	103	224	56000	3	0.3%	56
10	93	17.7%	14000	53	261	60000	3	0.3%	60
11	129	24.6%	16000	37	299	64000	4	0.4%	64
12	95	18.1%	18000	25	336	68000	6	0.5%	68
13	79	15.0%	20000	11	373	72000	5	0.5%	72
14	50	9.5%	22000	0	410	76000	2	0.2%	76
15	12	2.3%	24000	0	448	80000	3	0.3%	80
TOTAL	525		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	39	3.6%	>84
			TOTAL	1477		TOTAL	1095		

HPE	1080	GATE1	1095
MPE	2125	GATE2	525
DISE	985		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 02-Nov-92
NUMBER OF OCCURENCES
0
20
40
60
80
100
120
140
160
180
200
220
240
260
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 02-Nov-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 31-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m«		
GROUND SOIL DENSITY	1.65 tons/m«		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.98 tons	73.0 tons	
MAXIMUM/SORT	8 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.7%
EQUIVALENT SOIL-IN-GROUND	0.78 yd«	57.8 yd«	58.6 yd«/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,859 kBq		
MAXIMUM/SORT	1,072 kBq		
MINIMUM/SORT	3.0 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,372 kBq	3,276 kBq	
MAXIMUM/SORT	606 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-15 kBq	
SPECIFIC ACTIVITY	7,491 Bq/kg	45 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:49 AM	
PLANT STARTUP TIME		0.83 hr
PROCESSING END	04:31 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.98 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.69 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.67 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.03 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		76.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,296	
NONPROCESS RECORDS (Test, calibration, etc)	45	
20-SEC PROCESS RECORDS	1,380	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	785	AD=0 & MD=0 & MND>0
SOME SORT	591	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	4	
0<AD<1kBq & MD>0	2	
AD=0 & MD	4	
AD<0 & MD	0	

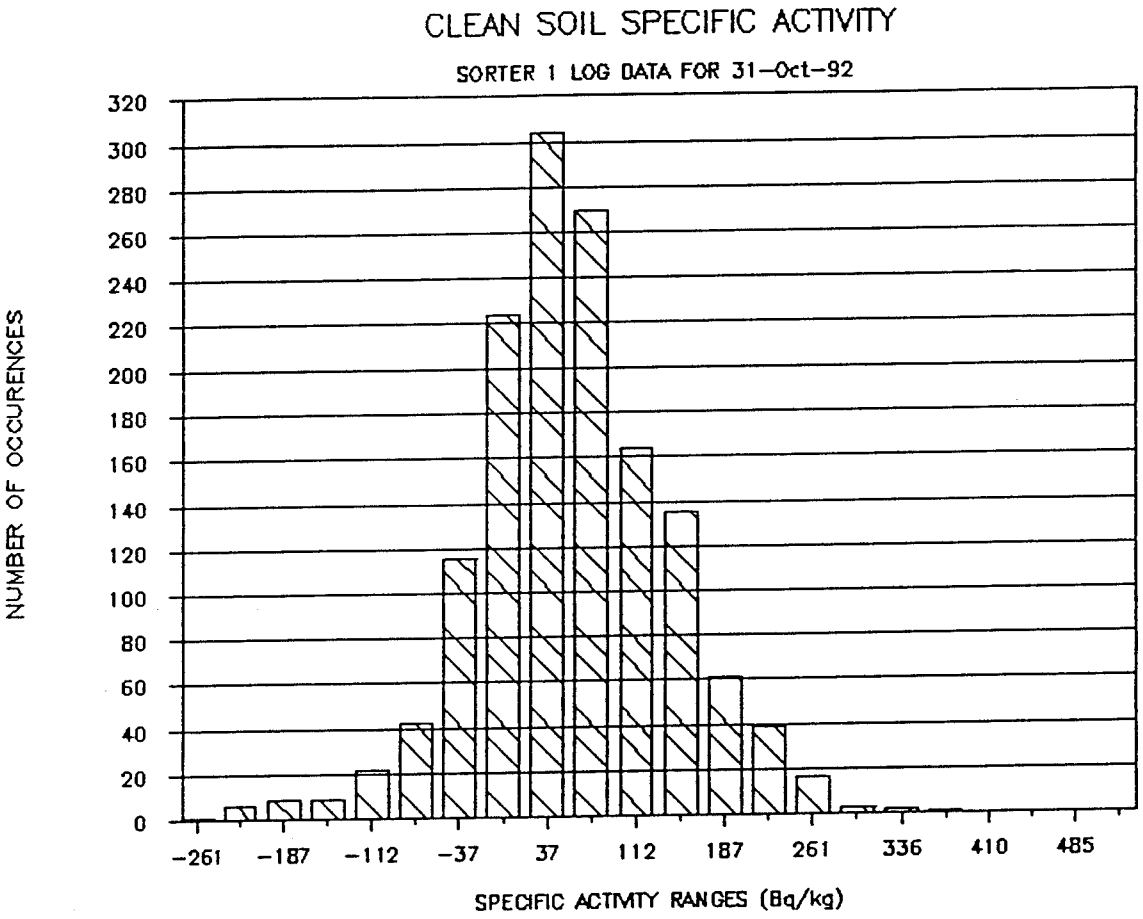
2-SEC COUNT PERIODS	13,800	
2-SEC RECORDS WITH SORTS	916	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	213	80.1%
3 DETECTORS	47	17.7%
4 DETECTORS	5	1.9%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	266	
NET 2-SEC RECORDS WITH SORTS	650	
2-SEC PERIODS WITH NO SORTS	13,150	
AVG TIME BETWEEN 2-SEC SORTS	42.5	sec

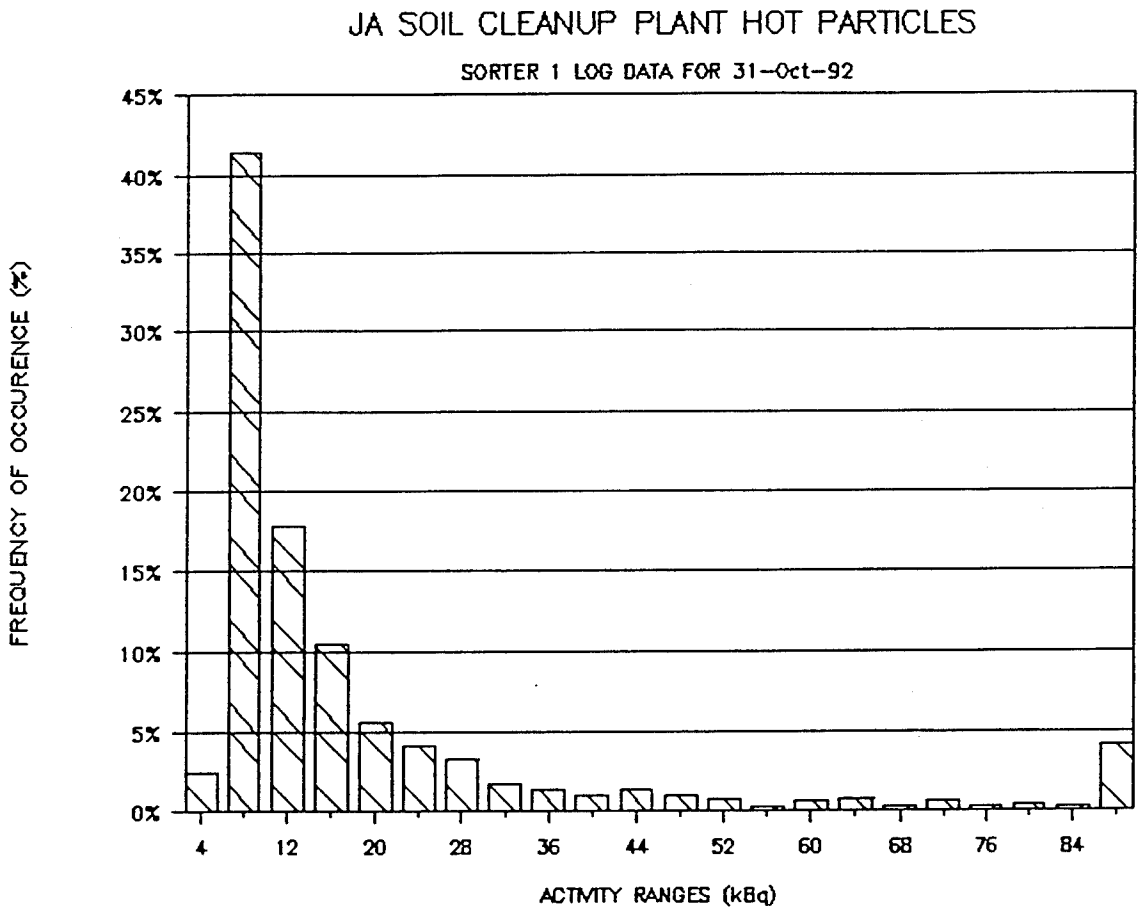
1-GATE SORTS		466	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	5	1.1%	-14000	1	-261
2	22	4.7%	-12000	6	-224
3	69	14.8%	-10000	9	-187
4	79	17.0%	-8000	9	-149
5	84	18.0%	-6000	22	-112
6	103	22.1%	-4000	42	-75
7	78	16.7%	-2000	116	-37
8	26	5.6%	0	224	0
TOTAL	466		2000	304	37
			4000	270	75
2-GATE SORTS		450	6000	164	112
DETECTO	SORTS	FREQ%	8000	135	149
8			10000	61	187
9	12	2.7%	12000	39	224
10	48	10.7%	14000	17	261
11	78	17.3%	16000	3	299
12	97	21.6%	18000	2	336
13	88	19.6%	20000	1	373
14	77	17.1%	22000	0	410
15	50	11.1%	24000	0	448
TOTAL	450		26000	0	485
			>28000	0	0
			TOTAL	1425	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	22	2.4%	4
8000	380	41.5%	8
12000	163	17.8%	12
16000	95	10.4%	16
20000	51	5.6%	20
24000	38	4.1%	24
28000	30	3.3%	28
32000	16	1.7%	32
36000	12	1.3%	36
40000	9	1.0%	40
44000	12	1.3%	44
48000	9	1.0%	48
52000	7	0.8%	52
56000	3	0.3%	56
60000	6	0.7%	60
64000	7	0.8%	64
68000	3	0.3%	68
72000	6	0.7%	72
76000	3	0.3%	76
80000	4	0.4%	80
84000	2	0.2%	84
>84000	38	4.1%	>84
TOTAL	916		

HPE	908	GATE1	916
MPE	563	GATE2	450
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 31-Oct-92
NUMBER OF OCCURENCES
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 31-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 31-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.83 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.52 tons	74.1 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.0%
EQUIVALENT SOIL-IN-GROUND	1.21 yd³	58.7 yd³	59.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	19,209 kBq		
MAXIMUM/SORT	672 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	8,478 kBq	6,514 kBq	
MAXIMUM/SORT	499 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-11 kBq	
SPECIFIC ACTIVITY	5,563 Bq/kg	88 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:49 AM		
PLANT STARTUP TIME		0.83 hr	
PROCESSING END	04:42 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.80 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		8.88 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.84 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.04 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		78.3%	

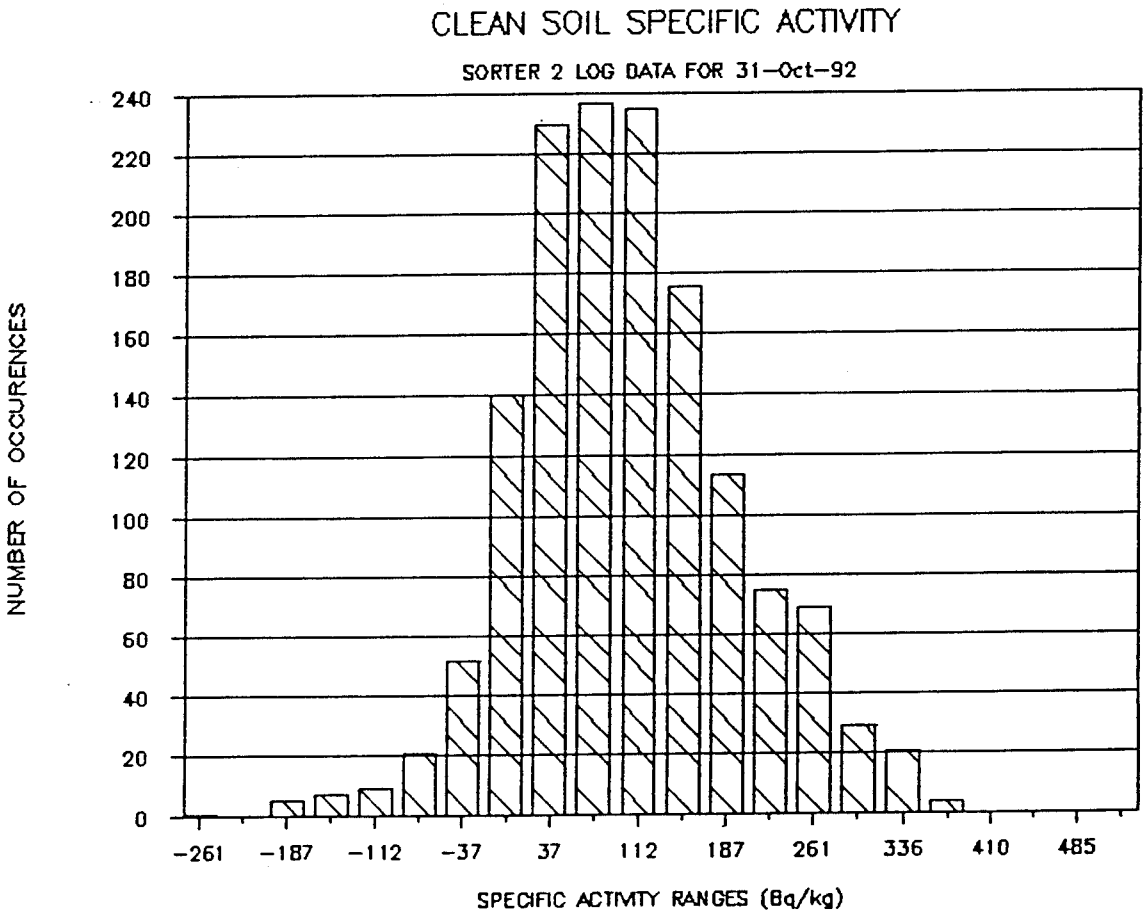
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,272	
NONPROCESS RECORDS (Test, calibration, etc)	14	
20-SEC PROCESS RECORDS	1,411	
TOTAL SORT	6	MD>0 & MND=0
NO SORT	684	AD=0 & MD=0 & MND>0
SOME SORT	719	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	2	
0<AD<1kBq & MD>0	0	
AD=0 & MD	2	
AD<0 & MD	0	

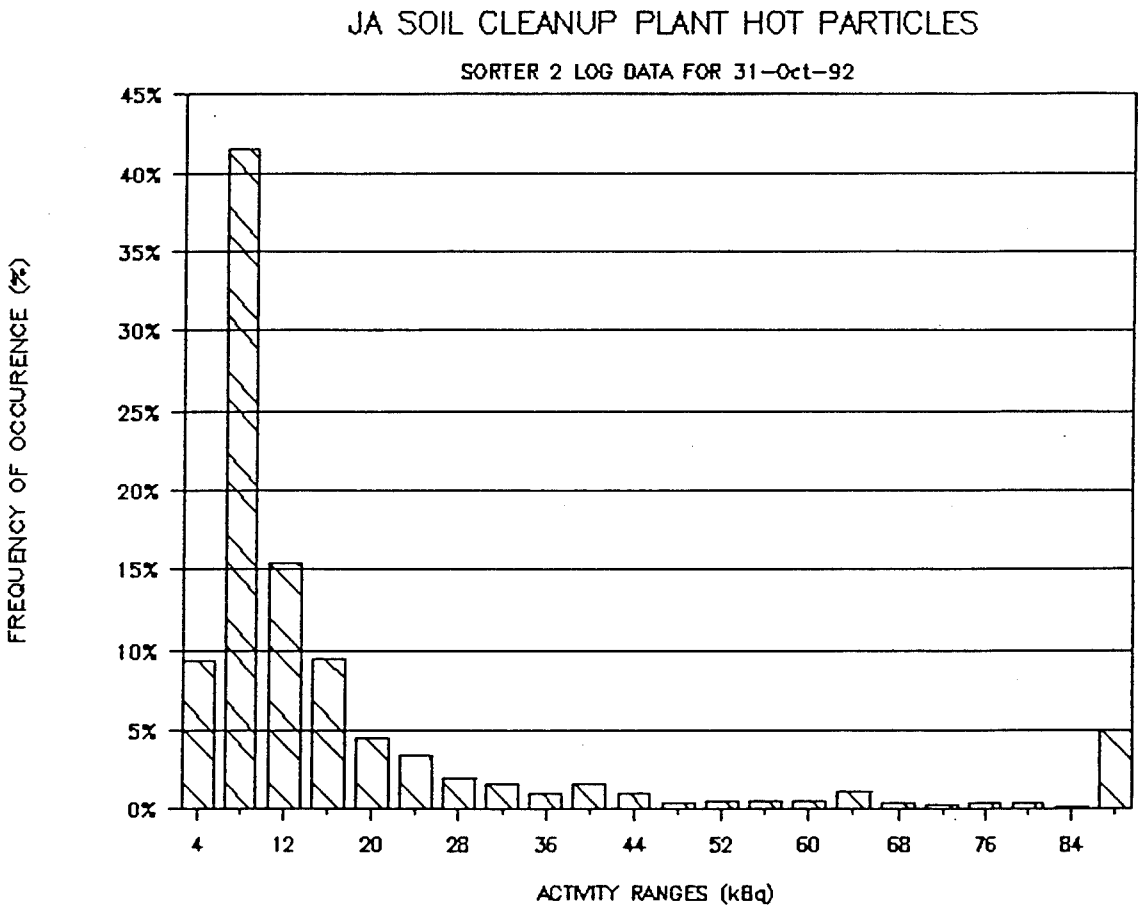
2-SEC COUNT PERIODS	14,110	
2-SEC RECORDS WITH SORTS	861	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	193	75.1%
3 DETECTORS	45	17.5%
4 DETECTORS	12	4.7%
5 DETECTORS	5	1.9%
6 DETECTORS	2	0.8%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	257	
NET 2-SEC RECORDS WITH SORTS	604	
2-SEC PERIODS WITH NO SORTS	13,506	
AVG TIME BETWEEN 2-SEC SORTS	46.7 sec	

1-GATE SORTS		439	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	21	4.8%	-14000	1	-261	4000	80	9.3%	4
2	52	11.8%	-12000	0	-224	8000	358	41.6%	8
3	89	20.3%	-10000	5	-187	12000	133	15.4%	12
4	92	21.0%	-8000	7	-149	16000	82	9.5%	16
5	85	19.4%	-6000	9	-112	20000	39	4.5%	20
6	61	13.9%	-4000	21	-75	24000	29	3.4%	24
7	33	7.5%	-2000	52	-37	28000	17	2.0%	28
8	6	1.4%	0	140	0	32000	14	1.6%	32
TOTAL	439		2000	230	37	36000	8	0.9%	36
			4000	237	75	40000	14	1.6%	40
2-GATE SORTS		422	6000	235	112	44000	8	0.9%	44
DETECTO	SORTS	FREQ%	8000	176	149	48000	3	0.3%	48
8			10000	114	187	52000	4	0.5%	52
9	44	10.4%	12000	75	224	56000	4	0.5%	56
10	55	13.0%	14000	69	261	60000	4	0.5%	60
11	97	23.0%	16000	29	299	64000	9	1.0%	64
12	90	21.3%	18000	21	336	68000	3	0.3%	68
13	76	18.0%	20000	4	373	72000	2	0.2%	72
14	50	11.8%	22000	0	410	76000	3	0.3%	76
15	10	2.4%	24000	0	448	80000	3	0.3%	80
TOTAL	422		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	43	5.0%	>84
			TOTAL	1425		TOTAL	861		

HPE	859	GATE1	861
HPE	956	GATE2	422
DISE	460		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 31-Oct-92
NUMBER OF OCCURENCES
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 31-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 30-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.92 tons	75.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.73 yd³	59.6 yd³	60.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,324 kBq		
MAXIMUM/SORT	613 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,324 kBq	1,052 kBq	
MAXIMUM/SORT	405 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-13 kBq	
SPECIFIC ACTIVITY	5,785 Bq/kg	14 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:52 AM	
PLANT STARTUP TIME		0.88 hr
PROCESSING END	04:51 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.65 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.98 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.89 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.09 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		78.8%

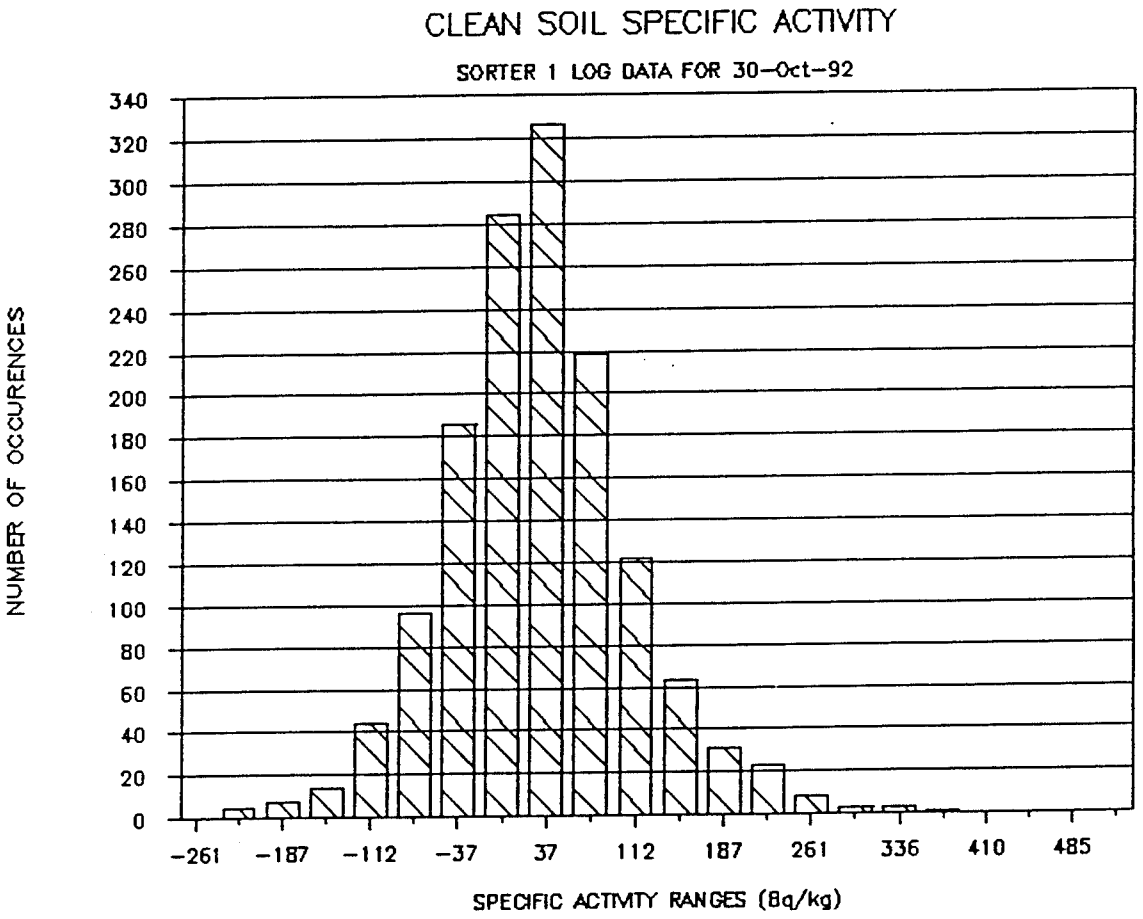
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,117
NONPROCESS RECORDS (Test, calibration, etc)		17
20-SEC PROCESS RECORDS		1,420
TOTAL SORT		4 MD>0 & MND=0
NO SORT		976 AD=0 & MD=0 & MND>0
SOME SORT		440 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

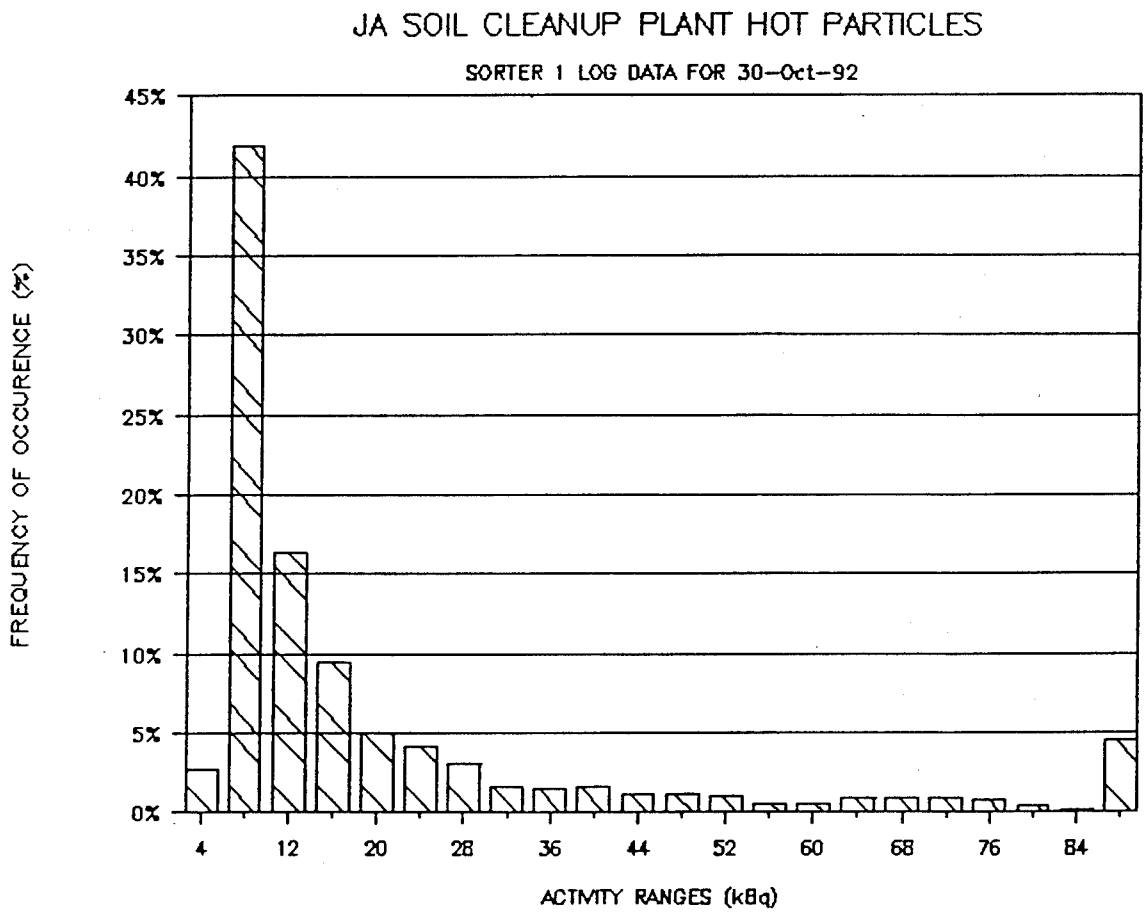
2-SEC COUNT PERIODS	14,200	
2-SEC RECORDS WITH SORTS	697	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	163	78.7%
3 DETECTORS	35	16.9%
4 DETECTORS	7	3.4%
5 DETECTORS	2	1.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	207	
NET 2-SEC RECORDS WITH SORTS	490	
2-SEC PERIODS WITH NO SORTS	13,710	
AVG TIME BETWEEN 2-SEC SORTS	58.0 sec	

1-GATE SORTS		354	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	9	2.5%	-14000	0	-261	4000	19	2.7%	4
2	18	5.1%	-12000	5	-224	8000	292	41.9%	8
3	44	12.4%	-10000	7	-187	12000	114	16.4%	12
4	57	16.1%	-8000	14	-149	16000	66	9.5%	16
5	55	15.5%	-6000	44	-112	20000	35	5.0%	20
6	80	22.6%	-4000	96	-75	24000	29	4.2%	24
7	72	20.3%	-2000	186	-37	28000	21	3.0%	28
8	19	5.4%	0	285	0	32000	11	1.6%	32
TOTAL	354		2000	327	37	36000	10	1.4%	36
			4000	219	75	40000	11	1.6%	40
2-GATE SORTS		343	6000	122	112	44000	8	1.1%	44
DETECTO	SORTS	FREQ%	8000	63	149	48000	8	1.1%	48
8			10000	31	187	52000	7	1.0%	52
9	13	3.8%	12000	23	224	56000	4	0.6%	56
10	33	9.6%	14000	8	261	60000	4	0.6%	60
11	64	18.7%	16000	3	299	64000	6	0.9%	64
12	54	15.7%	18000	3	336	68000	6	0.9%	68
13	57	16.6%	20000	1	373	72000	6	0.9%	72
14	75	21.9%	22000	0	410	76000	5	0.7%	76
15	47	13.7%	24000	0	448	80000	3	0.4%	80
TOTAL	343		26000	0	485	84000	1	0.1%	84
			>28000	0	0	>84000	31	4.4%	>84
			TOTAL	1437		TOTAL	697		

HPE	679	GATE1	697
MPE	391	GATE2	343
DISE	304		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 30-Oct-92
NUMBER OF OCCURENCES
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 30-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 30-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.87 tons	75.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.9%
EQUIVALENT SOIL-IN-GROUND	0.69 yd³	59.6 yd³	60.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,139 kBq		
MAXIMUM/SORT	264 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,511 kBq	4,214 kBq	
MAXIMUM/SORT	178 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	5,195 Bq/kg	56 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:52 AM	
PLANT STARTUP TIME		0.88 hr
PROCESSING END	04:52 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.63 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.00 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.89 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.11 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		78.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		2,019
NONPROCESS RECORDS (Test, calibration, etc)		18
20-SEC PROCESS RECORDS		1,420
TOTAL SORT		2 MD>0 & MND=0
NO SORT		878 AD=0 & MD=0 & MND>0
SOME SORT		540 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

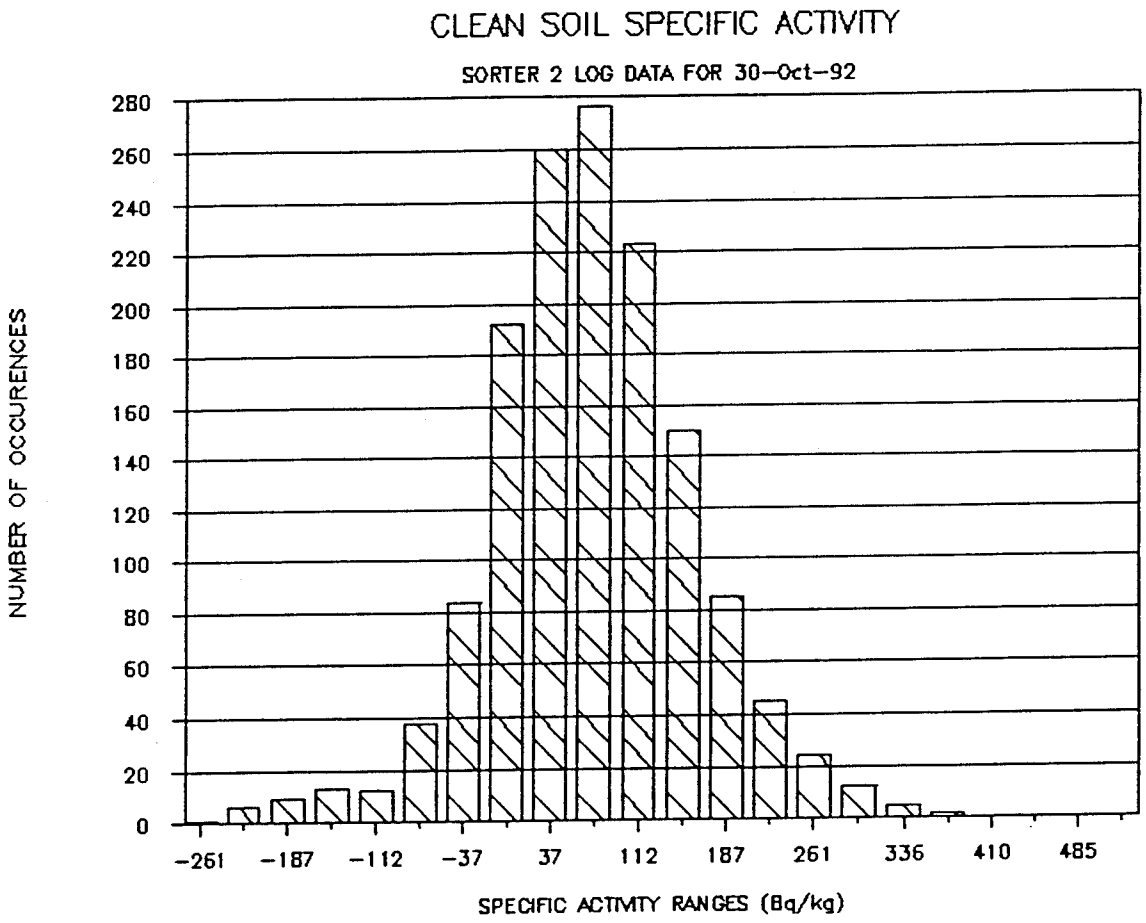
2-SEC COUNT PERIODS		14,200	
2-SEC RECORDS WITH SORTS		599	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	136	85.5%
	3 DETECTORS	21	13.2%
	4 DETECTORS	2	1.3%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	159	
NET 2-SEC RECORDS WITH SORTS		440	
2-SEC PERIODS WITH NO SORTS		13,760	
AVG TIME BETWEEN 2-SEC SORTS		64.5	sec

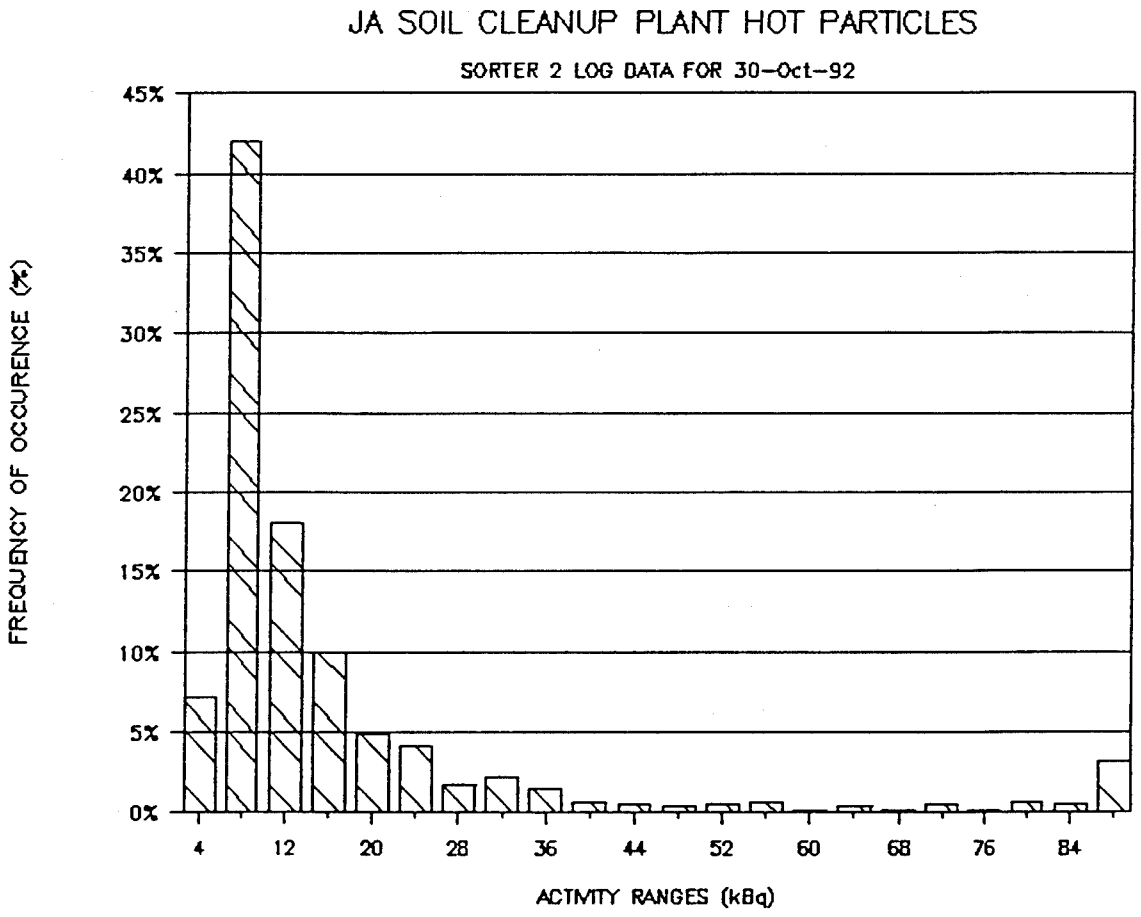
1-GATE SORTS	298	ACT_ND	NUMBER	SPEC_A
DETECTO SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1 14	4.7%	-14000	1	-261
2 38	12.8%	-12000	6	-224
3 53	17.8%	-10000	9	-187
4 52	17.4%	-8000	13	-149
5 44	14.8%	-6000	12	-112
6 54	18.1%	-4000	38	-75
7 34	11.4%	-2000	84	-37
8 9	3.0%	0	192	0
TOTAL 298		2000	260	37
		4000	277	75
2-GATE SORTS	301	6000	223	112
DETECTO SORTS	FREQ%	8000	150	149
8		10000	85	187
9 29	9.6%	12000	45	224
10 44	14.6%	14000	24	261
11 54	17.9%	16000	12	299
12 57	18.9%	18000	5	336
13 62	20.6%	20000	2	373
14 41	13.6%	22000	0	410
15 14	4.7%	24000	0	448
TOTAL 301		26000	0	485
		>28000	0	0
		TOTAL	1438	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	43	7.2%	4
8000	252	42.1%	8
12000	108	18.0%	12
16000	60	10.0%	16
20000	29	4.8%	20
24000	25	4.2%	24
28000	10	1.7%	28
32000	13	2.2%	32
36000	9	1.5%	36
40000	4	0.7%	40
44000	3	0.5%	44
48000	2	0.3%	48
52000	3	0.5%	52
56000	4	0.7%	56
60000	1	0.2%	60
64000	2	0.3%	64
68000	1	0.2%	68
72000	3	0.5%	72
76000	1	0.2%	76
80000	4	0.7%	80
84000	3	0.5%	84
>84000	19	3.2%	>84
TOTAL	599		

HPE	607	GATE1	599
MPE	548	GATE2	301
DISE	141		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 30-Oct-92
NUMBER OF OCCURENCES
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 30-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 29-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.66 tons	61.3 tons	
MAXIMUM/SORT		53.6 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				98.9%
EQUIVALENT SOIL-IN-GROUND		0.52 yd³	48.6 yd³	49.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		10,490 kBq		
MAXIMUM/SORT		355 kBq		
MINIMUM/SORT		3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		3,656 kBq	773 kBq	
MAXIMUM/SORT		203 kBq	19 kBq	
MINIMUM/SORT		0 Bq	-10 kBq	
SPECIFIC ACTIVITY		5,545 Bq/kg	13 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	09:15 AM		
PLANT STARTUP TIME		2.26 hr	
PROCESSING END	04:42 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.80 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		7.44 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.42 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.02 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		64.2%	

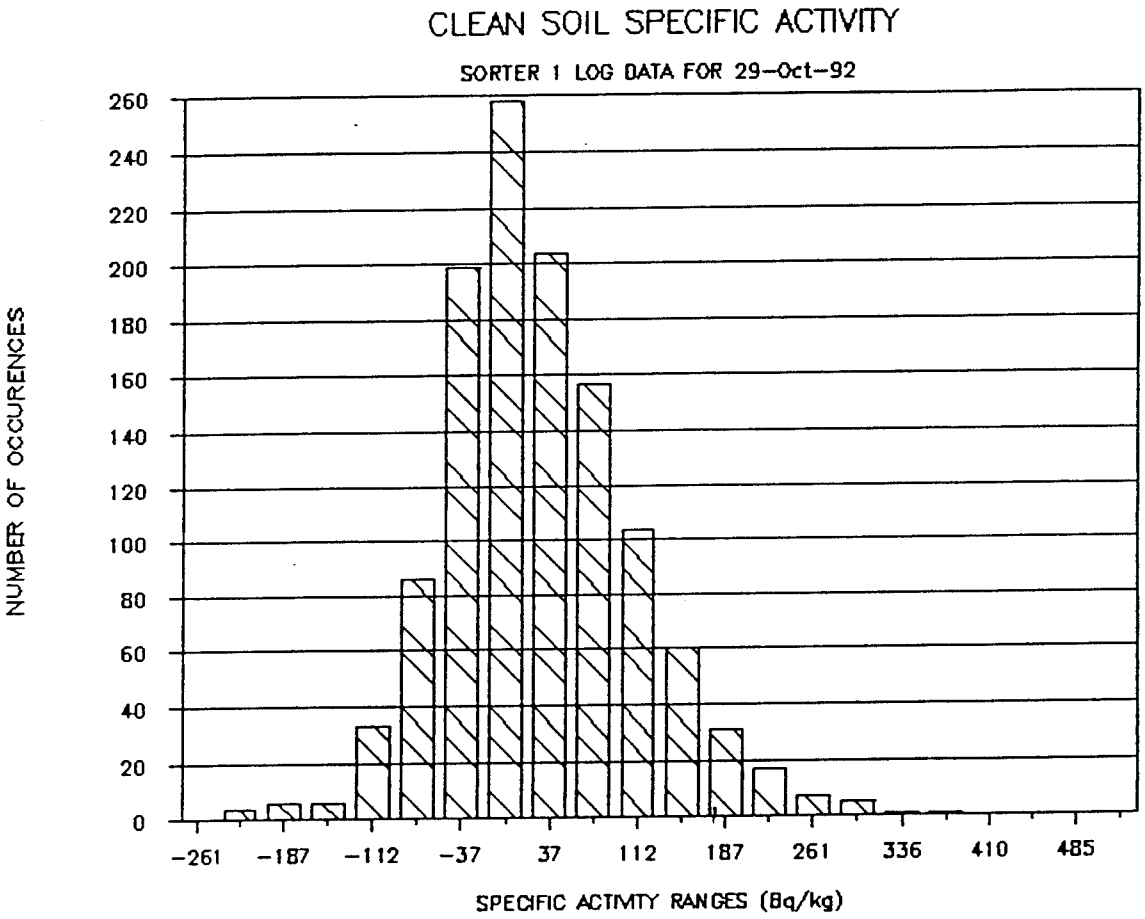
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,601
NONPROCESS RECORDS (Test, calibration, etc)		23
20-SEC PROCESS RECORDS		1,156
TOTAL SORT		4 MD>0 & MND=0
NO SORT		848 AD=0 & MD=0 & MND>0
SOME SORT		304 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

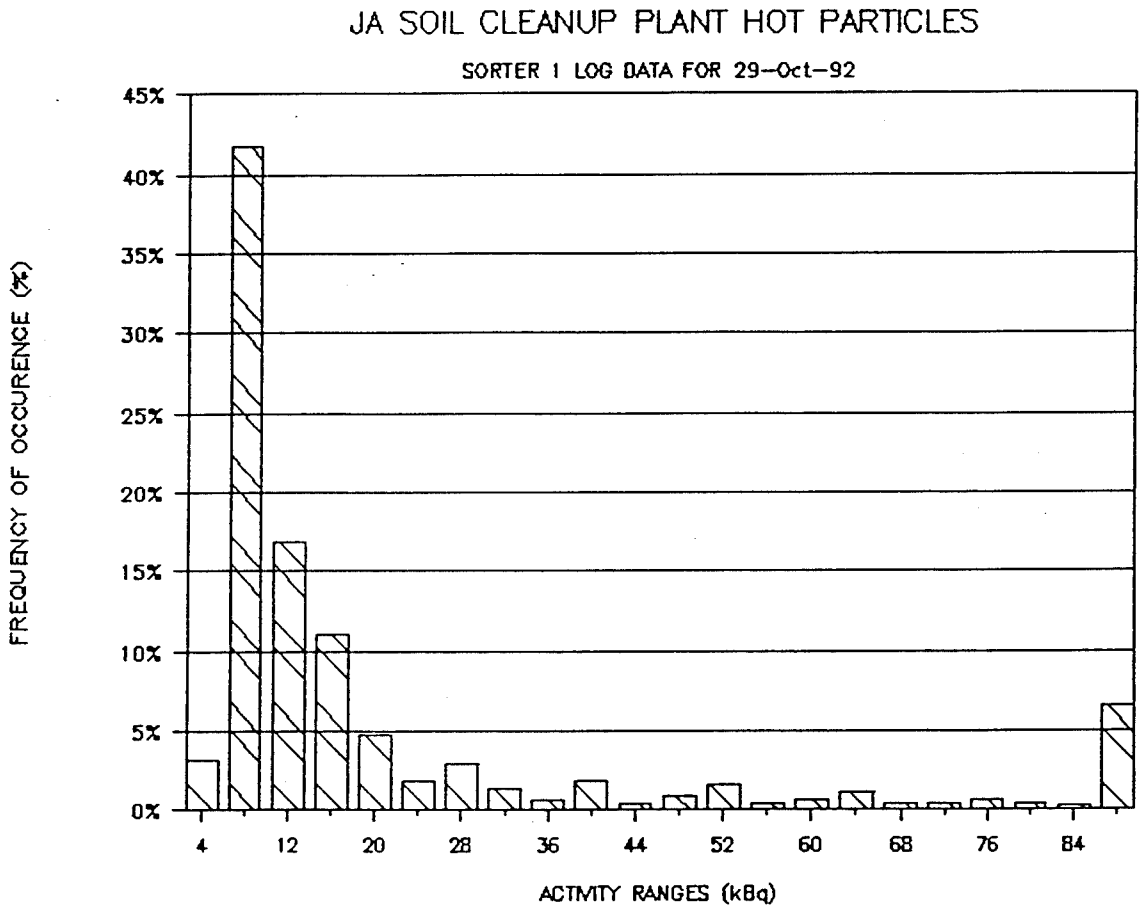
2-SEC COUNT PERIODS		11,560	
2-SEC RECORDS WITH SORTS		445	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	107	78.7%
	3 DETECTORS	25	18.4%
	4 DETECTORS	4	2.9%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	136	
NET 2-SEC RECORDS WITH SORTS		309	
2-SEC PERIODS WITH NO SORTS		11,251	
AVG TIME BETWEEN 2-SEC SORTS		74.8	sec

1-GATE SORTS		229	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	5	2.2%	-14000	0	-261	4000	14	3.1%	4
2	21	9.2%	-12000	4	-224	8000	186	41.8%	8
3	44	19.2%	-10000	6	-187	12000	75	16.9%	12
4	36	15.7%	-8000	6	-149	16000	49	11.0%	16
5	50	21.8%	-6000	33	-112	20000	21	4.7%	20
6	32	14.0%	-4000	86	-75	24000	8	1.8%	24
7	26	11.4%	-2000	199	-37	28000	13	2.9%	28
8	15	6.6%	0	258	0	32000	6	1.3%	32
TOTAL	229		2000	204	37	36000	3	0.7%	36
			4000	157	75	40000	8	1.8%	40
2-GATE SORTS		216	6000	104	112	44000	2	0.4%	44
DETECTO	SORTS	FREQ%	8000	60	149	48000	4	0.9%	48
8			10000	31	187	52000	7	1.6%	52
9	9	4.2%	12000	17	224	56000	2	0.4%	56
10	38	17.6%	14000	7	261	60000	3	0.7%	60
11	46	21.3%	16000	5	299	64000	5	1.1%	64
12	40	18.5%	18000	1	336	68000	2	0.4%	68
13	40	18.5%	20000	1	373	72000	2	0.4%	72
14	26	12.0%	22000	0	410	76000	3	0.7%	76
15	17	7.9%	24000	0	448	80000	2	0.4%	80
TOTAL	216		26000	0	485	84000	1	0.2%	84
			>28000	0	0	>84000	29	6.5%	>84
			TOTAL	1179		TOTAL	445		

HPE	435	GATE1	445
MPE	244	GATE2	216
DISE	307		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 29-Oct-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 29-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 29-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.80 ± 0.01 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.63 tons	49.0 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.7%
EQUIVALENT SOIL-IN-GROUND	0.50 yd³	38.8 yd³	39.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,158 kBq		
MAXIMUM/SORT	408 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,322 kBq	2,211 kBq	
MAXIMUM/SORT	246 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	3,713 Bq/kg	45 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	10:35 AM	
PLANT STARTUP TIME		3.59 hr
PROCESSING END	04:46 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.74 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		6.18 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.14 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.04 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		51.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,202
NONPROCESS RECORDS (Test, calibration, etc)		34
20-SEC PROCESS RECORDS		926
TOTAL SORT		5 MD>0 & MND=0
NO SORT		651 AD=0 & MD=0 & MND>0
SOME SORT		270 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

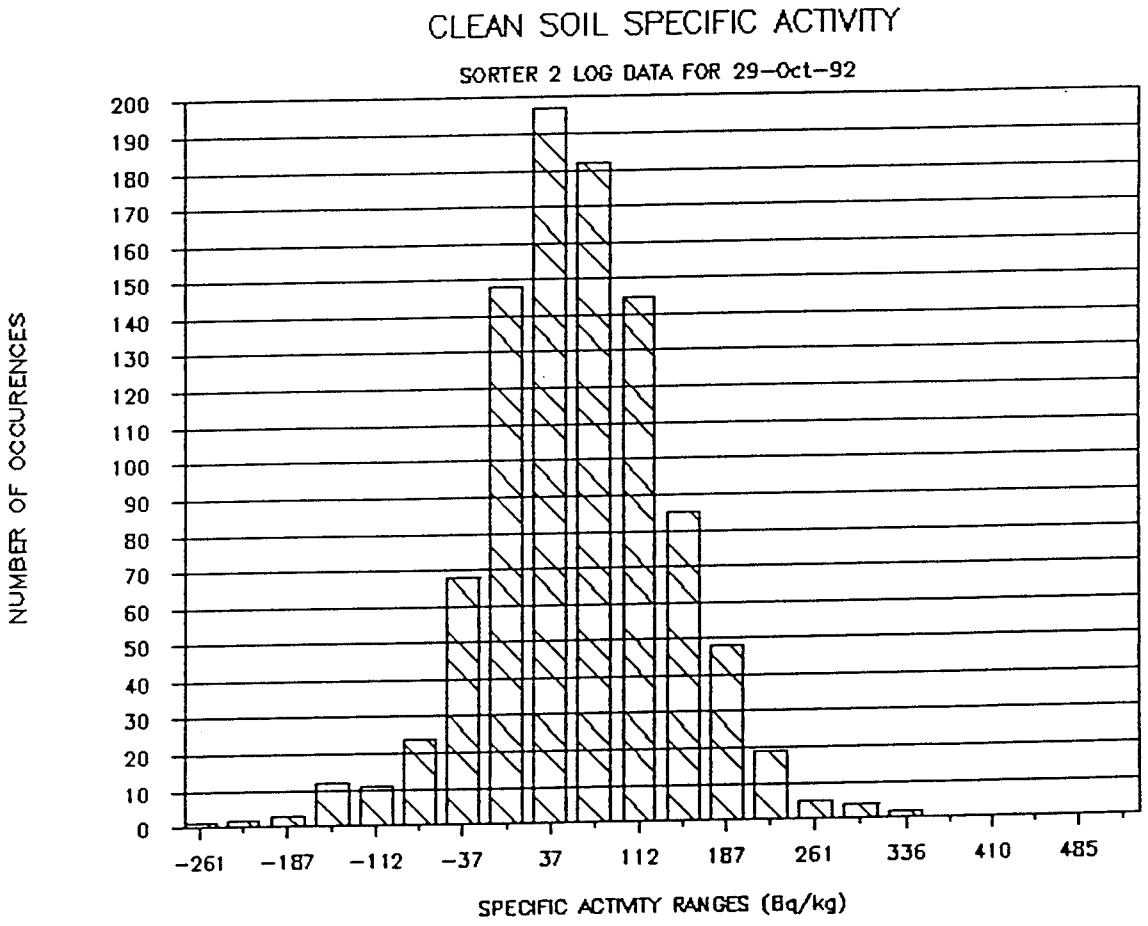
JA SOIL CLEANUP PLANT LOG SUMMARY

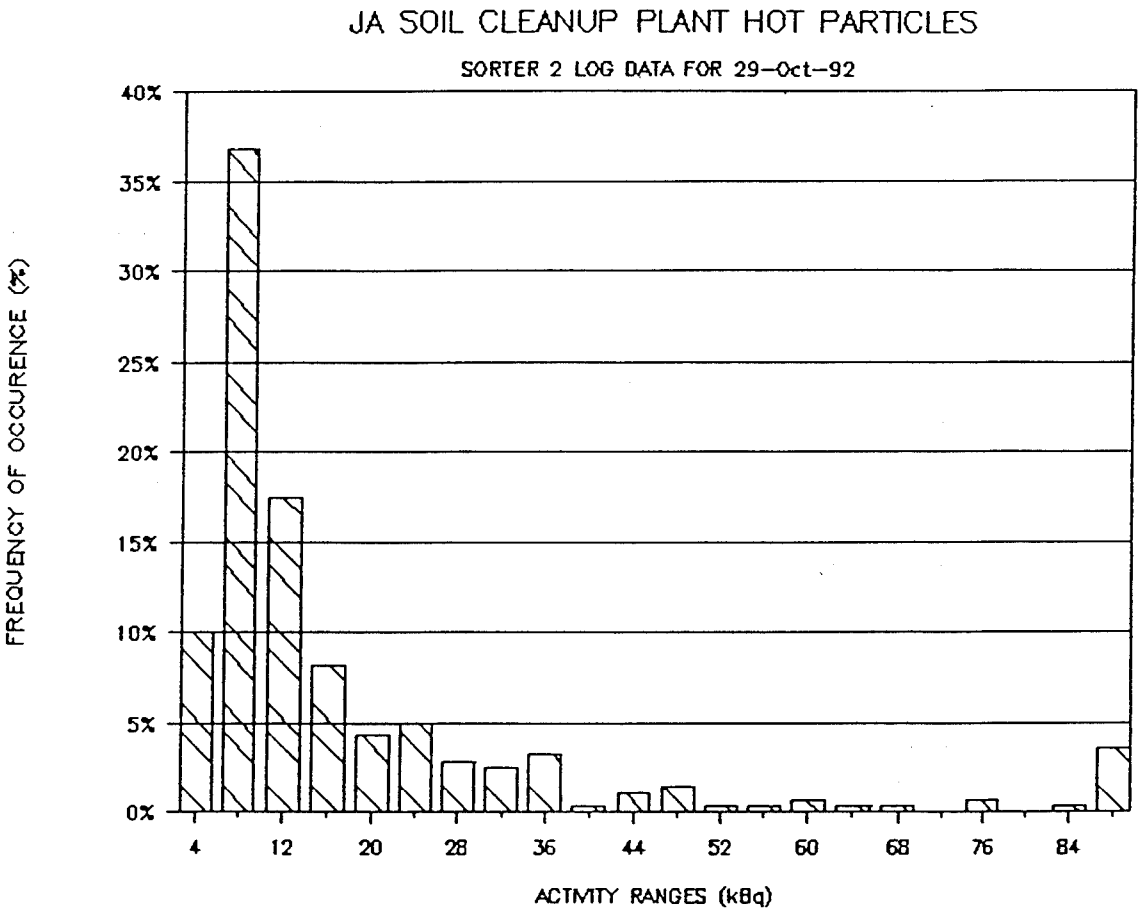
2-SEC COUNT PERIODS	9,260	
2-SEC RECORDS WITH SORTS	276	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	60	77.9%
3 DETECTORS	14	18.2%
4 DETECTORS	3	3.9%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	77	
NET 2-SEC RECORDS WITH SORTS	199	
2-SEC PERIODS WITH NO SORTS	9,061	
AVG TIME BETWEEN 2-SEC SORTS	93.1	sec

1-GATE SORTS		148	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	6	4.0%	-14000	1	-261	4000	28	10.0%	4
2	22	14.6%	-12000	2	-224	8000	103	36.8%	8
3	26	17.2%	-10000	3	-187	12000	49	17.5%	12
4	24	15.9%	-8000	12	-149	16000	23	8.2%	16
5	26	17.2%	-6000	11	-112	20000	12	4.3%	20
6	25	16.6%	-4000	24	-75	24000	14	5.0%	24
7	19	12.6%	-2000	68	-37	28000	8	2.9%	28
8	3	2.0%	0	148	0	32000	7	2.5%	32
TOTAL	151		2000	197	37	36000	9	3.2%	36
			4000	182	75	40000	1	0.4%	40
2-GATE SORTS		128	6000	145	112	44000	3	1.1%	44
DETECTO	SORTS	FREQ%	8000	85	149	48000	4	1.4%	48
8			10000	48	187	52000	1	0.4%	52
9	11	8.5%	12000	19	224	56000	1	0.4%	56
10	20	15.5%	14000	5	261	60000	2	0.7%	60
11	27	20.9%	16000	4	299	64000	1	0.4%	64
12	19	14.7%	18000	2	336	68000	1	0.4%	68
13	22	17.1%	20000	0	373	72000	0	0.0%	72
14	20	15.5%	22000	0	410	76000	2	0.7%	76
15	10	7.8%	24000	0	448	80000	0	0.0%	80
TOTAL	129		26000	0	485	84000	1	0.4%	84
			>28000	0	0	>84000	10	3.6%	>84
			TOTAL	956		TOTAL	280		

HPE	270	GATE1	276
MPE	282	GATE2	128
DISE	380		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 29-Oct-92
NUMBER OF OCCURENCES
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 29-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 28-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.93 tons	77.5 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.74 yd³	61.4 yd³	62.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	21,254 kBq		
MAXIMUM/SORT	2,188 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,198 kBq	3,712 kBq	
MAXIMUM/SORT	1236 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	7,736 Bq/kg	48 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:47 AM	
PLANT STARTUP TIME		0.79 hr
PROCESSING END	05:00 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.51 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.21 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.13 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.08 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		81.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,392	
NONPROCESS RECORDS (Test, calibration, etc)	16	
20-SEC PROCESS RECORDS	1,463	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	852	AD=0 & MD=0 & MND>0
SOME SORT	611	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

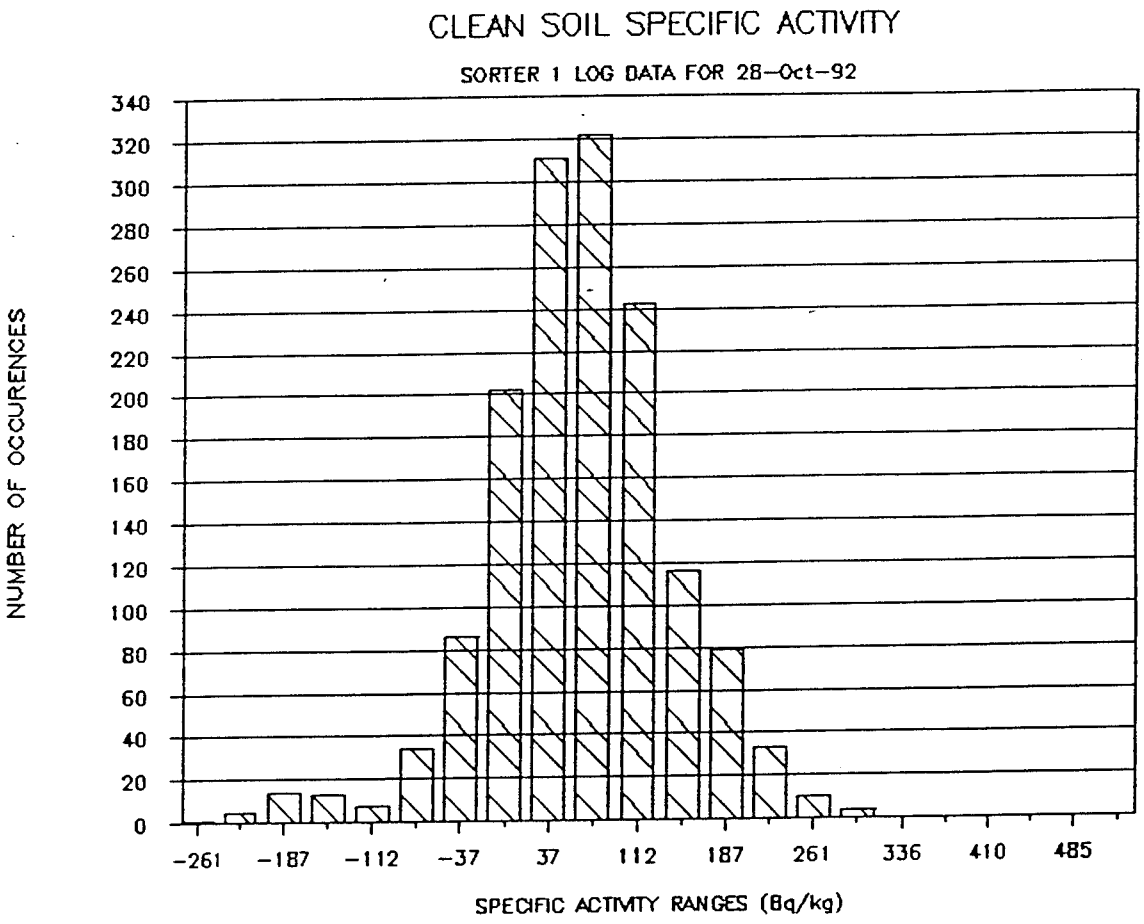
2-SEC COUNT PERIODS	14,630	
2-SEC RECORDS WITH SORTS	929	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	209	82.3%
3 DETECTORS	37	14.6%
4 DETECTORS	6	2.4%
5 DETECTORS	2	0.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	254	
NET 2-SEC RECORDS WITH SORTS	675	
2-SEC PERIODS WITH NO SORTS	13,955	
AVG TIME BETWEEN 2-SEC SORTS	43.3	sec

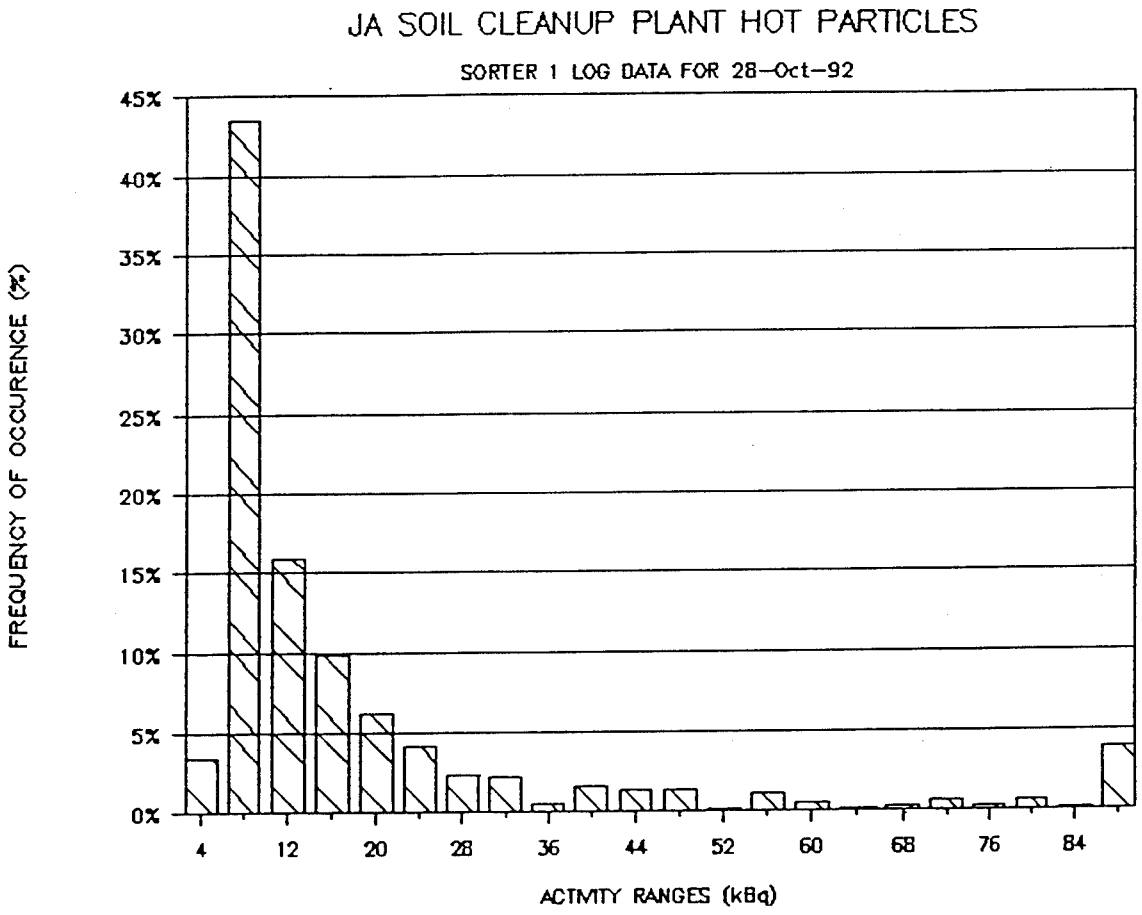
1-GATE SORTS	470	ACT_ND	NUMBER	SPEC_A
DETECTO SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1 21	4.5%	-14000	1	-261
2 50	10.6%	-12000	5	-224
3 78	16.6%	-10000	14	-187
4 79	16.8%	-8000	13	-149
5 88	18.7%	-6000	7	-112
6 74	15.7%	-4000	34	-75
7 57	12.1%	-2000	86	-37
8 23	4.9%	0	202	0
TOTAL 470		2000	311	37
		4000	322	75
2-GATE SORTS	459	6000	243	112
DETECTO SORTS	FREQ%	8000	116	149
8		10000	79	187
9 32	7.0%	12000	33	224
10 66	14.4%	14000	10	261
11 83	18.1%	16000	4	299
12 89	19.4%	18000	0	336
13 81	17.6%	20000	0	373
14 63	13.7%	22000	0	410
15 45	9.8%	24000	0	448
TOTAL 459		26000	0	485
		>28000	0	0
		TOTAL	1480	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	32	3.4%	4
8000	404	43.5%	8
12000	148	15.9%	12
16000	91	9.8%	16
20000	58	6.2%	20
24000	38	4.1%	24
28000	22	2.4%	28
32000	20	2.2%	32
36000	5	0.5%	36
40000	15	1.6%	40
44000	13	1.4%	44
48000	12	1.3%	48
52000	1	0.1%	52
56000	10	1.1%	56
60000	5	0.5%	60
64000	1	0.1%	64
68000	2	0.2%	68
72000	6	0.6%	72
76000	3	0.3%	76
80000	6	0.6%	80
84000	1	0.1%	84
>84000	36	3.9%	>84
TOTAL	929		

HPE	913	GATE1	929
MPE	477	GATE2	459
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 28-Oct-92
NUMBER OF OCCURENCES
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 28-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 28-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.93 tons	76.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.74 yd³	60.7 yd³	61.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	13,573 kBq		
MAXIMUM/SORT	362 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,732 kBq	6,136 kBq	
MAXIMUM/SORT	240 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,143 Bq/kg	80 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:47 AM		
PLANT STARTUP TIME		0.79 hr	
PROCESSING END	04:54 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.60 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.12 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		8.04 hr	
TOTAL SYSTEM PAUSE TIME		0.02 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.08 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		80.3%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,223	
NONPROCESS RECORDS (Test, calibration, etc)	66	
20-SEC PROCESS RECORDS	1,447	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	815	AD=0 & MD=0 & MND>0
SOME SORT	631	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	14,470	
2-SEC RECORDS WITH SORTS	776	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	205	83.7%
3 DETECTORS	31	12.7%
4 DETECTORS	8	3.3%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	245	
NET 2-SEC RECORDS WITH SORTS	531	
2-SEC PERIODS WITH NO SORTS	13,939	
AVG TIME BETWEEN 2-SEC SORTS	54.5	sec

1-GATE SORTS DETECTO	SORTS	402 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	11	2.5%	-14000	0	-261	4000	44	5.4%	4
2	69	15.9%	-12000	0	-224	8000	303	37.4%	8
3	63	14.5%	-10000	2	-187	12000	146	18.0%	12
4	84	19.4%	-8000	7	-149	16000	77	9.5%	16
5	85	19.6%	-6000	7	-112	20000	45	5.6%	20
6	72	16.6%	-4000	12	-75	24000	42	5.2%	24
7	39	9.0%	-2000	33	-37	28000	23	2.8%	28
8	10	2.3%	0	144	0	32000	22	2.7%	32
TOTAL	433		2000	228	37	36000	15	1.9%	36
			4000	310	75	40000	14	1.7%	40
2-GATE SORTS		374	6000	308	112	44000	11	1.4%	44
DETECTO	SORTS	FREQ%	8000	208	149	48000	6	0.7%	48
8			10000	123	187	52000	6	0.7%	52
9	22	5.8%	12000	53	224	56000	6	0.7%	56
10	50	13.3%	14000	35	261	60000	1	0.1%	60
11	79	21.0%	16000	7	299	64000	4	0.5%	64
12	92	24.4%	18000	2	336	68000	1	0.1%	68
13	67	17.8%	20000	0	373	72000	3	0.4%	72
14	52	13.8%	22000	0	410	76000	5	0.6%	76
15	15	4.0%	24000	0	448	80000	1	0.1%	80
TOTAL	377		26000	0	485	84000	2	0.2%	84
			>28000	0	0	>84000	33	4.1%	>84
			TOTAL	1479		TOTAL	810		

HPE	741	GATE1	776
MPE	575	GATE2	374
DISE	76		

REC CODE EXPLANATION

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 27-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.64 tons	43.0 tons	
MAXIMUM/SORT	51.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
			98.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.51 yd³	34.1 yd³	34.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,483 kBq		
MAXIMUM/SORT	2,071 kBq		
MINIMUM/SORT	2.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,122 kBq	3,117 kBq	
MAXIMUM/SORT	1369 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	6,463 Bq/kg	73 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	09:35 AM	
PLANT STARTUP TIME		2.59 hr
PROCESSING END	04:50 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.67 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		7.25 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.52 hr
TOTAL SYSTEM PAUSE TIME		0.35 hr
TOTAL DOWNTIME (MAX-ACTUAL)		2.73 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		45.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,185
NONPROCESS RECORDS (Test, calibration, etc)		22
20-SEC PROCESS RECORDS		814
TOTAL SORT		4 MD>0 & MND=0
NO SORT		486 AD=0 & MD=0 & MND>0
SOME SORT		328 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		(4)
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

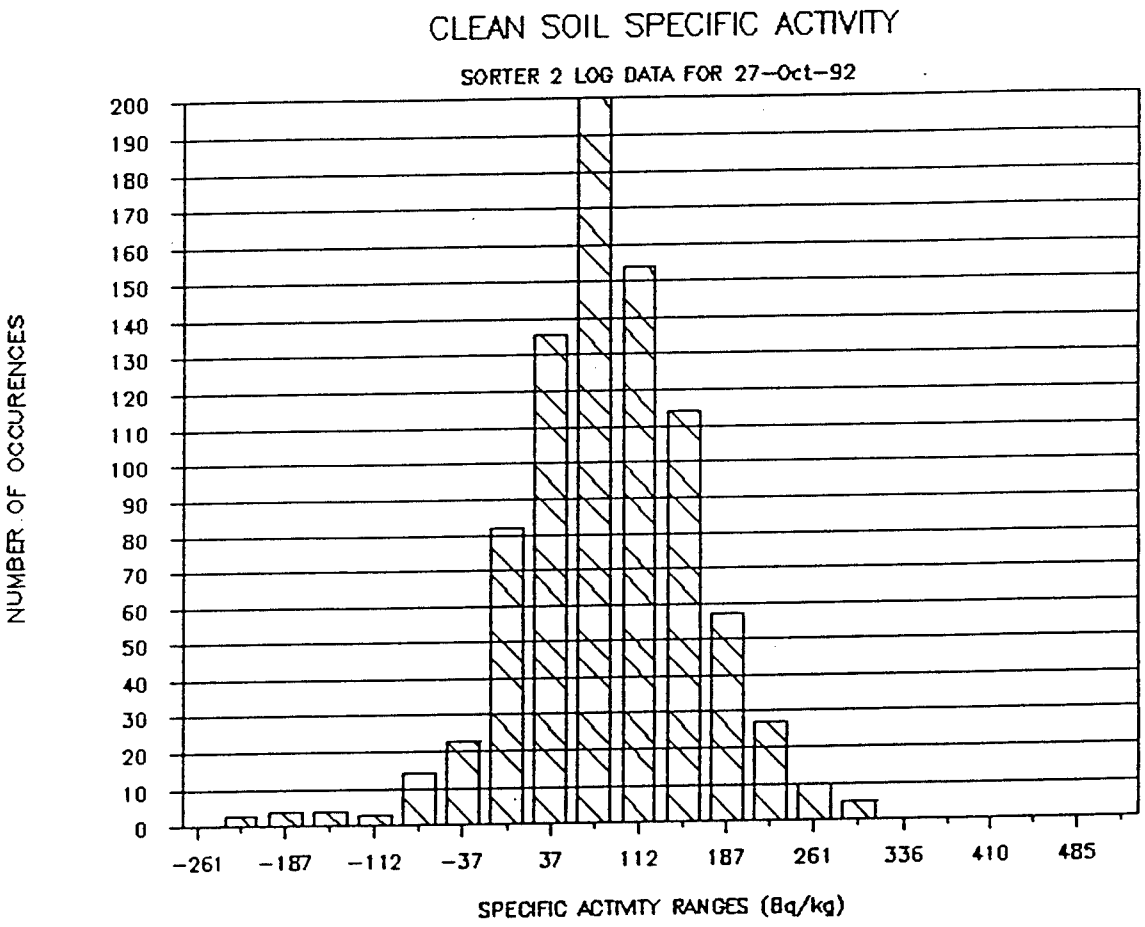
2-SEC COUNT PERIODS		8,140	
2-SEC RECORDS WITH SORTS		371	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	85	75.2%
	3 DETECTORS	20	17.7%
	4 DETECTORS	5	4.4%
	5 DETECTORS	2	1.8%
	6 DETECTORS	1	0.9%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	113	
NET 2-SEC RECORDS WITH SORTS		258	
2-SEC PERIODS WITH NO SORTS		7,882	
AVG TIME BETWEEN 2-SEC SORTS		63.1	sec

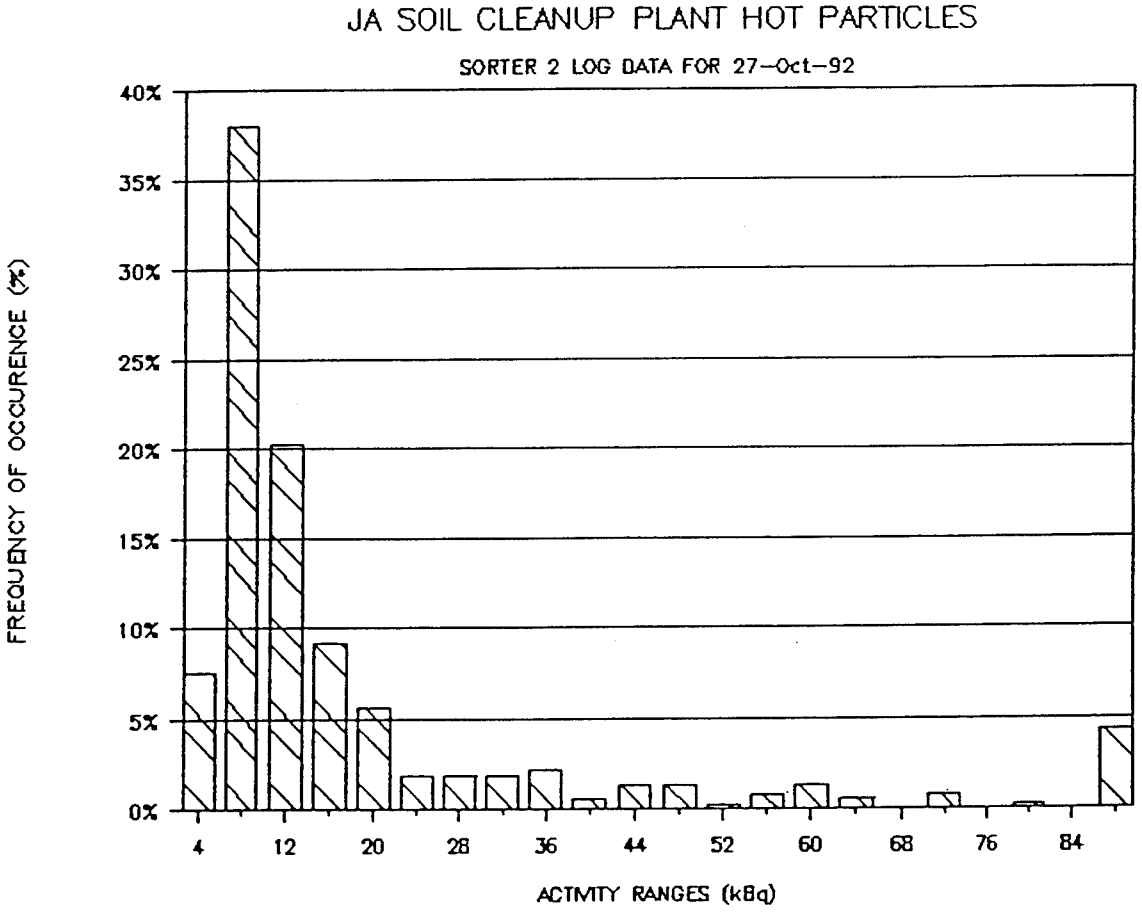
1-GATE SORTS		187	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	6	3.2%	-14000	0	-261
2	20	10.7%	-12000	3	-224
3	39	20.9%	-10000	4	-187
4	38	20.3%	-8000	4	-149
5	34	18.2%	-6000	3	-112
6	22	11.8%	-4000	14	-75
7	23	12.3%	-2000	23	-37
8	5	2.7%	0	82	0
TOTAL	187		2000	136	37
			4000	200	75
2-GATE SORTS		184	6000	154	112
DETECTO	SORTS	FREQ%	8000	114	149
8			10000	57	187
9	13	7.1%	12000	27	224
10	24	13.0%	14000	10	261
11	39	21.2%	16000	5	299
12	44	23.9%	18000	0	336
13	25	13.6%	20000	0	373
14	28	15.2%	22000	0	410
15	11	6.0%	24000	0	448
TOTAL	184		26000	0	485
			>28000	0	0
			TOTAL	836	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	28	7.5%	4
8000	141	38.0%	8
12000	75	20.2%	12
16000	34	9.2%	16
20000	21	5.7%	20
24000	7	1.9%	24
28000	7	1.9%	28
32000	7	1.9%	32
36000	8	2.2%	36
40000	2	0.5%	40
44000	5	1.3%	44
48000	5	1.3%	48
52000	1	0.3%	52
56000	3	0.8%	56
60000	5	1.3%	60
64000	2	0.5%	64
68000	0	0.0%	68
72000	3	0.8%	72
76000	0	0.0%	76
80000	1	0.3%	80
84000	0	0.0%	84
>84000	16	4.3%	>84
TOTAL	371		

HPE	364	GATE1	371
MPE	279	GATE2	184
DISE	308		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 27-Oct-92
NUMBER OF OCCURENCES
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 27-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 26-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.63 tons	66.6 tons	
MAXIMUM/SORT	6.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.50 yd³	52.8 yd³	53.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	12,312 kBq		
MAXIMUM/SORT	569 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,332 kBq	(1,124)kBq	
MAXIMUM/SORT	345 kBq	13 kBq	
MINIMUM/SORT	0 Bq	-19 kBq	
SPECIFIC ACTIVITY	6,848 Bq/kg	(17)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	08:14 AM	
PLANT STARTUP TIME		1.25 hr
PROCESSING END	04:57 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.54 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.72 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.97 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.75 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		69.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,870
NONPROCESS RECORDS (Test, calibration, etc)		24
20-SEC PROCESS RECORDS		1,255
TOTAL SORT		0 MD>0 & MND=0
NO SORT		798 AD=0 & MD=0 & MND>0
SOME SORT		457 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

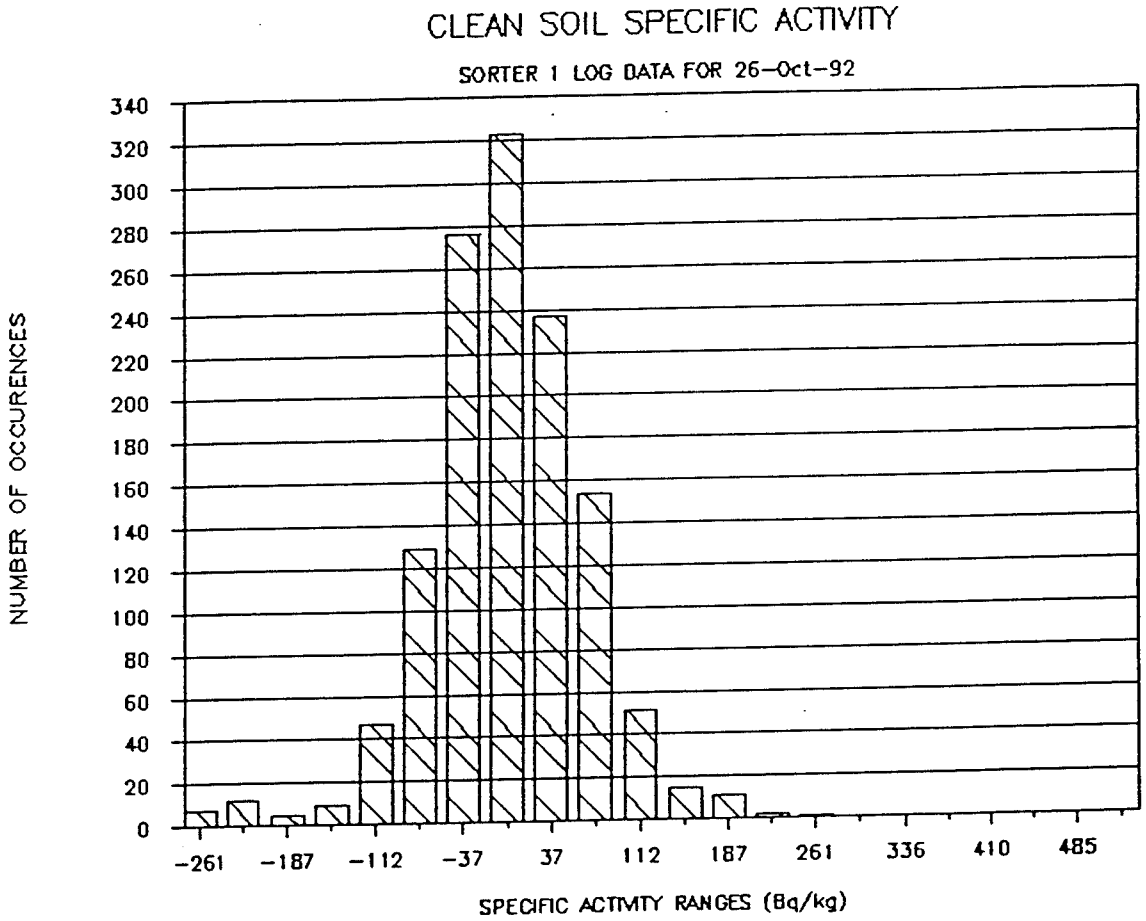
JA SOIL CLEANUP PLANT LOG SUMMARY

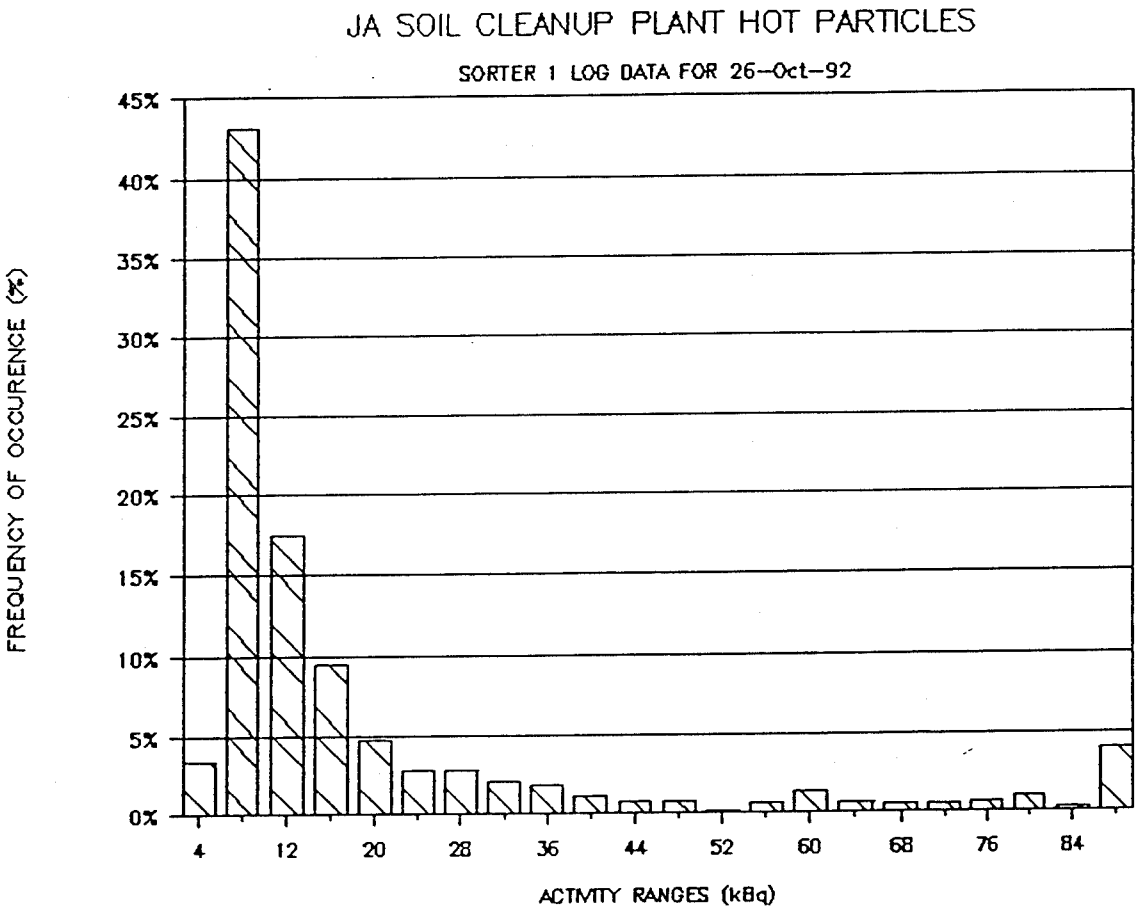
2-SEC COUNT PERIODS	12,550	
2-SEC RECORDS WITH SORTS	615	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	145	81.9%
3 DETECTORS	25	14.1%
4 DETECTORS	7	4.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	177	
NET 2-SEC RECORDS WITH SORTS	438	
2-SEC PERIODS WITH NO SORTS	12,112	
AVG TIME BETWEEN 2-SEC SORTS	57.3	sec

1-GATE SORTS		318	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	17	5.3%	-14000	7	-261	4000	21	3.4%	4
2	28	8.8%	-12000	12	-224	8000	265	43.1%	8
3	46	14.5%	-10000	5	-187	12000	107	17.4%	12
4	68	21.4%	-8000	9	-149	16000	58	9.4%	16
5	70	22.0%	-6000	47	-112	20000	29	4.7%	20
6	48	15.1%	-4000	129	-75	24000	17	2.8%	24
7	29	9.1%	-2000	276	-37	28000	17	2.8%	28
8	12	3.8%	0	323	0	32000	13	2.1%	32
TOTAL	318		2000	237	37	36000	11	1.8%	36
			4000	154	75	40000	7	1.1%	40
2-GATE SORTS		297	6000	51	112	44000	5	0.8%	44
DETECTO	SORTS	FREQ%	8000	15	149	48000	5	0.8%	48
8			10000	11	187	52000	1	0.2%	52
9	29	9.8%	12000	2	224	56000	4	0.7%	56
10	34	11.4%	14000	1	261	60000	8	1.3%	60
11	51	17.2%	16000	0	299	64000	4	0.7%	64
12	68	22.9%	18000	0	336	68000	3	0.5%	68
13	60	20.2%	20000	0	373	72000	3	0.5%	72
14	30	10.1%	22000	0	410	76000	4	0.7%	76
15	25	8.4%	24000	0	448	80000	6	1.0%	80
TOTAL	297		26000	0	485	84000	2	0.3%	84
			>28000	0	0	>84000	25	4.1%	>84
			TOTAL	1279		TOTAL	615		

HPE	606	GATE1	615
MPE	338	GATE2	297
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 26-Oct-92
NUMBER OF OCCURENCES
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 26-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 26-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.59 tons	67.0 tons	
MAXIMUM/SORT		4.7 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	48.9 kg	
				99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.46 yd³	53.1 yd³	53.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		14,389 kBq		
MAXIMUM/SORT		2,291 kBq		
MINIMUM/SORT		2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		5,605 kBq	3,188 kBq	
MAXIMUM/SORT		1652 kBq	15 kBq	
MINIMUM/SORT		0 Bq	-15 kBq	
SPECIFIC ACTIVITY		9,556 Bq/kg	48 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	08:15 AM	
PLANT STARTUP TIME		1.25 hr
PROCESSING END	04:57 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.54 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.71 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.01 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.70 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		70.1%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,766
NONPROCESS RECORDS (Test, calibration, etc)		15
20-SEC PROCESS RECORDS		1,262
TOTAL SORT		0 MD>0 & MND=0
NO SORT		810 AD=0 & MD=0 & MND>0
SOME SORT		452 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

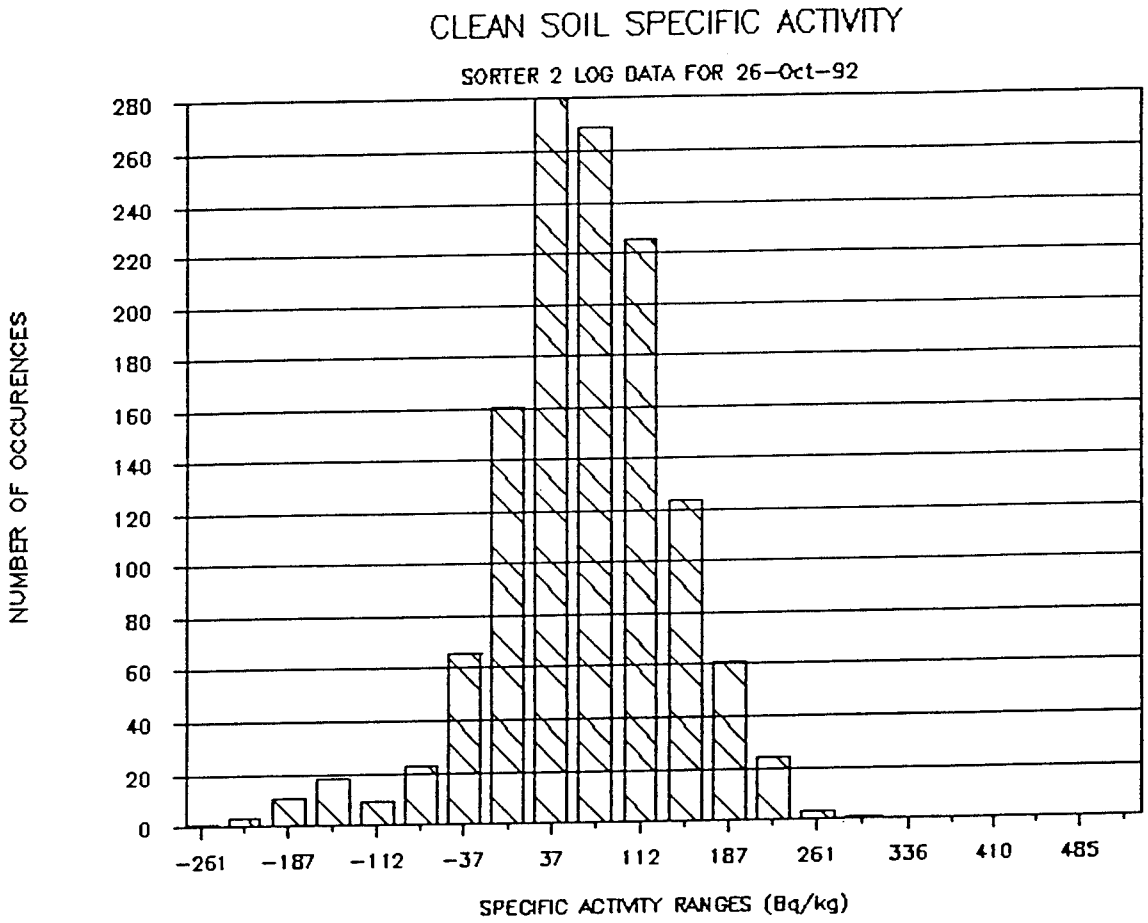
2-SEC COUNT PERIODS	12,620	
2-SEC RECORDS WITH SORTS	504	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	111	77.6%
3 DETECTORS	25	17.5%
4 DETECTORS	7	4.9%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	143	
NET 2-SEC RECORDS WITH SORTS	361	
2-SEC PERIODS WITH NO SORTS	12,259	
AVG TIME BETWEEN 2-SEC SORTS	69.9	sec

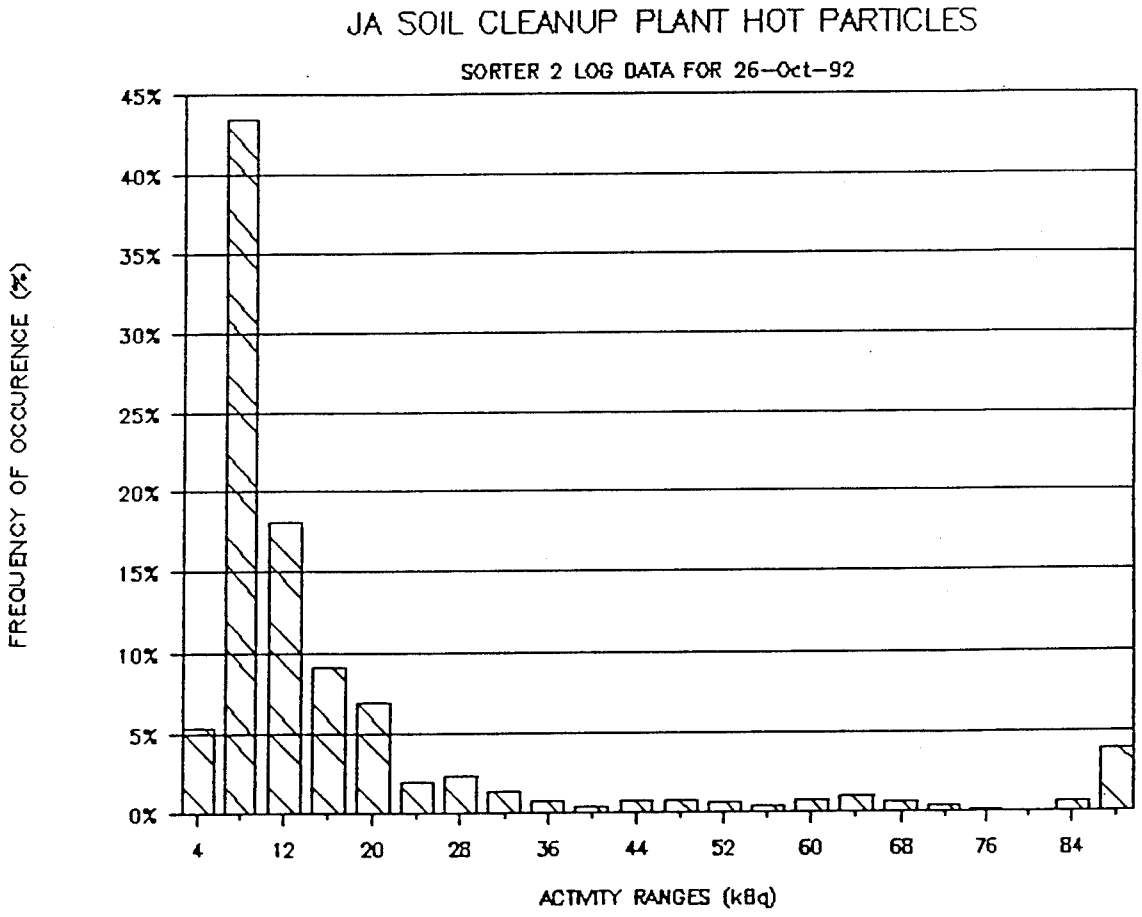
1-GATE SORTS	258	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS FREQ%	(Bq)	(#)	(Bq/kg)
1	7 2.7%	-14000	1	-261
2	21 8.1%	-12000	3	-224
3	39 15.1%	-10000	11	-187
4	41 15.9%	-8000	18	-149
5	64 24.8%	-6000	9	-112
6	47 18.2%	-4000	23	-75
7	34 13.2%	-2000	66	-37
8	5 1.9%	0	161	0
TOTAL	258	2000	280	37
		4000	269	75
2-GATE SORTS	246	6000	225	112
DETECTO	SORTS FREQ%	8000	124	149
8		10000	61	187
9	21 8.5%	12000	24	224
10	23 9.3%	14000	3	261
11	40 16.3%	16000	1	299
12	60 24.4%	18000	0	336
13	48 19.5%	20000	0	373
14	44 17.9%	22000	0	410
15	10 4.1%	24000	0	448
TOTAL	246	26000	0	485
		>28000	0	0
		TOTAL	1279	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	27	5.4%	4
8000	219	43.5%	8
12000	91	18.1%	12
16000	46	9.1%	16
20000	35	6.9%	20
24000	10	2.0%	24
28000	12	2.4%	28
32000	7	1.4%	32
36000	4	0.8%	36
40000	2	0.4%	40
44000	4	0.8%	44
48000	4	0.8%	48
52000	3	0.6%	52
56000	2	0.4%	56
60000	4	0.8%	60
64000	5	1.0%	64
68000	3	0.6%	68
72000	2	0.4%	72
76000	1	0.2%	76
80000	0	0.0%	80
84000	3	0.6%	84
>84000	20	4.0%	>84
TOTAL	504		

HPE	499	GATE1	504
MPE	376	GATE2	246
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 26-Oct-92
NUMBER OF OCCURENCES
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 26-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 24-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 ~~ERR~~ tons/m³ KBM 10/24/92		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.58 tons	64.8 tons	
MAXIMUM/SORT	56.2 kg	53.6 kg	
MINIMUM/SORT	0.6 kg	47.4 kg	
			99.1%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.46 yd³	51.4 yd³	51.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,402 kBq		
MAXIMUM/SORT	288 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,955 kBq	(1,343)kBq	
MAXIMUM/SORT	178 kBq	13 kBq	
MINIMUM/SORT	-20055 Bq	-16 kBq	
SPECIFIC ACTIVITY	5,134 Bq/kg	(21)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	08:05 AM	
PLANT STARTUP TIME		1.09 hr
PROCESSING END	04:42 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.80 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.61 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.84 hr
TOTAL SYSTEM PAUSE TIME		0.51 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.77 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		68.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,641
NONPROCESS RECORDS (Test, calibration, etc)		33
20-SEC PROCESS RECORDS		1,232
TOTAL SORT		2 MD>0 & MND=0
NO SORT		862 AD=0 & MD=0 & MND>0
SOME SORT		368 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	2	

JA SOIL CLEANUP PLANT LOG SUMMARY

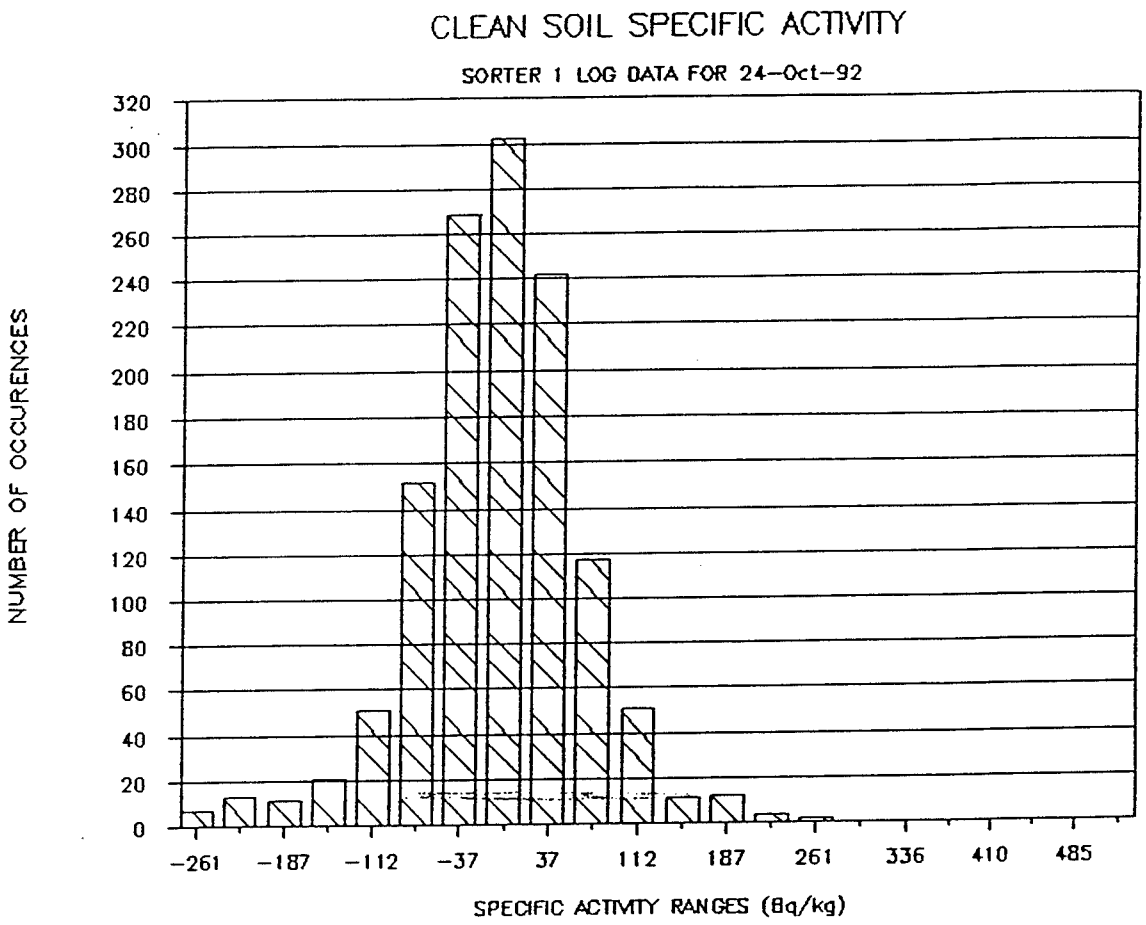
2-SEC COUNT PERIODS	12,320	
2-SEC RECORDS WITH SORTS	409	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	97	77.6%
3 DETECTORS	21	16.8%
4 DETECTORS	7	5.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	125	
NET 2-SEC RECORDS WITH SORTS	284	
2-SEC PERIODS WITH NO SORTS	12,036	
AVG TIME BETWEEN 2-SEC SORTS	86.8	sec

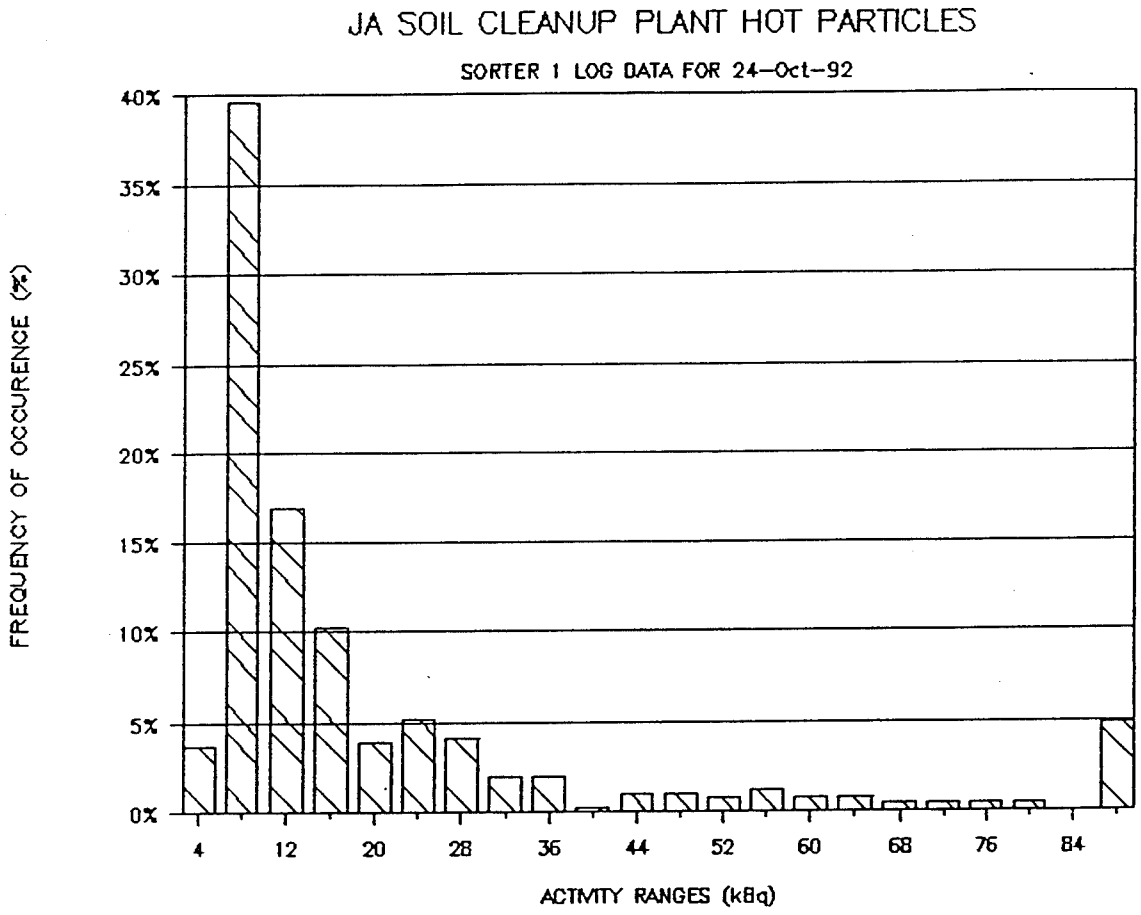
1-GATE SORTS		201	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	6	3.0%	-14000	7	-261
2	23	11.4%	-12000	13	-224
3	33	16.4%	-10000	11	-187
4	33	16.4%	-8000	21	-149
5	44	21.9%	-6000	51	-112
6	25	12.4%	-4000	152	-75
7	29	14.4%	-2000	269	-37
8	8	4.0%	0	302	0
TOTAL	201		2000	242	37
			4000	117	75
2-GATE SORTS		208	6000	51	112
DETECTO	SORTS	FREQ%	8000	11	149
8			10000	12	187
9	13	6.3%	12000	4	224
10	31	14.9%	14000	2	261
11	42	20.2%	16000	0	299
12	41	19.7%	18000	0	336
13	37	17.8%	20000	0	373
14	24	11.5%	22000	0	410
15	20	9.6%	24000	0	448
TOTAL	208		26000	0	485
			>28000	0	0
			TOTAL	1265	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	15	3.7%	4
8000	162	39.6%	8
12000	69	16.9%	12
16000	42	10.3%	16
20000	16	3.9%	20
24000	21	5.1%	24
28000	17	4.2%	28
32000	8	2.0%	32
36000	8	2.0%	36
40000	1	0.2%	40
44000	4	1.0%	44
48000	4	1.0%	48
52000	3	0.7%	52
56000	5	1.2%	56
60000	3	0.7%	60
64000	3	0.7%	64
68000	2	0.5%	68
72000	2	0.5%	72
76000	2	0.5%	76
80000	2	0.5%	80
84000	0	0.0%	84
>84000	20	4.9%	>84
TOTAL	409		

HPE	401	GATE1	409
MPE	300	GATE2	208
DISE	166		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 24-Oct-92
NUMBER OF OCCURENCES
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 24-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 24-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.66 tons	64.4 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.6 kg	45.5 kg	
			99.0%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.52 yd³	51.1 yd³	51.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	14,766 kBq		
MAXIMUM/SORT	4,197 kBq		
MINIMUM/SORT	2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,509 kBq	3,438 kBq	
MAXIMUM/SORT	3051 kBq	18 kBq	
MINIMUM/SORT	-17105 Bq	-13 kBq	
SPECIFIC ACTIVITY	8,352 Bq/kg	53 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	08:05 AM		
PLANT STARTUP TIME		1.09 hr	
PROCESSING END	04:42 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.80 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		8.62 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.81 hr	
TOTAL SYSTEM PAUSE TIME		0.51 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.81 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		68.1%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,564	
NONPROCESS RECORDS (Test, calibration, etc)	40	
20-SEC PROCESS RECORDS	1,226	
TOTAL SORT	4	MD>0 & MND=0
NO SORT	828	AD=0 & MD=0 & MND>0
SOME SORT	394	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	2	

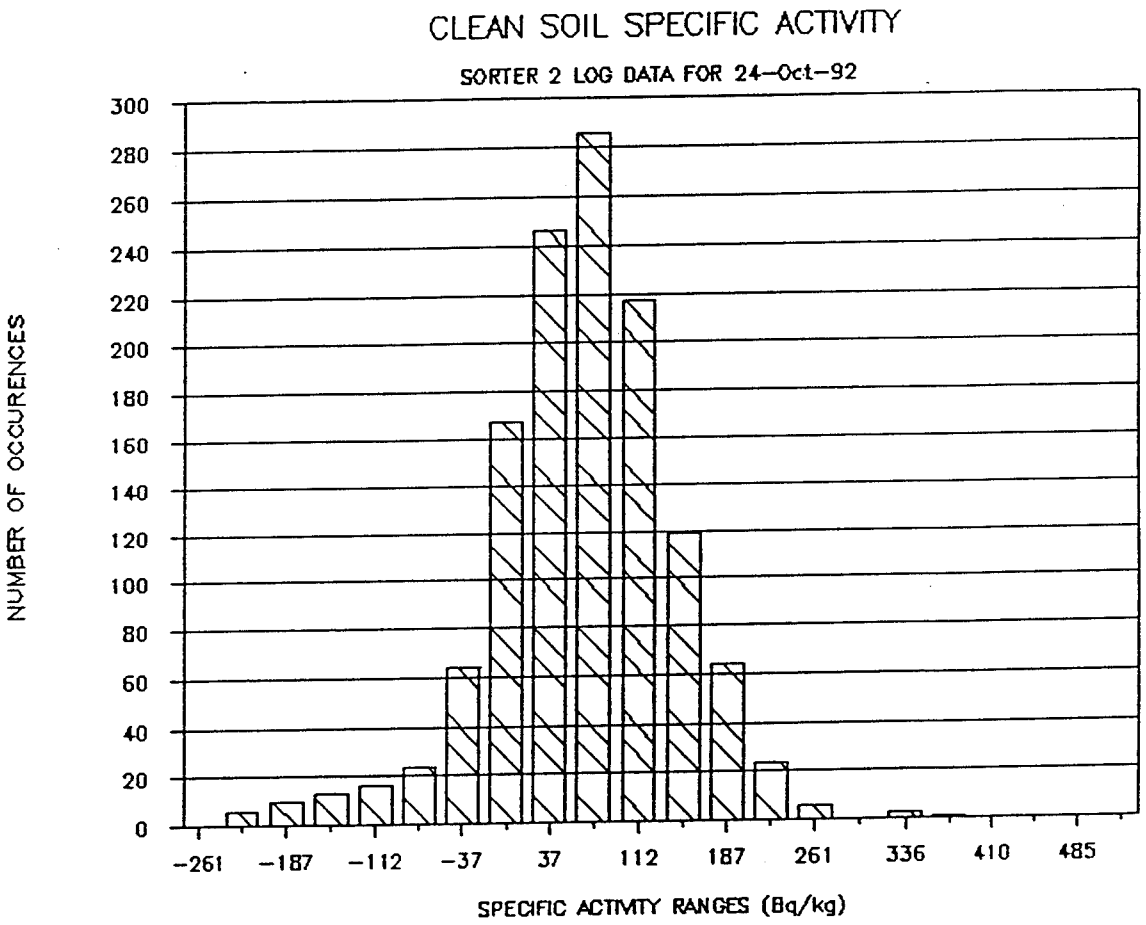
JA SOIL CLEANUP PLANT LOG SUMMARY

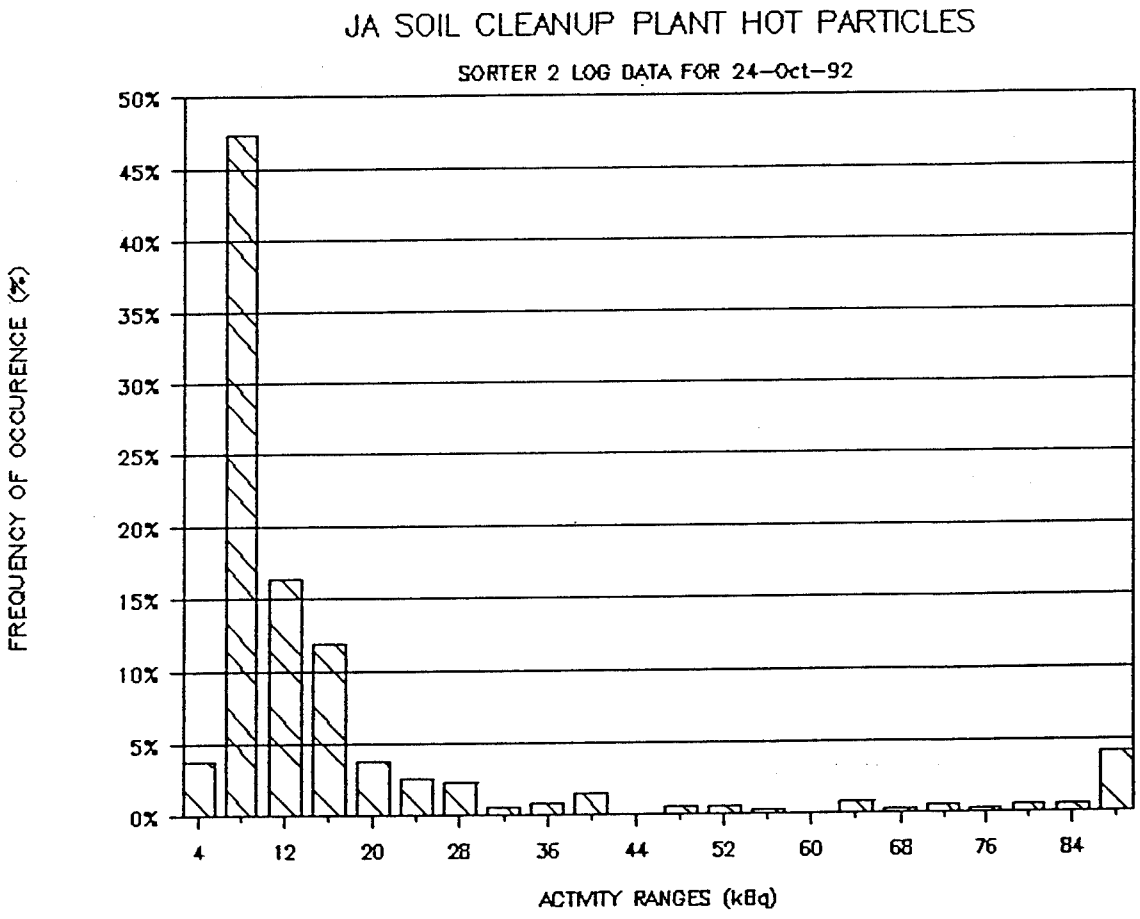
2-SEC COUNT PERIODS	12,260	
2-SEC RECORDS WITH SORTS	338	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	74	78.7%
3 DETECTORS	16	17.0%
4 DETECTORS	4	4.3%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	94	
NET 2-SEC RECORDS WITH SORTS	244	
2-SEC PERIODS WITH NO SORTS	12,016	
AVG TIME BETWEEN 2-SEC SORTS	100.5 sec	

1-GATE SORTS		175	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	7	4.0%	-14000	0	-261	4000	13	3.8%	4
2	12	6.9%	-12000	6	-224	8000	160	47.3%	8
3	30	17.1%	-10000	10	-187	12000	55	16.3%	12
4	37	21.1%	-8000	13	-149	16000	40	11.8%	16
5	37	21.1%	-6000	16	-112	20000	13	3.8%	20
6	24	13.7%	-4000	24	-75	24000	9	2.7%	24
7	17	9.7%	-2000	64	-37	28000	8	2.4%	28
8	11	6.3%	0	167	0	32000	2	0.6%	32
TOTAL	175		2000	246	37	36000	3	0.9%	36
			4000	286	75	40000	5	1.5%	40
2-GATE SORTS		163	6000	217	112	44000	0	0.0%	44
DETECTO	SORTS	FREQ%	8000	119	149	48000	2	0.6%	48
8			10000	64	187	52000	2	0.6%	52
9	9	5.5%	12000	24	224	56000	1	0.3%	56
10	19	11.7%	14000	6	261	60000	0	0.0%	60
11	31	19.0%	16000	0	299	64000	3	0.9%	64
12	40	24.5%	18000	3	336	68000	1	0.3%	68
13	32	19.6%	20000	1	373	72000	2	0.6%	72
14	24	14.7%	22000	0	410	76000	1	0.3%	76
15	8	4.9%	24000	0	448	80000	2	0.6%	80
TOTAL	163		26000	0	485	84000	2	0.6%	84
			>28000	0	0	>84000	14	4.1%	>84
			TOTAL	1266		TOTAL	338		

nPE	341	GATE1	338
MPE	342	GATE2	163
DISE	312		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 24-Oct-92
NUMBER OF OCCURENCES
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 24-Oct-92
FREQUENCY OF OCCURENCE (%)
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 23-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.02 c/sec			
SORTER SOIL DENSITY	1.1 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.60 tons	41.1 tons	
MAXIMUM/SORT		53.8 kg	51.2 kg	
MINIMUM/SORT		0.6 kg	46.1 kg	
				98.6%
WEIGHT RECOVERY OR VOLUME RECOVERY				
EQUIVALENT SOIL-IN-GROUND		0.47 yd³	32.6 yd³	33.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		6,248 kBq		
MAXIMUM/SORT		366 kBq		
MINIMUM/SORT		2.8 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		2,326 kBq	(1,609)kBq	
MAXIMUM/SORT		220 kBq	10 kBq	
MINIMUM/SORT		0 Bq	-16 kBq	
SPECIFIC ACTIVITY		3,905 Bq/kg	(39)Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	12:44 PM		
PLANT STARTUP TIME		5.74 hr	
PROCESSING END	05:16 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.24 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		4.53 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.52 hr	
TOTAL SYSTEM PAUSE TIME		0.04 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		0.01 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		45.2%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,119	
NONPROCESS RECORDS (Test, calibration, etc)	15	
20-SEC PROCESS RECORDS	814	
TOTAL SORT	4	MD>0 & MND=0
NO SORT	494	AD=0 & MD=0 & MND>0
SOME SORT	316	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

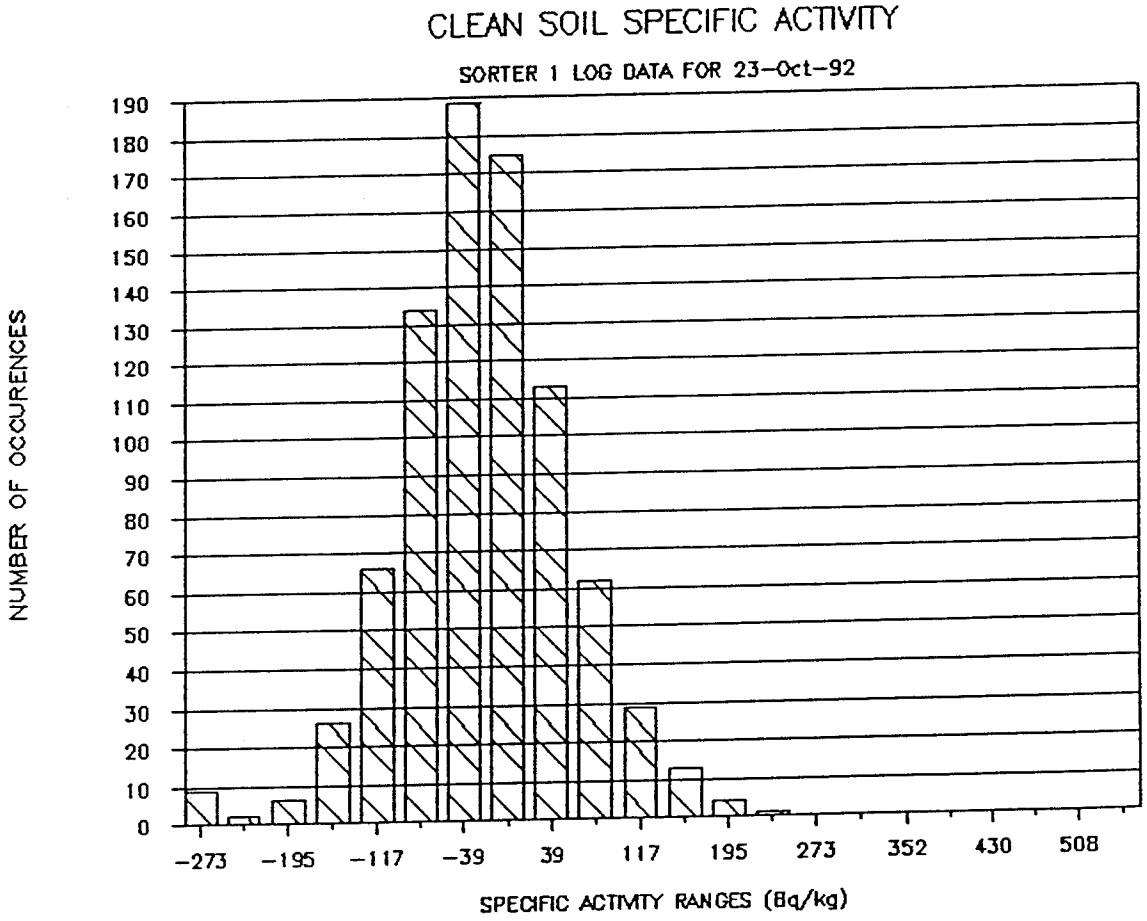
JA SOIL CLEANUP PLANT LOG SUMMARY

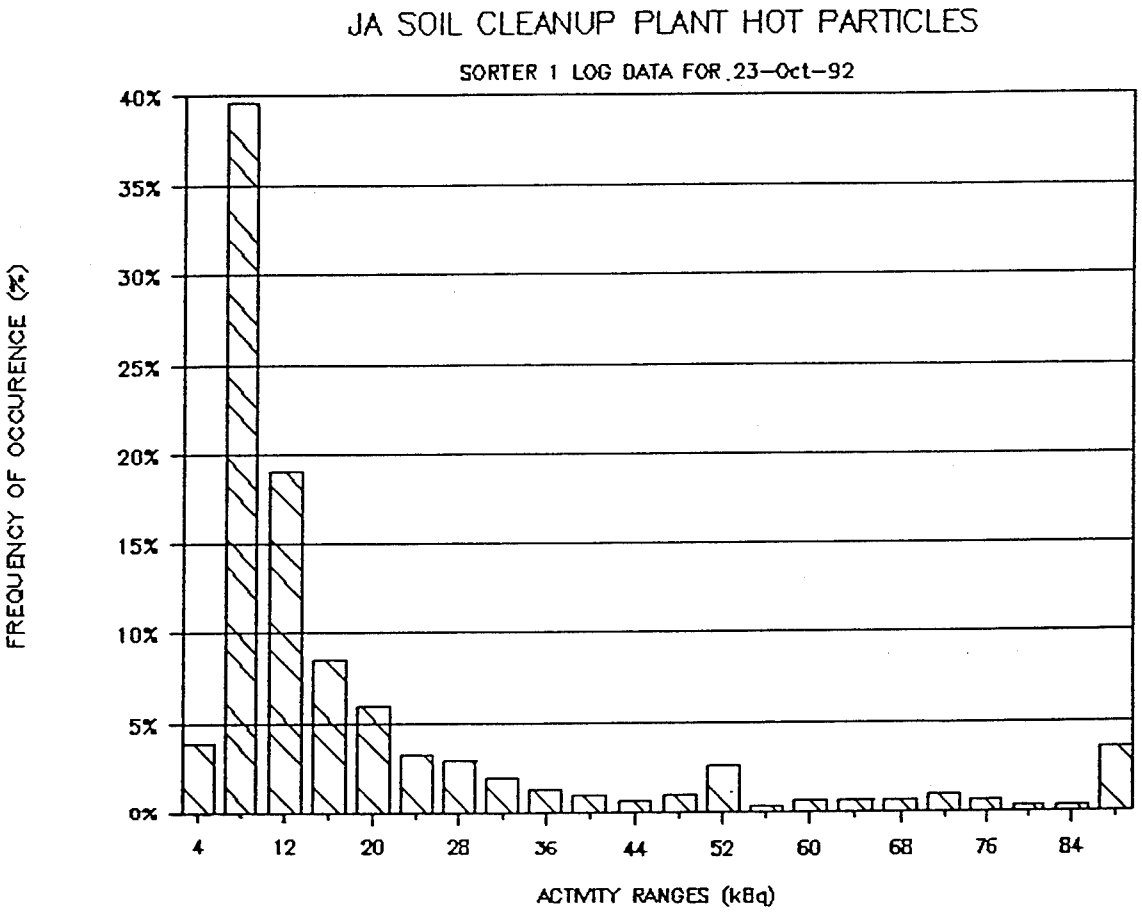
2-SEC COUNT PERIODS	8,140	
2-SEC RECORDS WITH SORTS	305	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	71	86.6%
3 DETECTORS	10	12.2%
4 DETECTORS	1	1.2%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	82	
NET 2-SEC RECORDS WITH SORTS	223	
2-SEC PERIODS WITH NO SORTS	7,917	
AVG TIME BETWEEN 2-SEC SORTS	73.0	sec

1-GATE SORTS DETECTO	SORTS	145 FREQ%	ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)	ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
1	0	0.0%	-14000	9	-273	4000	12	3.9%	4
2	14	9.7%	-12000	2	-234	8000	121	39.7%	8
3	19	13.1%	-10000	6	-195	12000	58	19.0%	12
4	33	22.8%	-8000	26	-156	16000	26	8.5%	16
5	40	27.6%	-6000	66	-117	20000	18	5.9%	20
6	23	15.9%	-4000	134	-78	24000	10	3.3%	24
7	12	8.3%	-2000	189	-39	28000	9	3.0%	28
8	4	2.8%	0	175	0	32000	6	2.0%	32
TOTAL	145		2000	113	39	36000	4	1.3%	36
			4000	62	78	40000	3	1.0%	40
2-GATE SORTS		160	6000	29	117	44000	2	0.7%	44
DETECTO	SORTS	FREQ%	8000	13	156	48000	3	1.0%	48
8			10000	4	195	52000	8	2.6%	52
9	5	3.1%	12000	1	234	56000	1	0.3%	56
10	21	13.1%	14000	0	273	60000	2	0.7%	60
11	32	20.0%	16000	0	313	64000	2	0.7%	64
12	45	28.1%	18000	0	352	68000	2	0.7%	68
13	31	19.4%	20000	0	391	72000	3	1.0%	72
14	16	10.0%	22000	0	430	76000	2	0.7%	76
15	10	6.3%	24000	0	469	80000	1	0.3%	80
TOTAL	160		26000	0	508	84000	1	0.3%	84
			>28000	0	0	>84000	11	3.6%	>84
			TOTAL	829		TOTAL	305		

HPE	317	GATE1	305
MPE	285	GATE2	160
DISE	332		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 23-Oct-92
NUMBER OF OCCURENCES
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-273
-195
-117
-39
39
117
195
273
352
430
508
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 23-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 23-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.1 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.65 tons	40.2 tons	
MAXIMUM/SORT	49.4 kg	51.2 kg	
MINIMUM/SORT	0.6 kg	44.2 kg	
			98.4%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.51 yd³	31.9 yd³	32.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,449 kBq		
MAXIMUM/SORT	490 kBq		
MINIMUM/SORT	2.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,449 kBq	2,272 kBq	
MAXIMUM/SORT	331 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-14 kBq	
SPECIFIC ACTIVITY	3,775 Bq/kg	57 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	12:43 PM	
PLANT STARTUP TIME		5.73 hr
PROCESSING END	05:16 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.24 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		4.54 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.43 hr
TOTAL SYSTEM PAUSE TIME		0.14 hr
TOTAL DOWNTIME (MAX-ACTUAL)		0.11 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		44.3%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,062
NONPROCESS RECORDS (Test, calibration, etc)	38
20-SEC PROCESS RECORDS	798
TOTAL SORT	6 MD>0 & MND=0
NO SORT	492 AD=0 & MD=0 & MND>0
SOME SORT	306 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	(6)
0<AD<1kBq & MD>0 0	
AD=0 & MD 0	
AD<0 & MD 0	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS		7,980	
2-SEC RECORDS WITH SORTS		264	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	66		85.7%
3 DETECTORS	8		10.4%
4 DETECTORS	3		3.9%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		77	
NET 2-SEC RECORDS WITH SORTS		187	
2-SEC PERIODS WITH NO SORTS		7,793	
AVG TIME BETWEEN 2-SEC SORTS		85.3	sec

1-GATE SORTS 138

DETECTO	SORTS	FREQ%
1	2	1.4%
2	18	13.0%
3	23	16.7%
4	31	22.5%
5	34	24.6%
6	17	12.3%
7	10	7.2%
8	3	2.2%
TOTAL	138	

2-GATE SORTS 126

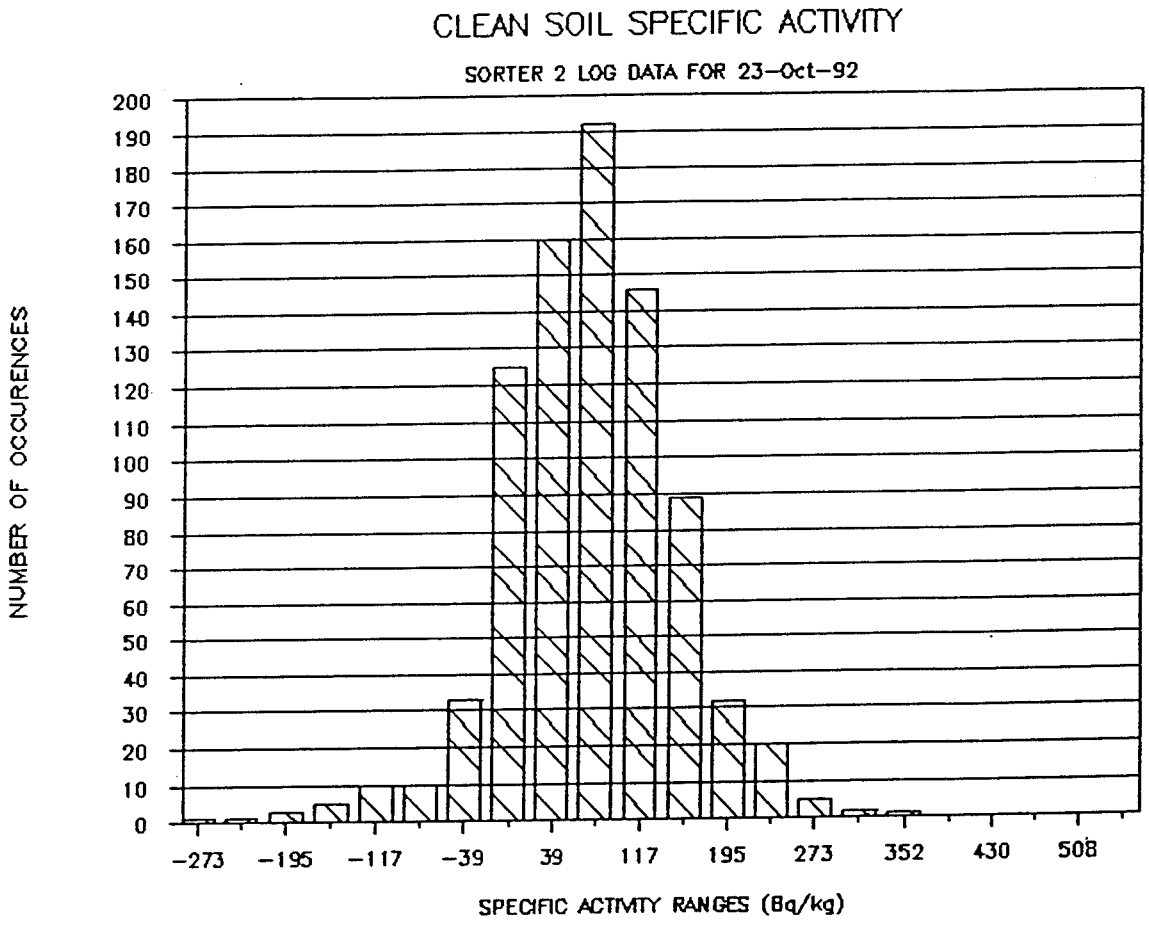
DETECTO	SORTS	FREQ%
8		
9	9	7.1%
10	13	10.2%
11	30	23.6%
12	29	22.8%
13	29	22.8%
14	12	9.4%
15	5	3.9%
TOTAL	127	

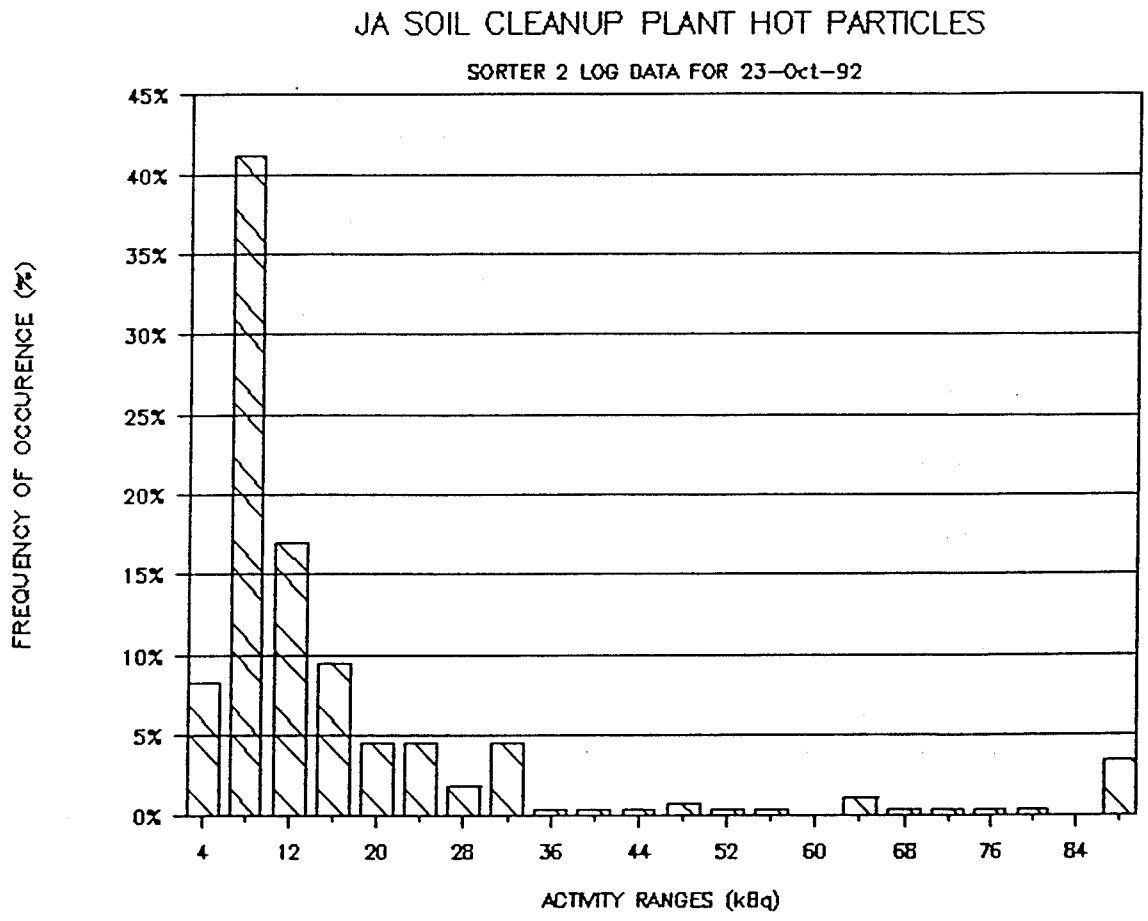
ACT_ND (Bq)	NUMBER (#)	SPEC_A (Bq/kg)
-14000	1	-273
-12000	1	-234
-10000	3	-195
-8000	5	-156
-6000	10	-117
-4000	10	-78
-2000	33	-39
0	125	0
2000	160	39
4000	192	78
6000	146	117
8000	89	156
10000	32	195
12000	20	234
14000	5	273
16000	2	313
18000	1	352
20000	0	391
22000	0	430
24000	0	469
26000	0	508
>28000	0	0
TOTAL	835	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	22	8.3%	4
8000	109	41.1%	8
12000	45	17.0%	12
16000	25	9.4%	16
20000	12	4.5%	20
24000	12	4.5%	24
28000	5	1.9%	28
32000	12	4.5%	32
36000	1	0.4%	36
40000	1	0.4%	40
44000	1	0.4%	44
48000	2	0.8%	48
52000	1	0.4%	52
56000	1	0.4%	56
60000	0	0.0%	60
64000	3	1.1%	64
68000	1	0.4%	68
72000	1	0.4%	72
76000	1	0.4%	76
80000	1	0.4%	80
84000	0	0.0%	84
>84000	9	3.4%	>84
TOTAL	265		

HPE	260	GATE1	264
MPE	298	GATE2	126
DISE	462		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 23-Oct-92
NUMBER OF OCCURENCES
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-273
-195
-117
-39
39
117
195
273
352
430
508
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 23-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 21-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.05 c/sec		
SORTER SOIL DENSITY	0.8 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.63 tons	39.4 tons	
MAXIMUM/SORT	39.1 kg	37.3 kg	
MINIMUM/SORT	0.5 kg	34 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.4%
EQUIVALENT SOIL-IN-GROUND	0.50 yd³	31.3 yd³	31.8 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,888 kBq		
MAXIMUM/SORT	173 kBq		
MINIMUM/SORT	3.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,097 kBq	(2,721)kBq	
MAXIMUM/SORT	83 kBq	11 kBq	
MINIMUM/SORT	-10728 Bq	-16 kBq	
SPECIFIC ACTIVITY	3,331 Bq/kg	(69)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:42 AM	
PLANT STARTUP TIME		0.70 hr
PROCESSING END	04:53 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.62 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.19 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.97 hr
TOTAL SYSTEM PAUSE TIME		1.18 hr
TOTAL DOWNTIME (MAX-ACTUAL)		3.22 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		59.6%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,365
NONPROCESS RECORDS (Test, calibration, etc)		13
20-SEC PROCESS RECORDS		1,074
TOTAL SORT		6 MD>0 & MND=0
NO SORT		605 AD=0 & MD=0 & MND>0
SOME SORT		463 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	143	
AD=0 & MD	0	
AD<0 & MD	3	

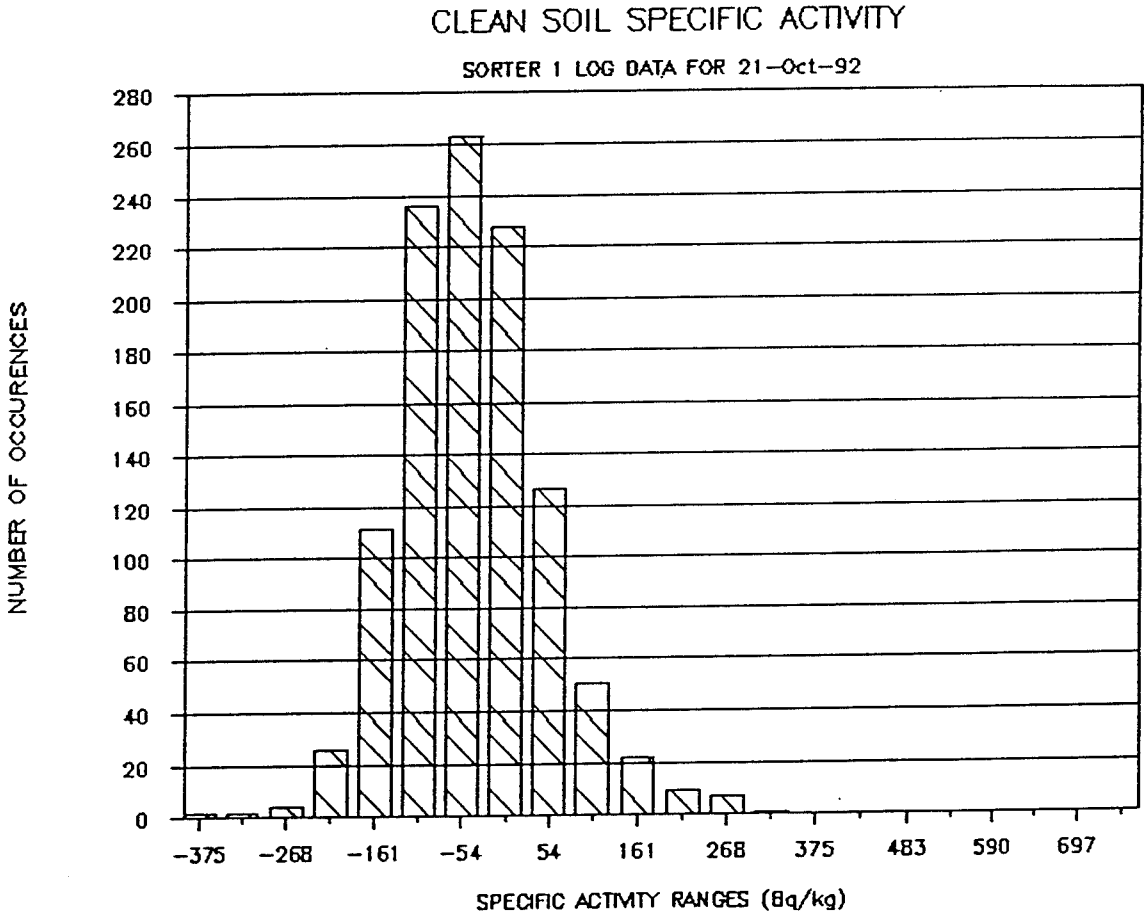
JA SOIL CLEANUP PLANT LOG SUMMARY

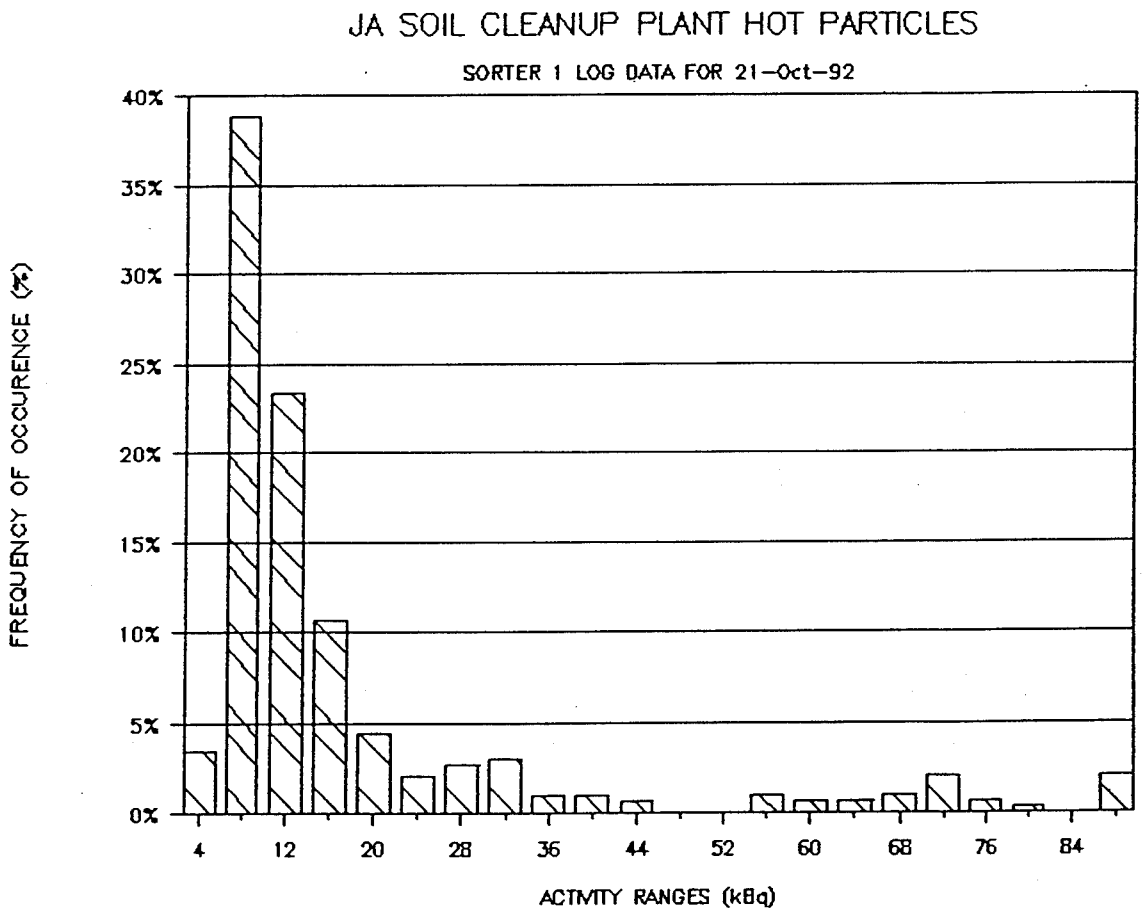
2-SEC COUNT PERIODS	10,740	
2-SEC RECORDS WITH SORTS	291	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	63	79.7%
3 DETECTORS	15	19.0%
4 DETECTORS	1	1.3%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	79	
NET 2-SEC RECORDS WITH SORTS	212	
2-SEC PERIODS WITH NO SORTS	10,528	
AVG TIME BETWEEN 2-SEC SORTS	101.3 sec	

1-GATE SORTS		136	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	3	2.2%	-14000	2	-375	4000	10	3.4%	4
2	14	10.3%	-12000	2	-322	8000	113	38.8%	8
3	27	19.9%	-10000	4	-268	12000	68	23.4%	12
4	27	19.9%	-8000	26	-214	16000	31	10.7%	16
5	19	14.0%	-6000	112	-161	20000	13	4.5%	20
6	18	13.2%	-4000	236	-107	24000	6	2.1%	24
7	21	15.4%	-2000	263	-54	28000	8	2.7%	28
8	7	5.1%	0	228	0	32000	9	3.1%	32
TOTAL	136		2000	127	54	36000	3	1.0%	36
			4000	51	107	40000	3	1.0%	40
2-GATE SORTS		155	6000	22	161	44000	2	0.7%	44
DETECTO	SORTS	FREQ%	8000	9	214	48000	0	0.0%	48
8			10000	7	268	52000	0	0.0%	52
9	7	4.5%	12000	1	322	56000	3	1.0%	56
10	23	14.8%	14000	0	375	60000	2	0.7%	60
11	34	21.9%	16000	0	429	64000	2	0.7%	64
12	30	19.4%	18000	0	483	68000	3	1.0%	68
13	21	13.5%	20000	0	536	72000	6	2.1%	72
14	19	12.3%	22000	0	590	76000	2	0.7%	76
15	21	13.5%	24000	0	643	80000	1	0.3%	80
TOTAL	155		26000	0	697	84000	0	0.0%	84
			>28000	0	0	>84000	6	2.1%	>84
			TOTAL	1090		TOTAL	291		

HPE	303	GATE1	291
MPE	532	GATE2	155
DISE	498		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 21-Oct-92
NUMBER OF OCCURENCES
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-375
-268
-161
-54
54
161
268
375
483
590
697
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 21-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 21-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	0.8 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.66 tons	38.6 tons	
MAXIMUM/SORT	37.3 kg	37.3 kg	
MINIMUM/SORT	0.5 kg	31.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			95.9%
EQUIVALENT SOIL-IN-GROUND	1.31 yd³	30.6 yd³	31.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,519 kBq		
MAXIMUM/SORT	188 kBq		
MINIMUM/SORT	3.6 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,758 kBq	(401)kBq	
MAXIMUM/SORT	98 kBq	11 kBq	
MINIMUM/SORT	-2893 Bq	-13 kBq	
SPECIFIC ACTIVITY	2,266 Bq/kg	(10)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:42 AM	
PLANT STARTUP TIME		0.70 hr
PROCESSING END	04:51 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.65 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.15 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.00 hr
TOTAL SYSTEM PAUSE TIME		1.33 hr
TOTAL DOWNTIME (MAX-ACTUAL)		3.15 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		60.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,303	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	1,080	
TOTAL SORT	7	MD>0 & MND=0
NO SORT	103	AD=0 & MD=0 & MND>0
SOME SORT	975	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	(5)	
0<AD<1kBq & MD>0	146	
AD=0 & MD	0	
AD<0 & MD	1	

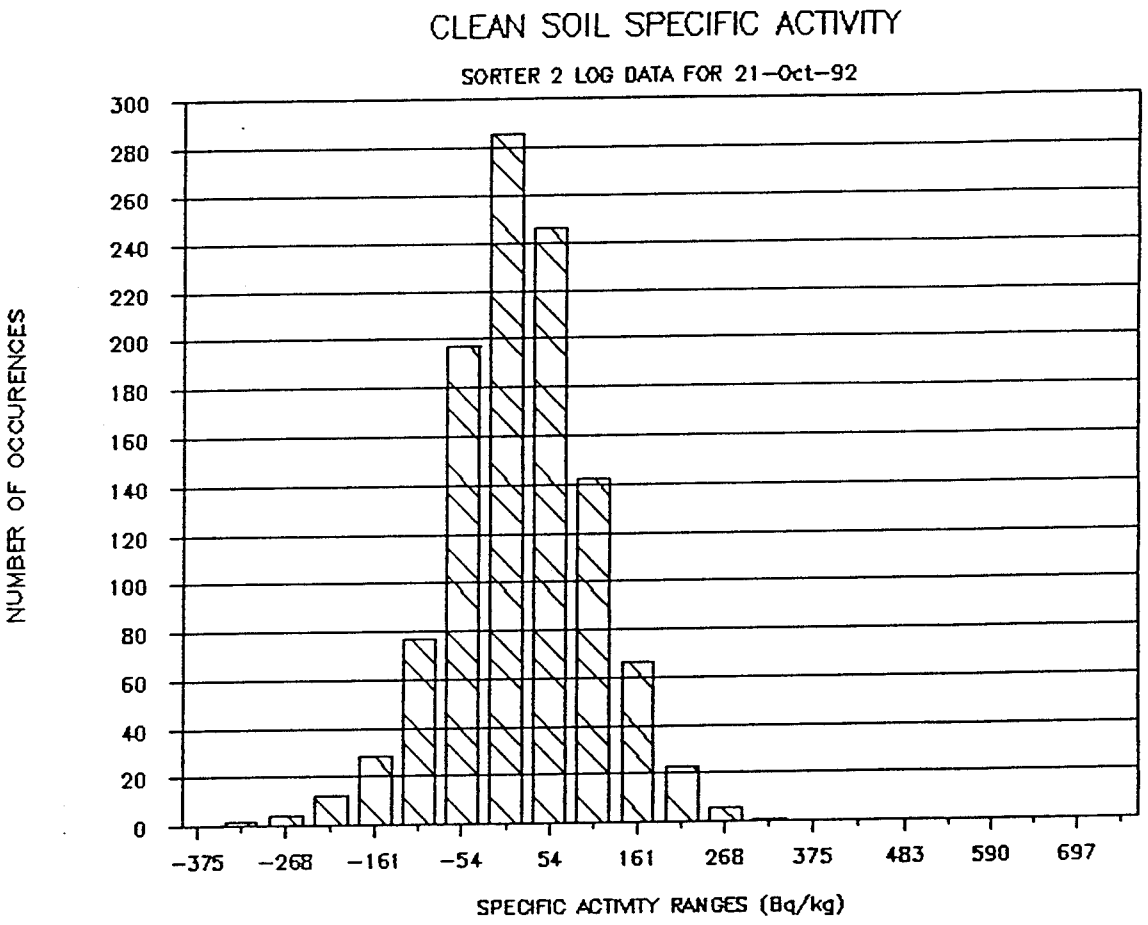
JA SOIL CLEANUP PLANT LOG SUMMARY

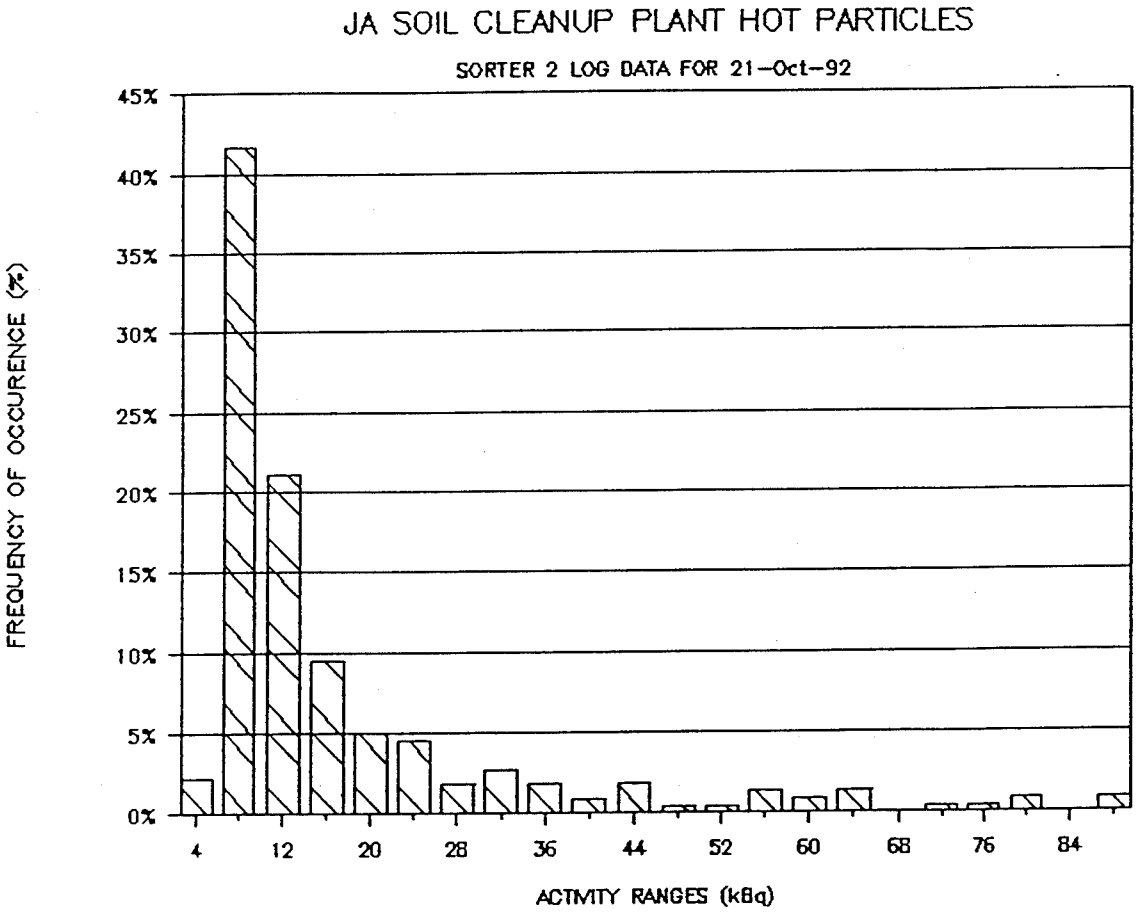
2-SEC COUNT PERIODS	10,800	
2-SEC RECORDS WITH SORTS	223	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	52	80.0%
3 DETECTORS	11	16.9%
4 DETECTORS	2	3.1%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	65	
NET 2-SEC RECORDS WITH SORTS	158	
2-SEC PERIODS WITH NO SORTS	10,642	
AVG TIME BETWEEN 2-SEC SORTS	136.7 sec	

1-GATE SORTS	119	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 9	7.6%	-14000	0	-375	4000	5	2.2%	4
2 12	10.1%	-12000	2	-322	8000	93	41.7%	8
3 22	18.5%	-10000	4	-268	12000	47	21.1%	12
4 19	16.0%	-8000	12	-214	16000	21	9.4%	16
5 20	16.8%	-6000	28	-161	20000	11	4.9%	20
6 21	17.6%	-4000	77	-107	24000	10	4.5%	24
7 11	9.2%	-2000	197	-54	28000	4	1.8%	28
8 5	4.2%	0	286	0	32000	6	2.7%	32
TOTAL 119		2000	246	54	36000	4	1.8%	36
		4000	142	107	40000	2	0.9%	40
2-GATE SORTS	104	6000	66	161	44000	4	1.8%	44
DETECTO SORTS	FREQ%	8000	23	214	48000	1	0.4%	48
8		10000	6	268	52000	1	0.4%	52
9 9	8.7%	12000	1	322	56000	3	1.3%	56
10 11	10.6%	14000	0	375	60000	2	0.9%	60
11 24	23.1%	16000	0	429	64000	3	1.3%	64
12 22	21.2%	18000	0	483	68000	0	0.0%	68
13 21	20.2%	20000	0	536	72000	1	0.4%	72
14 15	14.4%	22000	0	590	76000	1	0.4%	76
15 2	1.9%	24000	0	643	80000	2	0.9%	80
TOTAL 104		26000	0	697	84000	0	0.0%	84
		>28000	0	0	>84000	2	0.9%	>84
		TOTAL	1090		TOTAL	223		

HPE	225	GATE1	223
MPE	2787	GATE2	104
DISE	539		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 21-Oct-92
NUMBER OF OCCURENCES
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-375
-268
-161
-54
54
161
268
375
483
590
697
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 21-Oct-92
FREQUENCY OF OCCURENCE (%)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 20-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.75 ± 0.05 c/sec		
SORTER SOIL DENSITY	0.8 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.53 tons	35.9 tons	
MAXIMUM/SORT	4.2 kg	37.3 kg	
MINIMUM/SORT	0.5 kg	33.1 kg	
			98.5%
WEIGHT RECOVERY OR VOLUME RECOVERY			
EQUIVALENT SOIL-IN-GROUND	0.42 yd³	28.5 yd³	28.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,104 kBq		
MAXIMUM/SORT	204 kBq		
MINIMUM/SORT	3.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,222 kBq	(1,594)kBq	
MAXIMUM/SORT	109 kBq	12 kBq	
MINIMUM/SORT	0 Bq	-16 kBq	
SPECIFIC ACTIVITY	6,067 Bq/kg	(44)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	10:01 AM	
PLANT STARTUP TIME		3.03 hr
PROCESSING END	04:43 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.78 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		6.70 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.43 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.27 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		54.2%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)		1,488
NONPROCESS RECORDS (Test, calibration, etc)		35
20-SEC PROCESS RECORDS		977
TOTAL SORT		0 MD>0 & MND=0
NO SORT		457 AD=0 & MD=0 & MND>0
SOME SORT		520 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS		0
0<AD<1kBq & MD>0	102	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

2-SEC COUNT PERIODS	9,770	
2-SEC RECORDS WITH SORTS	511	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	117	81.3%
3 DETECTORS	25	17.4%
4 DETECTORS	2	1.4%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	144	
NET 2-SEC RECORDS WITH SORTS	367	
2-SEC PERIODS WITH NO SORTS	9,403	
AVG TIME BETWEEN 2-SEC SORTS	53.2 sec	

1-GATE SORTS		253	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	5	2.0%	-14000	5	-375
2	19	7.5%	-12000	15	-322
3	37	14.6%	-10000	15	-268
4	50	19.8%	-8000	20	-214
5	43	17.0%	-6000	71	-161
6	37	14.6%	-4000	136	-107
7	45	17.8%	-2000	205	-54
8	17	6.7%	0	249	0
TOTAL	253		2000	153	54
			4000	66	107
2-GATE SORTS		258	6000	37	161
DETECTO	SORTS	FREQ%	8000	18	214
8			10000	11	268
9	11	4.2%	12000	6	322
10	31	11.9%	14000	3	375
11	50	19.2%	16000	0	429
12	49	18.8%	18000	0	483
13	46	17.6%	20000	0	536
14	47	18.0%	22000	0	590
15	27	10.3%	24000	0	643
TOTAL	261		26000	0	697
			>28000	0	0
			TOTAL	1010	

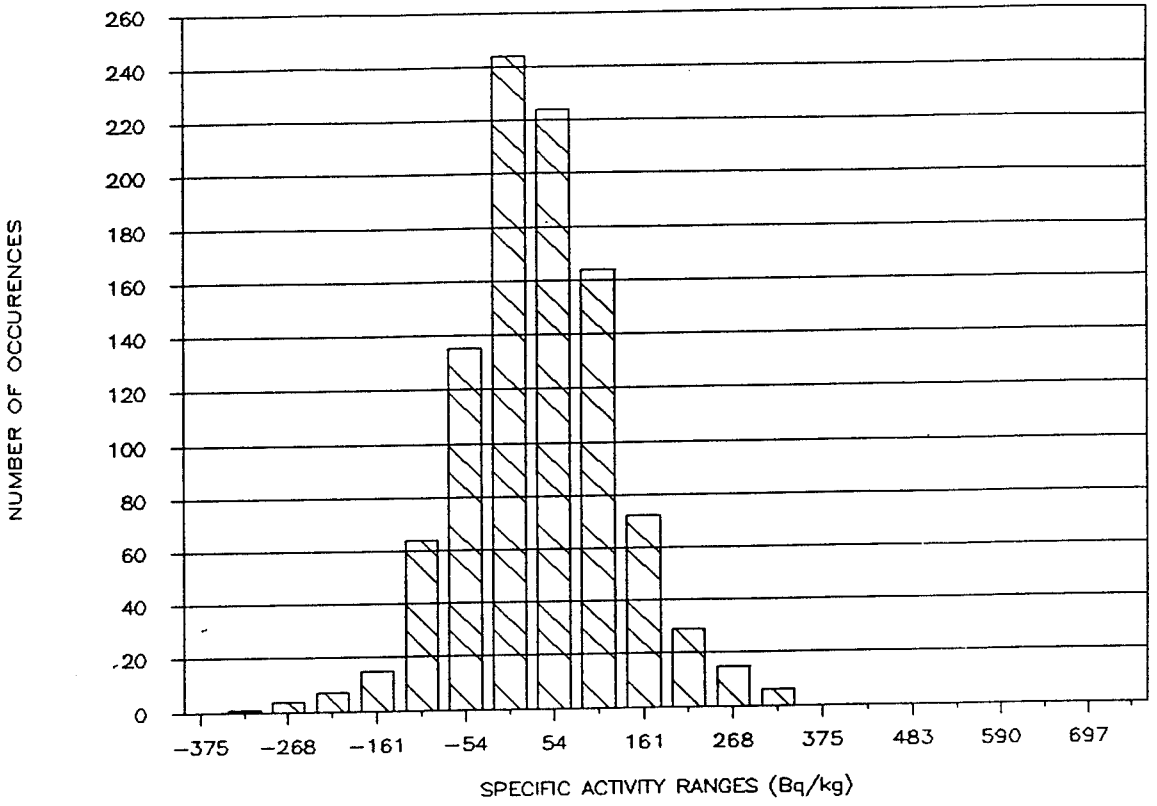
ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	10	1.9%	4
8000	210	40.9%	8
12000	104	20.2%	12
16000	54	10.5%	16
20000	38	7.4%	20
24000	23	4.5%	24
28000	14	2.7%	28
32000	10	1.9%	32
36000	13	2.5%	36
40000	5	1.0%	40
44000	4	0.8%	44
48000	1	0.2%	48
52000	5	1.0%	52
56000	3	0.6%	56
60000	1	0.2%	60
64000	4	0.8%	64
68000	1	0.2%	68
72000	2	0.4%	72
76000	0	0.0%	76
80000	0	0.0%	80
84000	1	0.2%	84
>84000	11	2.1%	>84
TOTAL	514		

HPE	504	GATE1	511
MPE	626	GATE2	258
DISE	0		

REC CODE EXPLANATION

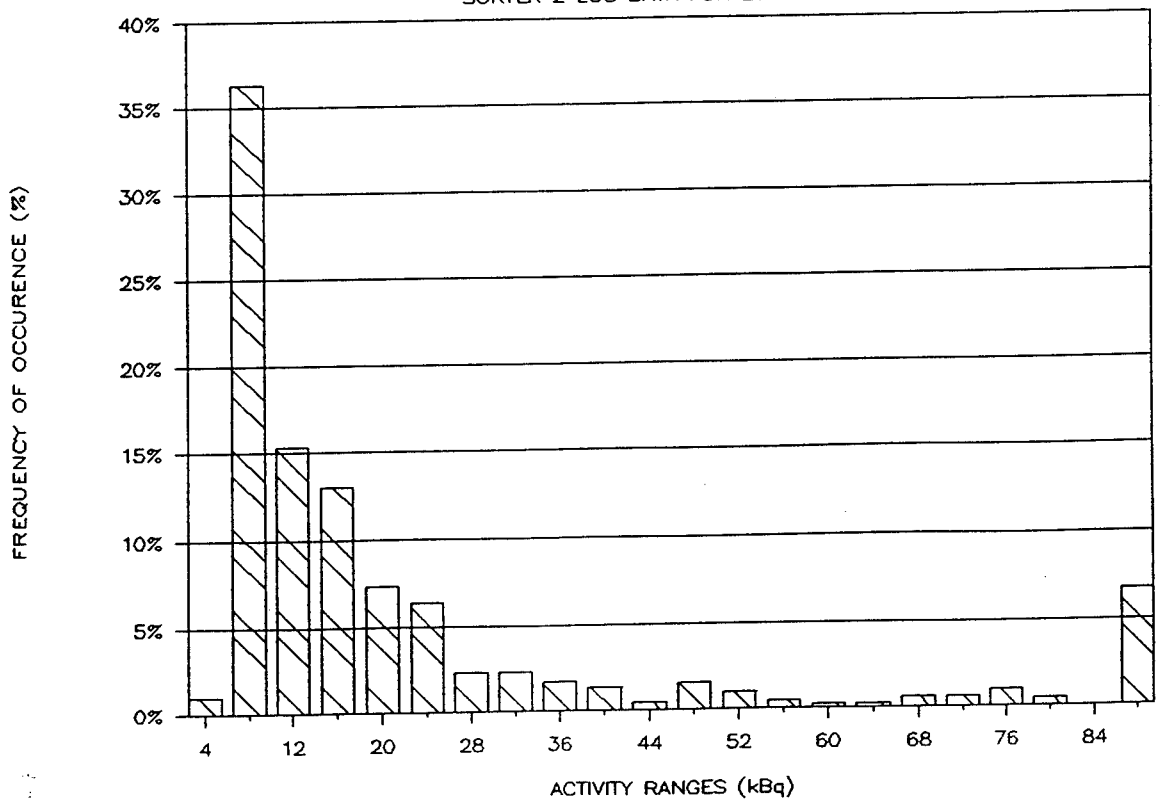
CLEAN SOIL SPECIFIC ACTIVITY

SORTER 2 LOG DATA FOR 20–Oct–92



JA SOIL CLEANUP PLANT HOT PARTICLES

SORTER 2 LOG DATA FOR 20–Oct–92



JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 19-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.1 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.91 tons	62.6 tons	
MAXIMUM/SORT	53.8 kg	51.2 kg	
MINIMUM/SORT	0.6 kg	42.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	0.72 yd³	49.6 yd³	50.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	30,417 kBq		
MAXIMUM/SORT	2,161 kBq		
MINIMUM/SORT	2.9 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,544 kBq	(1,955)kBq	
MAXIMUM/SORT	1253 kBq	13 kBq	
MINIMUM/SORT	-5139 Bq	-12 kBq	
SPECIFIC ACTIVITY	10,464 Bq/kg	(31)Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	08:02 AM	
PLANT STARTUP TIME		1.04 hr
PROCESSING END	05:15 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.24 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.23 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.88 hr
TOTAL SYSTEM PAUSE TIME		1.16 hr
TOTAL DOWNTIME (MAX-ACTUAL)		2.34 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		68.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,164	
NONPROCESS RECORDS (Test, calibration, etc)	36	
20-SEC PROCESS RECORDS	1,239	
TOTAL SORT	2	MD>0 & MND=0
NO SORT	726	AD=0 & MD=0 & MND>0
SOME SORT	511	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	3	
AD=0 & MD	0	
AD<0 & MD	1	

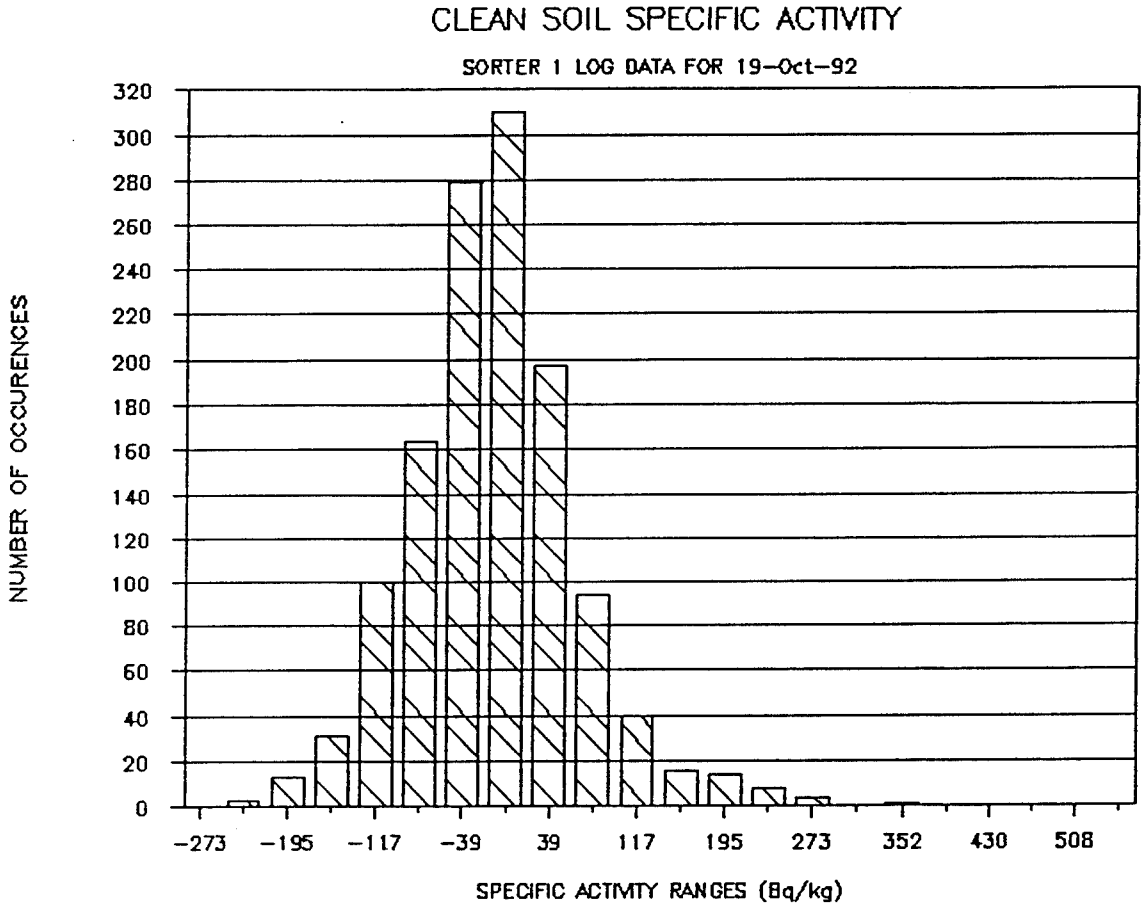
2-SEC COUNT PERIODS	12,390	
2-SEC RECORDS WITH SORTS	925	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	241	74.6%
3 DETECTORS	61	18.9%
4 DETECTORS	17	5.3%
5 DETECTORS	4	1.2%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	323	
NET 2-SEC RECORDS WITH SORTS	602	
2-SEC PERIODS WITH NO SORTS	11,788	
AVG TIME BETWEEN 2-SEC SORTS	41.2	sec

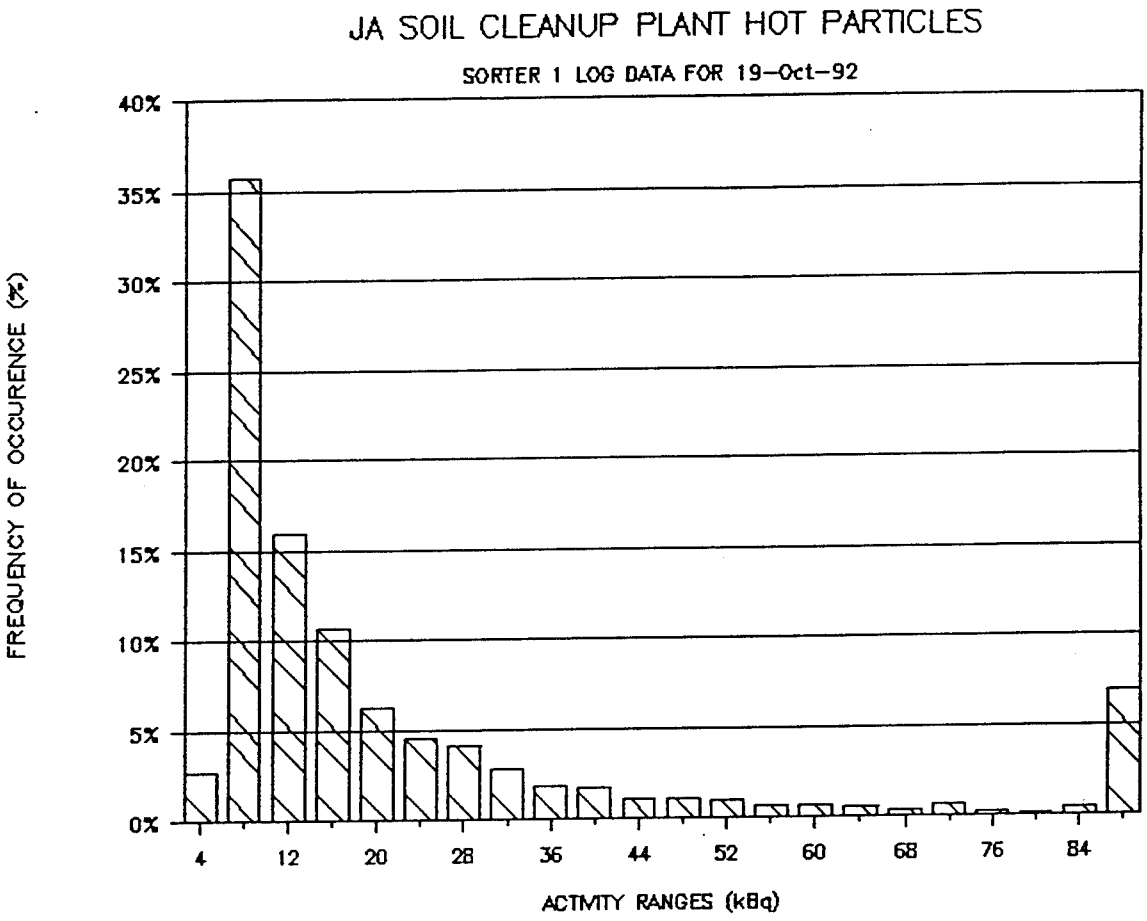
1-GATE SORTS	469	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	20	4.3%	-14000	0	-273
2	60	12.8%	-12000	3	-234
3	79	16.8%	-10000	13	-195
4	94	20.0%	-8000	31	-156
5	61	13.0%	-6000	100	-117
6	64	13.6%	-4000	164	-78
7	61	13.0%	-2000	279	-39
8	30	6.4%	0	310	0
TOTAL	469		2000	197	39
			4000	94	78
2-GATE SORTS	456		6000	40	117
DETECTO	SORTS	FREQ%	8000	16	156
8			10000	14	195
9	46	10.1%	12000	8	234
10	71	15.5%	14000	4	273
11	90	19.7%	16000	0	313
12	79	17.3%	18000	1	352
13	58	12.7%	20000	0	391
14	67	14.7%	22000	0	430
15	46	10.1%	24000	0	469
TOTAL	457		26000	0	508
			>28000	0	0
			TOTAL	1274	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	25	2.7%	4
8000	331	35.7%	8
12000	148	16.0%	12
16000	99	10.7%	16
20000	58	6.3%	20
24000	42	4.5%	24
28000	38	4.1%	28
32000	26	2.8%	32
36000	17	1.8%	36
40000	16	1.7%	40
44000	10	1.1%	44
48000	10	1.1%	48
52000	9	1.0%	52
56000	6	0.6%	56
60000	6	0.6%	60
64000	5	0.5%	64
68000	3	0.3%	68
72000	6	0.6%	72
76000	2	0.2%	76
80000	1	0.1%	80
84000	4	0.4%	84
>84000	64	6.9%	>84
TOTAL	926		

HPE	861	GATE1	925
MPE	402	GATE2	456
DISE	166		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 19-Oct-92
NUMBER OF OCCURENCES
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-273
-195
-117
-39
39
117
195
273
352
430
508
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 19-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 19-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.1 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.10 tons	62.4 tons	
MAXIMUM/SORT	51.2 kg	51.2 kg	
MINIMUM/SORT	0.6 kg	44.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.3%
EQUIVALENT SOIL-IN-GROUND	0.87 yd³	49.4 yd³	50.3 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	19,450 kBq		
MAXIMUM/SORT	1,332 kBq		
MINIMUM/SORT	3.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,261 kBq	2,598 kBq	
MAXIMUM/SORT	890 kBq	17 kBq	
MINIMUM/SORT	-3326 Bq	-10 kBq	
SPECIFIC ACTIVITY	6,616 Bq/kg	42 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	08:02 AM		
PLANT STARTUP TIME		1.03 hr	
PROCESSING END	05:16 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.24 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.24 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.88 hr	
TOTAL SYSTEM PAUSE TIME		1.16 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		2.35 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		68.8%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	2,103	
NONPROCESS RECORDS (Test, calibration, etc)	37	
20-SEC PROCESS RECORDS	1,239	
TOTAL SORT	3	MD>0 & MND=0
NO SORT	592	AD=0 & MD=0 & MND>0
SOME SORT	645	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	(1)	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	1	

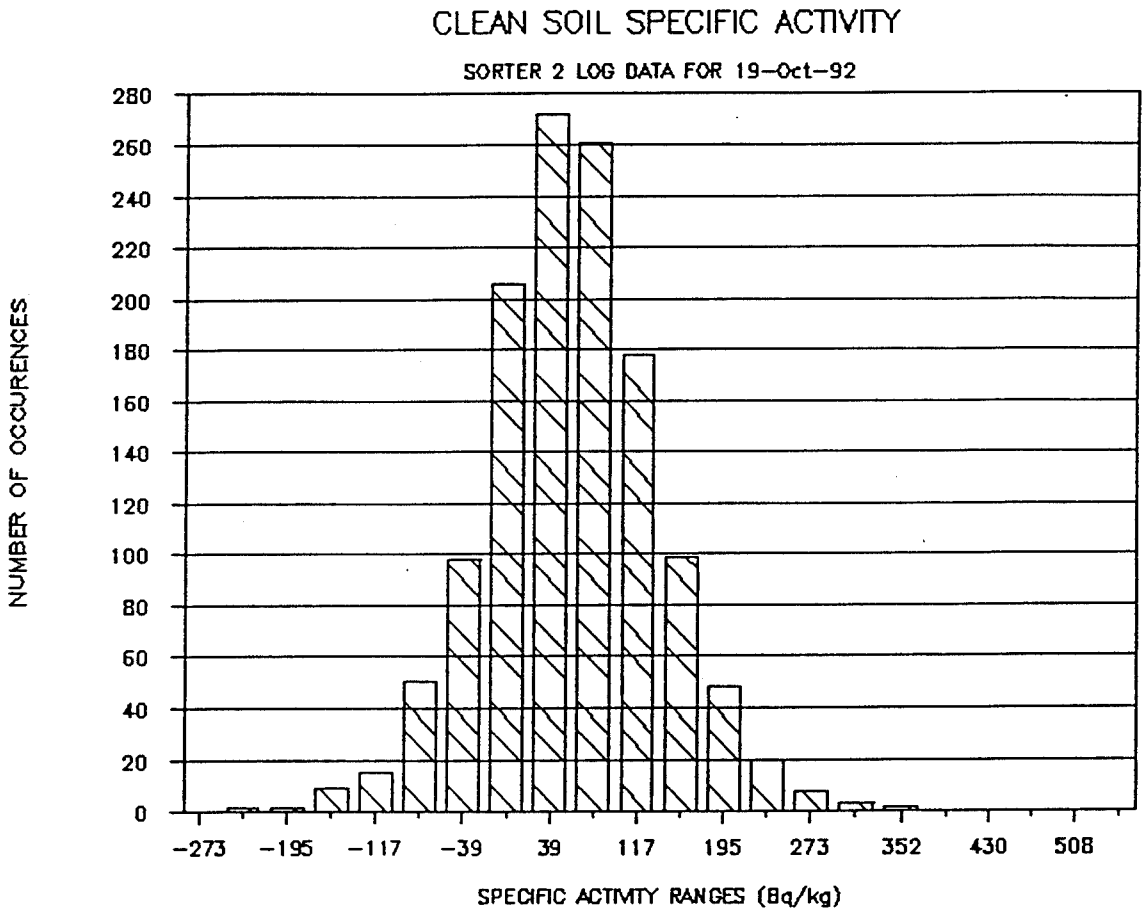
2-SEC COUNT PERIODS	12,390	
2-SEC RECORDS WITH SORTS	864	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	218	80.4%
3 DETECTORS	45	16.6%
4 DETECTORS	7	2.6%
5 DETECTORS	1	0.4%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	271	
NET 2-SEC RECORDS WITH SORTS	593	
2-SEC PERIODS WITH NO SORTS	11,797	
AVG TIME BETWEEN 2-SEC SORTS	41.8	sec

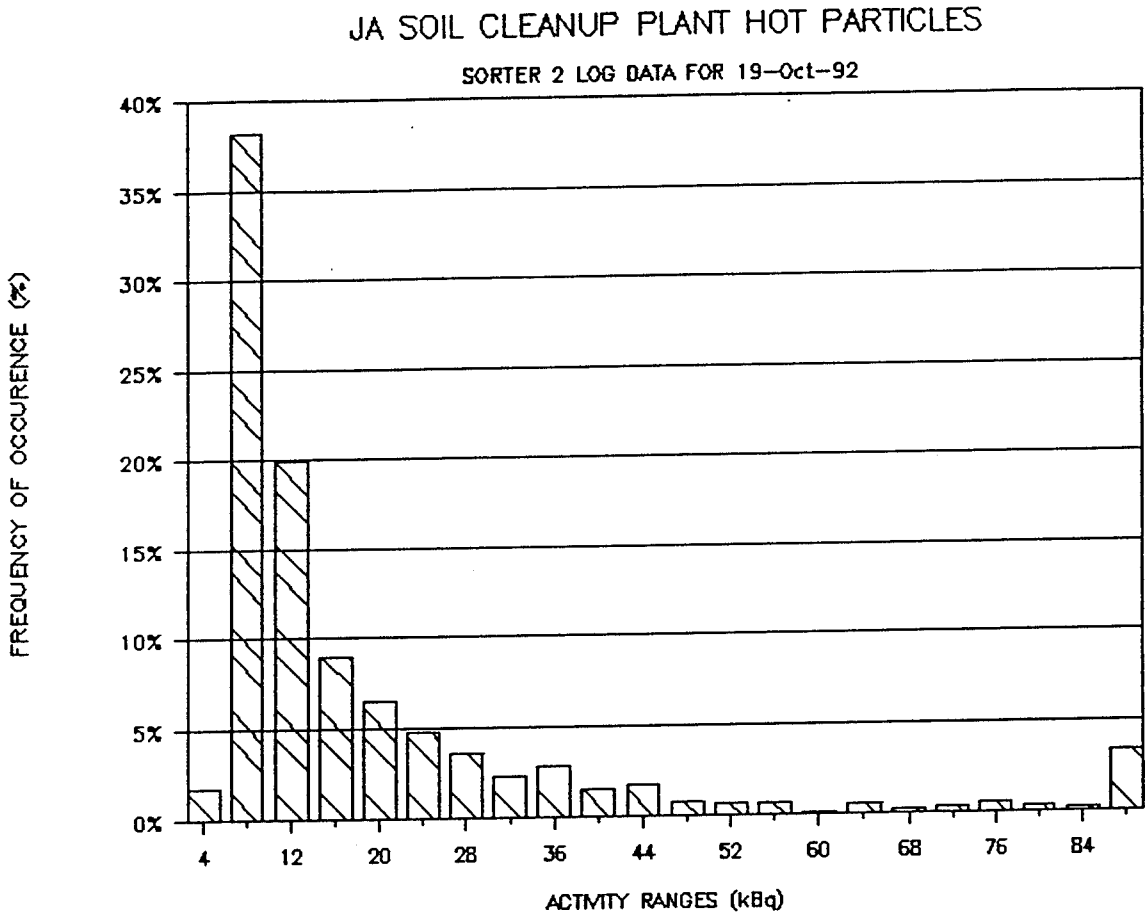
1-GATE SORTS	451	ACT_ND	NUMBER	SPEC_A
DETECTO SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1 21	4.7%	-14000	0	-273
2 58	12.9%	-12000	2	-234
3 86	19.1%	-10000	2	-195
4 98	21.7%	-8000	9	-156
5 77	17.1%	-6000	15	-117
6 54	12.0%	-4000	51	-78
7 42	9.3%	-2000	98	-39
8 15	3.3%	0	206	0
TOTAL 451		2000	272	39
		4000	261	78
2-GATE SORTS	413	6000	178	117
DETECTO SORTS	FREQ%	8000	99	156
8		10000	48	195
9 47	11.3%	12000	20	234
10 56	13.5%	14000	8	273
11 84	20.2%	16000	3	313
12 77	18.6%	18000	2	352
13 73	17.6%	20000	0	391
14 57	13.7%	22000	0	430
15 21	5.1%	24000	0	469
TOTAL 415		26000	0	508
		>28000	0	0
		TOTAL	1274	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	15	1.7%	4
8000	331	38.2%	8
12000	173	20.0%	12
16000	78	9.0%	16
20000	56	6.5%	20
24000	41	4.7%	24
28000	31	3.6%	28
32000	20	2.3%	32
36000	24	2.8%	36
40000	13	1.5%	40
44000	15	1.7%	44
48000	7	0.8%	48
52000	6	0.7%	52
56000	6	0.7%	56
60000	1	0.1%	60
64000	5	0.6%	64
68000	2	0.2%	68
72000	3	0.3%	72
76000	5	0.6%	76
80000	3	0.3%	80
84000	2	0.2%	84
>84000	29	3.3%	>84
TOTAL	866		

HPE	830	GATE1	864
MPE	661	GATE2	413
DISE	234		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 19-Oct-92
NUMBER OF OCCURENCES
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-273
-195
-117
-39
39
117
195
273
352
430
508
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 19-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 17-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.73 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.54 tons	54.4 tons	
MAXIMUM/SORT	6.4 kg	55.9 kg	
MINIMUM/SORT	0.6 kg	44.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.42 yd³	43.1 yd³	43.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	11,773 kBq		
MAXIMUM/SORT	699 kBq		
MINIMUM/SORT	3.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,866 kBq	(968)kBq	
MAXIMUM/SORT	442 kBq	15 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	7,211 Bq/kg	(18)Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	09:19 AM		
PLANT STARTUP TIME		2.32 hr	
PROCESSING END	04:40 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.83 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		7.36 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.80 hr	
TOTAL SYSTEM PAUSE TIME		0.02 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.56 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		58.0%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,614	
NONPROCESS RECORDS (Test, calibration, etc)	30	
20-SEC PROCESS RECORDS	1,044	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	700	AD=0 & MD=0 & MND>0
SOME SORT	344	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

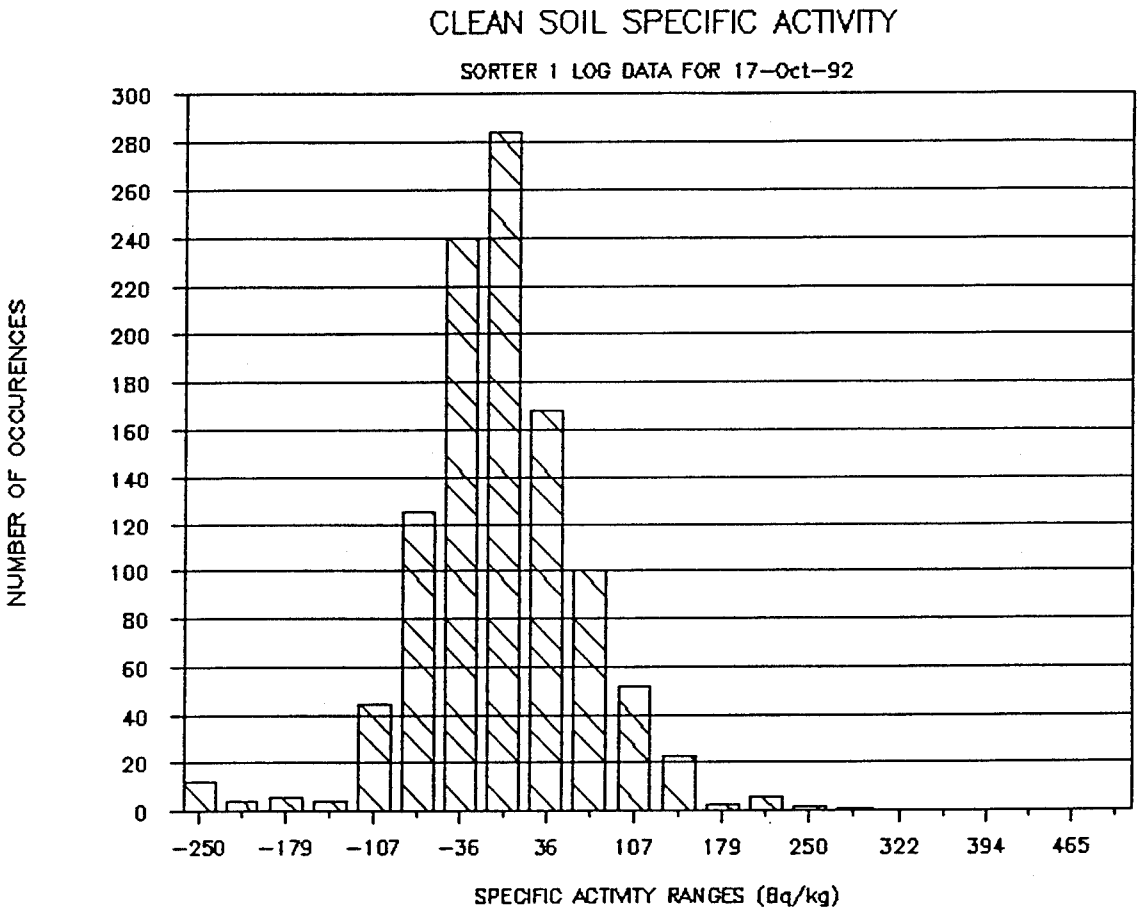
2-SEC COUNT PERIODS		10,440	
2-SEC RECORDS WITH SORTS		570	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	138	80.2%
	3 DETECTORS	28	16.3%
	4 DETECTORS	6	3.5%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	172	
NET 2-SEC RECORDS WITH SORTS		398	
2-SEC PERIODS WITH NO SORTS		10,042	
AVG TIME BETWEEN 2-SEC SORTS		52.5	sec

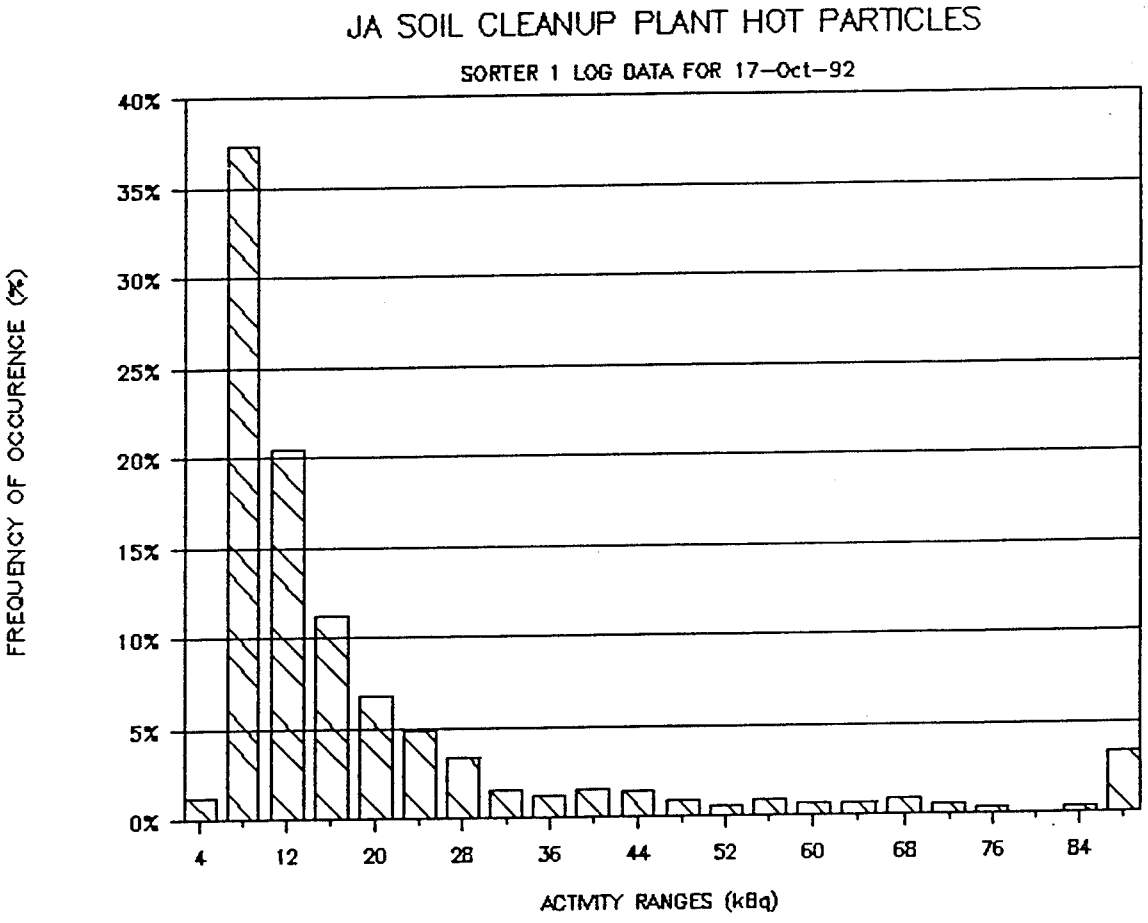
1-GATE SORTS		293	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	6	2.0%	-14000	12	-250
2	34	11.5%	-12000	4	-215
3	54	18.3%	-10000	6	-179
4	55	18.6%	-8000	4	-143
5	58	19.7%	-6000	45	-107
6	34	11.5%	-4000	125	-72
7	37	12.5%	-2000	240	-36
8	17	5.8%	0	284	0
TOTAL	295		2000	168	36
			4000	100	72
2-GATE SORTS		277	6000	52	107
DETECTO	SORTS	FREQ%	8000	23	143
8			10000	3	179
9	17	6.1%	12000	6	215
10	43	15.5%	14000	2	250
11	56	20.1%	16000	1	286
12	46	16.5%	18000	0	322
13	51	18.3%	20000	0	358
14	33	11.9%	22000	0	394
15	32	11.5%	24000	0	429
TOTAL	278		26000	0	465
			>28000	0	0
			TOTAL	1075	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	7	1.2%	4
8000	214	37.3%	8
12000	117	20.4%	12
16000	64	11.2%	16
20000	39	6.8%	20
24000	28	4.9%	24
28000	19	3.3%	28
32000	9	1.6%	32
36000	7	1.2%	36
40000	9	1.6%	40
44000	8	1.4%	44
48000	5	0.9%	48
52000	3	0.5%	52
56000	5	0.9%	56
60000	4	0.7%	60
64000	4	0.7%	64
68000	5	0.9%	68
72000	3	0.5%	72
76000	2	0.3%	76
80000	0	0.0%	80
84000	2	0.3%	84
>84000	19	3.3%	>84
TOTAL	573		

HPE	548	GATE1	570
MPE	285	GATE2	277
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 17-Oct-92
NUMBER OF OCCURENCES
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 17-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 17-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.76 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.68 tons	54.7 tons	
MAXIMUM/SORT	6.4 kg	55.9 kg	
MINIMUM/SORT	0.6 kg	44.8 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.54 yd³	43.4 yd³	43.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	14,176 kBq		
MAXIMUM/SORT	605 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,422 kBq	2,872 kBq	
MAXIMUM/SORT	467 kBq	14 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	7,936 Bq/kg	52 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	09:19 AM		
PLANT STARTUP TIME		2.32 hr	
PROCESSING END	04:45 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.75 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		7.43 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.86 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.58 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		58.5%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,672	
NONPROCESS RECORDS (Test, calibration, etc)	22	
20-SEC PROCESS RECORDS	1,054	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	578	AD=0 & MD=0 & MND>0
SOME SORT	476	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

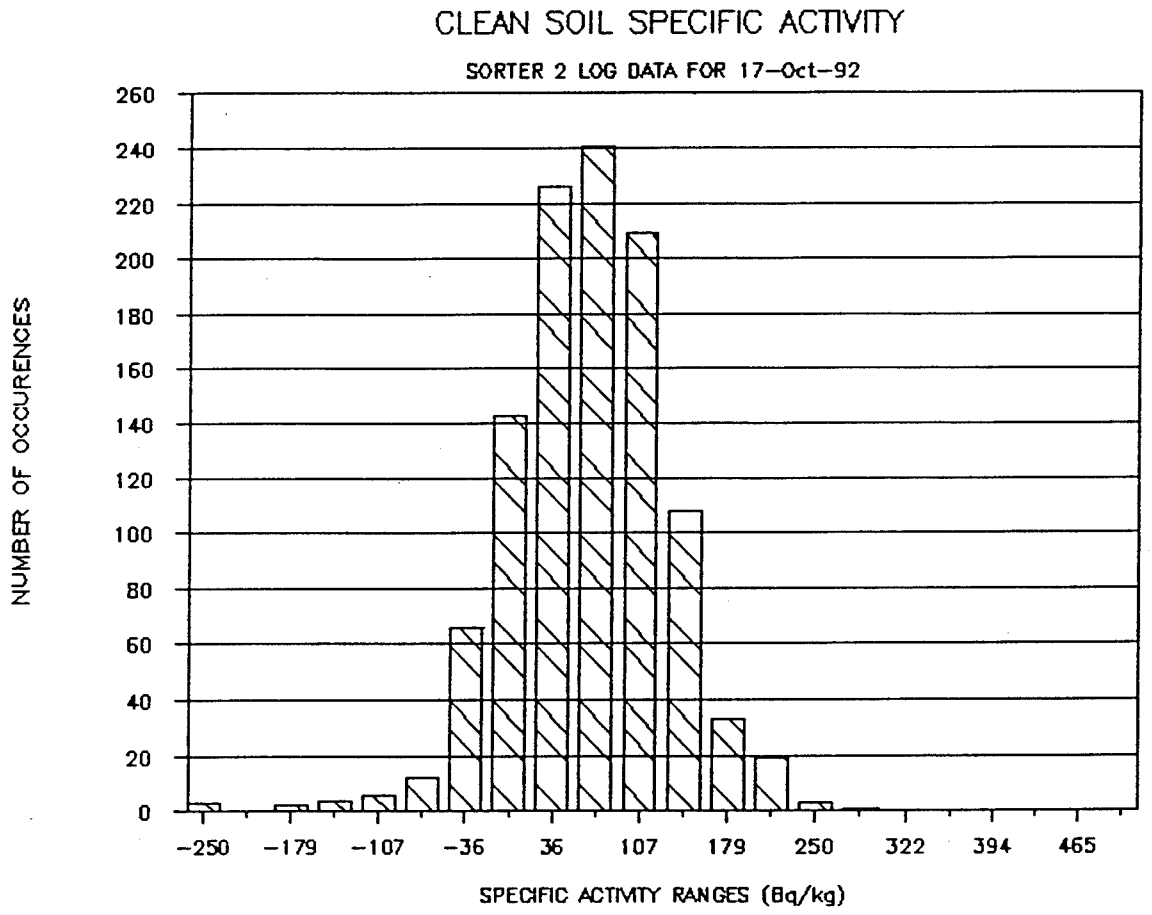
JA SOIL CLEANUP PLANT LOG SUMMARY

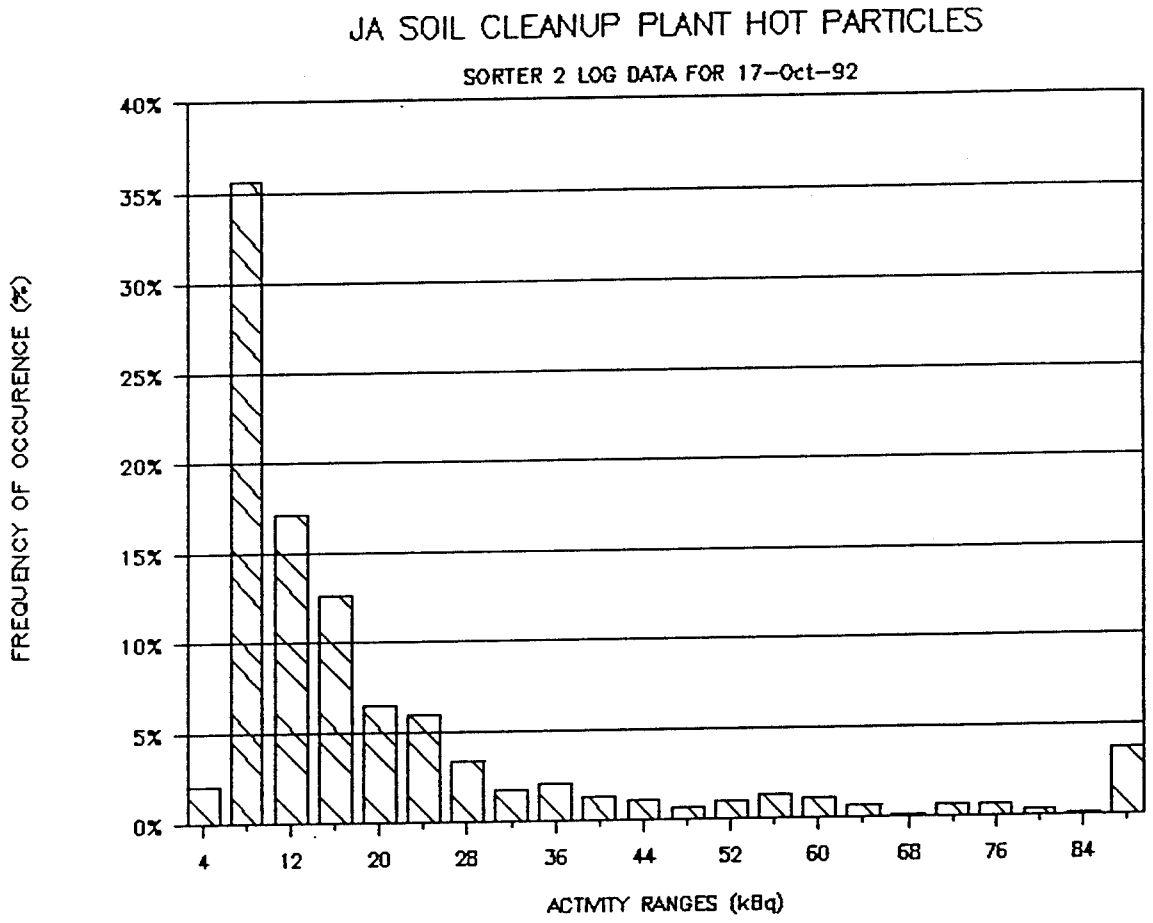
2-SEC COUNT PERIODS	10,540	
2-SEC RECORDS WITH SORTS	618	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	164	77.7%
3 DETECTORS	38	18.0%
4 DETECTORS	7	3.3%
5 DETECTORS	2	0.9%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	211	
NET 2-SEC RECORDS WITH SORTS	407	
2-SEC PERIODS WITH NO SORTS	10,133	
AVG TIME BETWEEN 2-SEC SORTS	51.8 sec	

1-GATE SORTS		329	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	10	3.0%	-14000	3	-250	4000	13	2.1%	4
2	42	12.8%	-12000	0	-215	8000	220	35.6%	8
3	66	20.1%	-10000	2	-179	12000	106	17.2%	12
4	63	19.1%	-8000	4	-143	16000	78	12.6%	16
5	52	15.8%	-6000	6	-107	20000	40	6.5%	20
6	52	15.8%	-4000	12	-72	24000	37	6.0%	24
7	35	10.6%	-2000	66	-36	28000	21	3.4%	28
8	9	2.7%	0	143	0	32000	11	1.8%	32
TOTAL	329		2000	226	36	36000	13	2.1%	36
			4000	241	72	40000	8	1.3%	40
2-GATE SORTS		289	6000	209	107	44000	7	1.1%	44
DETECTO	SORTS	FREQ%	8000	108	143	48000	4	0.6%	48
8			10000	33	179	52000	6	1.0%	52
9	27	9.3%	12000	19	215	56000	8	1.3%	56
10	44	15.2%	14000	3	250	60000	7	1.1%	60
11	71	24.6%	16000	1	286	64000	4	0.6%	64
12	51	17.6%	18000	0	322	68000	1	0.2%	68
13	42	14.5%	20000	0	358	72000	4	0.6%	72
14	45	15.6%	22000	0	394	76000	4	0.6%	76
15	9	3.1%	24000	0	429	80000	2	0.3%	80
TOTAL	289		26000	0	465	84000	1	0.2%	84
			>28000	0	0	>84000	23	3.7%	>84
			TOTAL	1076		TOTAL	618		

HPE	582	GATE1	618
MPE	478	GATE2	289
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 17-Oct-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 17-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 15-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.74 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.15 tons	23.1 tons	
MAXIMUM/SORT	4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	49.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.4%
EQUIVALENT SOIL-IN-GROUND	0.12 yd³	18.3 yd³	18.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	3,366 kBq		
MAXIMUM/SORT	273 kBq		
MINIMUM/SORT	3.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,126 kBq	(960)kBq	
MAXIMUM/SORT	166 kBq	7 kBq	
MINIMUM/SORT	0 Bq	-18 kBq	
SPECIFIC ACTIVITY	7,483 Bq/kg	(42)Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	02:42 PM		
PLANT STARTUP TIME		7.71 hr	
PROCESSING END	05:06 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.39 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		2.40 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		2.41 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		-0.00 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		24.0%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	590	
NONPROCESS RECORDS (Test, calibration, etc)	7	
20-SEC PROCESS RECORDS	433	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	323	AD=0 & MD=0 & MND>0
SOME SORT	110	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

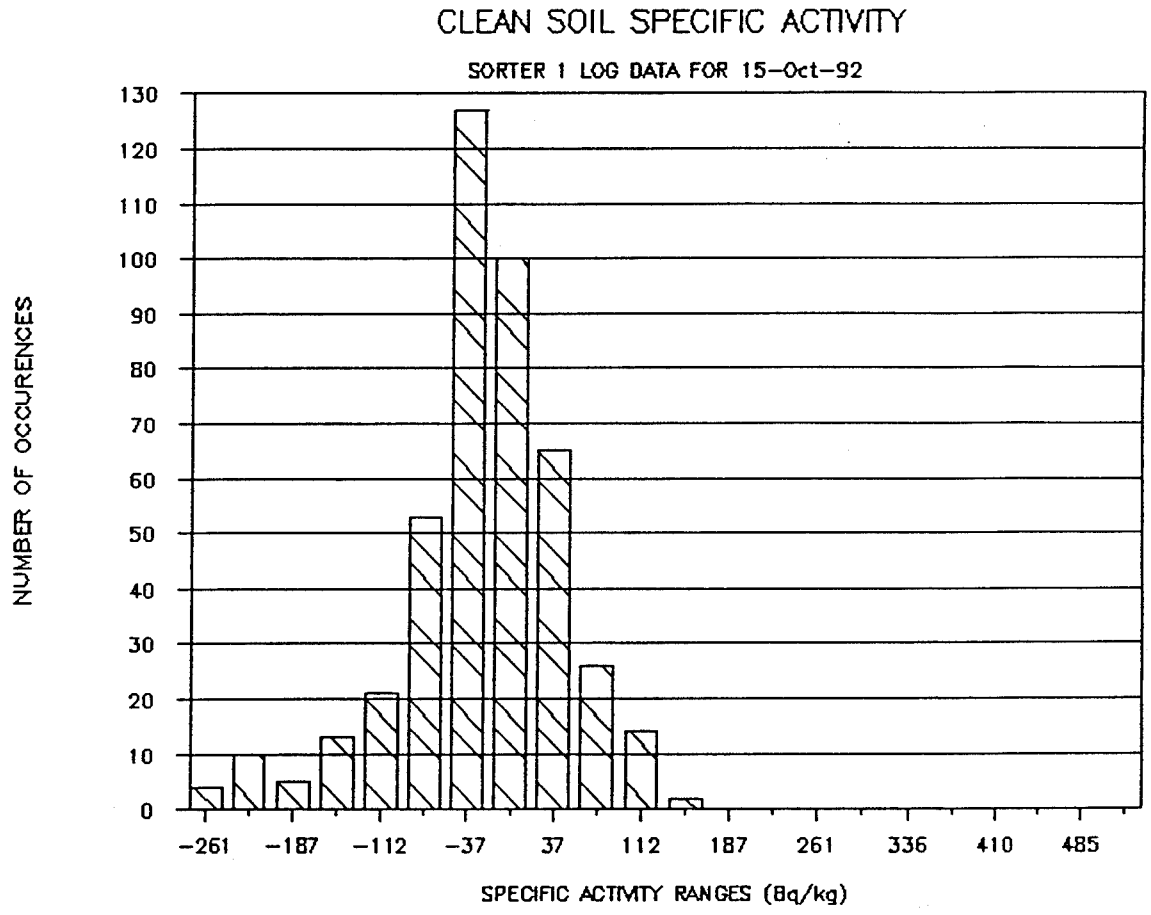
JA SOIL CLEANUP PLANT LOG SUMMARY

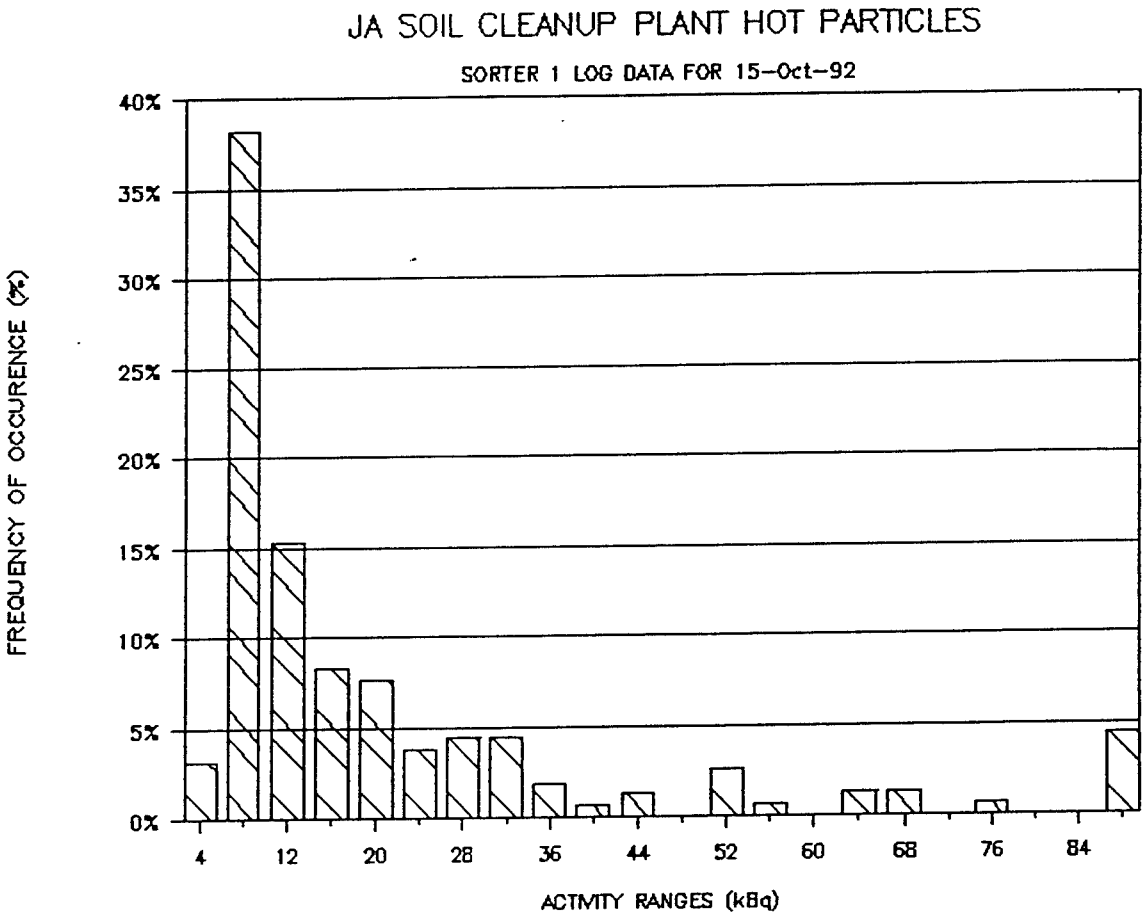
2-SEC COUNT PERIODS	4,330	
2-SEC RECORDS WITH SORTS	157	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	41	83.7%
3 DETECTORS	8	16.3%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	49	
NET 2-SEC RECORDS WITH SORTS	108	
2-SEC PERIODS WITH NO SORTS	4,222	
AVG TIME BETWEEN 2-SEC SORTS	80.2	sec

1-GATE SORTS		78	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	2	2.6%	-14000	4	-261	4000	5	3.2%	4
2	8	10.3%	-12000	10	-224	8000	60	38.2%	8
3	13	16.7%	-10000	5	-187	12000	24	15.3%	12
4	18	23.1%	-8000	13	-149	16000	13	8.3%	16
5	15	19.2%	-6000	21	-112	20000	12	7.6%	20
6	11	14.1%	-4000	53	-75	24000	6	3.8%	24
7	8	10.3%	-2000	127	-37	28000	7	4.5%	28
8	3	3.8%	0	100	0	32000	7	4.5%	32
TOTAL	78		2000	65	37	36000	3	1.9%	36
			4000	26	75	40000	1	0.6%	40
2-GATE SORTS		79	6000	14	112	44000	2	1.3%	44
DETECTO	SORTS	FREQ%	8000	2	149	48000	0	0.0%	48
8			10000	0	187	52000	4	2.5%	52
9	8	10.1%	12000	0	224	56000	1	0.6%	56
10	12	15.2%	14000	0	261	60000	0	0.0%	60
11	14	17.7%	16000	0	299	64000	2	1.3%	64
12	18	22.8%	18000	0	336	68000	2	1.3%	68
13	13	16.5%	20000	0	373	72000	0	0.0%	72
14	8	10.1%	22000	0	410	76000	1	0.6%	76
15	6	7.6%	24000	0	448	80000	0	0.0%	80
TOTAL	79		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	7	4.5%	>84
			TOTAL	440		TOTAL	157		

HPE	153	GATE1	157
MPE	72	GATE2	79
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 15-Oct-92
NUMBER OF OCCURENCES
0
10
20
30
40
50
60
70
80
90
100
110
120
130
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 15-Oct-92
FREQUENCY OF OCCURENCE (%)
40%
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 15-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.17 tons	23.3 tons	
MAXIMUM/SORT	6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.3%
EQUIVALENT SOIL-IN-GROUND	0.13 yd³	18.5 yd³	18.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	4,704 kBq		
MAXIMUM/SORT	318 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,639 kBq	595 kBq	
MAXIMUM/SORT	183 kBq	12 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	9,763 Bq/kg	26 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	02:42 PM		
PLANT STARTUP TIME		7.71 hr	
PROCESSING END	05:08 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.37 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		2.43 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		2.43 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		-0.01 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		24.3%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	604	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	438	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	321	AD=0 & MD=0 & MND>0
SOME SORT	117	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

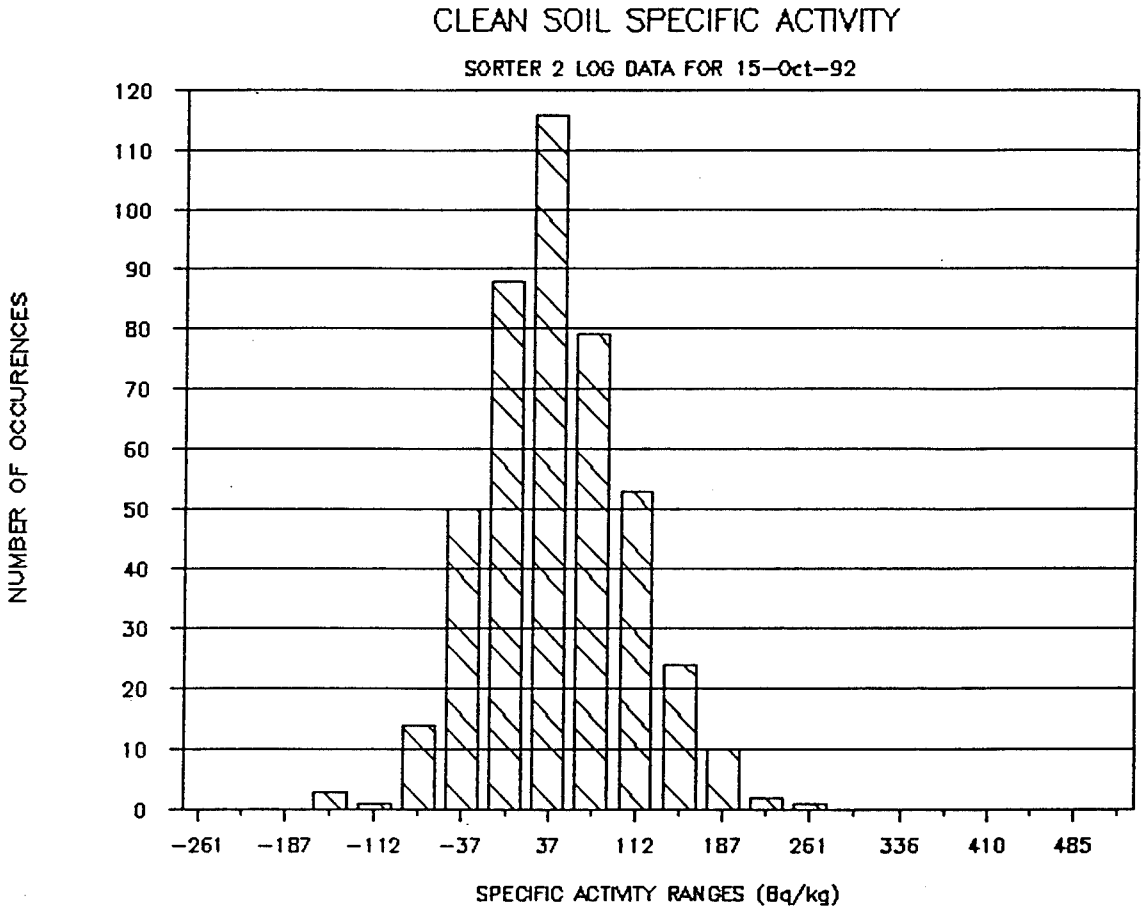
2-SEC COUNT PERIODS	4,380	
2-SEC RECORDS WITH SORTS	166	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	43	84.3%
3 DETECTORS	8	15.7%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	51	
NET 2-SEC RECORDS WITH SORTS	115	
2-SEC PERIODS WITH NO SORTS	4,265	
AVG TIME BETWEEN 2-SEC SORTS	76.2 sec	

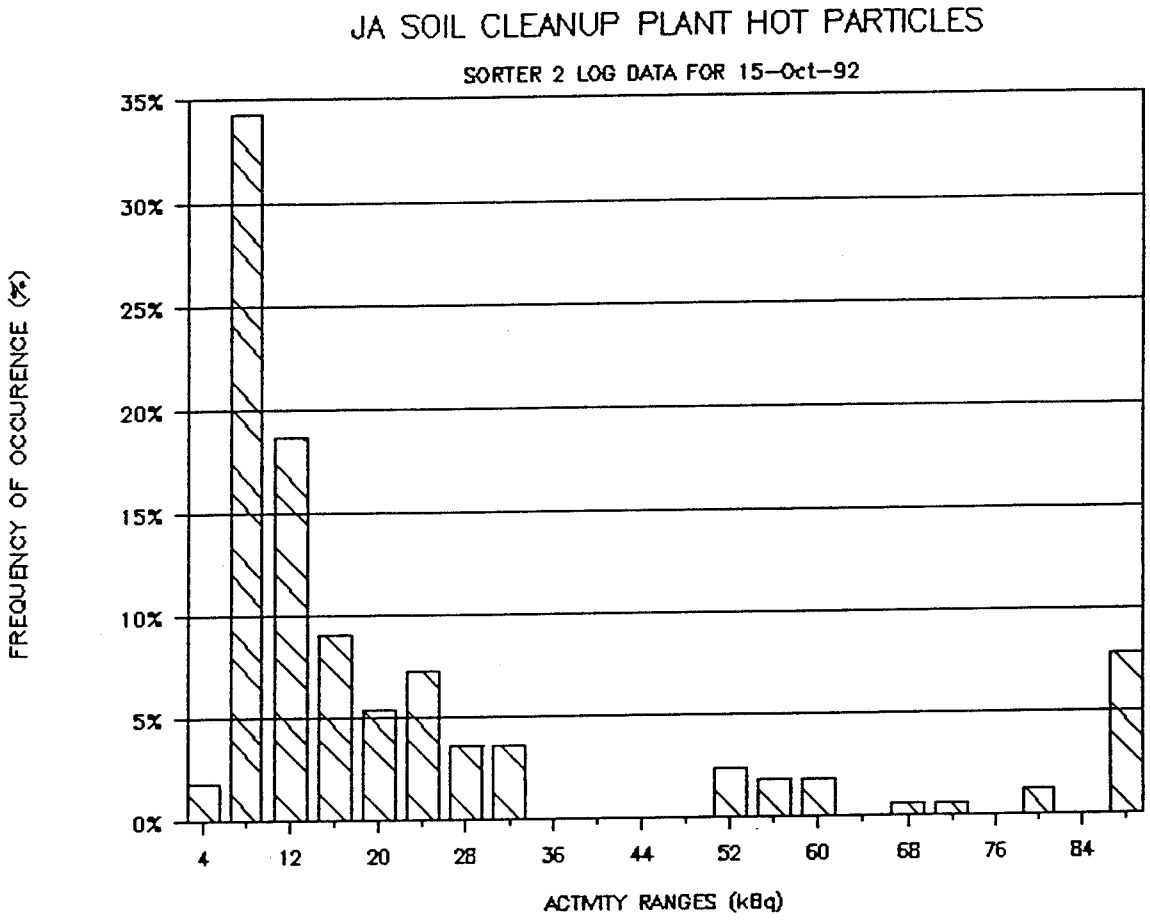
1-GATE SORTS		85	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	5	5.9%	-14000	0	-261
2	15	17.6%	-12000	0	-224
3	14	16.5%	-10000	0	-187
4	13	15.3%	-8000	3	-149
5	13	15.3%	-6000	1	-112
6	12	14.1%	-4000	14	-75
7	12	14.1%	-2000	50	-37
8	1	1.2%	0	88	0
TOTAL	85		2000	116	37
			4000	79	75
2-GATE SORTS		81	6000	53	112
DETECTO	SORTS	FREQ%	8000	24	149
8			10000	10	187
9	12	14.8%	12000	2	224
10	12	14.8%	14000	1	261
11	15	18.5%	16000	0	299
12	11	13.6%	18000	0	336
13	14	17.3%	20000	0	373
14	14	17.3%	22000	0	410
15	3	3.7%	24000	0	448
TOTAL	81		26000	0	485
			>28000	0	0
			TOTAL	441	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	3	1.8%	4
8000	57	34.3%	8
12000	31	18.7%	12
16000	15	9.0%	16
20000	9	5.4%	20
24000	12	7.2%	24
28000	6	3.6%	28
32000	6	3.6%	32
36000	0	0.0%	36
40000	0	0.0%	40
44000	0	0.0%	44
48000	0	0.0%	48
52000	4	2.4%	52
56000	3	1.8%	56
60000	3	1.8%	60
64000	0	0.0%	64
68000	1	0.6%	68
72000	1	0.6%	72
76000	0	0.0%	76
80000	2	1.2%	80
84000	0	0.0%	84
>84000	13	7.8%	>84
TOTAL	166		

HPE	157	GATE1	166
MPE	94	GATE2	81
DISE	0		

REC CODE EXPLANATION


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 15-Oct-92
NUMBER OF OCCURENCES
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 15-Oct-92
FREQUENCY OF OCCURENCE (%)
35%
30%
25%
20%
15%
10%
5%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 07-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.07 tons	13.7 tons	
MAXIMUM/SORT	2.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.5%
EQUIVALENT SOIL-IN-GROUND	0.05 yd³	10.9 yd³	10.9 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	1,035 kBq		
MAXIMUM/SORT	127 kBq		
MINIMUM/SORT	3.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	385 kBq	522 kBq	
MAXIMUM/SORT	77 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	5,635 Bq/kg	38 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:24 AM		
PLANT STARTUP TIME		0.42 hr	
PROCESSING END	08:50 AM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		8.67 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		1.42 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		1.43 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		-0.01 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		14.3%	

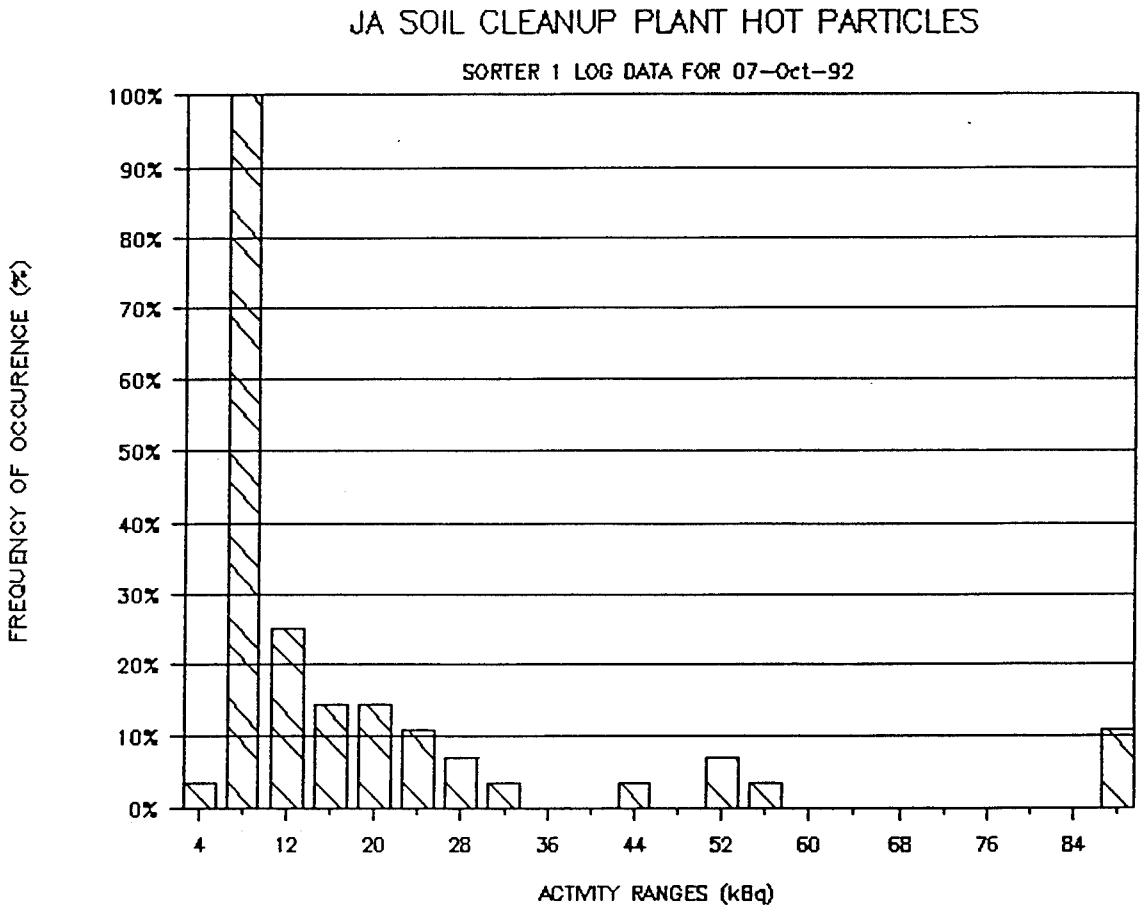
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	250	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	257	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	193	AD=0 & MD=0 & MND>0
SOME SORT	64	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

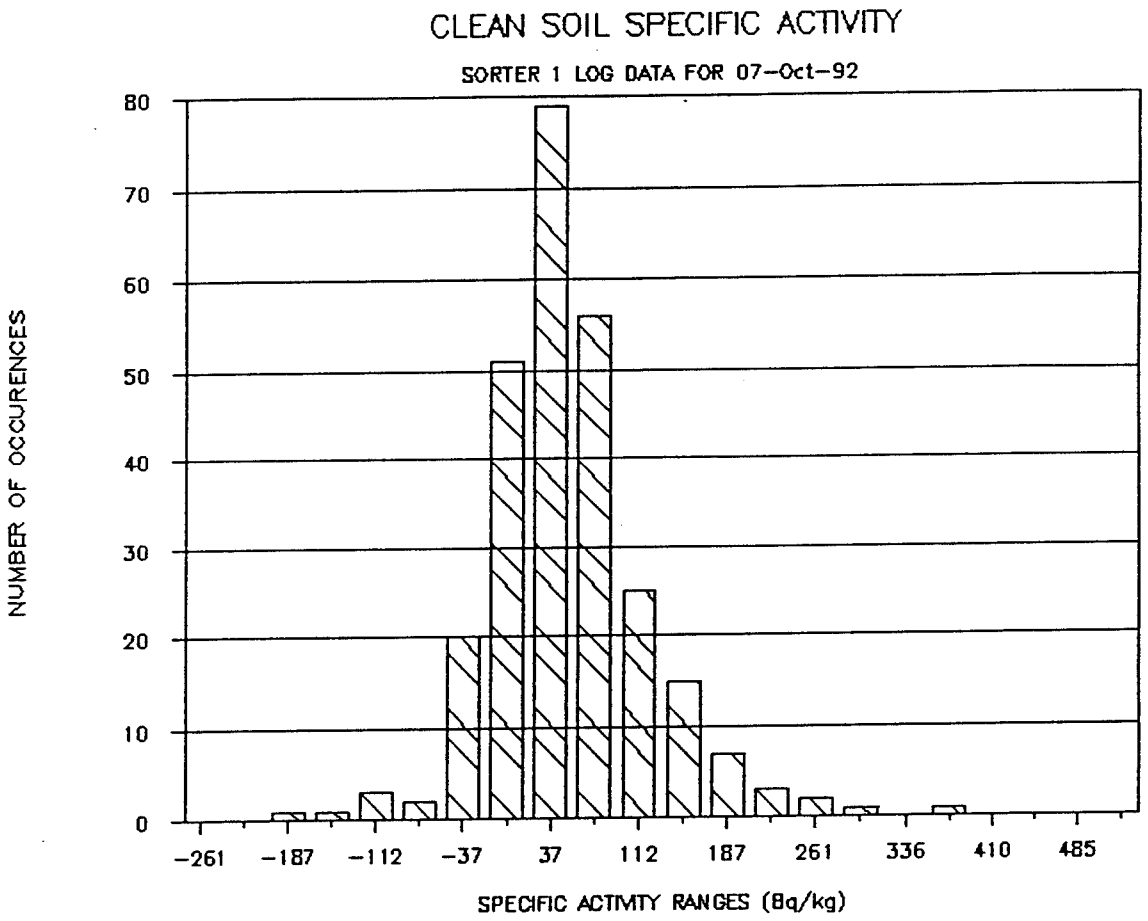
2-SEC COUNT PERIODS	2,570	
2-SEC RECORDS WITH SORTS	57	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	14	87.5%
3 DETECTORS	2	12.5%
4 DETECTORS	0	0.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	16	
NET 2-SEC RECORDS WITH SORTS	41	
2-SEC PERIODS WITH NO SORTS	2,529	
AVG TIME BETWEEN 2-SEC SORTS	125.4 sec	

1-GATE SORTS		32	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	1	3.8%	-14000	0	-261	4000	1	3.6%	4
2	5	19.2%	-12000	0	-224	8000	28	100.0%	8
3	3	11.5%	-10000	1	-187	12000	7	25.0%	12
4	3	11.5%	-8000	1	-149	16000	4	14.3%	16
5	9	34.6%	-6000	3	-112	20000	4	14.3%	20
6	9	34.6%	-4000	2	-75	24000	3	10.7%	24
7	2	7.7%	-2000	20	-37	28000	2	7.1%	28
8	0	0.0%	0	51	0	32000	1	3.6%	32
TOTAL	26		2000	79	37	36000	0	0.0%	36
			4000	56	75	40000	0	0.0%	40
2-GATE SORTS		25	6000	25	112	44000	1	3.6%	44
DETECTO	SORTS	FREQ%	8000	15	149	48000	0	0.0%	48
8			10000	7	187	52000	2	7.1%	52
9	2	8.0%	12000	3	224	56000	1	3.6%	56
10	4	16.0%	14000	2	261	60000	0	0.0%	60
11	3	12.0%	16000	1	299	64000	0	0.0%	64
12	3	12.0%	18000	0	336	68000	0	0.0%	68
13	9	36.0%	20000	1	373	72000	0	0.0%	72
14	4	16.0%	22000	0	410	76000	0	0.0%	76
15	0	0.0%	24000	0	448	80000	0	0.0%	80
TOTAL	25		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	3	10.7%	>84
			TOTAL	267		TOTAL	28		

HPE	27	GATE1	57
MPE	45	GATE2	25
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 07-Oct-92
FREQUENCY OF OCCURENCE (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 07-Oct-92
NUMBER OF OCCURENCES
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 07-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.03 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.09 tons	14.1 tons	
MAXIMUM/SORT	2.7 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	50.9 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.3%
EQUIVALENT SOIL-IN-GROUND	0.07 yd³	11.1 yd³	11.2 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	844 kBq		
MAXIMUM/SORT	67 kBq		
MINIMUM/SORT	4.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	384 kBq	1,082 kBq	
MAXIMUM/SORT	51 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-5 kBq	
SPECIFIC ACTIVITY	4,168 Bq/kg	77 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:24 AM		
PLANT STARTUP TIME		0.42 hr	
PROCESSING END	08:52 AM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		8.63 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		1.46 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		1.47 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		-0.01 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		14.7%	

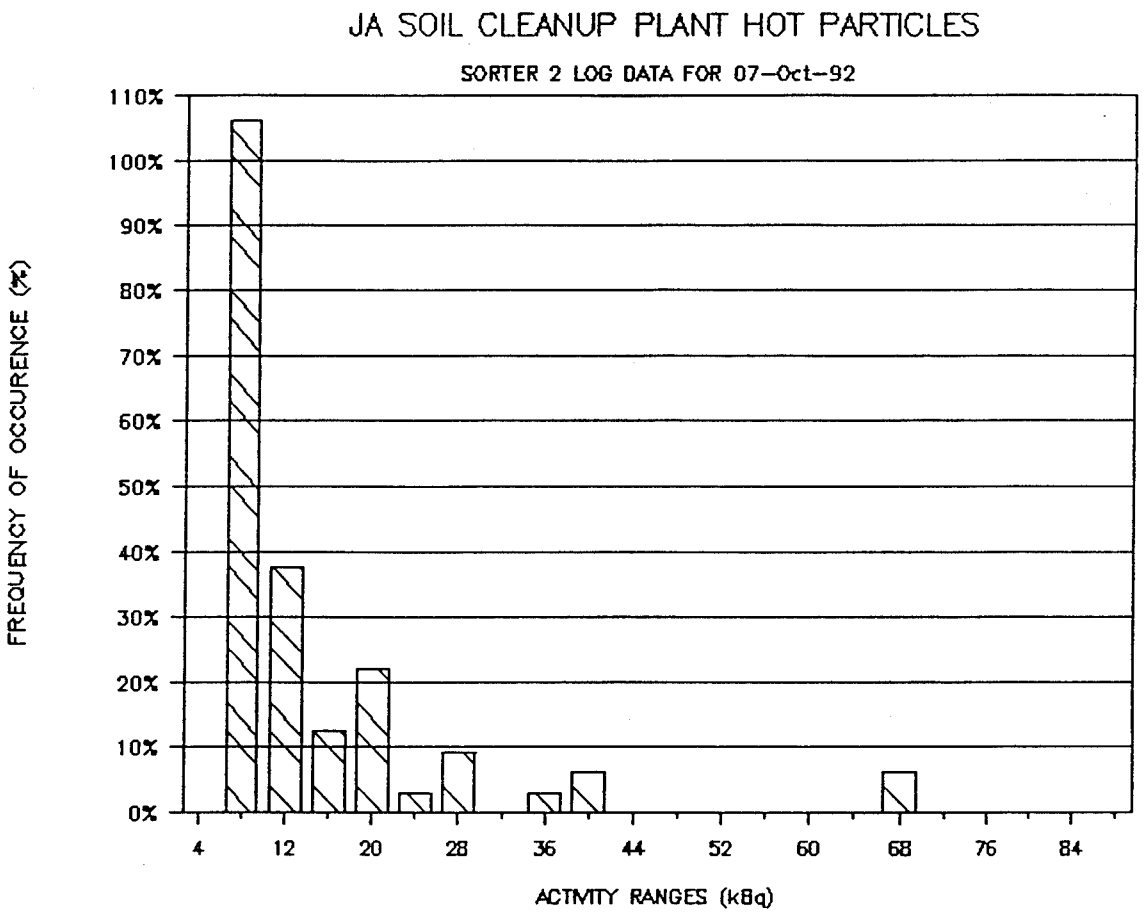
TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	248	
NONPROCESS RECORDS (Test, calibration, etc)	3	
20-SEC PROCESS RECORDS	264	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	182	AD=0 & MD=0 & MND>0
SOME SORT	82	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

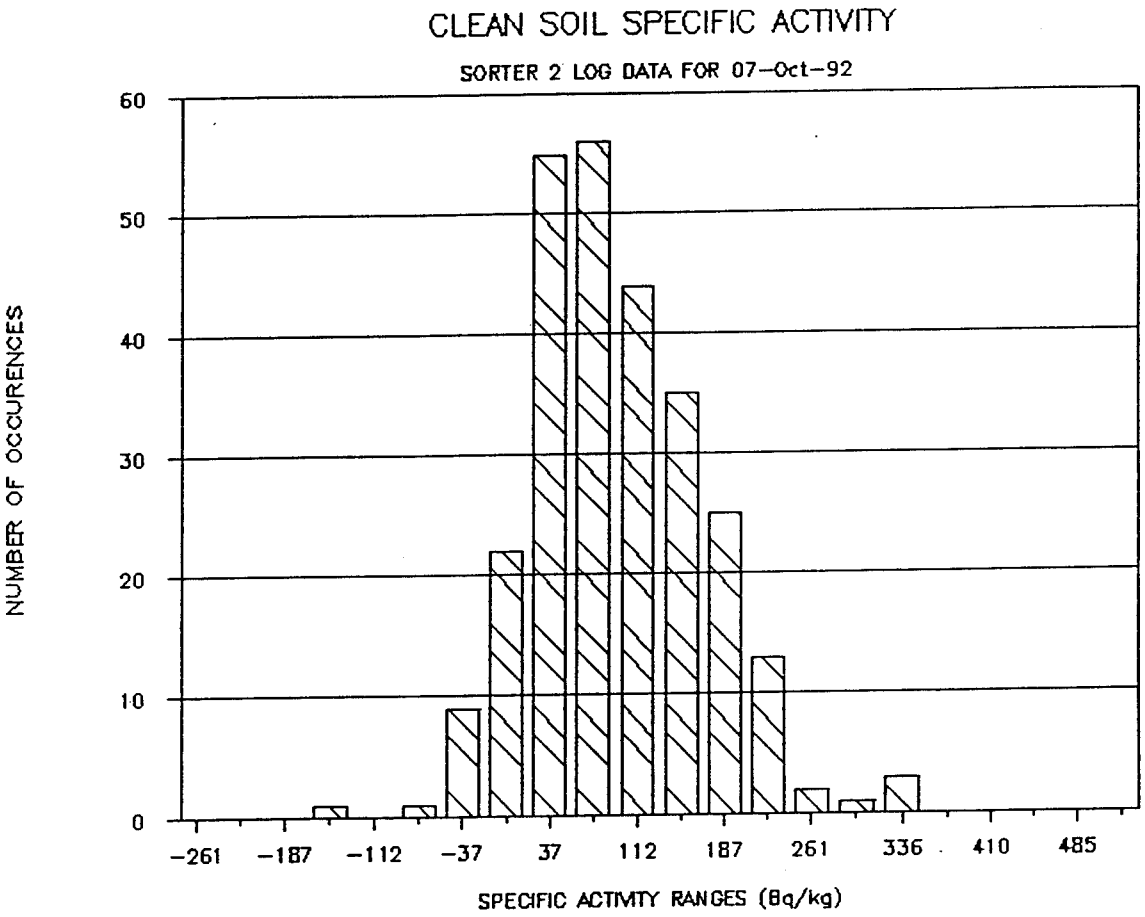
2-SEC COUNT PERIODS	2,640	
2-SEC RECORDS WITH SORTS	66	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	16	76.2%
3 DETECTORS	4	19.0%
4 DETECTORS	1	4.8%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	21	
NET 2-SEC RECORDS WITH SORTS	45	
2-SEC PERIODS WITH NO SORTS	2,595	
AVG TIME BETWEEN 2-SEC SORTS	117.3 sec	

1-GATE SORTS		32	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	1	4.0%	-14000	0	-261	4000	0	0.0%	4
2	6	24.0%	-12000	0	-224	8000	34	106.3%	8
3	2	8.0%	-10000	0	-187	12000	12	37.5%	12
4	5	20.0%	-8000	1	-149	16000	4	12.5%	16
5	9	36.0%	-6000	0	-112	20000	7	21.9%	20
6	5	20.0%	-4000	1	-75	24000	1	3.1%	24
7	3	12.0%	-2000	9	-37	28000	3	9.4%	28
8	1	4.0%	0	22	0	32000	0	0.0%	32
TOTAL	25		2000	55	37	36000	1	3.1%	36
			4000	56	75	40000	2	6.3%	40
2-GATE SORTS		34	6000	44	112	44000	0	0.0%	44
DETECTO	SORTS	FREQ%	8000	35	149	48000	0	0.0%	48
8			10000	25	187	52000	0	0.0%	52
9	5	14.7%	12000	13	224	56000	0	0.0%	56
10	6	17.6%	14000	2	261	60000	0	0.0%	60
11	5	14.7%	16000	1	299	64000	0	0.0%	64
12	3	8.8%	18000	3	336	68000	2	6.3%	68
13	9	26.5%	20000	0	373	72000	0	0.0%	72
14	4	11.8%	22000	0	410	76000	0	0.0%	76
15	2	5.9%	24000	0	448	80000	0	0.0%	80
TOTAL	34		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	0	0.0%	>84
			TOTAL	267		TOTAL	32		

HPE	32	GATE1	66
MPE	58	GATE2	34
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 07-Oct-92
FREQUENCY OF OCCURENCE (%)
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 07-Oct-92
NUMBER OF OCCURENCES
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 06-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.29 tons	46.9 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.4%
EQUIVALENT SOIL-IN-GROUND	0.23 yd³	37.2 yd³	37.4 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	5,347 kBq		
MAXIMUM/SORT	444 kBq		
MINIMUM/SORT	3.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	1,897 kBq	2,441 kBq	
MAXIMUM/SORT	244 kBq	18 kBq	
MINIMUM/SORT	0 Bq	-9 kBq	
SPECIFIC ACTIVITY	6,549 Bq/kg	52 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	10:56 AM	
PLANT STARTUP TIME		3.95 hr
PROCESSING END	05:02 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.47 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		6.09 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.89 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.20 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		48.8%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	888	
NONPROCESS RECORDS (Test, calibration, etc)	9	
20-SEC PROCESS RECORDS	880	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	635	AD=0 & MD=0 & MND>0
SOME SORT	245	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

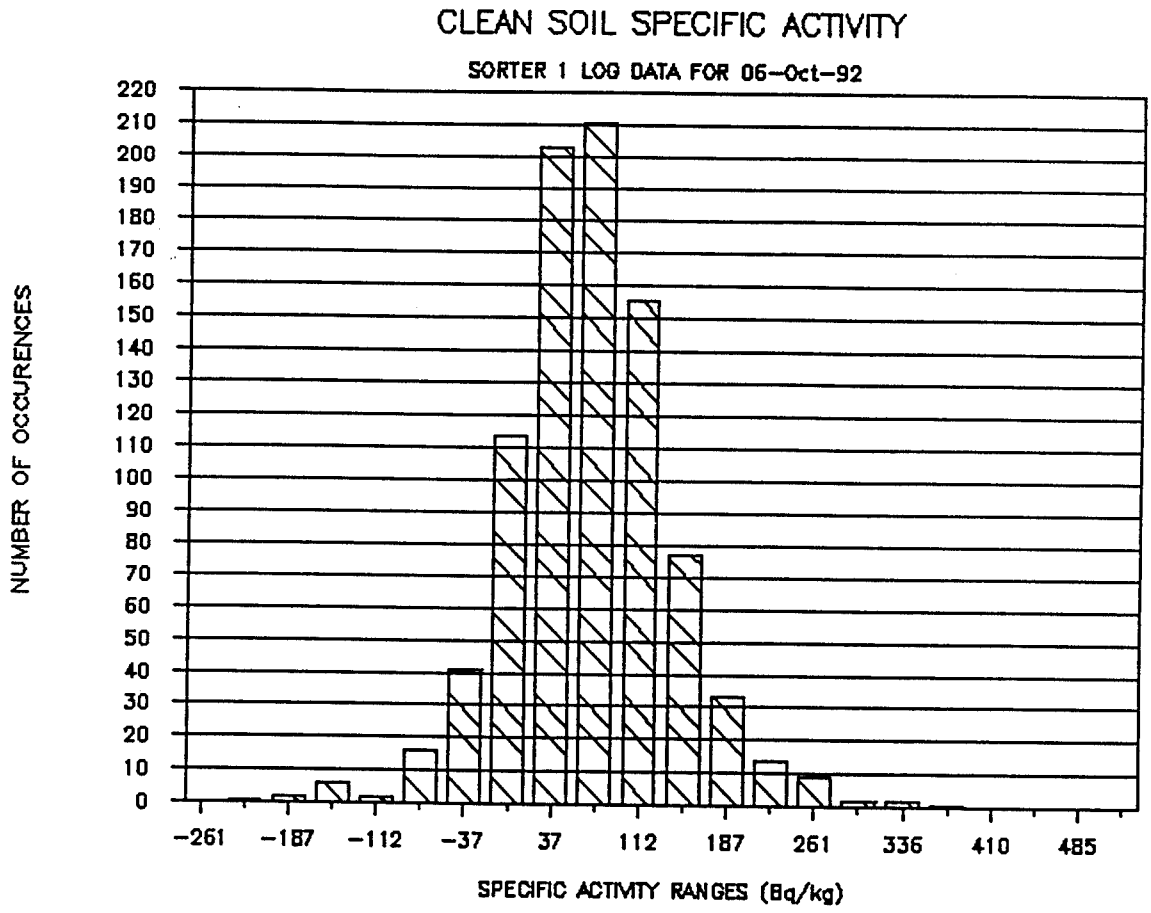
2-SEC COUNT PERIODS		8,800	
2-SEC RECORDS WITH SORTS		253	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
	2 DETECTORS	55	82.1%
	3 DETECTORS	10	14.9%
	4 DETECTORS	2	3.0%
	5 DETECTORS	0	0.0%
	6 DETECTORS	0	0.0%
	7 DETECTORS	0	0.0%
	8 DETECTORS	0	0.0%
	TOTAL	67	
NET 2-SEC RECORDS WITH SORTS		186	
2-SEC PERIODS WITH NO SORTS		8,614	
AVG TIME BETWEEN 2-SEC SORTS		94.6	sec

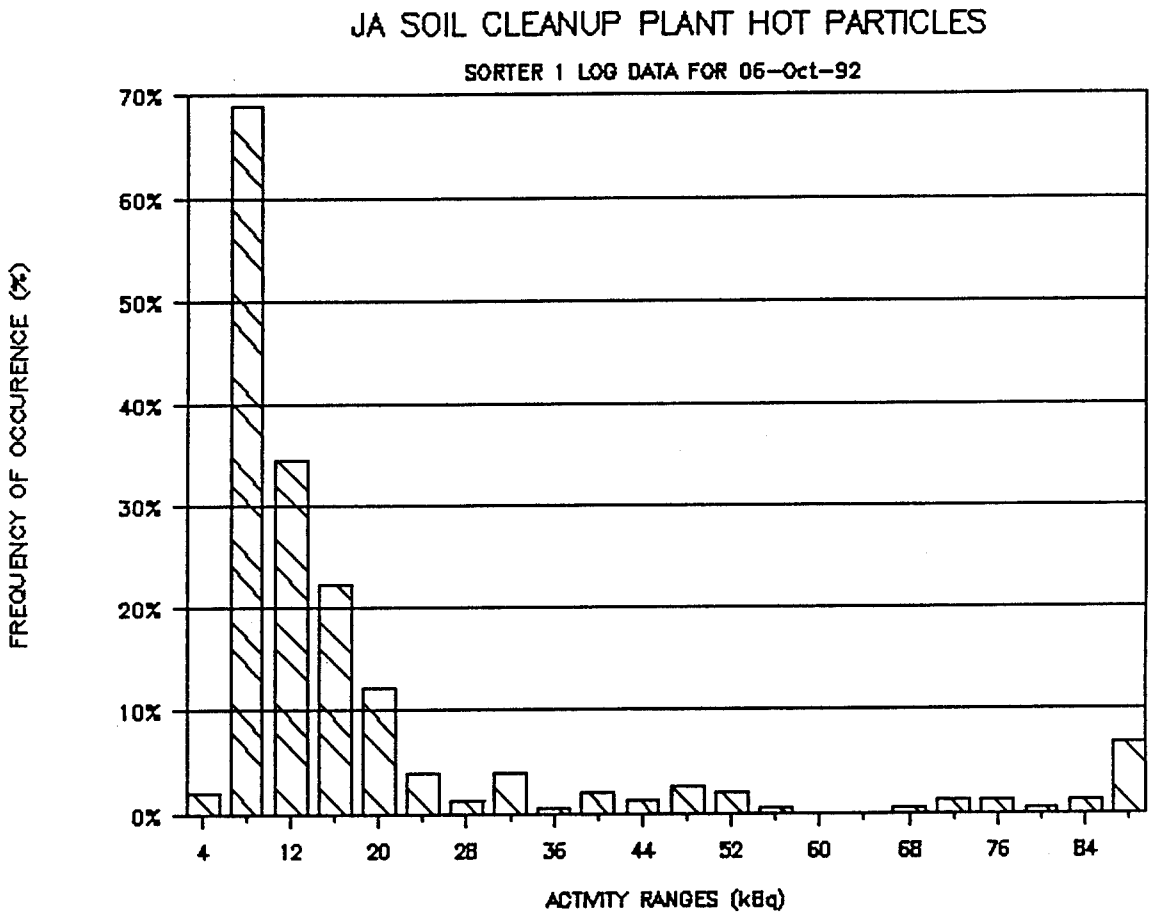
1-GATE SORTS		134	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	2	1.8%	-14000	0	-261
2	20	17.9%	-12000	1	-224
3	16	14.3%	-10000	2	-187
4	20	17.9%	-8000	6	-149
5	27	24.1%	-6000	2	-112
6	31	27.7%	-4000	16	-75
7	18	16.1%	-2000	41	-37
8	0	0.0%	0	114	0
TOTAL	112		2000	203	37
			4000	211	75
2-GATE SORTS		119	6000	155	112
DETECTO	SORTS	FREQ%	8000	77	149
8			10000	33	187
9	7	5.9%	12000	14	224
10	16	13.4%	14000	9	261
11	17	14.3%	16000	2	299
12	20	16.8%	18000	2	336
13	32	26.9%	20000	1	373
14	20	16.8%	22000	0	410
15	7	5.9%	24000	0	448
TOTAL	119		26000	0	485
			>28000	0	0
			TOTAL	889	

ACT_P	SORT	FREQ%	ACT_P
(Bq)	(#)		(kBq)
4000	3	2.0%	4
8000	102	68.9%	8
12000	51	34.5%	12
16000	33	22.3%	16
20000	18	12.2%	20
24000	6	4.1%	24
28000	2	1.4%	28
32000	6	4.1%	32
36000	1	0.7%	36
40000	3	2.0%	40
44000	2	1.4%	44
48000	4	2.7%	48
52000	3	2.0%	52
56000	1	0.7%	56
60000	0	0.0%	60
64000	0	0.0%	64
68000	1	0.7%	68
72000	2	1.4%	72
76000	2	1.4%	76
80000	1	0.7%	80
84000	2	1.4%	84
>84000	10	6.8%	>84
TOTAL	148		

HPE	117	GATE1	253
MPE	159	GATE2	119
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 06-Oct-92
NUMBER OF OCCURENCES
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 06-Oct-92
FREQUENCY OF OCCURENCE (%)
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 06-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.38 tons	47.0 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.2%
EQUIVALENT SOIL-IN-GROUND	0.30 yd³	37.3 yd³	37.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	6,617 kBq		
MAXIMUM/SORT	508 kBq		
MINIMUM/SORT	3.5 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	2,543 kBq	3,180 kBq	
MAXIMUM/SORT	311 kBq	19 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,701 Bq/kg	68 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	10:56 AM		
PLANT STARTUP TIME		3.95 hr	
PROCESSING END	05:03 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.45 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		6.11 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.91 hr	
TOTAL SYSTEM PAUSE TIME		0.00 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		1.20 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		49.1%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	892	
NONPROCESS RECORDS (Test, calibration, etc)	8	
20-SEC PROCESS RECORDS	884	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	582	AD=0 & MD=0 & MND>0
SOME SORT	302	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	1	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

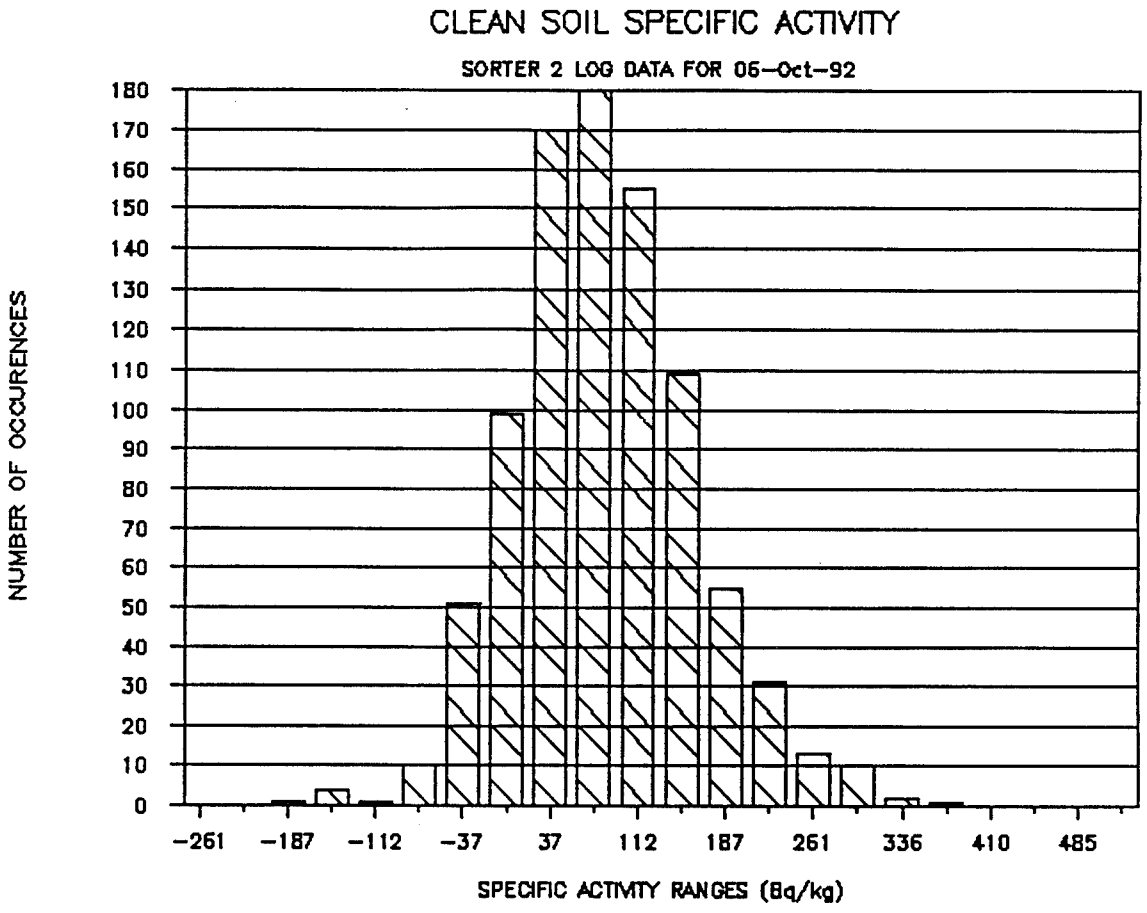
2-SEC COUNT PERIODS	8,840	
2-SEC RECORDS WITH SORTS	309	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	71	78.0%
3 DETECTORS	18	19.8%
4 DETECTORS	2	2.2%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	91	
NET 2-SEC RECORDS WITH SORTS	218	
2-SEC PERIODS WITH NO SORTS	8,622	
AVG TIME BETWEEN 2-SEC SORTS	81.1	sec

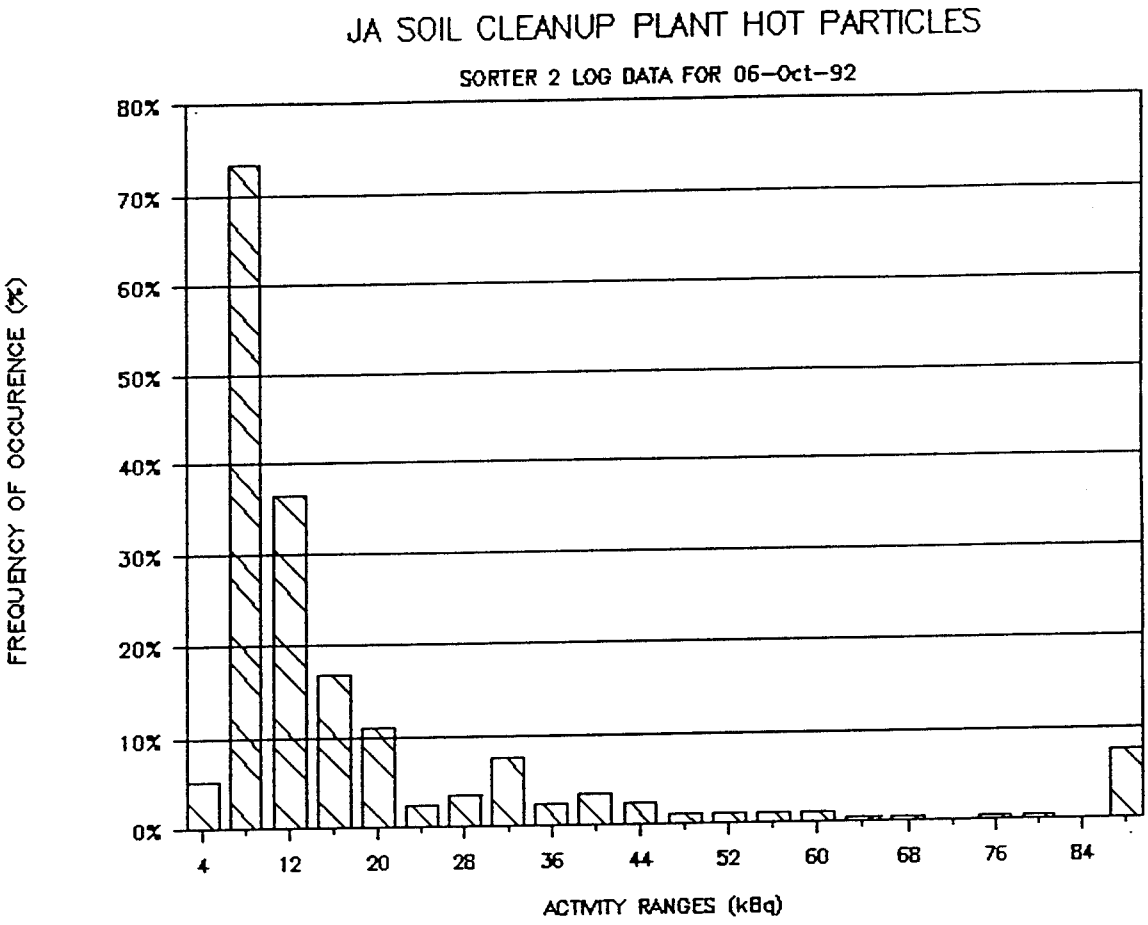
1-GATE SORTS		162	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	10	8.1%	-14000	0	-261
2	29	23.6%	-12000	0	-224
3	41	33.3%	-10000	1	-187
4	29	23.6%	-8000	4	-149
5	22	17.9%	-6000	1	-112
6	20	16.3%	-4000	10	-75
7	9	7.3%	-2000	51	-37
8	2	1.6%	0	99	0
TOTAL	123		2000	170	37
			4000	180	75
2-GATE SORTS		147	6000	155	112
DETECTO	SORTS	FREQ%	8000	109	149
8			10000	55	187
9	20	13.6%	12000	31	224
10	35	23.8%	14000	13	261
11	28	19.0%	16000	10	299
12	20	13.6%	18000	2	336
13	23	15.6%	20000	1	373
14	17	11.6%	22000	0	410
15	4	2.7%	24000	0	448
TOTAL	147		26000	0	485
			>28000	0	0
			TOTAL	892	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	9	5.2%	4
8000	127	73.4%	8
12000	63	36.4%	12
16000	29	16.8%	16
20000	19	11.0%	20
24000	4	2.3%	24
28000	6	3.5%	28
32000	13	7.5%	32
36000	4	2.3%	36
40000	6	3.5%	40
44000	4	2.3%	44
48000	2	1.2%	48
52000	2	1.2%	52
56000	2	1.2%	56
60000	2	1.2%	60
64000	1	0.6%	64
68000	1	0.6%	68
72000	0	0.0%	72
76000	1	0.6%	76
80000	1	0.6%	80
84000	0	0.0%	84
>84000	13	7.5%	>84
TOTAL	173		

HPE	146	GATE1	309
MPE	214	GATE2	147
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 06-Oct-92
NUMBER OF OCCURENCES
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 06-Oct-92
FREQUENCY OF OCCURENCE (%)
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 05-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.05 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.60 tons	60.0 tons	
MAXIMUM/SORT		6 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				99.0%
EQUIVALENT SOIL-IN-GROUND		0.48 yd³	47.5 yd³	48.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		9,234 kBq		
MAXIMUM/SORT		303 kBq		
MINIMUM/SORT		3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		3,464 kBq	5,172 kBq	
MAXIMUM/SORT		199 kBq	18 kBq	
MINIMUM/SORT		0 Bq	-6 kBq	
SPECIFIC ACTIVITY		5,775 Bq/kg	86 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:36 AM		
PLANT STARTUP TIME		0.61 hr	
PROCESSING END	05:05 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.41 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.48 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.28 hr	
TOTAL SYSTEM PAUSE TIME		1.94 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		3.20 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		62.7%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,223	
NONPROCESS RECORDS (Test, calibration, etc)	8	
20-SEC PROCESS RECORDS	1,130	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	696	AD=0 & MD=0 & MND>0
SOME SORT	434	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

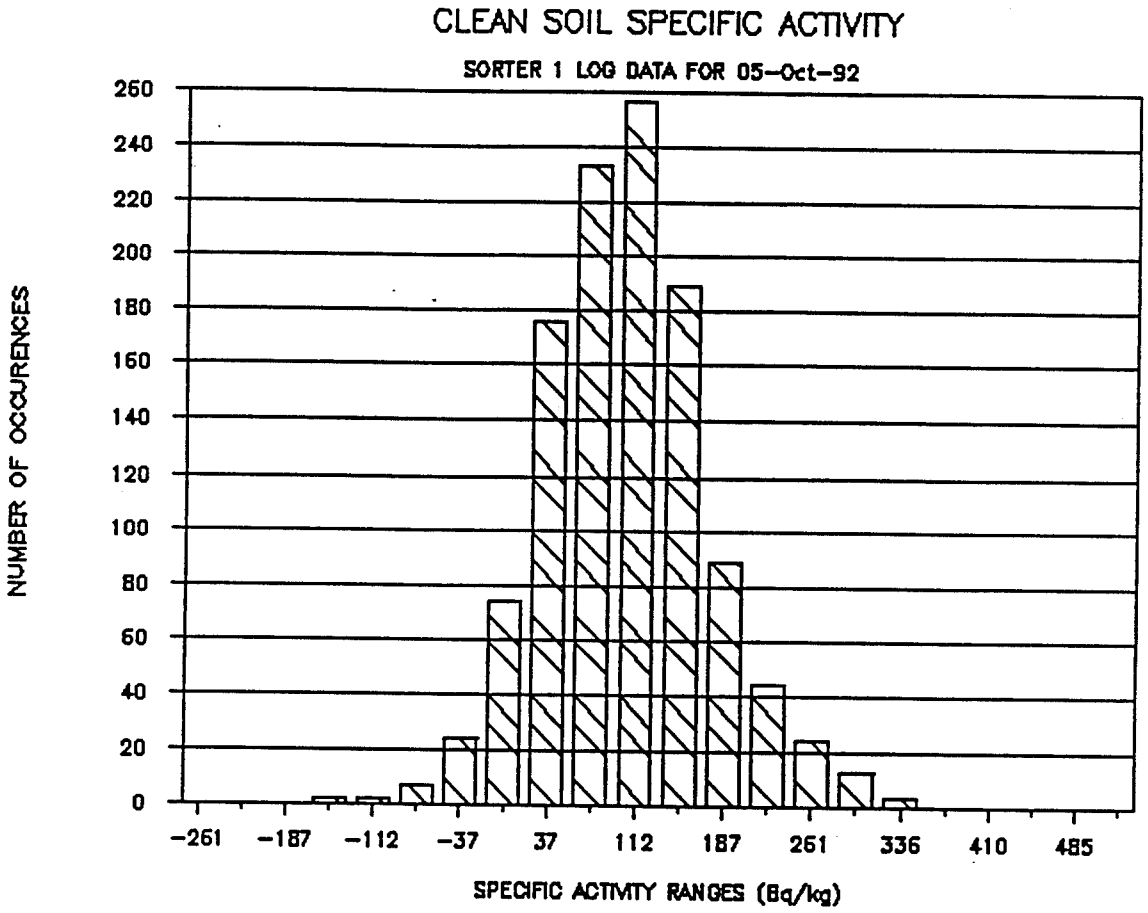
JA SOIL CLEANUP PLANT LOG SUMMARY

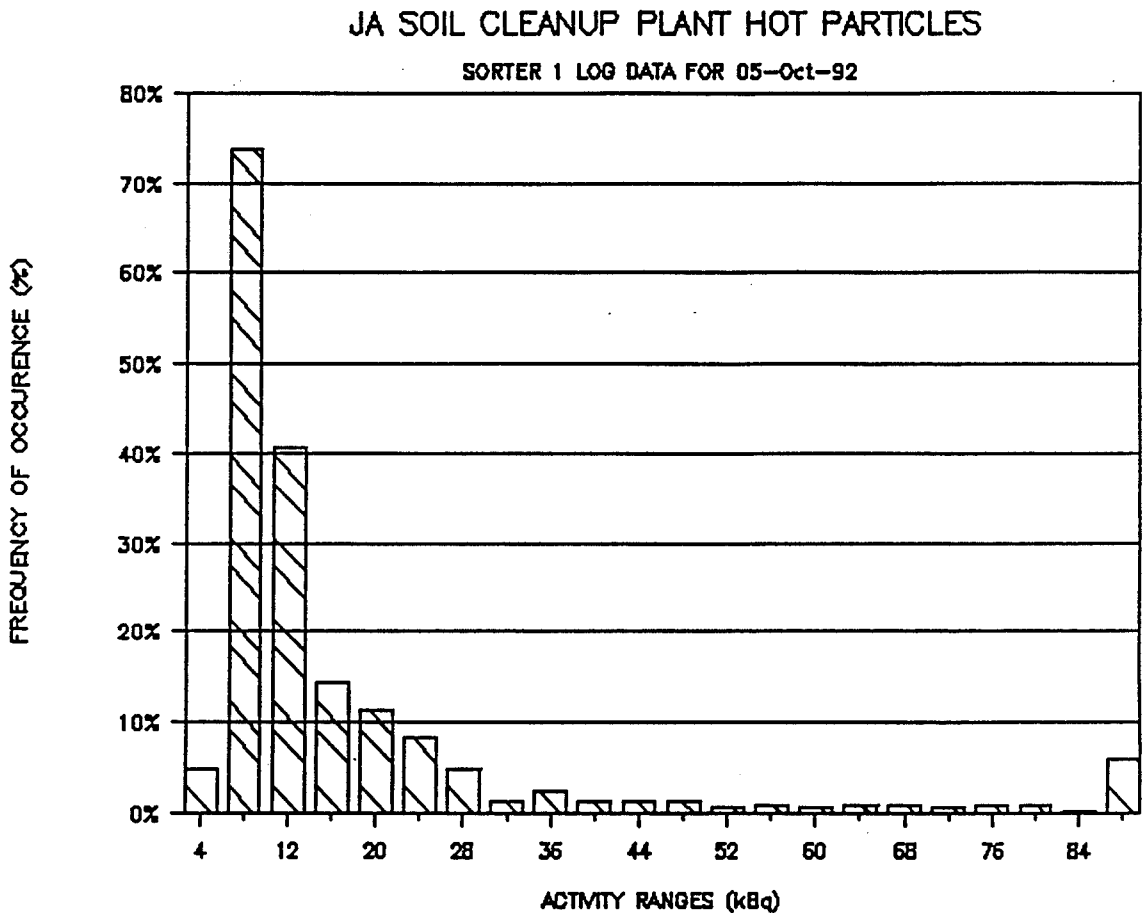
2-SEC COUNT PERIODS	11,300	
2-SEC RECORDS WITH SORTS	527	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	120	83.3%
3 DETECTORS	22	15.3%
4 DETECTORS	2	1.4%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	144	
NET 2-SEC RECORDS WITH SORTS	383	
2-SEC PERIODS WITH NO SORTS	10,917	
AVG TIME BETWEEN 2-SEC SORTS	59.0	sec

1-GATE SORTS	257	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT FREQ%		ACT_P
DETECTO SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1 10	4.6%	-14000	0	-261	4000	14	4.7%	4
2 29	13.3%	-12000	0	-224	8000	218	73.9%	8
3 39	17.9%	-10000	0	-187	12000	120	40.7%	12
4 48	22.0%	-8000	2	-149	16000	42	14.2%	16
5 53	24.3%	-6000	2	-112	20000	33	11.2%	20
6 38	17.4%	-4000	7	-75	24000	24	8.1%	24
7 30	13.8%	-2000	24	-37	28000	14	4.7%	28
8 10	4.6%	0	74	0	32000	4	1.4%	32
TOTAL 218		2000	176	37	36000	7	2.4%	36
		4000	233	75	40000	4	1.4%	40
2-GATE SORTS	270	6000	257	112	44000	4	1.4%	44
DETECTO SORTS	FREQ%	8000	189	149	48000	4	1.4%	48
8		10000	89	187	52000	2	0.7%	52
9 21	7.8%	12000	44	224	56000	3	1.0%	56
10 43	15.9%	14000	24	261	60000	2	0.7%	60
11 50	18.5%	16000	13	299	64000	3	1.0%	64
12 51	18.9%	18000	4	336	68000	3	1.0%	68
13 49	18.1%	20000	0	373	72000	2	0.7%	72
14 35	13.0%	22000	0	410	76000	3	1.0%	76
15 21	7.8%	24000	0	448	80000	3	1.0%	80
TOTAL 270		26000	0	485	84000	1	0.3%	84
		>28000	0	0	>84000	17	5.8%	>84
		TOTAL	1138		TOTAL	295		

HPE	223	GATE1	527
MPE	301	GATE2	270
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 05-Oct-92
NUMBER OF OCCURENCES
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 05-Oct-92
FREQUENCY OF OCCURENCE (%)
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 05-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec			
SORTER SOIL DENSITY	1.15 tons/m³			
GROUND SOIL DENSITY	1.65 tons/m³			
		CONTAMINATED	CLEAN	
MASS TOTAL		0.93 tons	59.1 tons	
MAXIMUM/SORT		53.6 kg	53.6 kg	
MINIMUM/SORT		0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY				98.5%
EQUIVALENT SOIL-IN-GROUND		0.74 yd³	46.9 yd³	47.6 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)				
TOTAL		13,832 kBq		
MAXIMUM/SORT		769 kBq		
MINIMUM/SORT		3.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY		5,204 kBq	6,390 kBq	
MAXIMUM/SORT		420 kBq	20 kBq	
MINIMUM/SORT		0 Bq	-11 kBq	
SPECIFIC ACTIVITY		5,596 Bq/kg	108 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	07:59 AM		
PLANT STARTUP TIME		1.00 hr	
PROCESSING END	05:03 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.45 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		9.07 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.23 hr	
TOTAL SYSTEM PAUSE TIME		1.54 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		2.84 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		62.2%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,771	
NONPROCESS RECORDS (Test, calibration, etc)	21	
20-SEC PROCESS RECORDS	1,121	
TOTAL SORT	4	MD>0 & MND=0
NO SORT	608	AD=0 & MD=0 & MND>0
SOME SORT	509	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	1	
AD<0 & MD	0	

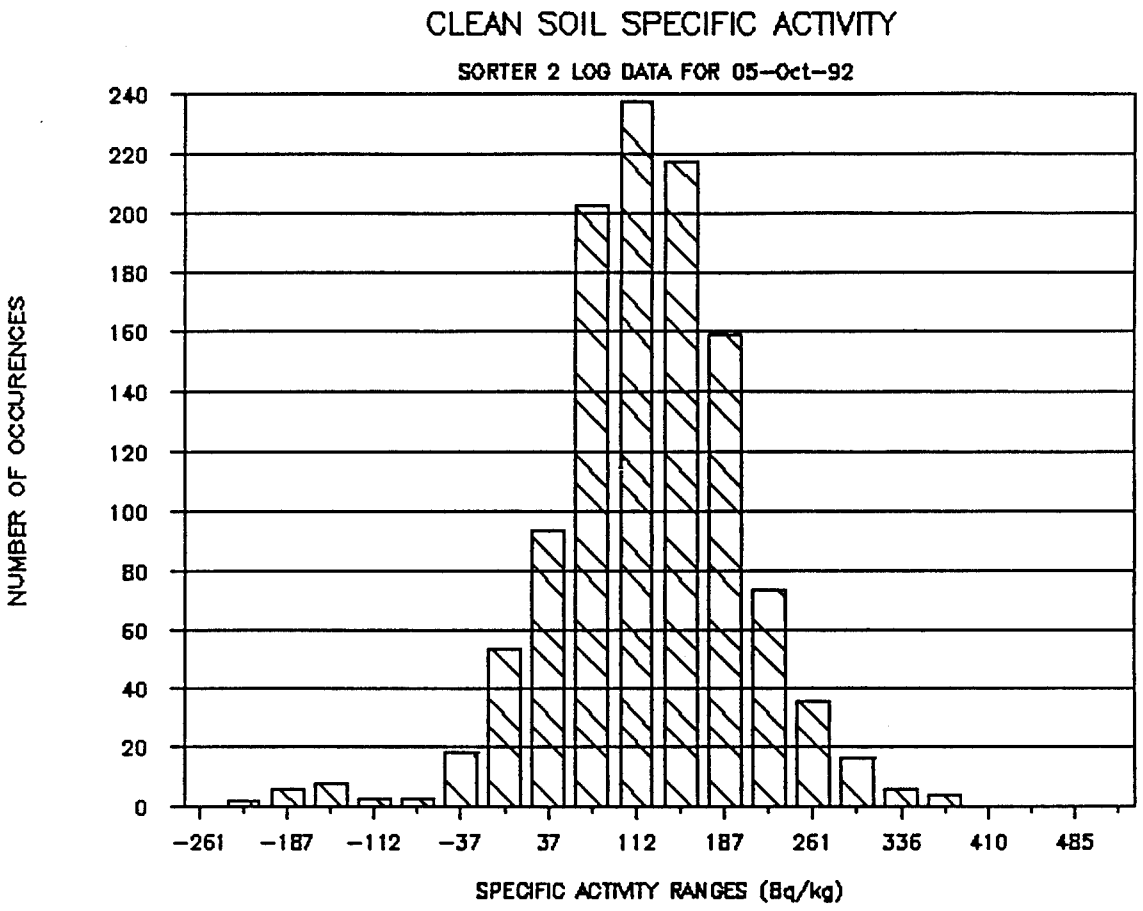
JA SOIL CLEANUP PLANT LOG SUMMARY

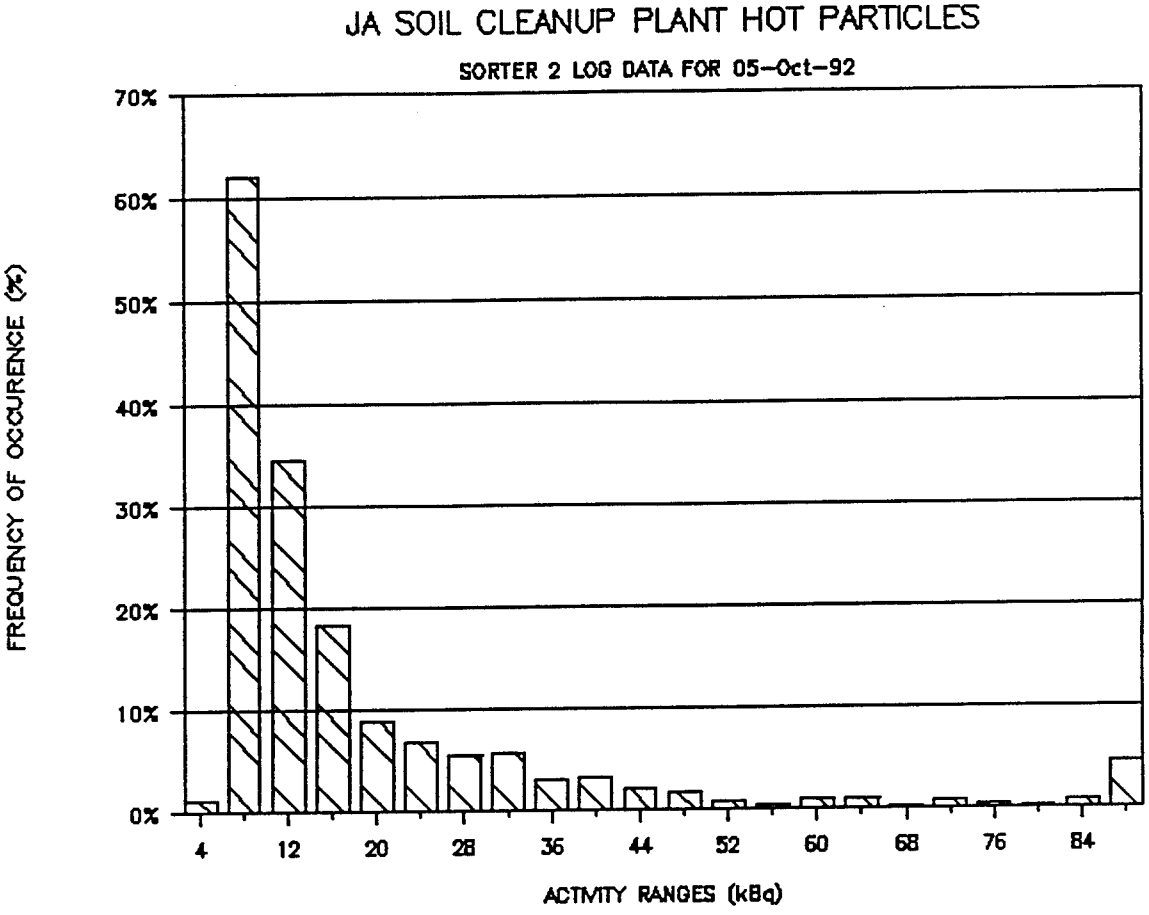
2-SEC COUNT PERIODS	11,210	
2-SEC RECORDS WITH SORTS	650	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	159	79.5%
3 DETECTORS	33	16.5%
4 DETECTORS	8	4.0%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	200	
NET 2-SEC RECORDS WITH SORTS	450	
2-SEC PERIODS WITH NO SORTS	10,760	
AVG TIME BETWEEN 2-SEC SORTS	49.8	sec

1-GATE SORTS		329	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	14	5.1%	-14000	0	-261	4000	5	1.3%	4
2	41	15.0%	-12000	2	-224	8000	247	62.1%	8
3	70	25.5%	-10000	6	-187	12000	137	34.4%	12
4	71	25.9%	-8000	8	-149	16000	73	18.3%	16
5	50	18.2%	-6000	3	-112	20000	35	8.8%	20
6	49	17.9%	-4000	3	-75	24000	27	6.8%	24
7	28	10.2%	-2000	18	-37	28000	22	5.5%	28
8	6	2.2%	0	54	0	32000	23	5.8%	32
TOTAL	274		2000	94	37	36000	12	3.0%	36
			4000	203	75	40000	13	3.3%	40
2-GATE SORTS		321	6000	238	112	44000	8	2.0%	44
DETECTO	SORTS	FREQ%	8000	218	149	48000	7	1.8%	48
8			10000	159	187	52000	3	0.8%	52
9	36	11.2%	12000	74	224	56000	2	0.5%	56
10	48	15.0%	14000	36	261	60000	4	1.0%	60
11	78	24.3%	16000	16	299	64000	4	1.0%	64
12	53	16.5%	18000	6	336	68000	1	0.3%	68
13	51	15.9%	20000	4	373	72000	3	0.8%	72
14	39	12.1%	22000	0	410	76000	2	0.5%	76
15	16	5.0%	24000	0	448	80000	1	0.3%	80
TOTAL	321		26000	0	485	84000	3	0.8%	84
			>28000	0	0	>84000	18	4.5%	>84
			TOTAL	1142		TOTAL	398		

HPE	273	GATE1	650
MPE	334	GATE2	321
DISE	4		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 05-Oct-92
NUMBER OF OCCURENCES
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 05-Oct-92
FREQUENCY OF OCCURENCE (%)
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 03-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.77 ± 0.07 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.48 tons	45.8 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			99.0%
EQUIVALENT SOIL-IN-GROUND	0.38 yd³	36.3 yd³	36.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,606 kBq		
MAXIMUM/SORT	779 kBq		
MINIMUM/SORT	2.7 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,037 kBq	5,061 kBq	
MAXIMUM/SORT	465 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	6,347 Bq/kg	111 Bq/kg	

WORK DAY

WORK DAY START	07:00 AM	
PROCESSING START	07:28 AM	
PLANT STARTUP TIME		0.48 hr
PROCESSING END	04:38 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.87 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.16 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.79 hr
TOTAL SYSTEM PAUSE TIME		0.08 hr
TOTAL DOWNTIME (MAX-ACTUAL)		4.36 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		47.9%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	955	
NONPROCESS RECORDS (Test, calibration, etc)	8	
20-SEC PROCESS RECORDS	863	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	517	AD=0 & MD=0 & MND>0
SOME SORT	346	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

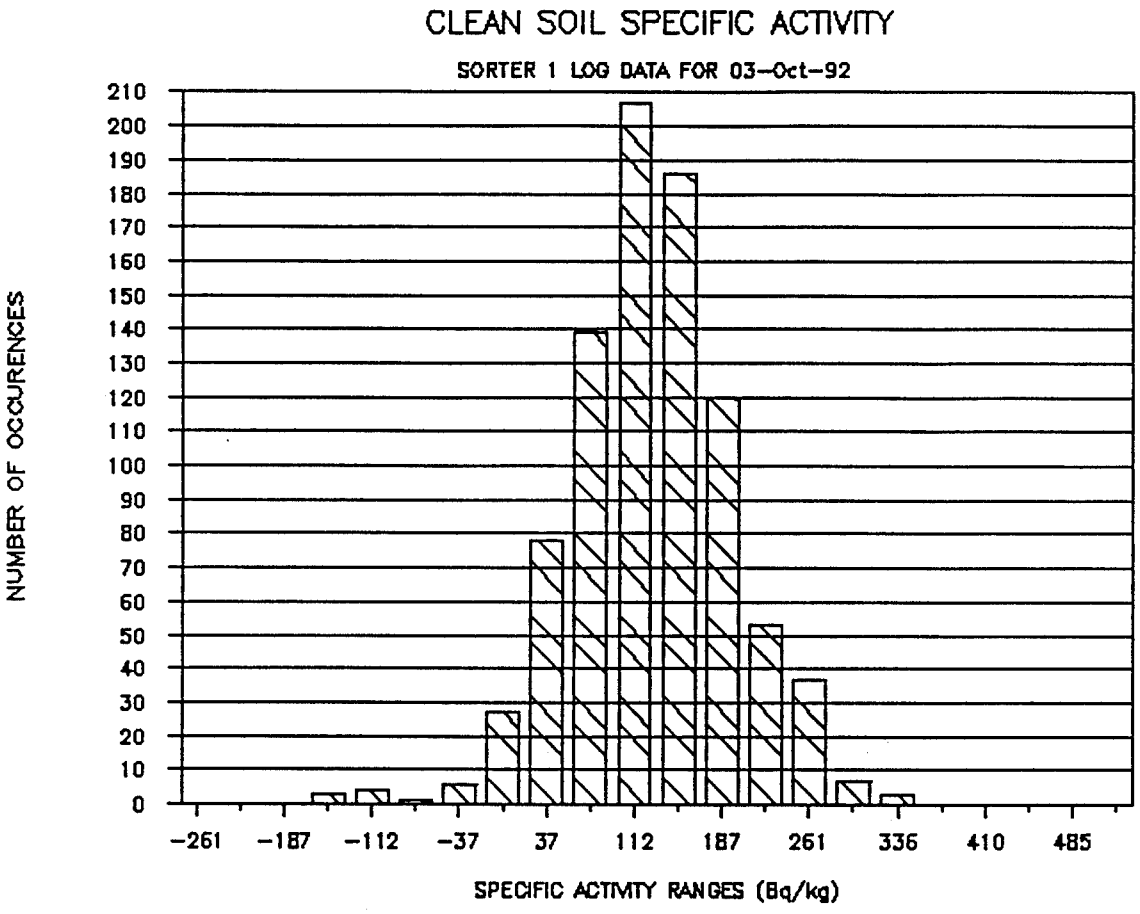
JA SOIL CLEANUP PLANT LOG SUMMARY

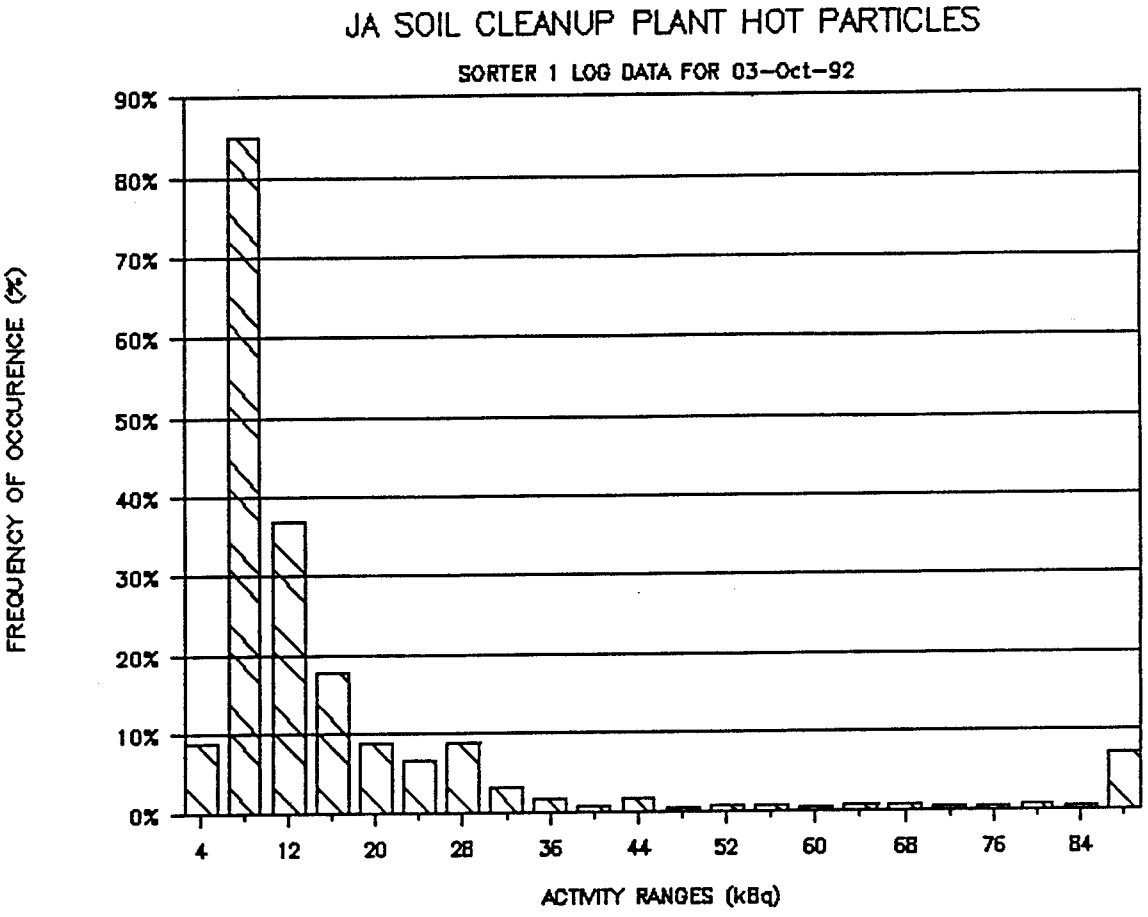
2-SEC COUNT PERIODS	8,630	
2-SEC RECORDS WITH SORTS	438	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	104	83.9%
3 DETECTORS	18	14.5%
4 DETECTORS	2	1.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	124	
NET 2-SEC RECORDS WITH SORTS	314	
2-SEC PERIODS WITH NO SORTS	8,316	
AVG TIME BETWEEN 2-SEC SORTS	55.0	sec

1-GATE SORTS		217	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	3	1.6%	-14000	0	-261	4000	20	8.8%	4
2	25	13.2%	-12000	0	-224	8000	192	85.0%	8
3	32	16.9%	-10000	0	-187	12000	83	36.7%	12
4	30	15.9%	-8000	3	-149	16000	40	17.7%	16
5	47	24.9%	-6000	4	-112	20000	20	8.8%	20
6	52	27.5%	-4000	1	-75	24000	15	6.6%	24
7	25	13.2%	-2000	6	-37	28000	20	8.8%	28
8	3	1.6%	0	27	0	32000	7	3.1%	32
TOTAL	189		2000	78	37	36000	4	1.8%	36
			4000	139	75	40000	2	0.9%	40
2-GATE SORTS		221	6000	207	112	44000	4	1.8%	44
DETECTO	SORTS	FREQ%	8000	186	149	48000	1	0.4%	48
8			10000	120	187	52000	2	0.9%	52
9	11	5.0%	12000	53	224	56000	2	0.9%	56
10	29	13.1%	14000	37	261	60000	1	0.4%	60
11	38	17.2%	16000	7	299	64000	2	0.9%	64
12	41	18.6%	18000	3	336	68000	2	0.9%	68
13	56	25.3%	20000	0	373	72000	1	0.4%	72
14	39	17.6%	22000	0	410	76000	1	0.4%	76
15	7	3.2%	24000	0	448	80000	2	0.9%	80
TOTAL	221		26000	0	485	84000	1	0.4%	84
			>28000	0	0	>84000	16	7.1%	>84
			TOTAL	871		TOTAL	226		

HPE	188	GATE1	438
MPE	223	GATE2	221
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 03-Oct-92
NUMBER OF OCCURENCES
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 03-Oct-92
FREQUENCY OF OCCURENCE (%)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 03-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.81 ± 0.07 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.67 tons	44.7 tons	
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.5%
EQUIVALENT SOIL-IN-GROUND	0.53 yd³	35.4 yd³	36.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	9,908 kBq		
MAXIMUM/SORT	252 kBq		
MINIMUM/SORT	3.4 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	3,930 kBq	5,305 kBq	
MAXIMUM/SORT	169 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-6 kBq	
SPECIFIC ACTIVITY	5,893 Bq/kg	119 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:28 AM	
PLANT STARTUP TIME		0.48 hr
PROCESSING END	04:37 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.88 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.14 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		4.71 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		4.44 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		47.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	942	
NONPROCESS RECORDS (Test, calibration, etc)	11	
20-SEC PROCESS RECORDS	847	
TOTAL SORT	0	MD>0 & MND=0
NO SORT	396	AD=0 & MD=0 & MND>0
SOME SORT	451	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

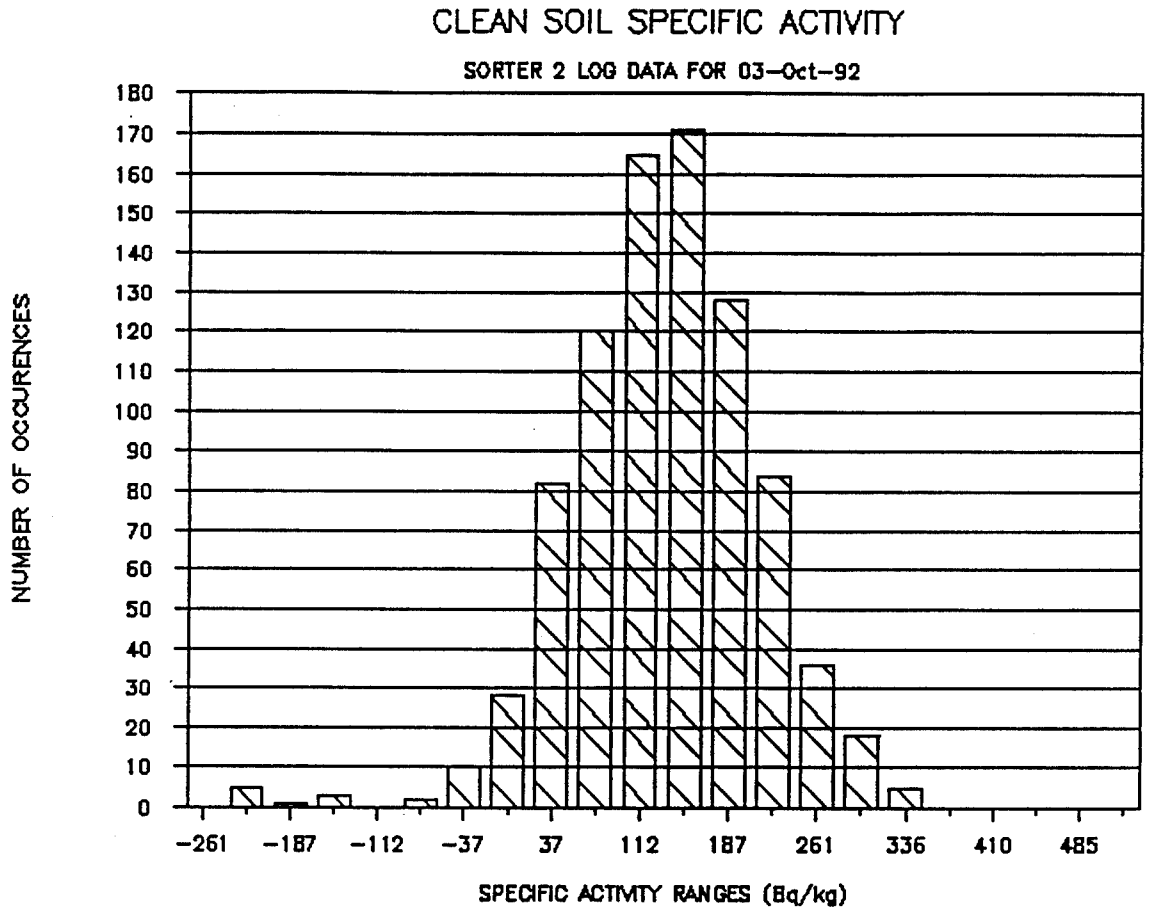
JA SOIL CLEANUP PLANT LOG SUMMARY

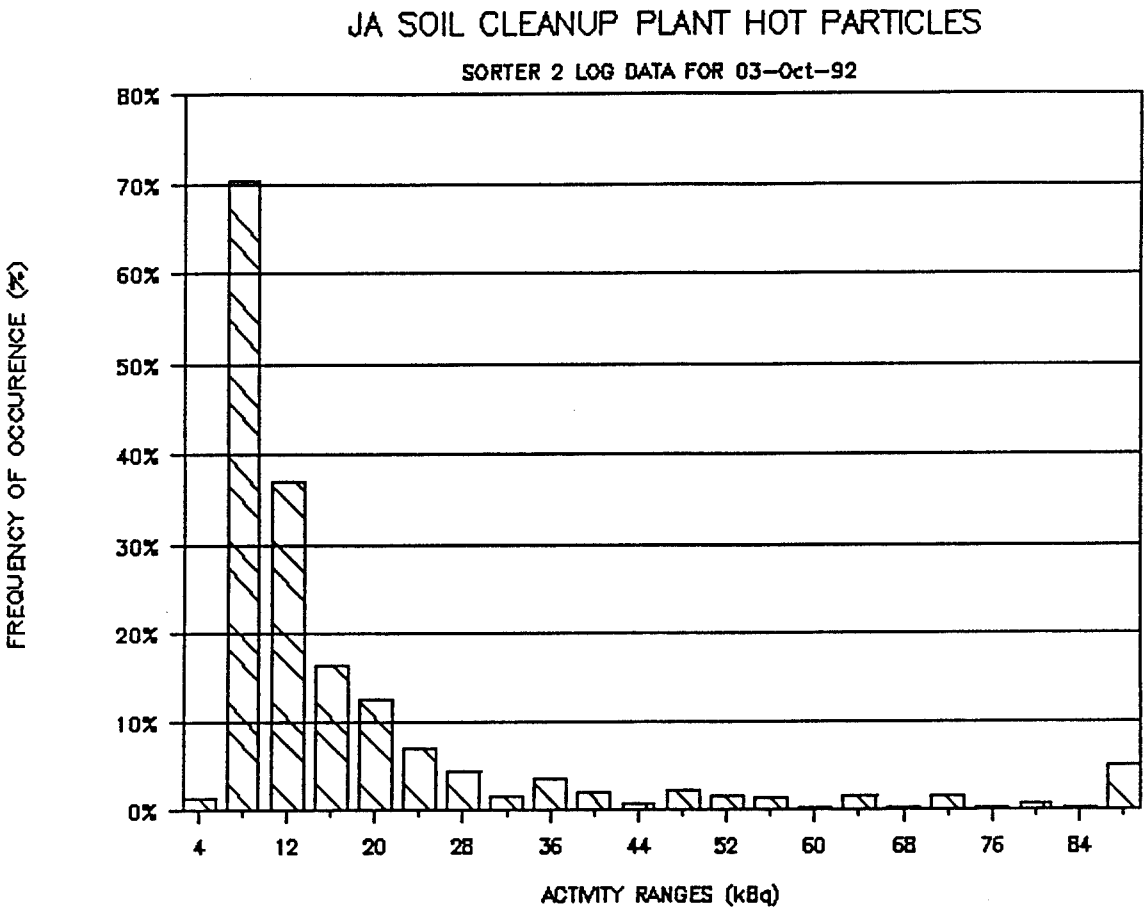
2-SEC COUNT PERIODS		8,470	
2-SEC RECORDS WITH SORTS		546	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR			
2 DETECTORS	126		88.1%
3 DETECTORS	17		11.9%
4 DETECTORS	0		0.0%
5 DETECTORS	0		0.0%
6 DETECTORS	0		0.0%
7 DETECTORS	0		0.0%
8 DETECTORS	0		0.0%
TOTAL		143	
NET 2-SEC RECORDS WITH SORTS		403	
2-SEC PERIODS WITH NO SORTS		8,067	
AVG TIME BETWEEN 2-SEC SORTS		42.0	sec

1-GATE SORTS		280	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT FREQ%		ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	4	1.6%	-14000	0	-261	4000	4	1.3%	4
2	26	10.4%	-12000	5	-224	8000	224	70.4%	8
3	50	20.0%	-10000	1	-187	12000	118	37.1%	12
4	55	22.0%	-8000	3	-149	16000	52	16.4%	16
5	49	19.6%	-6000	0	-112	20000	40	12.6%	20
6	50	20.0%	-4000	2	-75	24000	22	6.9%	24
7	37	14.8%	-2000	10	-37	28000	14	4.4%	28
8	9	3.6%	0	28	0	32000	5	1.6%	32
TOTAL	250		2000	82	37	36000	11	3.5%	36
			4000	120	75	40000	6	1.9%	40
2-GATE SORTS		266	6000	165	112	44000	2	0.6%	44
DETECTO	SORTS	FREQ%	8000	171	149	48000	7	2.2%	48
8			10000	128	187	52000	5	1.6%	52
9	16	6.0%	12000	84	224	56000	4	1.3%	56
10	30	11.3%	14000	36	261	60000	1	0.3%	60
11	58	21.8%	16000	18	299	64000	5	1.6%	64
12	51	19.2%	18000	5	336	68000	1	0.3%	68
13	51	19.2%	20000	0	373	72000	5	1.6%	72
14	40	15.0%	22000	0	410	76000	1	0.3%	76
15	20	7.5%	24000	0	448	80000	2	0.6%	80
TOTAL	266		26000	0	485	84000	1	0.3%	84
			>28000	0	0	>84000	16	5.0%	>84
			TOTAL	858		TOTAL	318		

HPE	231	GATE1	546
MPE	338	GATE2	266
DISE	0		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 03-Oct-92
NUMBER OF OCCURENCES
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 03-Oct-92
FREQUENCY OF OCCURENCE (%)
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 02-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	0.89 tons	74.8 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.8%
EQUIVALENT SOIL-IN-GROUND	0.71 yd³	59.3 yd³	60.0 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	15,043 kBq		
MAXIMUM/SORT	857 kBq		
MINIMUM/SORT	3.1 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	5,329 kBq	6,087 kBq	
MAXIMUM/SORT	581 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-8 kBq	
SPECIFIC ACTIVITY	5,978 Bq/kg	81 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:40 AM	
PLANT STARTUP TIME		0.68 hr
PROCESSING END	05:06 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.40 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.43 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.84 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.59 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		78.4%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,601	
NONPROCESS RECORDS (Test, calibration, etc)	47	
20-SEC PROCESS RECORDS	1,412	
TOTAL SORT	1	MD>0 & MND=0
NO SORT	821	AD=0 & MD=0 & MND>0
SOME SORT	590	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	0	
AD=0 & MD	0	
AD<0 & MD	0	

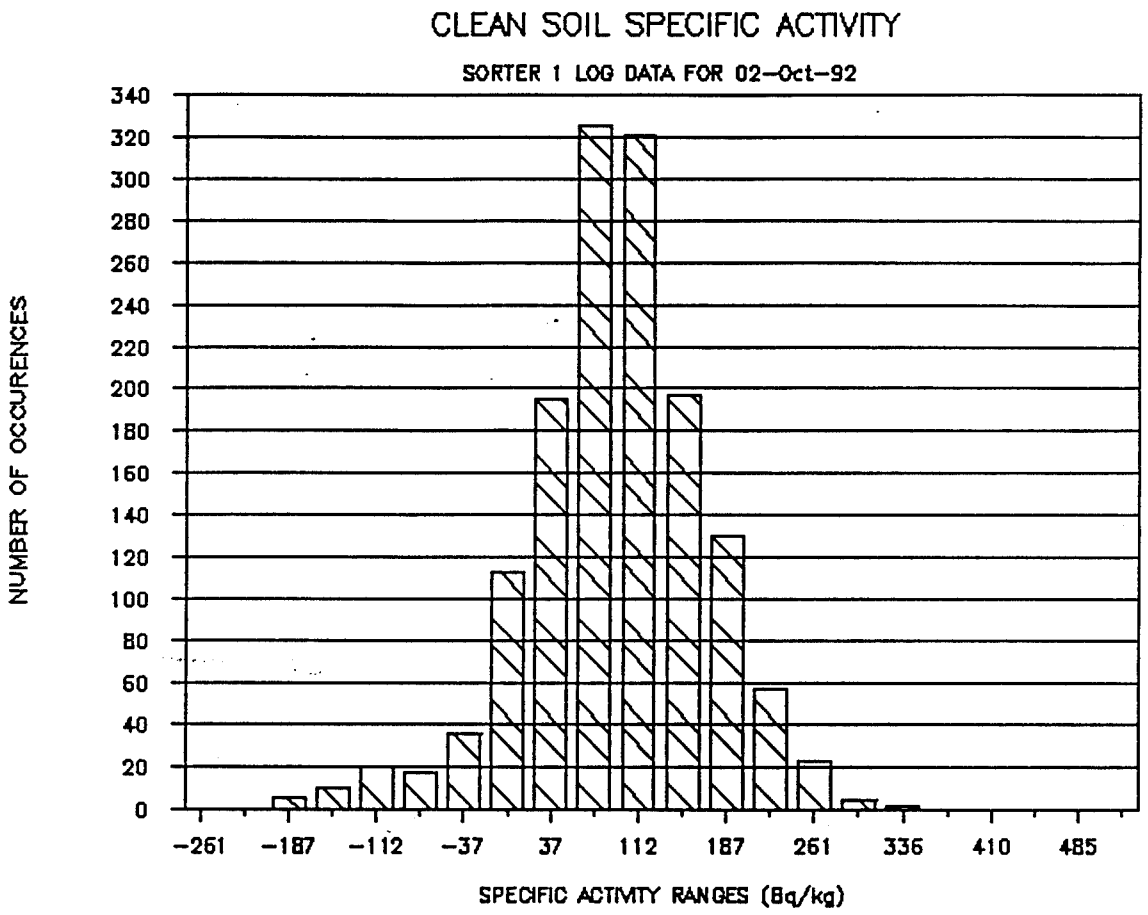
JA SOIL CLEANUP PLANT LOG SUMMARY

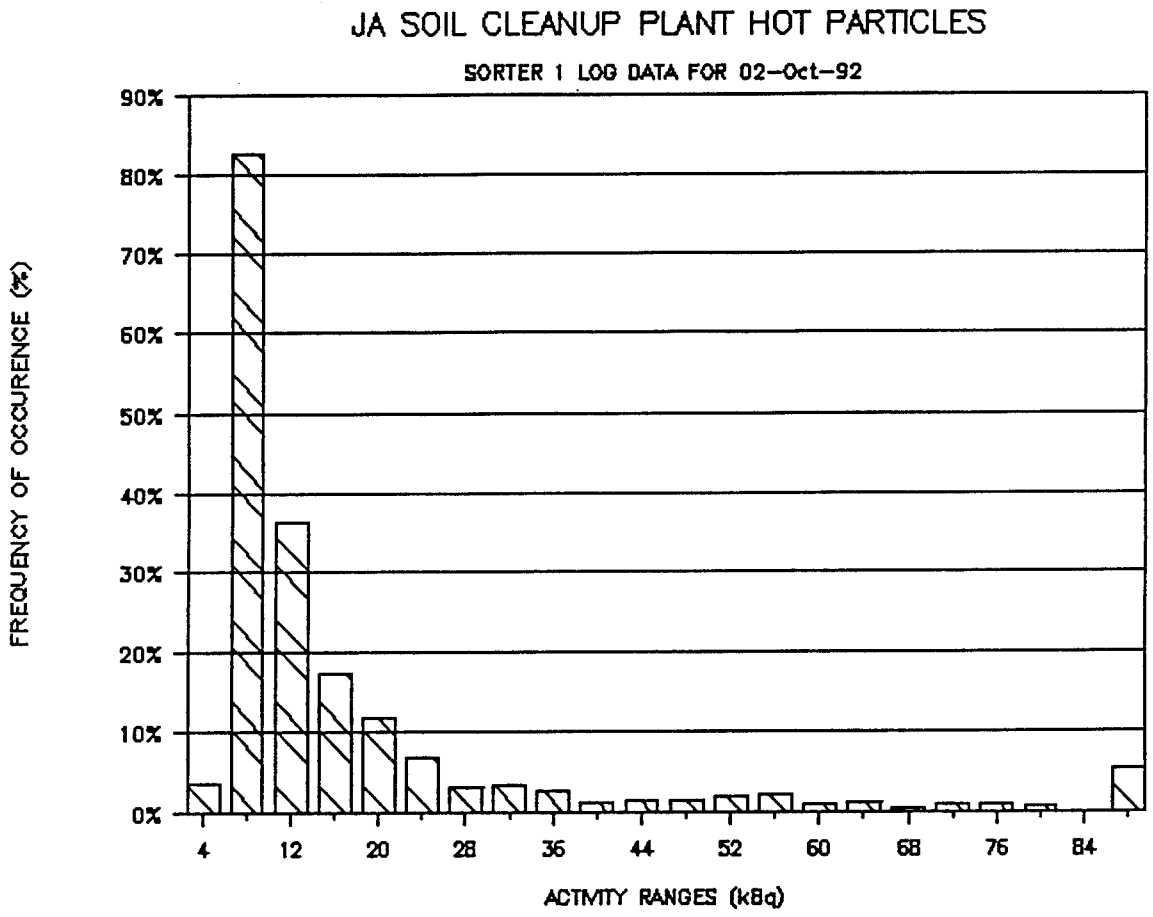
2-SEC COUNT PERIODS	14,120	
2-SEC RECORDS WITH SORTS	780	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	167	87.0%
3 DETECTORS	20	10.4%
4 DETECTORS	5	2.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	192	
NET 2-SEC RECORDS WITH SORTS	588	
2-SEC PERIODS WITH NO SORTS	13,532	
AVG TIME BETWEEN 2-SEC SORTS	48.0	sec

1-GATE SORTS		392	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	12	3.6%	-14000	0	-261	4000	16	3.8%	4
2	52	15.8%	-12000	0	-224	8000	347	82.6%	8
3	62	18.8%	-10000	6	-187	12000	153	36.4%	12
4	58	17.6%	-8000	10	-149	16000	72	17.1%	16
5	73	22.2%	-6000	20	-112	20000	49	11.7%	20
6	77	23.4%	-4000	18	-75	24000	29	6.9%	24
7	50	15.2%	-2000	36	-37	28000	13	3.1%	28
8	9	2.7%	0	113	0	32000	14	3.3%	32
TOTAL	329		2000	195	37	36000	11	2.6%	36
			4000	326	75	40000	5	1.2%	40
2-GATE SORTS		388	6000	321	112	44000	6	1.4%	44
DETECTO	SORTS	FREQ%	8000	197	149	48000	6	1.4%	48
8			10000	130	187	52000	8	1.9%	52
9	26	6.7%	12000	57	224	56000	9	2.1%	56
10	51	13.1%	14000	23	261	60000	4	1.0%	60
11	66	16.9%	16000	5	299	64000	5	1.2%	64
12	74	19.0%	18000	2	336	68000	2	0.5%	68
13	78	20.0%	20000	0	373	72000	4	1.0%	72
14	72	18.5%	22000	0	410	76000	4	1.0%	76
15	23	5.9%	24000	0	448	80000	3	0.7%	80
TOTAL	390		26000	0	485	84000	0	0.0%	84
			>28000	0	0	>84000	23	5.5%	>84
			TOTAL	1459		TOTAL	420		

HPE	334	GATE1	780
MPE	387	GATE2	388
DISE	1		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 02-Oct-92
NUMBER OF OCCURENCES
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 02-Oct-92
FREQUENCY OF OCCURENCE (%)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 02-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.04 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	1.09 tons	75.2 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			98.6%
EQUIVALENT SOIL-IN-GROUND	0.87 yd³	59.6 yd³	60.5 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	26,115 kBq		
MAXIMUM/SORT	2,186 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	9,413 kBq	6,392 kBq	
MAXIMUM/SORT	1610 kBq	17 kBq	
MINIMUM/SORT	0 Bq	-12 kBq	
SPECIFIC ACTIVITY	8,618 Bq/kg	85 Bq/kg	

WORK DAY		
WORK DAY START	07:00 AM	
PROCESSING START	07:40 AM	
PLANT STARTUP TIME		0.68 hr
PROCESSING END	05:03 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.46 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		9.37 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		7.91 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		1.46 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		79.0%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)			2,314
NONPROCESS RECORDS (Test, calibration, etc)			36
20-SEC PROCESS RECORDS			1,424
TOTAL SORT			1 MD>0 & MND=0
NO SORT			727 AD=0 & MD=0 & MND>0
SOME SORT			694 AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS			2
0<AD<1kBq & MD>0		0	
10:26:38	AD=0 & MD	2	
10:40:38	AD<0 & MD	0	

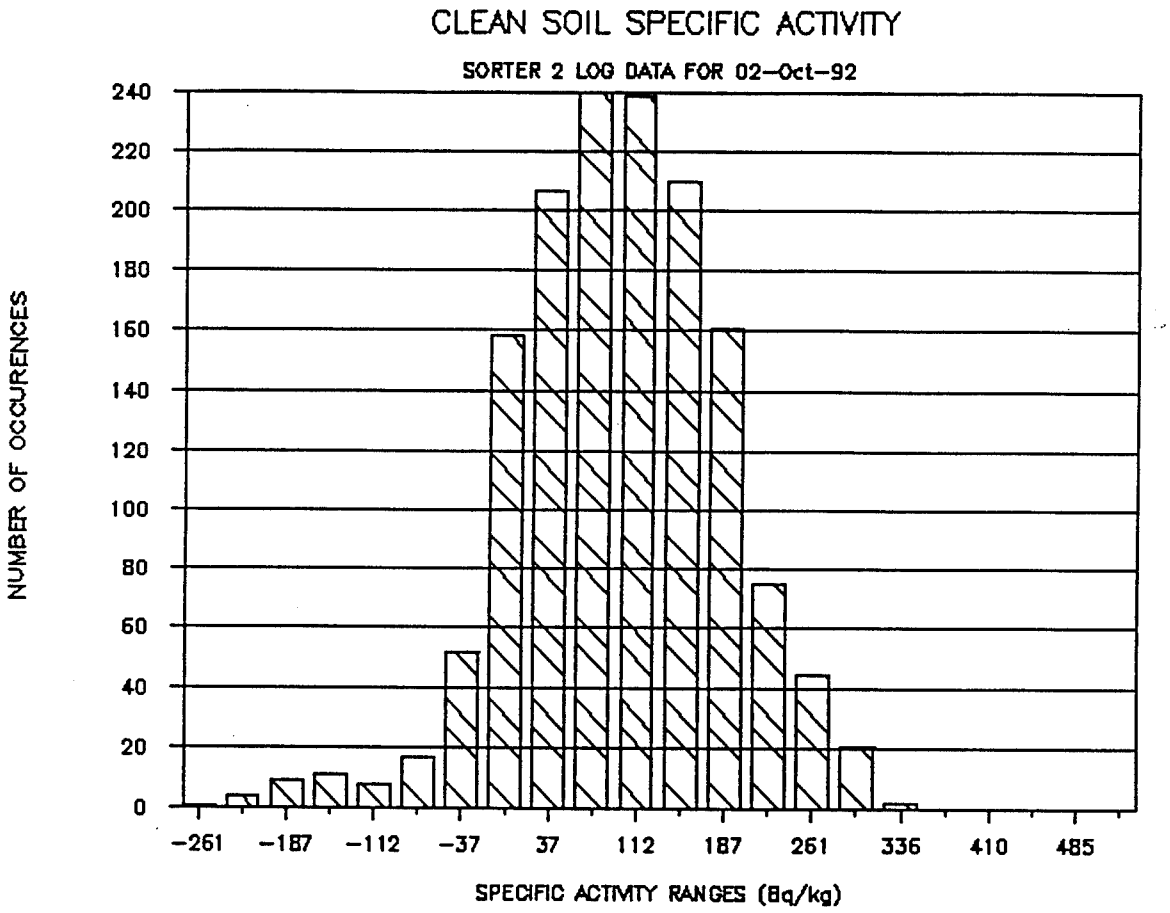
JA SOIL CLEANUP PLANT LOG SUMMARY

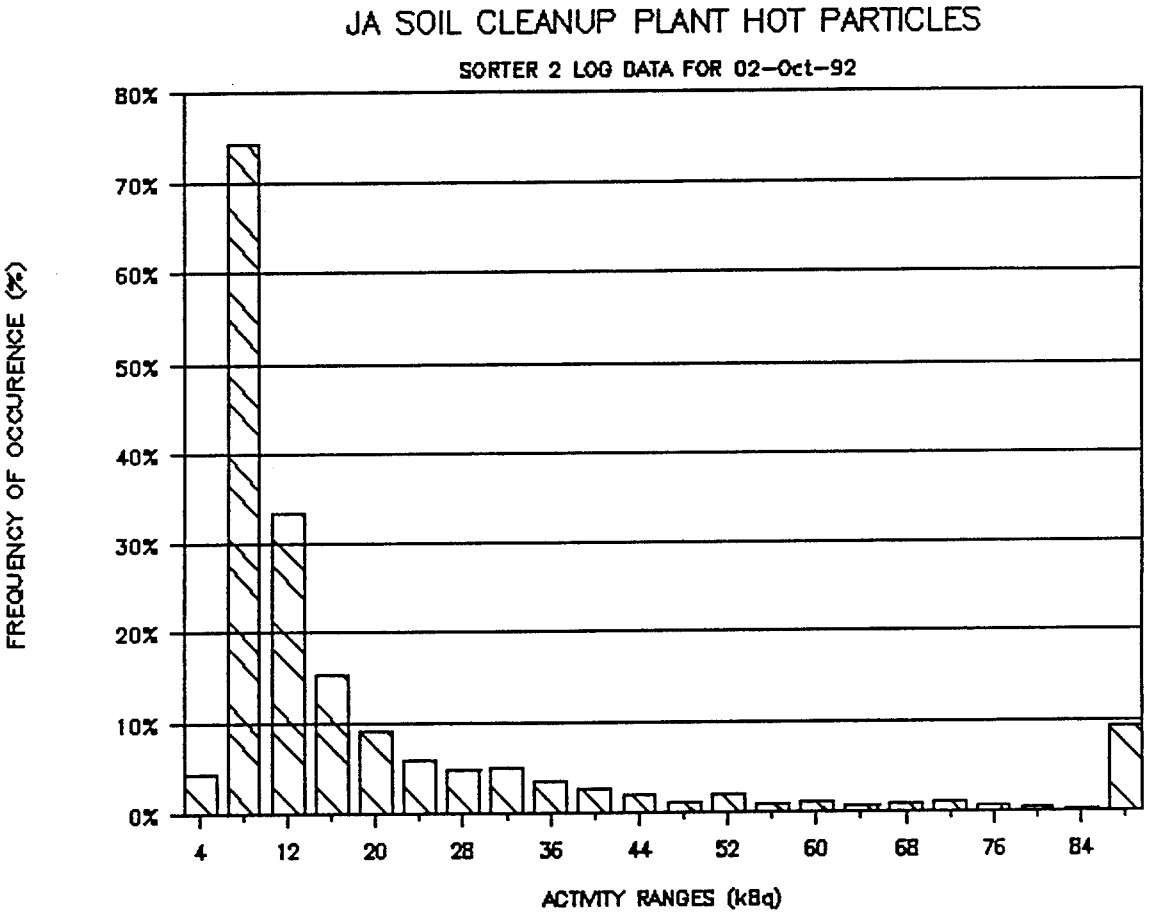
2-SEC COUNT PERIODS	14,240	
2-SEC RECORDS WITH SORTS	890	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	191	76.1%
3 DETECTORS	50	19.9%
4 DETECTORS	8	3.2%
5 DETECTORS	2	0.8%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	251	
NET 2-SEC RECORDS WITH SORTS	639	
2-SEC PERIODS WITH NO SORTS	13,601	
AVG TIME BETWEEN 2-SEC SORTS	44.6 sec	

1-GATE SORTS		446	ACT_ND	NUMBER	SPEC_A	ACT_P	SORT	FREQ%	ACT_P
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)	(Bq)	(#)		(kBq)
1	15	4.1%	-14000	1	-261	4000	22	4.4%	4
2	61	16.5%	-12000	4	-224	8000	370	74.3%	8
3	119	32.2%	-10000	9	-187	12000	166	33.3%	12
4	77	20.8%	-8000	11	-149	16000	76	15.3%	16
5	61	16.5%	-6000	8	-112	20000	45	9.0%	20
6	58	15.7%	-4000	17	-75	24000	29	5.8%	24
7	47	12.7%	-2000	52	-37	28000	24	4.8%	28
8	8	2.2%	0	158	0	32000	25	5.0%	32
TOTAL	370		2000	207	37	36000	17	3.4%	36
			4000	240	75	40000	13	2.6%	40
2-GATE SORTS		444	6000	239	112	44000	10	2.0%	44
DETECTO	SORTS	FREQ%	8000	210	149	48000	6	1.2%	48
8			10000	161	187	52000	10	2.0%	52
9	35	7.9%	12000	75	224	56000	5	1.0%	56
10	70	15.8%	14000	45	261	60000	6	1.2%	60
11	114	25.7%	16000	21	299	64000	3	0.6%	64
12	76	17.1%	18000	2	336	68000	5	1.0%	68
13	66	14.9%	20000	0	373	72000	6	1.2%	72
14	56	12.6%	22000	0	410	76000	3	0.6%	76
15	27	6.1%	24000	0	448	80000	2	0.4%	80
TOTAL	444		26000	0	485	84000	1	0.2%	84
			>28000	0	0	>84000	46	9.2%	>84
			TOTAL	1459		TOTAL	498		

HPE	383	GATE1	890
MPE	506	GATE2	444
DISE	1		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 02-Oct-92
NUMBER OF OCCURENCES
240
220
200
180
160
140
120
100
80
60
40
20
0
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 2 LOG DATA FOR 02-Oct-92
FREQUENCY OF OCCURENCE (%)
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 1 01-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.78 ± 0.06 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	2.89 tons	55.3 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			95.0%
EQUIVALENT SOIL-IN-GROUND	2.29 yd³	43.8 yd³	46.1 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	8,554 kBq		
MAXIMUM/SORT	383 kBq		
MINIMUM/SORT	3.2 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	4,618 kBq	8,310 kBq	
MAXIMUM/SORT	204 kBq	20 kBq	
MINIMUM/SORT	0 Bq	-10 kBq	
SPECIFIC ACTIVITY	1,599 Bq/kg	150 Bq/kg	

WORK DAY			
WORK DAY START	07:00 AM		
PROCESSING START	08:41 AM		
PLANT STARTUP TIME		1.69 hr	
PROCESSING END	04:50 PM		
WORK DAY END	05:30 PM		
PLANT SHUTDOWN TIME		0.67 hr	
LUNCH PERIOD		0.5 hr	
WORK HOURS		10.0 hr	
MAX PROCESS HOURS (END-START)		8.16 hr	
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		6.03 hr	
TOTAL SYSTEM PAUSE TIME		2.14 hr	
TOTAL DOWNTIME (MAX-ACTUAL)		2.13 hr	
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		60.2%	

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,059	
NONPROCESS RECORDS (Test, calibration, etc)	10	
20-SEC PROCESS RECORDS	1,085	
TOTAL SORT	40	MD>0 & MND=0
NO SORT	531	AD=0 & MD=0 & MND>0
SOME SORT	514	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	0	
0<AD<1kBq & MD>0	2	
AD=0 & MD	0	
AD<0 & MD	0	

JA SOIL CLEANUP PLANT LOG SUMMARY

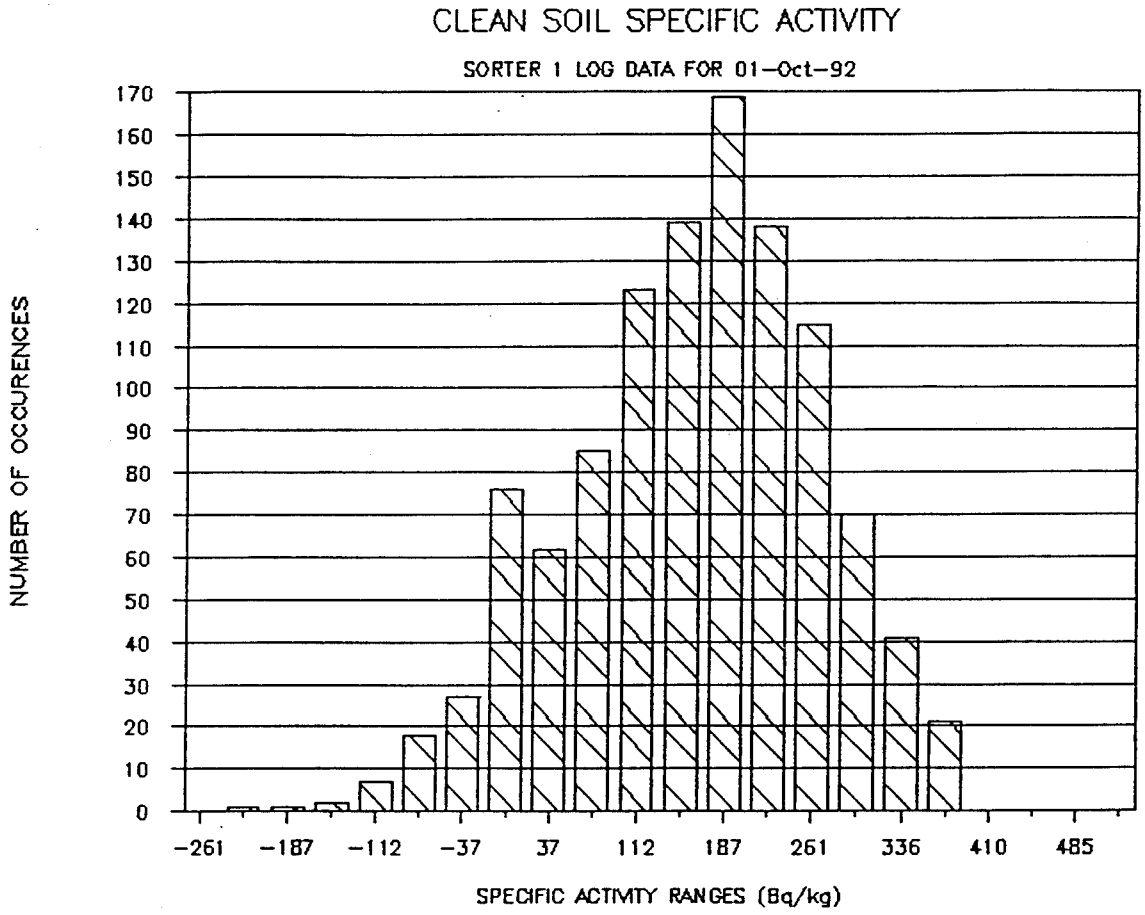
2-SEC COUNT PERIODS	10,850	
2-SEC RECORDS WITH SORTS	526	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	107	84.3%
3 DETECTORS	18	14.2%
4 DETECTORS	2	1.6%
5 DETECTORS	0	0.0%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	127	
NET 2-SEC RECORDS WITH SORTS	399	
2-SEC PERIODS WITH NO SORTS	10,451	
AVG TIME BETWEEN 2-SEC SORTS	54.4	sec

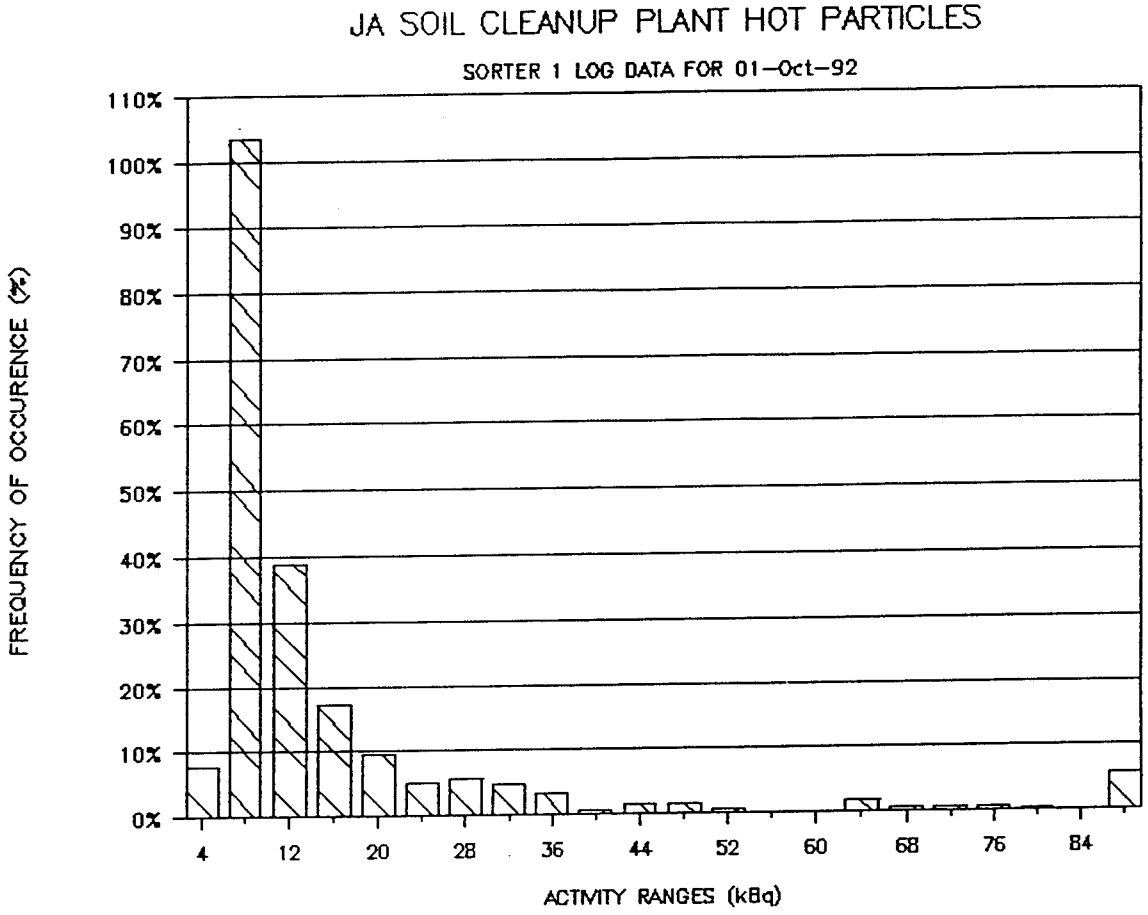
1-GATE SORTS		265	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	10	4.3%	-14000	0	-261
2	22	9.4%	-12000	1	-224
3	26	11.2%	-10000	1	-187
4	39	16.7%	-8000	2	-149
5	65	27.9%	-6000	7	-112
6	55	23.6%	-4000	18	-75
7	45	19.3%	-2000	27	-37
8	3	1.3%	0	76	0
TOTAL	233		2000	62	37
			4000	85	75
2-GATE SORTS		261	6000	123	112
DETECTO	SORTS	FREQ%	8000	139	149
8			10000	169	187
9	14	5.4%	12000	138	224
10	22	8.4%	14000	115	261
11	36	13.8%	16000	70	299
12	54	20.7%	18000	41	336
13	70	26.8%	20000	21	373
14	50	19.2%	22000	0	410
15	15	5.7%	24000	0	448
TOTAL	261		26000	0	485
			>28000	0	0
			TOTAL	1095	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	19	7.6%	4
8000	258	103.6%	8
12000	97	39.0%	12
16000	43	17.3%	16
20000	24	9.6%	20
24000	13	5.2%	24
28000	14	5.6%	28
32000	12	4.8%	32
36000	8	3.2%	36
40000	2	0.8%	40
44000	4	1.6%	44
48000	4	1.6%	48
52000	2	0.8%	52
56000	0	0.0%	56
60000	0	0.0%	60
64000	5	2.0%	64
68000	2	0.8%	68
72000	2	0.8%	72
76000	2	0.8%	76
80000	1	0.4%	80
84000	0	0.0%	84
>84000	14	5.6%	>84
TOTAL	249		

HPE	247	GATE1	526
MPE	442	GATE2	261
DISE	40		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 1 LOG DATA FOR 01-Oct-92
NUMBER OF OCCURENCES
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
-261
-187
-112
-37
37
112
187
261
336
410
485
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
SORTER 1 LOG DATA FOR 01-Oct-92
FREQUENCY OF OCCURENCE (%)
110%
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
4
12
20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

JA SOIL CLEANUP PLANT LOG SUMMARY

SORTER 2 01-Oct-92

AVERAGE BACKGROUND COUNT RATE	0.79 ± 0.05 c/sec		
SORTER SOIL DENSITY	1.15 tons/m³		
GROUND SOIL DENSITY	1.65 tons/m³		
	CONTAMINATED	CLEAN	
MASS TOTAL	6.04 tons	51.6 tons	
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
WEIGHT RECOVERY OR VOLUME RECOVERY			89.5%
EQUIVALENT SOIL-IN-GROUND	4.79 yd³	40.9 yd³	45.7 yd³/day
PARTICLE ACTIVITY (MAXIMUM ESTIMATE)			
TOTAL	10,328 kBq		
MAXIMUM/SORT	548 kBq		
MINIMUM/SORT	3.3 kBq		
DISPERSED + PARTICLE (REALISTIC ESTIMATE) ACTIVITY	7,416 kBq	7,750 kBq	
MAXIMUM/SORT	311 kBq	19 kBq	
MINIMUM/SORT	-373 Bq	-11 kBq	
SPECIFIC ACTIVITY	1,228 Bq/kg	150 Bq/kg	

WORK DAY

WORK DAY START	07:00 AM	
PROCESSING START	08:40 AM	
PLANT STARTUP TIME		1.68 hr
PROCESSING END	04:47 PM	
WORK DAY END	05:30 PM	
PLANT SHUTDOWN TIME		0.71 hr
LUNCH PERIOD		0.5 hr
WORK HOURS		10.0 hr
MAX PROCESS HOURS (END-START)		8.12 hr
ACTUAL PROCESS HOURS (TOTAL 20-SEC SORT PERIODS)		5.98 hr
TOTAL SYSTEM PAUSE TIME		0.00 hr
TOTAL DOWNTIME (MAX-ACTUAL)		2.14 hr
TIME UTILIZATION (ACTUAL HRS/WORK HRS)		59.7%

TOTAL SOIL PROCESSING RECORDS (2-SEC and 20-SEC)	1,697	
NONPROCESS RECORDS (Test, calibration, etc)	19	
20-SEC PROCESS RECORDS	1,076	
TOTAL SORT	96	MD>0 & MND=0
NO SORT	408	AD=0 & MD=0 & MND>0
SOME SORT	570	AD>0&0<MD<MNDmax&MND<MNDmax
UNEXPLAINED RECORDS	2	

10:22:36	0<AD<1kBq & MD>0	6	11:21:16
10:42:56	11:17:16 AD=0 & MD	0	11:21:36
10:43:56	11:20:16 AD<0 & MD	2	11:21:56

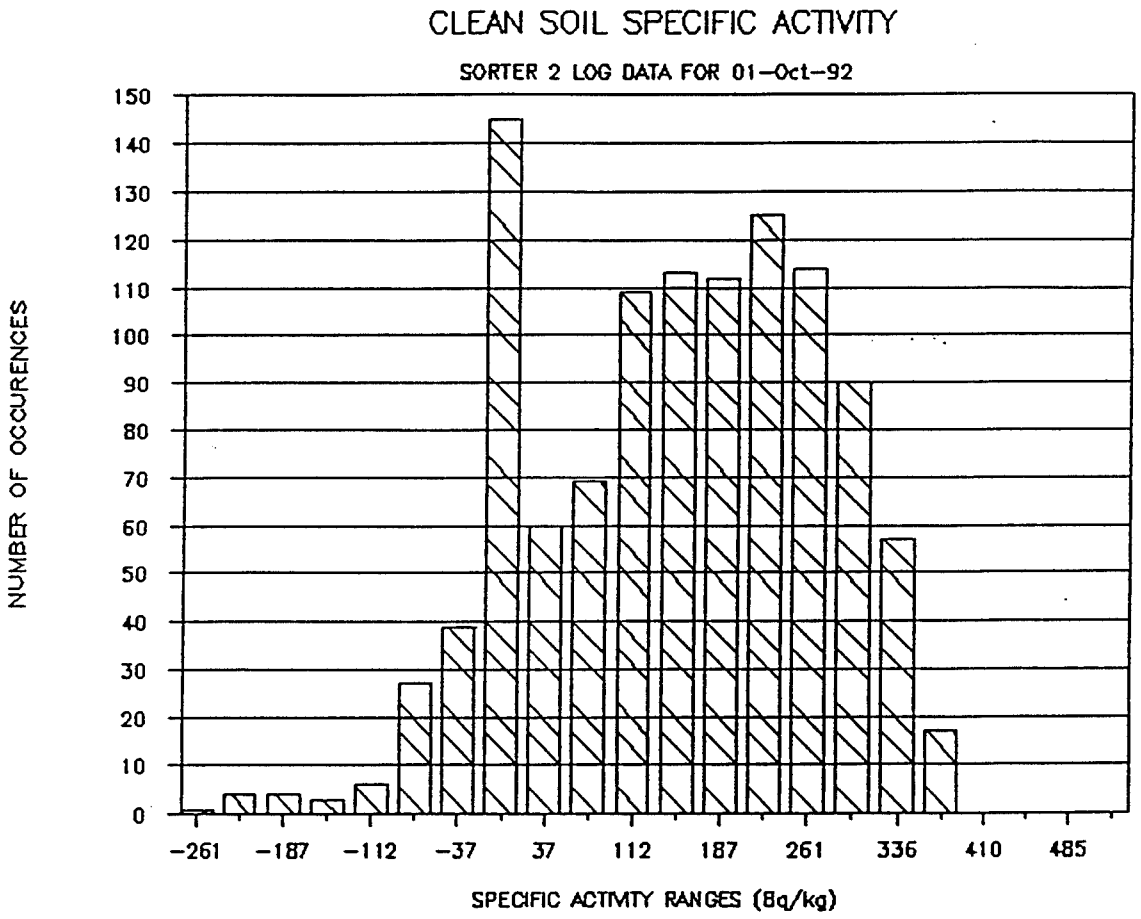
2-SEC COUNT PERIODS	10,760	
2-SEC RECORDS WITH SORTS	621	AP>0
2-SEC RECORDS WITH POSITIVES IN >1 DETECTOR		
2 DETECTORS	128	85.3%
3 DETECTORS	20	13.3%
4 DETECTORS	1	0.7%
5 DETECTORS	1	0.7%
6 DETECTORS	0	0.0%
7 DETECTORS	0	0.0%
8 DETECTORS	0	0.0%
TOTAL	150	
NET 2-SEC RECORDS WITH SORTS	471	
2-SEC PERIODS WITH NO SORTS	10,289	
AVG TIME BETWEEN 2-SEC SORTS	45.7	sec

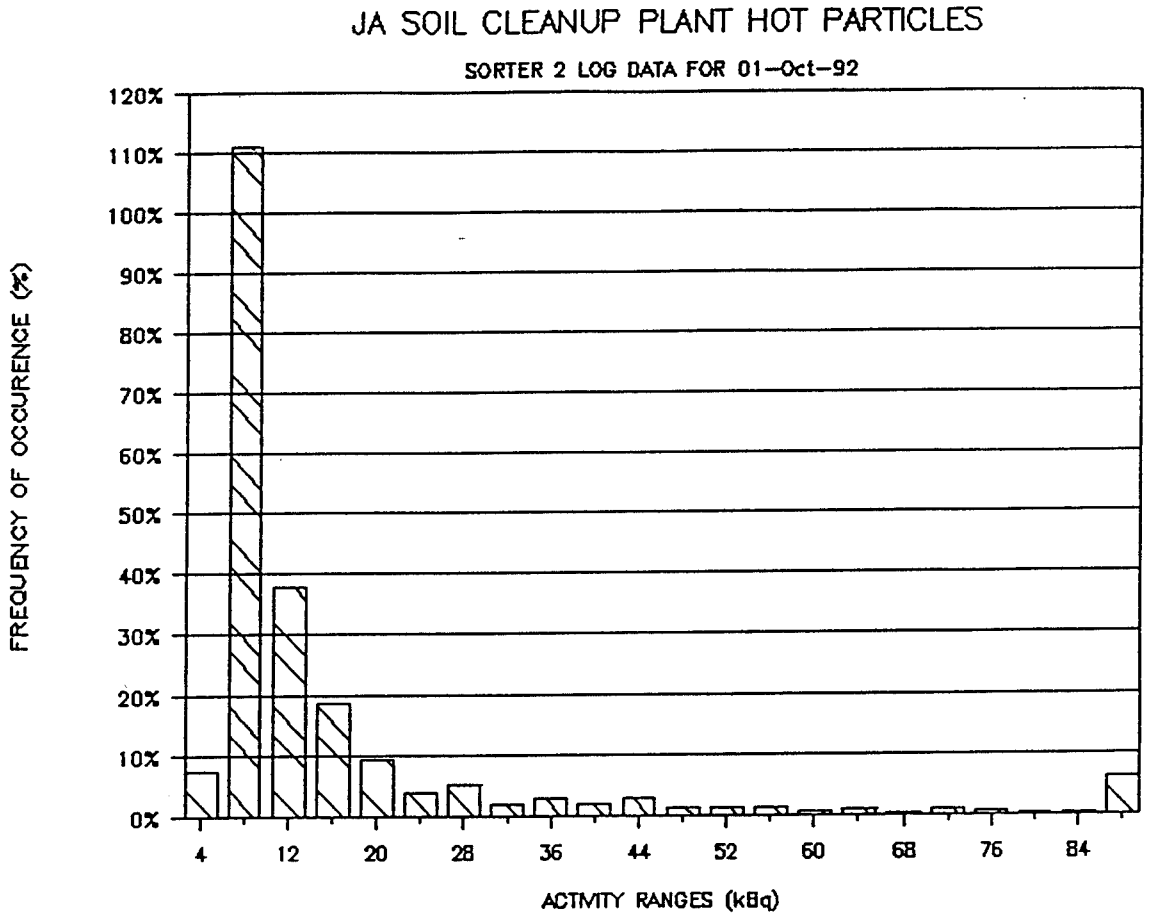
1-GATE SORTS		294	ACT_ND	NUMBER	SPEC_A
DETECTO	SORTS	FREQ%	(Bq)	(#)	(Bq/kg)
1	5	2.0%	-14000	1	-261
2	36	14.2%	-12000	4	-224
3	62	24.5%	-10000	4	-187
4	57	22.5%	-8000	3	-149
5	57	22.5%	-6000	6	-112
6	41	16.2%	-4000	27	-75
7	33	13.0%	-2000	39	-37
8	3	1.2%	0	145	0
TOTAL	253		2000	60	37
			4000	69	75
2-GATE SORTS		327	6000	109	112
DETECTO	SORTS	FREQ%	8000	113	149
8			10000	112	187
9	14	4.3%	12000	125	224
10	45	13.8%	14000	114	261
11	71	21.7%	16000	90	299
12	63	19.3%	18000	57	336
13	52	15.9%	20000	17	373
14	43	13.1%	22000	0	410
15	39	11.9%	24000	0	448
TOTAL	327		26000	0	485
			>28000	0	0
			TOTAL	1094	

ACT_P (Bq)	SORT (#)	FREQ%	ACT_P (kBq)
4000	21	7.4%	4
8000	316	111.3%	8
12000	107	37.7%	12
16000	53	18.7%	16
20000	27	9.5%	20
24000	11	3.9%	24
28000	15	5.3%	28
32000	6	2.1%	32
36000	8	2.8%	36
40000	6	2.1%	40
44000	8	2.8%	44
48000	4	1.4%	48
52000	4	1.4%	52
56000	4	1.4%	56
60000	2	0.7%	60
64000	3	1.1%	64
68000	1	0.4%	68
72000	3	1.1%	72
76000	2	0.7%	76
80000	1	0.4%	80
84000	1	0.4%	84
>84000	18	6.3%	>84
TOTAL	284		

HPE	278	GATE1	621
MPE	566	GATE2	327
DISE	96		

NOTE: REC code 1 = Source check; 2 = Empty belt; 3 = Test


CLEAN SOIL SPECIFIC ACTIVITY
SORTER 2 LOG DATA FOR 01-Oct-92
NUMBER OF OCCURENCES
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-261
-187
-112
-37
37
112
187
261
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SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
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10%
0%
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20
28
36
44
52
60
68
76
84
ACTIVITY RANGES (kBq)

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DNA-TR-93-168-V2

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